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# New concepts and methods for phylogenetic taxonomy and nomenclature in zoology, exemplified by a new ranked cladonomy of recent amphibians (Lissamphibia)

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## Abstract

Although currently most taxonomists claim to adhere to the concept of 'phylogenetic taxonomy', in fact most of the zoological classifications currently published are only in part 'phylogenetic' but include also phenetic or gradist approaches, in their arbitrary choices of the nodes formally recognised as taxa and in their attribution of ranks to these taxa. We here propose a new approach to 'phylogenetic taxonomy and nomenclature', exemplified by a phylogenetic classification or cladonomy of the extant amphibians (subclass **Lissamphibia** of the class **Amphibia**) derived from a supermatrix-based phylogenetic analysis using 4060 amphibian species, i.e. about half of the 8235 species recognised on 31 October 2020. These taxa were represented by a mean of 3029 bp (range: 197–13849 bp) of DNA sequence data from a mean of 4 genes (range: 1–15). The cladistic tree thus generated was transferred into a classification according to a new taxonomic and nomenclatural methodology presented here, which allows a bijective or isomorphic relationship between the phylogenetic hypothesis and the classification through a rigorous use of suprageneric ranks, in which their hierarchy mirrors the structure of the tree. Our methodology differs from all previous ones in several particulars: [1] whereas the current *International Code of Zoological Nomenclature* uses only three 'groups of names' (species, genus and family), we recognise four nominal-series (species, genus, family and class); [2] we strictly follow the *Code* for the establishment of the valid nomen (scientific name) of taxa in the three lower nominal-series (however, in a few situations, we suggest improvements to the current Rules of the *Code*); [3] we provide precise and unambiguous Criteria for the assignment of suprageneric nomina to either the family- or the class-series, excluding nomina proposed expressly under unranked or pseudoranked nomenclatural systems; [4] in the class-series, for which the *Code* provides only incomplete Rules concerning availability, we provide precise, complete and unambiguous Criteria for the nomenclatural availability, taxonomic allocation and nomenclatural validity and correctness of nomina; [5] we stress the fact that nomenclatural ranks do not have biological definitions or meanings and that they should never be used in an 'absolute' way (e.g., to express degrees of genetic or phenetic divergence between taxa or hypothesised ages of cladogeneses) but in a 'relative' way: two taxa which are considered phylogenetically as sister-taxa should always be attributed to the same nomenclatural rank, but taxa bearing the same rank in different 'clades' are by no means 'equivalent', as the number of ranks depends largely on the number of terminal taxa (species) and on the degree of phylogenetic resolution of the tree; [6] because of this lack of 'equivalence', some arbitrary criteria are necessary to fix a starting point for assigning a given suprageneric rank to some taxa, from which the ranks of all other taxa will automatically derive through a simple implementation of the hierarchy of ranks: for this purpose we chose the rank family and we propose a 'Ten Criteria Procedure' allowing to fix the position of this rank in any zoological classification. As a result of the implementation of this set of Criteria, we obtained a new ranked classification of extant lissamphibians using 25 suprageneric ranks below the rank class (11 class-series and 14 family-series ranks), and including 34 class-series and 573 family-series taxa, and where the 575 genera we recognise are referred to 69 families and 87 subfamilies. We provide new nomina and diagnoses for 10 class-series taxa, 171 family-series taxa, 14 genus-series taxa and 1 species. As many new species of amphibians are permanently described, this classification and its nomenclature will certainly have to change many times in the future but, using the clear, explicit, complete, automatic and unambiguous methodology presented here, these changes will be easy to implement, and will not depend on subjective and arbitrary choices as it has too often been the case in the last decades. We suggest that applying this methodology in other zoological groups would improve considerably the homogeneity, clarity and usefulness of zoological taxonomy and nomenclature.

## Keywords

Amphibia, Lissamphibia, classification, phylogeny, cladonomy, ergotaxonomy, taxonomic concepts, taxonomic category, *Code*, Duplostensional Nomenclatural System, nomenclatural rank, mandatory rank, nomenclatural availability, taxonomic allocation of nomina, usage of nomina, nomenclatural validity, nomenclatural correctness, comprehensive list of nomina, class-series, family-series, genus-series, synonymy load, nomenclatural parsimony, taxonomic completeness, preventive taxonomy

## Terminology, conventions and abbreviations

In the present work, we use a very detailed and precise technical terminology for nomenclatural, taxonomic, evolutionary, biological and other concepts mentioned in the text, Figures, Tables and Appendices. We are conscious that this unusual terminology will be found tedious or hard to follow by some our readers. Although most of it has been largely adopted by the Linz Zoocode Committtee (Dubois *et al.* 2019) and a few of these new terms have already entered the common language of taxonomy and nomenclature, we do not expect most of this terminology to be adopted soon by the taxonomic community at large and incorporated into the *Code*. We use this terminology for the reasons already highlighted by Dubois (2000*b*, 2011*a*, 2013) and Dubois *et al.* (2016, 2019), mostly because the terminology of the current *Code* is often unclear, ambiguous and misleading. Our terminology has two very important advantages: {A1} it provides non-ambiguous definitions of the concepts used in our work; and {A2} it allows an important parsimony in the expression of ideas in our text, using a single term to express a concept, even if complex, instead of a long periphrase. As is well known by all those who have worked on writing a glossary or dictionary, the exercise of writing definitions for technical terms used in a particular, specialised, domain, is very difficult and demanding, but it allows considerable clarification of one's ideas and is beneficial to both its authors and readers. In the text below, we will encounter many cases of semantic disambiguation concerning 'common' terms of taxonomy and nomenclature, such as nomen/paronym, author/scriptor, taxon/taxomen, rank/category or type/onomatophore. For those who have difficulties reading our text, we suggest to have a printed version of our Glossary at hand. After some time, they might become accustomed to some of our new terms and even appreciate them.

Appendix **A1. GLO** below provides definitions and etymology for many terms and formulae used in this work. These terms are printed in ***bold italics*** at least on the occasion of their first or most important uses in the text, whereas **simple bold** is used to call attention to important terms or expressions.

The term ***nomen*** (plural ***nomina***) is used here for 'scientific name', and the expression ***nominal-series*** for 'groups of names' as used in the *Code*.

*Simple italics* are used for species- and genus-series nomina, for titles of publications and websites, for anatomical structures (e.g. *musculus semitendinosus*) and for Latin-derived terms or expressions (such as *idem* or *hoc loco*).

Today, more and more scientific information is made publicly available on websites, blogs, etc., but not as genuine scientific publications (often submitted to peer review and formally published as permanent printed or online documents). No guarantee exists that such electronic-only databases, applications and other 'gray' documents will still exist and be available to the scientists of the future, even in the short term. For this reason, whenever the same information could be found in genuine publications, we refrained here from giving such references for scientific information relevant to our work. However, in the cases no such permanent publications exist, we provided the electronic address of the online document, designated by an abbreviation (e.g. <*AWb* 2020> for *Amphibian Web*). Such references are given separately from those of duly published works at the beginning of our list of references, before anonymous works (defined according to Dubois 2015*b*).

The following abbreviations and conventions are used below, particularly in the chapter 3.3 presenting our cladonomy.

**Nominal-series**

CS. ● Class-series (no term in the *Code*).
FS. ● Family-series (family group in the *Code*).
GS. ● Genus-series (genus group in the *Code*).
NS. ● Nominal-series (group of names in the *Code*).
SS. ● Species-series (species group in the *Code*).

**Mode of writing of nomina**

*Species-series nomina.*
*Genus-series nomina.*
*Family-series nomina.*
**Class-series nomina.**

**Numbering of nomina**

C.*n.n.* ● Class-series nomen.
F.*n.n.* ● Family-series nomen.
G.*n.n.* ● Genus-series nomen.
S.*n.n.* ● Species-series nomen.

**Numbers of taxa (see A.CLAD-1)**

***n*** **C†**. ● Number of all-fossil class-series taxon or taxa, not listed here.
***n*** **F†**. ● Number of all-fossil family-series taxon or taxa, not listed here.
***n*** **G†**. ● Number of all-fossil genus or genera, not listed here.
***n*** **GIS**. ● Number of extant genera *incertae sedis*.

**Etymology of nomina**

G. ● Etymology derived from classical Greek.
L. ● Etymology derived from classical Latin.
N. ● Etymology derived from an available nomen.
P. ● Etymology derived from the name of a person.
R. ● Etymology derived from a modern language.

**Homonymy, synonymy and synotaxy**

***Homonym***, ***homonymous***, ***homonymy***. ● Concerning any nomen that has to be considered a homonym of another one **of the same nominal-series** according to the *Code* (in the genus- or family-series) or to DONS Criteria (in the class-series).

***Synonym***, ***synonymic list***, ***synonymous***, ***synonymy***, ***synonymy load***. ● Concerning any nomen **of the same nominal-series** that applies to the same taxon according to the *Code* (in the genus- or family-series) or to DONS Criteria (in the class-series).

***Synotaxic***, ***synotaxic list***, ***synotaxon***. ● Concerning any nomen **of the same or different nominal-series**, or unassigned to any nominal-series (***ectonym***), that applies to the same taxon.

**Categories of airesy**

EPITA. ● Explicit Internal Airesy.
ETA. ● External Airesy.
IPITA. ● Implicit Internal Airesy.

**Nomenclatural systems**

AONS. ● Ambiostensional Nomenclatural System.
DONS. ● Duplostensional Nomenclatural System.
LSNS. ● Linnaean-Stricklandian Nomenclatural System.
MONS. ● Metrostensional Nomenclatural System.
OONS. ● Orostensional Nomenclatural System.

**Ten Criteria Procedure for attribution of a nomen to the rank family**

CHC. ● Consistent Hierarchy Criterion.
CNC. ● Consistent Naming Criterion.
CPC. ● Conflict of Precedence Criterion.
FPC. ● Family-Series Precedence Criterion.
LR. ● Lowest ranked nomen/taxon.
MRC. ● Mandatory Rank Criterion.
NPC. ● Nomenclatural Precedence Criterion.
NRC. ● Non-Redundancy Criterion.
NTC. ● Nomenclatural Thrift Criterion.
STC. ● Sister-Taxa Criterion.
TCP. ● Ten Criteria Procedure.
UQ. ● Upper (third) Quartile.
UQC. ● Upper Quartile Criterion.
UQN. ● Upper Quarter of Nomina.

**Auctorship and date of nomina**

|**Lepospondyli**|, etc. ● Class-series nomen used following current tradition, but without auctorship and date, for not having been validated according to DONS Criteria (see Dubois 2006*a*).
|Noble, 1931|, etc. ● Secondary auctorship validated through Article 35.4.1 (see Dubois 2015*a*).
||Bonaparte, 1850||, etc. ● Primary auctorship validated through Article 40.2 (see Dubois 2015*a*).
*Astrodactylus* [Hogg, 1838] Hogg, 1839, etc. ● The nomen *Astrodactylus* does not appear in the work of Hogg (1838), but is implied by the presence in this work of the family-series *Astrodactylidae*; the nomen *Astrodactylus* appeared for the first time in the work of Hogg (1839).

**Various abbreviations and conventions**

*BZN*. ● *Bulletin of Zoological Nomenclature*.
DOP. ● Part of the identifier of a nomen established as new

in the present work ('Dubois, Ohler & Pyron').

Glossary. ● 'Glossary' section of the present work (Appendix **A1.GLO**).

Keratodont formulae of tadpoles. ● Given here according to the conventions of Dubois (1995*a*).

LLS. ● *Latonia*-like situation, in which a single well-diagnosable (by clear morphological, behavioural, ecological or other characters, but not merely by its position in a tree) species S is cladistically sister to a group of several or many species G1 being itself well-diagnosable from S, which leads to recognise a distinct genus G2 for the latter (see details under M&M).

M&M. ● 'Material and methods' section of the present work.

Phalangeal formulae of digits (fingers and toes). ● They are given under the form 2-2-3-3 for hands and 2-2-3-4-3 for feet, starting from the axial digit (closest to body axis).

SVL. ● Snout-vent length of a specimen.

The *Code*. ● The edition currently in force of the *International Code of Zoological Nomenclature* (Anonymous 1999, 2012, 2014).

The Commission. ● The International Commission on Zoological Nomenclature (see Anonymous 1999).

The LZC. ● The Linz Zoocode Committee (see Dubois *et al.* 2019).

TL. ● Total length of a specimen.

*TREE*. ● The molecular cladistic tree shown in **A2.TREE-1**.

**Other conventions**

{Boulenger 1882}, etc. ● Sources of diagnoses of new taxa.

{A1}, {a1}, etc. ● Items in a series of related items.

" ". ● Anoplonym.

' '. ● Family-series nomen being redundant to a superordinate class-series nomen in a given ergotaxonomy, that should therefore not be used under the nomenclatural Criteria used in the present work.

« » ● Nomen expressly proposed as unranked (anhypsonym).

< > ● Nomen expressly proposed as following the *International Code for Phylogenetic Nomenclature* (Cantino & Queiroz 2020) (notharchonym).

“ ”. ● Exact quotation from publication.

‘ ’. ● Highlighted, questionable or problematic term.

## Figures in text


**F1.MOR.** ● Figure 1. MOR. Mandatory and optional nomenclatural ranks in zoological nomenclature. (Page 29).

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**T4.AVN.** ● Table 4. AVN. Criteria of unavailability of class-series and family-series nomina, and of nomenclatural acts concerning them. (Pages 39–41).

**T5.RHI.** ● Table 5. RHI. Categories of rhizonymy in the family-series and class-series with their standard endings used here. (Pages 43–45).

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**T7.NS-1.** ● Table 7. NS1. Nomina and spellings. Definitions of categories. (Pages 52–53).

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**T10.ENL.** ● Table 10. ENL. Endings used in the protographs of panrhizonyms of class-series nomina of **LISSAMPHIBIA**. (Page 74).

**T11.LEG.** ● Table 11. LEG. Legethographs of class-series nomina of **AMPHIBIA**. (Pages 76–78).

**T12.ZYG.** ● Table 12. ZYG. Zygoidy. (Page 79).

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**T16.SYN.** ● Table 16. SYN. Synonymy load in extant **LISSAMPHIBIA** (i.e., excluding all-fossil supraspecific taxa) according to the taxonomy adopted here. (Page 123).

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**Appendices**

**A1.GLO.** ● Appendix 1. GLO. Glossary. (Pages 366–406).

**A2.TREE-1.** ● Appendix 2. TREE-1. Detailed phylogenetic tree of **Lissamphibia**, showing all species and higher supraspecific taxa recognised here as valid. (Pages 407–447).

**A3.TREE-2.** ● Appendix 3. TREE-2. Simplified phylogenetic tree of **Lissamphibia**, showing all genera and higher supraspecific taxa recognised here as valid. (Pages 448–452).

**A4.RNK.** ● Appendix 4. RNK. Abbreviations for ranks of taxa cited in Appendices **A6.NFS**, **A7.NCS** and **A8.ECT.** (Page 453).

**A5.NGS.** ● Appendix 5. NGS. Genus-series nomina and taxa of **Lissamphibia** (Pages 454–557).

**A6.NFS.** ● Appendix 6. NFS. Family-series nomina and taxa of **Lissamphibia**. (Pages 558–613).

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**A9.CLAD-1.** ● Appendix 9. CLAD-1. Complete taxonomy and nomenclature of **Lissamphibia** proposed here. (Pages 674–708).

**A10.CLAD-2.** ● Appendix 10. CLAD-2. Simplified cladonomy and nomenclature of **Lissamphibia** proposed here, showing all taxa from classis to subfamily and all genera. (Pages 709–718).

**A11.CLAD-3.** ● Appendix 11. CLAD-3. Families and subfamilies of **Lissamphibia** here considered valid. (Pages 719–723).

**A12.CLAD-4.** ● Appendix 12. CLAD-4. Class-series taxonomy and nomenclature of **Lissamphibia** proposed here. (Pages 724–725).

**A13.QUA.** ● Appendix 13. QUA. Usage of nomina of families of extant **Lissamphibia** from 1796 to 2014. (Pages 726–729).

**A14.AIR.** ● Appendix 14. AIR. New airesies. (Pages 730–732).

**A15.MIS.** ● Appendix 15. MIS. Missing molecular data. (Pages 733–735).

**A16.BUF.** ● Appendix 16. BUF. The Buffon Declaration. (Pages 736–737).

**A17.ADD.** ● Appendix 17. ADD. Notes added in proofs. (Page 738).

## 1. Introduction

> Frequent are the laments over the instability of our systematic nomenclature; bitter the complaints against those who change names. But surely such complaints are unjust when urged against those who range themselves under laws. We are forcibly reminded by such complaints of the ancient apologue of the wolf and the lamb. The stream of nomenclature has indeed been much muddied, but it is due to the acts of those who refuse to be bound by laws or reason. The only way to purify the stream is to clear out all the disturbing elements. In doing so, mud that has settled for a time may be disturbed, but this is at worst anticipating what would have inevitably happened sooner or later. We are suffering from the ignorance or misdeeds of the past. In opposing the necessary rectifications and the enforcement of the laws, extremes may meet; conservatives and anarchists agree. But the majority may be depended upon in time to subscribe to the laws, and the perturbed condition will then cease to be.
>
> Theodore Gill 1896: 600

The purpose of this work is double: {B1} to propose new concepts and a new methodology for phylogenetic taxonomy and nomenclature in zoology, particularly at higher levels; and {B2} to exemplify these proposals in detail by a new ranked suprageneric cladonomy of recent amphibians.

One might argue that, despite the structural interrelationships among these two topics, a better choice might have been to devote one separate work to each of them. However, in this respect our work has one major classic precedent (Simpson 1945), not to mention the many works of lesser ambition where new taxonomic and nomenclatural concepts and methods were offered in the context of revisionary works dealing with precise zoological groups. General theoretical proposals in these domains (e.g., Dubois 2005*b*, 2006*a*), are more difficult to grasp by newcomers than the same proposals illustrated by detailed examples (e.g., Kluge 2010), and on the reverse publishing new taxonomic proposals but without a detailed explanation of the taxonomic and nomenclatural concepts and methods they rely upon (e.g., Frost *et al.* 2006 for their suprageneric classification and nomenclature) does not allow their clear understanding and discussion.

We provide below an updated ***phylogenetic classification*** (***cladonomy***) and ***nomenclature*** of recent amphibians (**Lissamphibia**), i.e., the group of the class **Amphibia** (including all-fossil taxa) that is represented in the extant fauna of our planet. This requires an updated evaluation of the ***taxonomy*** (formal recognition of ***taxa***) of the group, based on the most recent ***phylogenetic*** hypotheses, and an updated ***nomenclature*** (identification of the valid nomina for these taxa), based on unambiguous and universal ***Rules*** or ***Criteria***. We here use the term ***recent*** to designate all lissamphibians, the term ***'all-fossil'*** for lissamphibian taxa that do not include a single extant species, and the term ***'extant'*** for all lissamphibian taxa that are represented today by at least one species in the living fauna. Species recently ***extinct*** (during the anthropocene), such as *Rheobatrachus silus*, are here referred to the category ***'extant'***.

Today, the classification of Eucaryotes cannot but be 'phylogenetic'. This means that only groups that are hypothesised, on the basis of morphological, molecular and/or other evidence, to be '***monophyletic***' (*sensu* Hennig 1950) or ***holophyletic*** (Ashlock 1971), should be recognised as valid taxa, and that the sequence of nodes in the phylogenetic tree should be reflected in the taxonomic hierarchy, more basal nodes corresponding to higher, more inclusive taxa (Hennig 1950, 1966; Wiley 1981). As phylogenetic hypotheses are permanently modified (in most cases improved) by the addition of new taxa and new characters and the implementation of new methods of analysis of the data, no classification is or will ever be 'final', and taxonomists must become accustomed to the fact that we work only on 'provisional' or 'working' classifications, more shortly ***ergotaxonomies*** (Dubois 2005*c*). But, to be fully 'phylogenetic', it is not enough for a given ergotaxonomy to include only holophyletic taxa: it must also reflect in all details the structure of the tree, each node of the latter being formally recognised as a taxon and named according to a device that allows to identify its place in the tree. This is currently not the case in any of the classifications currently used in the literature, particularly in the group of amphibians, for two distinct reasons: {C1} only some nodes are currently considered 'worthy' of being formally recognised taxonomically and named; and {C2} the ranks attributed to these taxa are arbitrary and inconsistent, thus precluding their use for communicating the structure of the phylogenetic tree.

The building of the ergotaxonomy of a group of organisms has to go through three stages, steps or 'floors': {D1} a phylogenetic analysis leading to a phylogenetic hypothesis for the group (a ***cladistic*** '***tree***'); {D2} a transcription of this tree into a classification of taxa; and {D3} the naming of these taxa, following fixed sets of international Rules of nomenclature or explicit Criteria for nomina at ranks which are not regulated by the *Code*. We detail below the methodology we used for each of these three steps, and which leads to the three results of this study presented and discussed below: {E1} a cladistic tree of amphibians, designated below as *TREE* (Appendices **A2–3.TREE-1** to **A.TREE-3**; Figure **F6.TREE-3**); {E2} a cladistic suprageneric ergotaxonomy of amphibians, *CLAD* (Appendices **A9.CLAD-1** to **A12.CLAD-4**); and {E3} a nomenclature of suprageneric taxa of amphibians (Appendices **A9.CLAD-1** to **A12.CLAD-4**).

Amphibians are a very diverse and charismatic vertebrate group (Vitt & Caldwell 2009). The recent amphibians (**LISSAMPHIBIA**) comprise three groups, currently considered as orders: frogs (**ANURA**), salamanders (**URODELA**) and caecilians (**GYMNOPHIONA**). More than 8,200 species (8235 on 31 October 2020 according to <*AWb* 2020>) are currently recognised in this group. Today, they are found in almost every habitat on every land mass except Antarctica and various islands and archipelagoes (Duellman 1999). Amazingly, nearly half of the known species have been described only in the last 25 years (Dubois 2004*c*; <*AWb* 2020>), for two main reasons: {F1} many groups exhibit staggeringly diverse radiations in poorly explored areas of the globe (such as the Andes, the Amazon and Congo basins, the Oriental region and New Guinea); and {F2} the methods and concepts used to distinguish species have shown a major change in the recent decades (due in particular to the development of nucleic acid sequencing and of the cladistic methodology, but also, in some groups at least, by improvements in the methods of morpho-anatomical study). This diversity is also currently in crisis, as many of these hyperdiverse regions have experienced major population crashes in recent years, due to factors such as habitat loss, destruction or degradation, climate change and infectious diseases, and faunistic and genetic pollution (Stuart *et al.* 2004). Thus, an updated classification of these organisms is critically necessary, to understand their diversity and distribution, evolutionary history and conservation needs.

Contrary to a widespread belief, it is not true that the classification of amphibians has long shown only historical inertia and informal consensus of researchers. In fact, all along the history of biology, and even long before taxonomy became 'phylogenetic' and 'molecular', the classification of amphibians has witnessed permanent and considerable changes, mostly through the identification of homoplasy and polyphyly, and more recently paraphyly, but 'incidentally' and 'intuitively', before these concepts were clearly identified and named, indeed before the concept of evolution was adopted as the paramount concept of biology, or even accepted as being scientific. The current classification of the amphibians is the result of this long progress of knowledge about these animals. This process started by the use of morphological characters of adults, initially external and later internal (mostly sketetal), then by the consideration of larval characters, then by the use of data from behaviour, karyology, protein electrophoresis and nucleic acid hybridisation, and finally (first mitochondrial and later nuclear) nucleic acid sequencing. The Hennigian 'revolution' was followed by the introduction of the cladistic methodology based on morpho-anatomical characters in the 1970s, and molecular-based phylogenies started being produced in the early 2000s.

A complete and detailed review of the history of the taxonomy of amphibians would be beyond the scope of the present work, as it would require not only comparisons of classifications but also, and more significantly, of the characters on which these classifications were based, and on the way these characters were used, that showed several dramatic changes over two centuries and a half.

In amphibians like in all other groups, taxonomy began by using 'overall resemblance' (expressed through the use of vernacular terms to designate the taxa: 'frog', 'toad', 'treefrog', etc.), and only later started to analyse this 'similarity' in terms of characters. In many cases this showed that 'overall resemblance' was not, as could be understood through the claims in some recent works, 'completely stupid'. Despite the much repeated statements of Hennig and some of his disciples, as soon as classifications started being based on explicit characters, no classification has ever been 'completely phenetic', as all authors have always classified the males and the females as members of the same species, and rejected as 'unnatural' taxa in which 'resemblance' was clearly due to 'convergence'. The Hennigian 'revolution' was a methodological revolution the most important novelties of which were the introduction of the concepts of plesiomorphy and apomorphy and of an explicit methodology of cladistic analysis, but, when one considers the classifications, the transition from so-called phenetic to so-called phylogenetic classifications was much smoother and progressive than it has often been claimed. What is clear is that before the time of molecular studies, researchers interested in the evolution and taxonomy of amphibians had to examine specimens and 'read' their phenotype in terms of characters, which is far from being always the case today.

'Overall resemblance' as understood in many old works usually consisted in a set of characters that often appear correlated within the organisms (see examples below), not necessarily for being inherited from a common ancestor, but often for constituting a set of features that allow a good adaptation to a certain mode of life, therefore reflecting convergence. But subsequent studies of other characters, independent from this set of correlated ones, often allowed to show that homoplasy was at stake. In frogs for example, from the very early days of systematics, various 'general morphotypes' were identified which show adaptation to aquatic, terrestrial, burrowing, arboreal, hypogeous, etc., modes of life. These groups correspond in fact to the concept of 'guild' as used initially in birds' ecology and more recently, with much success, in larval anurans (Altig & Johnson 1989), but quite strangely not in adult amphibians, although it could be of great use in the understanding of their evolution and adaptations.

A few examples will be enough to show that, even before the introduction of 'phylogenetic taxonomy' and molecular sequencing, major re-evaluations of the taxonomy had taken place, based on morphological characters alone.

In what is often considered the first scientific classification of animals, Linnaeus (1758*a*) showed a very poor understanding of 'lower' vertebrates. He recognised only two of the three groups of recent amphibians that we still recognise today, but simply as genera: *Rana* for the anurans, which he placed in a group also including *Lacerta*, *Testudo* and *Draco*; and *Caecilia* for the caecilians, which he placed within the snakes. As for the urodeles, he did not even recognise the group, as his genus *Lacerta* lumped as 'lizards' several other groups of 'reptiles' and the urodeles. The frogs were recognised as a group of its own already by Scopoli (1777). The salamanders were removed from the lizards by Brongniart (1800*a–b*), who was also the first one to point to their close relationship with frogs, and to remove caecilians from the snakes, but without referring them to the amphibians. This was formally done by Duméril's student Oppel (1811*a–b*), who was the first author to recognise the three groups of recent amphibians we recognise today.

Among the urodeles, some retain branchiae in the adult stage and were long considered as 'branchiate' salamanders. The first discovered ones were described as the genera *Siren* Österdam, 1766, *Proteus* Laurenti, 1768, *Gyrinus* Shaw, 1798 (later renamed '*Axolotl* Oken, 1821' and *Axolotus* Jarocki, 1822) and *Amphiuma* Garden *in* Smith, 1821. For a while two schemes were in force in parallel in the literature for the classification of these genera: {G1} following Sonnini & Latreille (1801*d*), placing them in a special taxon, sister to that accommodating the frogs and salamanders; and {G2} following Duméril (1805), placing them in the urodeles. Latreille (1825) was the first author to realise that axolotls were larval salamanders and to separate them from the other three genera.

The concept of 'treefrog' (recognised in many languages under widely different terms such as 'rainette' in French or 'Laubfrosch' in German) is particulartly enlightening to show how, on the basis of morpho-anatomy alone, the taxonomy of amphibians progressively freed itself from the 'overall resemblance' paradigm. The term 'treefrog', indicating in most cases (but not always) an arboreal mode of life, corresponds to a rather well defined morphotype or 'syndrome' that would allow recognition of a 'guild', including; {H1} enlarged adhesive digital tips (identified from the early days of frogs's systematics); {H2} presence of intercalary additional elements before the last phalanx of digits (first mentioned apparently by Gadow 1901: 27 and Noble 1922: 22, 59, 71); {H3} granular 'treefrog belly skin' (Ohler 1999: 40; first mentioned apparently by Cope 1889*a*: 321); {H4} absence of latero-dorsal folds; {H5} short hind limbs; {H6} incomplete webbing; and {H7} often uniform green colour. As now documented by molecular methods, we know that this 'syndrome' appeared independently in a number of evolutionary groups (Manzano *et al.* 2007), but by itself this finding is not in the least new, as it had already been made through careful purely morphological observations and without recourse to the Hennigian concept of synapomorphy. What the modern methods allow is to go deeper, more reliably and in more details into the resolution of such cases of homoplasy, but this does not constitute a 'conceptual revolution'.

The concept of 'treefrog' is missing in Linnaeus, but both Garsault (1764) and Laurenti (1768) erected a genus (respectively *Ranetta* and *Hyla*) for the frogs having enlarged adhesive pads at the extremities of digits, which were first all referred to the latter genus for decades. This genus was then progressively dismantled into several genera or/and subgenera but which were long left in the same higher group as all other frogs: three in Fitzinger (1826), nine in Wagler (1830), twelve in Bonaparte (1831*a*), twenty-two in Tschudi (1838), sixteen in Duméril & Bibron (1841), thirty-seven in Fitzinger (1843), etc. Günther (1858) was the first author to dispatch the treefrogs genera in nine families placed in three 'sections'.

Cope (1864*b*, 1875) went a step further, in distinguishing two main groups of frogs based on the 'arciferous' or 'firmisternous' structure of the pectoral girdle, which led him to sort the 'treefrogs' in two distinct families (*Hylidae* and *Ranidae*) referred respectively to these two groups long called 'hyloids' and 'ranoids'. Noble (1931: 524) restricted the latter family to the frogs devoid of intercalary cartilage and erected a distinct family for those having this character. Subsequent works have shown that the ranoids with enlarged adhesive pads but missing this intercalary element were in fact not 'treefrogs' and were missing other characters of the 'treefrog syndrome', pointing to other modes of life: for example, the members of several ranid genera (e.g. *Amolops* Cope, 1865, *Meristogenys* Yang, 1991 and *Odorrana* Fei, Ye & Huang, 1990) having smooth bellies, long limbs, and often dorsolateral folds and polychromous coloration, are rheophilous and not arboreal. But even among these frogs, careful examination of the morphology of these enlarged digit tips allowed homoplasy to be uncovered (Ohler & Dubois 1989).

Another major step in the identification of homoplasy in 'treefrogs' was Laurent's (1951) splitting of 'ranoid' treefrogs into two families (*Rhacophoridae* and *Hyperoliidae*) which are only remotely related. Other more recent findings were supported by molecular data, so that today more than ten different higher taxa correspond to the initial phenetic concept of 'treefrog' (Manzano *et al.* 2007) but, as shown by this quick survey, part of this result was already obtained by 'traditional' morphological studies and did not rely on molecular phylogeny. In fact, whereas purely morphological methods have proved to be quite efficient to detect polyphyly, they have been much less so to detect paraphyly, and for this purpose molecular phylogenetic methods have been much more useful.

For more than a century, a number of authors proposed an overall classification of all extant amphibians (Laurenti 1768; Brongniart 1800*a–b*; Daudin 1800, 1803*a–b*; Sonnini & Latreille 1801*a–d*; Duméril 1805; Oppel 1811*a–b*; Blainville 1816*a–b*, 1835; Merrem 1820; Gray 1825, 1831*a*; Latreille 1825; Fitzinger 1826, 1843; Bory de Saint-Vincent 1828; Ritgen 1828; Wagler 1830; Bonaparte 1831*a–b*, 1840*a–b*, 1850; Tschudi 1838; Hogg 1838, 1839*a–b*, 1841; Haeckel 1866*b*; Lataste 1878*a*, 1879*a*, 1888; Sarasin & Sarasin 1887, 1890; Zittel 1888; Gadow 1901; Stejneger 1907; Noble 1931; Laurent 1948*a–b*; Kuhn 1961, 1962, 1965; etc.) or of one of their three groups: frogs (Duméril & Bibron 1841; Günther 1858; Cope 1864*b*, 1865, 1866, 1867; Mivart 1869; Boulenger 1882*b*, 1888; Nicholls 1916; Bolkay 1919; Fejérváry 1921*b*; Miranda-Ribeiro 1926; Laurent 1967; Reig 1958; Griffiths 1959, 1963; Tatarinov 1964*a*; etc.), salamanders (Gray 1850; Duméril *et al.* 1854; Boulenger 1882*c*; Brame 1957, 1958; Thorn 1969; etc.) and caecilians (Duméril

& Bibron 1841; Boulenger 1882*c*; etc.). However, as the number of species of other taxa increased dramatically, it began more difficult to embrace the taxonomy of the whole group. Many authors then concentrated their work on subsamples of the group, defined either taxonomically (Parker 1934; Fuhn 1960; Wake 1966; Taylor 1968; Duellman 1970, 1977; etc.) or geographically (Kellogg 1932; Rivero 1961; Cei 1962, 1980; Liu & Hu 1961; Zweifel 1972; Dubois 1981*b*, 1987*a*, 1992; etc), and fewer and fewer authors endeavoured to provide a comprehensive classification of the whole group. Interest in such a more complete approach was triggered by the renewed approach of phylogeny initiated by Hennig (1950, 1966), and morphology-based phylogenetic hypotheses concerning some groups started being produced (Liem 1970; Lynch 1971, 1973*b*; Duellman 1975; Clarke 1981; Roček 1981; Channing 1989; etc.), followed by new general phylogenies and classifications of the extant amphibians (Inger 1967; Sokol 1977; Dowling & Duellman 1978; Goin *et al.* 1978; Laurent 1980, 1986; Dubois 1983*b*, 1984*b*, 1985, 2005*d*; Duellman & Trueb 1985; Lynch 1971, 1973*b*; Trueb 1971; Starrett 1973; Heyer 1975; Heyer & Liem 1976; Milner 1988; Fei *et al.* 1990; Trueb & Cloutier 1991; Blommers-Schlösser 1993; Cannatella & Hillis, 1993; Ford & Cannatella, 1993; Larson & Dimmick, 1993; Duellman & Trueb, 1994; etc.).

With the advent and increasing popularity of molecular systematics starting in the 1990s, phylogenetic estimates of many amphibian groups started to appear, and also began to illustrate numerous problems of the prevailing classification, including newly recognised lineages through the resolution of paraphyletic and polyphyletic groupings, often due to homoplasy and morphological convergence (Graybeal 1993; Marmayou *et al.* 2000; Biju & Bossuyt 2003; Darst & Cannatella 2004; Faivovich *et al.* 2005; Roelants & Bossuyt 2005; San Mauro *et al.* 2005; Wiens *et al.* 2005*a–b*; Grant *et al.* 2006).

Since the 2000s, there have been several attempts to utilise this information to stabilise the taxonomy and nomenclature of amphibians. Dubois (2005*d*) proposed a synthesis of available phylogenetic and taxonomic information, though he noted that many groups were poorly diagnosed and delimited. Frost *et al.* (2006) produced the landmark work "The Amphibian Tree of Life", containing for the first time a comprehensive phylogeny for amphibians based on DNA sequence data, and a taxonomy that transcribed this estimate of evolutionary relationships into a unified scheme for extant taxa. Subsequent works have refined the phylogeny of several groups (Sá *et al.* 2012; Grant *et al.* 2006; etc.), but overall the phylogenetic framework was corroborated, and the taxonomy represented a robust framework for future revision. It should be noted however that, in the recent decades, except in a few groups like the *Hyloidea*, much more information has been obtained on the molecular relationships of recent groups than on their morphology and anatomy, a domain which remains largely unexplored and which in the future might disclose some important problems regarding phylogenetic hypotheses.

As for the nomenclature of the amphibians, it long remained based on obsolete interpretations based on a very incomplete review of the existing literature and on a largely shared ignorance of the Rules of the *Code*, especially for the nomina of taxa above the rank genus. To give just one example, in most works before 1981, the family including the genus *Rana* was named '*Ranidae* Bonaparte, 1831', because this author was (wrongly) believed to have been the first to use the spelling *Ranidae* for this nomen, which ignored the fact that, under the Rules, its author was Batsch (1796) who had first named it as *Ranini* (Dubois & Bour 2011) and that it had been mentioned under various ***aponyms*** (***avatars***) of the latter before 1831 (Dubois 1984*b*: 41). Dubois (1981*b*, 1983*b*, 1984*b*, 1987*a*, 1992, 2005*d*) clarified the historical and nomenclatural status of many nomina of amphibians, and in particular (Dubois 2004*b*) those of higher taxa above the rank superfamily, for the taxonomic allocation and the nomenclatural validity of nomina of which the *Code* does not provide Rules. Unfortunately, following Frost *et al.* (2006), these analyses were largely ignored or challenged in subsequent works, and the higher nomenclature of amphibians used in recent websites (e.g. <*ASW* 2020*a*, *AWb* 2020, *GBIF* 2020, *ITIS* 2020, *SN* 2020, *Taxonomicon* 2020, *ToL* 2020, *uBio* 2020>), which is based on several factual errors and inconsistent nomenclatural Criteria, requires correction (see Dubois & Ohler 2019).

In 2011, Pyron & Wiens presented the first large-scale (i.e., with the aim of representing species-level diversity) phylogenetic estimate for amphibians containing 2,871 species (Pyron & Wiens 2011), 5.5 times more than the 522 species sampled by Frost *et al.* (2006). These species represented essentially all major lineages of amphibians, including 432 (86 %) of the 504 genera recognised at that time. The results were actually fairly similar to those of Frost *et al.* (2006), resolving a few lingering issues such as the holophyly of South American marsupial frogs (family *Hemiphractidae*), and naming additional lineages within the former family *Leptodactylidae* (see Fouquet *et al.* 2013). This study has since been widely used as a baseline in studies of amphibian systematics, including both taxonomy and evolutionary analyses, given the usefulness of the topology and branch lengths for phylogenetic comparative analyses (Bell & Zamudio 2012; Fritz & Rahbek 2012).

Despite the enormous advances and apparent robustness and stability of the phylogenetic estimates and taxonomy and nomenclature of Frost *et al.* (2006) and Pyron & Wiens (2011), they cannot be considered the final word in amphibian systematics, for a number of reasons. The first is that no taxonomy will ever be final, as accumulation of data and knowledge will continue endlessly. Numerous new lineages of amphibians have been recognised since 2011 that alter our interpretation of evolutionary history, phylogenetic relationships and nomenclatural allocations (Kamei *et al.* 2012; Barej *et al.* 2014). The second is that the inevitable errors that will plague any large-scale scientific study, in this case mostly misidentified or erroneous sequences or insufficient taxonomic or character sampling within some lineages, has changed the phylogeny in some places (Blotto *et al.* 2013), necessitating further taxonomic clarification.

The third reason is perhaps the most important, which is that both Frost *et al.* (2006) and Pyron & Wiens (2011), as well as most taxonomic studies in any group of animals, were inconsistent or erroneous in their application of some Rules of the *Code*, and above all did not present a unified set of ***explicit***, ***unambiguous*** and ***objective*** Criteria for the allocation of nomina to higher taxa and/or ranks based on the phylogenetic analyses. Recognition of most taxa, such as superfamilies, families and subfamilies, was based primarily on recent tradition, but not under any particular standard of usage (e.g., use by at least 10 authors in 25 publications in the preceding 50 years). Thus, recognition of a family in one lineage or a genus in another does not indicate any kind of consistency or equivalence in the application of those ranks.

This is not to say that these ranks **by themselves** are biologically meaningful, which they generally are not, but that their application in amphibians (as in most groups) is based neither on a robustly defined historical tradition or on recent conventions, nor on a meaningful division of the taxonomic hierarchy to reflect the structure of the tree. Thus, the current amphibian taxonomy in many ways represents the worst of all possible worlds.

A thorough revision can easily alleviate these problems, and form the basis of a stable nomenclature that is objectively Rules- and Criteria-based, and which can be interpreted meaningfully by researchers working in any amphibian subgroup as a platform for new species descriptions and further revision as new data become available. We attempt to provide such a revision here, based on several data and Criteria.

{I1} First, we utilise a recent phylogenetic analysis (Jetz & Pyron 2018) containing 4060 species (about 50 % of the currently known, extant amphibian species), sampled for up to 15 genes (5 mitochondrial and 10 nuclear, 15091 bp total).

{I2} Then, we implement a set of ten objective Criteria that allow for the unambiguous fixation of the rank family in a suprageneric classification, and Criteria for the availability, allocation and validity of nomina of taxa above the rank superfamily (i.e., ranks which are not covered by the *Code*).

{I3} We provide an unprecedented complete review of all the supraspecific nomina ever proposed for lissamphibians in the 262 years of taxonomy from 1758 to 2020 and establish their status.

{I4} Finally, we apply our Criteria and these data on the nomina to our tree, to generate an objective, Rules- and Criteria-based taxonomic and nomenclatural revision of all lisamphibians, which reflects in a bijective manner our tree for all suprageneric ranks. This scheme is certainly by no means the last word on amphibian systematics, but we hope that it will serve to further stabilise amphibian taxonomy, and provide a solid basis for future researchers.

## 2. Materials and methods: phylogeny, taxonomy and nomenclature

### 2.1. Phylogeny

#### *2.1.1. Phylogenetic reconstruction*

The phylogenetic tree we have based our classification on was published by Jetz & Pyron (2018), in their analysis of the historical evolutionary factors driving diversification in amphibians, and the interplay therein with present-day extinction risk. These authors presented a sparsely-sampled supermatrix, which was very similar to recent efforts in numerous groups, including plants (McMahon & Sanderson 2006; Hinchliff & Roalson 2013), birds (Jetz *et al.* 2012), amphibians (Pyron & Wiens 2011) and squamates (Pyron *et al.* 2011, 2013; Tonini *et al.* 2016). In short, they attempted to compile all available DNA sequence data for extant amphibian species from a set of broadly sampled loci, for a concatenated, partitioned analysis using Maximum Likelihood (ML). They then assessed node support using the increasingly well-established Shimodaira-Hasegawa Like (SHL) approximate Likelihood-Ratio Test (aLRT), which shows high precision and accuracy with respect to traditional non-parametric bootstrap methods, while being computationally efficient and quick to calculate (see Anisimova *et al.* 2011; Pyron *et al.* 2011).

This approach has been well validated both empirically (Pyron *et al.* 2011) and theoretically (Queiroz & Gatesy 2007), at least with respect to consistency in topology and branch-length estimates across studies, and with regard to the expectation of relationships derived from other sources, such as morphological data (Frost *et al.* 2006). Amphibian relationships have been remarkably consistent across {J1} studies sampling many loci and fewer taxa to infer higher-level relationships (Feng *et al.* 2017), {J2} studies examining species-level relationships of particular groups in detail (Duellman *et al.* 2016) and {J3} supermatrix approaches to large-scale inference of amphibian phylogeny (Pyron & Wiens 2011).

Thus, concerns about the potential impacts of missing data, which have generally been shown to be negligible in most cases (Wiens 2003), should be alleviated based on this congruence. In particular, the amount of 'missing data' is a function of the number of loci chosen for analysis, and the amount of data present is in reality the most important parameter (Wiens & Morrill 2011). If a study of a particular family samples 50 species for 5 genes with 0 % missing data, and those data are then added into a supermatrix with a scaffold of 15 genes, each of those species then has 67 % 'missing data' by default. Yet, the same phylogenetic signal is still present. As has been seen empirically (Pyron & Wiens 2011, Sanderson *et al.* 2011), the supermatrix approach used here has typically recovered the same topology and branch lengths as the original smaller-scale studies. This is not to say that the results are necessarily correct, but if poor or misleading phylogenetic signal characterises the underlying data, this is not a problem of the supermatrix approach *per se*, and would have to be addressed separately.

Thus, the artificial increase in 'missing data' introduced by inclusion in the supermatrix does not seem to negatively impact the existing phylogenetic signal in the existing data (but see Sanderson *et al.* 2015). What is more important is instead the amount of phylogenetically informative DNA sequence data present for each species. This is necessarily heterogeneous given the nature of the supermatrix approach due to different levels of sequencing effort and overlap among different groups. Thus, we have increased our sampling of both species and genes over previous efforts, to gather as much available data as possible for as many terminals as possible.

Another empirical confirmation of the statements above came from this study itself. The final *TREE* on which this whole study is based was produced in August 2014, and a first skeleton of our taxonomy *CLAD* was produced in the immediately following months. Then, we worked for several years on the completion of the nomenclatural survey of all the existing supraspecific nomina of amphibians and above all of their nomenclatural and taxonomic status according to the taxonomic and nomenclatural Rules and Criteria adopted here (and detailed below), up to the final stage presented here, which was reached at the end of 2019. During all this time, the incorporation of all the taxonomic changes required by phylogenetic novelties published by colleagues (discussed below in the 'Taxonomic changes' section) did not require any significant change in the structure of *CLAD*. Several new taxa (mostly genera) that we had recognised in the preliminary part of our work were recognised and named by colleagues in the meanwhile, and of course we adopted their nomina when they were taxonomically justified and nomenclaturally available. In a few cases (discussed below), the addition of missing species allowed the resolution of some phylogenetic ambiguities concerning these species and to improve our taxonomy, but in no case did these new data result in challenging the main taxa we had recognised at any rank above subtribe. Thus the *TREE* on which this study is based, with the SHL-aLRT support value of 90 % that we adopted (see below) showed a remarkable, and unexpected, even for us, robustness. This robustness will no doubt be challenged in the future with the addition of large numbers of species or sequencing of additional genes, but so far it has not been so for a period of five years despite the addition of about 1000 species since the beginning of the present work.

The previous iteration of this matrix used for taxonomic revision (Pyron & Wiens 2011) contained data from 2871 species sampled for up to 12,712 bp from up to 12 genes, three mitochondrial and nine nuclear. Substantial increases in the number of described species and associated sequencing efforts since then have drastically broadened the data available in GenBank for large-scale phylogenetic inference. Their methods for incorporating these data into an updated supermatrix closely followed previous studies (Jetz *et al.* 2012; Tonini *et al.* 2016), which we reiterate here, from Jetz & Pyron (2018).

As we were primarily interested in a taxonomic revision of extant **Amphibia**, it was necessary first to have a reference taxonomy representing current usage. We refer to this as our 'naïve' taxonomy. Until very recently (see Frost *et al.* 2006), amphibian taxonomy was largely a matter of social consensus, with few rigorous analytical studies defining taxa as holophyletic groups based on shared, derived characters and strict application of nomenclatural Rules. In the recent decades, much progress has been made, and most higher-level amphibian taxa currently recognised (Blackburn & Wake 2011) represent well-supported holophyletic groups.

Amphibian taxonomy is curated in two separate online resources: *Amphibian Species of the World* (<*ASW* 2020*a*>) and *AmphibiaWeb* (<*AWb*>), both of which maintain up-to-date species lists of extant taxa and are broadly similar in reflecting recent updates to higher-level classifications. Although they are relatively equivalent taxonomically, the *AmphibiaWeb* interface was easier to extract data from, and Jetz & Pyron (2018) thus used the update of 19 February 2014 of this website as reference. This contained 7238 recognised extant amphibian species. These were classified into families and subfamilies generally following the most recent large-scale revision (Pyron & Wiens 2011), with a few recent updates from recently recognised higher taxa.

In general, this taxonomy reflected recent updates that have shifted higher-ranked taxa (e.g., families) towards the tips. Examples include recognition of groups previously considered subfamilies of *Ranidae* (e.g., *Rhacophorinae*) or *Caeciliidae* (e.g., *Dermophiinae*) as families (*Rhacophoridae*, *Dermophiidae*). In addition, they curated several updates to the *AmphibiaWeb* taxonomy, such as new evidence for the placement of *Crossodactylodes* and *Rupirana*. Thus, our naïve reference taxonomy represents a general recent consensus, rather than an '*AmphibiaWeb*' or '*Amphibian Species of the World*' taxonomy specifically. When we do make specific reference to a taxonomic position taken by those references, it is made explicit.

A final important note is that, at this point, we also adopt the updated taxonomies at the genus level from these sites, including many of those introduced recently (Frost *et al.* 2006) for traditionally recognised groups such as *Bufo*, *Hyla* and *Rana.* Although not adopted by some recent authors (Pauly *et al.* 2009; see Frost *et al.* 2009), these are clearly holophyletic based on those results and others. This does not affect our higher-level taxonomic revision directly, but it does indicate that progress has been made in the generic taxonomy of extant amphibians (but see below 'Genus taxonominal level'). Although we recommend only a few taxonomic changes at genus level in this work, we noted all instances of non-holophyly at the genus level, as a guide for future revisions. As it does not provide any clue on whether a holophyletic taxon is a genus, a subgenus, a tribe or a family, holophyly is not by itself a sufficient Criterion for genus recognition, but this question is not tackled in detail in the present work, where we tend to follow the current 'consensus' regarding amphibian genera, except in a few cases which we make explicit.

To generate the updated supermatrix, Jetz & Pyron (2018) first took the 2871-species, 12-gene matrix and updated the sequence of species to the naïve reference taxonomy (e.g., breaking up *Bufo*, *Hyla* and *Rana*). They also removed a few instances of misidentified specimens and mislabeled sequences identified by D. R. Frost in *ASW* <2020*b*> and other recent authors (e.g., Blotto *et al.* 2013). They then identified two additional mitochondrial genes (NADH subunits 1 and 2; ND1 and ND2) and one nuclear locus (brain-derived neurotrophic factor; BDNF) for which a large number of species (> 500) were available on GenBank, and could thus add significant data to the matrix.

They thus had a total of 15 genes: long- and short-subunit rRNAs (12S/16S), brain-derived neurotrophic factor (BDNF), C-X-C chemokine receptor type 4 (CXCR4), cytochrome *b* (CYTB), histone 3a (H3A), NADH subunits 1 and 2 (ND1 and ND2), sodium–calcium exchanger (NCX1), pro-opiomelanocortin (POMC), recombination-activating gene 1 (RAG1), rhodopsin (RHOD), seventh-in-absentia (SIA), solute-carrier family 8 (SLC8A3) and tyrosinase (TYR). For each gene, they searched GenBank exhaustively (e.g., 'Amphibia AND BDNF'), adding in all available data for species in the naïve reference taxonomy. The protein-coding genes were aligned using the 'Translation Align' option in Geneious (Biomatters Ltd.), with the MAFFT algorithm under the default parameters (Katoh & Standley 2013). This ensured that all sequences were coding and in open reading frame.

The ribosomal RNAs (12S/16S) were aligned *en masse* using the default parameters in MAFFT. Other approaches such as SATé (Liu *et al.* 2011) have generally shown good performance for datasets such as these, by co-estimating phylogeny and alignment to arrive at an optimised static alignment. However, preliminary use of these tools showed relatively poorer performance (e.g., lower pairwise identity) than the *en masse* strategy. In general, the SATé-type approach yielded large block of taxa that were well aligned to each other, but not to other such blocks (e.g., seemingly erroneous frame shifts between apparently homologous sites among different blocks).

The final matrix contained sequence for 4060 amphibian species and the outgroup *Homo sapiens*. These taxa were represented by a mean of 3030 bp (range: 197–13,849) of DNA sequence data from a mean of 4 genes. The total matrix was 15091 bp long. The individual genes were sampled as follows: 16S, 3717 species; 12S, 3062; CYTB, 1770; RAG1, 1594; ND1, 1045; TYR, 1041; RHOD, 1001; ND2, 826; POMC, 758; SIA, 512; H3A, 483; CXCR4, 471; BDNF, 433; NCX1, 429; SLC8A3: 299. Thus, some mitochondrial genes (e.g., 12S and 16S) were sampled for the majority of species, providing a scaffold for species-level relationships, whereas many nuclear genes were sampled for major lineages, providing a scaffold for higher-level relationships.

In terms of sampling, this includes 4060, i.e. 49.3 % of the 8235 total currently (as of 31 October 2020, <*AWb* 2020>) recognised extant species: 3449 of 7263 frogs (47.5 %), 549 of 759 salamanders (72.3 %) and 62 of 213 caecilians (29.1 %). We sampled 524 of 575 extant genera of amphibians recognised in *CLAD* (91.1 %): 425 of 468 genera for frogs (90.0 %), 77 of 77 for salamanders (100 %) and 22 of 30 for caecilians (73.3 %). Thus, the sampling represents a relatively complete overview of the extant diversity in **Amphibia**, including essentially all major lineages.

Phylogenetic inference using this dataset took a two-step approach, as in recent studies (Jetz *et al.* 2012; Tonini *et al.* 2016). To infer trees using ML, Jetz & Pyron (2018) used the program ExaML, an update of RA×ML (Kozlov *et al.* 2015) which is specially designed for analysis of large-scale datasets such as this one on high-performance computing clusters. ExaML executes a single search on a starting tree, and typical ML inference requires a large number of searches to adequately explore treespace and assure convergence on a global ML estimate. Thus, they used RA×MLv8.0.14 to generate 100 randomised maximum-parsimony starting trees. They then executed 100 ML searches on these trees using ExaML, and selected the one with the best likelihood score.

Estimating SHL support values requires a single ML tree, which is then NNI-optimised to calculate the aLRT at each node. Thus, Jetz & Pyron (2018) took the best ML tree from the 100 ExaML searches, and passed it back to RA×MLv8.0.14 using the '-f J' algorithm, which does an additional ML search to optimise topology and branch lengths via NNI. The SHL values are then calculated at each branch. Thus, the final *TREE* used here (Appendix **A2.TREE-1**) from Jetz & Pyron (2018) is an NNI-optimised version of the highest-scoring tree from 100 ML searches, with SHL-aLRT support values at each node. These are roughly equivalent to the probability that the branch has been resolved optimally compared to the next four suboptimal NNI rearrangements (i.e., that the branch can be resolved unambiguously based on the signal present in the data, and is not optimally represented as a polytomy). For more security and stability of our taxonomic decisions, we chose 90 % as a cutoff for 'strong' support, roughly equivalent to BS = 70 or Pp = 95 (see Pyron *et al.* 2011). This is even higher than the cutoff of 85 % recommended as a result from simulations and empirical results.

### *2.1.2. The lability of phylogenetic hypotheses and the use of the term* **clade**

In the present work, we refrained from using the term ***clade***, as it is highly confusing (see Glossary below). It has been used in the literature in at least four distinct meanings, in zoological taxonomy and nomenclature to designate a nomenclatural CS rank and more recently as a CS and FS preudo-rank, and in evolutionary biology as a homophyletic or holophyletic group of organisms. In many recent publications it is used simultaneously in both the second and fourth of the meanings above.

For many recent biologists, this term carries a misleading message of 'reality', as if our cladistic trees were an exact representation of the evolutionary relationships. This 'reality' of clades is also hightighted by some authors even going as far as crediting clades with the status of 'individuals'. This is a clear abuse of language. 'Clades', just like 'species' or 'genera', are not 'observed' (as are facts or real individuals) but hypothesised to match biological concepts. These hypotheses are doubtless 'scientific', as they rely on explicit concepts and refutable methodologies, but they nevertheless remain hypotheses. Like all other hypotheses, they may be subjected to test, refutation and abandonment, to replace them by better ones, which in their turn may suffer the same fate. This is not a quibble, a simple matter of language, this is a basic conceptual, scientific question.

Examples are numerous and frequent, of groups of species once considered as forming a clade, where the addition of either taxa, individuals or molecular data, or changes in the methods for building trees and considering them robust, result in challenging this hypothesis. Furthermore, many so-called 'clades' are hypothesised to include many more species than those actually studied, and addition of species to the analyses not rarely results in showing that the 'clade' so far assumed to exist was in fact heterogeneous and artificial (see e.g. Delorme *et al.* 2004). In such frequent cases, what had been considered for a while as a 'reality' turns out to be just an abstraction, a concept that did not reflect the real relationships. There is nothing shocking or contemptuous in stating this, this is just the way science progresses. This misunderstanding is strikingly exemplified by the frequent statement appearing in papers, including in their titles (e.g., Van Dyken *et al.* 2006; Maddison *et al.* 2008; Fang *et al.* 2016), that a new clade has been 'discovered'. Objects, organisms or facts can be discovered, but concepts and hypotheses are formulated, not discovered.

But there is another reason, the importance of which is only beginning to be really appreciated and acknowledged by the community of biologists, for being reluctant to use the concept of 'clade' in evolutionary biology. This is the fact that evolution has not only involved splitting (cladogeneses), that can be expressed in the form of a 'tree', but also reticulation (mixogeneses), that should be expressed as a complex multidimensional 'network'. We must recognise that "the history of life cannot properly be represented as a tree" (Doolitlle 1999*a*), because "events such as meiotic and sexual recombination, horizontal gene transfer and hybrid speciation cannot be modeled by bifurcating trees" (Linder *et al.* 2004: [2]), so that "life's history is sometimes like a tree and sometimes like a net" (Doolittle 1999*b*: M8). Therefore the concept of 'clade' corresponds to a gross simplification of evolutionary patterns and should certainly not be taken for a 'fact'. It is merely a tool aiming at facilitating our analysis of evolution, until better tools are conceived, tested and adopted.

For all these reasons, we think that the permanent use in the phylogenetic and taxonomic literature of the term 'clade', understood as designating real objects or individuals, is misleading and should be abandoned. In the present work, in most cases, we used instead the term ***branch***, which clearly refers to a human construction as it designates simply a portion of a cladistic tree, built here on the basis of nucleic acid sequencing, adopted as a hypothesis for the construction of our ergotaxonomy pending a better hypothesis. We do not claim that 'branches' do exist in the 'real world', we just consider them as tools for the establishment of a provisional and refutable ergotaxonomy. In a few cases, we used the term ***lineage*** to designate the evolutionary biology concept of holophyletic group of organisms, as this term has apparently never been used to designate a taxonominal rank and is thus less confusing than 'clade'.

Anyway, whatever progresses are made in the study of the cladistic relationships between the species known to us (both extant and extinct), we should realise that we will never know the 'true' relationships between them, as many more species have existed on earth and will never be known to us, and incomplete species sampling has a major impact on cladistic inference (Lecointre *et al.* 1993), so the trees we are building will remain forever, at best, approximations and will never reflect accurately the detailed course of evolution.

## 2.2. Taxonomy

### *2.2.1. Taxonomic paradigms*

The term ***taxonomy***, as first introduced by Candolle (1813), simply meant classification of organisms into particular units later called ***taxa*** (Meyer 1926), which initially had no phylogenetic meaning. The science of taxonomy relies on concepts (mostly taxa, categories and ranks) and Criteria (allowing to recognise that the data fit with the concepts). The first basic question, which is entirely scientific, is to know when a group of organisms 'deserves' to be formally recognised as a taxon: the reply to this question depends on the taxonomic paradigm adopted. The second question is how to arrange all the taxa into a unique hierarchical nomenclatural system which allows to store and retrieve the information relative to taxa. This second question is both scientific (deciding which Criteria should be used to build this hierarchy) and ergonomic: as taxonomy has to deal with millions of objects (the taxa), it cannot do without an ergonomic system of indexation of the information, just like in an encyclopaedia or a database. While it would not be so in a domain dealing with a few hundreds or thousands of known objects (like the planets), the need of a hierarchical system is very strong in zoological taxonomy.

So far, after its initial empirism, which did not rely on any theoretical framework, two main schools of taxonomy have played a leading role during the history of taxonomy: the phenetic and the cladistic ones.

To put the things schematically, the ***phenetic*** approach aims at measuring the resemblance/similarity or the differences or 'distance' between organisms or groups of organisms. Although not contradictory in its tenets with the concept of evolution, it does not use this concept for the building of classifications. On the basis of character analysis and of comparison on the data on characters concerning several individuals, it produces hierarchical classifications using taxonomic ranks. Of course, the main problem with this approach is that, in many cases, it fails to recognise homoplasy and parallel evolution, and produces polyphyletic or paraphyletic taxa, which do not reflect evolution.

In contrast, the concept of evolution is central to the ***cladistic*** approach of taxonomy. Relying also on character analysis, but additionally on the cladistic analysis methodology and therefore on the concept of synapomorphy, this approach aims at avoiding the formal recognition of polyphyletic and paraphyletic taxa. The main problem with this approach is that it only allows to recognise taxa that are considered monophyletic/holophyletic, but does not produce hierarchical classifications, as was understood and stressed by the supporters of the *Phylocode* system (Cantino & Queiroz 2020), which only recognises 'clades' nested among each other, but no ranks.

A third approach to taxonomy has strangely seldom been identified as such although it has been used in thousands of taxonomic publications, mostly dealing with species-level taxonomy (***microtaxonomy*** of Mayr & Ashlock 1991). It relies only partly on character analysis, however not to measure 'similarity' or 'kinship' but to understand the genuine genetic or other **interactions** between organisms in nature or in artificial conditions. It makes use of a particular taxonomic concept which has been termed ***relacter*** (Dubois 2004*d*). A relacter is a relationship or interaction that may exist between organisms in the real word, and is not construed by man through intellectual phenetic or cladistic comparisons of data concerning the characters of organisms. It does not characterise the individuals taken separately but their dynamic biological interaction, and therefore can be used only for ***syntopic*** and ***synchronic*** organisms.

A well-known example of relacter concerns the study of ***sympatry*** between two sets or organisms or of contact zones between two such entities (***parapatry***). In such cases, two sets of organisms are first conceptualised on the basis of several independent ***characters*** observed on numerous individuals. Then, if in sympatry these two sets remain always distinct (e.g. set A with ***character states*** A1 to A5, and set B with character states B1 to B5, without composite individuals), every biologist, under whatever taxonomic paradigm and independently from the 'species concept' used, will deduce that there is no gene flow between the two entities and recognise them as distinct species. The same will apply when there are no hybrids in a contact zone between two well characterised entities. The situation is more complex when hybrids exist in this zone, as then the dynamics of the gene flow between both entities must be studied, and, even more problematic, such Criteria are not usable in ***allopatry*** or ***allochrony***. In other words, this Criterion is **asymmetrical**: it works to distinguish species but not, at least in isolation, to lump them. This approach is neither phenetic nor cladistic and may be designated as ***relational***. It is meaningful only at low taxonomic levels, i.e. mostly for species, but its use has also been advocated at genus level (Dubois 1988*b*; see below). This approach of taxonomy can be compatible with both the phenetic and cladistic approaches but is perpendicular to them. It does not contribute to the measurement of either resemblance or kinship, but it reflects an inescapable feature of evolution, i.e. the fact that the latter is possible only through the permanent emergence of genetic incompatibility between groups of organisms that were previously interfertile. It should therefore not be ignored in theoretical analyses of taxonomy, but it is indeed often so.

### *2.2.2. Phylogenetic taxonomies*

It is only after the spreading of the works of Hennig (1950, 1966, 1974) that it became clear that two major 'schools' of taxonomy, 'phylogenetic' and 'phenetic', had to be distinguished. Today, few authors would advocate the latter approach, and most taxonomists claim to adhere to a 'phylogenetic' school of taxonomy. However, the widely known term 'phylogenetic taxonomy' is confusing because it has been employed in the recent years with several meanings. As pointed out by Mayr & Ashlock (1991), the confusion stems from that surrounding the terms ***phylogenesis*** and ***phylogeny***. As first introduced by Haeckel (1866*a*), these terms were meant at accounting for the evolutionary history of organisms and for the emergence and complexification of what is now called biodiversity. This phenomenon was viewed as consisting in three different but complementary processes: {K1} branching or ***cladogenesis***; {K2} diversification or ***anagenesis***; and {K3} stabilisation and persistence or ***stasigenesis***. However, starting with Hennig (1950), the meaning of the term phylogenesis has derived, becoming largely synonymous with one only of these two processes, cladogenesis.

The best known meaning of 'phylogenetic taxonomy', which was termed ***cladification*** by Mayr (1997) and ***cladonomy*** independently by both Brummitt (1997) and Dubois (1997), aims at producing a classification that best reflects strictly the **structure** of the cladistic tree, the latter being strictly understood as a ***cladogram*** of taxa, i.e., a tree showing a succession of nodes corresponding to cladogenetic events resulting in independent branches, often called 'clades' or 'lineages'. But two other approaches at least could claim to be 'phylogenetic', if the term is taken in its original sense in Haeckel (1866*a*). In the 'eclectic' or 'synthetic' approach advocated e.g. by Mayr (1974), which could be called ***phylonomy***, the classification is based on a ***phylogram***, i.e. a cladogram which incorporates 'distances', meant at measuring the 'divergences' or 'resemblances' between taxa. A third approach, initially considered but later rejected by Hennig himself but later supported by several authors (e.g. Kiriakoff 1954, 1965; Crowson 1970; Sibley & Ahlquist 1982, 1990; Avise & Johns 1999; Avise & Mitchell 2007), consists in incorporating in cladograms estimates of the absolute geological age of taxa to determine their rank in the taxonomic hierarchy. This approach, using what could be called ***chronogram***, could be designated as ***chrononomy***.

Because cladonomy, phylonomy and chrononomy all three start from and rely on a cladogram to build up their classifications, they qualify all three as 'phylogenetic' but they are not equivalent, neither in their methods nor in their results. To avoid confusion, we use below the terms 'cladonomy' and 'cladonomic' to designate the approach we adopted here for suprageneric taxonomy.

Taxa recognised under a cladonomic approach should be strictly ***monophyletic*** (*sensu* Hennig 1950, not Haeckel 1866*b*; concept renamed ***holophyletic*** by Ashlock 1971), i.e., they should include a unique hypothetical ancestral species and all its descendants.

The recognition of monophyletic/holophyletic groups as valid taxa is independent from their naming and from their rank. Taxa can be diagnosed or defined without being named, e.g., through the use of explicit expanded diagnoses (as was the case before and even after Linnaeus 1758*a*) or of numericlatures or other systems (see Dubois 2005*c*). But verbal communication between humans is made easier by the use of names, and this requires nomenclatural Rules. Furthermore, recognition of all holophyletic groups as taxa is only the first step of the transcription of a cladistic tree into a classification. The second step is the organisation of the taxa into a hierarchy that transcribes unambiguously the topology of the branching pattern of all well-supported nodes in the tree. Various non-nomenclatural methods have been proposed for this purpose, such as the indentation of lines respective to the margin in a table presenting a classification (Wiley 1981), but these methods do not allow this information to be carried by the names themselves. They require the inclusion of such tables in any publication dealing with an ergotaxonomy, which is very heavy and often unpracticable, or the citation of works providing them, i.e., relying on external information for the understanding of the relationships between taxa. As shown below, this information can be carried by the names themselves, if they are unambiguously assigned to ranks, in the frame of Linnaean-derived nomenclatural Rules.

Transcription of a cladistic tree under the form of an ergotaxonomy requires conventions. The most often used convention, and so far the most efficient one for this purpose, is a hierarchical arrangement of taxa (classificatory units) corresponding to the successive nodes of the tree. Ideally, these nodes should be dichotomous, but in cases of partially unresolved trees they may be polytomous. In both cases the taxa immediately resulting from the division can be called ***sister-taxa***.

There are four kinds of relationships between taxa (***topotaxy***) in a phylogenetic hierarchical classification: {L1} ***parordinate*** taxa are sister-taxa resulting from a ***dichotomy*** or ***polytomy*** in the tree adopted as basis for the ergotaxonomy; {L2}–{L3} ***superordinate*** taxa are hierarchically above their ***subordinate*** taxa (or, to put the same idea differently, they include the latter); any two parordinate taxa always have a single **immediately superordinate** taxon (their ***getangiotaxon***; Dubois & Berkani 2013) and may have (but do not always have) two or more **immediately subordinate** taxa (their ***getendotaxa***; Dubois & Berkani 2013); and {L4} ***alienordinate*** taxa are taxa that are not in a direct relation of ***ordination*** (i.e., of parordination, superordination or subordination).

As will be shown below, if used with caution, the system of nomenclatural ranks is appropriate to reflect directly in the nomina of taxa the hierarchical classification which reflects the topology of the tree and therefore these relationships between taxa. For this system to be efficient, universal and unambiguous, it must rely on precise nomenclatural Rules and Criteria.

### *2.2.3. Taxonomic categories and nomenclatural ranks*

The nomenclatural system of the *Code* relies on the use of nomenclatural ranks, such as genus, family or class. Many different ranks have been used by zootaxonomists during the two and a half centuries of history of the discipline (Dubois 2006*a*; Appendice **A4.RNK**). In the recent decades, some authors, who often ignored their respective works (e.g., Smith 1988; Sundberg & Pleijel 1994; Minelli 2000; Pleijel & Rouse 2003; Kluge 2005; Bertrand *et al*. 2006; Laurin 2010; Avise & Liu 2011) as well as works expressing different opinions, claimed that ranks should be abandoned as they are subjective and arbitrary, are not equivalent throughout zoology and do not warrant comparisons between taxa of same rank in different groups. The latter is quite true if ranks are considered to have an ***absolute*** meaning, as if they were permanently attached to taxa and expressed their 'nature' or 'essence', in biological or historical-chronological terms (Dubois 2006*c*, 2007*a*), but this essentialist interpretation is based on a misunderstanding and on a confusion between the concepts of ***nomenclatural rank*** and ***taxonomic category*** which takes its roots in a gradist/phenetic, non evolutionary, conception of taxonomy (for details see Dubois 2005*b*, 2006*a*, 2007*a*, 2008*f*, 2011*a*; Dubois & Raffaëlli 2012).

The same nomen, referring to the same taxon, often moves from one rank to another within its nominal-series to follow the changes in our phylogenetic hypotheses and taxonomic hierarchies. Taxonomic hierarchies as reflected in nomenclatural ranks are 'organisational models of relationships' (Knox 1998) that are extremely useful for keeping track of inter-level relationships among entities in a hierarchical system, as understood at a given moment of the history of the phylogenetic and taxonomic work on a zoological group. Whether a given higher taxon is treated as a superfamily, an order or a class is a matter of tradition and of general consensus among specialists of the group concerned at a given time, but ranks do not, cannot and should not carry any information on the 'amount of divergence' between taxa (measured by whatever Criterion), on their 'biological diversity' (Van Valen 1973; Giribet *et al.* 2016), on their 'patterns of evolution' (Dubois 1988*b*) or on the 'time elapsed since separation' between taxa throughout the tree of life (Schaefer 1976; Dubois 1988*b*, 2008*f*: 56–57; Avise & Johns 1999).

There would be no point in discussing whether a taxon 'is' a class or an order, as there is no **concept** of class or order, no theoretical background for **defining** ranks: ranks used by zootaxonomists are not meant at providing any information on the taxa themselves, but only on their hierarchical relationships and, through them, on the structure of the cladistic tree used as a reference for the building of a classification. They only point to a place in a hierarchy, and this place is highly labile according to the frequent additions to the available information and changes in taxonomic arrangements. The question is not to suppress ranks, but to realise that they only have a ***relative*** meaning, informing us on the hierarchical structure of the (provisional) taxonomy, i.e., on hypothesised cladistic relationships, but carry no further information.

The concept of taxonomic category, on the other hand, points to the fact that, at the lowest levels of the taxonomic hierarchy, it is possible to use different concepts for the recognition and delimitation of taxa, such as the different (and much discussed) 'species concepts' but also 'genus concepts' used by different authors. In this case, 'definitions' are indeed used for categories, which therefore do not only carry cladistic information.

An important distinction must therefore be made between two situations. In most of the nomenclatural hierarchy, i.e. above the rank genus, taxa can indeed be attributed to nomenclatural ranks, which carry only information on the structure of the tree, but this is different at the lowest end of this hierarchy, i.e.

for the ranks species and genus and related ones. In these cases, these terms refer to **both** a nomenclatural rank and a taxonomic category, a double qualification which can be termed a ***taxonominal level***. The term 'species' can designate both a rank in a hierarchy, having no proper 'meaning' or definition, and a taxonomic concept relying on a definition. The same is true, although this is often ignored, for the term genus. For this reason, Dubois (2007*a*) distinguished the terms ***species*** and ***genus*** (for the nomenclatural ranks) and the terms ***specion*** and ***genion*** (for the taxonomic concepts). However, as these latter terms have not gained common acceptance so far, below we follow the tradition and we use the traditional terms in both cases, the context allowing in most cases to distinguish them.

### *2.2.4. Taxonomic concepts and Criteria*

The concepts and Criteria used to recognise and distinguish taxa are not the same at different taxonominal levels. Let us briefly review them successively, starting with the general situation, then in the four main taxonominal levels used in the present work: the species-, genus- and family-series recognised by the *Code*, and the class-series as defined by Dubois (2000*b*). We do not use here the formula 'integrative taxonomy' (Dayrat 2005; Vences *et al.* 2013), as it is ambiguous, having been employed in the literature with different meanings, and anyway it is poorly informative, as "taxonomy has been integrative for most of its history" (Valdecasas *et al.* 2008: 211). We prefer to identify the different taxonomic concepts (species concepts, genus concepts, etc.) and criteria used by the authors to recognise, define and delimitate the taxa of different kinds.

#### *2.2.4.1. General situation*

As we have seen, relational taxonomic Criteria are of no use for higher ranked taxa: they can be and have been used only at species and genus taxonominal levels.

Only two approaches are common to all taxonominal levels: the phenetic one, which recognises ***phenons*** as taxa, and the cladistic one, which recognises 'lineages', 'clades' or better ***cladons*** (Mayr 1995) as taxa. After a period of extensive use of the first approach at the time of flourishing of 'numerical taxonomy', by the end of the 20$^{th}$ century the cladistic approach had become largely dominant. However, in recent years, and following the introduction of the 'Barcode of Life' methodology, the phenetic approach has shown an impressive new youth. This approach uses 'genetic distances' and *a priori* fixed 'thresholds' to decide 'objectively' that two groups of organisms should be recognised as distinct taxa and at which ranks these taxa should be attributed. Such taxa have received the designation of ***boleons*** (Dubois 2017*c*: 17). They can be and are used at all taxonominal levels.

In zoological groups where a calibration by external methods such as palaeochronology has been carried out, 'genetic distances' based on barcoding can be considered to provide more or less accurate estimates of the ages of the cladogeneses that were at the origin of two ***branches***, and this has been used by some to ascribe a rank to such sister-taxa. Beside the uncertainty that still exists regarding the accuracy of these datings, which will certainly be improved in the future, this method which allows to recognise what could be called ***chronotaxa*** is not tenable at the scale of the whole animal kingdom, because rates of evolution are widely different in different branches of the tree of life, as was definitively demonstrated by Avise & Johns (1999) and Avise & Mitchell (2007). It would not be acceptable to associate different ages to the same rank in different zoological groups, and a homogeneisation of the use of ranks following this Criterion would require considerable changes in the 'taxonomic tradition'. In this respect, Dubois (2007*a*: 33) wrote: "adopting the age of taxa as a basis for allocating taxa to ranks would result in major changes in the ranks traditionally given to many taxa (…), and it is unlikely that most taxonomists would be willing to take this step today. They might change their mind in a few decades, as many more data on the ages of taxa will then be available, but, even then, it is unlikely that this could be obtained by an addition of individual actions. It would probably require holding one or several large international meetings specially for this purpose." However, beside tradition and accuracy of the information, Dubois (2008*f*: 57) raised another problem of this approach, which is that it applies only to organisms living synchronically, e.g., today, as otherwise all fossil taxa would have to be given higher ranks simply because they lived long ago! As molecular and palaeontological data increase, it will be possible to estimate the absolute age of all major taxa at any epoch of the earth's history, and therefore to use this method for rank assignation of taxa, but these ranks would be valid only for comparisons of synchronic taxa, or different Criteria should be used to attribute ranks to taxa in the living fauna and in the faunae at different epochs of this history, which would not be workable.

### *2.2.4.2. Species taxonominal level*

A considerable literature has been devoted to discussing the 'species concept'. Many distinct 'species concepts' have been proposed and several are still in force in zootaxonomy. It is possible to compile lists of 92 'definitions' of 'species' (Lherminier & Solignac 2000) or to distinguish 22 'species concepts' (Mayden 1997), and certainly more, but many of these definitions and concepts are largely equivalent, and the useful number can be reduced to a few main categories (Mayr & Ashlock 1991). This literature is in part confusing, as it often does not distinguish between 'species' as a nomenclatural rank and 'species' (specion) as a taxonomic category. Three taxonomic species concepts have by far been most frequently used in the zoological literature (Dubois 2008*c*, 2009*c*, 2011*b*): the phenetic (***morphospecies***, or better ***phenospecies***), mixiological (***mayron***) and phylogenetic/cladogenetic (***simpson***) concepts. Although the implementation of these different concepts often results practically in the recognition of the same taxonomic units (i.e., including the same organisms), this is not always the case. Furthermore, they do not cover all the situations found in nature, as they ignore the cases of 'strange species' or ***kyons***, i.e. entities having unusual modes of formation of gametes, of initiation of development and of genetic transmission across generations, thus illustrating the reticulate dimension of evolution mentioned above, such as ***kleptons*** (like the frog 'species' *Pelophylax esculentus* or the salamander 'species' *Ambystoma platineum*) or ***klonons*** (like the lizard 'species' *Cnemidophorus uniparens*) (for details, see Dubois 2008*c*, 2009*c*, 2011*b*).

The recent trend to use a 'threshold value' of 'molecular distance' as measured by the barcode methodology to 'delimitate species' (***boleospecies***) is nothing but a recent avatar of the ***phenetic*** species concept already used, and criticised, before the onset of nucleic acid sequencing, under the form of 'genetic distance' based on the results of electrophoretic comparisons of proteins from different populations (Dubois 1977). It sometimes gives results which are widely distinct from that obtained through the use of the nondimensional 'mixiological species concept' (mayron) based on the relational approach of taxonomy making use of relacters and not only of characters (Dubois 2007*a*). The latter however can be used strictly only in sympatry and parapatry and cannot be so in allopatry or allochrony, which requires to have recourse to other concepts in such situations.

### *2.2.4.3. Genus taxonominal level*

As highlighted by Dubois (1988*b*), in contrast with the 'species concept', the number of publications dealing with the 'genus concept' has been ridiculously low. This is highly surprising, in view of the fact that the ***generic substantive*** is part of the scientific ***binomen*** which designates every species according to the ***Principle of Binomina***. Most zootaxonomists would probably argue that there is no problem in this respect as there is no 'genus concept', as if genera were given empirically and did not require any theoretical elaboration.

For a long time, genera were only recognised on the basis of phenetic Criteria, mostly shared morphological characters. Such a ***morphogenus***, or more widely ***phenogenus*** (when non-morphological characters were included in the diagnosis) concept had a great heuristic value for taxonomists, particularly for helping in recognising new species: genera so defined were often quite homogeneous morphologically, which limited the number of species with which any potential new species had to be compared to confirm or infirm that an undescribed species was involved. But of course this approach had the basic two complementary traps of all phenetic analyses: the exclusion from the genus of closely related species having divergent characters or the inclusion in the genus of remotely related species resembling those of the genus by homoplasy.

Inger (1958) proposed a concept of genus, that can be termed ***ecogenus***, which considered genera as both morphological units and ecological units, sharing closely related ecological niches and adaptive zones. This was an improved phenetic concept of genus, having a good heuristic value, but strangely few subsequent authors adopted it (even its own author abandoned it without explanation in his subsequent works).

The idea that genera should be holophyletic evolutionary units (***cladogenus*** concept) followed the onset of cladistic thinking, but few authors cared to propose Criteria to fix the **limits** of such cladistic units, that would distinguish them from taxa at other lower or higher ranks, and complying with an ***intensional***, objective and nonarbitrary concept (as defined by Simpson 1961). Therefore, in a way, the cladogenus concept is a partially empty, or at least incomplete, one, as it allows to reject polyphyletic and paraphyletic genera but does not provide information allowing to identify the node in the tree where a given genus 'stops'. In practice, most authors just rely in this respect on 'tradition', keeping 'well-known' genera, but this methodology soon reaches its limits when many new species are added to a former well-known genus, allowing to distinguish several lineages within it. A common practice is then to erect a new genus if a new species is discovered which appears to be the sister-species to all the species already known, but this is often arbitrary and unsubstantiated, giving particularly undue importance to recent discoveries. An alternative to these poorly argued practices is possible only if, additionally to being 'holophyletic groups', genera are understood as taxonomic units complying with other Criteria implied by a more elaborated 'genus concept'.

In this perspective, Dubois (1981*a,c*, 1983*a*, 1988*a,c*, 2004*d*) supported and developed a 'mixiological genus concept' earlier formulated by Van Gelder (1977) and that could be designated more briefly as ***mixogenus***. This concept requires to maintain in the same genus all species documented to have produced, whether in natural or in artificial conditions, true viable adult diploid hybrids, as well as their closely related species. This concept takes evolutionary information into account to define genera, recognising that this category, unlike all higher ranks, "is the classificatory level above the species where reticulate evolution just begins to stop" (Böhme & Köhler 2005: 294). In order to fit with the requirement of holophyly, this relational Criterion may lead to lump two or more 'traditional' genera that had been defined previously on the basis of cladistic Criteria. This use of a relacter to define genera is parallel in a way to the use of the mixiological concept at species level. Just like the latter but in the reverse way, this Criterion is not symmetrical: it can be used to group species in the same genus, but not to separate them in distinct genera, which would require to place in different genera closely related species that have developed mechanisms of interspecific isolation in sympatry and parapatry. Crossability (or its absence) between two species is not a 'character' of any of these species, but a characteristic of their relationship. It is therefore neither plesiomorph nor apomorph (if it were so, we would have to consider that each species bears billions of such characters, according to its potential crossability with all other living species of the planet) and is therefore useless in cladistic analysis.

The use of the mixogenus concept in zootaxonomy would have many important advantages (see Dubois 1988*b*: 72–75). In particular, and contrary to what has been written (e.g., Vences *et al.* 2013: 222), the use of this Criterion would lead to a much stronger stability in generic classifications of animals than all other Criteria, even taken together: it is very economical in use, as it is enough to have reliable information on the crossability between two cladistically remotely related species to refer permanently to the same genus both these species and all those previously referred to the most cladistically basal genus including one of them, as well as to its sister-group including the second one (see figures 4–6 in Dubois & Bour 2010*a* and figure 7 in Vences *et al.* 2013, clearly derived from the latter although it was not cited). In such cases, a single positive cross would allow to fix permanently the generic classification of the whole group. 'Permanently' means that this would stop the 'back and forth' movement between two generic classifications that has often been observed in such cases. Use of this concept would no doubt result, in some cases, in much larger genera, but this would be a true relief in the zoological groups which are currently much oversplit, because more studied, compared to the rest of zootaxonomy, like the birds (Dubois 1988*b*: 70–71, 76–78). In such cases, the 'traditional' genera could continue to be used, as least for some time, as subgenera. The only real problem with this genus concept is that it cannot be implemented in some zoological groups where the interspecific crossability cannot be tested, either because of some of the biological characteristics of their members (e.g., for being unisexual), or of the impossibility to cross them in captivity (e.g., for living in inaccessible environments or for being allochronous), but the fact that a concept or Criterion cannot be used universally should not bar us from using it when this is possible: otherwise the whole taxonomy of animals, covering extant and fossil taxa, should be based only on data obtained from the fossilisable parts of animals (Dubois 1988*b*: 73).

It is quite clear that today zootaxonomists are not ready to adopt the mixogenus concept, probably for fear of having to abandon the sacrosanct 'taxonomic stability', but also because studies of artificial crosses between amphibian species, which were very frequent in amphibians after the middle of the 20th century where they had proved very informative (see e.g. Blair 1972), have stopped being so because of the current ‘fashion’ for molecular phylogeny. But no other genus concept would allow for a real homogeneisation of generic taxa straddling most zoological groups. The recent use of the ***boleogenus*** concept, using barcode data and arbitrary thresholds, cannot play this role: it does not rely on a well-defined genus concept and belongs fully, as mentioned above, in the realm of phenetic taxonomy. The ***chronogenus*** concept is not better, as it cannot have any universality throughout the animal kingdom—or it could have some only at the expense of much greater challenges to the sacrosanct ‘taxonomic stability’ than the mixogenus concept (see e.g. Avise & Johns 1999).

In the absence of genus concept that would be fully satisfying from a theoretical point of view, an empirical approach is inescapable. The concept of ***diagnogenus*** seems then an acceptable compromise. It rests on two Criteria: {M1} genera should be groups of species considered on the basis of robust cladistic information to be strictly holophyletic; {M2} they should be ***diagnosable*** (and preferably, if possible, ***apognosable***) through characters accessible to the **external** examination of specimens or to the study of the animals in their natural habitat, i.e. mostly morphological, behavioural and ecological, but excluding internal anatomical characters, cytogenetic or molecular data. Genera so defined through their ***diagnosability*** (Guayasamin *et al.* 2009; Vences *et al.* 2013; Araujo-Vieja *et al.* 2020) would have a great heuristic value, as they would include ‘similar’ species that could be readily ascertained by phenetic survey, even in the field without dissection or other technical treatments. This would be much appreciated by all biologists working in the field with natural populations of animals (taxonomists, ecologists, conservation biologists) and it could help as an important guide for the collection of specimens, especially in our time when this has become more and more difficult for administrative and legal reasons. Genera so defined would be of extremely varied sizes (in terms of numbers of species included), which is not a problem in itself and even provides useful information on the degree of stasigenesis (evolutionary stasis) of the group concerned (Dubois 1988*b*).

#### *2.2.4.4. Suprageneric taxonominal levels*

In the family- and class-series, as we have seen, nomenclatural ranks do not qualify as taxonomic categories, that could be defined biologically, historically or otherwise. They only reflect the structure of the taxonomy adopted, which at these levels, according to the taxonomic paradigm adopted, can be based only on a phenetic quantitative measurement of similarity or distance, or on a cladistic tree. Relational Criteria cannot be used at these levels. Some recent authors used the concepts of ***boleon*** or ***chronotaxon*** to attribute ranks to presumably holophyletic higher taxa, but this approach cannot be used universally, because as we have seen this can be meaningful only within limited groups of the tree of life and could not be used throughout the latter.

### ***2.2.5. Taxonomic scope of the present work***

The present work does not provide a complete revision of the taxonomy and nomenclature of recent amphibians (**Lissamphibia**), but only a revision of their **suprageneric** taxonomy and nomenclature. A few changes are proposed here at generic and infrageneric levels, but they are very limited, for the reasons given above and below. A good understanding of these questions requires to grasp fully the distinction between the concepts of nomenclatural rank and of taxonomic category, which are often confounded in the literature.

In the present revisionary work, which deals mostly with the phylogenetic relationships among extant amphibians, we paid attention primarily to the definition of suprageneric taxa and their hierarchical relationships but we did not challenge the currently ‘accepted’ or ‘dominant’ species (or specion) taxa, nor, except in a few cases, the ‘accepted’ or ‘dominant’ genus (or genion) taxa.

#### *2.2.5.1. Species taxonominal level*

In the present work, we did not challenge the currently dominant species classification of extant amphibians, as given for example in the websites *ASW* <2020*a*> and *AWb* <2020>. We note however that this current classification is highly heterogeneous as, depending on the genus, family or other higher taxon, it relies on different species concepts, or more exactly on different 'Criteria' which do not even always rely on explicit concepts, particularly in the case of boleospecies. For the time being, the current specific classification of extant amphibians is far from having 'homogeneised' the 'species concepts' used in different subgroups and in different parts of the world. Revising the whole specific taxonomy of all extant amphibians in order to use a single 'species concept' or at least a homogeneous approach to species level taxonomy (e.g., recognising or not taxa attributed to the ranks and categories subspecies, aggregate of species and aggregate of subspecies accepted by the *Code*; see e.g. Dubois & Raffaëlli 2009, 2012) would be a huge work by itself, which is far beyond the scope of the present endeavour, and we did not introduce changes in this respect in our work.

*2.2.5.2. Genus taxonominal level*

We also refrained from introducing major changes in the currently 'accepted' generic classification of extant amphibians, although we are conscious of the fact that it is highly heterogeneous in terms of 'genus concepts' used, generally surreptitiously, as if genera were 'given' by the (often molecular) data, without any taxonomic analysis or justification, by different authors in different taxonomic groups and regions of the world. At this level, the heterogeneity of the taxonomic treatment in different groups is probably even greater than at species level. This treatment straddles from an unquestionably much too lumped approach to an unquestionably much too split one. In the first category, some genera are '*auberges espagnoles*' ('potlucks') which are heterogeneous by all criteria (morphology, development, life history, behaviour, bioacoustics, etc.), whereas others, in the second category, are monospecific but differ only very slightly, or even not at all, from their sister-genera or even more distantly related genera. There are clearly some trends in this respect, which are related to the authors involved in the study, to their country of work, to the region of the world and/or to the higher taxon concerned. But the cause of these discrepancies is the same in most cases, being the absence not only of a 'genus concept' but also of well-defined and explicit Criteria for the recognition of a supraspecific taxon as a genus.

In most publications dealing with generic classifications, authors insist on the requirement of monophyly/holophyly, which is not exclusive to genera but concerns all supraspecific taxa, but, as we have seen, by itself this Criterion does not provide the slightest clue for recognising a taxon as a genus and not a subgenus, a family or an order. The only reason that appears in many such papers is the sacrosanct 'taxonomic stability', but even this fuzzy Criterion becomes less convincing as more and more new species are described, which leads to modify the diagnoses and contents of the 'traditional' genera. Using the Criterion of holophyly alone does not allow in the least to decide whether *Leiopelma* and *Leioaspetos*, or *Nanorana* and *Paa*, or *Gastrophrynoides*, *Siamophryne* and *Vietnamophryne*, or *Eurycea* and *Urspelerpes*, or *Epicrium* and *Ichthyophis*, should be recognised as different genera or as synonyms or subgenera, as in all these cases the genus or genera would be holophyletic. Even concerning the European fauna, the taxonomy of which has been studied for more than 250 years, some 'mysteries' (or more exactly inconsistencies) remain: why is the genus *Latonia* recognised as distinct from *Discoglossus*, although they are virtually indistinguishable by their external morphology and ecology, whereas the genus *Ammoryctis* is not recognised as valid for the single species *Ammoryctis cisternasii*, which is readily distinguishable by several external morphological characters and its ecology from all the other species of *Alytes*, or *Pelodytopsis* not distinguished from *Pelodytes* on the same grounds? There are dozens of similar cases in the classification of extant amphibians. In order to progress towards a better (if not perfect) generic taxonomy of this group, other Criteria should be added to holophyly. Suggestions in this respect have been given above in our brief survey of the main 'genus concepts' or at least Criteria, that can be considered for this purpose.

A supplementary difficulty exists in the taxonomy of the amphibians, which does not exist in many other zoological groups: it is the long-standing rejection by many taxonomists (e.g. Duellman 1977) of the category of subgenus, despite the efforts of some authors (e.g. Dubois 1987*b*, 1988*b*; Smith & Chiszar 2006) to 'rehabilitate' it. The fact that the well-known website *ASW* <2020*a*>, which many, despite its numerous weaknesses, consider as 'authoritative', does not provide a formal classification of subgenera, and also of subspecies, of amphibians, but treats them as 'synonyms' (although mentioning these taxa sometimes in the discussions of the genera and species concerned), has certainly played a great role in this respect. This has led many authors to consider that they were 'obliged', when they found two or more well characterised holophyletic groups within a genus or within a species, to choose between two 'black and white' solutions: either recognising a single genus or a single species, or two genera or two species. Thus doing they failed to use all the possibilities offered by the *Code* to have a fine grained taxonomy for amphibians at low taxonomic levels, which has many theoretical and practical advantages and allows to express fine-scaled evolutionary processes and patterns (Bernardi 1956, 1957, 1980; Dubois 1988*b*, 2008*c*, 2009*c*, 2011*b*).

As concerns the rank 'supergenus', which has been used as a valid rank in amphibians by some authors (e.g., Vieites *et al.* 2007), and even expressly stated by Vences *et al.* (2013: 208) to be *Code*-compliant (!), although it would certainly be useful (Dubois 2006*b*), it is currently not recognised in the *Code* and should not be used in zootaxonomy until the *Code* is improved in this respect (Dubois 2008*f*).

In the present work, except in one case to solve a persisting irritating nomenclatural problem, as there exists currently no consensus either on the use of the subgenus category or on which taxa should be recognised at this level, we refrained from mentioning the subgenera in *CLAD*, and we listed them as 'synonyms' in Appendices **A5.NGS** and **A9.CLAD-1**, although we consider that a good number of subgenera should be recognised in amphibian taxonomy, but treating this question would have been outside the framework of this work.

### *2.2.5.3. Suprageneric taxonominal levels*

We adopted a drastically different approach for our suprageneric taxonomy of extant amphibians. In this case, for extant taxa we relied on a strict cladonomic methodology. Our unique arbitrary decisions were the choice (largely supported by empirical observations in various zoological groups) of a SHL-aLRT support value of 90 % or more as the basis for the recognition of a distinct taxon, the recognition of seven ***mandatory ranks*** in the taxonominal hierarchy and our uncompromising rejection of taxonomic redundancy, except at the rank family, for reasons explained below.

As addition of taxa and genes and changes in methods of analysis may result in changes in this respect, we relied on each node having a SHL-aLRT support value of 90 % or more as the basis for the recognition of a distinct taxon. Although this threshold is arbitrary, we followed it consistently, even in cases where it results in significant changes in 'traditional' classifications. Not doing so in some cases because of subjective 'suspicions of error', not based on evidence of erroneous species allocation, of nucleic acid contamination or of errors in sequences, would be even more arbitrary and scientifically untenable.

The original method of Hennig (1950) required to recognise each well-supported node of the tree as a distinct taxon. It was abandoned by subsequent workers not on theoretical but on 'practical' grounds, simply because it resulted in a very high and 'unmanageable' number of taxa and, above all, of ranks over the whole animal kingdom. Most taxonomists then agreed that 'some' nodes only should be recognised as taxa. But then, which ones? The 'most important' ones? But on which grounds will this 'importance' be evaluated? It may appear tempting in this respect to afford more weight to the taxa traditionally recognised at the main ranks, such as class, order, family and tribe. But, as we have seen, these ranks are arbitrary, lacking biological or other 'definitions' and are just a reflection of the structure of the tree. The only Criterion that remains here is 'tradition', admittedly a poor scientific Criterion—all the more that it is itself very imprecise. In extant anurans, it seems inescapable to recognise a family *Ranidae*, as this was the first family ever recognised in frogs, but then, should we also recognise a family *Rhacophoridae*, a family *Mantellidae*, a family *Dicroglossidae*, etc.? Where will 'tradition' start and end? 'Tradition' by itself is an imprecise guide.

To solve this problem, we devised a completely new method, the 'Ten Criteria Procedure' [TCP], which is presented in detail below. This procedure allows one to determine objectively which family-series nomina will have to be fixed at the rank family in the classification of extant amphibians, and would allow it even in a much larger taxonomic group. Then, starting from this fixed rank, the position of all other well-supported taxa in the taxonominal hierarchy is given automatically step by step, both above and below the rank family. This allocation is objective and indisputable as soon as a single Criterion is used for the recognition of a node as a distinct taxon, the chosen support value in our tree, without any exception in one direction or another (e.g., either continued recognition of a 'well-known' taxon when this is contradictory with the data, or refusal to erect a new taxon for a previously undetected and possibly poorly characterised lineage). No other Criterion (such as phenetic or genetic distance, or estimated age of common ancestor) is taken into account for the recognition of taxa. The resulting classification is an **exact reflection** of the tree on which it is based: in other words, both sets of data are in a relation of ***bijection*** or ***isomorphism***, in which each well-supported node of the tree is paired with exactly one taxon in the classification, and vice versa.

In our classification of all extant amphibians presented below, strict usage of this methodology, without paying any attention to other Criteria, led to the recognition of 23 ranks between genus and order. This number, which allows to reflect completely and unambiguously our *TREE*, may be considered by many as much too high. It is then fully possible to reduce the number of ranks used for a given purpose (e.g., for a local or regional fauna or for a phylogenetic work bearing on a small proportion of extant amphibians): one may for example decide to keep only, above genus, the ranks order, suborder, superfamily, family and subfamily, or even less, e.g. order and family, but then the taxa corresponding to these ranks will not be chosen arbitrarily but imposed by the Ten Criteria Procedure, the chosen support value for nodes and the rejection of taxonomic redundancy. As we will see, the result is largely at variance with both the traditional and recent classifications of extant amphibians, although based on similar and largely compatible phylogenetic data. This is because the assignation of ranks to taxa in these classifications did not follow any consistent Criterion.

A few points deserve additional comments. In order for our classification *CLAD* to be fully ***bijective*** with our *TREE*, the former must consistently reject taxonomic redundancy, i.e. the situation in which a given taxon has a single ***getendotaxon*** (immediately subordinate taxon). Therefore, every time that our data led us to recognise a taxon having only two getendotaxa, e.g. two genera in a family, we refused the recognition of intermediate taxa between them, even if these had been consistently used in all recent taxonomies. An example will make this clear. The salamander superfamily *Salamandroidea* has long been considered to include two main lineages, one (traditionally known as the family *Salamandridae*) including the genus *Salamandra* and many other genera, and one including only the two genera *Ambystoma* and *Dicamptodon*. In all recent classifications (e.g. Zhang & Wake 2009), these two latter genera were placed in two 'monotypic' families, *Ambystomatidae* and *Dicamptodontidae*, because "*Dicamptodon* has a long fossil record dating to the Paleocene (…), it differs from *Ambystoma* in easily visible features of morphology (…), and [it has] perennial, stream-adapted larvae rather than generally short-lived (except for neotenic populations) pond larvae as in most *Ambystoma*" (Zhang & Wake 2009: 503). In other words, these two families were based on the 'absolute age of taxa' and the 'phenetic distance' between them, two Criteria that we explicitly reject as irrelevant in the frame of our taxonomic (cladonomic) paradigm. We did not accept this familial arrangement, which obscures the fact that *Ambystoma* + *Dicamptodon* represent the sister-group to the *Salamandridae*. In order to reflect this fact, both these genera should be grouped in a single family *Ambystomatidae*. Would then it be possible to 'save' the taxon *Dicamptodontidae* by ascribing it the rank subfamily within the *Ambystomatidae*? No, because the taxa *Ambystomatinae* and *Dicamptodontinae* would then be strictly ***redundant*** with the genera *Ambystoma* and *Dicamptodon*. Their recognition would not bring any relevant additional information on the cladistic relationships between salamandroid taxa. The result is that there is apparently an important change in the overall classification of salamandroids, with complete suppression of a family (without even downgrading it to the rank subfamily), but looking closer at the data shows that it has in fact strictly no impact on our cladistic interpretation of the data, which remains the same as in previous works.

There is however a single situation in which we accept redundancy in our classification: it is when a suprafamilial taxon includes a single getendotaxon. In this case this taxon is always afforded the rank family. Let us consider the taxon that we recognise below as the superphalanx **Archaeosalientia**. It includes two superfamilies, the *Pelobatoidea* and the *Scaphiopodoidea*. The former includes two getendotaxa, which we recognise as the epifamilies *Pelobatoidae* and *Pelodytoidae*. The *Pelobatoidae* include again two getendotaxa, the families *Pelobatidae* and *Megophryidae*, but the second one includes only two extant genera, *Pelodytes* and *Pelodytopsis*. In the latter case, recognising a family *Pelodytidae* is strictly redundant with the epifamily *Pelodytoidae* and it does not bring any additional cladonomic information. The same is true for the superfamily *Scaphiopodoidea*, which only incudes two extant genera, *Scaphiopus* and *Spea*. Nevertheless, we recognise the families *Pelodytidae* and *Scaphiopodidae*. Their function here is not to bring cladonomic information but to contribute to information storage and retrieval.

Dubois (2007*a*: 48–50) discussed this question in detail and illustrated it in his figure 1 (reproduced here as Figure **F1.MOR**). He showed that to have a fully informative taxonomy and nomenclature, only two kinds of taxa required taxonomic and nomenclatural recognition: those including several supraspecific

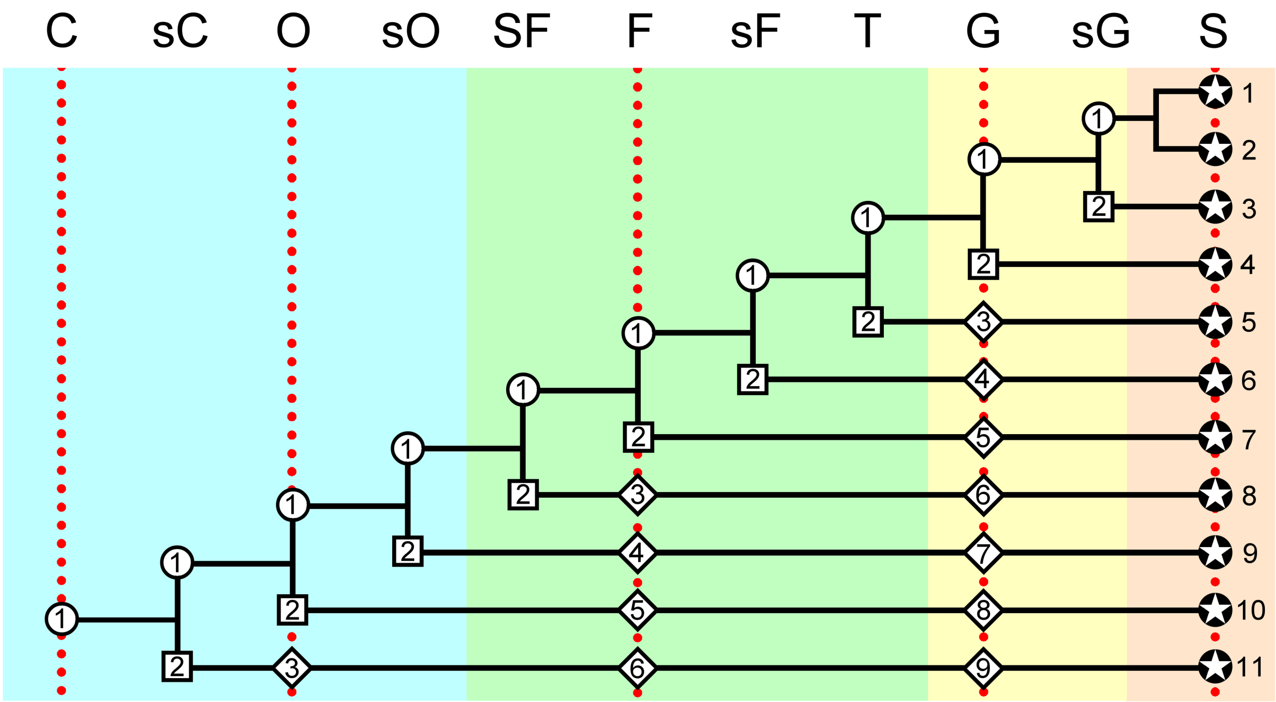


**FIGURE 1.MOR.** Mandatory and optional nomenclatural ranks in zoological nomenclature.

Nomenclatural ranks as designated in the upper line are as follows: C, classis; sC, subclassis; O, ordo; sO, subordo; SF, superfamilia; F, familia; sF, subfamilia; T, tribus; G, genus; sG, subgenus; S, species.

Background colours indicate the nominal-series in which these ranks belong: blue, class-series; green, family-series; yellow, genus-series; salmon, species-series.

Red stippled lines correspond to five major ranks that must be named in all cases, according to the guidelines supported by Dubois (2007*a*) and adopted here.

The reasons for naming these taxa are as follows: [1] star in circle, terminal taxa (species); [2] circles, taxa that must be named because they include several subtaxa; [3] squares, taxa that must be named, although they include only one species, because, according to the phylogeny presented, they are sister-groups of taxa indicated by circles; [4] diamonds, taxa that are not supported by cladistic data, but that must be named for purpose of allowing the nomenclatural hierarchy to play its role of system of storage and retrieval of information.

Figure reproduced from Dubois (2007*a*).

subtaxa and those that are their sister-groups, even if they do not include supraspecific subtaxa. But he added that a third situation requires taxonomic and nomenclatural recognition, deriving from the need to refer all animal organisms to taxa attributed to the seven ***primary key ranks*** (regnum, phylum, classis, ordo, familia, genus, species), which should thus be considered virtually 'mandatory' in all classifications. This proposal follows a long tradition in zootaxonomy. It is supported by the important idea that biological classifications have two major and distinct functions (Mayr 1982, 1997), a practical one (i.e., providing a universal system of storage and retrieval of information) and an explanatory one (i.e., providing an evolutionary interpretation and explanation of the diversity of organisms). Ignoring the first of these functions to concentrate only on the second may seem appealing as a 'purer' approach and may please some professional taxonomists and theoreticians, but is not doing a service to taxonomy and its innumerable users in all domains of human activity (Cracraft 1974; Ashlock 1984; Benton 2000; Dubois 2005*b*; Kuntner & Agnarsson 2006). For this reason, in our classification all genera (except those which are *incertae sedis*) are referred to a taxon of rank family, even when the latter is redundant with its getangiotaxon.

The classification of extant amphibians we present here is based on our *TREE* which relies on data of nucleic acid sequencing. Although our sampling of the extant amphibian species is considerable (4060 species out of 8235 recognised on 31 October 2020), it is not complete. In order to include the missing species, we had to rely either on morphological data or on recent publications based on sequencing that were published after the building of our matrix. When they are included, some of our conclusions may have to change.

Although, for purpose of completeness, we mentioned the fossil taxa, we did so entirely on the basis of the recent literature, as had already been done by Dubois (2005*d*), but we did not propose changes in their current taxonomic allocation and we did not discuss them in our text below.

For sake of completeness, and following Dubois (2005*d*), we included in our classification, and in our Appendices **A5.NGS**, **A6.NFS**, **A7.NCS** and **A9.CLAD-1** to **A12.CLAD-4**, all the all-fossil taxa of **Lissamphibia** currently recognised as valid in the literature, with their currently accepted synonyms. For this we relied on the most recent publications dealing with these taxa (not listed in our References). We considered as valid all the nomina that have not been recently synonymised, although some of them are likely to be synonyms. We were also conservative for their taxonomic allocation, so that we referred them to the lowest ranked taxon in which, according to the current knowledge, this taxon appears to belong. We consider that in many cases the validity and taxonomic allocation of their nomina is just tentative, and above all we take no stand on whether these taxa would have to be recognised as valid within the frame of our classification if they could be submitted to a molecular analysis. Thus their implementation in our scheme did not interfere with our taxonomic treatment of the extant taxa. For example, as we have seen above, we recognise a single family *Ambystomatidae* for the two extant genera *Ambystoma* and *Dicamptodon* to avoid taxonomic redundancy. In fact, in this case five all-fossil genera are currently also referred to this family, but this had no impact on our taxonomic decision, as we implement the Criterion of non-redundancy only among members of the extant (living and recently extinct) fauna.

The inclusion of nomina of taxa based initially on fossil specimens may also be useful for the taxonomy and nomenclature of extant taxa as, in a few cases (*Andrias*, *Latonia*, and possibly in other so far undetected cases), the valid nomen of a taxon still represented in the extant fauna may be one such nomen of 'fossil' taxon.

As we have seen above, except in a few cases, we did not challenge the currently accepted generic classification of extant amphibians. This of course has an impact on our suprageneric classification and nomenclature. Let us just consider the family *Bufonidae*, which in our classification is the family having the highest number of subordinate ranks (ten, from subfamily to catoclanus). This is the result imposed on us if we accept all the genera currently considered as valid in the literature, on the basis of unclear and heterogeneous decisions regarding the genus concept implemented. If another, clearer genus concept, was adopted, the suprageneric classification could change drastically. For example, if the mixogenus concept was applied to this family, the number of genera would be considerably reduced (see Dubois & Bour 2010*a*: 12–25), and by way of consequence the number of family-series taxa in this family too. The implementation of the diagnogenus concept throughout this family would also most probably reduce the number of genera but much less than with the mixogenus concept. A similar impact of taxonomic decisions regarding generic classification exists across the whole suprageneric classification of extant amphibians, but will have to persist as long as the decision to afford the rank genus to a branch remains largely arbitrary, as it is currently in most of amphibian groups.

## 2.3. Nomenclature

> No one wants to alter the language of common sense, any more than we wish to give up talking of the sun rising and setting. But astronomers find a different language better, and I contend that a different language is better in philosophy. (...) I conclude that common sense, whether correct or incorrect in the use of words, does not know in the least what words are. I wish I could believe that this conclusion would render it speechless.
>
> Bertrand Russell 1953: 306–307

### *2.3.1. Introduction*

Efficient and universal communication about scientific classifications requires to use a scientific nomenclature. Scientific names or ***nomina*** (Dubois 2000*b*) are "the key of the big new biology" (Patterson *et al.* 2010). Because they rely on theoretical formalisation of empirical data (characters) and their correspondence among taxa through homology statements, which are the basis for building models of relationships, they have conceptual, explanatory and predictive powers (Mayr 1982, 1997), and they also allow information storage and retrieval, so that "No other way of naming in science is so powerful" (Valdecasas *et al*. 2014). But in order to play fully this role, their allocation to taxa must follow strict and universal Rules, not vague 'consensus' based solely upon 'usage' or 'authority'. Such Rules are provided by the 'Linnaean-Stricklandian nomenclatural system' (Dubois 2006*c*), or more briefly 'LSNS', implemented in the *International Code of Zoological Nomenclature* (Anonymous 1999), which we strictly follow in this work except for a few points, explicitly mentioned below, for which we follow the *Linz Zoocode Proposals* (*LZP*) recently published by he Linz Zoocode Committee (LZC), in particular their 17 explicit ***Principles*** (see Dubois & Aescht 2017*b*; Dubois *et al.* 2019). The latter include two general ones (***Zoological Nomenclature Independence*** and ***Nomenclatural Foundation***), four dealing with the nomenclatural assignment and availability of nomina (***Nominal-Series***, ***Binomina***, ***Coordination*** and ***Neonymy***), one dealing with the taxonomic allocation of nomina (***Onomatophores***), nine dealing with the validity of nomina and the correctness of paronyms (***Zygoidy***, ***Homonymy***, ***Synonymy***, ***Priority***, ***Airesy***, ***Proedry***, ***Nomography***, ***Sozoidy*** and ***Archoidy***) and one dealing with the registration of nomina and onomatergies (***Registration***). Six of these Principles are present as such in the *Code*, although sometimes under different designations; eight do not appear there as Principles but are implemented as Rules in some articles; and three are not mentioned as Principles or Rules but are implied by some of the Rules of the *Code* (for details see our Glossary).

An important (and often ignored or misunderstood) characteristic of the zoological *Code*, not shared with other codes like the botanical Code (Turland *et al.* 2018), the *Phylocode* (Cantino & Queiroz 2020) or the project of *Biocode* (Greuter *et al.* 2011), is that the nomina of taxa are assigned to three 'groups of names', better called ***nominal-series*** (Dubois 2000*b*), each of which consists of several ***nomenclatural ranks***, and within which slightly different Rules apply: the ***species-series*** (with four ranks only, species, subspecies, 'aggregate of species' and 'aggregate of subspecies'; nomina written here in *italics*), the ***genus-series*** (with two ranks only, genus and subgenus; nomina here in *italics*) and the ***family-series*** (from subtribe to superfamily, with as many additional ranks below superfamily as needed; nomina here in *CAPITAL ITALICS*). Additionally, following Dubois (2000*b*) and the *LZP*, a ***class-series***, not recognised by the *Code*, can be used for nomina of taxa above the rank superfamily (order, class, phylum, and as many additional ranks as needed; nomina here in **BOLD CAPITALS**). In zoological nomenclature, nomina are not attached to ranks but to nominal-series, and the latter play a role much more important than the ranks themselves in the functioning of the nomenclatural system.

In each zoological ergotaxonomy, allocation of ***nomina*** to ***taxa*** follows strict and automatic Rules, but their allocation to nominal-series and ranks is largely arbitrary, being linked to tradition and 'consensus' rather than to a well-defined methodology. There is nothing in the *Code* or in the taxonomic literature to indicate why any given taxon should be attributed to the rank family, superfamily, suborder or order, and in fact the whole history of taxonomy is a succession of changes in this respect, with a clear tendency towards the progressive upgrading of the ranks of taxa, even when the latter do not change in their definitions and contents. Most of the genera recognised by Linnaeus (1758*a*) correspond now to taxa of rank family, order or even higher.

This peculiar characteristic of the LSNS, with four (in fact three + one) nominal-series that lack biological or other definitions is a result of the history of zoological nomenclature. It is justified only by the need to organise the taxonomic information in a convenient and ergonomic way, allowing easy and efficient storage and retrieval of taxonomic and bibliographic information (Mayr & Ashlock 1981), but it has no 'theoretical' justification. However, suppressing this system today to replace it by a 'better' (still to be defined) system of organisation of ranks and nomina (with different requirements and forms for the nomina in the different nominal-series) would be a very cumbersome endeavour and would cause endless problems. Its implementation would require considerable working time, care and funding, and would probably entail many mistakes that would have to be corrected later on. It should certainly not be considered as appropriate now, in this time of 'taxonomic urgency' (for details see Dubois 2011*a*, 2015*a*).

### *2.3.2. Nomenclatural Rules, recommendations and conventions*

Once taxa have been defined and arranged into a hierarchy, they must be named. Note that the process goes this way (from taxa to nomina), not the reverse way (from nomina to taxa). For this to be done consistently, and in a way that preserves an unambiguous relationship between the ergotaxonomy and the nomenclature, nomenclatural Rules must be strictly followed. Here we follow the Rules of the *Code* for all nomina of taxa at the rank superfamily and below, and the ***Duplostensional Nomenclatural***

***System*** or ***DONS*** (Dubois 2015*c*, 2016, 2020*a*) for all nomina of ranks above the rank superfamily, which are not regulated by the *Code*.

The Nomenclatural Process which leads ultimately to the establishment of the valid nomen of a taxon under these Rules is a three-step process consisting in: {N1} the ***availability*** of nomina and nomenclatural acts; {N2} the taxonomic ***allocation*** of nomina; and {N3} the ***validity*** and ***correctness*** of nomina (Dubois 2005*b*). As we will see in more detail below, when first published, a nomen may be nomenclaturally available (***hoplonym***) or unavailable (***anoplonym***) (Dubois 2000*b*). It is usually then or more rarely later taxonomically allocated through a name-bearing type of ***onomatophore***. It may then be ***valid*** (***kyronym***), if it has ***precedence*** over all other available nomina allocated to the taxon at stake (synonyms) or having the same spelling (homonyms), or ***invalid*** (***akyronym***), if not.

As the present work deals mostly with suprageneric classification and nomenclature, we will give below some details on the nomenclatural Rules, ***recommendations*** and conventions that we follow here, first in the family-series (regulated by the *Code*) and then in the class-series (regulated by the DONS Criteria).

### *2.3.3. Nominal-series, nominal-sets and nomenclatural ranks*

The *Code* is both imprecise and restrictive concerning the number and designation of ranks usable in zoological nomenclature. In the species- and genus-series, the number of ranks complying with the *Code* is strictly limited, respectively to four and two. In the family-series, it is limited only at the top, the highest rank allowed being superfamily. Above this rank, i.e., in the class-series, no precision is given in the *Code*, so one is led to consider that no limitation or rule exists.

It would be misleading to believe that each ‘group or level’ of nomina is limited to the rank that is designated by the same basic or ‘key’ term, possibly combined with another ‘qualifying’ term, such as ‘family’, ‘subfamily’ and ‘superfamily’. Under such an interpretation, ranks based on different ‘key’ terms, such as family and tribe, or phylum, class and order, should be referred to different nominal-series. This is obviously wrong in the case of family and tribe, and using such a rule in the case of nomina at ranks above superfamily, in recognising e.g. a ‘phylum-series’ and an ‘order-series’ distinct from the ‘class-series’, as suggested by Hemming (1953), Levine (1958), Blackwelder (1967), Rodendorf (1977*a*–*b*), Brothers (1983*a*–*b*) or Starobogatov (1984, 1991), would only unnecessarily but considerably complicate the nomenclature of higher-ranked taxa (for details see Dubois, 1984*b*, 2005*b*, 2006*a*). Such proposals ignore the fact that the ranks of taxa are completely arbitrary and merely based, in each zoological group, on tradition and consensus, as they provide by themselves no information on the biological characteristics of taxa or on their evolutionary history. In order to remove this ambiguity, the LZC proposed to use the new expression ***nominal-set*** to designate the gathering of all the ranks the designations of which are based on the same ‘key’ term—e.g., family, tribe, phylum, class, order (Dubois & Aescht 2017*c*). All members of the same nominal-set belong of course in the same nominal-series, but a given nominal-series may include several nominal-sets (e.g., family and tribe in the family-series, or regnum, phylum, class and order in the class-series).

In the family-series, the *Code* states that as many ranks as needed (“that may be desired” according to Article 35.1) may be used from the rank superfamily downwards to the rank genus. No explanation or rationale is given for this upward limitation, which forbids the use of ranks like hyperfamily above superfamily, but as long as the *Code* has not been modified in this respect (Dubois 2006*a*, 2011*a*), this limitation must be followed.

As we will see, to be available, a family-series nomen must be a ***rhizonym***, i.e., a nomen formed by adding an ***ending*** indicating plural to the ***stem*** of an available genus-series nomen, its ‘type genus’ or better ***nucleogenus*** (Dubois 2005*b*). Five FS ranks are ***fully regulated*** by the *Code* regarding their endings: one rank regarded here as mandatory (***family***, ending in -*IDAE*) and four ranks regarded here as optional (***superfamily***, ending in -*OIDEA*; ***subfamily***, ending in -*INAE*; ***tribe***, ending in -*INI*; and ***subtribe***, ending in -*INA*). Although their use is explicitly allowed in the *Code*, no guideline is offered in this text regarding the endings to be used for the other optional ranks in the FS, which are unlimited in number, except that these endings should indicate plural in Latin. This is made mandatory by the fact that all FS nomina are “nouns in the nominative plural” (Article 11.7.1.1), or should be treated as such.

This question was addressed by Bour & Dubois (1985, 1986), Dubois (2006*a*) and Dubois & Aescht (2019*j*), who made proposals which we largely follow here, with slight modifications. As we will see below, in order to express fully the cladistic relationships among extant amphibians disclosed by our analysis, we need 25 ranks above genus and below classis: 11 ranks in the class-series and 14 ranks in the family-series. In other zootaxonomic groups, more ranks would be necessary and for this we refer to Dubois (2006*a*), but here we will limit our discussion to these 25 ranks.

As we will see also, in our proposed methodology the ***mandatory rank*** family plays a central role, its position in the hierarchy being fixed by objective Criteria. Of course, in the FS we need additional ranks both above and below the rank family. The situation above the rank family offers little freedom as, according to the *Code*, the hierarchy must stop at the rank superfamily. We inserted two ranks between superfamily and family, namely ***epifamily*** (as used in Bour & Dubois 1985, 1986, Lescure *et al.* 1986 and Dubois 2005*d*, but not in Dubois 2006*a*, which was not *Code*-compliant in this respect) and ***apofamily***, but we refrained to add more as the class-series provides many additional ranks that allow expanding the hierarchy to the top. Below family, Dubois (2006*a*: 208) proposed a hierarchy of 38 ranks, but as we need only 10 of these ranks for the extant amphibians we used only a small subsample of this virtual hierarchy. In particular, we did not use intermediate ranks between family and the three subordinate ranks below family fully regulated by the *Code* (subfamily, tribe and subtribe), so that they follow each other in descending order.

**TABLE 1.HIE.** Hierarchical relationships between the ranks in the species-, genus-, family- and class-series used in this work.

This Table provides the first mentions of these ranks in the herpetological literature, and the prefixes (modifiers) used to designate these ranks in the present work, as well as the standard endings [between square brackets] used here in the family-series for the nomina referred to these ranks. The family-series ranks for which the *Code* mentions standard endings are shown on light gray background. The places in the hierarchy of the ranks clanus and phalanx follow Dubois (2006*b*). INR: information not relevant here.

| Modifier | Species | Genus | Clanus | Tribus | Familia | Phalanx | Ordo | Classis |
|---|---|---|---|---|---|---|---|---|
| Super | INR | INR | INR | INR | Günther 1858; Gill 1884 [-OIDEA] | *Hoc loco* | INR | INR |
| Epi | INR | INR | INR | INR | Bour & Dubois 1985 [-OIDAE] | *Hoc loco* | INR | INR |
| Apo | INR | INR | INR | INR | *Hoc loco* [-EIDAE] | INR | INR | INR |
| – | Linnaeus 1758*a* | Linnaeus 1758*a* | Dubois 2008*f* [-ITES] | Latreille 1825 [-INI] | Batsch 1788 [-IDAE] | *Hoc loco* | Linnaeus 1758*a* | Linnaeus 1758*a* |
| Sub | Linnaeus 1758*a*; Bedriaga 1881 | Linnaeus 1758*a*; Gray 1825 | *Hoc loco* [-ITIES] | Lescure[+2] 1986 [-INA] | Rafinesque 1815 [-INAE] | *Hoc loco* | Linnaeus 1758*a*; Rafinesque 1815 | Linnaeus 1758*a*; Rafinesque, 1814 |
| Infra | INR | INR | *Hoc loco* [-ITOES] | Lescure[+2] 1986 [-INIA] | INR | *Hoc loco* | *Hoc loco* | INR |
| Hypo | INR | INR | *Hoc loco* [-ITUES] | *Hoc loco* [-INOA] | INR | *Hoc loco* | *Hoc loco* | INR |
| Cato | INR | INR | *Hoc loco* [-ITYES] | INR | INR | INR | INR | INR |

**TABLE 2.SEQ.** Sequences of steps of allocation of the 23 ranks used in the present work for suprageneric taxa below the rank order.
The attribution of taxa/nomina to the taxonominal rank family is fixed through the ***Ten Criteria Procedure*** described in text. Their attribution to the other 21 ranks is made through two distinct sequences of steps, one progressively ascending above the rank family and one progressively descending below the rank family. Family-series ranks are in *italics* and class-series ranks in Roman. Ranks in **bold** are those implemented in the step at stake. Ranks underlined are compulsory ranks as defined in text and shown in Figure **F1.MOR**.

A. Upward sequence of implementation of 12 ranks above the rank family and below the rank order

| Step | Ranks recognised |
|---|---|
| 0 | ***FAMILIA*** |
| U01 | ***SUPERFAMILIA*** – *FAMILIA* |
| U02 | *SUPERFAMILIA* – ***EPIFAMILIA*** – *FAMILIA* |
| U03 | *SUPERFAMILIA* – *EPIFAMILIA* – ***APOFAMILIA*** – *FAMILIA* |
| U04 | **SUBORDO** – *SUPERFAMILIA* – *EPIFAMILIA* – *APOFAMILIA* – FAMILIA |
| U05 | SUBORDO – **INFRAORDO** –*SUPERFAMILIA* – *EPIFAMILIA* – *APOFAMILIA* – *FAMILIA* |
| U06 | SUBORDO – INFRAORDO – **HYPOORDO** – *SUPERFAMILIA* – *EPIFAMILIA* – *APOFAMILIA* – *FAMILIA* |
| U07 | SUBORDO – INFRAORDO – HYPOORDO – **SUPERPHALANX** – *SUPERFAMILIA* – *EPIFAMILIA* – *APOFAMILIA* – *FAMILIA* |
| U08 | SUBORDO – INFRAORDO – HYPOORDO – SUPERPHALANX – **EPIPHALANX** – *SUPERFAMILIA* – *EPIFAMILIA* – *APOFAMILIA* – *FAMILIA* |
| U09 | SUBORDO – INFRAORDO – HYPOORDO – SUPERPHALANX – EPIPHALANX – **PHALANX** – *SUPERFAMILIA* – *EPIFAMILIA* – *APOFAMILIA* – *FAMILIA* |
| U10 | SUBORDO – INFRAORDO – HYPOORDO – SUPERPHALANX – EPIPHALANX – PHALANX – **SUBPHALANX** – *SUPERFAMILIA* – *EPIFAMILIA* – *APOFAMILIA* – *FAMILIA* |
| U11 | SUBORDO – INFRAORDO – HYPOORDO – SUPERPHALANX – EPIPHALANX – PHALANX – SUBPHALANX – **INFRAPHALANX** – *SUPERFAMILIA* – *EPIFAMILIA* – *APOFAMILIA* – *FAMILIA* |
| U12 | SUBORDO – INFRAORDO – HYPOORDO – SUPERPHALANX – EPIPHALANX – PHALANX – SUBPHALANX – INFRAPHALANX – **HYPOPHALANX** – *SUPERFAMILIA* – *EPIFAMILIA* – *APOFAMILIA* – *FAMILIA* |

B. Downward sequence of implementation of 10 ranks below the rank family and above the rank genus

| Step | Ranks recognised |
|---|---|
| 0 | ***FAMILIA*** |
| D01 | *FAMILIA* – ***SUBFAMILIA*** |
| D02 | *FAMILIA* – *SUBFAMILIA* – ***TRIBUS*** |
| D03 | *FAMILIA* – *SUBFAMILIA* – *TRIBUS* – ***SUBTRIBUS*** |
| D04 | *FAMILIA* – *SUBFAMILIA* – *TRIBUS* – *SUBTRIBUS* – ***INFRATRIBUS*** |
| D05 | *FAMILIA* – *SUBFAMILIA* – *TRIBUS* – *SUBTRIBUS* – *INFRATRIBUS* – ***HYPOTRIBUS*** |
| D06 | *FAMILIA* – *SUBFAMILIA* – *TRIBUS* – *SUBTRIBUS* – *INFRATRIBUS* – *HYPOTRIBUS* – ***CLANUS*** |
| D07 | *FAMILIA* – *SUBFAMILIA* – *TRIBUS* – *SUBTRIBUS* – *INFRATRIBUS* – *HYPOTRIBUS* – *CLANUS* – ***SUBCLANUS*** |
| D08 | *FAMILIA* – *SUBFAMILIA* – *TRIBUS* – *SUBTRIBUS* – *INFRATRIBUS* – *HYPOTRIBUS* – *CLANUS* – *SUBCLANUS* – ***INFRACLANUS*** |
| D09 | *FAMILIA* – *SUBFAMILIA* – *TRIBUS* – *SUBTRIBUS* – *INFRATRIBUS* – *HYPOTRIBUS* – *CLANUS* – *SUBCLANUS* – *INFRACLANUS* – ***HYPOCLANUS*** |
| D10 | *FAMILIA* – *SUBFAMILIA* – *TRIBUS* – *SUBTRIBUS* – *INFRATRIBUS* – *HYPOTRIBUS* – *CLANUS* – *SUBCLANUS* – *INFRACLANUS* – *HYPOCLANUS* – ***CATOCLANUS*** |

As concerns the CS ranks, Dubois (2006*a*) provided a hierarchy of 99 ranks, but we only need to use 11 of them (from subclass to hypophalanx) for the extant amphibians. They are referred to three distinct nominal-sets, those of ***class*** (one rank), ***order*** (four ranks) and ***phalanx*** (six ranks).

Starting from the key rank ***family***, the fixation of which is detailed below, in order to deal with all the suprageneric taxa recognised here in extant amphibians we need 15 superordinate ranks below class and above family (12 in the CS and 3 in the FS) and 10 subordinate ranks below family (all in the FS). To avoid arbitrary and chaotic allocation of ranks to taxa, the use of these 25 ranks needs to follow in all cases the same, fixed, sequence, giving priority to some 'common' ranks over 'rarer' ones. The simplest situation is when there is a need of a single rank above family and below order, and of only three ranks between family and genus. In such cases, priority will be given to the four ranks fully regulated by the *Code* (superfamily above family, and subfamily, tribe and subtribe below family). But as soon as more ranks have to be added, we need an *a priori* fixed sequence for the addition of ranks into the hierarchy. In most cases, this sequence will simply follow a descending order (e.g., tribe, subtribe, infratribe, hypotribe, or order, suborder, infraorder, hypoorder). But there are a few exceptions. For example, we did not use any rank between subfamily and tribe (such as infrafamily or supertribe), in order to allow the four 'official' (i.e., fully regulated by the *Code*) ranks (family, subfamily, tribe and subtribe) to follow directly each other—but such additional ranks might be necessary in another zoological group whose taxonomy would require more ranks than the amphibians. For the same reason, the ranks epifamily and apofamily will be used only after the rank superfamily, as the latter is part of the ranks recommended by the *Code*.

Table **T1.HIE** presents all the ranks used in this work, with their respective nominal-series and nominal-sets, and reference to the first works where they were mentioned in herpetology. For the 14 FS ranks we used, it shows the standard endings adopted here, which differ slightly in a few cases from those suggested in the previous works cited above.

Table **T2.SEQ** provides the two sequences of allocation of ranks to taxa that we implemented in this work, both above and below the rank family. This excludes the ranks class, subclass and order, for which here we simply followed the tradition, as given e.g. in the database of the *Zoological Record* (<*ZR* 1864–2020>).

On the whole, a total of 1389 (766 generic and 623 suprageneric) lissamphibian taxa, are recognised in this work (Table **T.14.NUM**), attributed to 14 family-series and 11 class-series ranks below class, some of these ranks being used very often and some very rarely. The following list provides the number of taxa using each of these ranks in *CLAD* presented here. Ranks <u>underlined</u> in this list are part of the seven key ranks considered here mandatory in zoological nomenclature for reasons stated above.

Numbers of taxa attributed to class-series ranks below class (34 + 1 †): **C03 Subclassis** (1); <u>**C04 Ordo**</u> (3 + 1 †); **C05 Subordo** (7); **C06 Infraordo** (2); **C07 Hypoordo** (2); **C08 Superphalanx** (2); **C09 Epiphalanx** (2); **C10 Phalanx** (3); **C11 Subphalanx** (5); **C12 Infraphalanx** (4); **C13 Hypophalanx** (3).

Numbers of taxa attributed to family-series ranks (573 + 15 †): *F14 Superfamilia* (18); *F15 Epifamilia* (12); *F16 Apofamilia* (9); <u>*F17 Familia*</u> (69 + 13 †); *F18 Subfamilia* (87 + 2 †); *F19 Tribus* (89); *F20 Subtribus* (92); *F21 Infratribus* (65); *F22 Hypotribus* (44); *F23 Clanus* (32); *F24 Subclanus* (17); *F25 Infraclanus* (23); *F26 Hypoclanus* (14); *F27 Catoclanus* (2).

Numbers of taxa of rank <u>genus</u> (566 + 200 †).

### *2.3.4. Nomenclatural availability*

As we have seen, the nomenclatural process which leads to the establishment of the valid nomen of a taxon in a given ergotaxonomy is a three-step process (availability, allocation, validity). Let us consider first the step nomenclatural availability.

To be usable in zoological taxonomy, a nomen must have been introduced in the taxonomic literature following strict Criteria of availability, resulting from the process of nomenclatural ***promulgation*** (Dubois 2020*b*). These Criteria include in fact four distinct levels, three concerning availability proper (Dubois 2005*b*) and one concerning nominal-series ***assignment***. They must be implemented in the following order: {O1} ***publication*** availability or ***p-availability***; {O2} nominal-series assignment of nomen; {O3} nomen availability or ***n-availability***; and, whenever necessary, {O4} nomenclatural act availability or ***a-availability***. The Criteria of p-availability apply indiscriminately to all publications

**TABLE 3.AVP.** Criteria of unavailability of publications in zoological nomenclature according to the *Code* (Anonymous 1999, 2012).
Id., Identifier.
Publication category (Dubois et al. 2013: 5): P, p-publications, printed on paper; D, d-publications, released on optical discs; E, e-publications, distributed electronically online; M, m-publications, released in a mixed manner in parallel, under two or three of the formats just listed; O, other modes of production.
INR, Information not relevant here.

| Id. | Publication category | Name of Criterion | Article of the *Code* | Description of Criterion |
|---|---|---|---|---|
| Pb-01 | P | Date | 3.2 | Work published before 1757 |
| Pb-02 | P | Purpose | 8.1.1 | Work not issued for the purpose of providing a public and permanent scientific record |
| Pb-03 | P | Disclaimed publication | 8.2 | Work containing a statement to the effect that it is not issued for public and permanent scientific record or for the purposes of zoological nomenclature |
| Pb-04 | P | Obtainability | 8.1.2 | Work not obtainable, when first issued, free of charge or by purchase |
| Pb-05 | P | Invalidation of work under the Plenary Power of the Commission | 8.7, 81.1 | Publication totally 'suppressed' (invalidated) by the Commission under its Plenary Power, i.e., ruled to be treated as not having been published for the purpose of zoological nomenclature |
| Pb-06 | P | Facsimile of handwriting | 9.1 | After 1930, handwriting reproduced in facsimile by any process |
| Pb-07 | P | Facsimile of unpublished work | 9.12 | Facsimile or reproduction obtained on demand of an unpublished work according to the current Rules, even if previously deposited in a library or other archive |
| Pb-08 | P, D, M | Edition | 8.1.3 | Work issued as physical copies printed on paper or on optical disc but not issued in an edition containing numerous, simultaneously produced, identical and durable copies |
| Pb-09 | O | Mode of production | 8.4.1 | Work issued as physical paper copies by another means than printing on paper using ink or toner |
| Pb-10 | O | Proof sheets | 9.5 | Proof sheets |
| Pb-11 | P | Separates | 21.8.2 | After 1999, advance issue of separates of a paper publication |
| Pb-12 | P | Labels | 9.8 | Labels of specimens |
| Pb-13 | P | Congress material | 9.10 | Materials issued primarily to participants at meetings (e.g. symposia, colloquia, congresses or workshops), including abstracts and texts of presentations or posters |
| Pb-14 | D | Date | 8.4.1, 9.3 | Work issued as physical copies on optical disc before 1986 or after 2012 |
| Pb-15 | D | Format | 8.4.2 | Work issued as physical copies on optical disc after 1985 and before 2013 but not in read-only memory form |
| Pb-16 | D | Statement of intention | 8.4.2.1 | Work issued as physical copies on optical disc after 1985 and before 2000 failing to contain a statement that any new nomen or nomenclatural act it contains is intended for public and permanent scientific record and that the work is produced in an edition containing simultaneously obtainable copies |

*...Continued on the next page*

**TABLE 3.AVP.** (Continued)

| Id. | Publication category | Name of Criterion | Article of the *Code* | Description of Criterion |
|---|---|---|---|---|
| Pb-17 | D | Statement of deposition | 8.4.2.2 | Work issued as physical copies on optical disc after 1999 and before 2013 failing to contain a statement naming at least five major publicly accessible libraries in which copies of the optical disc were to have been deposited |
| Pb-18 | E | Mode of production | 8.1.3.2, 9.11 | Work issued as electronic copies that are not widely accessible and/or not with fixed content and layout |
| Pb-19 | E | Date of electronic publication | 8.5.1, 9.11 | Before 2012, work issued and distributed only electronically, without paper-printed edition |
| Pb-20 | E | Statement of date of electronic publication | 8.5.2, 9.11 | After 2011, work issued and distributed electronically failing to state its date of publication in the work itself |
| Pb-21 | E | Statement of pre-registration of electronic publication | 8.5.3, 9.11 | After 2011, work issued and distributed electronically failing to have been pre-registered in the *Official Register of Zoological Nomenclature* (*Zoobank*) and/or to contain evidence in the work itself that such pre-registration has occurred |
| Pb-22 | E | Statement of pre-registration of online supplementary material attached to a paper or electronic publication | 8.5.3, Recommendation 8c | After 2011, part of work containing information required for nomenclatural availability issued and distributed electronically as an 'online supplementary material' failing to have been registered in the *Official Register of Zoological Nomenclature* (*Zoobank*) and/or to contain evidence in the work itself that such registration has occurred, even if the main body of the work was published on paper or published electronically with pre-registration |
| Pb-23 | E | Statement of archiving of electronic publication | 8.5.3.1, 9.11 | After 2011, work issued and distributed electronically, registered in the *Official Register of Zoological Nomenclature*, **but** the entry of which fails to give the name and Internet address of an organisation other than the publisher that is intended to permanently archive the work in a manner that preserves the content and layout, and is capable of doing so |
| Pb-24 | E | Statement of ISBN or ISSN of electronic publication | 8.5.3.2, 9.11 | After 2011, work issued and distributed electronically, registered in the *Official Register of Zoological Nomenclature* **but** the entry of which fails to give an ISBN for the work or an ISSN for the journal containing the work |
| Pb-25 | O | Hectographing or mimeographing | 9.2 | After 1985, works produced by hectographing or mimeographing |
| Pb-26 | O | Photographs | 9.4 | Photographs as such |
| Pb-27 | O | Microfilms | 9.6 | Microfilms |
| Pb-28 | O | Acoustic records | 9.7 | Acoustic records made by any method |
| Pb-29 | E | Preliminary electronic versions | 9.9, 21.8.3 | Preliminary versions or works accessible online before the publication date of the final version |

that contain new nomina, whatever their nominal-series, whereas the Criteria of n-availability and a-availability differ slightly in each nominal-series.

In what follows, available nomina are designated as ***hoplonyms*** and unavailable ones as ***anoplonyms*** (Dubois 2000*b*). The latter are presented below " between straight quotation marks ".

*2.3.4.1. Publication availability*

Before examining the Criteria of availability of nomina themselves, all the Criteria of nomenclatural availability of the works where these nomina were published should also be checked. Table **T3.AVP** presents the 29 situations described in the *Code* or in DONS as leading to unavailability of publications for nomenclatural purposes (see Dubois 2015*c*: 83–84). Following the 2012 amendment of the *Code* (Anonymous 2012), three kinds of works can now be potentially available in zoological nomenclature: paper-printed publications (***p-publications***) since 1758; optical discs (CD-Roms, DVDs; ***d-publications***) from 1986 to 2011; and online electronic publications (***e-publications***) since 2012. No other kind of document can be available in zoological nomenclature.

Dubois *et al.* (2013: 61–64) pointed to a list of 40 works which are nomencaturally unavailable for having been published by *BMC* periodicals from 2001 to 2013 either only online before 2012, or after 2011 but without statement of *Zoobank* ***pre-registration***. These works proposed 97 new SS, GS, FS and CS nomina which turned out to be anoplonyms, as well as 4 nomenclatural acts which are unavailable, in many zoological groups. Since then, many more such situations occurred. Among the cases listed, two publications and four nomina concerned the extant **Amphibia**, but more appeared since then, and more will inevitably occur in the future, as long as the Commission has not faced the problems raised by Dubois *et al.* (2013) and modified the *Code* in order to suppress or limit them (see Dubois *et al.* 2019).

The following works are nomenclaturally unavailable according to the relevant Criteria in **T3.AVP**, so that all the new nomina of **Amphibia** they contain are unavailable and should never be used:

**(Pb-02) Work not issued for the purpose of providing a public and permanent scientific record.** ● Lowe, 1950: " *Aneides flavipunctatus quercetorum* " , " *Aneides flavipunctatus sequoiensis* " .

**(Pb-05) Invalidation of work under the Plenary Power of the Commission.** ● [1] La Cepède 1788: " *Buffo* " . [2] Oken 1816: " *Calamita* " , " *Phryne* " .

**(Pb-13) Congress material.** ● Liu 1964: " *Paramegophrys* " .

**(Pb-19) Date of electronic publication.** ● [1] Perez-Ramos & Saldana de la Riva 2000: " *Pseudoeurycea amuzga* " (see Dubois *et al.* 2005: 50). [2] Stöck *et al.* 2008: " *Bufo siculus* " (see Dubois *et al.* 2013). [3] Biju *et al.* 2009: " *Ghatophryne* " , " *Xanthophryne* " , " *Xanthophryne tigerinus* " (see Dubois *et al.* 2013).

**(Pb-21) Statement of pre-registration of electronic publication.** ● [1] Tissier *et al.* 2015: " *Phosphotriton* " †, " *Phosphotriton sigei* " †. [2] Chen *et al.* 2016: " *Prospea* " †, " *Prospea holoserisca* " †. [3] Sá *et al.* 2018: " *Relictus* " . [4] Souza Carvalho *et al.* 2019*a*: " *Cratopipa* " . [5] Agnolin *et al.* 2020*a*: " *Kururubatrachus* " . [6] Skutschas *et al.* 2020*a*: " *Balveherpeton* " .

**(Pb-22) Statement of pre-registration of online supplementary material attached to a paper or electronic publication.** ● Li *et al.* 2008: " *Liuixalus* " .

*2.3.4.2. Nominal-series assignment of suprageneric nomina*

The nominal-series assignment of zoological nomina is usually straightforward when it concerns species- and genus-series nomina, except in very old publications, where for example some SS nomina were uninomina, but then the work is unavailable by virtue of Article 11.4 (see Table **T4.AVN**). But the distinction between family-series and class-series nomina is more difficult, at least in some cases. This question was discussed at length by Dubois & Bour (2010*b*), Dubois (2015*c*) and Dubois & Ohler (2019), and will only be summarised here.

**TABLE 4.AVN.** Criteria of unavailability of class-series (CS) and family-series (FS) nomina, and of nomenclatural acts concerning them, according to the *Code* (Anonymous 1999) for FS nomina and nomenclatural acts, and to the DONS Criteria (Dubois 2015*e*) for CS nomina (indicated as DONS in column 5).
For details and terminology, see Glossary and Dubois (2000*b*, 2010*a*, 2013). [Ex], Example. Id., Identifier of Rule or Criterion.
General domain: CS, nomen of the class-series; FS, nomen of the family-series; ON, onomatergy (nomenclatural act).

| Id. | General domain | Precise domain | Name of criterion | Article of the *Code* | Description of criterion |
|---|---|---|---|---|---|
| Av-01 | CS, FS, ON | Date | Anecdidonym 1: absence of publication | 11.1 | Nomen or nomenclatural act anterior to 1758. |
| Av-02 | CS, FS, ON | Publication | Anecdidonym 1: absence of publication | 11.1 | Nomen or nomenclatural act not published, after 1757, in the meaning of Articles 3.2, 8–9 and 21.8 (see Table **T3.AVP**). |
| Av-03 | CS, FS | Publication | Anecdidonym 2: anonymous publication | 14 | Nomen published after 1950 with anonymous authorship. |
| Av-04 | FS | Nomenclatural system | Ectonym 1: non-binominal specific nomenclature | 11.4 | Species-, genus- or family-series nomen (***oligocaconym***) published but unavailable within the framework of zoological nomenclature as regulated by the *Code*, for having been published in a work that is not consistently binominal for nomina of rank species, not even in its index. **Comment.** ● Article 11.4 expressly states that CS nomina are not concerned by this Rule. |
| Av-05 | CS, FS | Nomenclatural system | Ectonym 2: plurinominal suprageneric nomen | 4.1 | Nomen (***hypercaconym***) published but unavailable within the framework of zoological nomenclature as regulated by the *Code*, for being a plurinominal suprageneric nomen. **Comment.** ● In contrast with Rule Av-04 for FS nomina, this does not result in making all other FS and CS nomina proposed in the same work unavailable. |
| Av-06 | CS, FS | Nomenclatural system | Ectonym 3: nomen unassignable to nominal-series | 1.2.2, DONS | Nomen (***anemonym***) published but unavailable within the framework of zoological nomenclature as regulated by the *Code* or by DONS, for being unassignable to a nominal-series in the original publication. |
| Av-07 | CS, FS | Nomenclatural system | Ectonym 4: alternative nomenclatural system | *Code*, DONS | Nomen (***notharchonym***) published but unavailable within the framework of zoological nomenclature as regulated by the *Code* or by DONS, for being proposed within the framework of an alternative nomenclatural system distinct from that of the *Code* and incompatible with it (e.g., the *Phylocode* or the *Biocode*). |
| Av-08 | CS, FS | Nomenclatural system | Ectonym 5: unranked or pseudoranked nomenclatural system or pseudo-system | DONS | Nomen (***anhypsonym***) published but unavailable within the framework of zoological nomenclature as regulated by the *Code*, for being proposed within a fully or partially unranked nomenclatural system (e.g., using unranked '***taxa***', '***phyla'*** or '***clades***' above the FS). |
| Av-09 | CS | Purpose | Taxonomic system | DONS | Nomen not respecting the requirement to be proposed expressly within the frame of a taxonomic system, i.e. a hierarchical classification recognising several other taxa, whether named in the publication at stake, or implied by reference to other works. |
| Av-10 | CS, FS | Purpose | Temporary or informal reference | 1.3.5, 8.1.1, 11.7.1.2 | Nomen proposed as temporary reference or as a plural noun referring to the ***members*** of a taxon (e.g., 'testudines' for the members of the genus *Testudo* in Linnaeus 1758*a*), not for formal, public and permanent taxonomic use to designate a taxon. |
| Av-11 | CS, FS, ON | Purpose | Conditional proposal | 11.5.1, 15.1 | Nomen (***eulabonym***) or nomenclatural act proposed conditionally after 1960. |
| Av-12 | CS, FS | Purpose | Synonym | 11.6 | Nomen introduced as junior synonym of a nomen considered valid. **Exception**: this Rule does not apply if the nomen was treated as available in the scientific literature between 1757 and 1961. [Ex] LEPTODACTYLIDAE Werner, 1896. |

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**TABLE 4.** (Continued)

| Id. | General domain | Precise domain | Name of criterion | Article of the *Code* | Description of criterion |
|---|---|---|---|---|---|
| Av-13 | CS, FS | Purpose | Invalidity | 11.5, 11.6 | Nomen introduced as invalid.<br>**Exceptions**:<br>[1] nomina proposed conditionally before 1961 (see Av-11);<br>[2] nomina introduced as junior synonyms and having been validated before 1961 (see Av-12). |
| Av-14 | CS, FS | Purpose | Explicit intentionality | 16.1 | Nomen published after 1999 without explicit statement that it is a new nomen. |
| Av-15 | CS, FS | Intension | Taxonomic allocation | 1.1 | Nomen proposed for a taxon explicitly excluded from the animal kingdom. |
| Av-16 | CS, FS | Intension | Hypothetical concept | 1.3.1 | Nomen proposed for a hypothetical taxonomic concept, not based on actual specimen(s). |
| Av-17 | CS, FS | Intension | Individual specimens as such | 1.3.2, 1.3.3 | Nomen proposed for teratological specimen(s) as such or for hybrid(s) as such (i.e., not for formal taxa). |
| Av-18 | CS, FS | Intension | Gymnonym | 12, 13 | Nomen (***gymnonym*** or *nomen nudum*) introduced<br>[1] before 1931, without a description or definition of the taxon it denotes **or** an indication;<br>[2] after 1930, without [a] a description or definition that states ***in words*** characters that are purported to differentiate the taxon, **or** [b] a bibliographic reference to such a statement, **or** [c] a statement that the new nomen is a neonym (*nomen novum*) for an available nomen.<br>**Exception**: a FS nomen published after 1930 and before 1961 which does not satisfy the provisions of [2] above and was not rejected after 1960 and before 2000 by an author expressly mentioning these provisions, and which was used as valid before 2000, is available from its original publication. |
| Av-19 | CS, FS | Intension | Works of animals | 1.3.6 | Nomen proposed after 1930 for the work of extant animal(s). |
| Av-20 | FS | Rank | Nomenclatural hierarchy: availability of FS nomen | 35.1 | Family-series nomen expressly proposed as superordinate to the rank superfamily. |
| Av-21 | CS | Rank | Nomenclatural hierarchy: availability of CS nomen | DONS | Class-series nomen expressly proposed as parordinate or subordinate to at least one nomen of the family-series (i.e., of rank superfamily or below). |
| Av-22 | CS, FS | Language | Zoological formula | 1.3.7 | 'Zoological formula' (see Anonymous 1922), i.e., nomen proposed as modification of an available nomen by addition of a standard prefix or suffix (e.g., prefix *Pan-* to indicate 'total-clades'; see Louchart *et al.* 2014). |
| Av-23 | CS, FS | Language | Latin alphabet | 11.2 | Nomen not spelled in the 26 letters of the expanded Latin alphabet (taken to include the letters *j*, *k*, *w* and *y*). |
| Av-24 | CS, FS | Language | Grammatical case and number | 11.7.1, DONS | Nomen not respecting the requirement to be a ***noun*** in the ***nominative plural*** when introduced. |
| Av-25 | FS | Language | 'Non-latinised' FS nomen | 11.7.1.1, 11.7.2 | ***Barbaronym***:<br>[1] Before 1900, FS nomen originally published in 'non-latinised' form and failing to have been validated through [a] subsequent latinisation, [b] 'general acceptance' by 'authors interested in the group concerned' as [b1] valid **and** [b2] dating from that first publication in 'non-latinised' form.<br>[2] After 1899, any FS nomen originally published in 'non-latinised' form.<br>**Comment**: Article 11.7.2 of the *Code* is in fact not operational as the Criteria listed above are quite imprecise and of difficult interpretation and implementation (see Dubois 2015*e*: 8–9). |
| Av-26 | FS | Language | Suffixes | 11.7.1.4 | FS nomen based on a GS nomen applied only to fossils and ending in the suffix *-ites*, *-ytes* or *-ithes* |

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**TABLE 4.** (Continued)

| Id. | General domain | Precise domain | Name of criterion | Article of the *Code* | Description of criterion |
|---|---|---|---|---|---|
| Av-27 | CS, FS | Language | Metagraph 1: leipoprotograph | 19, 24.2, 32.2.1 | Incorrect original spelling after its rejection through airesy among multiple original spellings (symprotographs). |
| Av-28 | CS, FS | Language | Metagraph 2: nomographic correction | 19, 33.2.2, 34, 50.4 | Spelling rejected as a result of a mandatory spellings or ending correction. |
| Av-29 | CS, FS | Language | Metagraph 3: ameletograph | 19, 33.3 | Incorrect subsequent spelling.<br>**Comment**: a careful analysis is needed to avoid confusion between this concept and those of autoneonym and alloneonym (see Tables **T7.NS-1** and **T8.NS-2**). |
| Av-30 | FS | Rhizonymy | Family-series arhizonym or quasirhizonym | 11.7.1 | FS nomen not based on a then available genus-series nomen. |
| Av-31 | FS | Rhizonymy | Family-series cenorhizonym or xenorhizonym | 11.7.1, 13.2 | FS nomen based on an available generic nomen **but** the latter not being used as valid in the FS taxon adopted in the work where the FS nomen was introduced. |
| Av-32 | FS | Rhizonymy | Family-series auxorhizonym | 11.7.1 | FS nomen based on an available generic nomen used as valid in the taxonomy adopted in the publication where the FS nomen is introduced, **but** not being formed directly from the stem of this nomen but on this nomen to which a suffix (e.g., -formes or -morpha) has been added. |
| Av-33 | CS, FS | Ostension | Original aphory | 11.7.1.5, 13.2, 16.2, 39, DONS | Nomen originally published without proper fixation of nucleogenus (type genus):<br>[1] After 1930 and before 2000: [1a] FS nomen based on an unavailable GS nomen (Av-30); [1b] FS nomen based on a GS nomen not used as valid in the FS taxon adopted in the work where the FS nomen is introduced (Av-31).<br>[2] After 1999, FS nomen published without explicit statement of nucleogenus.<br>[3] At all times, FS nomen based on a GS nomen which has been invalidated by the International Commission on Zoological Nomenclature.<br>[4] After 2015, CS nomen published without explicit designation of conucleogenera or of a uninucleogenus. |
| Av-34 | CS, FS | Neonymy | Neonym of anoplonym | 12, 13 | Nomen introduced as a neonym (*nomen novum*) for an anoplonym (unavailable nomen). |
| Av-35 | FS | Registration | Absence of registration | 10.7, 79.4.3 | Nomen not listed in a part of the *List of Available Names in Zoology* adopted by the International Commission on Zoological Nomenclature, despite any previous availability. |
| Av-36 | FS | Invalidation | Invalidation under the Plenary Powers | 10.1, 78, 81 | Availability of FS nomen removed by the International Commission on Zoological Nomenclature under its Plenary Power (exoplonym). |

Two independent suprageneric nominal-series exist in zoological nomenclature: the family-series (nomina of families, tribes and related ranks), whose nomina are fully regulated by the *Code*, and the class-series (nomina of classes, orders and taxa attributed to other higher ranks), whose nomina are only ***partially regulated*** by the *Code* (mostly concerning their nomenclatural availability). However, there is no biological or other Criterion to decide whether a given suprageneric nomen should be assigned to either nominal-series, and the *Code* fails to provide any unambiguous Criterion to distinguish between FS and CS nomina. It just states in its Article 11.7.1.1 that, to be an available FS nomen, a nomen "must be a noun in the nominative plural formed from the stem of an available generic name", i.e., must be a rhizonym (Dubois 2006*c*), but unfortunately it does not exclude the possibility that a CS nomen can also be a rhizonym, which is a strong source of potential confusion.

Furthermore, Linnaeus (1758*a*), in the book that was later fixed as the starting point of zoological nomenclature, only used five named ranks below reign (class, order, genus, species, variety) and 12 unnamed ranks (Dubois 2007*c*), but not the ranks family and tribe, which were introduced only later, and whose position in the hierarchy wandered for a while before becoming fixed between order and genus only around 1825 (Dubois 2006*a*).

It results from this complex situation that, in the early texts of zootaxonomy, the fact that an author used the denomination 'family' or 'tribe' for a suprageneric taxon is not an acceptable evidence that this nomen should be assigned to the family-series as understood today. Unambiguous Criteria are needed. Such Criteria were first proposed by Dubois (2006*a*) and Dubois & Bour (2010*b*), and refined by Dubois (2015*c*) and Dubois & Ohler (2019).

Some terminological clarifications are needed. The first useful distinction is between ***rhizonyms*** (Dubois 2006*c*), ***arhizonyms*** (Dubois 2006*c*), ***pseudorhizonyms*** (Dubois 2015*c*) and ***quasirhizonyms*** (Dubois & Frétey 2020*a*), concepts presented in detail here in Table **T5.RHI**:

{P1} An ***arhizonym*** is a suprageneric nomen which is not based on the stem of an existing nomen, whether of the genus-series or of another nominal-series.

{P2} A ***rhizonym*** is a suprageneric nomen **HN** proposed for a suprageneric taxon **HT** and complying with three conditions: {P2a} it is based on the stem of a then ***available*** GS nomen **GN** included in **HT**; {P2b} this stem is followed by a **simple** plural ending, that can be construed as being derived from the Greek term εἶδος (*eidos*), 'appearance, shape' (e.g., -*IDAE*, -*OIDEA*, -*IDES*, etc.) or not (e.g., -*AE*, -*INAE*, -*INI*, -*INA*, -*ITI*, -*ITES*, etc.); {P2c} the nomen **GN** is allocated as ***valid*** to the taxon **HT** in the ergotaxonomy adopted in the publication where **HN** is introduced.

{P3} A ***pseudorhizonym*** is a suprageneric nomen based on the stem of a genus-series nomen failing to comply with one at least of the three conditions {P2a–c}. Three categories of pseudorhizonyms (***auxorhizonyms***, ***cenorhizonyms*** and ***xenorhizonyms***) were distinguished by Dubois (2015*c*), Dubois & Aescht (2019*j*) *a*nd Dubois & Frétey (2020*a*), who provided detailed discussions of these concepts.

{P4} A ***quasirhizonym*** is a suprageneric nomen based on the stem of either a nomen of the species-, family- or class-series or of a non-scientific name of animal, this stem being combined with an ending derived from another or several other terms.

Altogether, ***rhizonyms***, ***pseudorhizonyms*** and ***quasirhizonyms***, which are based on the stems of other nomina or names, which opposes them to ***arhizonyms***, qualify as ***panrhizonyms***,

The *Code* only deals with some of the situations that are encountered in zoological nomenclature:

{Q1} To be acceptable as an available FS nomen under the *Code*, a suprageneric nomen **HN** must be a rhizonym as defined above under {P2}.

{Q2} Any nomen **unambiguously** assigned to the FS in the original publication that does not comply with the conditions of {Q1} is an ***unavailable*** FS nomen.

Arhizonyms, pseudorhizonyms and quasirhizonyms therefore fail to comply with the *Code*'s Criteria of nomenclatural availability of FS nomina. But this does not mean that they are automatically available CS nomina: they can be so only if proposed clearly for taxa at ranks above superfamily.

After a detailed analysis of the literature dealing with amphibians, Dubois (2015*c*: 87–89) concluded that 10 situations can be encountered regarding the nominal-series assignment of suprageneric nomina (see Table **T6.ASN**): 5 which result in assignment to the CS, 3 which result in assignment to the FS and 2 which result in unassignment to a nominal-series and unavailability.

Six Criteria can be used to ascertain the nominal-series assignment of suprageneric nomina: {R1} original ***rank attribution*** of nomen, which applies only for the original Linnaean ranks reign, class and order and their subsidiary ranks (whose names start with sub-, super-, etc.); {R2} ***rhizonymy***, which is mandatory for family-series nomina but can occur also in the class-series; {R3} ***coordination*** and ***polysemy***, which apply only to family-series nomina; {R4} ***topotaxy***, i.e. the place of taxa in the ***taxonomic hierarchy***; {R5} historical Criterion, taking into account the first date of appearance of the family-series nomina in the zoological group considered; and {R6} ***taxonomic consistency***, which requires to give pre-eminence to the family-series in case of heretogeneity of the nominal-series assignment of parordinate nomina in a publication. In many cases, none of these Criteria is sufficient alone to reach a clear-cut decision, but their combination allows it. These Criteria were examined in details, with examples, in Dubois (2015*c*: 29–36) and in Dubois & Ohler (2019: 19–23) and it would be redundant to repeat all this information here, so we refer to these publications.

It is important to note that these Criteria apply only and strictly in the original publication in which the nomen is introduced, not in any subsequent work, whether by its original author or by another author.

In the present work, we applied carefully these Criteria to establish the nominal-series assignment of all suprageneric nomina ever proposed for taxa of extant amphibians, which allowed us to assign clearly all of them to a nominal-series and to state whether they are nomenclaturally available or not.

**TABLE 5.RHI.** Categories of rhizonymy in the family-series and class-series with their standard endings used here.

In the family-series, standard endings are imposed by the *Code* for 5 ranks, and in the present work we use standard endings for 9 additional ranks (see Table **T1.HIE**). In the class-series, under DONS, the Criteria for standard endings shown below are those of the *Code* for FS ***rhizonyms***, and those proposed by Dubois (2015*c*) and emended by Dubois & Frétey (2020*a*) in the frame of DONS for CS ***arhizonyms*** and ***panrhizonyms*** (***rhizonyms***, ***cenorhizonyms***, ***auxorhizonyms***, ***xenorhizonyms*** and ***quasirhizonyms***). In the fourth column, whenever appropriate the ***radiconomen*** of the nomen **HN** is given between square brackets and followed by: (I) if the radiconomen is a ***radicogenus*** nomen included in the CS taxon and therefore plays the role of ***onomatophore*** for the latter; (N) if the radicomen is a radicogenus nomen not included in the CS taxon and therefore does not play this role; (V) if the radiconomen is not a genus-series nomen but a species-series or a class-series nomen, or a non-scientific name of animal, and therefore does not play this role; (Z) if the HN nomen is not based on a radiconomen.

| Category of nomen | Definition, status according to nominal-series and reference | Standard CS ending | Examples in the CS: protograph of CS nomen HN [radiconomen] → eugraph of CS nomen HN |
|---|---|---|---|
| Rhizonym | Suprageneric nomen **HN** (designating a taxon **HT**) based on the stem of a then ***available*** genus-series nomen **GN** referred as ***valid*** to **HT**, followed by a ***simple*** ending denoting plural (e.g., **-AE**, **-IDAE**, **-INAE**, **-IDI**, **-OIDEA**, **-ACEA**, etc).<br><br>If proposed as a family-series nomen, it may be available under Article 13.2 of the *Code* (if all other criteria of nomenclatural availability are complied with), but then, according to the rank where it is used, it should be so with a correct ending according to the *Code*'s Rules or to DONS' proposals (Table **T1.HIE**).<br><br>If proposed as a class-series nomen, it may be available under DONS Criteria (if all other criteria of nomenclatural availability are complied with), but then, it should be so with the standard ending **-ACEA,** which is not in a relation of hierarchy and may be used at whatever rank.<br><br>Dubois 2006*c*: 8, 2015*c*: 80. | **-ACEA** | **BUFONACEA** Haeckel, 1889 [*Bufo* Laurenti, 1768 (I)] → **BUFONACEA** Haeckel, 1889<br><br>**PIPOIDEI** Dubois, 1983*f* [*Pipa* Laurenti, 1768 (I)] → **PIPACEA** Dubois, 1983*f*<br><br>**PROTEIDEA** Müller, 1831 [*Proteus* Laurenti, 1768 (I)] → **PROTEACEA** Müller, 1831<br><br>**RANACEA** Wilbrand, 1814 [*Rana* Linnaeus, 1758 (I)] → **RANACEA** Wilbrand, 1814<br>**RANAE** Bonaparte, 1850 [*Rana* Linnaeus, 1758 (I)] → **RANACEA** Bonaparte, 1850 |
| Arhizonym | Suprageneric nomen **HN** not based on the stem of a genus-series nomen.<br><br>If proposed as a family-series nomen, it is incorrectly formed according to Article 13.2 of the *Code*, and is therefore a family-series ***anoplonym*** (nomenclaturally unavailable).<br><br>If proposed as a class-series nomen, it may be available under DONS Criteria (if the other conditions of nomenclatural availability are complied with), and if so it should be used under the spelling which has obtained general acceptance in the literature, if it exists. Apart for a few endings (e.g., **-BRANCHIA**, **-GLOSSA**, **-PHORA**), most endings are used only within limited zoological groups. In all cases where several nomina referred to the same taxonomic group share a common ending, the use of this ending should be homogenised in all of them in order to follow its most common spelling (e.g., **-BATRACHIA** instead of **-BATRACHI**).<br><br>Dubois 2006*a*: 178, 2015*c*: 52. | Varia | **GEOBATRACHI** Ritgen, 1828 (Z) → **GEOBATRACHIA** Ritgen, 1828<br><br>**GYMNOBATRACHIA** Miranda-Ribeiro, 1924 (Z) → **GYMNOBATRACHIA** Miranda-Ribeiro, 1924<br><br>**PHANEROBRANCHI** Wagler, 1828 (Z) → **PHANEROBRANCHIA** Wagler, 1828<br><br>**IMPERFECTIBRANCHIA** Hogg, 1838 (Z) → **IMPERFECTIBRANCHIA** Hogg, 1838<br><br>**AGLOSSA** Knauer, 1878 (Z) → **AGLOSSA** Knauer, 1878<br>**AGLOSSAE** Wagler, 1830 (Z) → **AGLOSSA** Wagler, 1830<br><br>**UROPHORA** Hogg, 1839 (Z) → **UROPHORA** Hogg, 1839<br><br>**NOTOCENTROPHORI** von Huene, 1920 (Z) → **NOTOCENTROPHORA** von Huene, 1920<br><br>**GYMNOPHIA** Rafinesque, 1814 (Z) → **GYMNOPHIONA** Rafinesque, 1814<br><br>**DERMATOPHIDES** Ritgen, 1828 (Z) → **DERMATOPHIONA** Ritgen, 1828 |

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**TABLE 5.RHI.** (Continued)

| Category of nomen | Definition, status according to nominal-series and reference | Standard CS ending | Examples in the CS: protograph of CS nomen HN [radiconomen] → eugraph of CS nomen HN |
|---|---|---|---|
| Pseudorhizonym | Suprageneric nomen **HN** based on the stem of a genus-series nomen but not complying with the conditions of the *Code* for the availability of FS nomina (***available*** GS nomen included as ***valid*** in **HT**).<br><br>If proposed as a family-series nomen, it is incorrectly formed according to Article 13.2 of the *Code*, and is therefore a family-series ***anoplonym*** (nomenclaturally unavailable).<br><br>If proposed as a class-series nomen, it may be available under DONS Criteria (if the other conditions of nomenclatural availability are complied with).<br><br>Three categories: ***cenorhizonym***, ***auxorhizonym*** and ***xenorhizonym*** (see below).<br><br>Dubois 2015*c*: 22, 79. | Varia | See below |
| Cenorhizonym | A subcategory of ***pseudorhizonym***: suprageneric nomen **HN** (designating a taxon **HT**) [1] based on the stem of an ***available*** or ***unavailable*** generic nomen **GN**, followed by a simple ending denoting plural (e.g., -AE, -IDAE, -INAE, -IDI, -OIDEA, -ACEA, etc), **but** [2] this nomen not being referred as ***valid*** to the taxon **HT** in the ergotaxonomy adopted in the publication where **HN** was introduced.<br><br>If proposed as a family-series nomen, it is incorrectly formed according to the *Code*, and is therefore a FS ***anoplonym***.<br><br>If proposed as a class-series nomen and available, it should be used with the standard ending **-ACEI,** which is not in a relation of hierarchy and may be used at whatever rank.<br><br>Dubois & Bour 2011: 157; Dubois 2015*c*: 53; Dubois & Frétey 2020*a*. | **-ACEI** | **ANGUINEA** Wiegmann & Ruthe, 1832 [*Anguis* Linnaeus, 1758 (N)] → **ANGUINACEI** Wiegmann & Ruthe, 1832<br><br>**CALAMITAE** Link, 1807 [*Calamita* Schneider, 1799 (N)] → **CALAMITACEI** Link, 1807<br><br>**LACERTINI** Gray, 1850 [*Lacerta* Linnaeus, 1758 (N)] → **LACERTACEI** Gray, 1850 |
| Auxorhizonym | A subcategory of ***pseudorhizonym***: suprageneric nomen **HN** (designating a taxon **HT**) [1] based on the stem of a then ***available*** generic nomen **GN** referred as ***valid*** to the taxon included in **HT** in the ergotaxonomy adopted in the publication where **HN** was introduced, **but** [2] combined with an ending derived from another or several other terms (e.g., -formes, -morpha, -phora, etc.).<br><br>If proposed as a family-series nomen, it is incorrectly formed according to the *Code*, and is therefore a FS ***anoplonym***.<br><br>If proposed as a class-series nomen and available, common particular cases are those of such nomina the original endings of which were derived from the roots *forma* (Latin) or μορφή, *morphe* (Greek) meaning 'form, shape': under DONS as emended by Dubois & Frétey (2020*a*), it should be used under the respective standard endings **-IFORMIA** or **-OMORPHA,** which are not in a relation of hierarchy but may be both used at whatever rank.<br><br>Dubois 2015*c*: 22; Dubois & Frétey 2020*a*. | **-IFORMIA**<br><br><br><br><br><br><br><br>**-OMORPHA** | **BUFONIFORMES** Cope, 1864*b* [*Bufo* Laurenti, 1768 (I)] → **BUFONIFORMIA** Cope, 1864*b*<br><br>**HYLAEFORMIA** Cope, 1863*b* [*Hyla* Laurenti, 1768 (I)] → **HYLIFORMIA** Cope, 1863*b*<br><br>**PIPAEFORMES** Brocchi, 1881 [*Pipa* Laurenti, 1768 (I)] → **PIPIFORMIA** Brocchi, 1881<br><br>**RANIFORMIA** Hogg, 1839*a* [*Rana* Linnaeus, 1758 (I)] → **RANIFORMIA** Hogg, 1839*a*<br><br>**ASTEROPHRYOMORPHA** Fejérváry, 1923 [*Asterophrys* Tschudi, 1838 (I)] → **ASTEROPHRYOMORPHA** Fejérváry, 1923<br><br>**PIPAEMORPHA** Fejérváry, 1921*b* [*Pipa* Laurenti, 1768 (I)] → **PIPOMORPHA** Fejérváry, 1921*b*<br><br>**RANOMORPHA** Fejérváry, 1921*b* [*Rana* Linnaeus, 1758 (I)] → **RANOMORPHA** Fejérváry, 1921*b* |

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**TABLE 5.RHI.** (Continued)

| Category of nomen | Definition, status according to nominal-series and reference | Standard CS ending | Examples in the CS: protograph of CS nomen HN [radiconomen] → eugraph of CS nomen HN |
|---|---|---|---|
| Xenorhizonym | A subcategory of ***pseudorhizonym***: suprageneric nomen **HN** (designating a taxon **HT**) [1] based on the stem of an available or unavailable genus-series nomen **GN**, **but** [2] this nomen not being referred as ***valid*** to the taxon **HT** in the ergotaxonomy adopted in the publication where **HN** was introduced **and** [3] its stem being combined with an ending derived from another or several other terms (e.g., -formes, -morpha, -phora, etc.).<br><br>If proposed as a family-series nomen, it is incorrectly formed according to the *Code*, and is therefore a FS ***anoplonym***.<br><br>If proposed as a class-series nomen and available, common particular cases are those of such nomina the original endings of which were derived from the roots *forma* (Latin) or μορφή, *morphe* (Greek) meaning 'form, shape': under DONS as emended by Dubois & Frétey (2020*a*), it should be used under the respective standard endings **-IFORMI** or **-OMORPHI,** which are not in a relation of hierarchy but may be both used at whatever rank.<br><br>Dubois 2015*c*: 22, 82, 90; Dubois & Frétey 2020*a*. | **-IFORMI** | **ANGUIFORMES** Gouriet, 1868 [*Anguis* Linnaeus, 1758*a* (N)] → **ANGUIFORMI** Hogg, 1839<br>**ANGUIFORMIA** Hogg, 1839*a* [*Anguis* Linnaeus, 1758*a* (N)] → **ANGUIFORMI** Hogg, 1839<br><br>**LACERTIFORMIA** Jarocki, 1822 [*Lacerta* Linnaeus, 1758*a* (N)] → **LACERTIFORMI** Jarocki, 1822<br>**LACERTIFORMIA** Hogg, 1839*a* [*Lacerta* Linnaeus, 1758*a* (N)] → **LACERTIFORMI** Hogg, 1839 |
| Quasirhizonym | Suprageneric nomen **HN** based on the stem of either a nomen of the species-, family- or class-series or of a non-scientific name of animal, this stem being combined with an ending derived from another or several other terms (e.g., -formes, -morpha, -phora, etc.).<br><br>If proposed as a family-series nomen, it is incorrectly formed according to Article 13.2 of the *Code*, and is therefore a family-series ***anoplonym*** (nomenclaturally unavailable).<br><br>If proposed as a class-series nomen and available, common particular cases are those of such nomina the original endings of which were derived from the roots *forma* (Latin) or μορφή, *morphe* (Greek) meaning 'form, shape': under DONS as emended by Dubois & Frétey (2020*a*), it should be used under the respective standard endings **-IFORMES** or **-OMORPHES,** which are not in a relation of hierarchy but may be both used at whatever rank.<br><br>Dubois & Frétey 2020*a*. | **-IFORMES**<br><br><br><br>**-OMORPHES** | **PISCIFORMIA** Hogg, 1839*a* (V) → **PISCIFORMES** Hogg, 1839<br><br>**SERPENTIFORMIA** Leuckart, 1840 (V) → **SERPENTIFORMES** Leuckart, 1840<br><br>**ICHTHYOMORPHA** Owen, 1866 (V) → **ICHTHYOMORPHES** Owen, 1866<br><br>**OPHIOMORPHA** Van der Hoeven, 1855 (V) → **OPHIOMORPHES** Van der Hoeven, 1855<br><br>**THERIOMORPHA** Owen, 1866 (V) → **THERIOMORPHES** Owen, 1866<br>**THERIOMORPHA** Hoffmann, 1878 (V) → **THERIOMORPHES** Hoffmann, 1878 |

### *2.3.4.3. Nomen and onomatergy availability*

#### 2.3.4.3.1. General situation

Table **T4.AVN** presents the 36 situations leading to unavailability of higher ranked nomina or of nomenclatural acts concerning them (see Dubois 2015*c*: 85–86). Three of these situations apply to the ***onomatergies*** (nomenclatural acts) and 34 to FS nomina under the *Code*, while 27 apply to CS nomina according to the DONS Rules (Dubois 2015*c*). These situations are much more varied than many taxonomists believe. Many authors think that the formula ***nomen nudum*** applies to all ***anoplonyms*** (unavailable nomina), but this is incorrect. The Glossary of the *Code* clearly defines *nomen nudum* as referring to a nomen that, if published before 1931, fails to conform to Article 12, or, if published after 1930, fails to conform to Article 13. This applies to only three of the 36 situations described in Table **T4.AVN** (Av-16, Av-31, Av-32). Rather than using the formula *nomen nudum* in an improper manner, it is therefore preferable to use the general terms ***anoplonym*** for the 36 situations, ***gymnonym*** for *nomen nudum* as defined in the *Code*, and ***atelonym*** for all other cases of anoplonyms, which include several subcategories not discussed here (see Dubois 2011*a* and Glossary below for details).

**TABLE 6.ASN.** Criteria of assignment of nomina to the class-series or the family-series under the *Code* (Anonymous 1999, 2012) and the Duplostensional Nomenclatural System (Dubois 2015*e*, 2016).
For the definitions of the categories of rhizonymy, see Table T5.RHI.
Abbreviations: CS, Nomenclatural class-series (including the ranks regnum, classis, ordo, etc.); DONS, Duplostensional Nomenclatural System; FS, Nomenclatural family-series (including the ranks familia, tribus, etc.); GN, Genus-series nomen; GS, Nomenclatural genus-series (including the ranks genus and subgenus); HN, Nomen proposed for suprageneric taxon HT; HT, Suprageneric taxon (of the CS or FS); INR, Information not relevant here; OP, Original publication where HN is proposed.

| Case regarding assignment | Criteria of nominal-series assignment | Assignment and availability of HN | Examples | Comments |
|---|---|---|---|---|
| [CS1] **Explicit class-series assignment to a Linnaean suprageneric rank** | [Cr1] **HN** is either [1] an arhizonym, [2] a pseudorhizonym (cenorhizonym, auxorhizonym or xenorhizonym), [3] a quasirhizonym or [4] a rhizonym<br><br>[Cr2] **HN** was proposed in **OP** in the nominative plural, with a clear suprageneric rank<br><br>[Cr3] **HN** was explicitly assigned in **OP** to one of the three original Linnaean ranks of the class-series (regnum, classis, ordo) or to one of their subsidiary ranks (super-, sub-, etc.) | **Class-series hoplonym** | [Ex1] All suprageneric nomina in Linnaeus (1758*a*), which are all arhizonyms<br><br>[Ex2] **Ranacea** Wilbrand, 1814, rhizonym based on the generic nomen *Rana* Linnaeus, 1758, explicitly assigned to the Linnaean rank order | INR |
| [CS2] **Implicit class-series assignment through consistent arhizonymy, pseudorhizonymy or quasirhizonymy** | [Cr1] **HN** is either [1] an arhizonym, [2] a pseudorhizonym (cenorhizonym, auxorhizonym or xenorhizonym) or [3] a quasirhizonym<br><br>[Cr2] **HN** was proposed in **OP** in the nominative plural, with a clear suprageneric rank but not one of the three original Linnaean ranks of the class-series (regnum, classis, ordo) or one of their subsidiary ranks (super-, sub-, etc.)<br><br>[Cr3] ***All*** other nomina at the ***same*** rank in **OP** were also arhizonyms, pseudorhizonyms or quasirhizonyms, and ***none*** of these nomina was subordinate or parordinate to any nomen referred to the family-series according to the Criteria [FS1] to [FS3] below | **Class-series hoplonym** | [Ex1] All nomina assigned to the rank family in Duméril (1805), Ritgen (1828) and Müller (1840), to the rank tribe in Merrem (1820) and Haworth (1825) and to the ranks family and tribe in Wagler (1830), where they are all suprageneric arhizonyms but where there are no family-series nomina according to the Criteria [FS1] to [FS3] below<br><br>[Ex2] All nomina explicitly referred to the rank tribe in Fitzinger (1826), Hogg (1839*b*) and Nicholls (1916), where they are all arhizonyms and superordinate to a rank family belonging indeed to the family-series according to the Criteria [FS1] to [FS3] below, but where there are no nomina of superfamilies | Although this was not specified in any set of Rules or Criteria before those proposed by Dubois (2006*a*), such an 'untold rule' has been followed by many authors in the past and nowadays |

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**TABLE 6.ASN.** (Continued)

| Case regarding assignment | Criteria of nominal-series assignment | Assignment and availability of HN | Examples | Comments |
|---|---|---|---|---|
| [CS3] **Implicit class-series assignment through rank superordination or parordination to a rank of the class-series** | [Cr1] **HN** is either [1] an arhizonym, [2] a pseudorhizonym (cenorhizonym, auxorhizonym or xenorhizonym),[3] a quasirhizonym or [4] a rhizonym<br><br>[Cr2] **HN** was proposed in **OP** in the nominative plural, with a clear suprageneric rank but not one of the three original Linnaean ranks of the class-series (regnum, classis, ordo) or one of their subsidiary ranks (super-, sub-, etc.)<br><br>[Cr3] **HN** was explicitly assigned in **OP** to a rank superordinate or parordinate to a rank referred to the class-series through explicit allocation [CS1] or arhizonymy, pseudorhizonymy or quasirhizonymy [CS2] | **Class-series hoplonym** | [Ex1] All nomina assigned to the rank tribe in Blainville (1816*a*) and Wagler (1828*b*), where they are all arhizonyms and superordinate to the Linnaean rank order<br><br>[Ex2] **Molgae** Ritgen, 1828, rhizonym based on the generic nomen *Molge* Merrem, 1820, assigned to the rank 'Zug' which is superordinate in **OP** to the rank 'family' which in this work is a class-series nomen according to the Criterion [CS2] (see above and Dubois & Ohler 2009)<br><br>[Ex3] The nomen **Muroidea**, rhizonym based on the generic nomen *Mus* Linnaeus, 1758, as used e.g. in the website *Tree of Life* (<http://tolweb.org>) for a taxon superordinate to the taxon **Eumuroida** whose CS nomen is an auxorhizonym (see Dubois 2015*c* for details). | INR |
| [CS4] **Implicit class-series assignment through rank superordination to the rank family before a given date** | [Cr1] **HN** is either [1] an arhizonym, [2] a pseudorhizonym (cenorhizonym, auxorhizonym or xenorhizonym), [3] a quasorhizonym or [4] a rhizonym<br><br>[Cr2] **HN** was proposed in **OP** in the nominative plural, with a clear suprageneric rank but not one of the three original Linnaean ranks of the class-series (regnum, classis, ordo) or one of their subsidiary ranks (super-, sub-, etc.)<br><br>[Cr3] **HN** was explicitly assigned in **OP** to a rank explicitly superordinate to the rank family before the first year when a rank equivalent to superfamily was first used in the literature dealing with the zoological group at stake, with nomina based on nucleogenera and for taxa including taxa of rank family | **Class-series hoplonym** | [Ex1] **Linguata** Gravenhorst, 1845, arhizonym unassigned to a rank, **Hypsibatae** Fitzinger, 1843, arhizonym assigned to the rank 'section', and **Hemisalamandrae** Fitzinger,1843, auxorhizonym assigned to the rank 'section', but all superordinate to the rank family and published before 1858, starting date for this Criterion in amphibians (see Appendix **T1.HIE**)<br><br>[Ex2] **Amphiumoides** Duméril & Bibron, 1841, rhizonym with unclear rank assignment (group, section or tribe in different part of the text), and **Tritones** Gray, 1850, rhizonym without rank assignment, but both superordinate to the rank family and published before 1858, starting date for this Criterion in amphibians (see Table **T1.HIE**) | In the class **Amphibia** the starting year for this Criterion is 1858, year of publication of Günther's paper in the *Proceedings of the zoological Society of London* (see Appendix **T1.HIE**) |

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**TABLE 6.ASN.** (Continued)

| Case regarding assignment | Criteria of nominal-series assignment | Assignment and availability of HN | Examples | Comments |
|---|---|---|---|---|
| [CS5] **Implicit class-series assignment through neonymy or allelonymy for a class-series nomen** | [Cr1] **HN** is either [1] an arhizonym, [2] a pseudorhizonym (cenorhizonym, auxorhizonym or xenorhizonym), [3] a quasirhizonym or [4] a rhizonym<br><br>[Cr2] **HN** was proposed in **OP** in the nominative plural, with a clear suprageneric rank but not one of the three original Linnaean ranks of the class-series (regnum, classis, ordo) or one of their subsidiary ranks (super-, sub-, etc.)<br><br>[Cr3] **HN** was explicitly proposed in **OP** as a neonym or allelonym for a nomen assigned to the class-series according to one of the Criteria [CS1] to [CS4] | **Class-series hoplonym** | [Ex1] **COECILIFORMES** Zagorodniuk, 2004, auxorhizonym expressly proposed as a neonym for **APODA** Oppel, 1811*b*, which in this work is a class-series nomen according to the Criterion [CS2] (see Dubois 2015*c*) | INR |
| [FS1] **Explicit family-series assignment and rhizonymy** | [Cr1] **HN** is a rhizonym<br><br>[Cr2] **HN** was proposed in **OP** in the nominative plural, with a clear suprageneric rank but below the rank order<br><br>[Cr3] **HN** was explicitly assigned in the original work to one of the ranks of the family-series mentioned in the *Code* (familia, tribus) or to one of their subsidiary ranks (super-, sub-, etc.) | **Family-series hoplonym** | [Ex1] All familial nomina mentioned in Batsch (1788, 1789, 1796) that are clearly based on the stems of available generic nomina, such as *TESTUDINES* Batsch, 1788 and *RANINA* Batsch, 1796 (see Dubois & Bour 2010*b*, 2011) | According to ONS Criteria, as soon as one nomen in a publication is assigned to the FS through this Criterion, all suprageneric nomina that are parordinate or subordinate to it in **OP** must also be assigned to the FS, irrespective of their being rhizonyms, pseudorhizonyms or arhizonyms |

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**TABLE 6.ASN.** (Continued)

| Case regarding assignment | Criteria of nominal-series assignment | Assignment and availability of HN | Examples | Comments |
|---|---|---|---|---|
| [FS2] **Implicit family-series assignment through unclear nominal-series assignment and rhizonymy** | [Cr1] **HN** is a rhizonym<br><br>[Cr2] **HN** was proposed in **OP** in the nominative plural, with a clear suprageneric rank but below the rank order<br><br>[Cr3] **HN** was not explicitly assigned in **OP** to a rank, or was explicitly allocated to a rank being neither one of the three original Linnaean ranks of the class-series (regnum, classis, ordo), nor one of their subsidiary ranks (super-, sub-, etc.), nor one of the ranks of the family-series mentioned in the *Code* (familia, tribus), nor one of their subsidiary ranks (super-, sub-, etc.) | **Family-series hoplonym** | All suprageneric rhizonyms without rank assignment appearing in the works of Gray (1825) and Bronn (1849) (for details on those of amphibians in pages 684–685 of the latter work see Dubois 1984*b*) | According to DONS Criteria, as soon as one nomen in a publication is assigned to the FS through this Criterion, all suprageneric nomina that are parordinate or subordinate to it in **OP** must also be assigned to the FS, irrespective of their being rhizonyms, pseudorhizonyms, quasirhizonyms or arhizonyms |
| [FS3] **Explicit or implicit family-series assignment through rank subordination or parordination to clear family-series nomen or nomina and arhizonymy, pseudorhizonymy or quasirhizonymy** | [Cr1] **HN** is either [1] an arhizonym, [2] a pseudorhizonym (cenorhizonym, auxorhizonym or xenorhizonym) or [3] a quasirhizonym<br><br>[Cr2] **HN** was proposed in **OP** in the nominative plural, with a clear suprageneric rank<br><br>[Cr3] **HN** was explicitly assigned in **OP** to one of the ranks of the family-series mentioned by the *Code* (familia, tribus) or to one of their subsidiary ranks (super-, sub-, etc.), or to another rank being neither one of the three original Linnaean ranks of the class-series (regnum, classis, ordo), nor one of their subsidiary ranks (super-, sub-, etc.), or not explicitly assigned to a rank, ***but*** being parordinate or subordinate to ***at least one*** nomen unambiguously referred to the family-series according to the Criteria [FS1] or [FS2] | **Family-series anoplonym** | [Ex1] All familial nomina mentioned in Batsch (1788, 1789, 1796) that are not based on the stems of available generic nomina, including arhizonyms such as '*BATRACHI*' Batsch, 1788 and cenorhizonyms such as '*LACERTAE*' Batsch, 1788 (see Dubois & Bour 2010*b*, 2011)<br><br>[Ex2] All nomina of **HOLOTHURINA** assigned to six unnamed ranks between family and genus in Brandt (1835: 242–262), such as 'I. *PEDATAE*', 'A. *HOMOIOPODES*', 'a) *DENDROPNEUMONES*', 'aa) *PERIPODES*', 'α) *PENTASTICHAE*' and 'αα) *ADETOPNEUMONES*' on pages 242–243, which are all arhizonyms and subordinate to a nomen (*HOLOTHURIAE*) assigned to the rank family in **OP** and belonging indeed to the family-series according to the Criterion [FS1]<br><br>[Ex3] The arhizonyms "*ELEUTHEROGNATHINAE*" and "*SYMPHIGNATHINAE*" proposed by Méhely (1901) for taxa of rank subfamily, and "*PRONOTOCUPEDINI*" proposed by Tan *et al.* (2012) for a taxon of rank tribe | In this situation, a nomen is neither an available class-series nor an available family-series nomen, but is clearly referred to the family-series and will have to be mentioned in serious and comprehensive family-series synonymic lists. In order to place it in one such list referring to a valid FS nomen, it must have a nucleogenus (type genus). The latter can be designated either by original or subsequent monophory or by subsequent designation among originally or subsequently included nominal genera. |

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**TABLE 6.ASN.** (Continued)

| Case regarding assignment | Criteria of nominal-series assignment | Assignment and availability of HN | Examples | Comments |
|---|---|---|---|---|
| [UN1] **Unavailable suprageneric nomen for having been proposed in an unavailable work** | [Cr1] **HN** is either [1] an arhizonym, [2] a pseudorhizonym (cenorhizonym, auxorhizonym or xenorhizonym), [3] a quasirhizonym or [4] a rhizonym<br><br>[Cr2] **HN** was proposed in an **OP** which is not nomenclaturally available (see Table **T3.AVP**)<br><br>[Cr3] **HN** was explicitly or implicitly but clearly assigned in **OP** to a rank higher than genus, belonging either to the family-series or to the class-series, or not clearly to one of these two nominal-series | **Anoplonym belonging in the family-series or in the class-series, or unallocated to a suprageneric nominal-series** | [Ex1] The new nomina proposed by Zaldívar-Riverón *et al.* (2008) and Lecompte *et al.* (2008) for new tribes, by Vilela *et al.* (2009) for a new subfamily and by Haug *et al.* (2010) for an unranked 'higher taxon', in works published only online before 2012 (for details, see Dubois *et al.* 2013)<br><br>[Ex2] The new nomina proposed by Lin & Hastings (2013) for two new tribes, by Pyron *et al.* (2013) for a new subfamily and by Lamsdell & Selden (2013) for a new family in works published only online after 2011 without prior registration in *Zoobank* (for details, see Dubois *et al.* 2013) | INR |
| [UN2] **Unavailable suprageneric nomen for having been proposed without complying with the conditions of nomenclatural availability of nomina** | [Cr1] **HN** is either [1] an arhizonym, [2] a pseudorhizonym (cenorhizonym, auxorhizonym or xenorhizonym), [3] a quasirhizonym or [4] a rhizonym<br><br>[Cr2] **HN** was explicitly proposed in **OP** as failing to comply with one condition of nomenclatural availability of nomina at least (see Table **T4.AVN**), e.g.: [A] not being in the nominative plural, but in the nominative singular or in another grammatical case; [B] proposed as new after 1930 without a diagnosis or description based on characters; [C] proposed as new after 1999 without the explicit mention that it is a new nomen; [D] proposed as a new CS nomen with explicit mention that it is governed by nomenclatural Rules alternative to the *Code*, not complementary to it, or within the frame of a fully unranked nomenclatural system (***ectonym***) (see Appendix **A8.ECT**)<br><br>[Cr3] **HN** was explicitly or implicitly but clearly assigned in **OP** to a rank higher than genus, belonging either to the family-series or to the class-series, or not clearly to one of these two nominal-series | **Anoplonym belonging in the family-series or in the class-series, or unallocated to a suprageneric nominal-series** | [Ex1] The new FS and CS nomina proposed by Romer (1933, 1945), Fuhn (1960), Bossuyt & Milinkovitch (2001), Pyron & Wiens (2011), Vieites *et al.* (2011) and Fregin *et al.* (2012) without diagnosis or description based on characters (for details see: Dubois *et al.* 2001, 2013; Ohler & Dubois 2012; Dubois 2012*b*)<br><br>[Ex2] See Appendix **A8.ECT** | The *Code* does not state that nomina in the nominative singular are unavailable for CS nomina, which is normal as this text does not provide any statement about such nomina; but the *Code* expressly states that GS nomina must be in the nominative singular and FS nomina in the nominative plural, so it is consistent to require CS nomina to be in the nominative plural as well; quite logically, this is expressly stated in Article 23.1 of the project of *Biocode* (Greuter *et al.* 2011) |

Careful examination of Table **T4.AVN** shows that a number of amphibian FS and CS nomina published in the past, and for some of them recently, are nomenclaturally unavailable and cannot be used in zoological nomenclature. Here are some examples of nomina which are nomenclaturally unavailable according to the relevant Criteria in Table **T4.AVN**, and therefore should never be used:

**(Av-11) Conditional proposal.** ● "*LEPTOBRACHIINI* Dubois, 1980", validated later as *LEPTOBRACHIINAE* Dubois, 1983*c*.

**(Av-18) Gymnonym.** ● [1] "*ALLOPHRYNIDAE* Savage, 1973", validated later as *ALLOPHRYNIDAE* Goin, Goin & Zug, 1978 (see Dubois 1986*a*). [2] "*ANEIDINI* Vieites, Nieto Román, Wake & Wake, 2001", validated later as *ANEIDINI* Wake, 2012 (see Dubois 2012*b*). [3] "*LIUIXALINI* Li, Nieto Román, Wake & Wake, 2001", validated in the present work as *ROMERINA* **nov.** [4] "*MICRIXALINAE* Bossuyt & Milinkovitch, 2001", validated later as *MICRIXALINAE* Dubois, Ohler & Biju, 2001 (see Dubois *et al.* 2001). [5] "*PARATELMATOBIINAE* Pyron & Wiens, 2011", validated later as *PARATELMATOBIINAE* Ohler & Dubois, 2012. [6] "*Relictus* Sá *et al*. 2018", validated in the present work as *Relictocleis* **nov.** [7] "*Unicus* Sá *et al*. 2019*a*", same as preceding. [8] "*Unicus* Sá *et al*. 2019*b*", same as preceding.

**(Av-29) Metagraph 3: ameletograph.** ● "*DICROGLOSSIDAE* Anderson, 1871", ameletograph of *DISCOGLOSSIDAE* Günther, 1858 (see Ohler & Dubois 2014 and Ohler *et al.* 2014).

**(Av-30) Family-series arhizonym or quasirhizonym.** ● [1] "*BATRACHI* Batsch, 1788". [2] "*ICHTYOIDA* Latreille, 1825". [3] "*TRITONIDES* Tschudi, 1838". [4] "*ELEUTHEROGNATHINAE* Méhely, 1901". [5] "*HEMIGNATHODONTINAE* Miranda-Ribeiro, 1926".

**(Av-31) Family-series cenorhizonym or xenorhizonym.** ● [1] "*TRITONIA* Rafinesque, 1815", validated later as *TRITONES* Tschudi, 1838. [2] "*PROTEINA* Gray, 1825", validated later as *PROTEINA* Bonaparte, 1831 (see Dubois & Ohler 2015).

**(Av-32) Family-series auxorhizonym.** ● [1] "*BUFONIFORMES* Duméril & Bibron, 1841". [2] "*PIPINOMORPHA* Báez & Pugener, 2003". [3] "*ALLOCENTROLENIAE* Guayasamin *et al.* 2009".

Four particular domains regarding the availability of nomina require particular attention because of the existence of several situations which may be confounded if not enough attention is paid to their complexity: {S1} that of ***metagraphs***, i.e. the distinction between ***autoneonyms*** (available) and some categories of ***apographs*** (which, being spellings and not nomina, can qualify neither as available nor as unavailable); {S2} that of the categories of ***homonymy***; {S3} that of ***ectonyms***, i.e. nomina which are proposed under a nomenclatural system different from that of the *Code* and incompatible with it; {S4} that of the ***acceptable tolerance*** for borderline ***gymnonymy***.

2.3.4.3.2. Metagraphs

A really tricky problem of zoological nomenclature is that of the distinction between different kinds of alternative spellings for nomina and of the distinction between different spellings of nomina and different nomina. This question was discussed at full length in several papers (Dubois 1987*b*, 2010*a*, 2012*a*, 2015*c*, 2017*b*; Dubois & Ohler 2019; Dubois & Aescht 2019*o*) which should be consulted for details. Here the conclusions of these discussions are shown in Tables **T4.AVN**, **T7.NS-1** and **T8.NS-2**. Table **T7.NS-1** presents the categories and subcategories of nomina and spellings we distinguish in this work, whereas **T8.NS-2** presents the Criteria of distinction between some of these categories.

To make these matters short, once a new nomen has been made available in zoological nomenclature, it is liable either to be replaced by another available nomen (***neonym***) according to the ***Principle of Neonymy***, or to have its original spelling (***protograph***) modified. This modification may be either intentional (***meletograph***) or not (***ameletograph***), being then due to inadvertence from the part of the 'author' of the publication (more precisely, the nomenclatural ***auctor*** of the nomen or the subsequent ***scriptor*** of the spelling) or of its editor, publisher or printer. As long as this situation has not been clarified by a careful analysis, this modified spelling may be designated as that of a ***metagraph***. The latter may later turn out to be either a voluntary change in spelling (***meletograph***), i.e. an 'unjustified emendation' or ***autoneonym***, therefore a distinct nomen with its own auctor and date, or simply an ***ameletograph*** (involuntary change in spelling), which does qualify as a distinct nomen and does not have its own auctor but only a scriptor. There are then several possibilities: this spelling may be a ***symprotograph*** or a ***leipoprotograph***, a ***nomographic correction*** or an ***ameletograph***. Among all the existing or potential spellings of a given nomen, in the end only one (the ***eugraph***) can qualify as the correct one for this nomen to designate a given taxon in a given ergotaxonomy. It is important to realise that the relevant

**TABLE 7.NS-1.** Nomina and spellings. Definitions of categories.
Categories of nomina are designated by terms ending in -onym, whereas categories of spellings are designated by terms ending in -graph.
Column 4 N/S: N, nomen, which may be available or unavailable; S, spelling, devoid of independent availability.

| Category of nomen or spelling | Subcategory of nomen or spelling | Definition | N/S |
|---|---|---|---|
| Nomen | – | ***Scientific name*** as defined and regulated by the zoological *Code*. | N |
| Nomen | Poieonym | Brand new ***nomen***, not proposed to replace an existing one. | N |
| Nomen | Homonym | One of two (or several) nomina deemed to be homonyms under the Rules of the *Code* (for SS, GS or FS nomina) or under the DONS Criteria (for CS nomina). | N |
| Nomen | Homograph | One of two (or several) nomina having exactly the same spelling. | S |
| Homonym | Hadromonym | Permanent homonym. | N |
| Homonym | Asthenomonym | Conditional homonym. | N |
| Nomen | Synonym | One of two (or several) nomina deemed to denote the same taxon in a given ergotaxonomic frame under the Rules of the *Code* (for SS, GS or FS nomina) or under the DONS Criteria (for CS nomina). | N |
| Synonym | Isonym | Objective synonym. | N |
| Synonym | Doxisonym | Subjective synonym. | N |
| Synonym | Allelonym | One of two (or several) synonymous nomina used both (or all) as valid for the same taxon (having the same content) in the same publication. | N |
| Nomen | Isomonym | Any of two or more distinct nomina being both homonyms and isonyms under the Rules of the *Code* (for SS, GS or FS nomina) or under the DONS Criteria (for CS nomina). | N |
| Nomen | Archaeonym | Original nomen that has been replaced by a ***neonym***. | N |
| Nomen | Neonym | Nomen proposed ***expressly*** to replace an available nomen (its ***archaeonym***), and having the same ***onomatophore*** (Articles 12.2.3, 13.1.3, 33.2.3) and also the same ***onomatostasis*** in some cases of CS ***sozonymorphs*** (Dubois 2015*c*) as the latter. | N |
| Neonym | Autoneonym | ***Neonym*** having the same etymology as its ***archaeonym***, i.e., directly derived from it through unjustified emendation (Article 33.2.3). | N |
| Neonym | Alloneonym | ***Neonym*** having a partially or totally different etymology from that of its ***archaeonym***, i.e., not directly derived from it through unjustified emendation (Articles 12.2.3, 13.1.3). | N |
| Neonym | Mesoneonym | ***Neonym*** whose etymology is not clearly different or the same as that of its ***archaeonym***. | N |
| Neonym | Haploneonym | Subsequent spelling of a nomen which, being clearly a ***meletograph***, must be considered a ***neonym*** although it does not meet the restrictive Criteria of Article 33.2.1 (see NH1–NH5 in column 3 of Table **T8.NS-2**). | N |
| Neonym | Archoneonym | ***Ameletograph*** which has been afforded the status of available ***neonym*** by the Commission under the Plenary Power. | N |
| Spelling | – | The arrangement of letters that compose a word. In nomenclature, the same nomen can take different spellings, its ***parographs***. | S |
| Spelling | Parograph | Any spelling, either original (***protograph***) or subsequent (***apograph***), ever used in the literature for a nomen. | S |
| Spelling | Protograph | Original ***parograph*** of a nomen in the publication where it was originally introduced. | S |
| Protograph | Holoprotograph | A category of ***protograph***: unique original spelling of a nomen. | S |
| Protograph | Symprotograph | A category of ***protograph***: one of two or more alternative original spellings of a nomen. | S |
| Protograph | Lectoprotograph | The ***symprotograph*** validated by an ***airesy*** under Article 24.2. | S |
| Protograph | Leipoprotograph | Any ***symprotograph*** rejected by an ***airesy*** under Article 24.2. | S |
| Spelling | Apograph | Any subsequent ***parograph*** of an existing nomen. | S |

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**TABLE 7.** (Continued)

| Category of nomen or spelling | Subcategory of nomen or spelling | Definition | N/S |
|---|---|---|---|
| Spelling | Eugraph | Correct spelling of a nomen for a given taxon in a given ergotaxonomy. | S |
| Spelling | Nothograph | Incorrect spelling of a nomen for a given taxon in a given ergotaxonomy. | S |
| Spelling / Nomen | Metagraph | Any spelling of a nomen different from the correct original spelling and which may be either an ***apograph*** (a ***symprotograph*** or a ***leipoprotograph***, a ***nomographic correction***, a ***meletograph*** or an ***ameletograph***) or an ***autoneonym***. | N/S |
| Metagraph | Meletograph | Spelling of a nomen used voluntarily in a publication by an author, scriptor, editor, printer or publisher. | N/S |
| Metagraph | Ameletograph | Spelling of a nomen used inadvertently in a publication by an author, editor or publisher. | S |
| Metagraph | Nomographic correction | Any correction in the spelling, stem or ending of a nothograph required by the nomenclatural Rules, which may be either a ***mandatory ending correction*** (Article 32.5; Dubois 2013) or a ***mandatory spelling correction*** (Article 34; Dubois 2013). | S |
| Metagraph | Archapograph | ***Autoneonym*** which has been given the status of ***apograph*** by the *Code* (Articles 33.2.3.1, 35.4.1) or by the Commission under the Plenary Powers. | S |

criterion to distinguish a neonym from an ameletograph is not the fact that the new spelling is 'justified' (as implied by the *Code*'s terminology) but whether it is **intentional** (voluntary) or not.

We followed the Criteria summarised in these tables throughout the present work to establish the status of all amphibian nomina regarding their availability and spelling. In particular, following Dubois (2017*b*), we adopted a wider acceptation of the concept of ***autoneonym*** than that implemented in the *Code*, which we consider questionable and non-operational. Rather than on the concepts of 'justified' or 'unjustified' emendations, our interpretation relies on the distinction between 'intentional' and 'inadvertent' spelling changes which we consider more relevant. As a consequence, following the Criteria described in **T7.NS-1** and under HN-1 to HN-5 in **T8.NS-2**, we afford here nomenclatural availability to a few nomina (***sigoneonyms***) which are denied this status in some recent publications and databases, as well as in some recent decisions of the Commission. However, as none of these nomina has precedence over its synonyms or ***homonyms***, this difference of interpretation does not result in any changes in the nomina recognised as valid in our ergotaxonomy, and is therefore not liable to raise new nomenclatural problems.

#### 2.3.4.3.3. Categories of homonymy

In zoological nomenclature, although designated by a term used since the 19th century, homonymy is not 'simple homonymy' as understood in common language or even in linguistics. It is a precise technical qualification of nomina that is not equivalent to strict ***homography*** (identical spelling). First of all, homonymy only applies to nomina of the same nominal-series: two ***homographic*** nomina in different nominal-series are ***hemihomonyms*** (Starobogatov 1984, 1991) and are not concerned by the Rules of homonymy (see Shipunov 2011). Second, under the *Code*, homonymy is defined differently according to the nominal-series considered: {T1} in the genus-series, homonymy exists only in case of absolute homography (a single one-letter difference being enough to prevent homonymy); {T2} in the species-series, nomenclatural homonymy occurs more widely than between homographs, as it only requires 'almost absolute' homography, i.e., ***paromography*** or ***rhizomography*** (a few 'variant spellings' being 'deemed to be identical'); {T3} in the family-series, homonymy only requires rhizomography (homography of the stems of the nomina, which qualify then as ***rhizomonyms***).

The traditional *Code*'s subcategories of **homonyms** were redefined by Dubois (2000*b*) as ***hadromonyms*** (which cover two categories of the *Code*, 'simple homonyms' in the GS and FS and ***primary homonyms*** in the SS) and ***asthenomonyms*** (SS ***secondary homonyms*** in the *Code*). Later, Dubois (2012*a*) proposed to recognise two additional subcategories of homonyms in particular situations.

**TABLE 8.NS-2.** Nomina and spellings. Criteria used in this work for the distinction between ameletographs and neonyms.
Publication P1, Publication, by author A1, where the original nomen or spelling ON was first published. Publication P2, Publication, by author A2, where the modified nomen or spelling MN first appeared. →, Neonym for. [Ex], Example. INR, Information not relevant here.

| Criterion | MN is an ameletograph and therefore an aponym of ON (hence an avatar of the same nomen, with same authorship, date and onomatophore) | MN is a meletograph and therefore a neonym of ON (hence a distinct available nomen, with its own authorship and date but the same onomatophore) |
|---|---|---|
| 1. Explicit statement | **Ameletograph 1.** (**AM1**). [1] Both ON and MN appear in P2. [2] No explicit statement is provided in P2 that MN was introduced voluntarily to replace ON. [3] No clear choice was made in P2 between ON and MN regarding validity (Criterion Cr8 of Dubois 1987*e*, 2017*b*).<br><br>[Ex] Hoffmann (1878) mentioned the genus *Pleurodeles* Tschudi, 1838, twice (p. 687) under its original spelling and once (p. 674), without explanation, under the spelling *Pleuroderes*. The latter is an ameletonym, unavailable in zoological nomenclature. | **Autoneonym 1.** (**NT1**). [1] Both ON and MN appear in P2. [2] P2 contains an explicit statement that MN was introduced to replace ON, or MN is explicitly treated as valid and ON as invalid (Article 33.2.1). [3] MN was clearly derived from the same etymology as that of ON. [4] MN was clearly considered valid in P2.<br><br>[Ex1] *Megalophrys* Wagler, 1830 → *Megophrys* Kuhl & Van Hasselt, 1822 (see Dubois 1982*c*).<br><br>[Ex2] *Hyperodon* Agassiz, 1846 → *Uperodon* Duméril & Bibron, 1841.<br><br>[Ex3] *Cassina* Boulenger, 1882*b* → *Kassina* Girard, 1853.<br><br>**Mesoneonym.** (**NM**). [1] Both ON and MN appear in P2. [2] P2 contains an explicit statement that MN was introduced to replace ON, or MN is explicitly treated as valid and ON as invalid (Article 33.2.1). [3] MN was clearly derived from the same etymology as that of ON, ***but*** with addition of a suffix which may be construed as being derived from another term, so that it is not clear, according to the *Code*, if MN should be regarded as an alloneonym or an autoneonym. [4] MN was clearly considered valid in P2.<br><br>[Ex1] The genus nomen *Triturus* Rafinesque 1815, which may be regarded as either [a] an autoneonym of *Triton* Laurenti, 1768 or [b] an alloneonym being a compound term derived from the gathering of *Triton* Laurenti, 1758 with a suffix derived from the Greek term οὀρά (*oura*), 'tail' (see Dubois 1985: 68).<br><br>[Ex2] The epithet *monticola* which may be regarded as either [a] an autoneonym of the Latin adjective *montana*, derived itself from the Latin noun *mons*, 'mountain', or [b] an alloneonym being a compound term derived from the gathering of a prefix derived from the Latin noun *mons* and a suffix derived from the Latin *-cola*, 'dweller of', derived itself from the Latin verb *colere*, 'to dwell' (see Dubois 1982*c*: 264, footnote 1).<br><br>**Alloneonym.** (**NL**). [1] Both ON and MN appear in P2. [2] P2 contains an explicit statement that MN was introduced to replace ON, or MN is explicitly treated as valid and ON as invalid (Article 33.2.1). [3] MN was clearly derived from an etymology different from that of ON. [4] MN was clearly considered valid in P2.<br><br>[Ex1] *Batrachus* Rafinesque, 1814 → *Bufo* Laurenti, 1768 (see Dubois & Bour 2010*a*).<br><br>[Ex2] *Dendrobates* Wagler, 1830 → *Hysaplesia* H. Boie in Schlegel, 1826*a* (see Dubois 2017*b*).<br><br>[Ex1] *Philautus* Gistel, 1848 → *Orchestes* Tschudi, 1838 (see Dubois 1987*e*: 45–46). |

*...Continued on the next page*

**TABLE 8.NS-2.** (Continued)

| Criterion | MN is an ameletograph and therefore an aponym of ON (hence an avatar of the same nomen, with same authorship, date and onomatophore) | MN is a meletograph and therefore a neonym of ON (hence a distinct available nomen, with its own authorship and date but the same onomatophore) |
|---|---|---|
| 2. Consistency of treatment in P2 | **Ameletograph 2.** (**AM2**). Spelling change in P2 has no clear and straightforward justification or explanation that could also apply to another nomen in P2. | **Autoneonym 2.** (**NT2**). Several nomina are treated in the same way in P2 (Article 33.2.1), e.g. [a] corrected according to etymology or [b] according to some, possibly arbitrary, criterion which is clear from the context.<br>[Ex1] Etymology: several nomina in Wagler (1830) or in Agassiz (1843, 1844, 1846, 1847) (see Dubois 1987*m*: 40–44).<br>[Ex2] Arbitrary criterion: many nomina in Palacký (1898) in which *ph* in ON was consistently replaced by *f* in MN (see Dubois 1987*e*: 37). |
| 3. Implicit etymology | **Ameletograph 3.** (**AM3**). Spelling change in P2 is unjustified by etymology or unclear in this respect (Criterion Cr7 in Dubois 1987*m*, 2017*b*). MN may even be incorrectly formed whereas the original spelling was correctly formed. | **Sigoneonym 1.** (**NS1**) The change of spelling in P2 has an implicit but clear etymological justification: MN is etymologically justified and correctly formed, whereas ON was not, or could be considered not to be so (Criterion Cr4 in Dubois 1987*e*, 2017*b*).<br>[Ex1] *Calophryne* Fitzinger, 1843 → *Kalophrynus* Tschudi, 1838 (see Dubois 2017*b*).<br>[Ex2] *Phrynocerus* Cope, 1862 → *Phrynoceros* Tschudi, 1838. |
| 4. Spelling modified by original author | **Ameletograph 4.** (**AM4**). MN was introduced in P2 by the author A1 of P1 but appears only once in P2, and is absent throughout the subsequent works by A1—even sometimes with reversion to the use of ON (Criterion Cr9 of Dubois 1987*m*, 2017*b*). | **Sigoneonym 2.** (**NS2**). [1] MN was introduced in P2 by the author A1 of P1, either [a] in an erratum/corrigendum published after P1, or [b] in a subsequent work P2. [2] MN was used more than once by A1 in publications subsequent to P1 whereas no reversion to the use of ON occurred in these works (Criterion Cr5 in Dubois 1987*e*, 2017*b*).<br>[Ex] *Lophiohyla* Miranda-Ribeiro, 1926 → *Lophyohyla* Miranda-Ribeiro, 1923 (see Dubois 1984*b*: 21–22). |
| 5. Single or multiple occurrence | **Ameletograph 5.** (**AM5**). MN appeared only once in P2 (including its index if relevant), and ON is absent throughout this work and subsequent ones by A2—even sometimes with reversion to the use of ON (Criterion Cr9 of Dubois 1987*m*, 2017*b*). | **Sigoneonym 3.** (**NS3**). MN [1] was introduced in P2 by an author A2, and appeared more than once either [a] in the text of P2, or [b] at least once in the text but also in the index of P2, or [c] in publications by A2 subsequent to P2 whereas no reversion to the use of ON occurred in these works—even sometimes despite the fact that A2 may have used ON in publications previous to P2. (Criterion Cr6 of Dubois 1987*e*, 2017*b*).<br>[Ex] More than once in text: *Ptychadaena* Parker, 1930 → *Ptychadena* Boulenger, 1917 (see Dubois 1987*m*: 36). |
| 6. Sozonymy | **Ameletograph 6.** (**AM6**). MN has not been used as valid in at least 100 publications before 2000. | **Sigoneonym 4.** (**NS4**) MN has been used as valid in at least 100 publications before 2000. |

*...Continued on the next page*

**TABLE 8.NS-2.** (Continued)

| Criterion | MN is an ameletograph and therefore an aponym of ON (hence an avatar of the same nomen, with same authorship, date and onomatophore) | MN is a meletograph and therefore a neonym of ON (hence a distinct available nomen, with its own authorship and date but the same onomatophore) |
|---|---|---|
| 7. Family-series rhizonymy | **Ameletograph 7.** (**AM7**). In P2, no FS or CS nomen was coined as a rhizonym or pseudorhizonym based on MN. | **Sigoneonym 5.** (**NS5**) In P2, a FS or CS nomen was coined as a rhizonym or pseudorhizonym of MN, even if MN was not mentioned.<br>[Ex1] MN mentioned in P2: *Calostethus* Mivart, 1869 → *Colostethus* Cope, 1866 (see Dubois 1984*b*: 33).<br>[Ex2] MN not mentioned in P2: *Astrodactylus* [Hogg, 1838] Hogg, 1839*a* → *Asterodactylus* Wagler, 1827 (see Dubois 1984*b*: 18–19). |
| 8. Careless author, editor, printer or publisher | **Ameletograph 8.** (**AM8**). [1] The author A2 of MN can be documented to have published numerous spelling mistakes in P2 and/or elsewhere, e.g., because of his/her carelessness regarding spelling matters, or because of his/her bad handwriting, difficultly deciphered by the printer. [2] The editor, printer and/or the publisher of P2 can be documented to have published numerous spelling mistakes, e.g., because this printer is working in a country where Roman characters are not in current use.<br>[Ex1] Careless author: John Edward Gray (see Dubois 2010*b*: 16).<br>[Ex2] Careless editor, printer or publisher: *Cultum herpetologica sinica* or the *Journal of the Liupanshui normal University* (see Dubois *et al.* 2005: 34, 48). | **INR** |
| 9. Plenary Power of the Commission | **Archapograph.** (**AC**). MN, originally an available autoneonym, was given the status of apograph by the the *Code* (Articles 33.2.3.1, 35.4.1) or by Commission under the Plenary Power. | **Archoneonym.** (**NC**). MN, originally an unavailable ameletograph, was given the status of available nomen by the Commission under the Plenary Power.<br>[Ex] *Liopelma* Günther, 1869 → *Leiopelma* Fitzinger, 1861*b* (see Melville 1977). |

A ***metomonym*** is a ***junior*** homonym that results from a 'redefinition' of a nomen, through unwarranted modification or replacement of the onomatophore of a previously introduced nomen—which in fact results in the promulgation of a new nomen. Thus, citing '**AMPHIBIA** Linnaeus, 1758' but for a taxon having a much more restricted ***extension*** than the original one amounts to the promulgation or recognition of a new ***homonymous*** nomen **AMPHIBIA**. Metomonyms are particularly frequent in the class-series but also sometimes occur in other nominal-series. For this situation to apply however, the change in onomatophore should be explicit, or at least indisputable, for example through explicit mention of the original onomatophore or of part of it as being then referred to a distinct taxon: the mere misuse of a nomen, for example for a taxon not explicitly including the onomatophore but without mention of the taxonomic allocation of the latter, does not qualify as the promulgation of a metomonym (see Dubois & David 2020). Otherwise, any misidentification of a specimen or of a taxon would qualify as the promulgation of a new nomen, and the taxonomic literature would have to recognise millions of such 'junior homonyms'. Dubois (2012*a*: 67) gave several examples of metomonyms and of misuses of previously introduced nomina that do not qualify as metomonyms.

An ***isomonym*** is a new nomen which has the same onomatophore as a previously (and independently) introduced nomen and which is a homonym of the latter according to the nomenclatural Rules. This situation is very common in the family-series. Quite often, in the old literature, but also sometimes in more recent works, different auctores introduced **independently**, i.e., without knowledge of their respective works, homonymous family-series nomina. This is an automatic consequence of the fact that, to be available, a family-series nomen must be a rhizonym, and that if two auctores decide independently, perhaps for different reasons, to erect a new FS taxon and to base its nomen on the same nucleogenus (type genus), the resulting nomina will be homonymous. In most publications which mention CS and FS nomina, the auctorship and date of the nomina are not given, and in the old literature it was quite frequent to erect new taxa and to introduce new nomina without stating that the taxa and nomina were new, but this did not impede the availability of the new nomina—it became so only in the current edition of the *Code*, the Article 16 of which requires explicit mention of the intention to introduce a new nomen, and also explicit mention of its nucleogenus. But then, when mention of the intention is missing in the original text, it is often difficult or impossible, especially in the older works, to ascertain whether this is a subsequent use of an existing nomen, possibly modified in its ending, or a new isomonymous nomen. However, in most cases it is of no practical nomenclatural consequence and it would even be a futile endeavour to try to ascertain this, because: {U1} if the junior use of the nomen is based on the ***senior*** nomen or is slightly different from it but based on the same stem (e.g., *RANINA* and *RANIDAE*), it is just a mere citation (***chresonym***) or a subsequent avatar (***aponym***) of the latter (e.g., following a change of rank) and it has the same auctor, date and onomatophore; {U2} if the junior nomen is independent of the senior nomen, it is simply its junior ***isomonym***, i.e. both its junior ***isonym*** (objective synonym) and ***hadromonym***, and anyway it will not have any chance to be valid. It is therefore justified, in synonymic lists of family-series nomina, to consider all subsequent mentions of a family-series nomen, whether under its protograph or under one of its apographs, as subsequent uses of the original nomen as its chresonym or aponym and not as its isomonym. This practice greatly simplifies the reading of such lists (see e.g. Dubois 1984*b*) and it avoids heavy and useless researches to ascertain whether the user of the junior nomen had cited it or had 'established' it again, believing he/she was the first to use it. However before doing so, two elements should be ascertained:

{V1} If an isomonym is introduced with the **explicit statement** that it is a new nomen or applies to a new taxon, it is available as a new junior homonym and synonym with its own auctor and date, not a mere citation of an existing nomen.

{V2} If the content of the taxon is not compatible with the ***onomatophore*** (and ***onomatostasis*** if relevant, see below) of the original taxon, it is also available as a new junior metomonym with its own auctor and date. This applies even if the nomen was credited to a previous auctor.

Note however that this situation is quite different from the situation in the other three nominal-series (species-, genus- and class-series), where the fact that two nomina are homographs does not automatically mean that they are the same nomen, with the same auctor, date and onomatophore: in such cases a careful study of all the information available is necessary to establish the status of the junior nomen.

Dubois (2012*a*: 59–60, 67) gave several examples of isomonyms and of cases of subsequent usage of identical or slightly modified nomina that do not qualify as isomonyms. The FS nomen *RANIDAE* provides a good example of the frequent situation where no evidence exists that the auctor had created an isomonym and had not just used an existing nomen without mentioning its auctor. The family nomen *Ranidae* was the first one introduced in the scientific literature for a family of anuran amphibians, which has nothing surprising as it was based on the nomen *Rana*, the only generic nomen of anurans in Linnaeus (1758*a*). However, it was re-introduced on repeated occasions, presumably as 'new', at least by auctores who did not quote each other, and who used different spellings for it: *Ranina* Batsch, 1796; *Ranae* Goldfuss, 1820; *Ranadae* Gray, 1825; *Ranoidea* Fitzinger, 1826; *Ranidae* Boie, 1828; etc. From a purely formal point of view, all these nomina should probably be considered isomonyms, but this would only make the synonymy of this family nomen, which is already very heavy, even more cumbersome and difficult to read: it is therefore much simpler and clearer to consider them all as aponyms of *Ranina* Batsch, 1796, which is the valid nomen (as *Ranidae*) of the family.

Opposite examples can be given. Dubois & Raffaëlli (2012: 113) explicitly established a new salamander tribe *Ranodontini*, based on the nucleogenus *Ranodon* Kessler, 1866. They were not aware of the existence of the nomen *Ranodontinae*, previously established by Thorn (1966: 108) on the basis of the same nucleogenus. Their nomen is therefore an invalid junior isomonym of Thorn's nomen. The same applies to their nomina *Aneidini*, *Batrachosepini* and *Hydromantina*, which were in press when Wake (2012) hurried to publish identical nomina for three tribes based on the same nucleogenera (see Dubois 2012*b*).

In the present work, we have strictly limited the recognition of isomonyms to the cases where the new use of the isomonymous nomen was accompanied by the explicit statement that the latter was new—which in most cases was due to the ignorance of the existence in the literature of the senior isomonym or to almost synchronous publication of both works.

#### 2.3.4.3.4. Ectonyms

Among the 36 situations that lead to nomenclatural unavailability of zoological nomina and nomenclatural acts listed in Table **T4.AVN**, 31 concern cases of unavailability due to errors made within the nomenclatural system of the *Code* or of the *Code*-compatible Duplostensional Nomenclatural System for class-series nomenclature. But five of them concern cases of nomina which were proposed within the framework of alternative and incompatible nomenclatural systems, or at least which do not respect some of the basic requirements of the *Code* such as ***binominal*** nomenclature for species, the assignment of nomina to nominal-series and ranks, or the taxonomic allocation of nomina through ***ostension*** with onomatophores but not through verbal ***intensional definitions*** (see e.g. Dubois 2011*a*).

At the beginning of the 20th century, when zoologists from various countries agreed to adopt international Rules for zoological nomenclature (Blanchard 1905), one of their first decisions was to draw clear lines of delimitation between works respecting these Rules and works ignoring them. For this purpose, they had to take quite drastic decisions. For example, one of the first Rules adopted concerned the requirement that specific nomina should be binomina, not uninomina or plurinomina. They could have restricted themselves to state that species ***nomina*** that did not respect this Rule were unavailable, and therefore cast aside the domain of zoological nomenclature. But they went further, and stated that ***works*** that were not consistently binominal for nomina of rank species were expelled altogether for this reason from zoological nomenclature, so that even the genus-series and family-series nomina or the nomenclatural acts in such works were also unavailable. Note that they did not go as far concerning plurinominal genus-, family- or class-series nomina, or family-series nomina not being rhizonyms: in these cases, the *Code* only states that the ill-formed nomina are unavailable, but this has no impact on the availability of the other new nomina in the same works—a possibility which would indeed have made sense then, but which could not be implemented today as it would have catastrophic consequences on nomenclatural stability. Other 'barriers' exist between *Code*-compliant nomenclature and other possible nomenclatural systems, e.g. concerning the date, the language and alphabet used or the kind of documents providing nomenclatural availability (excluding e.g. manuscripts, unpublished works or non-pre-registered electronic publications). These barriers are very important, as if they did not exist it would be impossible to have strict Rules leading to international, unambiguous and automatic recognition of the valid nomina of taxa.

In the recent years, a renewed interest in zoological nomenclature has led to various proposals of changes in the nomenclatural Rules. Some of these proposals, like that of DONS, were compatible with the basic Principles and Rules of the *Code*, but others, like that of the *Phylocode* or that to abandon the use of ranks for the nomina of higher taxa, were not. The latter proposals are in fact 'immiscible' with the *Code* and should be considered as amounting to the implementation, either fully conscious and elaborated or not, of alternative nomenclatural systems. As such proposals and practices tend to become more and more common, we think it is high time for zootaxonomists who wish to follow strictly the Rules of the *Code*, or Criteria compatible with the latter for questions not addressed by the *Code* (such as class-series nomenclature), to erect new explicit barriers to 'protect' the *Code* from such alternative systems, just like when works that were not binominal for species were expelled from *Code*-compliant zoological nomenclature. For example, we think that the *Code* should clearly state that works using totally or partially unranked, or pseudo-ranked, nomenclature for higher taxa, should be considered as nomenclaturally unavailable, at least for the new unranked nomina that they contain, and that such nomina should not be used in taxonomic works respecting the *Code*. We implemented this proposal in the present work.

We designate here such nomina, which we consider as unavailable under *Code*-compliant zoological nomenclature, as ***ectonyms***. For the time being, we recognise five categories of ectonyms (see **T4.AVN**), but this does not preclude the possible recognition of further categories later on.

#### 2.3.4.3.4.1. Oligocaconyms: non-binominal specific nomenclature

Article 11.4 of the *Code* denies nomenclatural availability to all species-, genus- and family-series nomina (here called ***oligocaconyms***) established in works that are not consistently binominal for nomina of rank species. Such works were still quite frequent after the publication of Linnaeus' (1758*a*) tenth edition of the *Systema Naturae*. In some of these works (e.g., concerning amphibians, Rösel von Rosenhof 1758 or Gronovius 1763), the nomina of species were plurinomina (in fact rather diagnoses than nomina, just like in many pre-1758 Linnaean zoological books), whereas in others they were uninomina and in still others (e.g., Linnaeus 1758*b*) they were variable (uninomina, binomina and plurinomina).

Note that Article 11.4 expressly states that class-series nomina are not concerned by this Rule, so that for example the class-series nomina that appeared in Linnaeus (1758*b*) but were absent in Linnaeus (1758*a*), such as **Acanthopterygii**, must be considered nomenclaturally available (see Dubois 2010*a*, 2012*a*).

#### 2.3.4.3.4.2. Hypercaconyms: plurinominal nomina above the species-series

Article 4.1 of the *Code* denies nomenclatural availability to genus-, family- and class-series nomina which are not uninomina (i.e. which are binomina or plurinomina). Concerning amphibians, this was the case of some class-series nomina published until late in the 19th century (e.g., by Daubenton 1782, La Cepède 1788, Cuvier 1797, Shaw 1802, Latreille 1804, Pallas 1814, Wilbrand 1829, Wagler 1830, Bronn 1853, Stannius 1856, Günther 1858, Wright & Huxley 1866, Strauch 1870). We did not include these nomina in our survey of amphibians' class-series nomina.

Note that in this case, in contrast with the preceding, the unavailability concerns only these ***hypercaconyms*** themselves but does not apply to the other new nomina proposed in the same work.

#### 2.3.4.3.4.3. Anemonyms: nomina unassignable to a nominal-series

Article 1.2.2 of the *Code* states that this text regulates the nomina of taxa of the species-, genus- and family-series, and that some Articles also provide partial regulation (mainly concerning their availability) for class-series nomina. Then, in the rest of the *Code*, details are given on various Rules which, although obeying the same general Principles, are different, and sometimes quite so, according to the nominal-series. It is therefore fully clear that, although this is not stated in full words in the *Code*, in order to be recognised as available in zoological nomenclature, a nomen must be either explicitly assigned or implicitly assignable to a nominal-series in the work where it is first proposed, as otherwise it could not be regulated by the *Code*. We call such nomina ***anemonyms***.

As we have seen (Table **T6.ASN**), following the works of Dubois (2015*c* and references therein), in most cases this assignment is possible through the use of objective Criteria, but there are a few exceptions, and in such cases the nomen must be considered as unavailable. One such example is the nomen "Porcellana", proposed by Costa (1776) for a taxon called family on page 177 but genus on page 297 (Dubois 2015*c*: 32).

***Anhypsonyms***, discussed below, represent a particular category of anemonyms.

2.3.4.3.4.4. Notharchonyms: alternative nomenclatural systems

In the recent years, several nomenclatural systems alternative to the current *Code* have been proposed by different authors. Most of these systems claim to be 'phylogenetic nomenclatural systems' and show two main differences with the *Code*:

{W1} These systems do not rely, for the allocation of nomina to taxa, to ***ostension*** through ***onomatophores*** (see below subchapter 'Taxonomic allocation of nomina'), but to ***intensional definitions*** of nomina. Nomina established under such systems may be qualified as ***diorismonyms***.

{W2} They do not use ***nominal-series*** and ***nomenclatural ranks*** but treat all supraspecific taxa indiscriminately as unranked 'taxa' or 'clades'. This question is discussed further below under the subchapter on anhypsonyms.

The best advertised and famous of these intensional nomenclatural systems is the *Phylocode* (Cantino & Queiroz 2020), which has both characteristics {W1} and {W2}.

The project of *Biocode* (Greuter *et al.* 2011) relies on ostensional allocation of nomina to taxa but follows {W2} and is therefore also incompatible with the *Code* (see Dubois 2011*c*).

The *Phylocode* has elicited a number of severe criticisms (see e.g. Dubois 2005*b*: 387–398, and references therein). Nevertheless, it has had a limited success among some taxonomists, particularly palaeontologists, for a reason that is easy to understand: the fact that the *Code* fails to provide Rules for the nomenclature of taxa above the rank superfamily, whereas 'phylogenetic nomenclatural systems', including the *Phylocode*, do not have such limitations, as they cover the whole nomenclatural hierarchy. It is comprehensible in such conditions that some authors (e.g., Kuntner & Agnarsson 2006) proposed a compromise solution, 'maintaining' the nomina of lower taxa in the *Code* and 'offering' the nomina of higher taxa to the *Phylocode*. This solution is not only flawed and shaky, it is not viable in the long run. The modes of functioning of the two nomenclatural systems are fundamentally different and incompatible, as they rely on widely different systems of allocation of nomina to taxa, and their association in a unique nomenclatural system could not function harmoniously for long. Nomenclatural ranks as used in the *Code* carry most useful information on the structure of a taxonomic hierarchy (and thus also, through the latter and following some conventions, about a phylogenetic tree), but are fully arbitrary, having by themselves no biological meaning concerning the 'kind of taxon' at stake, so that not rarely a taxon has to shift from a rank to another, in order to allow a better expression of phylogenetic relationships within a group. But this can often be done without any change in its intensional and ***extensional definition***. In a system based on a chimera between the *Code* and the *Phylocode*, what would occur if a nomen had to shift, e.g., from the rank superfamily to suborder, or *vice versa*? It would also have to shift from an ostensional definition based on an onomatophore to an intensional 'phylogenetic' definition, or *vice versa*. As the nomenclatural status of nomina depends on their original taxonomic allocation in the original work where they are introduced, this would be fully unmanageable. The proper solution to the problem of higher taxa nomenclature is not in an unholy marriage but in a widening of the domain of competence of the *Code* in order to include all taxa at all ranks.

For a long time, the *Phylocode* did not have a deep impact on amphibian nomenclature, as only two ectonyms explicitly based on its Rules (***notharchonyms***) had been published before 2020 (see Appendix **A8.ECT**): <Gymnophioniformes> Marjanović & Laurin, 2008 and <Gymnophionomorpha> Marjanović & Laurin, 2008. But four additional ones were proposed in the book *Phylonyms* (Queiroz *et al.* 2020), and it can be expected that many more will be published in the coming years.

Besides, many nomina have been coined, before the implementation of the *Phylocode*, within the frame of unranked nomenclatural systems or pro-systems, as we will now see.

2.3.4.3.4.5. Anhypsonyms: unranked or pseudoranked nomenclatural systems, mero-systems or pseudo-systems

Dubois (2015*c*: 7–9) discussed the concept of 'nomenclatural system' and proposed to distinguish several kinds of such systems. He defined a **comprehensive nomenclatural system** or ***nomenclatural holo-system*** as a set of Principles, Rules and Criteria that allows to find the valid and correct nomen of **any** taxon of a given group of organisms under **any** taxonomic arrangement, in **all** situations and in an **unambiguous**, **automatic**, **repeatable** and **universal** manner. This means that such a system does not leave room for interpretations, discussions and debates. It must therefore cover all particular cases and situations that may be encountered in the taxonomic literature and give precise instructions in such cases, including in some particular situations the need to resolve an ambiguity through an ***airesy*** (revisionary nomenclatural act). It cannot accept imprecisions regarding the terms used and the Rules. A good Criterion to recognise such a system is that its Rules are automatic enough to allow their potential computerisation aiming at solving any nomenclatural question, provided all necessary information has been entered in a database, without leaving room for personal decision, except in a very limited set of situations which require recourse to an airesy. A nomenclatural system which does not comply with these requirements cannot be stated to be comprehensive, and may be more appropriately described as an **incomplete nomenclatural system** or ***nomenclatural pro-system***. Under holo-systems, two different authors working seriously on different sides of the planet, confronted to the same nomenclatural situation or problem, should come to the same conclusion without having to contact each other, to rely on 'consensus' or to appeal to a committee, board or court, whereas this is not the case under pro-systems.

Pro-systems themselves are of two kinds, ***nomenclatural mero-systems*** that provide Rules or Criteria for some taxonomic or nomenclatural situations only, e.g. not covering the whole nomenclatural hierarchy, and ***nomenclatural pseudo-systems*** that are not internally consistent and leave room for personal interpretations and subjective decisions even in the situations supposedly covered by the system.

As we have seen above in 2.2.2, the widespread misunderstanding which consists in equating nomenclatural ranks with taxonomic categories is at the basis of the recent practice of using no supraspecific rank at all (***unranked nomenclatural systems***) or of a mixture of ranked taxa (e.g., genera, subfamilies, families and superfamilies) and unranked taxa, all the latter being simply designated as 'taxa' or 'clades'. This latter mixture was designated by Dubois (2007*a*: 34) as ***pseudoranked nomenclatural pro-systems***. Dubois (2008*f*: 69–80) discussed such systems in detail and illustrated them (tables 5–10) with two examples, taken from the works of Frost *et al.* (2006) and Vieites *et al.* (2007).

Unranked nomina established under such systems or pro-systems (***anhypsonyms***), cannot be assigned to nominal-series and as such cannot be available under the *Code* or under a nomenclatural system for class-series nomina that would be compatible with the *Code*. We propose the following convention to write such ectonyms: «Paratoidea» Queiroz & Gauthier, 1992; «Stegokrotaphia» Cannatella & Hillis, 1993; «Natatanura» Frost *et al*., 2006.

The first such ectonyms were proposed by Queiroz & Gauthier (1992) under a nomenclatural system 'announcing' the *Phylocode*. These authors, followed by Cannatella & Hillis (1993) and Ford & Cannatella (1993), made no distinction between taxonomic categories and nomenclatural ranks. Their criticism of the latter in fact applied to taxonomic categories but did not in the least address the question of the appropriateness of using a hierarchy of ranks and nomina to express the structure of the hypothetic phylogenetic tree on which their taxonomy and nomenclature were based. They distinguished 'stem-names' and 'node-names', which they both treated as 'singular nouns', because "taxa are historical entities" (Ford & Cannatella 1993: 95). This by itself is sufficient to remove the nomenclatural availability of these nomina under the *Code* or DONS.

In amphibians, many such anhypsonyms (48) were later proposed by a single research team (45 in the work of Frost *et al.* 2006 and 3 in that of Grant *et al.* 2006). Some of these nomina were fully new, whereas others were borrowed from the literature but redefined, thus in fact establishing new hemihomonymous nomina. These authors found some merits in the recommendations of Queiroz & Gauthier (1992) but did not follow them consistenly. They used a mixed nomenclatural pro-system "based on common sense" in which they respected the *Code* for taxa of the ranks species to superfamily (which they called 'regulated taxa'), but used the indiscrimate general term 'taxon' for all higher taxa, stating that they applied "an unranked taxonomy for unregulated taxa (above family group), the hypotheses for these taxa being derived from their included content and diagnostic synapomorphies." (Frost *et al.* 2006: 143). This sentence by itself shows again the common confusion between taxonomy and nomenclature, as the *Code* regulates nomina, not taxa. They did not justify this difference of treatment between both kinds of taxa. Furthermore, this statement is misleading because the unranked taxa they recognised were not all "above family group" as most of them were parordinate to family-series taxa or to taxa being themselves subordinate to family-series taxa (see table 9 in Dubois 2008*f*: 77). Besides, the Criteria they used to 'validate' some ancient nomina under their system were inconsistent (Dubois & Ohler 2019). Their nomenclatural pro-system is therefore both a mero- and a pseudo-system.

Dubois (2015*c*) attempted to 'save' some of these ectonyms by applying to them the Criteria of assignment of nomina to nominal-series listed above under {R1} to {R6}. As we have seen, nomina introduced within the frame of a fully unranked nomenclatural system like the *Phylocode* cannot be referred to ranks and nominal-series, or could be so only arbitrarily, and must therefore anyway be treated as unavailable in *Code*-regulated zoological nomenclature (Criterion Av-07 in Table **T4.AVN**). But some nomina introduced under pseudoranked nomenclatural pro-systems could possibly be referred to ranks (and consequently to nominal-series) through the Criterion of topotaxy {R4}: in such cases, all nomina parordinate or subordinate to nomina which are clearly assigned to the FS according to the Criteria [FS1] to [FS3] of Table **T6.ASN**, would have to be assigned to the FS, whereas all those that were introduced for taxa superordinate to the latter should be assigned to the CS. Then, all the unranked 'taxa' of caecilians and frogs introduced by Frost *et al.* (2006), being parordinate or subordinate to families, would belong in the FS. Most of these nomina, being arhizonyms or pseudorhizonyms, would therefore be unavailable in zoological nomenclature, except for two of them («Hyloides» and «Ranoides») which, being rhizonyms, could be available—although invalid for being junior homonyms, respectively of *Hylina* Rafinesque, 1815 (1825) and *Ranina* Batsch, 1796. Finally, in salamanders, two nomina of 'higher' taxa, «Cryptobranchoidei» (just superordinate to the families *Cryptobranchidae* and *Hynobiidae*) and «Diadectosalamandroidei», parordinate to the latter, would belong in the CS. However, these two CS nomina would then be invalid junior synonyms of much older CS nomina (respectively **Imperfectibranchia** Hogg, 1838 and **Pseudobranchia** Sonnini & Latreille, 1801; see Dubois & Raffaëlli 2012). In the end, there would be no way to 'save' the 45 new higher nomina of 'taxa' introduced by Frost *et al.* (2006), some of which are quite long and unpalatable (Dubois & Raffaëlli 2009, Dubois 2010*e*) and in fact this is fully justified, as the authors of these nomina had clearly proposed them outside the regular system of the *Code*, as those of unranked taxa.

Because of the unwarranted mistrust in ranks, based on a misunderstanding, that has been spread by a few recent authors, a number of papers using pseudoranked nomenclature were published in the last 25 years. Appendix **A8.ECT** lists the 96 such nomina that were established for amphibian taxa from 1992 to 2020 and which are unavailable both in the FS according to the *Code* and in the CS according to DONS. Few of the authors of these works justified their use of such unranked nomina for these higher taxa, and when they did so their explanations were sometimes quite strange indeed. Thus, Guayasamin *et al.* (2009: 20) established an 'unranked taxon' «Allocentroleniae», whose nomen is unavailable under the *Code*, in the superfamily *Hyloidea* for the two families *Centrolenidae* and *Allophrynidae*, instead of using an intermediate family-series nomen for this taxon, because this would have created "nomenclatural instability by shifting the ranks of taxa"—a phenomenon which occurs frequently in zootaxonomy as a result of the progress of research and is not a problem as there exists nothing like a 'stability of ranks'. For their part, Streicher *et al.* (2018: 142) wrote: "We take this opportunity to propose new names for some of the more well-supported clades of [*sic*] families (note that taxa above the family level do not require formal diagnoses). Even if these clades prove to be incorrect in the future, these names at least allow us to reference these groups." The idea that suprafamilial taxa "do not require formal diagnoses" clearly takes its root in the *Phylocode* ideology, but is not justified under a *Code*-compatible conception of nomenclature (see Articles 1.2.2, 10.1 and 13.1.1).

As a matter of fact, among the 96 anhypsonyms and notharchonyms listed in Appendix **A8.ECT**, 18 were published accompanied only by 'phylogenetic definitions' ('node-' or 'stem-based' nomina) but no diagnosis, definition or description in words allowing to make them nomenclaturally available under the *Code*, so that even if some authors wished to use, against all evidence, the ectonyms of this table under a *Code*-compliant taxonomy, this could not apply to these 18 diorismonyms.

2.3.4.3.5. Acceptable tolerance for borderline gymnonymy

One of the main, if not the main, reasons for the unavailability of nomina is ***gymnonymy***, i.e., in most cases, the fact that the new nomen was originally published without "a description or definition that states in words characters that are purported to differentiate the taxon" (Article 13.1.1), or even, before 1931, an ***indication***, e.g., an illustration of the taxon being named (Article 12.2.7). On the other hand, a vernacular name, a locality, a geological horizon, the mention of a host, a label or a specimen do not in themselves constitute a description, definition or indication and do not provide nomenclatural availability. The same applies, although this is not mentioned in the *Code*, to the position of a taxon in a hypothetic phylogenetic tree or to its geographical distribution. Dubois (2017*d*) discussed this matter in detail and showed that the important point here is the **presence** of this description, definition or indication in the original publication, not its accuracy or completeness. He also argued that the term ***character*** in this definition designated in fact ***character states*** (e.g., eye colour blue), not the characters by themselves (e.g., eye colour).

In the recent decades, much confusion has been introduced in the taxonomic literature by the supporters of so-called 'phylogenetic taxonomies' like the *Phylocode*, which in fact are systems mingling phylogeny, taxonomy and nomenclature. The purposes of these three domains are distinct. That of phylogeny is to establish the historical kinship between organisms and to formulate hypotheses about the existence of lineages, that of taxonomy is to classify these organisms into evolutionary meaningful units, the taxa, and that of nomenclature is to give universal and unambiguous nomina to these taxa. Although today it is clear to all zoologists that the taxa we recognise should ultimately correspond to groups considered to be independent lineages, this is not an absolute necessity. In some cases, particularly at the species level, it may be fully justified to erect a new taxon and to name it on the basis of its fixed differences in taxonomic characters with all other known taxa, even before its phylogenetic position is clarified. Species delimitation is a concept different from species relationships. The recent idea that taxa should not be named until their phylogenetic position is 'known' (in fact hypothesised) is misleading (see in this respect Páll-Gergely 2017 and Dubois 2020*c*).

Dubois (2017*d*) listed different kinds of ***taxognoses*** (definition of taxon, whether based on characters or on hypothesised cladistic relationships between taxa) that can be used in taxonomy and nomenclature. The most often used kinds of taxognoses in *Code*-compliant nomenclature are ***idiognoses***, called 'descriptions' in the *Code* (taxognosis based on character states that are considered to provide a brief description or characterisation of a taxon, including both ***diagnostic*** character states and character states shared with other taxa, but without mentioning its comparison with other taxa), ***diagnoses*** s.str., called 'definitions' in the *Code* (intensional taxognosis providing character states considered to allow a non-ambiguous distinction of a taxon from other taxa with which it is compared, irrespective of any cladistic hypothesis) and ***apognoses*** (intensional taxognosis providing a definition of a taxon based on character states that are considered to be shared by all members of the taxon and absent in all non-members, and that are considered, on the basis of a cladistic analysis and hypothesis, to be autapomorphic for the taxon). These three kinds of taxognoses, one of which only refers to a cladistic hypothesis, comply with the requirement to provide "characters that are purported to differentiate the taxon" for its naming.

On the other hand, ***coinognoses*** (extensional taxognoses based directly on hypothesised cladistic relationships derived from a cladistic analysis), which include the 'phylogenetic definitions' of the *Phylocode*, and which do not refer to character states, do not provide nomenclatural availability under the *Code*. Although this has been pointed out 20 years ago (Dubois 1999), and acknowledged by a number of taxonomists (Bauer *et al.* 2010), this is still not understood by many authors, who continue to 'describe' and name new taxa without stating any diagnostic character of the latter but only referring to the topology of a molecular tree.

Until recently, there has been a permanent increase in the quality of idiognoses and diagnoses during the history of taxonomy. Anyone who has worked with the old taxonomic publications of the 18$^{th}$ and 19$^{th}$ centuries knows that many old descriptions were extremely laconic and, in fact, clearly insufficient to characterise the taxon. However, this did not impede them to make the new nomina nomenclaturally available under the *Code*'s Rules, as shown by an example.

The nomen of the European frog species *Rana dalmatina* was made available through the following sentence in Bonaparte (1838*a*) in his account of *Rana temporaria* Linnaeus, 1758: "La *Rana dalmatina*, nuova especie del Fitzinger a noi incognita, seppur non è une gigantesca varietà della presente, la somiglia moltissimo, secundo lui medesimo, che altra differenza non vi ritrova fuor della statura maggiore, e i piedi posteriori proporzionatamente anco più lunghi." [The *Rana dalmatina*, a new species of Fitzinger unknown to us, even if it is not a gigantic variety of the present species, resembles it very much, according to himself, which besides its greater size has the rear legs proportionately quite longer.] According to the *Code*, this description undoubtedly makes the nomen *Rana dalmatina* Fitzinger *in* Bonaparte, 1838 available. However, it was ignored by Günther (1859) and Boulenger (1882*b*) who used for this species its junior synonym *Rana agilis* Thomas, l855. Boulenger (1898: 332) then wrote: "The strict application of the law of priority would require the adoption of this name in preference to that proposed by Thomas sixteen years later, as the former was accompanied by a definition ('Gigantea, pedibus posticis longissimus'), however inadequate, and specimens so labelled by Fitzinger are preserved in the Vienna Museum. However, this is one of those cases in which, it appears to me, conservatism is desirable, as the name *agilis* was the first to appear in connexion with a proper description, and has been so generally in use within the last half-century. Similar considerations have guided me in the naming of the two species of the genus *Bombinator*, and I hope, in the interest of the stability of nomenclature, they will commend themselves to future workers." This is an excellent example of the weakness of the argument of '***nomenclatural stability***', because more than one century later, the nomen *Rana dalmatina*, resurrected by Stejneger (1907: 108), has been used consistently for this species—and the generic nomen *Bombinator* Merrem, 1820 is now universally considered an invalid synonym of *Bombina* Oken, 1816, and the two species mentioned by Boulenger (1898) are now known under other epithets.

This example also highlights the fact that nomenclatural availability should not rely on the accuracy and completeness of the original diagnosis. If we looked at the original 'definition' of *Rana dalmatina* with the eyes of today, we would say that it cannot allow to distinguish this species, as we now know several species of *Rana* that have longer legs than *Rana temporaria*—and furthermore the latter tends to be larger than *Rana dalmatina* in many populations. But at the time of this description, these characters could be considered sufficient to characterise the new species. Considering today that this diagnosis is insufficient to "differentiate the taxon" and does not provide nomenclatural availability would not only challenge again the nomenclatural stability in this group, it would also open the door to many other similar 'revisionary' actions. For the sake of nomenclatural consistency and stability, the availability of nomina published long ago, or even more recently, with clearly insufficient diagnoses, should not be challenged. The important point is not the quality of the diagnosis but the fact that a description or definition was provided, with the ***intention*** to allow recognition of the taxon.

Although this is quite clear concerning the 'historical' works of early taxonomy, this does not mean that today we should not require from taxonomists a more 'serious' work regarding taxognoses. For the sake of quality of taxonomic research, the threshold of tolerance for 'unprofessional' work should be lowered. In particular, three peculiar situations deserve special consideration: {X1} ***polythetic diagnoses***; {X2} absence of characters distinguishing the new taxon from the taxa with which it is compared; and {X3} absence of direct connexion between the taxognosis and the taxon being described.

2.3.4.3.5.1. Polythetic diagnoses

Diagnoses are abstractions based on generalisations derived from several observations. A diagnosis concerns a taxon, i.e. a concept, not a fact. It is not necessarily associated with a cladistic hypothesis. It is often based on character states shared by all members of the taxon and absent in the non-members, but this is not always the case, as polythetic diagnoses (Sneath 1962; Van Regenmortel 2016: 6; see Figure **F2.MPT**) are acceptable under some taxonomic paradigms: whereas a ***monothetic diagnosis*** includes a unique combination of character states and relies only on properties that are both necessary and sufficient for membership in the taxon, a polythetic diagnosis involves a variable, but unique to the taxon, combination of alternative properties, none of which is necessarily present in every member of the class. In fact, the Aristotelian requirement for 'necessary and sufficient' properties shared by all members of a taxon refers to an 'essence' of the latter, which makes no sense within the framework of an evolutionary understanding of biodiversity.

A polythetic diagnosis is fully appropriate to make a new nomen available, as it allows to characterise the taxon. But it does not allow to identify its members, as none of them shares all its character states with all the other ones. For example, the diagnosis of both taxa **Amphibia** and **Squamata** may include the mention of four chiridian members being present or absent, but combined with other diagnostic

| | A | B | C | D | E | F | G | H |
|---|---|---|---|---|---|---|---|---|
| 1 | + | + | + | – | – | – | – | – |
| 2 | + | + | + | – | – | – | – | – |
| 3 | + | + | – | + | – | – | – | – |
| 4 | + | + | – | + | – | – | – | – |
| 5 | – | – | – | – | + | + | + | – |
| 6 | – | – | – | – | + | + | – | + |
| 7 | – | – | – | – | + | – | + | + |
| 8 | – | – | – | – | – | + | + | + |

**FIGURE 2.MPT.** Monothetic and polythetic classes.
Hypothetic example with 8 individuals (1–8) and 8 properties (A–H). The possession of a property (character state) is indicated by a plus sign. Individuals 1–2, 3–4 and 1–2–3–4 form three monothetic classes with respectively 3, 3 and 2 properties present in all the members. Individuals 5–8 constitute a polythetic class, each member possessing 3 out of 4 properties with no common property being present in all the members (Van Rijsbergen 1979; Van Regenmortel 2016).

characters in these two taxa. The identification of the members of a taxon may rely on detailed descriptions, or on non-purely dichotomic identification keys, or better on tables showing the variability within the taxon of character states for some characters. Although this variability is a source of complexity for the building of matrices of characters and for phenetic or cladistic analyses, it is a biological reality that should not be ignored by taxonomists.

From a nomenclatural point of view, it is therefore misleading to require that the diagnosis provided to make a new nomen available includes only character states shared by all members of the taxon, let alone ***synapomorphies*** of the taxon, as a diagnosis does not need to include cladistic information to provide nomen availability. But of course, when phylogeny and taxonomy are at stake, more information is necessary.

2.3.4.3.5.2. Non-differential diagnoses

As we have seen, the *Code* allows to make a new nomen available through the publication of a simple idiognosis, i.e. a description of the taxon or even of a specimen, without comparison with other taxa. What the formula "purported to differentiate the taxon" means in such cases is that the author of the nomen **thinks** that these characters states or their combination are diagnostic of the taxon, i.e. allow its distinction from all other taxa.

However, as soon as an author provides, instead of an idiognosis, a real diagnosis s.str. of a taxon, in order to make the new nomen available it is necessary to mention not only characters (e.g., colour or tympanum) but also character states (colour blue or red, tympanum present or absent, or round or oval), and that the combination of these character states be unique among the taxa with which the new taxon is compared. Whenever, considering all the character states cited for a new taxon and for other taxa with which it is expressly compared in the original publication, the new taxon has a strictly identical list of characters, there is no "character purported to differentiate the taxon" and the new nomen is unavailable. Although rare, this situation exists in the literature, as exemplified by the case of the amphibian generic nomen *Paradactylodon* Risch, 1987 discussed by Dubois & Raffaëlli (2012: 114) and misunderstood in

| | A | B |
|---|---|---|
| *Hynobius* | a | c |
| *Onychodactylus* | a | c |
| *Ranodon* | a | d |
| *Salamandrella* | b | c |
| *Batrachuperus* | b | d |
| *Paradactylodon* | b | c |

**FIGURE 3.NDD.** A non-differential diagnosis for a new taxon.
Diagnosis, based on two characters (A–B) and two character states for each (respectively a–b and c–d) proposed by Risch (1984) for the new salamander genus *Paradactylodon*, compared with the genera *Hynobius*, *Onychodactylus*, *Ranodon*, *Salamandrella* and *Batrachuperus*.

*ASW* <2020*a*> and by Stöck *et al.* (2019). As shown here in Figure **F3.NDD**, in this case the information provided does not qualify as a polythetic diagnosis allowing to provide nomenclatural availability to the new nomen, as the character states mentioned for the new taxon are identical to those mentioned for the genus *Salamandrella*.

To evaluate the availability of a new nomen, the diagnosis or 'definition' provided for a new taxon must therefore be compared in detail with those given in the same work for the taxa considered by the author to be closely related.

There is a case when nomenclatural Rules are not enough to prevent the erection of unwarranted taxa: it is when the new taxon is referred to a wrong superordinate taxon, e.g. when a purported new species is placed in a 'wrong' genus. In this case, the diagnosis provided for the new taxon may well be accurate, but, as it is based on misleading comparisons with taxa which are not closely related to it, this diagnosis is irrelevant, or amounts to a diagnosis of the new taxon relatively to the higher taxon to which it was wrongly referred. This was a very common situations in the early days of taxonomy, but it stills occurs from time to time, as shown by the cases of the occidozygine *Ingerana charlesdarwini*, described by Das (1998) as a member of the ranid genus *Rana* (see Dubois *et al.* 2005, Dinesh *et al.* 2009), of the discroglossine *Paa mokokchungensis*, described by Das & Chanda (2000) as a member of the megophryid genus *Scutiger* (see Dubois 2002), or of the arthroleptid *Arthroleptis nonakoensis*, described by Plath *et al.* (2006) as a member of the phrynobatrachid genus *Phrynobatrachus* (see Frétey 2008). Of course, in such cases, it may appear 'easy' to find diagnostic characters for the 'new species', but they are often irrelevant and useless to characterise the taxon—so that it is not surprising that in some such cases the transfer of the taxon to its proper genus results in its immediate synonymisation, as in the case of the lizard *Geophis alasukai* Gasc & Rodrigues, 1979, which, once transferred to the genus *Atractus* Wagler, 1828, proved to be a mere synonym of *A. flammigerus* (Boie, 1827) (see Chippaux 1986).

In such cases the *Code* is useless to avoid the potential publication of a junior synonym, as formally the new nomen has been validated by a 'diagnosis'. This is why the role of competent referees may be important in taxonomic publications, as they may avoid such failures.

2.3.4.3.5.3. Diagnosis unconnected with new taxon

The last point raised here is a bit subtle to understand. Let us come back to the wording of article 13.1.1, which formulates the main condition for the availability of a new nomen as follows: this nomen must "be accompanied by a description or definition that states in words characters that are purported to differentiate ***the taxon*** [*stressed by us*]". This means that the diagnosis must concern the new taxon being described, not its members, whether individuals or subordinate taxa. Thus, when for example a new genus is erected, the diagnosis provided to make its nomen available should be clearly attached to this taxon of rank genus, not to one of its included specimens or species, even its ***nucleospecies*** (type species), and even if the latter is the only species referred to this genus in the original description. The two taxa at stake, the genus and the species, have different taxonominal functions: the first one points to the need to recognise a taxon of rank genus, which may be sister to one or several other taxa of the same rank, whereas the second plays the same role at species level.

To the best of our knowledge, this subtlety in the reading of Article 13.1.1 was raised for the first time, aptly in our opinion, by Arribas (2016) in his discussion of the availability of the lizard generic nomen *Caucasilacerta* Harris *et al.*, 1998. It applies also to the '*Relictus* case', and possibly to other cases that have not yet been identified. Sá *et al.* (2018) erected the frog subgenus *Relictus* for the single species *Chiasmocleis gnoma*, without providing a formal diagnosis of it. Dubois *et al.* (2018: 55–56) listed a few characters extracted from the original description which could be construed as constituting a polythetic diagnosis in order to try to 'save' this genus-series nomen. But in the original publication these characters were attached to the species *Chiasmocleis gnoma*, not to the taxon *Relictus*, so that the latter nomen remains unavailable, and with it also its neonym *Unicus* proposed by Sá *et al.* (2019*a*), who did not seize this opportunity to provide a real diagnosis for this taxon, as suggested by Dubois *et al.* (2018).

2.3.4.3.5.4. Notes for the future

In the recent decades, several papers provided recommendations for a modern 'integrative taxonomy' and the use of 'best practices' in this domain (Dayrat 2005; Padial *et al.* 2010; Kaiser *et al.* 2013; Vences *et al.* 2013). However, nomenclature has remained the 'poor relative' of this taxonomic 'revolution'. We think that this should change, and that taxonomists should pay more attention to 'nomenclatural accuracy' (Dubois 2017*e*) in their works, particularly in their descriptions of new taxa (Dubois *et al.* 2018).

In particular, we think it is intolerable that, at the beginning of the 21th century, be still published descriptions of new taxa missing formal diagnoses or idiognoses, or other basic elements allowing to ascertain the nomenclatural status of the new nomina, including the actual publication date of the final version of a work in case of electronic publication, compelling subsequent workers to carry out heavy inquiries to obtain this information. We suggest the *Code* should be improved in adding, after a starting date still to be defined, several requirements acting as 'barriers' (as defined above) and being indispensable for the nomenclatural availability of any new nomen: {Y1} a formal idiognosis, diagnosis or apognosis, identified as such in a special paragraph; {Y2} a precise ***onymotope*** ('type locality') for any new species-series taxon; {Y3} collection numbers for ***onymophoronts*** of species-series taxa; {Y4} the etymology of the new nomen, including its mode of derivation (according to Article 31.1.1 or 31.1.2) in case of species-series taxon dedicated to a person; {Y5} basic grammatical information on the nomen, such as the grammatical ***gender*** and the stem for a genus-series nomen, or the grammatical status as adjective, participle or noun in apposition for a species-series ***epithet***. We applied these recommendations in the taxonomic part of the present work for all the new nomina introduced here.

*2.3.4.4. Conclusion*

Throughout the present work, we followed the Rules and Criteria presented above to establish the status regarding availability of all the nomina of the genus-, family- and class-series nomina of recent amphibians ever published. Most of these Rules are those of the *Code*, but when the latter does not provide Rules (concerning class-series nomina) or in a few cases when the Rules of the *Code* appear to us as grossly inappropriate (e.g., for the distinction between autoneonyms and apographs), we followed consistently the Criteria presented above.

### *2.3.5. Categories of usage of nomina*

As discussed by Dubois (2010*a*), the *Code* makes numerous references to the concept of 'usage' or '***prevailing usage***' but does not provide a general operational definition of these terms, which are defined differently in different parts of the text (e.g. in Article 23.9 and in the Glossary). In the present work, in the three nominal-series covered by the *Code*, we had to follow these imprecise Rules and we did this as much as possible. But for class-series nomina, for which the *Code* does not provide Rules or Recommendations, we adopted the precise ***categories of usage*** defined by Dubois (2006*a*, 2010*a*), limiting ourselves to the three main ones, as implemented in DONS (Dubois & Raffaëlli 2012; Dubois 2015*c*), as follows:

{Z1} A ***sozonym*** is a CS nomen that has had since a given date a **real massive usage** in the **scientific literature** at large, i.e., not limited to the specialised taxonomic literature, to designate a given taxon, **whereas no other nomen has been used significantly** for the same taxon or closely related taxa after that date. The quantitative requirements adopted here, following Dubois (2016), are: {Z1a} for the landmark starting date, 31 December 1899; {Z1b} for the definition of real massive usage, the presence of the nomen in the **titles** of at least 100 scientific publications.

{Z2} A ***sozodiaphonym*** is a CS nomen that has also had such a large usage in the scientific literature at large, but **alternatively** to another competing nomen or several other nomina which also had a large usage for the same taxon.

{Z3} A ***distagmonym*** is a CS nomen that has not had such a large usage in the scientific literature.

The term ***sozonymorphs*** designates both sozonyms and sozodiaphonyms, as opposed to distagmonyms.

As we will see below, these terms and definitions will be useful both for the taxonomic allocation of CS nomina and for their taxonomic validity.

### *2.3.6. Taxonomic allocation of nomina*

The LSNS is a theory-free ostensional nomenclatural system in which the allocation of nomina to taxa is made through ***onomatophores*** (Simpson 1940), i.e., through the objective link established between specimens and nomina, not subjectively through verbal definitions of taxa. We here use the verb ***to anchor*** to designate the nomenclatural act of designation of an onomatophore for a taxon and the noun ***anchorage*** to designate the result of this act. Species-series nomina are connected to taxa through nomen-bearing 'type specimens' (***onymophoronts***), genus-series nomina are so through nomen-bearing 'type-species' (***nucleospecies***) and family-series nomina are so through nomen-bearing 'type-genera' (***nucleogenera***) (for details and terminology see Dubois 2005*b*, 2011*a*). Concerning class-series nomina, the *Code* does not give any clue for their taxonomic allocation. Let us therefore consider separately the situation in the FS and in the CS.

#### *2.3.6.1. Family-series nomina*

Whereas in the SS and GS the designation of onomatophores may be done by several procedures and is sometimes quite complex, in the FS this designation is straightforward because available FS nomina are based on the stems of GS nomina (the 'stem' being sometimes the entire nomen itself; see Article 29), which are therefore automatically their onomatophores.

Until 2000, the identification of the nucleogenera of FS nomina did not have to be expressly stated in the original publication, as it could usually be easily deduced from the similarity between the FS nomen and the stem of one of its included genera. This kind of indication (according to the *Code*) was called ***implicit etymological designation*** (Dubois 1984*b*). However, in a few cases, a doubt was possible when the nomina of two genera included in a new FS taxon had the same stem, so that in the current version of the *Code*, to be valid the designation must be explicit, and if this designation is missing the nomen is not available, as stated in Criterion (Av-33) in Table **T4.AVN**.

Family-series nomina which are not based on the stems of available nomina of included genera considered valid are nomenclaturally unavailable and therefore cannot be valid. However, it may be useful to allocate each of these nomina to a given synonymy, as anyone finding one of these nomina in the literature or in databases may wish to know to which taxon it applies. Given the fact that, under the *Code*, nomina are allocated to taxa through their onomatophore, this allocation requires the designation of a nucleogenus for any such FS anoplonym. This is similar to the designation of nucleospecies for GS anoplonyms, which was implemented for example by Dubois & Raffaëlli (2009) in salamanders. There is nothing in the *Code* that forbids to do so. In the case of FS anoplonyms, there are three situations. In the first one {a1}, the nomen of the FS anoplonym is clearly a rhizonym based on the stem of an available genus nomen of the taxonomic group concerned: we consider this as a nucleogenus designation by implicit etymological designation, just like for hoplonyms. In the second situation {a2}, the FS anoplonym is an arhizonym, but one or several generic nomina were allocated to the taxon in the original work (situation of **original *symphory***): in such cases one of them has to be chosen and designated as nucleogenus, except when a single genus nomen was mentioned, which is therefore nucleogenus by original ***monophory***. In the third situation {a3}, no available genus-series nomen was explicitly associated with the new FS anoplonym in the original publication (situation of **original *aphory***): in such cases a nucleogenus should be designated in order to fit with the taxon that appears to have corresponded to the taxon intended by the new unavailable nomen. The nucleogenera hereby established or designated for FS nomina are shown in Appendix **A6.NFS** below.

*2.3.6.2. Class-series nomina*

As explained by Dubois & Ohler (2019), in the absence of Rules in the *Code* for the allocation of CS nomina to taxa, any taxonomist who wishes to use such nomina has to adopt a system for this purpose, and none of such systems can be claimed to be more '*Code*-compliant' than any other. However, for such a system to be '*Code*-compatible', it should follow some of the basic characteristics of the *Code*: regarding CS nomina, their taxonomic allocation should be done through an ostensional system using onomatophores, not through a system of verbal definitions, be them 'phylogenetic' or not.

In this work, we used the ***Duplostensional Nomenclatural System (DONS)*** as described in Dubois (2015*c*, 2016), which is derived through simplification from the ***Ambiostensional Nomenclatural System (AONS)*** initially proposed by Dubois (2006*a*). We refer to the works of Dubois (2006*c*, 2007*a*, 2011*a*, 2015*c*, 2016, 2020*a*; Dubois & Raffaëlli 2012) for detailed explanations of the rationale of this nomenclatural system, which are not repeated here. An important difference between this system and the system of the *Code* in the three lowest nominal-series is that this system is ***monosemic***, i.e., it does not use a ***Principle of Coordination***: therefore, in a given ergotaxonomy a given CS nomen can apply only to a single taxon, not to a set of ***coordinated*** nomina.

Allocation of CS nomina to taxa under the DONS Rules is simple and straightforward. It depends however on the ***category of usage*** to which the nomen is referred. According to this category of usage, a different nomenclatural subsystem of DONS will be used for the taxonomic allocation of the CS nomen.

{b1} ***Metrostensional Nomenclatural Subsystem (MONS)***. If the CS nomen is a ***distagmonym***, its taxonomic allocation relies solely on its ***onomatophore***, i.e. on the list of its ***conucleogenera*** (or on its single ***uninucleogenus***), i.e., all the ***available*** nominal genus-series nomina originally and unambiguously referred as ***valid*** to the taxon for which the CS nomen was proposed. This list is an **indissoluble** set of available nomina which act **altogether** as the onomatophore of the CS nomen at stake. Then, within any ergotaxonomy adopted as valid, this nomen is a ***nesonym***, which applies to the ***metronym***, i.e. the **least inclusive** CS taxon which contains **all** these nucleogenera (the ***metrotaxon*** of the nomen in this ergotaxonomy). This provides an unambiguous allocation of the nomen to a single CS taxon in the ergotaxonomy adopted.

{b2} ***Orostensional Nomenclatural Subsystem (OONS)***. If the CS nomen is a ***sozonymorph*** (sozonym or sozodiaphonym), its taxonomic allocation is made through a combination of its ***onomatophore*** and its ***onomatostasis***, which provides the external limits of the taxon. The onomatostasis of a CS nomen consists in the list of its ***alienogenera***, i.e., the **indissoluble** set of available generic nomina originally explicitly listed as valid but as non-members of the taxon. Then, within any ergotaxonomy adopted as valid, this nomen is a choronym, which applies to the ***oronym***, i.e. the **most inclusive** CS taxon which contains **all** its nucleogenera and excludes **all** its coalienogenera (the ***orotaxon*** of the nomen in the ergotaxonomy adopted as valid). This also provides an unambiguous allocation of the nomen to a single CS taxon in the ergotaxonomy adopted.

Three particular cases must be considered separately. More details on these situations were given in Dubois (2015*c*: 37–42).

{b3} In some rather rare cases, a new CS nomen, either sozonymorph or distagmonym, is proposed for a taxon that is defined or diagnosed, which makes the nomen available, but to which no genus is referred. In such cases, just like for SS and GS nomina that happen to be in the same situation of **original *aphory*** (absence of onomatophore), the first subsequent author who listed nominal genera as included in the CS taxon fixed the nucleogenera (and if available the alienogenera) of the nomen by subsequent designation (for more details see Dubois 2006*c*). In the present work, we did several such designations The nucleogenera and alienogenera hereby established or designated for FS nomina are shown in Appendix **A7.NCS** below.

{b4} In the rare cases where a CS nomen has only original or subsequent conucleogenera (or a single uninucleogenus) but no original alienogenus, it also only has a metronym and cannot have an oronym, but in this case this is because of incompleteness of information, not of overlap between taxa. Such a CS nomen is an ***ellitonym*** and it must be treated as a metronym: it can be taxonomically allocated only through its metrotaxon. This can be formulated differently in stating that in this case its metronym is also its oronym in the ergotaxonomy adopted.

{b5} In the (rather frequent) cases where some (or even a single one) of the original alienogenera are/is now included in the metrotaxon of a CS sozonymorph, the latter, although available, cannot be valid in this ergotaxonomy. It is then a ***gephyronym***, a particular case of ***anaptonym***, i.e., a nomen that cannot be allocated to a taxon and therefore cannot be valid.

In practice, for sozonymorphs, it is not necessary to look for the taxonomic allocation of all the alienogenera of a choronym to determine the extension of the taxon it designates. It is enough to find the (phylogenetically) 'closest' alienogenera that will allow to ascertain the external limits of the taxon and therefore identify the taxon to which the CS nomen under consideration applies in the ergotaxonomy chosen. These immediate 'neighbours' are the ***getextragenera*** of the CS nomen and they are sufficient to allocate unambiguously the CS nomen to a taxon. A single getextragenus is enough for this purpose. This has important ergonomic advantages as long as the analysis is done 'by hand' and is not computerised, because it is not necessary to ascertain the taxonomic allocation of all the alienogenera, including those that are clearly 'remote' from the orotaxon but may belong in taxonomic groups with which the taxonomist doing the nomenclatural analysis is not well acquainted. Of course, it would not be the case if all zoological nomina were taxonomically allocated, but this is far from being the case, as it is easy to check by looking at any large and 'comprehensive' database. Even among the nomina of Linnaeus (1758*a*), a few are still taxonomically unallocated or only at very high taxonomic levels.

The OONS system for sozonymorphs has two main advantages: {c1} it allows to validate the sozonym or sozodiaphonym for a taxon identical or very close to that recognised under this nomen in the literature; {c2} but it also allows to expand the content of the taxon to include more basal taxa recently discovered (often as fossils) without having to coin a new nomen for the taxon including the traditional taxon but also the more basal taxon ('stem-' or 'pan-'taxon). Finally, this system is liable to be entirely computerised, so that in the future all the rather complex and tedious verifications and actions described above can be automatised, which will avoid the mistakes that no rarely occur when the analysis is carried out 'by hand'.

### *2.3.7. Validity and correctness of nomina*

#### *2.3.7.1. Introduction*

The final aim of the nomenclatural work is to establish unambiguously the ***valid*** nomen which must be used by all biologists worldwide for a given taxon under a given classification and its ***correct*** spelling. In order to be ***potentially valid***, a nomen must have gone through the first two stages of the nomenclatural process: it must be available (***promulgated***) and ***anchored*** (it must have an onomatophore).

The 'ideal' situation in zoological nomenclature is that where a single available nomen was proposed, during the whole history of zoological taxonomy, for a taxon now recognised as valid in an ***ergotaxonomy***. Unfortunately, this situation is not general, and various problems of **nomenclatural conflict** are observed in most genuine situations. These conflicts can occur between ***nomina***, between ***spellings*** of nomina or between ***onomatergies*** (nomenclatural acts). Dubois (2013) surveyed these situations of conflict which he termed ***zygoidy***. We here refer to this work for details and explanations. Below, we summarise the Principles (including some 'untold' ones which were first described and named by Dubois in 2013 and later adopted among the *LZP*), Rules, Criteria and 'codified exceptions' which, according to the *Code*, allow the resolution of the conflicts of zygoidy in the SS, GS and GS, as well as those used here under the DONS Criteria in the CS.

### *2.3.7.2. Priority*

The ***Principle of Priority*** is explicitly mentioned in Article 23 of the *Code*. It is by far the most often used system of resolution of zygoidy whenever the two competing items were published at different dates. According to this Principle, in any situation of ***allochronous*** zygoidy and in the three nominal-series recognised and covered by the *Code*, the first published ***zygonym*** (competing homonym or synonym), ***zygograph*** (competing ***parograph***) or ***zygonomatergy*** (competing nomenclatural act) has precedence, except if the ***Principle of Nomography*** or the ***Principle of Archoidy*** applies. The same Principle with its limitations is recognised in the CS according to DONS, except that here the ***Principle of Sozoidy*** may also prevail over the Principle of Priority.

Two particular cases regarding Priority must be pointed out in the family-series: those covered by Articles 35.4.1 and 40.2 of the *Code*. In a few special cases, the valid nomen of a FS taxon is not the oldest one but a more recent one. In order to indicate such exceptions, such nomina bear 'double auctorships', one being that of the earliest published nomen and the other one the nomen validated through the relevant Article. This question was treated in detail by Dubois (2015*a*) and we refer to this work for details. In the present work, we used the following presentations for such nomina: {d1} *LEPTODACTYLIDAE* ||Tschudi, 1838||-Werner, 1896 for nomina validated through Article 35.4.1; and {d2} *MEGOPHRYIDAE* Bonaparte, 1850-|Noble, 1931| for nomina validated through Article 40.2.

### *2.3.7.3. Airesy (first reviser)*

The ***Principle of Airesy*** is explicitly mentioned in Article 24.2.1 of the *Code* as the 'Principle of the First Reviser', a needless cumbersome formulation as the *Code* does not recognise any 'second' or subsequent revisers. It states that in any situation of ***synchronous*** zygoidy and in the three nominal-series covered by the *Code*, precedence among ***zygoids*** (zygonyms, zygographs or zygonomatergies) is fixed by the action of the ***arbiter*** ('first reviser') publishing an explicit ***airesy*** ('first reviser action') of seniorisation removing this ambiguity. DONS also recognises this Principle in the CS. Such airesies are definitive and irreversible by subsequent actions of individual zoologists. They may however be superseded by the ***Principles of Proedry*** and the ***Principle of Archoidy***, and in the CS according to DONS by the ***Principle of Sozoidy***.

Three distinct categories of Airesies can be distinguished in the three nominal-series covered by the *Code*:

{e1} ***External Airesy (ETA)***: explicit Airesy made by the arbiter who mentioned both competing synchronous nomina, spellings or onomatergies and expressly chose one as valid (Article 24.2.3). This kind of Airesy is also recognised in the CS according to DONS.

{e2} ***Explicit Internal Airesy (EPITA)***: same as ETA, but made by the original auctor(s) and concerning only competing synchronous spellings published in the same original work (Article 24.2.4). This kind of Airesy is also recognised in the CS according to DONS.

{e3} ***Implicit Internal Airesy (IPITA)***: implicit Airesy made by the original auctor(s) of competing synchronous spellings published in the same original work, through mentioning only one of them in a subsequent publication (Article 24.2.4). This kind of Airesy does not concern nomina or onomatergies, and is not implemented in the CS according to DONS (in this respect see Dubois 2010*a*: 14–18).

### *2.3.7.4. Proedry (rank precedence)*

In the three nominal-series covered by the *Code*, whenever ***zygonyms*** are introduced simultaneously, but proposed at different ranks within their nominal-series, the nomen proposed at higher rank has precedence (Articles 24.1, 55.5, 56.3, 57.7). The same applies to the cases of simultaneous onomatophore fixations for a nominal taxon (situation of ***zygophory***): the fixation for the taxon at higher rank takes precedence (Article 61.2.1).

The *Code* just mentions these Rules in the Articles cited above, but does not recognise a special Principle for these onomatergies. Dubois (2013) proposed to recognise it as the ***Principle of Proedry***, which was adopted among the *LZP* (Dubois & Aescht 2019*n*; Dubois *et al.* 2019) where it also applies to CS nomina.

*2.3.7.5. Eugraphy*

In the three nominal-series covered by the *Code*, the correct spelling (***eugraph***) of a given nomen in a given ergotaxonomy may be different from its original spelling (***protograph*** or ***lectoprotograph***) when this nomen is a ***nomograph*** and requires either ***mandatory spelling correction*** (justified emendation or ***eunomograph***) of an inadvertent spelling error (Articles 32.2.2, 32.5.1, 33.2.2), or ***mandatory ending correction*** (mandatory change or ***legonomograph***) in the case of a species-series nomen (to comply with agreement in grammatical gender with the generic nomen) (Articles 31.2, 34.2) or of a family-series nomen (to comply with the mandatory spellings indicating the rank of some family-series nomina) (Articles 29.2, 34.1). The protograph of a nomen must also be modified when this follows a decision of the Commission under the Plenary Power (***archograph***). The *Code* just mentions these Rules in the Articles cited above, but does not recognise a special Principle for these onomatergies. Dubois (2013) proposed to recognise it as the ***Principle of Nomography***, which was adopted by the *LZC* (Dubois & Aescht 2019*o*, Dubois *et al.* 2019).

These Rules apply in the three nominal-series covered by the *Code*, the SS, GS and FS, but they cannot apply directly in the class-series, so that Criteria for fixing the correct spelling (***legethograph***) of these nomina had to be devised (Dubois 2015*c*; Dubois & Frétey 2020*a*). For the spelling of the stems of the nomina, the *Code*'s Rules concerning the mandatory spelling correction are appropriate, but the Rules concerning their endings cannot be used, especially in the cases of panrhizonyms, i.e., class-series nomina based of the stems of other nomina.

Alonso-Zarazaga (2005) proposed that all nomina above the rank superfamily be referred to a single 'upper uninominal group', including also the 'family-subgroup', and be based on the stems of genus-series nomina, combined with endings derived from the words *zoo* (for the 'phylum-subgroup'), *morph* (for the 'class-subgroup') and *form* (for the 'order-subgroup'). Dubois (2006*c*) provided a detailed criticism and rebuttal of this proposal which does not need to be repeated here. Adopting it would entail gigantic and catastrophic changes in the higher nomenclature of animals, for no benefits in counterpart. Currently, panrhizonyms are used in the class-series nomenclature of only a small proportion of the zoological groups. This can be ascertained for example by simply looking at the two volumes of review of the higher taxonomy of animals published by Zhang (2011*a*, 2013*a*): of the 49 groups surveyed in these volumes, only 18 used panrhizonyms to name a few of their higher taxa (see Table **T9.ENZ**). As for the endings used for these nomina, three were based on *form*, seven on *morph* and one on *zoo*, but there was no correlation between the use of a given ending and the rank of the taxon. For example, the ending **-OMORPHA** was used in 11 works, but for the following ranks or pseudoranks: 'phylum' (in a pseudoranked nomenclatural system), phylum, subphylum, class, subclass, superorder, order, suborder and infraorder. For the class-series ranks and below, the most used of these endings in these works based on *form* and *morph* are, respectively, **-IFORMES** and **-IFORMIA**, and **-OMORPHA** and **-OMORPHI**. Various other endings, not based on these terms and simpler (one to five letters), have been used for class-series nomina in these works: some (e.g. **-OIDEA**, **-INA** or **-INI**) are identical to endings imposed by the *Code* in the family-series, or acceptable in this nominal-series (e.g. **-OIDEI**, **-OIDES** or **-IDEI**), and are therefore liable to cause confusion, whereas others (e.g. **-ACEA** or **-ACEI**) are less prone to ambiguity.

Dubois (2015*c*) proposed a different system, in which the endings of the panrhizonyms are not supposed to reflect their rank but their category of panrhizonymy, according to a set of Criteria detailed in Table **T5.RHI**. Considering the facts above, he chose the following standard endings for the four categories of panrhizonyms that he distinguished: **-ACEA** for rhizonyms, **-ACEI** for cenorhizonyms, **-IFORMIA** and **-OMORPHA** for auxorhizonyms, and **-IFORMES** and **-OMORPHI** for xenorhizonyms. These endings replace the original endings with minimal perturbation. Dubois & Frétey (2020*a*) distinguished the category of quasirhizonyms and proposed for it the standard endings **-IFORMES** and **-OMORPHES**.

**TABLE 9.ENZ.** Endings based on the stems *form*, *morph* and *zoo* used for class-series nomina in Zhang (2011*a*, 2013*a*).

Column 1. References of papers: 01, Zhang (2011*b*); 01b, Zhang (2013*b*); 02, Hooper *et al.* (2011); 03, Crowther (2011); 04, Tyler & Schilling (2011); 05, Eschmeyer & Fong (2011); 06, Wilson & Reeder (2011); 07a, Zhang (2011*c*); 07, Zhang (2013*c*); 08, Beaulieu *et al.* (2011); 09, Zhang *et al.* (2011); 10, Dunlop & Penney (2011); 11, Minelli (2011); 12, Shear (2011); 13, Ahyong *et al.* (2011); 14, Janssens & Christiansen (2011); 15, Slipinski *et al.* (2011); 16, Pape *et al.* (2011); 17, Bock & Gordon (2013); 18, Emig *et al.* (2013).

Columns 2–10. Endings based on the stems *form* and *morph* used for some higher taxa. The ranks at each rank are given for each of them, preceded by their numbers.

Line Total. Number of works where the ending is used and for which rank (but not number of taxa at this rank in each work).

Abbreviations for ranks (see **Appendix A4.RNK**): bC, subclass; bO, suborder; bPm, subphylum, C, class; iO, infraorder; O, order; Pm, phylum; 'Pm', 'phylum'; pO, superorder; Sr, series.

| Ref. | EMORPHIA | IFORMEA | IFORMES | IFORMIA | IMORPHA | IMORPHIA | OMORPHA | OMORPHAE | OMORPHI | OMORPHIA | OZOA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | – | – | – | – | – | – | 2 'Pm' | – | – | – | 5 'Pm' |
| 02 | – | – | – | – | – | – | 1 C, 2 bC | – | – | – | |
| 03 | – | – | – | – | – | – | – | – | – | – | 1 C |
| 04 | – | – | – | – | – | – | 1 Pm, 1 bPm | – | – | – | |
| 05 | – | – | 62 O | – | – | – | – | – | 1 C | – | |
| 06 | 1 O | – | 3 bO, 5 iO | 2 bO | 1 bO | 1 O | 3 O, 5 bO | – | 1 iO | 1 O | |
| 07 | – | – | 2 O | – | – | – | 1 bPm | – | – | – | |
| 08 | – | – | 1 pO | – | – | – | – | – | – | – | |
| 09 | – | – | 1 O | – | – | – | – | – | – | – | |
| 10 | – | – | – | – | – | – | – | 2 iO | – | – | |
| 11 | – | – | – | – | – | – | 5 O | – | – | – | |
| 12 | – | – | – | 1 pO | – | – | 3 pO | – | – | – | |
| 13 | – | – | 3 O | – | – | – | 9 bO | – | – | – | |
| 14 | – | – | – | – | – | – | 2 O | – | – | – | |
| 15 | – | – | – | 7 Sr | – | – | – | – | – | – | |
| 16 | – | – | – | – | – | – | 8 iO | – | – | – | |
| 17 | | | | | | | | | | | 1 Pm |
| 18 | – | 3 bPm | – | – | – | – | – | – | – | – | |
| Total (34) | **1** (1 O) | **1** (1 bPm) | **7** (1 pO, 4 O, 1 bO, 1 iO) | **3** (1 pO, 1 bO, 1 Sr) | **1** (1 bO) | **1** (1 O) | **13** (1 'Pm', 1 Pm, 2 bPm, 1 C, 1 bC, 1 pO, 3 O, 2 bO, 1 iO) | **1** (1 iO) | **2** (1 C, 1 iO) | **1** (1 O) | **3** (1 'Pm', 1 Pm, 1 C) |

**TABLE 10.ENL.** Endings used in the protographs of panrhizonyms of class-series nomina of **Lissamphibia** in the literature according to Appendix **A7.NCS**.

The lines provide the original endings of the protographs of these 105 nomina, and the columns their standard endings following the system proposed by Dubois (2015*c*) and Dubois & Frétey (2020*a*).

| Original ending | Rhizonyms –ACEA | Cenorhizonyms –ACEI | Auxorhizonyms –IFORMIA –OMORPHA | Xenorhizonyms –IFORMI –OMORPHI | Quasirhizonyms –IFORMES –OMORPHES |
|---|---|---|---|---|---|
| –A (1) | 1 | 0 | 0 | 0 | 0 |
| –ACEA (4) | 4 | 0 | 0 | 0 | 0 |
| –AE (5) | 4 | 1 | 0 | 0 | 0 |
| –AEFORMES (1) | 0 | 0 | 1 | 0 | 0 |
| –AEFORMIA (1) | 0 | 0 | 1 | 0 | 0 |
| –AEMORPHA (1) | 0 | 0 | 1 | 0 | 0 |
| –DES (1) | 1 | 0 | 0 | 0 | 0 |
| –EA (1) | 0 | 1 | 0 | 0 | 0 |
| –ES (4) | 4 | 0 | 0 | 0 | 0 |
| –IA (2) | 2 | 0 | 0 | 0 | 0 |
| –IDA (5) | 5 | 0 | 0 | 0 | 0 |
| –IDEI (2) | 2 | 0 | 0 | 0 | 0 |
| –IFORMES (10) | 0 | 0 | 9 | 1 | 0 |
| –IFORMIA (11) | 0 | 0 | 6 | 3 | 2 |
| –INA (2) | 2 | 0 | 0 | 0 | 0 |
| –INI (1) | 0 | 1 | 0 | 0 | 0 |
| –OIDEA (32) | 32 | 0 | 0 | 0 | 0 |
| –OIDEI (5) | 5 | 0 | 0 | 0 | 0 |
| –OIDES (1) | 1 | 0 | 0 | 0 | 0 |
| –OMORPHA (15) | 0 | 0 | 7 | 0 | 8 |
| Total (105) | 63 | 3 | 25 | 4 | 10 |

For xenorhizonyms based on *-form*, they proposed the ending **-iformi**. Tables **T10.ENL** and **T11.LEG** present information on the original endings of all the panrhizonyms so far published for **Lissamphibia** (listed in Appendix **A7.NCS**). Among these 105 nomina of **Lissamphibia** listed in this Table, 23 had original endings based on the term *form*, 16 had endings based on *morph* and 66 had 'simple' endings like **-oidea**, **-oidei**, **-ida** or **-ae**. Only two of these 105 nomina (**Hemiphractiformia** and **Ranomorpha**) are used as valid in the taxonomy of **Lissamphibia** adopted here (Appendices **A9.CLAD-1** to **A12. CLAD-4**).

For sake of completeness, the term ***khoristarhizonym*** (distinct from ***khoristorhizonym*** as defined by Dubois & Frétey 2020*a*) is here proposed for arhizonyms ending in *form* or *morph*. To avoid confusion with panrhizonyms, the endings **-iformies** and **-omorphies** are here proposed for such CS nomina.

*2.3.7.6. Reversal of precedence*

In the *Code*, several exceptions to the Principles of Priority and 'first reviser' are allowed in the species-, genus- and family-series, in 9 situations involving so-called '***prevailing usage***'. However, as discussed by Dubois (2010*a*: 13−14, 2017*b*: 24) and Löbl (2015), this formula is used inconsistently in the *Code*.

2.3.7.6.1. Article 23.9

Article 23.9 on 'reversal of precedence' allows in certain conditions to protect 'prevailing usage' through validation of a ***nomen protectum*** (protected nomen) against a ***nomen oblitum*** (forgotten nomen) that would have precedence over the former according to the *Code*. The conditions for such an onomatergy are that the former nomen must have been used by at least 10 authors in 25 works published during at least 10 years in the immediately preceding 50 years, whereas the latter has never been used as **valid** after 1899. In this Article, the expression 'prevailing usage' is given a precise definition which, although it raises several problems (see Ohler & Dubois 2018 and Dubois & Ohler 2018), is operational. This Article results in validating some junior zygonyms against Priority. It applies only to the three nominal-series covered by the *Code*. In the CS, it would correspond partially to the Principle of Sozoidy discussed below.

2.3.7.6.2. Other Articles resulting in reversal of precedence

However, in the 'Glossary' of the *Code* (which fails to mention the formula '***reversal of precedence***'), 'prevailing usage' of a nomen is defined differently, as the usage "which is adopted by at least a substantial majority of the most recent authors concerned with the relevant taxon, irrespective of how long ago their work was published". This vague definition is based on undefined terms. When is a majority 'substantial'? How is 'most recent' defined? Who are the authors 'concerned with the relevant taxon'? This definition is therefore not operational and the mention of the formula 'prevailing usage' in some Articles of the *Code* is confusing. The 8 following Articles, which apply only in the three nominal-series covered by the *Code*, are concerned by such exceptions:

{f1} Article 23.12 reads: "A name that was rejected between 6 November 1961 and 1 January 1973, by an author who explicitly applied Article 23b in force between those dates under the then current editions of the *Code*, on the grounds that it was a *nomen oblitum* (…) is not to be given precedence over a junior synonym in prevailing usage, unless the Commission rules that the older but rejected name is to take precedence". This Article results in validating some junior synonyms against Priority.

{f2} Article 29.5 reads: "If a spelling of a family-group name was not formed in accordance with Article 29.3 but is in prevailing usage, that spelling must be maintained, whether or not it is the original spelling". This Article results in validating some family-series apographs against Priority and Nomography.

{f3} Article 33.2.3.1 reads: "when an unjustified emendation is in prevailing usage and is attributed to the original author and date it is deemed to be a justified emendation". This Article results in transforming some autoneonyms into apographs and in validating the latter against Priority.

{f4} Article 33.3.1 reads: "when an incorrect subsequent spelling is in prevailing usage and is attributed to the publication of the original spelling, the subsequent spelling and attribution are to be preserved and the spelling is deemed to be a correct original spelling". This Article results in validating some apographs against Priority.

{f5} Article 35.4.1 reads: "A family-group name based upon an unjustified emendation (…) or an incorrect spelling of the name of the type genus must be corrected, unless it is preserved under Article 29.5 or unless the spelling of the genus-group name used to form the family-group name is preserved under Articles 33.2.3.1 or 33.3.1". This Article results in transforming some family-series autoneonyms into apographs and in validating the latter against Priority, and in validating some family-series apographs against Priority and Nomography.

{f6} Article 35.5 reads: "If after 1999 a name in use for a family-group taxon (…) is found to be older than a name in prevailing usage for a taxon at higher rank in the same family-group taxon [*which could be stated more briefly: "than a superordinate name in prevailing usage"*], the older name is not to displace the younger name". This Article results in validating some family-series junior synonyms against Priority.

{f7} Article 40.2 reads: "If (…) a family-group name was replaced before 1961 because of the synonymy of the type genus, the substitute name is to be maintained if is in prevailing usage". This Article results in validating some family-series junior synonyms against Priority.

{f8} Article 59.3 reads: "A junior secondary homonym replaced before 1961 is permanently invalid unless the substitute name is not in use and the relevant taxa are no longer considered congeneric (…)". This Article results in validating some species-series junior nomina against Priority.

All these Articles of the *Code* present in fact 'codified exceptions' that do not correspond to a Principle. They rely on a vague concept of 'usage' which is highly questionable in a text which is supposed to play a regulatory role in millions of scientific publications (Dubois 2010*b*–*c*). This is why Dubois (2005*b*) proposed to replace this ambiguous and undefined concept by well-defined ***categories of usage*** on the basis of which he proposed to implement a new nomenclatural Principle, the Principle of Sozoidy (Dubois 2013).

**TABLE 11.LEG.** Legethographs (Latin standard endings or full spellings) adopted here for the class-series nomina of **LISSAMPHIBIA**.

Column 1: Categories of CS nomina regarding rhizonymy (see Table **T5.RHI**). Column 2: Standard Latin ending, full spelling or both adopted here for nomina of this category (see text for explanations). Column 3: Original ending, full spelling or both used for this nomen in the literature (see Appendix **A6.NFS**), which should be replaced by the ending or spelling in column 2; **–XXX**, standard spelling of ending adopted here; **YYY**, standard spelling of full nomen adopted here; ÷**ZZZ**, standard spelling of either full nomen or ending adopted here. The numbers given after the nomina are those of the latter bearing this ending in the category, with the following distinctions: [ ], number of nomina that had originally this ending; ( ), number of nomina the original ending of which had to be corrected; | |, number of nomina established as new in the present work; { }, total number of nomina of this category. **A**, Arhizonyms: Latin standard ending consistent with usage in other zoological class-series nomina based on the same final stem. **C**, Cenorhizonyms: Latin standard ending in –**ACEI**, avoiding confusion with FS nomina with standard FS endings in –*IDAE*, –*INAE*, –*INA*, –*INI* and –*OIDEA*. **P**, Pararhizonyms: Latin standard ending in –**ACEAE**, avoiding confusion with FS nomina with standard FS endings in –*IDAE*, –*INAE*, –*INA*, –*INI* and –*OIDEA*. **Q**, Quasirhizonyms: Latin standard ending in –**IFORMES** or –**OMORPHES**. **R**, Rhizonyms: Latin standard ending in –**ACEA**, avoiding confusion with FS nomina with standard FS endings in –*IDAE*, –*INAE*, –*INA*, –*INI* and –*OIDEA*. **U**, Auxorhizonyms: Latin standard ending in –**IFORMIA** or –**OMORPHA**. **X**, Xenorhizonyms: Latin standard ending in –**IFORMI** or –**OMORPHI**.

| Category of nomen regarding rhizonymy | Spelling of word or standard ending adopted here | Original spellings or endings that had to be corrected |
|---|---|---|
| **A** {2} | –**ALIA** [2] | – |
| **A** {10} | ÷**AMPHIBIA** [7] + (3) | **AMPHIBIENS** (1)<br>**AMPHIBIES** (1)<br>**AMPHYBIENS** (1) |
| **A** {2} | –**BATAE** [2] | – |
| **A** {32} | ÷**BATRACHIA** [15] + (17) | –**BATRACHI** (8)<br>**BATRACHIER** (1)<br>**BATRACHOIDEA** (2)<br>**BATRACHOIDEI** (1)<br>**BATRACIENS** (5) |
| **A** {28} | –**BRANCHIA** [14] + (14) | –**BRANCHES** (5)<br>–**BRANCHI** (2)<br>–**BRANCHIALES** (1)<br>–**BRANCHIATA** (5)<br>–**BRANCHIENS** (1) |
| **A** {2} | **BRANCHIATA** [2] | – |
| **A** {18} | ÷**CAUDATA** [11] + (7) | –**CAUDATAE** (1)<br>÷**CAUDATI** (4)<br>–**CAUDES** (2) |
| **A** {1} | –**CERA** [1] | – |
| **A** {1} | –**CERCI** [1] | – |
| **A** {1} | **CERCOPI** [1] | – |
| **A** {1} | –**CHELATA** [1] | – |
| **A** {24} | –**COELA** [20] + (4) | –**COELI** (2)<br>–**COELIDAE** (2) |
| **A** {3} | ÷**COSTATA** [1] + (2) | ÷**COSTATI** (2) |
| **A** {7} | –**DACTYLA** [2] + (5) | –**DACTYLES** (2)<br>–**DACTYLI** (2)<br>–**DACTYLIA** (1) |
| **A** {5} | –**DELA** [4] + (1) | –**DELES** (1) |
| **A** {4} | ÷**DENTATA** [4] | – |
| **A** {7} | –**DERA** [2] + (5) | –**DERES** (5) |
| **A** {3} | –**DERMA** [3] | – |
| **A** {1} | –**DYTAE** [1] | – |
| **A** {3} | –**ECHMIA** [3] | – |
| **A** {10} | –**ENTIA** [10] | – |

*...Continued on the next page*

**TABLE 11.** (Continued)

| Category of nomen regarding rhizonymy | Spelling of word or standard ending adopted here | Original spellings or endings that had to be corrected |
|---|---|---|
| **A** {3} | –FERA [1] + (2) | –FERES (1)<br>–FERI (1) |
| **A** {5} | –GLENA [2] + (3) | –GLENIDES (3) |
| **A** {12} | –GLOSSA [6] + (6) | –GLOSSAE (2)<br>–GLOSSES (2)<br>–GLOSSI (2) |
| **A** {5} | –GYRINIA (5) | –GYRINIDAE (3)<br>–GYRINIDES (2) |
| **A** {7} | ÷ICHTHYODI [1] + (6) | –ICHTHYENS (1)<br>ICHTHYOIDEA (2)<br>–ICHTHYI (1)<br>ICHTYOIDA (1)<br>ICTYOIDES (1) |
| **A** {2} | LINGUATA [2] | – |
| **A** {3} | MEANTES [2] + (1) | MEANTIA (1) |
| **A** {4} | –MELA (4) | –MELES (4) |
| **A** {8} | –MOLGAE [5] + (3) | –MOLGAEI (3) |
| **A** {5} | ÷MUTABILIA [5] | – |
| **A** {2} | –NECTAE [2] | – |
| **A** {4} | –NUDA [3] + (1) | –NUDS (1) |
| **A** {2} | –ONYXIA [2] | – |
| **A** {8} | –OPHIONA (7) + \|1\| | –OPHIA (1)<br>–OPHIDES (3)<br>–OPHIDIA (1)<br>–OPHILIA (1)<br>–OPHYDIENS (1) |
| **A** {2} | –PARES [2] | – |
| **A** {1} | PAROTOIDIA [1] | – |
| **A** {1} | PEDATA [1] | – |
| **A** {1} | –PHARA [1] | – |
| **A** {2} | –PHILI [2] | – |
| **A** {2} | –PHORA [1] + (1) | –PHORI (1) |
| **A** {2} | ÷PHRYNIA [2] | – |
| **A** {2} | –PLEURAE [2] | – |
| **A** {4} | –PNEUMA [1] + (3) | –PNEUMENA (3) |
| **A** {1} | –PNEUSTA (1) | –PNEUSTA (1) |
| **A** {5} | –PNOA [5] | – |
| **A** {5} | –PODA [5] | – |
| **A** {2} | ÷PULMONATA (2) | –PULMONADOS (1)<br>PULMONES (1) |
| **A** {1} | –ROSA [1] | – |
| **A** {2} | –SACRALIA [2] | – |
| **A** {2} | –SALAMANDRAE [2] | – |
| **A** {4} | –SAURIA [3] + (1) | –SAURIENS (1) |
| **A** {1} | –SCOLECODES [1] | – |
| **A** {2} | –SIPHONA [2] | – |
| **A** {1} | –SOMA (1) | –SOMES (1) |
| **A** {7} | –STERNIA [7] | – |
| **A** {1} | –STOMATA [1] | – |
| **A** {3} | –TARSATA (3) | –TARSIDEN (3) |
| **A** {1} | –TREMATA [1] | – |
| **A** {1} | –TRETA [1] | – |

*...Continued on the next page*

**TABLE 11.** (Continued)

| Category of nomen regarding rhizonymy | Spelling of word or standard ending adopted here | Original spellings or endings that had to be corrected |
|---|---|---|
| **A** {23} | –URA [9] + (5) + \|9\| | –OURA (2)<br>–OURES (1)<br>–URES (2) |
| **A** {1} | VERTEBRATA [1] | – |
| **Total A {315}** | | |
| **R** {63} | –ACEA [4] + (59) | –A (1)<br>–AE (4)<br>–DES (1)<br>–ES (4)<br>–IA (2)<br>–IDA (5)<br>–IDEI (2)<br>–INA (2)<br>–OIDEA (32)<br>–OIDEI (5)<br>–OIDES (1) |
| **Total R {63}** | | |
| **C** {2} | –ACEI (2) | –AE (1)<br>–INI (1) |
| **P** {1} | –ACEAE (1) | –AE (1) |
| **Total C + P {3}** | | |
| **U** {17} | –IFORMIA [6] + (11) | –AEFORMES (1)<br>–AEFORMIA (1)<br>–IFORMES (9) |
| **U** {8} | –OMORPHA [7] + (1) | –AEMORPHA (1) |
| **Total U {25}** | | |
| **X** {4} | –IFORMI [1] + (3) | –IFORMIA (3) |
| **X** {0} | –OMORPHI {0} | – |
| **Total X {4}** | | |
| **Q** {2} | –IFORMES (2) | –IFORMIA (2) |
| **Q** {8} | –OMORPHES (8) | –OMORPHA (8) |
| **Total Q {10}** | | |
| **TOTAL {420}** | | |

*2.3.7.7. Sozoidy*

So far, the ***Principle of Sozoidy*** is not part of the *Code* and cannot be applied to the nomenclature of the three nominal-series covered by the *Code*. However, as the *Code* does not provide any clue for establishing the validity of class-series nomina, for these nomina any zoologist is entitled to use for this purpose the Criteria or conventions that he/she considers the best, provided he/she justifies this choice (Dubois & Ohler 2019; Dubois *et al.* 2019). In this respect, in the present work we follow the DONS Criteria (Dubois 2015*c*, 2016). These Criteria might also apply later in the other three nominal-series if the *LZP* (Dubois *et al.* 2019) were adopted, but we refrained from doing this here. They consist in three points:

{g1} Among two or more ***zygonyms***, whenever one qualifies as a ***sozonym***, i.e., has been used since 1900 either **universally** (***symphonym***) or **significantly** whereas none of its zygonyms has been used so for the same taxon or closely related taxa (***paneurydiaphonym***), it must be given precedence for validity (if not invalid for another reason) over its senior or seniorised zygonym(s). The same applies {g1a} to two or more ***zygographs*** if one of them qualifies as a ***sozograph***, i.e., complies with the same Criteria, or {g1b} to two or more ***onomatergies*** if one of them qualifies as a ***sozairetophory***, i.e. results in the validation of an ***airetophory***.

**TABLE 12.ZYG.** Categories of zygoidy in zoological nomenclature and their main characteristics.

*Category of zygoidy*: Category and subcategories of conflict between two nomina, spellings or onomatergies (nomenclatural acts). *Date*: publication date of two nomina, spellings or onomatergies: D, different (allochronous); S, same (synchronous). *Pub*: publication of two nomina, spellings or onomatergies: D, in different publications; S, in same publication. *Nominal-series*: C, class-series; F, family-series; G, genus-series; S, species-series. *Principles, Rules or Criteria*: Nomenclatural Principles, Rules, Criteria and Airesies ('first reviser actions') used for the resolution of conflict of zygoidy: ETA, External Airesy; EPITA, Explicit Internal Airesy; IPITA, Implicit Internal Airesy; Nom, Nomography (mandatory spelling change or mandatory ending change); Pri, Priority; Pro, Proedry (rank precedence); Soz, Sozoidy (conservation of massive usage of nomen or spelling). *Exceptions*: codified exceptions to Nomenclatural Principles: RP, Reversal of Precedence as a result of Article 23.9 or other Articles (see text); AR, Archoidy (decision of the Commission under its Plenary Power). *Perm*: permanency of juniorisation of one of the two nomina or spellings: L, labile and potentially reversible, depending on the ergotaxonomy adopted; P, permanent and irreversible, whatever ergotaxonomy is adopted. + , item relevant for this category; –, item irrelevant for this category.

| Category of zygoidy | Date | Pub | Nominal-series | | | | Principles or Rules | | | | | | | Exceptions | | Perm |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | C | F | G | S | ETA | EPITA | IPITA | Nom | Pri | Pro | Soz | RP | AR | |
| **Zygonymy**: ***homonymy***: hadromonymy | S | S | + | – | – | – | + | + | – | – | – | + | + | – | – | P |
| | S | S | – | + | + | + | + | + | – | – | – | + | – | + | + | P |
| | S | D | + | – | – | – | + | + | – | – | – | + | + | – | – | P |
| | S | D | – | + | + | + | + | + | – | – | – | + | – | + | + | P |
| | D | D | + | – | – | – | – | – | – | – | + | – | + | – | – | P |
| | D | D | – | + | + | + | – | – | – | – | + | – | – | + | + | P |
| **Zygonymy**: ***homonymy***: asthenomonymy | S | S | – | – | – | + | + | + | – | – | – | + | – | + | + | L |
| | S | D | – | – | – | + | + | + | – | – | – | + | – | + | + | L |
| | D | D | – | – | – | + | – | – | – | – | + | – | – | + | + | L |
| **Zygonymy**: ***synonymy***: allelonymy | S | S | + | – | – | – | + | + | – | – | – | + | + | – | – | P |
| | S | S | – | + | + | + | + | + | – | – | – | + | – | + | + | P |
| **Zygonymy**: ***synonymy***: isonymy | S | D | + | – | – | – | + | + | – | – | – | + | + | – | – | P |
| | S | D | – | + | + | + | + | + | – | – | – | + | – | + | + | P |
| | D | D | + | – | – | – | – | – | – | – | + | – | + | – | – | P |
| | D | D | – | + | + | + | – | – | – | – | + | – | – | + | + | P |
| **Zygonymy**: ***synonymy***: doxisonymy | S | S | + | – | – | – | + | + | – | – | – | + | + | – | – | L |
| | S | S | – | + | + | + | + | + | – | – | – | + | – | + | + | L |
| | S | D | + | – | – | – | + | + | – | – | – | + | + | – | – | L |
| | S | D | – | + | + | + | + | + | – | – | – | + | – | + | + | L |
| | D | D | + | – | – | – | – | – | – | – | + | – | + | – | – | L |
| | D | D | – | + | + | + | – | – | – | – | + | – | – | + | + | L |
| **Zygography**: symprotography | S | S | + | – | – | – | + | + | – | + | – | – | + | – | – | P |
| | S | S | – | + | + | + | + | + | + | + | – | – | – | + | + | P |
| **Zygography**: other cases of parography | S | D | + | – | – | – | + | + | – | + | – | – | + | – | – | L |
| | S | D | – | + | + | + | + | + | – | + | – | – | – | – | + | P |
| | D | D | + | – | – | – | – | – | – | + | + | – | + | – | – | L |
| | D | D | – | + | + | + | – | – | – | + | + | – | – | – | + | P |
| **Zygonomatergy** | S | S | + | – | – | – | + | + | – | – | – | + | + | – | – | P |
| | S | S | – | + | + | + | + | + | – | – | – | + | – | – | + | P |
| | S | D | + | – | – | – | + | + | – | – | – | + | + | – | – | P |
| | S | D | – | + | + | + | + | + | – | – | – | + | – | – | + | P |
| | D | D | + | – | – | – | – | – | – | – | + | – | + | – | – | P |
| | D | D | – | + | + | + | – | – | – | – | + | – | – | – | + | P |

{g2} Nomina and spellings that are neither sozonyms nor sozographs can be either {g2a} ***sozodiaphonyms*** or ***sozodiaphographs*** (nomina or spellings that have also been used significantly in the non-systematic literature but **alternatively** to other nomina which have also had such a large usage) or {g2b} ***distagmonyms*** or ***distagmographs*** (nomina or spellings that have **not** been used significantly in the non-systematic literature). If no sozonyms or sozographs are available, the normal Principles of precedence of the *Code* (Priority, Airesy, etc.) apply first among sozodiaphonyms or sozodiaphographs if available, then among distagmonyms or distagmographs.

{g3} For the purpose of this Principle, the term **significantly** is to be understood as qualifying a nomen or a spelling that has been used in the **titles** of at least 100 scientific works published after 31 December 1899.

*2.3.7.8. Archoidy (Commission's Plenary Power)*

Although the Principles, Rules and codified exceptions presented above allow to solve the main problems, confusions or conflicts that may arise during the application of the nomenclatural Rules in zootaxonomy, in a few particular situations the normal Rules of the *Code* do not allow to do this. In such cases, in the interest of nomenclatural universality, unambiguity and stability, the *Code* allows the International Commission on Zoological Nomenclature to use its ***Plenary Power*** to promulgate decisions circumventing some of the Principles and Rules of the *Code* (except those concerning its own powers and duties). The use of the Plenary Power is treated in the *Code* just as a 'codified exception', but it should rather be viewed as the implementation of a Principle, the ***Principle of Archoidy***, as suggested by the *LZC* (Dubois & Aescht 2019; Dubois *et al.* 2019).

So far, it does not seem that the Commission has ever used its Plenary Power to invalidate or validate a class-series nomen or an onomatergy concerning a CS nomen—which is consistent with the fact that the *Code* currently does not include any Rule concerning the validity of such nomina. Until it decides to change explicitly its practices in this respect, the Principle of Archoidy should be considered not to apply to CS nomina. This means that when the Commission imposes the use of some CS nomina in the applications published in the *BZN* or in the Opinions and Declarations it issues, this should not be construed as a decision taken under the Plenary Power and having force of law but just as a non-binding editorial decision. This is an important point, as the Commission regularly imposes such uses, as for example those of the invalid (in our opinion) nomina **Caudata** (for **Urodela**) or **Testudines** (for **Chelonii**) in such texts or at least in their titles (see respectively Dubois & Bour 2010*b* and Dubois & Ohler 2019).

*2.3.7.9. Conclusion*

Table **T12.ZYG** provides a survey of all the categories of conflicts of zygoidy in zoological nomenclature presented above, with their main characteristics and information on the Principles, Rules, Criteria or codified exceptions allowing to solve them.

Dubois (2015*c*: 91–108), Dubois (2020*a*) and Dubois & Frétey (2020*b–d*, 2021*a–d*) presented detailed analyses exemplifying the use of the DONS Criteria for the resolution of nine quite complex problems of zygoidy in the class-series concerning the recent amphibians. These analyses are not repeated here but their conclusions were implemented in the present work, along with many others not detailed here.

### *2.3.8. Comprehensive lists of supraspecific nomina of Lissamphibia*

In order to establish the valid nomina of all the suprageneric lissamphibian taxa that our phylogenetic analysis and our taxonomic methodology lead us to recognise, we had to rely on comprehensive lists of all the available nomina of the species-, genus-, family- and class-series, of all the aponyms ever used for them in the literature since 1758, on reliable information on their taxonomic allocation and nomenclatural validity and correctness (according to the Rules of the *Code* for SS, GS and FS nomina, and to DONS for CS nomina), as well as on lists of nomina that cannot be used as valid for being either anoplonyms, ectonyms or anaptonyms. As such comprehensive lists did not exist, we had to build them, and in order to do so we surveyed virtually all the relevant publications since 1758 where new nomina or aponyms could have been published.

Our methodology was as follows. We started from the recent works of Dubois (1981*b*, 1984*b*, 1987*a,e,m*, 1992, 2004*b*, 2005*d*), Frost (1985), Frost *et al.* (2006) and *ASW* <2020*a*> to build preliminary 'skeleton lists' of lissamphibian nomina of the GS, FS and CS, as well as of ectonyms. We then built a list of all the references cited as sources of these nomina and we ordered them chronologically. We then surveyed all these works in the chronological order for new nomina and aponyms. We progressed very slowly, year by year, using as many sources as possible, including the references mentioned in these works, as well as the website *Biodiversity Heritage Library* <*BHL* 2020>. This lead us to 'rediscover' many references of publications not being 'classically' mentioned in the literature on amphibian systematics. This allowed us not only to rediscover plenty of nomina and spellings that had sunk into partial or complete oblivion, but also to establish the chronological appearance of all the aponyms for each nomen, which turned out be quite different in many cases from that which appeared in previous works (Dubois 1984*b*; Fouquette & Dubois 2014; <*ASW* 2020*a*>). This very difficult and painstaking work kept us busy for about five years, but now we think these lists are very close to absolute completeness and will not require further verification, except perhaps in a few borderline cases. We would be very grateful to any colleagues who could indicate to us references, nomina and aponyms that we would have missed, and we plan to keep these lists updated in the future and to devote an online database to this information.

These lists are presented in Appendices **A5.NGS**, **A6.NFS**, **A7.NCS** and **A8.ECT**, where the nomina are presented in alphabetical order. They contain a great deal of nomenclatural information, presented in a standardised abbreviated manner, explained in detail in their legends. For a full benefit of these lists, some time should first be devoted to a careful study of these conventions. Despite these conventions and abbreviations, these lists cover 219 pages in the present work, but an expanded and explicit presentation of the same data would have required several times more pages.

We used these lists to establish the valid nomina, with their correct spellings, of all the taxa recognised as valid in the present work. In the course of this work, we found that no nomina were available for 200 (14.4 %) of the 1389 extant supraspecific taxa below the rank classis here recognised, and we provided new nomina for them, including 14 new genus-series nomina and one new species-series nomen. In fact, during our work we had planned to establish 18 new generic nomina, but five of these new genera (*Firouzophrynus*, *Leucostethus*, *Nesorohyla*, *Rentapia* and *Zhangixalus*) were named by other authors during the six years and half of our work. We did not mention the new nomina that we had coined for these taxa, although most of them were shorter and would have been preferable in our opinion (see Dubois & Raffaëlli 2009, Dubois 2010*e*), especially when they may have to be used as nucleogenera of family-series nomina.

### *2.3.9. 'Vernacular', 'common' and scientific names*

The following lines were borrowed in part from Dubois & Ohler (2019: 12–13).

Science is an international endeavour, the aim of which is universality. Every time in history that science has been put to the narrow service of a country, a culture, a language, an ideology, this has entailed declines in knowledge and in the usefulness of science for mankind (Raposo *et al.* 2017). Biological taxonomy makes sense only as an international approach: if the same organisms were given different nomina in different countries or in different villages, no communication would be possible among biologists worldwide and this would have dramatic consequences on our understanding of biodiversity and our ability to use it, act upon it, manage or protect it, or protect us from it. This aim requires the use of a single language in all countries to designate the taxa recognised by taxonomists. At the beginning of taxonomy, some taxonomists of different countries and cultures tended to use scientific names in their own languages. Latin was chosen as the unique language of nomenclature because it is a 'dead' language that uses the same letters as many 'living' languages and because it was the language of the scholars throughout medieval and Renaissance Europe, where modern zoology began.

Today, keeping Latin as the 'neutral' language of taxonomy is important as it avoids the imposition to this discipline of the linguistic idiosyncrasies of a few countries, which are not shared in other parts of the world. It is also important to keep a single corpus of scientific nomina for biological taxa. Because of the many problems posed by the availability, allocation, synonymy and homonymy of nomina, nomenclature is a complex domain and its proper management is time- and effort-consuming. Developing in parallel other nomenclatural corpora, sometimes with their own 'rules', certainly cannot be seen as contributing to the continuity, unity and universality of science, and this should not be supported by taxonomists.

As a matter of fact, beside the 'official' Latin nomenclatures regulated by the International Codes, a tendency has developed in the recent decades to develop 'parallel' biological nomenclatures in different modern languages. Committees have been established, lists published, and more and more biologists now tend to use these non-Latin names to designate the taxa they study, for example in the texts and even in the titles of their publications. Thus, many recent taxonomic checklists and databases provide, besides the Latin nomina (scientific names) of taxa, their 'modern' names, either in a single language (often English) or several. These lists are usually presented as lists of 'common', 'trivial' or even 'vernacular' names of the taxa, which they are not in fact. Such names are of two different kinds.

A few of them do indeed qualify as 'vernacular' names, i.e. names used used in "the language or dialect spoken by the ordinary people in a particular country or region" (Pearsall 2001: 2054). They have often been employed by the persons speaking or writing the language at stake for centuries and before the onset of scientific language. This applies to common terms like 'frog' in English, 'Frosch' in German, 'grenouille' in French or 'rana' in Italian, Portuguese or Spanish. Such names will appear for example in usual dictionaries of the language concerned. But then, most of these genuine vernacular names do not correspond to taxonomic concepts. For example, vernacular designations like 'common frog', 'green frog' or 'brown frog' are used by local people in Europe, North America, South Africa or Australia, where they do not designate the same, or even related, biological taxa. Citing such names as 'synonyms' of scientific names is therefore misleading and confusing.

But the vast majority, if not the totality in many cases, of the names in such lists of 'common' or 'vernacular' names are not 'common' at all, being completely unknown of the 'ordinary people' of the countries concerned. Most of these names are in fact recent **alternative scientific names** for the Latin nomina now recognised by the Codes, provided by some dedicated 'committees' or simply coined by the authors of the lists. This is in fact similar to the so-called 'vernacular' names used in many early taxonomic publications in various European languages. Despite a frequent misunderstanding of this term, these names were not 'vernacular' in the least, they were genuine **scientific names**, but in languages others than Latin, derived by literate scientists from scholarly etymologies (usually from Greek or Latin roots). The recent tendency, supported in zoology by the absence of a clear definition of this term in the Glossary of the *Code*, which applies it in fact indiscriminately to any 'non-Latin' name, ignores these facts, which poses problems regarding the nomenclatural availability of some nomina (see e.g. Dubois 2015*c*: 26–27 and references therein).

Therefore, the recent flourishing of lists of so-called 'common names' of taxa in modern languages, used in parallel with the scientific names, is certainly not to be welcomed as a progress for taxonomy. Particularly problematic is the recent tendency to designate taxa in the titles of scientific publications by English names or names in other recent languages, not accompanied by the valid Latin nomina of these taxa, and we think this practice should be abandoned by taxonomists and editors.

Real vernacular names for animal 'species' (which in fact in many cases are used by the local people to designate several closely related or similar species, or different sexes or life stages of the same species), or based on the local names of the regions or localities where these animals are known to occur, may find and have found their way to scientific zoological nomenclature, having been borrowed by taxonomists to name genus-series or species-series taxa of animals (e.g., in amphibians, respectively *Paa* Dubois, 1975 or *Beduka* **nov.**, and *Aubria masako* Ohler & Kazadi, 1990 or *Beduka amboli* **nov.**). But then these names leave the world of vernacular names designating 'kinds of animals' to enter that of scientific names designating taxa, i.e. scientific concepts. Then, they must comply with all the Rules of availability, allocation, validity and correction of the *Code*. Recently, a trend has appeared in some borderline 'scientific' literature, to mix both worlds, and to suggest abandoning some available and valid zoological nomina for so-called 'ethical' reasons (e.g., Shiffman 2019) and even replacing them by vernacular names given to 'kinds of animals' (covering often several scientific taxa) in local languages (Gilman & Wright 2020). Such proposals do not need serious discussion, as they just express the complete ignorance of their authors, and of the journals which accepted to publish them, of the nature of scientific taxonomy and nomenclature, of the concepts of taxon, nomen, availability, priority, validity and stability. In this respect, a 'non-scientific' journal like *The New York Times* recently showed more understanding of these questions (Roach 2020) than 'scientific' journals like *Scientific American* or *Nature*. If some authors in the future decided to use such vernacular names as valid in zoological nomenclature to replace available nomina currently considered valid, these non-scientific names would simply have to be rejected as unavailable for being ectonyms.

Unambiguous naming for all animal taxa is the main issue of zoological nomenclature, as regulated by the *Code*, so multiple names for taxa cannot be promoted within the system. Nevertheless it is important to acknowledge that in our world exist various systems of naming natural kinds depending on the aims, on the places and on the usage. But this has to be considered elsewhere.

## 2.4. A new methodology for taxonomic and nomenclatural transcription of a tree into a cladonomy

### *2.4.1. Introduction*

Some have argued that a 'phylogenetic taxonomy' requires a 'phylogenetic nomenclature' (Queiroz & Gauthier 1990, 1994), such as the *Phylocode* (Cantino & Queiroz 2020), as the LSNS Rules would not allow to express nomenclaturally the phylogenetic relationships between taxa, in particular because of their use of arbitrary nomenclatural ranks. As we have seen, we disagree with this point of view, which is based on a confusion between taxonomy and nomenclature, and particularly between taxonomic categories and nomenclatural ranks. Because it uses "phylogenetic definitions of taxon names" for the allocation of nomina to taxa, the *Phylocode* is an ***intensional*** system which is ***theory-bound*** regarding taxonomy. In contrast, the *Code*, which uses onomatophores for this allocation, is an ***ostensional*** and ***theory-free*** system. This has allowed it to adapt to the changes in taxonomic paradigms that have been frequent in the history of biology, and it should remain able to do so as no one knows today what will be the taxonomic paradigms of the future. But we agree that the LSNS Rules are not enough by themselves to ensure that nomenclature will reflect the cladistic hypotheses on which the classification is based. Several conditions should be respected for the LSNS being able to do so. The first one is taxonomic: {h1} that only groups hypothesised to be monophyletic/holophyletic should be recognised as taxa. Two other ones are taxonominal: {h2} that sister-taxa (according to the tree adopted as valid) be always afforded the same nomenclatural rank (i.e., be parordinate); and {h3} that nominal-series strictly follow each other when going upwards or downwards in the hierarchy, without overlap between them, and that ranks do the same within nominal-series.

The first condition concerns the recognition, contents and diagnosis of ***taxa***, i.e., formal groups of organisms considered to be holophyletic (i.e., including one ancestor species and all its descendants). The definition and composition of taxa is fully independent both from their nomina and from the ranks given to the latter.

The second condition concerns the ***ranks*** afforded to these taxa. These ranks are ***relative***, not absolute as believed by some. This means that they are not part of the definition of taxa or of nomina. As we have seen, nomenclatural ranks just provide information on the structure of the tree, i.e., on the hypothesised cladistic relationships between the taxa, not on their characters, 'degree of divergence' or age, as would taxonomic categories, which have long been confused with them. In order to account for changes in the topology of the tree, the same taxon may freely shift from one rank to another within a nominal-series without any change in its definition and content. This has indeed occurred very frequently in 'real taxonomies' throughout the history of biology.

Before going further however, it is important to remember that taxonomy and nomenclature are not meant at being useful only to specialised phylogeneticists and taxonomists, but also to all users of scientific nomina, including other biologists and non-biologists. This means that, as far as possible, 'very-well-known' taxa and nomina should remain in use, at least for taxa that do not contradict the requirement for holophyly of taxa, which requires in some cases to use them for taxa different (less inclusive) than those for which they had been originally proposed, as it is the case for the nomen **Amphibia**. There should exist both some ***robustness*** and some **lability** or **adaptability** of nomina relative to the content of taxa, as long as nomina remain anchored through a stable objective reference, their onomatophores, which do not refer to verbal definitions of the taxa for which they were proposed or are now used, but simply to inclusion of one or a few specimens in the latter.

As we have seen, in order to act as an efficient information storage and retrieval system, the nomenclatural system should rely first on a few 'mandatory' or 'compulsory' ranks, namely kingdom, phylum, class, order, family, genus and species (Wiley 1979, 1981; Dubois 2006*a*, 2007*a*, Kuntner & Agnarsson 2006): all organisms on earth should be referable to taxa attributed to these seven ranks. Nomenclatural ranks do not carry biological, historical or other information, and they are not, and cannot be made, 'equivalent' by any Criterion across the whole animal kingdom. In practice, taxonomic assignment of these seven ranks therefore relies only upon 'tradition' and 'consensus' among specialists of the main zoological groups: an order of mammals is by no Criterion equivalent to an order of insects, molluscs, nematodes or ciliates.

Beside these seven mandatory ranks, all other nomenclatural ranks are optional. Their use should not be based on trying to carry some information on the taxa themselves, their characters, their 'degree of divergence' or their age, but only to reflect the structure of the tree adopted as the basis for the classification of any given group, i.e. the topology of the succession of their well-supported nodes. Cladistic trees may appear as 'well-resolved', at least in part, when they include 'well-supported' dichotomies, or 'poorly resolved', at least in their portions that include polytomies.

If taxonomy and nomenclature are to act as a device carrying information on the evolutionary history of a group, not in terms of adaptations, convergences or innovations in characters, but in terms of successions of dichotomies or cladogeneses (resulting in separate 'clades' between which no gene flow occurs any more), these dichotomies should be reflected in the classification and nomenclature. This can be done in a non-ambiguous manner by giving the same nomenclatural rank to the two taxa resulting from each dichotomy (or, provisionally, by the several taxa resulting from an unresolved polytomy). Not doing so would reflect a 'gradist' or 'gradonomic' conception of taxonomy, in which some taxa resulting from dichotomies would be more 'important' than others by some criterion, and therefore would merit to be given a 'higher rank', than their sister-taxa.

This is indeed what is done in all 'pseudoranked' ergotaxonomies and nomenclatures, which are in fact the common standard in the current taxonomic literature (see Dubois 2007*a*, 2008*f*) although few authors would provide theoretical justification for their use. For example, Vieites *et al.* (2007) recognised a salamander subfamily *HEMIDACTYLINAE* with four immediately subordinate taxa (corresponding to an unresolved polytomy): genus *Batrachoseps*, 'supergenus' *Bolitoglossa* (with twelve genera), genus *Hemidactylium* and tribe *SPELERPINI* (with four genera). The genera recognised by this ergotaxonomy are therefore not all sister-taxa and this nomenclature does not carry any message concerning their cladistic relationships. To transform this pseudoranked ergotaxonomy into a genuine ranked ergotaxonomy, these four taxa should be afforded the same rank, e.g. tribe, two tribes including a single genus and the other two being composed of several genera (Dubois 2008*f*). Similarly, Frost *et al.*'s (2006) classification of the **AMPHIBIA** recognised pairs of sister-taxa such as 'taxon'/familia or familia/superfamilia, so that the nomenclatural hierarchy in this work is devoid of cladistic meaning.

In contrast, if all well-supported nodes are recognised as taxa, if all sister-taxa are always given the same nomenclatural rank, and if successive nodes are given different ranks, the latter carry cladistic information. This was argued for by Hennig (1950, 1966, 1974) and many of his successors. The important point in ranking is not the ***absolute rank*** given to any taxon, which has no meaning by itself and is fully labile, but the relative ranks of the different taxa, and in particular the fact that sister-taxa in a phylogenetic taxonomy have the same rank, as pointed out long ago, for example by Raikow (1985: 195): "In any Linnaean classification, the taxa are arranged in a nested hierarchy of progressively more inclusive ranks or categories. In cladistic classification, the pattern of cladistic relationships, usually taken to hypothesise genealogy, is the basis for ranking. The clades are recognised as taxa and their rank is determined by their position. More inclusive groups are ranked at higher category levels than less inclusive groups. (…) This is totally unambiguous; the classification exactly expresses the genealogy."

This system allows a fully ***bijective*** or ***isomorphic*** relationship between the tree and the ergotaxonomy: the latter derives directly from the tree, and reciprocally it allows to reconstruct the tree automatically in all its details. But, for this to be possible, this requires to use as many different ranks as successive dichotomies (or polytomies) in the tree. A particular problem is caused here by the fact that the current *Code* limits arbitrarily the number of ranks allowed in the genus-series (with only two ranks, genus and subgenus, but for example no rank supergenus) and in the species-series (with only four ranks, 'aggregate of species', species, 'aggregate of subspecies' and subspecies). Hopefully these arbitrary limitations will later finally be cancelled (see Dubois 2006*a*, 2011*a*), but in the meanwhile the detailed nomenclatural expression of cladistic trees through a hierarchy of ranks will have to rely mostly on nomina of the family- and class-series. In the former, the number of ranks is indefinite below the rank superfamily, but, strangely enough, additional ranks above superfamily are forbidden by the *Code*. In the latter, the number of ranks is fully unlimited, which allows as many ranks as needed to express in detail the cladistic relationships even in trees displaying very high numbers of nodes at successive levels.

Few cladistic trees are 'balanced', with equal or subequal numbers of levels in both branches originating from a single basal dichotomy. The usual situation is to have two widely unbalanced branches, one being much richer in terminal taxa (species or subspecies) and in intermediate nodes than the other one. In such cases, the number of ranks in each branch will be widely different and these ranks will not be equivalent **between** branches, thus carrying no phylogenetic signal at this level, but they will carry such a signal **within** branches, whenever the same rank is given to two sister-branches. This raises no theoretical problem as soon as it is acknowledged that ranks are meaningless by themselves and only useful to express hypothesised cladistic relationships between taxa.

This system thus makes use of two different 'kinds' of ranks, shown in Figure **F1.MOR**. Mandatory ranks (kingdom, phylum, class, order, family, genus, species) have a double function: {i1} that of allowing information storage and retrieval in bibliographic (such as the *Zoological Record* <*ZR* 1864–2020>) and taxonomic (such as the *Integrated Taxonomic Information Service* <*ITIS* 2020>, or the *Universal Biological Indexer and Organiser* <*uBio* 2020>) databases; {i2} that of providing information on the structure of the tree, i.e., on the cladistic relationships between taxa. This second function is the only one performed by optional ranks. The latter are potentially unlimited in number. However, in real taxonomies, which never cover the whole animal kingdom in all details, but are either very general (limited to higher rank taxa) or quite specialised (limited to rather lowly ranked taxa, as in the present work), they will rarely exceed a few dozens or less. Optional ranks are therefore needed only to express sister-taxa relationships, so they must be used only for taxa that include several subtaxa. Therefore, in unbalanced taxonomies, less ranks will be used in taxa-poor branches than in taxa-rich ones. Optional ranks do not allow useless taxonomic redundancy (inclusion in one taxon of a single subtaxon of next lower rank in the same nominal-series having the same content/extension and characters/intension). In contrast, in the case of mandatory ranks, taxonomic redundancy is imposed by their function {i1}. For example, although the frog family *RHINOPHRYNIDAE* contains a single extant genus *Rhinophrynus* with a single species *Rhinophrynus dorsalis*, so that these three taxa are redundant in terms of taxonomy and phylogeny, they are not so for the purpose of information retrieval, and all three should be recognised as distinct taxa. But there is no need, and it would be a mistake, to recognise a subfamily *RHINOPHRYNINAE*, a tribe *RHINOPHRYNINI*, a subgenus *Rhinophrynus (Rhinophrynus)* or a subspecies *Rhinophrynus dorsalis dorsalis*, as these taxa would have no sister-taxa.

So far, in zootaxonomy, most authors, even without clear formulation of the concept of 'mandatory rank', have in practice acted in agreement with the recommendation above to attribute well-known taxa to these seven ranks. But no explicit and detailed methodology has ever, to the best of our knowledge, been proposed to serve as a guideline for the choice of the taxa to which these seven ranks should be attributed. We here propose such a methodology. As reminded above, taxonomy should be at service of numerous users of various kinds and should not comply only with the aims and preferences of specialised taxonomists and phylogeneticists. Therefore, this methodology is meant at standardising the use of ranks in zoological nomenclature, not at 'revolutionising' it. In particular, it should allow to maintain as much as possible the long traditions regarding the nomina used for the best known animal taxa. Because of the widely different traditions used in different branches of zootaxonomy, we insist that, for the time being, this methodology should be applied separately in the different major animal groups as traditionally recognised—except when these have been shown to be polyphyletic or paraphyletic, such as in the case of the '**REPTILIA**' or '**PISCES**'. A good source for establishing these traditions is provided by the numerous volumes of the *Zoological Record* (<*ZR* 1864–2020>), a yearly updated database that exists since 1864 and which is now available online.

As we have seen, at this stage we excluded terminal taxa (species and subspecies) as well as genera and subgenera from our recommendations, because today several distinct species/subspecies and genus/subgenus concepts are used by different taxonomists or groups of taxonomists, in part following different taxonomic traditions in different animal taxonomic groups, e.g., with or without frequent use of the ranks subgenus and subspecies, or in groups including organisms with peculiar reproductive modes like parthenogenesis, gynogenesis and 'hybridogenesis' (see Dubois 2011*b*). At this stage we recommend to follow such traditions in the groups at stake, or to propose changes but based on explicit concepts and methodology.

Regarding extant amphibians, our recommendations concern in the first place {j1} the two mandatory suprageneric ranks family and order, and {j2} their nomina. As will be shown below, fixing the position in *TREE* of the two ranks family and order, which usually is fully arbitrary and does not correspond to any biological or historical Criterion, will be a starting point that will allow to determine the assignment of all other ranks, in any given partial taxonomic hierarchy (restricted to a defined higher taxon), to the holophyletic taxa recognised.

### *2.4.2. Allocation, assignment, attribution and allotment of nomina*

In zoological taxonomy, nomina are allocated to taxa, assigned to nominal-series and attributed to nomenclatural ranks, and taxa are referred to taxonominal ranks. These four kinds of attachment or connexion are distinct and independent. Some are permanent, others are labile. So far, in the literature no clear distinction has been made between them, and no specific term has been fixed for any of them: in most cases, these processes are not distinguished, and are designated by general terms like ‘allocation’ or ‘attribution’. In order to avoid confusions and misunderstandings, we propose here a formal terminology for these four distinct concepts.

{k1} Following Dubois (2005*b*), we propose to use the verb ***to allocate*** and the substantive ***allocation*** for the process of connexion between a nomen and a taxon. This ***taxonomic allocation*** is effected through two tools specific to zoological nomenclature, the onomatophore and the onomatostasis. The onomatophore is usually designated in the original publication where the nomen is established, but in some cases in a subsequent airesy effected by a taxonomist of by the Commission under its Plenary Power. Once designated, it is fixed and permanent, not liable to change. In contrast, the onomatostasis is usually (in the SS, GS, FS and for ***doxisonyms*** in the CS) labile, depending on the structure of the taxonomy (see Dubois 2020*a*), but it is fixed and permanent in the case of sozonymorphs in the CS under DONS Criteria.

{k2} Following Dubois (2015*c*), we propose to use the verb ***to assign*** and the substantive ***assignment*** for the process of attachment of a nomen to one of the four nominal-series (SS, GS, FS and CS). This ***nominal-series assignment*** must be effected in the original publication where the nomen is established. Failing to do renders the new nomen nomenclaturally unavailable (Tables **T4.AVN** and **T6.ASN**). Once done, this assignment is permanent and non-modifiable.

{k3} Zoological nomina are thus permanently attached to nominal-series but, contrary to the situation in botanical nomenclature, not in the least to ranks. Owing to the Principle of Coordination, once established at any rank in a nominal-series, a nomen is deemed to have been established simultaneously, with the same auctor, date and onomatophore, at any other rank in the same nominal-series. In a given ergotaxonomy however, a given nomen will be used as valid only at certain ranks, depending on the taxonomic arrangement. For the process leading to decisions in this domain, we hereby propose to use the verb ***to attribute*** and the substantive ***attribution***. The ***rank attribution*** of a nomen is highly labile, being liable to change whenever the phylogenetic hypotheses and ergotaxonomic arrangements change. Furthermore, in any given ergotaxonomy, in the species-, genus- and family-series, the same nomen may be used as valid at several distinct ranks that are immediately super/subordinate to each other.

{k4} In most cases, when describing a taxon, an author refers it to a nominal-series and a rank within this nominal-series. Subsequent works may lead to modify the rank of this nomen, which poses no nomenclatural problem as long as one remains within the same nominal-series, as the nomen will keep its auctor, date and onomatophore. However, in certain cases, and particularly when suprageneric taxa are concerned, the choice between a FS rank (e.g. superfamily) and a CS rank (e.g. infraorder), which as we have seen does not rely on taxonomic concepts but largely on tradition and consensus, may be challenged in subsequent works. But then transfer of a taxon from the FS to the CS or *vice versa* will require a change of nomen for the taxon, even if its intension and extension are not modified, because nomina in different nominal-series obey different nomenclatural rules and nomina can never be transferred from one nominal-series to another one. This change of nomen may be a source of ambiguities and confusions. In order to limit the occurrence and the negative consequences of such situations, it is useful to dispose of operational Criteria allowing to choose the nominal-series to which a new nomen will be assigned. We propose such Criteria below. For this process, which is distinct from the three processes described above, we hereby propose to use the verb ***to allot*** and the substantive ***allotment***. More details on ***nominal-series allotment*** are given below.

### *2.4.3. The two basic mandatory ranks between genus and class: family and order*

In amphibians, the introduction of explicit phylogenetic analysis as a basis for taxonomic (partly cladonomic and partly gradonomic) classification has resulted in a tendency for higher-ranked taxa (e.g., families) to be moved toward the tips (i.e., making families less inclusive). This movement was justified by the fact that the number of traditional higher taxa in extant amphibians was clearly too low to be able to express conveniently the complexity of the relationships within the group, which had been underestimated in the past. However, we think this movement should not continue forever, and that drastic changes in the higher taxonomy of the group should now be restricted to genuine major discoveries or changes in the structure of the tree, but not occur as a simple result of mere increase in the number of known species and genera which do not change the basic pattern of relationships between taxa.

In amphibians, regarding the mandatory rank order, the tradition is very entrenched in the literature and it should in our opinion not be challenged. In innumerable works, the extant amphibians are referred to three higher taxa that are usually given the rank order: the frogs, the salamanders and the caecilians. They correspond exactly to the three main holophyletic groups disclosed by our cladistic analysis (see below), where they form an unresolved trichotomy. The valid nomina of these three orders, following the DONS methodology (Dubois 2015*c*, 2020*a*; Dubois & Ohler 2019; Dubois & Frétey, 2020b–c, 2021b), are respectively **Anura** Duméril, 1805, **Urodela** Duméril, 1805 and **Gymnophiona** Rafinesque, 1814[1].

Stating that the ranks order and family are mandatory means that every animal species must be referred to a taxon at each of these two ranks. But these two ranks are the only ones that are mandatory below class and above genus. All the other ranks are facultative, and their implementation in any branch of *TREE* will depend on the structure of this branch, i.e. on the number of well-supported nodes between the rank family and the rank order.

The situation is much more complex concerning the rank 'family'. Here, 'tradition' only is not enough, as new families are constantly added in the extant amphibians as in most other zoological groups: there were 8 families in Duméril & Bibron's (1841, 1854) classification of this group, 19 in Boulenger's (1882*a*–*b*), 20 in Noble's (1931), 42 in Duellman & Trueb's (1985) and 54 in Frost *et al.*'s (2006). This process might continue indefinitely, with a permanent increase in the number of families which does not always correspond to an increase of knowledge but sometimes only to a particular focus given by some recent authors to 'their' groups, at the expense of less studied groups. Some Criteria are needed to limit this constant increase in the number of families and unjustified upgrade of lower-ranked taxa to the rank family. This led us to devise a completely new methodology for fixing the level of the rank 'family' in a zoological classification. We present below in detail the rationale and the Criteria of this methodology, the 'Ten Criteria Procedure' [TCP] which we used as the basis for our attribution of all amphibian suprageneric taxa, not only to this rank but also, by way of consequence, to all other suprageneric and infraordinal ranks. As we will show, having established the nomen to which the rank family is attributed, the entire suprageneric classification of the group at stake (our *CLAD*) is automatically generated by our Criteria.

Most current taxonomists highly praise 'nomenclatural stability', which is even stated in the *Code* as one of its main purposes. However, this concept is a complex one (Dubois 2005*b*) which is usually poorly defined, including in the *Code* (Dubois 2010*c*). In the absence of scientific Criteria to define nomenclatural ranks, we agree that nomenclatural stability **in the main ranks** is a laudable goal, but we insist that {l1} it should be based on precise Criteria and {l2} it cannot concern all taxa and ranks but only some of them, as otherwise taxonomy and nomenclature would have to be frozen forever and could not evolve with new concepts and new data as they have always done and should continue to do (Dubois 1998). Therefore, whereas we agree that the taxonomy of amphibians should always include 'well-known' nomina like those of the order **Anura**, of the family *Ranidae* and of the genus *Rana*, it is important to realise that this stability of nomina does not always imply a stability of the corresponding taxa: while the taxon **Anura** has the same meaning today as it had in the work of Duméril (1805), both taxa *Ranidae* and *Rana* now have intensions and extensions very different from that which they had in the original works of respectively Batsch (1796) and Linnaeus (1758*a*). Here we do not use the concept of 'nomenclatural stability' in the imprecise sense it usually has in the literature but in a technical, well-defined and operational meaning, described in detail below.

1. For the correct authorship of the paper where this nomen and others appeared for the first time, see Dubois & Frétey (2021*b*).

### *2.4.4. Nominal-series saturation*

As we have seen, the *Code* restricts the number of ranks that can be used in the three nominal-series it governs: they are two in the GS (genus and subgenus), four in the SS (species, subspecies, 'aggregate of species' and 'aggregate of subspecies') and they are limited in the upward direction in the FS by the rank superfamily. In the first two three nominal-series, using additional ranks in not *Code*-compliant and should be corrected whenever found in a publication.

At genus level, some recent authors used nomenclatures which are not *Code*-compliant, such as implementing a rank 'supergenus' above genus (e.g. Vieites *et al.* 2007 in the *Hemidactyliinae*) or several ranks between genus and species (e.g. Hillis & Wilcox 2005). In order to transfer such nomenclatures to *Code*-compliant practices, in the first case the rank supergenus should be replaced by a low family-series rank (such as subtribe or below): in the present case for example we used eight ranks between subfamily and genus in the *Hemidactyliinae*. Concerning the second situation, the *Code* allows to use a single additional rank between subgenus and species, that of 'aggregate of species' (or better ***supraspecies***, see Dubois & Raffaëlli 2009), but no other rank is to be used in order to remain in a *Code*-compliant nomenclature.

In the family-series, all ranks above superfamily that may or have been used are not *Code*-compliant and should be abandoned, but they may be replaced by low ranks of the class-series, as this nominal-series, not being regulated by the *Code*, has no limitation in the number and names of ranks

We call ***nominal-series saturation*** the situation in which all the ranks allowed by the *Code* in a given nominal-series have been used in a formal ergotaxonomy and nomenclature. This saturation is soon reached, after two ranks, in the GS, and after four ranks in the SS. If more ranks are used in these two NS, they are not acceptable under the *Code* and their nomina are not submitted to the Rules of ***homonymy***, ***synonymy*** and ***priority*** of the *Code*.

In the FS, the situation is special as the *Code* provides a list of five 'main' ranks but states that "any other rank bekow superfamily and above genus that may be desired" is acceptable (Article 35.1). There is therefore no limitation in the addition of ranks in the downward direction below family. In the present work, we make use of 10 ranks below family and this is *Code*-compliant. In the upward direction above family, the *Code* just fixes an upper limit (superfamily) but does not state that no ranks are allowed between family and superfamily. Saturation exists there only in the upward hierarchy above family when all the ranks between family and superfamily **accepted as valid in a given work** have been used. In the present work, the maximum number we used, in some groups only, is three (apofamily, epifamily and superfamily). This is also *Code*-compliant, but the use of ranks above superfamily (such as hyperfamily) would not be so. In the group of extant amphibians where the structure of our *TREE* imposes more than three ranks above family and below order, starting with the fourth rank above family the transition to the CS must be effected.

### *2.4.5. Recognition of suprageneric taxa and their rank attribution: the 'Ten Criteria Procedure' [TCP]*

Our procedure relies on ten Criteria, which may be implemented in any suprageneric zoological cladonomy for the attribution of a suprageneric nomen to the rank family. This will allow to reflect bijectively a cladistic tree and allow back and forth equivalence between them. The ten Criteria of the [TCP] rely either only on nomenclatural Rules {N} or on both taxonomic and nomenclatural Criteria {TN}. The following three-letter abbreviations are used in the text below to designate these ten Criteria, and one-letter abbreviations between square brackets are used in Appendix **A9.CLAD-1** for five of them:

[CHC] Consistent Hierarchy Criterion. {N}.
[CNC] Consistent Naming Criterion. {TN}.
[CPC] or [P] Conflict of Precedence Criterion. {N}.
[FPC] Family-Series Precedence Criterion. {N}.
[MRC] or [M] Mandatory Rank Criterion. {N}.
[NPC] Nomenclatural Precedence Criterion. {N}.
[NRC] or [N] Non-Redundancy Criterion. {N}.
[NTC] or [T] Nomenclatural Thrift Criterion. {N}.

[STC] Sister-Taxa Criterion. {TN}.

[UQC] or [Q] Upper Quartile Criterion. {TN}.

The Criterion [CNC] provides necessary conditions for the recognition of suprageneric taxa, the Criterion [NTC] allows to settle potential conflicts between the allotment of a taxon to the FS or the CS, and the other eight provide general Criteria for the attribution of ranks to taxa.

Below we describe in detail these Criteria, and we provide some information on our cladonomy of extant amphibians which we built using these Criteria and which includes 69 families (55 of frogs, 9 of salamanders and 5 of caecilians). A full understanding of what follows requires to refer to our tree and our cladonomy, shown in Appendices **A2.TREE-1** and **A9.CLAD-1**, which are presented and discussed in more details in our section Results below.

Note that the use of the methodology described below can be used consistently only on the basis of a robust cladistic tree, such as *TREE* in the present work, which is based on a thorough analysis of numerous molecular data. Today it cannot be used for all-fossil taxa, even when these have been submitted to careful morphological and anatomical analyses, as many of them rely largely on incomplete specimens and therefore result in many 'missing data' in matrices (see e.g.: Ruta *et al.* 2003; Ruta & Coates 2007; Sigurdsen & Green 2011; Marjanović & Laurin 2015, 2019). In the present work, we adopted uncritically the all-fossil families of lissamphibians recognised by paleontologists, which simply correspond to tradition and consensus. The status and rank of these data were not challenged here and they were not submitted to the methodology described in detail below for extant taxa.

### *2.4.5.1. General Criteria*

#### 2.4.5.1.1. Criterion [CNC]: the 'Consistent Naming Criterion'

##### 2.4.5.1.1.1. Statement of Criterion

**"In any given cladonomy, all sister-branches resulting from nodes having a support value equal to or higher than a given *a priori* threshold must be recognised as distinct taxa, whereas no branch resulting from nodes having a support below this threshold should be so. However, for two sister-branches to be taxonomically recognised, one of them at least must include more than one supraspecific subtaxon (i.e., of rank genus or above)."**

##### 2.4.5.1.1.2. Rationale and use of this Criterion

As explained above, our aim here is to propose for the first time a complete 'phylogenetic taxonomy' or more exactly ***cladonomy*** of the extant amphibians above the rank genus, here designated as *CLAD*, being an exact and reversible transcription of the cladogenetic tree, here designated as *TREE*, based on nucleic acid sequencing data, that we here adopt as (provisionally) valid. For this to be possible and reliable, **all** suprageneric branches resulting from nodes having a SHL-aLRT support value of 90 % or more must be recognised as distinct taxa, whereas **no** branch resulting from nodes having a support below this threshold, even if 'close' to it (e.g., 89 %), should be so. If some such nodes were purely subjectively retained, despite being unsupported, for corresponding to 'well-known' or 'important' taxa, or on the contrary nodes meeting this Criterion rejected for being 'less known' or 'less meaningful' than others, or simply for the purpose of reducing the number of ranks in our hierarchy in order to follow 'tradition', the resulting taxonomy would not entertain a bijective relationship with our *TREE* any more—i.e., it would not allow alone to reconstruct *TREE*.

Of course, in subsequent works, it will not be necessary to mention always all these ranks and taxa and it may be sufficient, according to the purpose of the publication, to mention a few 'traditionally important' ranks (such as order, superfamily, family and subfamily), but the taxa attributed to these ranks will not be given haphazardly but will correspond to a well-defined taxonominal paradigm. And of course, when dealing with the complete classification, all these ranks and taxa should be mentioned.

This means that even in very unbalanced situations, e.g., when a single species comes out as the sister-taxon of a large taxon including hundreds of species, both branches of the dichotomy should nevertheless be named and be attributed to the same nomenclatural rank. By itself, the resulting ‘unbalanced taxonomy’ will be very informative regarding the pattern and processes of evolution of the group at stake, as it will point to very different rates of diversification and speciation, or of extinction, in these two branches, thus allowing to ask meaningful evolutionary questions, whereas this would be ‘masked’ in a taxonomy that would care mostly for equilibrated numbers in related taxa in the futile and hopeless search for quantitatively ‘equivalent’ taxa at the same rank.

The only case where well-supported nodes in *TREE* should not be used as evidence for distinct taxa is when the results are ‘strange’ enough, on the basis of robust previously published information, to suggest the existence of a problem regarding the reliability of either the identification of the voucher or the molecular sequence. Such problems should be solved if possible, and if impossible these specimens and sequences should be removed from *TREE* and from *CLAD* until more is known, but this decision should be made clear to all readers. As a matter of fact, so far we did not identify any such case in the data we used, or we were able to correct them.

Therefore, in the present work, this Criterion was followed strictly for all suprageneric nomina/taxa, whatever its consequences regarding ‘usage’ and ‘consensus’.

Stating that a taxon must be recognised and named on the basis of *TREE* means that this taxon will have to be taken into account when it comes to establish the ranks and nomina of taxa but does not tell us which rank and nomen it should bear. This information will be derived from the other nine Criteria below.

### 2.4.5.1.2. Criterion [NPC]: the ‘Nomenclatural Precedence Criterion’

#### 2.4.5.1.2.1. Statement of Criterion

**“In zoological nomenclature, precedence between family-series nomina is established through the same Rules as for species-series and genus-series nomina, i.e., publication priority, airesy, proedry, sozoidy or archoidy. In the class-series, according to the DONS Criteria, it is established through sozonymy, or through priority, airesy or proedry among sozodiaphonyms, or through priority, airesy or proedry among distagmonyms.”**

#### 2.4.5.1.2.2. Rationale and use of Criterion

In the family-series, the mention of this Criterion here can be considered superfluous as it is just part of the standard Rules of the *Code*. A few decades ago, a number of taxonomists simply ignored that the Principle of Priority, sometimes tempered by other Principles or Rules, did indeed apply to family-series nomina, but in this respect the situation has improved in the recent decades.

However, in the class-series, as the *Code* does not provide Criteria of validity, a chaotic situation currently prevails in the literature. Various Criteria, or more often inconsistent ‘pseudo-Criteria’ (see Dubois & Ohler 2019), have been used by different authors, who generally did not care for explaining the rationale for their choices. Few do so, and propose consistent Principles and Rules for this purpose, under the form of explicit proposals of ‘nomenclatural systems’ (e.g. Dubois 2006*a*, 2015*c*; Kluge 2010). As the *Code* does not take a stand on these matters, none of these explicit nomenclatural systems, or inexplicit ‘pseudo-systems’ (see Dubois 2015*c*) can be stated to be more ‘*Code*-compliant’ than others. The only requirement that can be expected to be met from authors in publications dealing with these matters is to state in full words which Principles, Rules, Criteria or at least guidelines they follow in this respect (Dubois & Ohler 2019). Here we clearly state that, for the nomenclature of all taxa of the class-series (i.e., above the rank superfamily), we followed the Criteria of the Duplostentional Nomenclatural System (DONS) as explained by Dubois (2015*c*, 2016, 2020*a*).

In the present work, these Rules (for FS nomina) and Criteria (for CS nomina) were followed strictly, whatever their consequences regarding ‘usage’ and ‘consensus’.

2.4.5.1.3. Criterion [CHC]: the 'Consistent Hierarchy Criterion'

2.4.5.1.3.1. Statement of Criterion

**"In any given cladonomy, in one branch at least resulting from a node, subordinate and superordinate taxa should be attributed to immediately successive nomenclatural ranks in the taxonominal hierarchy, but some of these ranks may be lacking in its sister-branch(es)."**

2.4.5.1.3.2. Rationale and use of this Criterion

As we will see, the Criteria [UQC] and [STC] below allow to fix the position of many taxa in the taxonominal hierarchy as belonging to the rank family. This will then allow to fix the ranks of **most** other suprageneric taxa, simply by following the hierarchical succession of ranks. This would seem to be a straightforward operation but it is not so, because some ranks are optional and are not always used in ergotaxonomies. In this respect, the situation is different below and above the rank family.

{m1} Below the rank family and above the rank genus, as the *Code* currently forbids to use any rank above genus in the GS, all ranks belong in the FS and the attribution of ranks to taxa is simply automatic, by just descending progressively the hierarchy of ranks. But when relatively few ranks are needed, it is even possible to ignore the potential intermediate ranks between subfamily and tribe in order to keep an isolated 'block' for the ranks for which the *Code* imposes fixed endings (family, subfamily, tribe and subtribe). It was the case in the present work, where we needed only ten ranks to account for all our hierarchy below family. If in another zoological group more ranks are needed, these potential intermediate ranks (e.g., infrafamily or supertribe) may be used and the downward progression may be indefinite. Dubois (2006*a*) proposed a system with 38 distinct ranks between family and genus, and the *Code* does not forbid to have even more. Therefore, the downward hierarchical succession of rank depends on the context, i.e. of the ranks taken in consideration in a given work.

{m2} The situation is different above the rank family, because here two distinct nominal-series must be distinguished, the FS and the CS. As we have seen, in the FS, the *Code* imposes a limitation in the number of ranks above family, as no rank is allowed above superfamily. In the present work, we indulged ourselves in implementing when necessary two optional intermediate ranks between family and superfamily, namely first epifamily below superfamily if just one such rank is needed and second apofamily below epifamily if a second such rank is needed (see Table **T2.SEQ** above). But the implementation of these two ranks is optional and required only when there is a need for more than one FS rank above superfamily, and it would seem inappropriate to increase indefinitely this number, all the more that there is no upward limitation to the number of ranks that can be implemented above superfamily in the CS. In the CS, there is no limitation of any kind and a descending hierarchy may be smoothly followed without disruption. Dubois (2006*a*) proposed a system with 16 distinct CS ranks between order and superfamily, and if necessary more could be used, but in the present work we needed only eleven ranks to account for the hierarchy of CS taxa required by *TREE* below the rank class.

2.4.5.1.3.3. Examples of use of this Criterion

The number of ranks may be different in distinct sub-branches of the same branch. This affects particularly the two ranks epifamily and apofamily, which need to be used in a few cases only. Because of the Criterion [STC] (see below), in a given branch all sister-taxa must bear the same rank, but when a given taxon has no sister-taxon, some intermediate ranks between the mandatory rank family and higher ranks won't be used in its hierarchy. Thus, the FS nomen *Ranidae* and its parordinate *Rhacophoridae* constitute together an apofamily *Raneidae*, which has four parordinate nomina/taxa (*Ceratobatracheidae*, *Discoglosseidae*, *Nyctibatracheidae* and *Ranixaleidae*). Altogether, these five apofamilies constitute an epifamily *Ranoidae* which has five parordinate epifamilies (*Conrauoidae*, *Ericabatrachoidae*, *Micrixaloidae*, *Petropedetoidae* and *Pyxicephaloidae*). Altogether these six epifamilies constitute a superfamily *Ranoidea* which has two parordinate superfamilies (*Odontobatrachoidea* and *Phrynobatrachoidea*). At this stage, we have reached the nominal-series saturation for this set of taxa and the transition to the class-series must be effected, at the lowest rank needed to account for the next dichotomies above, and at this stage the three superfamilies will have to constitute a hypophalanx **Ecaudata**. However, the number of FS ranks between the ranks family and superfamily is variable in this branch according to the subbranch: whereas it is three for the *Ranidae*, it is only two for the other four apofamilies, and one for the five other epifamilies. In this case, the NS saturation is reached although some only of the three FS ranks above family are used.

### 2.4.5.1.4. Criterion [FPC]: the 'Family-Series Precedence Criterion'

#### 2.4.5.1.4.1. Statement of Criterion

**"In any given suprafamilial cladonomy, whenever the other Criteria allow it, the nominal-series allotment of the suprafamilial taxa should be made giving precedence to the FS over the CS, and allotment to the CS should start only when all the available FS ranks above family have been used (nominal-series saturation), at least in one branch of the ergotaxonomy."**

#### 2.4.5.1.4.2. Rationale and use of this Criterion

This Criterion concerns the transition between the family-series and the class-series.

The Criteria that will be examined below allow to fix automatically, without recourse to subjective decisions, to 'consensus' or 'tradition', the place of the rank family in the hierarchical taxonomy of any zoological group. They also allow to fix the positions of **most** other ranks, but in some particular cases there may exist a problem of allotment (as defined above under 2.4.2) of taxa to nominal-series. As we have seen under Criterion [CHC], the situation here is different below and above the rank family.

{n1} Below the rank family and above the rank genus, a single nominal-series, the FS, is represented, so there is never any problem of taxonominal series allotment of taxa, and the Criterion [CHC] is sufficient to fix the ranks of taxa.

{n2} The situation is different above the rank family, because here two distinct nominal-series must be distinguished, the FS and the CS, and we will need Criteria to know where the transition between them occurs. This situation is complexified by the fact that, according to the *Code*, no FS rank is allowed above superfamily. Even if, as suggested here, two additional optional ranks epifamily and apofamily are implemented between family and superfamily, which is *Code*-compliant, the number of FS ranks above family is much lower than that in the CS. In such conditions, two situations may occur above family:

{n2a} In many cases, the implementation of the six Criteria [STC] to [NTC] below allows to exclude any ambiguity, because the combination of upper quartile, sister-taxa, consistent-hierarchy and mandatory rank allows to refer clearly all taxa between family and superfamily to a precise rank, including, in some branches at least, epifamily and apofamily, and then, continuing the progression upwards, there is no other possibility than to start using the class-series just above superfamily. In the CS, there is no special requirement except that ranks must follow smoothly each other, without ignoring some intermediate ranks.

{n2b} But it is not the case when the order contains much less taxonomic diversity. In such cases, the numbers of suprafamilial ranks needed are much lower, and the transition between the FS and the CS is not given automatically. In such cases, where should we put the transition? Or, in other words, which Criterion should be used for the nominal-series allotment of these suprafamilial taxa? As amply discussed above, no scientific Criterion would allow to decide in this respect, as ranks have no biological or other meaning. However, two 'practical' arguments allow to make the case in favour of one possibility: {$n2b_1$} the FS being regulated by the *Code*, the nomina in the three FS suprafamilial ranks will be imposed by the regular Rules, and will not be liable to be challenged by authors who would refuse to follow the DONS Criteria for CS nomenclature; {$n2b_2$} more importantly, the FS being submitted to the Principle of Coordination, using this nominal-series for three ranks would involve more ***nomenclatural parsimony***.

2.4.5.1.4.3. Examples of use of this Criterion

{o2a} This situation was observed in the present work in the order **Anura**. The suprafamilial ergotaxonomy of all the 55 taxa of rank family that were imposed by the Criteria described here shows a clear and smooth transition between the rank superfamily and the lowest CS rank (which is not the same in different branches). In this order, all ranks from subtribe and superfamily, including epifamily and apofamily, are used in a few branches, so that the transition to the CS is automatic when the progression upwards continues. This is due to the fact that, the more there are species, genera and suprageneric taxa in a group, the more suprafamilial and infraordinal ranks are needed (up to 12 in the present case), and the more there are constraints on these ranks through the Criteria [STC] and [CHC]. In this order, there is therefore no problem of nominal-series allotment of suprafamilial taxa.

{o2b} The situation is different in the amphibian orders **Urodela** and **Gymnophiona**.

In the salamanders, as in some branches there are up to 4 suprafamilial ranks, the three ranks superfamily, epifamily and apofamily will not be sufficient for all the suprafamilial taxa and the recourse to CS ranks will anyway have to be implemented. The four needed ranks could then be distributed in four different ways between the two nominal-series FS and CS: respectively 3 and 1, or 2 and 1, or 1 and 2, or 0 and 4. In the present case, in the **Urodela** the three available FS suprafamilial ranks superfamily, epifamily and apofamily are used above the taxa *Amphiumidae*, *Plethodontidae* and *Rhyacotritonidae*, which imposes the use of the 3 + 1 solution, with a single CS rank above superfamily and below **Urodela**, namely suborder. According to the Criterion [STC], this rank will have to be attributed to the three taxa subordinate to this order as they are part of an uresolved trichotomy.

Finally, in the caecilians, the number of suprafamilial taxa above the five families are only 1 or 2, so that, according to the Criterion [FPC], they could all be allotted to the FS, at the ranks superfamily and epifamily. But in this case, for sake of homogeneity with the other two orders which have suborders, we decided to recognise two suborders in the **Gymnophiona**, and then only the rank superfamily above family in the FS. This is the only case in the whole *CLAD* where we did not follow 'blindly' our *a priori* Criteria, and we concede that this decision can be rejected by others. They should then replace our two suborders by two superfamilies (whose nomina *Caecilioidea* and *Rhinatrematoidea* will be imposed by simple priority), and then dowgrade by one step the ranks of all other suprageneric taxa of the order.

### *2.4.5.2. Criteria applying only or particularly to families*

#### 2.4.5.2.1. Criterion [UQC]: the 'Upper Quartile Criterion'

2.4.5.2.1.1. Statement of Criterion

**"In any given cladonomy, any UQ-nomen (family-series nomen designating a taxon considered valid and having had a number of usages above the upper quartile of usages since 1758) must be maintained as valid at the nomenclatural rank family, irrespective whether it is also used at other superordinate or subordinate ranks".**

2.4.5.2.1.2. Rationale and use of this Criterion

This new device is the key Criterion of the [TCP].

As we have seen, because nomina are useful for the communication not only among taxonomists but also between them and other biologists and even the whole society, it is important that 'well-known' nomina of higher taxa, especially at mandatory ranks (class, order, family), remain in use, even in a renewed taxonomy resulting from new cladistic data. But this requirement does not exist for nomina that have been seldom used. By 'stability of use', we understand long-term stability covering the whole history of the taxonomy of the group since Linnaeus (1758*a*), or a really massive usage in a significant and recent part of it (e.g., since 1950).

In order to measure this, in 2014 we surveyed 101 publications (followed by {Q} in our list of references), from 1758 to 2014, presenting complete familial classifications of all extant amphibians or of at least of one of the three extant orders of the class (**Anura**, **Gymnophiona**, **Urodela**). In each of these publications, we noted the nomina of all the families recognised as valid. We then distributed these publications into five periods: 1796–1849 (starting with Batsch 1796, the first publication where an available family nomen was proposed for amphibians), 1850–1899, 1900–1949, 1950–1999 and 2000–2014 (although this last period is shorter, it deserves to be considered separately, as it corresponds to the expansion of the use of molecular cladistic works in amphibians). We then treated separately the nomina in the three extant orders. For each order, we computed the frequency of use of each familial nomen in each period among the works presenting a complete or subcomplete (e.g., missing the fossil taxa) familial classification of the order, and then we averaged these frequencies over the five periods. The results, presented in detail in Appendix **A13.QUA**, show that the average frequency of use of a nomen over the five periods varied from 1.0 to 100 %. We then divided in each order the complete list of familial nomina according to their usage in four equal parts (containing each one quarter of all these nomina), and we decided that all the nomina with a number of citations in these works being **above the *Upper* (third) *Quartile*** (***UQ-nomina***) should be considered 'well-known' for having been used consistently during the two and half centuries of zoological nomenclature, or at least massively in the recent periods, and that for this reason any ergotaxonomy of the group at stake should recognise one family bearing each of these nomina. This threshold (upper quartile deliminating the most used quarter of nomina, the ***Upper Quarter of nomina*** or ***UQN***) is doubtless arbitrary, but its implementation as a Criterion is fully automatic and objective. It can be implemented independently by all zoologists in any country of the planet and, if the sample of publications is large enough (we suggest a minimum of 100), it should result in the same list of nomina in all cases.

We think this arbitrary Criterion should be applied 'blindly', without any qualms, as if exceptions are haphazardly tolerated the Criterion vanishes altogether. So, a nomen just above the threshold should always be kept in the list, whereas a nomen just below it should not (which of course does not forbid its use in the rank family if this is required by the other Criteria proposed here).

However, we suggest two exceptions in the implementation of this Criterion:

{p1} Even if it belongs in the upper quarter, a familial nomen should not be placed in the list of 'mandatory valid family nomina' if it does not appear in any of the publications analysed for the last period (2000–2014). This is because the sudden disappearance of this well-known nomen in recent publications calls attention to a drastic and significant change, due to either nomenclatural or taxonomic reasons. Nomenclatural reasons may include the rejection of a nomen for being an invalid synonym (this is the case here of *Cystignathidae*) or for having been considered so in error (this is the case here of *Engystomatidae*). Taxonomic reasons include a drastic change in the taxonomic status of a group resulting from molecular surveys: this would apply for example to the nomen *Pseudidae*, which was long used as a valid familial nomen until it was found to apply to an aquatic specialised group of the family *Hylidae* (Darst & Cannatella 2004) and then abandoned by all authors at the rank family (in this case, although widely used in the past, this nomen is not part of the upper quarter, but even if it was it should be rejected from the list for not having been used for a family after 1999).

{p2} A reverse exception, or more exactly tolerance, should be accepted for a nomen which, although not being part of the Upper Quarter of usages over the period 1758–2014, has been used in 90 % or more of the publications in the period 2000–2014, thus pointing to an almost universal acceptance of the use of this nomen/taxon at the rank family in the most recent period. The acceptance of this tolerance, with the data of Appendix **A13.QUA**, resulted in the incorporation in the set of UQ-nomina of three additional nomina: *Megophryidae* (90.7 %), *Cryptobranchidae* (100 %) and *Rhyacotritonidae* (100 %).

The implementation of this Criterion as the first step for the building of a new suprageneric cladonomy is a guarantee of **strong nomenclatural stability** in zootaxonomy, which will be applauded by most users of classifications who are not specialists of the zoological groups at stake. It will facilitate the communication between taxonomists and non-taxonomists, whereas the recent permanent changes in suprageneric zoological taxonomies tends to discourage non-specialists and to develop a bad image of taxonomy and nomenclature in the biological community at large. Furthermore, as we will see below, it does not impede in the least the implementation of drastic changes in classifications whenever genuine discoveries or changes in phylogenetic hypotheses occur (e.g., the recent recognition of the *Odontobatrachidae*).

2.4.5.2.1.3. Consequences of the use of this Criterion

Implementation of this Criterion in the three orders of extant amphibians provided the following three lists of 36 FS nomina which, having in each order a number of usages above the upper quartile, or above 90 % for the period 2000–2014 (marked [Q+] below), must apply at least to a family:

Order **Anura** (24): *Bombinatoridae*; *Brachycephalidae*; *Bufonidae*; *Centrolenidae*; *Dendrobatidae*; *Discoglossidae*; *Heleophrynidae*; *Hemiphractidae*; *Hemisotidae*; *Hylidae*; *Hyperoliidae*; *Leiopelmatidae*; *Leptodactylidae*; *Megophryidae* [Q+]; *Microhylidae*; *Myobatrachidae*; *Pelobatidae*; *Pelodytidae*; *Pipidae*; *Ranidae*; *Rhacophoridae*; *Rhinodermatidae*; *Rhinophrynidae*; *Sooglossidae*.

Order **Gymnophiona** (3): *Caeciliidae*; *Ichthyophiidae*; *Rhinatrematidae*.

Order **Urodela** (9): *Ambystomatidae*; *Amphiumidae*; *Cryptobranchidae* [Q+]; *Hynobiidae*; *Plethodontidae*; *Proteidae*; *Rhyacotritonidae* [Q+]; *Salamandridae*; *Sirenidae*.

2.4.5.2.2. Criterion [STC]: the 'Sister-Taxa Criterion'

2.4.5.2.2.1. Statement of Criterion

**"In any given cladonomy, parordinate taxa (i.e., taxa that are considered sister-taxa according to the cladistic hypothesis adopted) should always be attributed to the same nomenclatural rank."**

2.4.5.2.2.2. Rationale and use of this Criterion

This Criterion applies to all pairs of taxa resulting from a dichotomy but also to all taxa involved in a polytomy as long as their relationships are partially unresolved. Although very simple in its formulation, and deriving directly from the basic principles of 'phylogenetic taxonomy', this Criterion is very rarely used in recent taxonomic works. In fact, apart from the works of Lescure *et al.* (1986), Dubois (2005*b*, 2006*a*) and Dubois & Raffaëlli (2009, 2012), we are not aware of any comprehensive taxonomic work dealing with the amphibians where it would have been consistently implemented. This has important consequences on the taxonomic hierarchies used by most authors and in most revisionary works, taxonomic and faunistic checklists and databases. Striking examples of ignorance of this Criterion can be found in Bossuyt & Milinkovitch (2001), Frost *et al.* (2006), Grant *et al.* (2006), Zhang *et al.* (2008), Van Bocxlaer *et al.* (2009), Blackburn & Wake (2011) or Vieites *et al.* (2011), as well as in many other recent works. All these taxonomies fail to follow consistently this Criterion and qualify therefore at least in part as 'gradist' and 'pseudo-ranked' because they afford higher ranks to some sister-taxa than to others for mere reasons of 'anagenetic divergence' or 'geological age'—or sometimes only of 'tradition', which is even less justifiable scientifically.

Although it applies at all ranks, the consequences of the Criterion [STC] are particularly important regarding the use of the rank family in zoological nomenclature. Whereas the Criterion [UQC] requires that in our taxonomy all the family-series UQ-nomina be used as valid at the rank family, it does not state for which taxa. In some groups, when the hierarchy required by the structure of the phylogeny counts few ranks, there is no choice and the rank family will apply to the only taxon of the FS that has to be recognised. But in other cases, when the hierarchy is expanded, this nomen will apply to several taxa at different ranks which all include its nucleogenus (e.g., *Ranoidea*, *Ranidae*, *Raninae*, *Ranini*, *Ranina*, which are all ***paronyms*** of the same FS nomen based on the GS nomen *Rana*). In such cases, the Criterion [STC] requires that the paronym of rank family be attached to a taxon parordinate to a familial UQ-nomen. This is because the rank family is crucial in the taxonomy of a group, and its use is more informative if it is given to a taxon having a sister-taxon than to a taxon having none. As we have seen, the fully expanded taxonomy presented here will be seldom mentioned, and many authors will only mention the ranks which they view as 'the most important', like order, family and genus, and sometimes superfamily and subfamily. So recognising taxonomically a dichotomy at the rank family is more informative than having a redundancy here.

The first consequence of consistent use of the Criterion [STC] is therefore that all the taxa which turn out to be, under the phylogeny adopted, sister-taxa of the families adopted under the Criterion

[UQC], must also be recognised as families. The second consequence is that this also applies to their ***getendotaxa*** (immediate subordinate taxa) and to their ***getangiotaxa*** (immediate superordinate taxa), and step by step this applies to many taxa in the hierarchy. Thus, combined with the Criterion [UQC], the application of the Criterion [STC] allows to fix the ranks of an important proportion of nomina in a given ergotaxonomy.

In the present work, this Criterion was followed strictly for all suprageneric nomina/taxa, whatever its consequences regarding 'usage' and 'consensus'.

#### 2.4.5.2.2.3. Examples of use of this Criterion

The following examples concern cases of taxa which, according to our data, require erection of a taxon of higher rank to account for the fact that they are parordinate to taxa including numerous species and supraspecific taxa.

As tackled above, the current treatment in the literature of the concept of genus is highly heterogeneous. This is particularly striking in the cases where a 'cladistically isolated' species is found to be parordinate to a well-supported branch containing several, or sometimes many, species. There is no general treatment of this situation in the current generic ergotaxonomy of amphibians. In some cases, the 'external' species is referred to its own monospecific genus and all the other ones to their own genus, whereas in other cases they are incorporated into the same genus as the other ones. In general, this difference of treatment reflects mostly 'tradition' but is not justified by any non-cladistic Criterion, such as phenetic divergence or hypothesised geological age. In several cases in the present work, in agreement with the diagnogenus concept mentioned above, we supported the recognition of a distinct genus for the 'external' species when the latter can be easily diagnosed from the larger genus by clear external morphological characters and/or occupancy of a distinct ecological niche, or even by fully disjunct geographical distribution: this is the case for *Leioaspetos vs*. *Leiopelma*, *Ammoryctis vs*. *Alytes*, *Pelodytopsis vs*. *Pelodytes* or *Boreorana vs*. *Lithobates*. The respective situations of the two genera in each pair are similar to those of other pairs currently accepted by the international community such as *Latonia vs. Discoglossus*, *Blythophryne vs*. *Bufoides*, *Chaltenobatrachus vs*. *Atelognathus* or *Urspelerpes vs*. *Eurycea*.

The species *Ceuthomantis smaragdina* appears in *TREE* as the only sequenced representative of a small group of six species in two genera that constitute one of the two branches resulting from a node having a support of 100 %. In *TREE*, the sister-branch of this group includes 482 species in 29 genera and 23 suprageneric taxa of **Amphibia**. Nevertheless, despite their huge disparity, both branches should be recognised as taxa of the same rank, i.e., family in this case (respectively *Ceuthomantidae* and *Brachycephalidae*) to comply with the [STC].

Although it has been a long time since Laurent (1943*b*) showed that the 'traditional' family *Rhacophoridae* was an arboreal specialised group of *Ranidae*, long confused with the *Hyperoliidae*, and that the latter family occupies a similar situation relative to the *Arthroleptidae*, both families *Rhacophoridae* and *Hyperoliidae* have remained in use in taxonomic works since then and they are now part of the upper quarter, so they should be stabilised at familial rank, and the same should apply to the families *Ranidae* and *Arthroleptidae*. In contrast, this does not apply to the nomen *Mantellidae*, which has been used for a taxon of rank family only recently and not universally, and does not appear in the upper quarter.

The two salamander genera *Siren* and *Pseudobranchus* are the only living representatives of one of the three branches of a trichotomy. Although the other two branches include many more species, genera and suprageneric taxa, the three branches must be attributed to the same rank, which in this case is suborder to comply with the Criterion [STC].

#### 2.4.5.2.2.4. Consequences of the use of this Criterion

Implementation of this Criterion in the three orders of extant amphibians provided the following two lists of 17 FS nomina that, being parordinate with FS nomina above the upper quartile for each order, must apply at least to a family (preceded below by the nomina of their sister-families between square brackets, followed by →):

Order **Anura** (16): [*Brachycephalidae* →] *Ceuthomantidae*; [*Bufonidae* →] *Odontophrynidae*; [*Centrolenidae* →] *Allophrynidae*; [*Dendrobatidae* →] *Aromobatidae*; [*Discoglossidae* →] *Alytidae*; [*Hemisotidae* →] *Brevicipitidae*; [*Hylidae* →] *Phyllomedusidae*; [*Hyperoliidae* →] *Arthroleptidae*; [*Leiopelmatidae* →] *Ascaphidae*; [*Leptodactylidae* →] *Leiuperidae*, *Paratelmatobiidae* and *Pseudopaludicolidae*; [*Microhylidae* →] *Phrynomeridae*; [*Myobatrachidae* →] *Calyptocephalellidae*; [*Rhinodermatidae* →] *Telmatobiidae*; [*Sooglossidae* →] *Nasikabatrachidae*.

Order **Gymnophiona** (1): [*Ichthyophiidae* →] *Uraeotyphlidae*.

The Criterion [STC] therefore allows to fix the ranks of 17 families additional to the 36 which had been settled by the Criterion [UQC]. There remain then only 16 unsettled situations, which will be settled by the following Criteria.

### 2.4.5.2.3. Criterion [CPC]: the 'Conflict of Precedence Criterion'

#### 2.4.5.2.3.1. Statement of Criterion

**"In any given cladonomy, whenever a taxon that could be cladistically subordinate to a UQ-nomen has nomenclatural precedence over it according to the Criterion [NPC], it should be raised to the rank family as parordinate to the UQ-nomen at stake."**

#### 2.4.5.2.3.2. Rationale and use of this Criterion

The Criteria that we devised to attribute the ranks to taxa in *CLAD* are not meant at replacing or ignoring the basic Rules of the *Code*, in particular those of precedence among nomina for validity. They must be compatible with them and respect them. Therefore, the fact that the Criterion [UQC] requires to recognise a nomen as valid at the rank family cannot lead to affording it precedence over another nomen which according to the Rules has **nomenclatural** precedence over it, but to accept both nomina as valid at the rank family. This then requires to upgrade both of them as sister-taxa from a lower rank which would be compatible with *TREE* up to the rank family, and then to adapt the ranks of taxa superordinate and subordinate to them.

#### 2.4.5.2.3.3. Consequences of the use of this Criterion

Five taxa were raised at the rank family in order to be parordinate to UQ-families as their nomina had precedence over them (the latter are mentioned after them in the following list):

Order **Anura** (4): *Alytidae* (*Discoglossidae*); *Arthroleptidae* (*Hyperoliidae*); *Brevicipitidae* (*Hemisotidae*); *Telmatobiidae* (*Rhinodermatidae*).

Order **Urodela** (1): *Cryptobranchidae* (*Hynobiidae*).

### 2.4.5.2.4. Criterion [NRC]: the 'Non-Redundancy Criterion'

#### 2.4.5.2.4.1. Statement of Criterion

**"In any given cladonomy, within a given nominal-series, redundant taxa, i.e., having the same intension and extension as their immediate superordinate or subordinate taxon, should be avoided if possible. If allowed by the data, subordinate taxa should be divided in two sister-taxa of the same rank (see Criterion [STC]). This Criterion does not apply automatically to taxa belonging to different nominal-series, if one of the ranks involved in the redundancy is one of the seven mandatory ranks (see text and Criterion [MRC]). It applies to taxa of the rank family relatively to their just superordinate taxon, except in the situation where this rank corresponds hierarchically to an unresolved polytomy (see Criterion [NTC])."**

2.4.5.2.4.2. Rationale and use of this Criterion

Under the taxonomic paradigm adopted here, the purpose of the use of ranks is not to carry any message regarding the characters of the taxa, their 'degree of anagenetic divergence', their age or any other biological or historical information. Ranks as we use them are useful only for two reasons: {q1} to reflect the topology of *TREE* and in particular to identify sister-taxa; {q2} additionally, but mostly in the case of the four mandatory ranks used in the present work (species, genus, family, order), to facilitate storage and retrieval of taxonominal information. So, except in the latter case, there is no need to recognise taxa at all ranks in all classifications. The only useful taxa and ranks in a given cladonomy are those which correspond to well-supported dichotomies (or by default polytomies) in *TREE*. As discussed already above in the case of the family *RHINOPHRYNIDAE* which contains a single genus *Rhinophrynus* and a single species *Rhinophrynus dorsalis*, as long as no additional species or subspecies of this group are recognised, there is no need to recognise redundant taxa like subfamily, tribe, subgenus or subspecies. Applied to taxa, the term ***redundant*** is understood here strictly as meaning coordinated taxa at different ranks sharing the same intension and extension.

This suggests that redundant taxa (and therefore ranks) should be banned from phylogenetic taxonomy. But there is a limitation to this Criterion: it should apply only **within** nominal-series, not **between** them, as if it were not the case it would be impossible to have monospecific genera, monogeneric families or monofamilial orders, situations which are quite frequent and justified in zootaxonomy, and accounted for in the next Criterion [MRC].

This Criterion has important consequences in several cases. It avoids the useless recognition of redundant taxa and therefore results in ***nomenclatural*** and ***taxonomic parsimony*** (see Dubois 2006*a–c*, 2007*a*, 2008*f*). For example, if a rather isolated group (having no close relatives) is composed of two sister-genera, according to the Criterion [NRC] it is not justified to erect for them two distinct families, even if these genera have been cladistically separated 'long ago' or if they show a 'strong anagenetic divergence'. Such Criteria would be relevant only if nomenclatural ranks were taxonomic categories and had the function to carry information on phenetic divergence or on the chronology of evolutionary events but, if they are regarded as carrying only information on the structure of the tree, the two families carry no additional information and are fully redundant with the genera.

Our cladonomy *CLAD* reflects our phylogenetic analysis *TREE*, which is based exclusively on nucleic acid sequencing. For the purpose of completeness and information retrieval, we included the all-fossil taxa of extant amphibians in *CLAD*, but, as stated above, their position there is not supported by such molecular taxa, and we therefore consider it as only tentative. In consequence, we did not take all-fossil taxa into account for the establishment of the ranks of taxa.

Therefore, the Criterion [NRC] forbids redundancy within one nominal-series, but allows it in some cases between different nominal-series. In fact, the strength of tradition in taxonomy is very high, and it may be predicted that, in some cases and possibly for some time only, some authors will prefer to continue to use a well-known superordinate nomen in one nominal-series rather than (or in addition to) a redundant superordinate nomen in the next higher nominal-series. Such ***perissonyms*** can be 'tolerated' for purposes of perpetuation of tradition but they are useless for pure reasons of communication about the structure of the tree and are therefore not justified under the [TCP]. In such cases, to point to this redundancy, we suggest that the nomen of the lowest redundant taxon be written between simple straight quotation marks ('…'), and the corresponding taxon should be removed from the analysis if the cladonomy is used to reconstruct the tree. Although we here point to its possibility, we did not implement this awkward concession to 'tradition' in the present work.

2.4.5.2.4.3. Examples of use of this Criterion

As we have seen, the family *CEUTHOMANTIDAE* contains only two genera and six species, whereas its sister-family *BRACHYCEPHALIDAE* contains more than 500 taxa. As we will see, in *CLAD* these two families together make up the hypophalanx **GAIANURA**, parordinate to two other hypophalanges which are required by the rest of *TREE*. It would be useless to recognise a superfamily *BRACHYCEPHALOIDEA* for these two families, as it would be redundant with the hypophalanx, but if some authors prefer superfamilial nomina, for example because, unlike class-series nomina, these nomina are fully regulated by the *Code*, they should mention this nomen as '*BRACHYCEPHALOIDEA*'. At any rate, as long as it contains a single genus with a single undivided species, the family *Ceuthomantidae* should not have subfamilies or tribes, and its single genus should not have subgenera. This is a common and basic situation in zoological nomenclature, which does not require special comments here.

Nevertheless, consistent implementation of the Criterion [NRC] results in challenging some long established traditions. A good example of this is the case of the salamander genera *Ambystoma* and *Dicamptodon*, already mentioned above (2.2). In various recent works, these two genera are referred to two distinct families, *Ambystomatidae* and *Dicamptodontidae*, but this arrangement does not bring any cladistic information additional to the distinction of two genera. The recognition of a single FS taxon, the family *Ambystomatidae*, for these two genera as well as five all-fossil genera for which we have no molecular cladistic information, is enough to provide the information available. This family should be divided in two subfamilies only if one of the three additional pieces of information became available: {r1} erection of a third new genus of extant ambystomatid (based on an explicit genus concept), resulting either {r1a} from a splitting of the genus *Ambystoma* or of the genus *Dicamptodon* in two or more distinct genera or {r1b} from genuine discovery of a new extant species sister to all other members of one of these two genera; or {r2} obtention of reliable data allowing to refer the all-fossil genera or at least one of them to the same branch as either *Ambystoma* or *Dicamptodon*. As long as this is not the case, the two extant and five fossil genera should be referred to a single getangiotaxon, the family *Ambystomatidae*, sister to the *Salamandridae*.

In most cases, redundancy between taxa referred to different nominal-series can be avoided by suppressing one of the two redundant taxa. This will doubtless be seen by some authors as a problem, even if they adopt our taxonomy, in the case of sister-families that together make up a class-series taxon, and they may thus perpetuate the 'tradition' in this respect. For example, although unnecessary from the viewpoint of the transcription of *TREE* into a taxonomic hierarchy, it is quite possible that some taxonomists may wish to continue to use the superfamilial nomen *Pipoidea* for the taxon including the two extant families *Pipidae* and the *Rhinophrynidae*, as subordinate to the nomen of hypoordo **Dorsipares**, although both nomina **Dorsipares** and *Pipoidea* are redundant. In such cases, in order to point to this imprecision, we suggest that the superfamilial nomen be written '*Pipoidea*'.

2.4.5.2.4.4. Consequences of the use of this Criterion

This Criterion allowed to validate 17 family nomina in our work:

Eleven families were validated for being parordinate of UQ-families (the latter are mentioned after them in the following list):

Order **Anura** (9): *Allophrynidae* (*Centrolenidae*); *Aromobatidae* (*Dendrobatidae*); *Ascaphidae* (*Leiopelmatidae*); *Calyptocephalellidae* (*Myobatrachidae*); *Ceuthomantidae* (*Brachycephalidae*); *Nasikabatrachidae* (*Sooglossidae*); *Odontophrynidae* (*Bufonidae*); *Phrynomeridae* (*Microhylidae*); *Phyllomedusidae* (*Hylidae*).

Order **Gymnophiona** (2): *Scolecomorphidae* (*Caeciliidae*); *Uraeotyphlidae* (*Ichthyophiidae*).

Three pairs of families were both validated by this Criterion [NRC]:

Order **Anura** (6): *Astrobatrachidae* and *Nyctibatrachidae*; *Cacosternidae* and *Pyxicephalidae*; *Dicroglossidae* and *Occidozygidae*.

## 2.4.5.5.5. Criterion [MRC]: the 'Mandatory Rank Criterion'

2.4.5.2.5.1. Statement of Criterion

**"In any given cladonomy, all zoological species recognised as valid should be referred formally (at least provisionally) to one taxon of the following mandatory taxonominal ranks: genus, family, order, class, phylum and kingdom."**

2.4.5.2.5.2. Rationale and use of this Criterion

The rationale for this Criterion was explained above and is illustrated in Figure **F1.MOR**. According to this Criterion, all terminal taxa (species or subspecies) recognised in any ergotaxonomy must be referred at least to four taxa attributed to the four ***mandatory ranks*** of the zootaxonomic hierarchy concerned by the present work: species, genus, family and order. This can be put differently in stating that, in any given taxonomic hierarchy to which a species is referred, there should always exist at least one taxon at each of these four ranks, even if it has no known sister-taxon and even if this implies nomenclatural redundancy with taxa in other nominal-series. So, it is unacceptable to have a genus or a group of genera directly included in a taxon of rank order. A family must always be recognised between the order and the genus/genera, even if this family is redundant with the order and/or the genus, i.e., if it has the same intensional definition and the same taxonomic content (extension) as the latter. This is required for purposes of information storage and retrieval in databases, not of cladistic information.

2.4.5.2.5.3. Examples of use of this Criterion

Among the frogs including the genus *Pelobates*, the Criterion [UQC] requires to recognise two families, the *Pelobatidae* and *Pelodytidae*. These two families are not sister-taxa, the cladistic relationships established by *TREE* among these frogs being as follows: (*Scaphiopus*)(*Pelodytes* (*Pelobates*+*Megophrys*)). Climbing up *TRE*E from the genera, the taxon including the genus *Pelobates* must be recognised first as the family *Pelobatidae*, and its sister-taxon including the genus *Megophrys* as the family *Megophryidae*. Together, the *Pelobatidae* and the *Megophryidae* make up a superordinate taxon, the epifamily *Pelobatoidae*, parordinate to the *Pelodytoidae* which include the single family *Pelodytidae*. Altogether, the *Pelobatoidae* and the *Pelodytoidae* constitute the superfamily *Pelobatoidea*, which is sister to the *Scaphiopodoidea*. This superfamily includes only two extant genera, but these cannot be directly placed in the superfamily: a taxon *Scaphiopodidae* at the mandatory rank family must be recognised between the genera and the superfamily, despite being fully redundant with the latter.

Note that in this case the Criterion [STC] requires to recognise an epifamily *Pelodytoidae* for the single family *Pelodytidae*, but that there is no such requirement for the family *Scaphiopodidae*, which should be referred directly to the superfamily *Scaphiopodoidea*, without intermediate rank epifamily. This case exemplifies the fact that the concept of 'consistent-hierarchy' does not imply necessarily that all successive ranks be represented in all the branches of a tree.

2.4.5.2.5.4. Consequences of the use of this Criterion

Implementation of this Criterion in the three orders of extant amphibians provided the following list of 17 FS nomina that need to apply at least to a family:

Order **Anura** (17): *Cacosternidae*; *Ceratobatrachidae*; *Ceratophryidae*; *Conrauidae*; *Cycloramphidae*; *Dicroglossidae*; *Ericabatrachidae*; *Micrixalidae*; *Nyctibatrachidae*; *Occidozygidae*; *Odontobatrachidae*; *Petropedetidae*; *Phrynobatrachidae*; *Ptychadenidae*; *Pyxicephalidae*; *Ranixalidae*; *Scaphiopodidae*.

2.4.5.2.6. Criterion [NTC]: the 'Nomenclatural Thrift Criterion'

2.4.5.2.6.1. Statement of Criterion

**"In any given cladonomy, whenever according to the data the rank family should be granted to several taxa forming together an unresolved polytomy (more than two sister-taxa), a single family should be provisionally recognised and the polytomy should be downgraded to the rank subfamily."**

2.4.5.2.6.2. Rationale and use of this Criterion

The purpose of our work is to homogenise and clarify the hierarchical relationships between taxa and nomina to make them compatible with our current cladistic hypotheses. But we are conscious that the latter are labile and will change in the future, when more species have been collected, distinguished and sequenced and molecular data obtained for more complete genomes. Because out threshold Criteria are quite demanding, we recognise nodes only when the support for them is robust and quite unlikely to change easily. But in many cases our data do not allow complete resolution of the relationships among closely related taxa.

In *TREE*, suprageneric nodes supported by our *a priori* threshold are of two kinds: 'suprageneric' and 'infrageneric' (or 'intrageneric') ones. Because of the absence of an explicit 'genus concept' followed consensually by current amphibian taxonomists, this distinction is largely arbitrary. As we decided to comply with the current generic classifications of extant amphibians (with a few exceptions) and with the non-recognition of subgenera by most recent authors (which derives in part from their non-recognition in the database *ASW* <2020*a*>), we did not recognise taxonomically (and therefore nomenclaturally) the well-supported nodes of the second kind. This is a provisional situation which will hopefully be improved when more solid concepts and Criteria are adopted by the community for the taxonomic category genus.

After exclusion of the nodes whose support is beyond our threshold, and of the nodes which are considered as infrageneric, there remain 393 nodes in our *TREE* (Table **T13.NOD**). Among them, 278 (70.7 %) are dichotomies and 115 (29.3 %) are polytomies (from trichotomies, with three branches, to enneatomies, with nine branches). All these nodes are recognised as suprageneric taxa, and each of them includes at least two genera. Besides, 214 suprageneric taxa are recognised for '***achotomic***' branches, i.e. branches that do not include any suprageneric dichotomy or polytomy but that are sister-branches to dichotomic or polytomic branches. On the whole, therefore, 214 suprageneric taxa (35.3 %) include a single genus, 278 (45.8 %) include at least two subordinate suprageneric taxa and 115 (18.9 %) from three to nine such taxa.

Except for dichotomies, the 115 polytomies mentioned above have vocation to be resolved in the future, when more information is available. In order for *CLAD* to remain bijective, each resolution will increase the number of ranks and therefore of taxa that will have to be recognised. A trichotomy with three genera (A)(B)(C) requires the recognition of only one suprageneric taxon ABC, but its resolution as ((A)(B))(C) requires the recognition of three suprageneric taxa, AB, C and ABC. Therefore, we are confident that, except in cases where it will be shown that our *TREE* included genuine errors (of taxonomic identification of specimens or of sequencing, alignment or analysis), the number of taxa that will have to be recognised in order to keep a bijective suprageneric taxonomy will increase as compared to our scheme, and that most of the nomina of suprageneric taxa here recognised as valid will remain so, but at ranks which will be higher than those used here. This led us to introduce in this work 171 new FS suprageneric extant taxa below the rank class (29.8 % of the total of 573 such taxa considered valid in *CLAD*), as we expect them to remain valid, at least for taxonomists interested in having a completely bijective cladonomy.

However, we followed a slightly differential approach in the case of families. This is because the rank family is mandatory over the whole of animal taxonomy and will be used in many works, even having no phylogenetic or taxonomic dimension, and in many databases. Therefore, we refrained from coining new family nomina, or upgrading to the rank family nomina already available, in all the cases where according to the nine Criteria above we should have had a polytomy at the rank family. All polytomies at the rank family should be resolved in the shorter or longer term into several hierarchised taxa: two families, each of which may include two subfamilies, each of which may include two tribes, etc. Recognising all the branches of these polytomies as families would draw the attention to these taxa and give them an undue importance, for example in the light of the Criterion [UQC], and we think that in such cases it is better to wait. This approach called ***nomenclatural thrift*** (Dubois 2019) was implemented here only in the cases of polytomies at the rank family but not at higher or lower ranks.

Therefore, in all cases of polytomies which, according to the structure of *TREE*, should have been recognised as families, we recognised provisionally a single family and we downgraded all the branches/taxa of the polytomy at the rank subfamily. When research progresses, one of these subfamilial nomina will be raised at family rank, except when fully new species are discovered which require the erection of a new family as sister-taxon of that recognised in the present work.

Because of the Criterion [CPC], this procedure cannot be applied if the polytomy at rank family includes a single taxon designated by a UQ-nomen that does not have nomenclatural precedence over one of the other members of the polytomy, or if the polytomy involves two branches corresponding to UQ-nomina or more. In such cases, all the members of the polytomy must be granted the rank family. However, none of these situations occurred in *CLAD*.

**TABLE 13.NOD.** Resolution of suprageneric polytomies among extant lissamphibian taxa in *CLAD* (all-fossil taxa excluded).

Id*,* Identifier of rank or series of ranks. *Abbreviations for higher taxa:* A, **Anura**; G, **Gymnophiona**; U, **Urodela**; L, **Lissamphibia** (A + G + U + *incertae sedis* L). *Categories of tomoidy:* 1, Taxonomic achotomy (a single subordinate genus); 2, Dichotomy (two subordinate taxa of next lower suprageneric rank); 3, Polytomy (three to nine subordinate taxa of next lower suprageneric rank). *Structure of information in each cell:* Abbreviation of higher taxon; Number of nomina of this rank in line [% of sum in line].

| Id | Rank | 1 | 2 | 3 | Total |
|---|---|---|---|---|---|
| **A** | **C.03. Subclassis –** | A: 0 [0] | A: 20 [74.0] | A: 7 [25.9] | A: 27 |
| | **C.13. Hypophalanx** | G: 1 [33.3] | G: 2 [66.7] | G: 0 [0] | G: 3 |
| | | U: 0 [0] | U: 2 [66.7] | U: 1 [33.3] | U: 3 |
| | | L: 1 [2.9] | L: 24 [70.6] | L: 9 [26.5] | L: 34 |
| **B** | *F.14. Superfamilia–* | A: 4 [12.9] | A: 22 [71.0] | A: 5 [16.1] | A: 31 |
| | *F.16. Apofamilia* | G: 0 [0] | G: 2 [100] | G: 0 [0] | G: 2 |
| | | U: 1 [16.7] | U: 5 [83.3] | U: 0 [0] | U: 6 |
| | | L: 5 [12.8] | L: 29 [74.4] | L: 5 [12.8] | L: 39 |
| **C** | *F.17. Familia* | A: 13 [23.6] | A: 27 [49.1] | A: 15 [27.3] | A: 55 |
| | | G: 2 [40.0] | G: 3 [60.0] | G: 0 [0] | G: 5 |
| | | U: 2 [22.2] | U: 6 [66.7] | U: 1 [11.1] | U: 9 |
| | | L: 17 [24.6] | L: 36 [52.2] | L: 16 [23.2] | L: 69 |
| **D** | *F.18. Subfamilia* | A: 28 [35.9] | A: 36 [46.2] | A: 14 [17.9] | A: 78 |
| | | G: 0 [0] | G: 2 [100] | G: 0 [0] | G: 2 |
| | | U: 2 [28.6] | U: 4 [57.1] | U: 1 [14.3] | U: 7 |
| | | L: 30 [34.5] | L: 42 [48.3] | L: 15 [17.2] | L: 87 |
| **E** | *F.19. Tribus* | A: 26 [35.1] | A: 31 [41.9] | A: 17 [23.0] | A: 74 |
| | | G: 1 [25.0] | G: 3 [75.0] | G: 0 [0] | G: 4 |
| | | U: 1 [9.1] | U: 8 [72.7] | U: 2 [18.2] | U: 11 |
| | | L: 28 [31.5] | L: 42 [47.2] | L: 19 [21.3] | L: 89 |
| **F** | *F.20. Subtribus* | A: 32 [45.7] | A: 27 [38.6] | A: 11 [15.7] | A: 70 |
| | | G: 0 [0] | G: 3 [75.0] | G: 1 [25.0] | G: 4 |
| | | U: 8 [44.4] | U: 9 [50.0] | U: 1 [5.6] | U: 18 |
| | | L: 40 [43.5] | L: 39 [42.4] | L: 13 [14.1] | L: 92 |
| **G** | *F.21. Infratribus* | A: 27 [52.9] | A: 17 [33.3] | A: 7 [13.7] | A: 51 |
| | | G: 0 [0] | G: 3 [75.0] | G: 1 [25.0] | G: 4 |
| | | U: 3 [30.0] | U: 5 [50.0] | U: 2 [20.0] | U: 10 |
| | | L: 30 [46.2] | L: 25 [38.5] | L: 10 [15.4] | L: 65 |
| **H** | *F.22. Hypotribus* | A: 13 [43.3] | A: 10 [33.3] | A: 7 [23.3] | A: 30 |
| | | G: 2 [50.0] | G: 2 [50.0] | G: 0 [0] | G: 4 |
| | | U: 4 [40.0] | U: 1 [10.0] | U: 5 [50.0] | U: 10 |
| | | L: 19 [43.2] | L: 13 [29.5] | L: 12 [27.3] | L: 44 |
| **I** | *F.23. Clanus* | A: 10 [47.6] | A: 6 [28.6] | A: 5 [23.8] | A: 21 |
| | | G: 0 [0] | G: 0 [0] | G: 0 [0] | G: 0 |
| | | U: 5 [45.5] | U: 5 [45.5] | U: 1 [9.1] | U: 11 |
| | | L: 15 [46.9] | L: 11 [34.4] | L: 6 [18.8] | L: 32 |
| **J** | *F.24. Subclanus –* | A: 26 [52.0] | A: 14 [28.0] | A: 10 [20.0] | A: 50 |
| | *F.27. Catoclanus* | G: 0 [0] | G: 0 [0] | G: 0 [0] | G: 0 |
| | | U: 3 [50.0] | U: 3 [50.0] | U: 0 [0] | U: 6 |
| | | L: 29 [41.1] | L: 17 [23.5] | L: 10 [35.3] | L: 56 |
| **A–J** | **TOTAL TAXA** | A: 179 [36.8] | A: 210 [43.1] | A: 98 [20.1] | A: 487 |
| | **C.03. Subclassis –** | G: 6 [21.4] | G: 20 [71.4] | G: 2 [7.1] | G: 28 |
| | *F.27. Catoclanus* | U: 29 [31.9] | U: 48 [52.7] | U: 14 [15.4] | U: 91 |
| | | L: 214 [35.3] | L: 278 [45.8] | L: 115 [18.9] | L: 607 |
| **A–J** | **TOTAL NODES** | – | A: 210 [68.2] | A: 98 [31.8] | A: 308 |
| | **C.03. Subclassis –** | | G: 20 [90.9] | G: 2 [9.1] | G: 22 |
| | *F.27. Catoclanus* | | U: 48 [77.4] | U: 14 [22.6] | U: 62 |
| | | | L: 278 [70.7] | L: 115 [29.3] | L: 393 |

2.4.5.2.6.3. Consequences of the use of this Criterion

This Criterion applies to four family nomina in our work, two of which are UQ-nomina.

Order **Anura** (4): *Ceratobatrachidae*; *Cycloramphidae*; *Hemiphractidae* [Q]; *Leptodactylidae* [Q].

### *2.4.6. Implementation of the [TCP] and rank attribution of suprageneric taxa*

The ten Criteria detailed above allow to fix the ranks in any given cladonomic hierarchy in an objective and repeatable manner. Some of these Criteria, like the [UQC] or the [MRC], are doubtless arbitrary, but if adopted by the community of taxonomists and used consistently, they would allow two independent taxonomists, working in different places on the globe and having no contact with each other, to come out with the same taxonomic hierarchy, the same taxa and the same nomina if they start from the same tree, and this cladonomy could be transcribed automatically exactly into the same tree by anyone despite having never seen this tree previously.

In order for this Ten Criteria Procedure to be fully clear to all readers, after a summary of the latter, we detail below a few hypothetical and real (based on *TREE*) examples of their implementation in a few different situations, and then on the use of the nomenclatural Rules reminded above.

#### *2.4.6.1. A general summary of the Ten Criteria Procedure [TCP]*

In order to be successful, the Ten Criteria Procedure of assignment of ranks to suprageneric taxa in a given zoological group should follow a series of steps. Until a software is devised and made available allowing an automation of this procedure, it has to be implemented ‘by hand’, which is quite heavy and requires care and attention.

The first important point is that, in our proposed system, the ranks of suprageneric taxa cannot be fixed separately. This fixation must be done altogether for all the suprageneric taxa recognised within a zoological group in a given ergotaxonomy. Any change to this taxonomy required by new data, e.g. through resolving polytomies or correcting errors (e.g. due to misidentification of voucher specimens), must therefore imply, before its implementation, a re-examination of the whole taxonominal hierarchy. The procedure then relies on three basic ‘feet’ which are made possible by the concept of ‘mandatory rank’: the procedure starts from the nomina/taxa attributed to three ‘fixed landmarks’, the mandatory ranks {s1} genus and {s2} order, and {s3} the set of nomina fixed as valid by the Criterion [UQC] for the mandatory rank family.

Regarding orders and genera, as explained above, in our work the attribution of extant amphibian taxa to these two ranks is given by two *a priori* unchallenged (in the present work) facts, i.e. tradition (in the case of the three orders) or current ‘consensus’, even if based on unclear and non-universal concepts and Criteria (in the case of genera). The Ten Criteria Procedure allows to attribute automatically to nomenclatural ranks all the taxa intermediate in the hierarchy between these two references, starting with the rank family and processing from it both upwards and downwards. The taxonominal hierarchy between these two references is composed in fact of two independent and successive hierarchies, in the FS and in the CS. The transition between them does not occur always between the same ranks, depending on the number of ranks implemented in each of them in each section of *TREE*. Let us call ***CS-branch*** (class-series branch) any section of *TREE* below the rank order and above the rank superfamily, ***upper-FS-branch*** (upper-family-series branch) any section of *TREE* below the lowest CS rank and above the rank family, and ***lower-FS-branch*** (lower-family-series branch) any section of *TREE* below the rank family rank and the rank genus. These three kinds of partial hierarchies can be designated collectively as ***NS-branches*** (nominal-series branches).

In order to simplify the presentation below, although the concepts of node (phylogenetic dichotomy or polytomy), taxon (classificatory unit) and nomen (label designating such a classificatory unit) are distinct, for more simplicity they will often be designated collectively here by the expressions ‘node/taxon’ or ‘taxon/nomen’ which mean ‘the node, the taxon designating it and the nomen applying to it’.

To apply this procedure, a number of data and Criteria must be available and respected.

{t1} Some of these steps are general and must be completed before starting the analysis itself:

{t1a} Build up a database of all available genus-series (GS) nomina in the group studied, with their nucleospecies ('type species') and a database of all available family-series (FS) nomina in the group, with their nucleogenera.

{t1b} Build up a database of all the FS nomina of the group ever used as valid at the rank family in at least one of 100 published comprehensive classifications or more since 1758, count their respective numbers of usages, sort them into four quarters and list those belonging in the upper quarter (UQ).

{t1c} Build up a *TREE* showing all the species involved in the cladistic analysis and all the well-supported nodes according to a chosen *a priori* threshold value. Each of these nodes will be recognised in *CLAD* as a suprageneric taxon, including subordinate nodes/taxa and terminal taxa (species).

{t1d} Transcribe exactly the *TREE* into a cladonomic hierarchy *CLAD* of well-supported nodes, from the rank genus upwards, which correspond to more and more inclusive suprageneric taxa recognised in *CLAD* as valid, but at this stage have neither nomina nor ranks. For each of these nodes/taxa, at the end of this procedure, all the parordinate taxa will have to be attributed to the same rank, but at this stage this rank is not known.

Starting from this point, the following steps of the procedure should be followed. This includes 8 points {t2} that have to be followed in all situations, and three points {t3} that have to be applied only in particular situations.

{t2a} ***Upper Quartile Criterion [UQC]***. Point among all the genera considered valid in this group all the genera (or their synonyms) that are nucleospecies of UQ family-series nomina. The Criterion [UQC] requires that, at the end of this procedure, all these family-series nomina will be used as valid at least for one taxon of rank family (and possibly for other subordinate and/or superordinate taxa), but it does not tell us at this stage for which taxa.

{t2b} ***Upper Quartile Criterion [UQC]***. Identify the pairs of UQ-taxa/nomina that appear parordinate at some level in the taxonomic hierarchy of *CLAD*. At the end of this procedure, some of them will remain parordinate, whereas others will not, if they must be referred to different superordinate taxa.

{t2c} ***Consistent Hierarchy Criterion [CHC]***, ***Sister-Taxa Criterion [STC]*** and ***Family-Series Precedence Criterion [FPC]***. Identify the lowest ranked pair(s) (LRP) of parordinate UQ-taxa/nomina at rank family, i.e. the one or those which in *CLAD* has/have the highest number of superordinate taxa/nomina below order. This/these lowest ranked pair(s) of UQ-nomina will provide the upward hierarchy of ranks superordinate to it/them used in *CLAD*: the suprafamilial FS ranks (in the upper-FS-branch) should be fixed in order to saturate the FS (i.e., using the ranks apofamily, epifamily and superfamily) if enough ranks are available, and then the hierarchy of CS ranks (in the CS-branch) should be implemented if more ranks are needed.

{t2d} ***Sister-Taxa Criterion [STC]***, ***Non-Redundancy Criterion [NRC]*** and ***Upper Quartile Criterion [UQC]***. In each branch subordinate to a parordinate taxon/nomen resulting from {t2c}, the rank family should be attributed to the highest ranked taxon and its parordinate taxon/a, except if the [NTC] requires to attribute it to a lower ranked taxon.

{t3a} ***Nomenclatural Thrift Criterion [NTC]***. Check that, in the nomenclature adopted following the preceding Criteria, there does not exist any polytomy at the rank family. If such a polytomy exists, recognise it taxonomically as a single family, even if this is contradictory with the [NRC] (i.e., if this family is redundant with its superordinate super-, epi- or apofamily), and downgrade all the other 'families', and by way of consequence all their subordinate taxa, by one rank.

{t3b} ***Family-Series Precedence Criterion [FPC]***. If there remain some unnamed taxa in *CLAD*, name them and, if their allotment to the FS or CS is unclear, give precedence to the FS if this is compatible with the other ranks in the hierarchy imposed by the previous steps of this procedure.

{t3c} ***Nomenclatural Precedence Criterion [NPC]*** and ***Conflict of Precedence Criterion [CPC]***. Check that, in the nomenclature adopted following the preceding Criteria, the *Code*'s or DONS Rules of nomenclatural precedence among nomina are respected, and if not correct the nomenclature accordingly.

{t2e} ***Mandatory Rank Criterion [MRC]***. Check that all species/terminal taxa are indeed referred to a taxon of the rank family, and if it is missing implement it, even if it is redundant with a superordinate taxon.

{t2f} ***Non-Redundancy Criterion [NRC]***. Check that, in the taxonomic hierarchy now obtained, there are no redundant taxa (i.e., taxa of different ranks having no parordinate taxa and having the same intension and extension) within the same nominal-series (FS or CS). If such redundant taxa/nomina exist, delete them, except those that are attributed through the implementation of the [NTC] or of the [MRC].

{t2g} ***Consistent Hierarchy Criterion [CHC]***. Proceed similarly for the downward hierarchies below each taxon/nomen fixed at the rank family in {t2b}, {t2d}, {t2e} and {t3} and below each of their parordinate taxon/nomen.

{t2h} ***Consistent Naming Criterion [CNC]***. Check that all nodes/taxa in *TREE* have been allocated a nomen and attributed a rank, and that the hierarchy of ranks is consistent, with all parordinate taxa sharing the same rank. If this is not the case, go back step by step in the procedure until the source of the error has been found and corrected.

Theoretical and real examples will allow to illustrate this procedure and point to some of its possible traps.

### *2.4.6.2. Theoretical examples*

Let us start with two examples based on two hypothetical partial trees shown in Figures **F4.TCP-1** and **F5.TCP-2**. Both concern 22 genera and show only well-supported nodes according to our threshold. The hypothesised phylogenetic relationships are the same in the upper part of both examples (genera G1 to G10), so that the taxa and the taxonomic hierarchies in this part are also the same in both cases, but they are different in the lower part (genera G11 to G22). These examples illustrate the importance of the Ten Criteria Procedure, and particularly in this case of the Upper Quartile, Sister-taxa and Nomenclatural Thrift Criteria, in fixing the ranks of taxa.

#### 2.4.6.2.1. Example T1

This case is shown in the partial tree of Figure **F4.TCP-1**. The following steps allow to attribute ranks and allocate nomina to all the nodes/taxa of this partial tree between the 22 genera G1 to G22 and the order MO1.

{t2a} In **TCP-1**, four FS nomina QF1, QF2, QF3 and QF4, based respectively on the nucleogenera G1, G5, G11 and G16, belong in the Upper Quarter of usages. These four UQ- nomina must therefore be allocated to four taxa attributed to the rank family, and possibly to others if required by the Principle of Coordination.

{t2b} Among the sister-taxa relationships shown in Figure **F4.TCP-1**, two involve pairs of parordinate UQ-taxa/nomina: QF1 and QF2, and QF3 and QF4. The family QF1 is therefore defined as including G1–G3 and its sister-family QF2 as including G4–G6. The family QF3 is defined as including G11–G15 and its sister-family QF4 as including the single genus G16.

{t2c} There are five infraordinal ranks above the pair QF1 and QF2 whereas there are only four above QF3 and QF4. Therefore, according to the [FPC], the taxonominal hierarchy above the first of these two pairs provides the family-series saturation: the taxa/nomina at the five ranks between these two families and the order MO1 are fixed first at the three suprafamilial ranks in the FS (HA1, HE1 and HP1) and then in the CS (HI1 and HU1). This applies also to their parordinate taxa/nomina (SA2, SE2 and SP2 in the FS; SI2 and SU2 in the CS).

{t2d} The families QF3 and QF4 are subordinate to four infraordinate taxa. In this hierarchy, the ranks HU1, HI1 and SP2 are imposed by the hierarchy above the pair of families QF3-QF4. Therefore, the taxon below the superfamily SP2 and above the families QF3 and QF4 must be attributed to the rank epifamily (see Table **T2.SEQ**) as DE3, and this also applies to its sister-taxon SE4, including the genera G17 and G18.

{t3a} This step has been respected.

{t3b} to {t3c} These steps are irrelevant here.

{t2e} So far, the genera G7–G10 and G17–G22 have not been referred to any taxon at family rank. According to the [MRC], six additional families should be recognised for these 10 genera. Two of them, DF5 and DF6, are sister-families, but the other four, MF7, MF8, MF9 and MF10 have no sister-families. They must nevertheless be recognised, although they are redundant with their immediate superordinate taxa which belong for the first two of them in the same nominal-series (the FS), and for the other two in a different nominal-series (the CS).

{t2f} There are only two redundant taxa within the FS in this cladonomy, MF7 and MF8, and both are imposed by the [MRC].

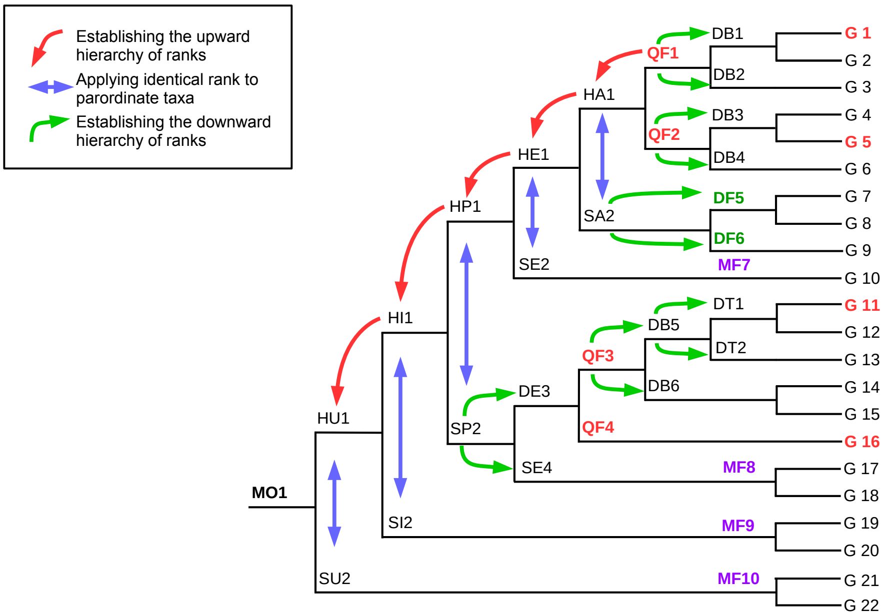


**FIGURE 4. TCP-1.** The Ten Criteria Procedure. Example T1.

Meaning of letters in identifiers for nomina/taxa:

*Two-letter identifiers*: First of two letters (using the Ten Criteria Procedure for the rank attribution of the nomen/taxon): D, downward hierarchy; H, upward hierarchy; M, mandatory rank; Q, upper quartile; S, sister-taxon.

Second of two letters (rank attributed to nomen/taxon through the Criteria [CHC], [STC] and [MRC]): A, apofamilia; B, subfamilia, E, epifamilia; F, familia; I, infraordo; O, ordo; P, superfamilia; R, subtribus; T, tribus; U, subordo. Colours for families: red, nomen attributed to this rank through the Upper Quartile Criterion; green, nomen attributed to this rank through downward hierarchy; violet: nomen attributed to this rank through the Mandatory Rank Criterion.

*Single letter identifiers (rank of nomen/taxon)*: G, genus.

Generic identifiers in red refer to genera which are nucleospecies of family-series nomina belonging in the Upper Quarter of usages.

{t2g} The downward hierarchy requires to recognise the subordinate taxa DB1 to DB6, and DT1 and DT2.

{t2h} This step has been respected.

In conclusion, this case is quite simple and straightforward, as the ranks of all the suprageneric nodes/taxa derive automatically, through parordination, superordination or subordination, from four pieces of information, the fact that the nomina QF1, QF2, QF3 and QF4 are part of the Upper Quarter of usages. Additionally, in this case two family taxa/nomina are redundant with their immediate superordinate FS taxa. As a consequence, the cladonomy derived from this information requires the recognition of 10 families in this partial tree. Note that this conclusion derives only from the implementation of the *a priori* Criteria defined above, and did not indulge any subjective decision.

### 2.4.6.2.2. Example T2

This case is shown in the partial tree **F.TCP-2**. The following steps allow to attribute ranks and allocate nomina to all the nodes/taxa of this partial tree between the 22 genera G1 to G22 and the order MO1. Contrary to the preceding, this example applies the Nomenclatural Thrift criterion [NTC].

{t2a} In **TCP-2**, two FS nomina QF1 and QF2, based respectively on the nucleogenera G1 and G5, belong in the Upper Quarter of usages. These two UQ-taxa/nomina must therefore be attributed to two taxa attributed to the rank family, and possibly to others if required by the Principle of Coordination.

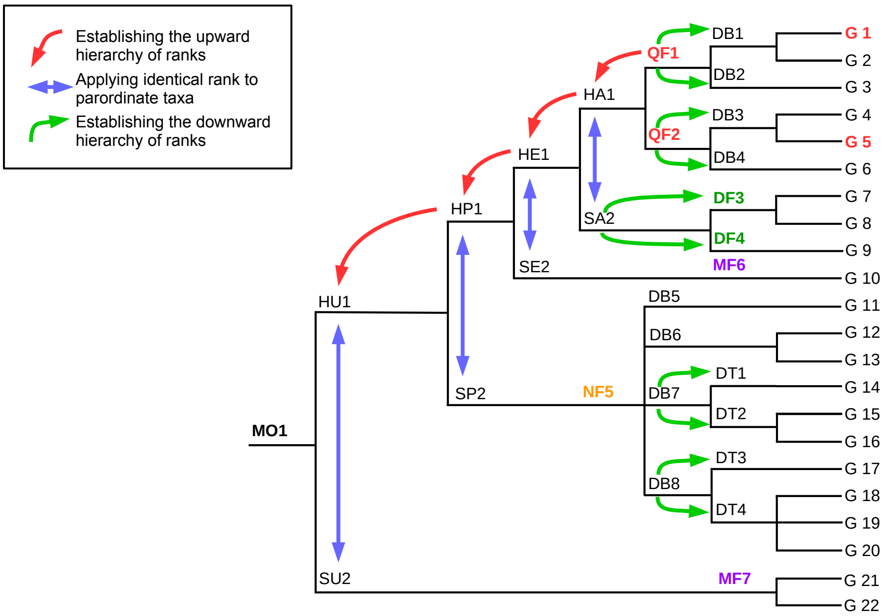


**FIGURE 5. TCP-2.** The Ten Criteria Procedure. Example T2.
Meaning of letters in identifiers for nomina/taxa:
*Two letter identifiers*: First of two letters (using the Ten Criteria Procedure for the rank attribution of the nomen/taxon): D, downward hierarchy; H, upward hierarchy; M, mandatory rank; N, nomenclatural thrift; Q, upper quartile; S, sister-taxon.
Second of two letters (rank attributed to nomen/taxon through the Criteria [CHC], [STC] and [MRC]): A, apofamilia; B, subfamilia, E, epifamilia; F, familia; I, infraordo; O, ordo; P, superfamilia; R, subtribus; T, tribus; U, subordo.
Colours for families: red, nomen attributed to this rank through the Upper Quartile Criterion; green, nomen attributed to this rank through downward hierarchy; orange: nomen attributed to this rank through the Nomenclatural Thrift Criterion; violet: nomen attributed to this rank through the Mandatory Rank Criterion.
*Single letter identifiers (rank of nomen/taxon)*: G, genus.
Generic identifiers in red refer to genera which are nucleospecies of family-series nomina belonging in the Upper Quarter of usages.

{t2b} Among the sister-taxa relationships shown in Figure **F5.TCP-2**, a single one involves UQ-nomina as parordinate, QF1-QF2. The family QF1 is defined as including G1–G3 and its sister-family QF2 as including G4–G6.

{t2c} There are four infraordinal ranks above the pair QF1-QF2. Therefore, according to the [FPC], the taxonominal hierarchy above this pair provides the family-series saturation: the taxa/nomina at the four ranks between these two families and the order MO1 are fixed first at the three suprafamilial ranks in the FS (HA1, HE1 and HP1) and then in the CS (HU1). This applies also to their parordinate nomina/taxa (SA2, SE2 and SP2 in the FS; SU2 in the CS).

{t2d} At this stage, there remain four main branches for which the position of the rank family has not been fixed: SA2, SE2, SP2 and SU2. No UQ-nomen is available for any of them. The first of these four branches, SP2, includes a dichotomy, one branch of which also includes a dichotomy: the first dichotomy corresponds to the highest ranked taxa subordinate to SA2 and should be taxonomically recognised as a pair of families DF3-DF4. Two other branches include only one genus (G10) or two genera (G21 and G22), but no node/taxon that could be attributed to the family-series: they will be discussed further below. The fourth branch is more complex, as it consists in a tetratomy and includes 10 genera G11–G20. According to the 'normal' situation in {t2d}, the four branches of this tetratomy, which are the highest ranked taxa in the superfamily SP2, should be attributed to the rank family, but this is hindered by the [NTC].

{t3a} As the tetratomy under SP2 is not resolved, the Nomenclatural Thrift Criterion requires to downgrade its four branches at the subfamily level as DB5 to DB8 and to recognise above them a single family NF5, despite the fact that it is redundant within the family-series with the superfamily SP2.

{t3b} This step is irrelevant here.

{t3c} This step cannot be but irrelevant here as we did not take into account the publication dates of the FS nomina in this hypothetical example.

{t2e} This step has been respected.

{t2f} So far, the genera G10, and G21 and G22 have not been allocated to any taxon at family rank. According to the [MRC], two families MF6 and MF7 should therefore be recognised, although they are redundant with their immediate superordinate taxa which belong for the first in the same nominal-series (the family-series), and for the other one in a different nominal-series (the class-series).

{t2g} The downward hierarchy requires to recognise the subordinate taxa DB1 to DB4, and DT1 to DT4.

{t2h} This step has been respected.

Although this case is a bit more complex than the preceding, it is also straightforward, as the ranks of all the suprageneric nodes/taxa derive automatically, through parordination, superordination or subordination, from two pieces of information, the fact that the nomina QF1 and QF2 are part of the upper quartile. Additionally, in this case a family is erected for a polytomy which should 'normally' have been taxonominally accounted for by four parordinate families, the latter being downgraded at the rank subfamily. This family, as well as another one including a single genus, is redundant within the family-series with its immediate superordinate taxon. In conclusion, the cladonomy derived from this information and these Criteria requires the recognition of 7 families in this partial tree. Here also this conclusion derives only from the implementation of the *a priori* Criteria defined above, and did not imply any arbitrary decision.

### *2.4.6.3. Real examples*

#### 2.4.6.3.1. Example R1: the taxonominal hierarchy in the three orders of extant **Lissamphibia**

As we have seen above, the number of ranks is often quite dissimilar in different parts of a tree. According to the Ten Criteria Procedure, the nominal-series and the names of these ranks are determined by the maximum number of suprafamilial and infraordinal ranks between the rank order and the rank family. Therefore, under the [TCP] Criteria the taxonominal hierarchy will have to be fixed independently in each zoological order.

In the subclass **Lissamphibia**, excluding the all-fossil **Allocaudata** whose position in *TREE* and rank are unclear, we recognise three orders including extant species: the **Anura**, **Urodela** and **Gymnophiona**. Let us consider them successfully.

{u1} Example R1a: order **Anura**. In this order, a careful survey of *TREE* and *CLAD* allows to find that the lowest ranked pair (LRP) of parordinate UQ-taxa/nomina fixed at rank family by the [UQC] is the pair *Ranidae*-*Rhacophoridae*. This pair has 11 superordinate taxa below the rank order, which is the highest number in this order. According to the Family-Series Precedence Criterion [FPC] step and the Criterion {t2c} above, this pair will allow to fix the upward hierarchy of ranks superordinate to it. This hierarchy starts in the upper-FS-branch with the three ranks apofamily (*Raneidae*), epifamily (*Ranoidae*) and superfamily (*Ranoidea*), which saturates the family-series, and then follows with eight ranks in the CS-branch, from infraphalanx (**Ecaudata**) to suborder (**Hydrobatrachia**). Starting from this hierarchy and using first the Sister-Taxa Criterion and then all the other Criteria of the [TCP], the ranks of all other taxa of **Anura** derive unambiguously. For example, if we consider the lower-FS-rank between the rank familia (*Ranidae*) and the rank genus (*Rana*), the structure of *TREE* requires to have eight ranks, from subfamilia *Raninae* to infraclanus *Ranitoes*. Therefore the [FPC] is a very parsimonious and powerful Criterion to fix automatically the taxonominal hierarchy in an order.

The same result could have been obtained differently, starting from the genera rather than the pair of families. The generic nomen *Rana* Linnaeus, 1758 is the nucleogenus of the family UQ-nomen *Ranidae* Batsch, 1796. Therefore, *CLAD* has to include a family *Ranidae.* Climbing up *CLAD* above *Rana* leads then first to a series of taxa including this genus and therefore potentially bearing the nomen *Ranidae* under another paronym at a higher rank, then to the UQ-nomen *Rhacophoridae*, based on *Rhacophorus* Kuhl & van Hasselt, 1822. Both *Ranidae* and *Rhacophoridae*, being UQ-nomina, must be recognised as parordinate families, so the common taxon that will include them both will have to be at a higher rank. Above the rank family, to account for all well-supported nodes in *TREE* we need 11 ranks below order: three in the FS above family, the FS ranks being then saturated, and eight in the CS, from infraphalanx to suborder. Below the rank family, we need eight suprageneric ranks. Therefore, altogether, to fix unambiguously the place of *Rana* in *CLAD*, we need to use 22 of the 23 suprageneric ranks that are employed here in the subclassis **Lissamphibia** including all extant amphibians.

{u2} Example R1b: order **Urodela**. The same methodology can be used in this order, where it is much quicker, as the number of genera involved is much lower. In this case, the lowest ranked pair (LRP) of parordinate UQ-taxa/nomina fixed at rank family by the [UQC] is the pair *Amphiumidae-Plethodontidae*. This pair has only 4 superordinate taxa below the rank order, which is the highest number in this order. In order to saturate the family-series, from this pair the hierarchy starts in the upper-FS-branch with the three ranks apofamily (*Amphiumeidae*), epifamily (*Amphiumoidae*) and superfamily (*Amphiumoidea*), and then we only need one rank in the CS-branch, suborder (**Pseudosauria**). These four ranks will therefore be the only suprafamilial ranks used in the **Urodela**.

{u3} Example R1c: order **Gymnophiona**. Finally, if we turn to this order, the number of genera and suprageneric taxa is still much lower. In this order, only three FS-nomina belong in the Upper Quarter: the *Caeciliidae*, *Ichthyophidae* and *Rhinatrematidae*. Among them, the lowest ranked pair is *Caeciliidae-Ichthyophidae*. If we relied on this pair as above, as the starting point for fixing the taxonominal hierarchy in this order, we would need to use only one rank, superfamily, above family in this order, with a superfamily *Rhinatrematoidea* including a single family *Rhinatrematidae* and a superfamily *Caecilioidea* with two families *Caeciliidae* and *Ichthyophiidae*. This would not bother us much, but we are aware that most taxonomists have an immoderate fondness for 'taxonomic stability', a non-scientific concept, and would probably be very 'shocked' by a move from 10 families of caecilians as advocated by San Mauro *et al.* (2014) to three families! For this reason, we decided to derogate, at least provisionally, from our general Criteria in this case, and to recognise for the time being five families within this order. For this to be possible, it is necessary to add one 'superfluous' rank to the taxonominal hierarchy in this order, and, by symmetry with the other two orders, we recognised two suborders in the latter. Then, we have one suborder with a single family and a second suborder with two superfamilies including two families each, which allows to respect the [UQC].

#### 2.4.6.3.2. Example R2: genera *Telmatobius* and *Rhinoderma*

The nomen *Rhinodermatidae* Bonaparte, 1850, based on the genus *Rhinoderma* Duméril & Bibron, 1841, being part of the UQN, a family must bear this nomen. Climbing up *TREE* above this genus leads first to the nomen *Telmatobiidae* Fitzinger, 1843, based on *Telmatobius* Wiegmann, 1834, which would have nomenclatural priority if *Rhinoderma* and *Telmatobius* were placed in the same family. To comply with the Criterion [CPC], we must recognise a family *Telmatobiidae*, parordinate to *Rhinodermatidae*. To respect sister-taxa relationships, they both constitute the apofamily *Telmatobieidae*, which is part of the epifamily *Telmatobioidae*, and the latter of the superfamily *Ceratophryoidea*. The latter has four parordinate superfamilies, and together they constitute a taxon which has to be in the class-series as FS nomenclatural saturation has been reached in this branch: this turns out to be the hypophalanx **Hylobatrachia**.

#### 2.4.6.3.3. Example R3: genus *Epidalea*

The genus *Epidalea* Cope, 1864 belongs in the UQ-family *Bufonidae* which is part of the superfamily *Bufonoidea*, one of the five branches that make up the hypophalanx **Hylobatrachia** and for which the rank superfamily is required because of FS rank saturation in one of them, the *Ceratophrynoidea*. Therefore, the upward subordinal hierarchy above *Bufonidae* includes ten ranks, nine CS ranks (from hypophalanx to suborder) and one FS rank (superfamily).

Below *Bufonidae*, the hierarchical placement of the genus *Epidalea* (as well as of 11 other genera) requires nine ranks (from subfamily to hypoclanus).

Therefore, the unambiguous hierarchical placement of the genus *Epidalea* requires 21 of the 23 of the suprageneric ranks that we use here below the rank suclassis.

2.4.6.3.4. Example R4: genus *Cycloramphus*

This genus is part of a taxon for which the first available nomen is *Cycloramphidae* Bonaparte, 1850, which belongs in the UQN, and which has four sister-taxa. Altogether, these five taxa make up a group which is parordinate to the apofamily *Telmatobieidae* mentioned above and must therefore be known as the apofamily *Cyclorampheidae*. Following the Criterion [NTC] requires to recognise in this apofamily a single family *Cycloramphidae*, with five subfamilies, despite the fact that this makes the apofamily and the family nomina redundant. The present solution is provisional and will last only until the cladonomic relationships within this group are better resolved, allowing to have only two families in this apofamily.

As shown by Dubois (1984*b*), the first nomen available for the family including the genus *Cycloramphus* Tschudi, 1838 is *Cyclorhamphina* Bonaparte, 1850, based on *Cyclorhamphus* Agassiz, 1847, an unjustified emendation of *Cycloramphus* Tschudi, 1838, whereas the spelling based on *Cycloramphus* appeared only later, in Bonaparte (1852). However, the spelling *Cycloramphidae* must be preserved, and credited (misleadingly) to Bonaparte (1850) where it did not appear, by virtue of Article 35.4.1, whose pertinence is questionable (Dubois 2010*a*).

2.4.6.3.5. Example R5: genus *Polypedates*

The first superordinate FS taxon/nomen of *Polypedates* Tschudi, 1838 among the UQN is *Rhacophoridae*, so the implementation of the ranks here is parallel to that of examples R1a and R1b above, however with a small but significant and noteworthy difference, which is not due to the Criterion [FPC] but to the nomenclatural Rules of the *Code*.

The first family-series nomenclaturally available for this genus is *Polypedatidae* Günther, 1858, but this nomen was invalidated before 1961 by usage of Article 40.2 in order to validate the 'well-known' (in fact, then mostly by a few specialists) nomen *Rhacophoridae* Hoffman, 1932, so that according to the *Code* the latter nomen should be known as *Rhacophoridae* Hoffman, 1932 (1858).

In the meantime however, the genus *Polypedates* Tschudi, 1838 was revalidated as applying to a genus distinct from *Rhacophorus* Kuhl & Van Hasselt, 1822. Today, the nomen *Rhacophoridae* must therefore be used at all ranks for taxa that include both *Rhacophorus* and *Polypedates*. In *CLAD*, following the Principle of Coordination it applies to 7 taxa, from familia *Rhacophoridae* to subclanus *Rhacophorities*.

However, the situation is different regarding the two taxa that include *Polypedates* but exclude *Rhacophorus*, at ranks subclanus and infraclanus. Article 40.2.1 reads: "A name maintained by virtue of this Article retains its own author but takes the priority of the replaced name, of which it is deemed to be the senior synonym." Taking strictly these words would lead to strange consequences: in this case the family and all its endotaxa including the genus *Rhacophorus* would bear paronyms based on the genus *Rhacophorus*, dated 1858, but no taxon including the genus *Polypedates* could bear a FS nomen based on *Polypedates*, even if it excludes *Rhacophorus*. In fact, at low taxonomic levels, the nomina *Rhacophoridae* and *Polypedatidae* cannot be synonyms when they apply to taxa mutually exclusive regarding their nucleogenera. Solving this nomenclatural problem would require to establish a new FS nomen. This would be possible on the basis of the genus nomen *Taruga* Meegaskumbura *et al.*, 2010, although a nomen based on *Polypedates* already exists. This would clearly not be a good solution in terms of nomenclatural parsimony.

We think this Article, which is already problematic for other reasons (Dubois 2010*a*) should be reworded or even better suppressed from the *Code*, as Article 23.9 on Reversal of precedence is sufficient to solve problems of this kind when they arise. In the meantime, we consider that these two nomina cannot be synonyms in this situation and we recognise two subclans *Polypedatities* and *Rhacophorities*, and an infraclan *Polypedatitoes*.

2.4.6.3.6. Example R6: genus *Odontobatrachus*

This case is much simpler than the preceding ones. According to *TREE*, this genus is parordinate to two other taxa, the genus *Phrynobatrachus* and the large taxon for which it was shown above that the proper rank and nomen were superfamily *Ranoidea*. Therefore, two more superfamilies *Phrynobatrachoidea* and *Odontobatrachoidea* must be recognised. Each of them contains a single family, and the latter are indeed redundant, in this case, with both the superfamily and the genus, but these families should be recognised to comply with the Criterion [MRC]. Discrepancies in the number of subordinate taxa in the three superfamilies mentioned here reflect quite accurately the different structures of *TREE* in its different parts, so they are phylogenetically informative and not random or arbitrary and they should be recognised taxonomically, as provided by the Criterion [STC].

2.4.6.3.7. Example R7: genus *Litoria*

The first FS nomen available above the generic nomen *Litoria* Tschudi, 1838 is *Pelobii* Fitzinger, 1843, which is invalid for being based on the generic nomen *Pelobius* Fitzinger, 1843, an invalid junior homonym (Dubois 1984*b*; Dubois & Frétey 2016). The next available FS nomen for this genus is *Pelodryadidae* Günther, 1859, a junior synonym of *Phyllomedusidae* Günther, 1858. None of the latter nomina is part of the UQN. The sister-taxon of this family is *Hylidae* Rafinesque, 1815, which belongs in the UQN, therefore both taxa should be recognised as families by virtue of the Criterion [STC]. Treating the *Phyllomedusidae* as a subfamily of the *Hylidae* would make the latter redundant relative to the superfamily *Hyloidea*, which has four parordinate superfamilies, and this should be avoided according to the Criterion [NRC].

The nomen *Pelodryadidae*, here retained as valid but at the rank subfamily, is based on the generic nomen *Pelodryas* Günther, 1858, which is currently considered as a doxisonym of *Ranoidea* Tschudi, 1838 (Dubois & Frétey 2016). According to Article 40.1, the fact that *Pelodryas* is currently considered as an invalid junior synonym of another valid generic nomen has no impact on the validity of the FS nomen, as the latter was not replaced before 1961, contrary to the situation in the example R5 above.

2.4.6.3.8. Example R8: genera *Alytes*, *Bombina* and *Discoglossus*

In the examples mentioned above, starting from the genus and moving upwards in the taxonominal hierarchy always led to a point where we encountered a FS nomen being part of the UQN. But this is not always the case, as the following example will show.

The getangiotaxon A1a of the genus *Alytes* Wagler, 1829 is parordinate to a taxon A1b accommodating the genera *Discoglossus* Otth, 1837 and *Latonia* Meyer, 1845. Both taxa A1a and A1b constitute the taxon A2a which is parordinate to A2b, that contains the genera *Barbourula* Taylor & Noble, 1924 and *Bombina* Oken, 1816. Three FS nomina can be used for these taxa (see Dubois 1987*e*): *Alytae* Fitzinger, 1843; *Bombinatorina* Gray, 1825; and *Discoglossidae* Günther, 1858. The last two belonging in the UQN, they must be recognised at the rank family. One could *a priori* consider the possibility to use the nomen *Discoglossidae* either for A1b or for A2a, but in the latter case it could not be kept at the rank family because the nomen *Alytidae* has nomenclatural priority upon it. Therefore, A1b must be *Discoglossidae* to comply with the Criteria [STC], [NPC] and [CPC]. *Alytidae* then applies to A1a, *Alytoidea* to A2a and *Bombinatoroidea* to its parordinate superfamily, with a single family *Bombinatoridae* imposed by the Criterion [MRC] despite being redundant. This example shows that: {v1} to follow strictly the Criterion [STC], one has also to pay attention to nomenclatural priority among nomina, which sometimes precludes the use of some possible taxonominal solutions (this is similar to example R2 above); {v2} at any rate, in all cases even the position in the hierarchy of the families whose nomina are not among the UQN is fixed automatically by the application of the Criterion [CPC]. In this case, the position of the *Discoglossidae* is fixed by the Criterion [UQC], that of the *Alytidae* by the Criteria [STC], [NPC] and [CPC], and that of the *Bombinatoridae* by the Criteria [UQC] and [MRC].

2.4.6.3.9. Example R9: genera *Ambystoma* and *Dicamptodon*

The family nomina *Ambystomatidae* and *Salamandridae* both belong in the UQN and, according to the structure of *TREE* and *CLAD*, must therefore be used at family rank to designate sister-taxa. The family *Salamandridae* includes more than 20 genera and has a rather complex taxonomic structure, but the family *Ambystomatidae* includes only two extant genera *Ambystoma* and *Dicamptodon* and five all-fossil genera, the status of which is still uncertain. As explained above, in the present work the taxonominal hierarchy is fixed only on the basis of the extant taxa, and does not take the all-fossil ones into account. The Consistent Naming Criterion [CNC] contains the following precision: "for two branches to be taxonomically recognised, one of them at least must include more than one supraspecific subtaxon (i.e., of rank genus or above)". This is not the case here and, as long as no third extant genus is cladistically supported and taxonomically recognised in this family, the latter should include no subfamily but only these two sister-genera.

2.4.6.3.10. A few other examples and comments

As mentioned above, the family rank plays a crucial role in our system because it is mandatory. A cladonomy will be more informative if as many families as possible have parordinate families. This imposes sometimes to recognise at the same rank family some sister-taxa which are highly unbalanced in terms of numbers of included taxa, such as *Cryptobranchidae* and *Hynobiidae*, *Brevicipitidae* and *Hemisotidae* or *Brachycephalidae* and *Ceuthomantidae*.

This latter example shows that the Criterion [UQC] does not fix the taxonomic hierarchy in a rigid manner. As a matter of fact, one might fear that the implementation of this Criterion could forbid the recognition of new families when brand new species are discovered that represent not only new genera but also new higher taxa. In such cases, as shown by a few recent examples, there exists indeed a 'temptation' for the authors who describe the new species or genus to 'overrate' their finding and to erect immediately a new family for it. However, not all recently discovered organisms require the erection of such high-ranked taxa, whatever exciting their discovery may have been for the biologists who found them. The analysis presented in the present work shows that it is sometimes the case and sometimes not. When genuine phylogenetic discoveries lead to the taxonomic recognition of brand new branches in *TREE*, these can be recognised at the rank family even if their nomina are very recent and then of course not members of the UQN. Let us consider in this respect the fate of the eight last nomina of families of extant amphibians that have been established in the literature, from 2003 to 2014. They can be sorted in four categories:

{w1} The most extreme example in this respect, R6 above, is the genus *Odontobatrachus*, described in 2014 but the isolated cladistic position of which requires its recognition in *CLAD* not only as a new family *Odontobatrachidae* but also as a superfamily *Odontobatrachoidea*, the latter being parordinate to two long known taxa, now the superfamilies *Phrynobatrachoidea* and *Ranoidea*. In this case not only the new family appears warranted under our Criteria but it is even an 'understatement' of the uniqueness of this lineage.

{w2} Two monogeneric families erected in 2003 (*Nasikabatrachidae*) and in 2009 (*Ceuthomantidae*, discussed above in 2.4.5.2.2.3–4 and 2.4.5.2.4.3–4) are maintained at the rank family in *CLAD*, although of course they do not belong in the UQN.

{w3} Two families erected in 2006 (*Cryptobatrachidae*) and 2008 (*Craugastoridae*) are here downgraded to the rank subfamily, and two other ones established in 2008 (*Strabomantidae*) and 2012 (*Chikilidae*) to the rank tribe.

{w4} The last one, *Thoropidae*, erected in 2006, is a strict synonym of a nomen established in 1850, *Cycloramphidae*, and does not even deserve to be downgraded to a lower rank.

The heterogeneity of these situations, for a few taxa established over a short period of 12 years, highlights the fact that, in the absence of an explicit methodology for fixing the position of the rank family in the taxonominal hierarchy, decisions are bound to be largely arbitrary and a great heterogeneity of treatment for similar situations cannot but exist from one group to another. The mere fact that a new genus is 'cladistically isolated', i.e. referred alone (with no sister-genus) to its getangiotaxon, does not require by itself to give the latter a high rank in the taxonominal hierarchy. This all depends on the other taxa required by the cladistic tree. In *CLAD*, in order to reflect bijectively *TREE*, the 'cladistically isolated' genera described after 2000 require indeed the recognition of new FS taxa, whose nomina are based on theirs, but these are referred here to a vast array of ranks, including superfamily (*Odontobatrachus*), family (*Astrobatrachus*, *Nasikabatrachus*), subfamily (*Astrobatrachus*), tribe (*Chikila*), subtribe (*Karsenia*) and infratribe (*Hypodactylus*). Therefore, unlike under a phenetic paradigm under a cladistic paradigm the discovery of a 'brand new kind of organisms' does not entail necessarily the erection of highly ranked new taxa.

**TABLE 14.NUM.** Number of generic and suprageneric taxa of **Lissamphibia** below class recognised as valid in the present work.

| Rank | Total number of extant taxa | Number of new extant taxa | % of new extant taxa | Total number of fossil taxa | Total number of extant + fossil taxa | Unnamed incertae sedis |
|---|---|---|---|---|---|---|
| Subclassis | 1 | 0 | 0 | – | 1 | – |
| Ordo | 3 | 0 | 0 | 1 | 4 | – |
| Subordo | 7 | 1 | 14.3 | – | 7 | 3 |
| Infraordo | 2 | 0 | 0 | – | 2 | – |
| Hypoordo | 2 | 0 | 0 | – | 2 | – |
| Superphalanx | 2 | 0 | 0 | – | 2 | 1 |
| Epiphalanx | 2 | 1 | 50.0 | – | 2 | – |
| Phalanx | 3 | 2 | 66.7 | – | 3 | – |
| Subphalanx | 5 | 2 | 40.0 | – | 5 | 1 |
| Infraphalanx | 4 | 3 | 75.0 | – | 4 | – |
| Hypophalanx | 3 | 1 | 33.3 | – | 3 | – |
| **TOTAL Class-series** | **34** | **10** | **29.4** | **1** | **35** | **5** |
| Superfamilia | 18 | 0 | 0 | – | 18 | 3 |
| Epifamilia | 12 | 1 | 8.3 | – | 12 | – |
| Apofamilia | 9 | 0 | 0 | – | 9 | – |
| Familia | 69 | 1 | 1.4 | 13 | 82 | 12 |
| Subfamilia | 87 | 11 | 12.6 | 2 | 89 | 6 |
| Tribus | 89 | 21 | 23.6 | – | 89 | 6 |
| Subtribus | 92 | 29 | 31.5 | – | 92 | 3 |
| Infratribus | 65 | 26 | 40.0 | – | 65 | 2 |
| Hypotribus | 44 | 24 | 54.5 | – | 44 | 2 |
| Clanus | 32 | 22 | 68.8 | – | 32 | – |
| Subclanus | 17 | 10 | 58.8 | – | 17 | – |
| Infraclanus | 23 | 14 | 60.9 | – | 23 | 1 |
| Hypoclanus | 14 | 11 | 78.6 | – | 14 | 1 |
| Catoclanus | 2 | 1 | 50.0 | – | 2 | – |
| **TOTAL Family-series** | **573** | **171** | **29.8** | **15** | **588** | **36** |
| Genus | 575 | 13 | 2.2 | 191 | 766 | – |
| **TOTAL CS, FS & GS** | **1182** | **194** | **16.4** | **207** | **1389** | **41** |

## 2.5. Some comments on the new nomina introduced in the present work

In the present work, we recognise 573 extant taxa of the family-series, including 171 new ones (29.8 %), from rank familia to catoclanus (Table **T14.NUM**). To name these taxa, because of the nomenclatural parsimony provided by the Principle of Coordination, we needed to coin only 154 new FS nomina, as well as 17 hyponymous paronyms of some of the latter (having the same nucleogenera, authors and dates, and being therefore not distinct nomina). To make these new nomina available, anchored and valid, we followed strictly the rules of the *Code*, in particular: {x1} we mentioned the fact that their nomina were new nomina provided for new taxa; {x2} we provided character-based diagnoses for these taxa; {x3} we explicitly designated the nucleogenera of these nomina. There were two situations regarding the designation of the nucleogenera for these 154 new FS nomina (Table **T15.NEW**): in 110 cases (71.4 %), we had no choice, because the new FS taxon included a single valid genus according to *CLAD*; but in 44 cases (28.6 %), a choice had been made between two or more included genera. For such choices, we followed two basic Criteria. The first one, {y1}, relies on the important idea that nomina coined by taxonomists should not be so to 'please themselves' or to show the breadth and depth of their 'classical culture', but to act as convenient devices for unambiguous universal communication

**TABLE 15.NEW.** New nomina and paronyms of **Lissamphibia** introduced in the present work.
N-P. ● Common serial numbers of nomina and paronyms.
N/P. ● Serial numbers of nomina, given as their highest eponymous paronyms (N) or as hyponymous paronyms (P).
Column Id. ● Identifier of nominal-series and rank, name of rank.
Nomen or paronym. ● The highest eponymous paronym of a nomen is followed by the sign °. All hyponymous paronyms of a nomen are followed by asterisk *. Their nomenclatural availability authorship and date are provided by the highest ranked paronym in a series of eponymous paronyms (see Article 24.1). > means that the onomatophore of this nomen is provided under its highest eponymous paronym.
Getendotaxa. ● Nomina of next lower taxa.
Onomatophore. ● Designated in the present work. They consist in: [1] in the species-series: one or more specimen(s); [2] in the genus- and families-series: a single taxomen (nucleospecies or nucleogenus); [3] in the class-series: one, two or three taxomina (uninucleogenus or conucleogenera). ● BNHS: collection of the Bombay Natural History Society.

| N-P | N/P | Id. | Nomen or paronym | Getendotaxa | Onomatophore |
|---|---|---|---|---|---|
| 001 | N001 | C.05. Subordo | **Plesiophiona** | *Rhinatrematidae* | *Rhinatrema* |
| 002 | N002 | C.09. Epiphalanx | **Helanura** | *Heleophrynidae* | *Heleophryne* |
| 003 | N003 | C.10. Phalanx | **Gondwanura** | *Nasikabatrachidae*; *Sooglossidae* | *Nasikabatrachus* + *Sooglossus* |
| 004 | N004 | C.10. Phalanx | **Phaneranura** | **Bainanura**; **Diplosiphona** | *Bufo* + *Heleioporus* |
| 005 | N005 | C.11. Subphalanx | **Bainanura** | **Phoranura**; **Phrynanura** | *Bufo* + *Dendrobates* |
| 006 | N006 | C.11. Subphalanx | **Pananura** | **Ecaudata**; **Savanura** | *Hildebrandtia* + *Rana* |
| 007 | N007 | C.12. Infraphalanx | **Phoranura** | *Aromobatidae*; *Dendrobatidae* | *Aromobates* + *Dendrobates* |
| 008 | N008 | C.12. Infraphalanx | **Phrynanura** | **Gaianura**; **Hemiphractiformia**; **Hylobatrachia** | *Brachycephalus* + *Bufo* + *Hemiphractus* |
| 009 | N009 | C.12. Infraphalanx | **Savanura** | *Ptychadenidae* | *Hildebrandtia* |
| 010 | N010 | C.13. Hypophalanx | **Gaianura** | *Brachycephalidae*; *Ceuthomantidae* | *Brachycephalus* + *Ceuthomantis* |
| 011 | N011 | F.15. Epifamilia | *Ericabatrachoidae* ° | *Ericabatrachidae* | *Ericabatrachus* |
| 012 | P001 | F.17. Familia | *Ericabatrachidae* * | *Ericabatrachus* | > *Ericabatrachidae* |
| 013 | N012 | F.18. Subfamilia | *Anhydrophryninae* | *Anhydrophryne* | *Anhydrophryne* |
| 014 | N013 | F.18. Subfamilia | *Callulininae* | *Balebreviceps*; *Callulina*; *Probreviceps*; *Spelaeophryne* | *Callulina* |
| 015 | N014 | F.18. Subfamilia | *Cryptothylacinae* | *Cryptothylax* | *Cryptothylax* |
| 016 | N015 | F.18. Subfamilia | *Flectonotinae* | *Flectonotus* | *Flectonotus* |
| 017 | N016 | F.18. Subfamilia | *Fritzianinae* | *Fritziana* | *Fritziana* |
| 018 | N017 | F.18. Subfamilia | *Ikakoginae* | *Ikakogi* | *Ikakogi* |
| 019 | N018 | F.18. Subfamilia | *Limnomedusinae* | *Limnomedusa* | *Limnomedusa* |
| 020 | N019 | F.18. Subfamilia | *Melanophryniscinae* | *Melanophryniscus* | *Melanophryniscus* |
| 021 | N020 | F.18. Subfamilia | *Mixophyinae* | *Mixophyes* | *Mixophyes* |
| 022 | N021 | F.18. Subfamilia | *Proceratophryinae* | *Proceratophrys* | *Proceratophrys* |
| 023 | N022 | F.18. Subfamilia | *Stefaniinae* | *Stefania* | *Stefania* |
| 024 | N023 | F.18.† Subfamilia | *Salteniinae* † | *Kuruleufemia* †; *Patagopipa* †; *Saltenia* †; *Shelania* † | *Saltenia* † |
| 025 | N024 | F.19. Tribus | *Acanthixalini* | *Acanthixalus* | *Acanthixalus* |
| 026 | N025 | F.19. Tribus | *Agalychnini* | *Agalychnis*; *Hylomantis* | *Agalychnis* |
| 027 | N026 | F.19. Tribus | *Atelognathini* | *Atelognathus*; *Chaltenobatrachus* | *Atelognathus* |

......*continued on the next page*

**TABLE 15.NEW.** (Continued)

| N-P | N/P | Id. | Nomen or paronym | Getendotaxa | Onomatophore |
|---|---|---|---|---|---|
| 028 | N027 | F.19. Tribus | *ATYMPANOPHRYINI* | *Atympanophrys* | *Atympanophrys* |
| 029 | N028 | F.19. Tribus | *BRACHYTARSOPHRYINI* | *Brachytarsophrys* | *Brachytarsophrys* |
| 030 | N029 | F.19. Tribus | *CHIASMOCLEINI* | *Chiasmocleis* | *Chiasmocleis* |
| 031 | N030 | F.19. Tribus | *CRUZIOHYLINI* | *Cruziohyla* | *Cruziohyla* |
| 032 | N031 | F.19. Tribus | *CTENOPHRYNINI* | *Ctenophryne* | *Ctenophryne* |
| 033 | N032 | F.19. Tribus | *EOTHECINI* | *Eotheca* | *Eotheca* |
| 034 | N033 | F.19. Tribus | *EPIPEDOBATINI* | *Epipedobates*; *Silverstoneia* | *Epipedobates* |
| 035 | N034 | F.19. Tribus | *FROSTIINI* | *Frostius* | *Frostius* |
| 036 | N035 | F.19. Tribus | *GASTROPHRYNOIDINI* | *Gastrophrynoides*; *Siamophryne*; *Vietnamophryne* | *Gastrophrynoides* |
| 037 | N036 | F.19. Tribus | *LEPTODACTYLODONTINI* | *Leptodactylodon* | *Leptodactylodon* |
| 038 | N037 | F.19. Tribus | *MYERSIOHYLINI* | *Myersiohyla* | *Myersiohyla* |
| 039 | N038 | F.19. Tribus | *NESOROHYLINI* | *Nesorohyla* | *Nesorohyla* |
| 040 | N039 | F.19. Tribus | *NOTADENINI* | *Notaden* | *Notaden* |
| 041 | N040 | F.19. Tribus | *NYMPHARGINI* | *Nymphargus* | *Nymphargus* |
| 042 | N041 | F.19. Tribus | *PHRYNOMEDUSINI* | *Phrynomedusa* | *Phrynomedusa* |
| 043 | N042 | F.19. Tribus | *TAUDACTYLINI* | *Taudactylus* | *Taudactylus* |
| 044 | N043 | F.19. Tribus | *TSINGYMANTINI* | *Tsingymantis* | *Tsingymantis* |
| 045 | N044 | F.19. Tribus | *NATALOBATRACHINI* | *Arthroleptella*; *Natalobatrachus* | *Natalobatrachus* |
| 046 | N045 | F.20. Subtribus | *ANDINOBATINA* ° | *ANDINOBATINIA*; *EXCIDOBATINIA* | *Andinobates* |
| 047 | N046 | F.20. Subtribus | *ANODONTHYLINA* | *Anodonthyla* | *Anodonthyla* |
| 048 | N047 | F.20. Subtribus | *CHAPARANINA* ° | *CHAPARANINIA*; *DIPLOPAINIA*; *FEIRANINIA* | *Chaparana* |
| 049 | N048 | F.20. Subtribus | *DASYPOPINA* | *Dasypops*; *Myersiella* | *Dasypops* |
| 050 | N049 | F.20. Subtribus | *DIASPORINA* | *Diasporus* | *Diasporus* |
| 051 | N050 | F.20. Subtribus | *EDALORHININA* | *Edalorhina* | *Edalorhina* |
| 052 | N051 | F.20. Subtribus | *ERIPAINA* | *Eripaa* | *Eripaa* |
| 053 | N052 | F.20. Subtribus | *GRILLITSCHIINA* | *Grillitschia* | *Grillitschia* |
| 054 | N053 | F.20. Subtribus | *HYLOSCIRTINA* | *Colomascirtus*; *Hyloscirtus* | *Hyloscirtus* |
| 055 | N054 | F.20. Subtribus | *IRANODONTINA* | *Afghanodon*; *Iranodon* | *Iranodon* |
| 056 | N055 | F.20. Subtribus | *ITAPOTIHYLINA* | *Itapotihyla* | *Itapotihyla* |
| 057 | N056 | F.20. Subtribus | *MANTIDACTYLINA* ° | *BOEHMANTINOA*; *MANTIDACTYLINOA* | *Mantidactylus* |
| 058 | N057 | F.20. Subtribus | *MICRYLETTINA* | *Micryletta*; *Mysticellus* | *Micryletta* |
| 059 | N058 | F.20. Subtribus | *MORERELLINA* | *Morerella* | *Morerella* |
| 060 | N059 | F.20. Subtribus | *NEOBATRACHINA* | *Neobatrachus* | *Neobatrachus* |
| 061 | N060 | F.20. Subtribus | *OPHRYOPHRYNINA* | *Boulenophrys*; *Ophryophryne* | *Ophryophryne* |
| 062 | N061 | F.20. Subtribus | *OPISTHOTHYLACINA* | *Opisthothylax* | *Opisthothylax* |

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**TABLE 15.NEW.** (Continued)

| N-P | N/P | Id. | Nomen or paronym | Getendotaxa | Onomatophore |
|---|---|---|---|---|---|
| 063 | N062 | F.20. Subtribus | *Oreophrynellina* | *Oreophrynella* | *Oreophrynella* |
| 064 | N063 | F.20. Subtribus | *Osornophrynina* | *Osornophryne* | *Osornophryne* |
| 065 | N064 | F.20. Subtribus | *Phasmahylina* | *Phasmahyla* | *Phasmahyla* |
| 066 | N065 | F.20. Subtribus | *Phytotryadina* | *Phytotriades* | *Phytotriades* |
| 067 | N066 | F.20. Subtribus | *Platypelina* | *Platypelis* | *Platypelis* |
| 068 | N067 | F.20. Subtribus | *Platyplectrina* | *Platyplectrum* | *Platyplectrum* |
| 069 | N068 | F.20. Subtribus | *Poyntoniina* | *Poyntonia* | *Poyntonia* |
| 070 | N069 | F.20. Subtribus | *Romerina* | *Romerus* | *Romerus* |
| 071 | N070 | F.20. Subtribus | *Stereocyclopina* | *Stereocyclops* | *Stereocyclops* |
| 072 | N071 | F.20. Subtribus | *Teratohylina* | *Teratohyla* | *Teratohyla* |
| 073 | N072 | F.20. Subtribus | *Tylototritonina* ° | *Echinotritoninia*; *Tylototritoninia* | *Tylototriton* |
| 074 | N073 | F.20. Subtribus | *Vitreoranina* | *Vitreorana* | *Vitreorana* |
| 075 | N074 | F.21. Infratribus | *Afrixalinia* | *Afrixalus* | *Afrixalus* |
| 076 | N075 | F.21. Infratribus | *Amazophrynellinia* | *Amazophrynella* | *Amazophrynella* |
| 077 | P002 | F.21. Infratribus | *Andinobatinia* * | *Andinobates*; *Ranitomeya* | > *Andinobatina* |
| 078 | N076 | F.21. Infratribus | *Arcovomerinia* | *Arcovomer* | *Arcovomer* |
| 079 | N077 | F.21. Infratribus | *Assinia* ° | *Assinoa*; *Paracrininoa* | *Assa* |
| 080 | N078 | F.21. Infratribus | *Blommersiinia* | *Blommersia*; *Guibemantis* | *Blommersia* |
| 081 | N079 | F.21. Infratribus | *Bokermannohylinia* | *Bokermannohyla* | *Bokermannohyla* |
| 082 | P003 | F.21. Infratribus | *Chaparaninia* * | *Chaparana*; *Gynandropaa* | > *Chaparanina* |
| 083 | N080 | F.21. Infratribus | *Corythomantinia* | *Corythomantis* | *Corythomantis* |
| 084 | N081 | F.21. Infratribus | *Dermatonotinia* | *Dermatonotus* | *Dermatonotus* |
| 085 | N082 | F.21. Infratribus | *Diplopainia* | *Diplopaa* | *Diplopaa* |
| 086 | N083 | F.21. Infratribus | *Echinotritoninia* | *Echinotriton* | *Echinotriton* |
| 087 | N084 | F.21. Infratribus | *Espadaraninia* ° | *Chimerellinoa*; *Espadaraninoa*; *Rulyraninoa* | *Espadarana* |
| 088 | N085 | F.21. Infratribus | *Excidobatinia* | *Excidobates* | *Excidobates* |
| 089 | N086 | F.21. Infratribus | *Feiraninia* | *Feirana* | *Feirana* |
| 090 | N087 | F.21. Infratribus | *Hamptophryninia* | *Hamptophryne* | *Hamptophryne* |
| 091 | N088 | F.21. Infratribus | *Nyctimantinia* | *Aparasphenodon*; *Argenteohyla*; *Nyctimantis* | *Nyctimantis* |
| 092 | N089 | F.21. Infratribus | *Osteocephalinia* | *Dryaderces*; *Osteocephalus*; *Tepuihyla* | *Osteocephalus* |
| 093 | N090 | F.21. Infratribus | *Osteopilinia* | *Osteopilus* | *Osteopilus* |
| 094 | N091 | F.21. Infratribus | *Pelophylacinia* | *Pelophylax* | *Pelophylax* |
| 095 | N092 | F.21. Infratribus | *Phrynellinia* | *Metaphrynella*; *Phrynella* | *Phrynella* |
| 096 | N093 | F.21. Infratribus | *Plectrohylinia* | *Exerodonta*; *Plectrohyla* | *Plectrohyla* |
| 097 | N094 | F.21. Infratribus | *Spicospininia* | *Spicospina* | *Spicospina* |

*......continued on the next page*

**TABLE 15.NEW.** (Continued)

| N-P | N/P | Id. | Nomen or paronym | Getendotaxa | Onomatophore |
|---|---|---|---|---|---|
| 098 | N095 | F.21. Infratribus | *SPINOMANTINIA* | *Spinomantis* | *Spinomantis* |
| 099 | P004 | F.21. Infratribus | *TYLOTOTRITONINIA* * | *Tylototriton*; *Yaotriton* | > *TYLOTOTRITONINA* |
| 100 | P005 | F.22. Hypotribus | *ASSINOA* * | *Assa*; *Geocrinia* | > *ASSINIA* |
| 101 | N096 | F.22. Hypotribus | *BARYCHOLINOA* | *Bahius*; *Barycholos*; *Phyllonastes* | *Barycholos* |
| 102 | N097 | F.22. Hypotribus | *BOEHMANTINOA* | *Boehmantis* | *Boehmantis* |
| 103 | N098 | F.22. Hypotribus | *BRYOPHRYNINOA* | *Bryophryne* | *Bryophryne* |
| 104 | N099 | F.22. Hypotribus | *CHARADRAHYLINOA* | *Charadrahyla*; *Megastomatohyla* | *Charadrahyla* |
| 105 | N100 | F.22. Hypotribus | *CHIMERELLINOA* | *Chimerella* | *Chimerella* |
| 106 | P006 | F.22. Hypotribus | *ESPADARANINOA* * | *Espadarana* | > *ESPADARANINIA* |
| 107 | N101 | F.22. Hypotribus | *GRACIXALINOA* | *Gracixalus* | *Gracixalus* |
| 108 | N102 | F.22. Hypotribus | *ICHTHYOSAURINOA* | *Ichthyosaura* | *Ichthyosaura* |
| 109 | N103 | F.22. Hypotribus | *ISTHMURINOA* ° | *ISTHMURITES*; *PARVIMOLGITES*; *PSEUDOEURYCEITES* | *Isthmura* |
| 110 | N104 | F.22. Hypotribus | *LISSOTRITONINOA* | *Lissotriton* | *Lissotriton* |
| 111 | P007 | F.22. Hypotribus | *MANTIDACTYLINOA* * | *Gephyromantis*; *Mantidactylus* | > *MANTIDACTYLINA* |
| 112 | N105 | F.22. Hypotribus | *MICROCAECILIINOA* | *Microcaecilia* | *Microcaecilia* |
| 113 | N106 | F.22. Hypotribus | *NANNOPHRYNINOA* | *Nannophryne* | *Nannophryne* |
| 114 | N107 | F.22. Hypotribus | *NOBLELLINOA* | *Microkayla*; *Noblella*; *Psychrophrynella*; *Qosqophryne* | *Noblella* |
| 115 | N108 | F.22. Hypotribus | *OREOBATINOA* ° | *OREOBATITES*; *PHRYNOPODITES* | *Oreobates* |
| 116 | N109 | F.22. Hypotribus | *ORIXALINOA* | *Orixalus* | *Orixalus* |
| 117 | N110 | F.22. Hypotribus | *PARACRINIINOA* | *Paracrinia* | *Paracrinia* |
| 118 | N111 | F.22. Hypotribus | *RHEOHYLINOA* ° | *ECNOMIOHYLITES*; *PTYCHOHYLITES*; *RHEOHYLITES* | *Rheohyla* |
| 119 | N112 | F.22. Hypotribus | *RUGOSINOA* | *Rugosa* | *Rugosa* |
| 120 | N113 | F.22. Hypotribus | *RULYRANINOA* ° | *AUDACIELLITES*; *RULYRANITES* | *Rulyrana* |
| 121 | N114 | F.22. Hypotribus | *SATOBIINOA* | *Satobius* | *Satobius* |
| 122 | N115 | F.22. Hypotribus | *THORNELLINOA* ° | *DENDROTRITONITES*; *NYCTANOLITES*; *THORNELLITES* | *Thornella* |
| 123 | N116 | F.22. Hypotribus | *VAMPYRIINOA* | *Vampyrius* | *Vampyrius* |
| 124 | N117 | F.23. Clanus | *AUDACIELLITES* | *Audaciella* | *Audaciella* |
| 125 | N118 | F.23. Clanus | *CHIRIXALITES* | *Chirixalus*; *Chiromantis* | *Chirixalus* |
| 126 | N119 | F.23. Clanus | *DENDROTRITONITES* | *Dendrotriton* | *Dendrotriton* |
| 127 | N120 | F.23. Clanus | *ECNOMIOHYLITES* | *Ecnomiohyla* | *Ecnomiohyla* |
| 128 | N121 | F.23. Clanus | *HYPSELOTRITONITES* | *Hypselotriton* | *Hypselotriton* |
| 129 | P008 | F.23. Clanus | *ISTHMURITES* * | *Aquiloeurycea*; *Isthmura* | > *ISTHMURINOA* |
| 130 | N122 | F.23. Clanus | *KURIXALITES* | *Kurixalus* | *Kurixalus* |
| 131 | N123 | F.23. Clanus | *MERCURANITES* ° | *BEDDOMIXALITIES*; *MERCURANITIES* | *Mercurana* |

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**TABLE 15.NEW.** (Continued)

| N-P | N/P | Id. | Nomen or paronym | Getendotaxa | Onomatophore |
|---|---|---|---|---|---|
| 132 | N124 | F.23. Clanus | *NASUTIXALITES* | *Nasutixalus* | *Nasutixalus* |
| 133 | N125 | F.23. Clanus | *NEURERGITES* | *Neurergus*; *Ommatotriton* | *Neurergus* |
| 134 | N126 | F.23. Clanus | *NYCTANOLITES* | *Nyctanolis* | *Nyctanolis* |
| 135 | P009 | F.23. Clanus | *OREOBATITES* * | *Lynchius*; *Oreobates* | > *OREOBATINOA* |
| 136 | N127 | F.23. Clanus | *PACHYTRITONITES* | *Laotriton*; *Pachytriton*; *Paramesotriton* | *Pachytriton* |
| 137 | N128 | F.23. Clanus | *PARVIMOLGITES* | *Ixalotriton*; *Parvimolge* | *Parvimolge* |
| 138 | N129 | F.23. Clanus | *PELTOPHRYNITES* | *Peltophryne* | *Peltophryne* |
| 139 | N130 | F.23. Clanus | *PHRYNOPODITES* | *Phrynopus* | *Phrynopus* |
| 140 | N131 | F.23. Clanus | *PSEUDOEURYCEITES* | *Pseudoeurycea* | *Pseudoeurycea* |
| 141 | N132 | F.23. Clanus | *PTYCHOHYLITES* | *Atlantihyla*; *Bromeliohyla*; *Duellmanohyla*; *Ptychohyla*; *Quilticohyla* | *Ptychohyla* |
| 142 | N133 | F.23. Clanus | *RHAEBOITES* | *Rhaebo* | *Rhaebo* |
| 143 | P010 | F.23. Clanus | *RHEOHYLITES* * | *Rheohyla* | > *RHEOHYLINOA* |
| 144 | P011 | F.23. Clanus | *RULYRANITES* * | *Rulyrana*; *Sachatamia* | > *RULYRANINOA* |
| 145 | P012 | F.23. Clanus | *THORNELLITES* * | *THORNELLITIES*; *NOTOTRITONITIES* | > *THORNELLINOA* |
| 146 | N134 | F.24. Subclanus | *BEDDOMIXALITIES* | *Beddomixalus* | *Beddomixalus* |
| 147 | N135 | F.24. Subclanus | *FEIHYLITIES* | *Feihyla* | *Feihyla* |
| 148 | N136 | F.24. Subclanus | *ISTHMOHYLITIES* | *Isthmohyla* | *Isthmohyla* |
| 149 | N137 | F.24. Subclanus | *LITHOBATITIES* | *Aquarana*; *Boreorana*; *Lithobates* | *Lithobates* |
| 150 | P013 | F.24. Subclanus | *MERCURANITIES* * | *Mercurana*; *Pseudophilautus*; *Raorchestes* | > *MERCURANITES* |
| 151 | N138 | F.24. Subclanus | *NOTOTRITONITIES* | *Nototriton* | *Nototriton* |
| 152 | N139 | F.24. Subclanus | *PSEUDORANITIES* | *Pseudorana* | *Pseudorana* |
| 153 | N140 | F.24. Subclanus | *TAMIXALITIES* | *Tamixalus* | *Tamixalus* |
| 154 | P014 | F.24. Subclanus | *THORNELLITIES* * | *BRADYTRITONITOES*; *THORNELLITOES* | > *THORNELLINOA* |
| 155 | N141 | F.24. Subclanus | *TLALOCOHYLITIES* | *Tlalocohyla* | *Tlalocohyla* |
| 156 | N142 | F.25. Infraclanus | *ANAXYRITOES* | *Anaxyrus*; *Incilius* | *Anaxyrus* |
| 157 | N143 | F.25. Infraclanus | *ANSONIITOES* ° | *ANSONIITUES*; *BARBAROPHRYNITUES*; *BLAIRITUES*; *INGEROPHRYNITUES*; *RENTAPIITUES* | *Ansonia* |
| 158 | N144 | F.25. Infraclanus | *BRADYTRITONITOES* | *Bradytriton* | *Bradytriton* |
| 159 | N145 | F.25. Infraclanus | *BUFOTITOES* | *Bufotes* | *Bufotes* |
| 160 | N146 | F.25. Infraclanus | *CAPENSIBUFONITOES* | *Capensibufo* | *Capensibufo* |
| 161 | N147 | F.25. Infraclanus | *DIAGLENITOES* | *Diaglena* | *Diaglena* |
| 162 | N149 | F.25. Infraclanus | *GHATIXALITOES* | *Ghatixalus* | *Ghatixalus* |
| 163 | N150 | F.25. Infraclanus | *LIUHURANITOES* | *Liuhurana* | *Liuhurana* |
| 164 | N151 | F.25. Infraclanus | *SABAHPHRYNITOES* | *Sabahphrynus* | *Sabahphrynus* |
| 165 | N152 | F.25. Infraclanus | *SCLEROPHRYITOES* | *Sclerophrys* | *Sclerophrys* |
| 166 | N153 | F.25. Infraclanus | *SMILISCITOES* | *Smilisca* | *Smilisca* |

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**TABLE 15.NEW.** (Continued)

| N-P | N/P | Id. | Nomen or paronym | Getendotaxa | Onomatophore |
|---|---|---|---|---|---|
| 167 | N154 | F.25. Infraclanus | *Strauchbufonitoes* | *Strauchbufo* | *Strauchbufo* |
| 168 | P015 | F.25. Infraclanus | *Thornellitoes* * | *Oedipinitues*; *Thornellitues* | > *Thornellinoa* |
| 169 | N155 | F.25. Infraclanus | *Vandijkophrynitoes* | *Vandijkophrynus* | *Vandijkophrynus* |
| 170 | P016 | F.26. Hypoclanus | *Ansoniitues* * | *Ansonia*; *Pelophryne* | > *Ansoniitoes* |
| 171 | N156 | F.26. Hypoclanus | *Barbarophrynitues* | *Barbarophryne* | *Barbarophryne* |
| 172 | N157 | F.26. Hypoclanus | *Blairitues* | *Blaira* | *Blaira* |
| 173 | N158 | F.26. Hypoclanus | *Epidaleitues* | *Epidalea* | *Epidalea* |
| 174 | N159 | F.26. Hypoclanus | *Ingerophrynitues* | *Ingerophrynus* | *Ingerophrynus* |
| 175 | N160 | F.26. Hypoclanus | *Leptophrynitues* | *Leptophryne* | *Leptophryne* |
| 176 | N161 | F.26. Hypoclanus | *Oedipinitues* | *Oedipina*; *Oedopinola* | *Oedipina* |
| 177 | N162 | F.26. Hypoclanus | *Pedostibitues* | *Pedostibes* | *Pedostibes* |
| 178 | N163 | F.26. Hypoclanus | *Rentapiitues* | *Phrynoidis*; *Rentapia* | *Rentapia* |
| 179 | N164 | F.26. Hypoclanus | *Schismadermatitues* | *Schismaderma* | *Schismaderma* |
| 180 | P017 | F.26. Hypoclanus | *Thornellitues* * | *Thornella* | > *Thornellinoa* |
| 181 | N165 | F.27. Catoclanus | *Bedukityes* | *Beduka*; *Blythophryne*; *Bufoides*; *Duttaphrynus*; *Firouzophrynus* | *Beduka* |
| 182 | N166 | G.28. Genus | *Bahius* | *bilineatus* | *bilineatus* |
| 183 | N167 | G.28. Genus | *Beduka* | *amboli*; *koynayensis* | *koynayensis* |
| 184 | N168 | G.28. Genus | *Blaira* | *ornata*; *rubigina* | *ornata* |
| 185 | N169 | G.28. Genus | *Boreorana* | *sylvatica* | *sylvatica* |
| 186 | N170 | G.28. Genus | *Diplopaa* | *taihangnicus* | *taihangnicus* |
| 187 | N171 | G.28. Genus | *Frethia* | *celebensis*; *diminutiva*; *floresiana*; *laevis*; *semipalmata*; *tompotika* | *laevis* |
| 188 | N172 | G.28. Genus | *Mo* | *bambutensis* | *bambutensis* |
| 189 | N173 | G.28. Genus | *Ombropaa* | *gammii* | *gammii* |
| 190 | N174 | G.28. Genus | *Orixalus* | *nonggangensis* | *nonggangensis* |
| 191 | N175 | G.28. Genus | *Romerus* | *romeri* | *romeri* |
| 192 | N176 | G.28. Genus | *Tamixalus* | *calcadensis* | *calcadensis* |
| 193 | N177 | G.28. Genus | *Thornella* | *kasios*; *nica*; *quadra* | *quadra* |
| 194 | N178 | G.28. Genus | *Vampyrius* | *vampyrus* | *vampyrus* |
| 195 | N179 | G.29. Subgenus | *Relictocleis* | *gnoma* | *gnoma* |
| 196 | N180 | S.30. Species | *Beduka amboli* | – | BNHS 5175 |

about taxa, so that short, euphonious nomina should be preferred to oversized, unpronounceable and unmemorable ones like **Hydatinosalamandroidei**, *Calyptocephalellidae*, *Sigalegalephrynus* or *huehuetenanguensis* (Dubois & Raffaëlli 2009, Dubois 2010*e*). Thus we preferred a FS nomen based on *Assa* to one based on *Geocrinia*, on *Mercurana* to one based on *Pseudophilautus*, or on *Oedipina* to one based on *Oedopinola*. However, in most cases, Criterion {y1} did not impose a clear choice, so we used Criterion {y2}: we tended to base the new FS nomen on the oldest GS nomen, as more recent generic nomina run more risk to be synonymised in the future. Although this would not invalidate the FS nomen, this situation should be avoided if possible.

We followed the Criterion {y1} to name new genus- and class-series taxa. Our 13 new genus-series nomina have 2 to 12 letters and 1 to 5 syllables, and our 10 new class-series nomina 8 to 12 letters and 4 to 6 syllables.

### 2.6. Definition of character states used for diagnosis

Most characters and character states used for diagnosis of new taxa were taken from publications, in particular taxonomic revisions, as indicated in the references, and a few only from personal observations. We provide below details on some morphological characters used in our diagnoses of a large array of taxa and that have no general acceptation in the literature.

The elements of the pectoral girdle are named following Duellman & Trueb (1994) and Robovská-Havelková (2010). The latter work gives a recent review of these elements in an ontogenetic and phylogenetic perspective. The prezonal element that is unique to anurans is named omosternum. Some works distinguish the part that is ossified as omosternum and the cartilaginous distal element as episternum but as both have an identical ontogenetic origin and vary according to developmental stage and taxonomic group, this distinction is not significant. The situation is similar for the postzonal element, the sternum, but this element has two different ontogenetic origins with either a paired or a single rudiment. In adults, a bony mesosternum and a cartilaginous metasternum (unique structure) or xiphisternum (showing two branches) are distinguished but, similarly to the omosternum, these two parts are distinguished by ossification or absence of it.

Three conditions of the *adductor mandibulae* muscle and the pathway of the mandibular ramus of the trigeminal nerve were defined by Starrett (1968) and discussed by Lynch (1986*a*) for eleutherodactyline frogs. The trigeminal nerve passing lateral to the *adductor mandibulae* muscle which is extending from the zygomatic ramus of the squamosal to the posterior part of the maxilla, defines the ‘S’ condition, whereas the nerve passing medial to the muscle that extends from the squamosal to the angular is the ‘E’ condition. There may be also a ‘S + E’ condition where the muscles share origin and insertion but the nerve pass between them (Lynch 1986*a*).

The paired macroglands behind the eyes and tympana in amphibians are here called ‘parotoids’ following Tyler *et al.* (2001).

## 3. Results: phylogeny, taxonomy and nomenclature

### 3.1. The Tree

Appendices **A2.TREE-1** and **A3.TREE-2** and Figure **F6.TREE-3** show the *TREE* on which our analyses are based with different levels of precisions. Our Appendix **A2.TREE-1** displays all the 4060 species on which our analysis is based and all the nodes resulting from this analysis, but the values of these nodes are given only when they are equal or superior to our *a priori* threshold SHL-aLRT support value of 90 %. It shows also the nomina of all the suprageneric taxa recognised as valid here. Appendix **A3.TREE-2** provides a simplified version of *TREE*, showing only the genera and all the suprageneric taxa accepted as valid in this work. Figure **F6.TREE-3** provides an oversimplified version of *TREE*, showing only the families and subfamilies accepted as valid in this work.

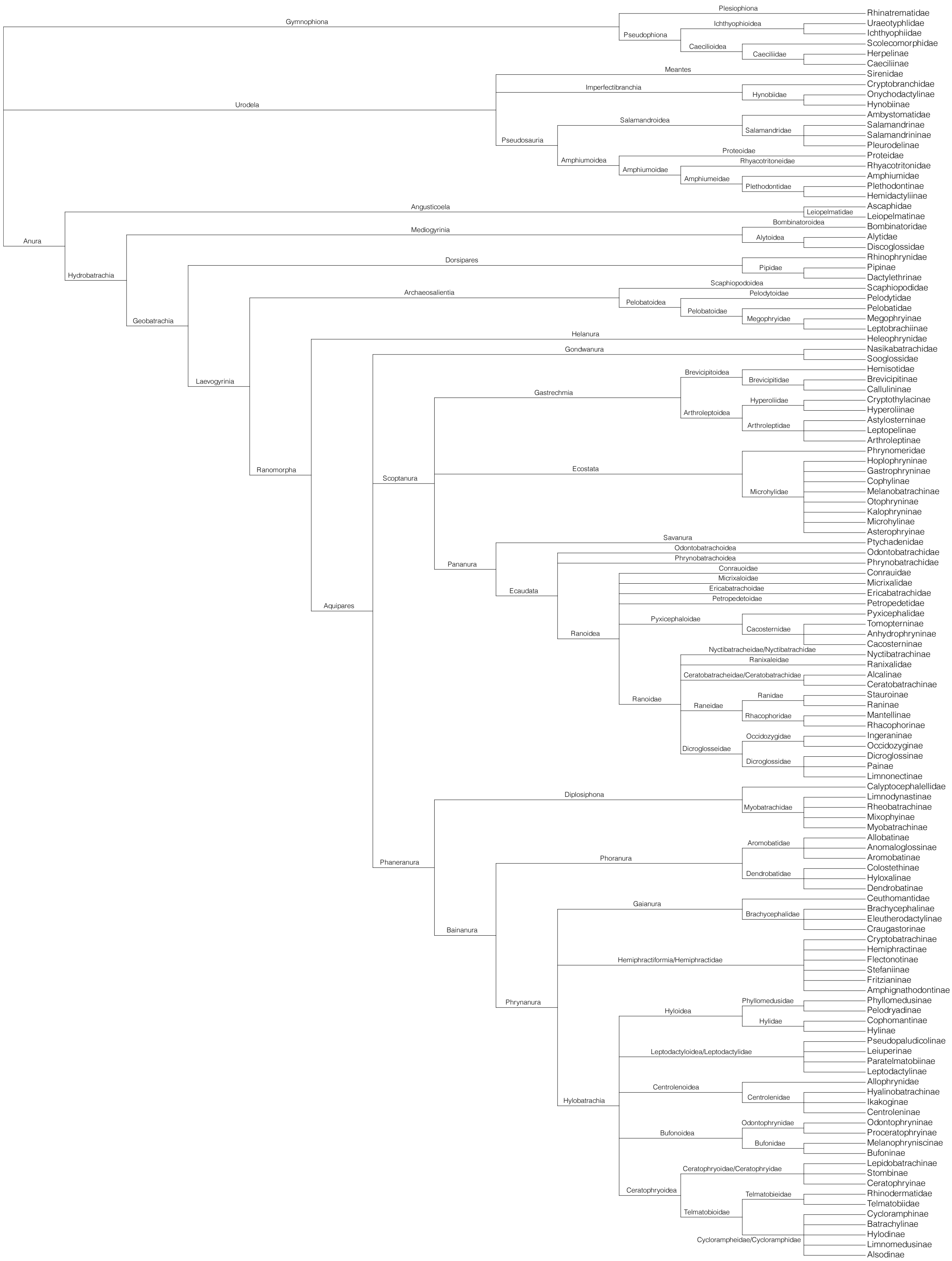


**FIGURE 6.TREE-3.** Oversimplified phylogenetic tree of **Lissamphibia** on which the present taxonomy is based, showing the families and subfamilies recognised here as valid and their relationships.

### 3.2. The nomina

Appendices **A5.NGS**, **A6.NFS** and **A7.NCS** provide the lists of all the lissamphibian nomina of the genus-, family- and class-series ever proposed in the literature, as well as of all their aponyms. As explained above, we think these lists, which cannot be absolutely complete of course, are very close to being so. As such, they will be useful to all forthcoming amphibian taxonomists as a 'mine' for existing nomina that can be potentially used to name some taxa that will have to be recognised in the future. With the existence of these lists, there will be 'no excuse' for proposing new junior synonyms or homonyms of these nomina.

In each of these three tables, we provide a great deal of information concerning these nomina: references, status regarding availability, allocation, validity and correctness according to *CLAD*, homonymy, airesies, proedry, archoidy and miscellanea. A few airesies (new nucleospecies designations, fixation of precedence between synchronous doxisonyms or symprotographs) are effected in the present work: they are listed in Appendix **A14.AIR**.

All the references listed in Appendices **A6.NFS** and **A7.NCS** are listed in our list of References, but this is not the case for the 1921 nomina of **A5.NGS**, as this would add about 1300 references to our list of 1458 references, and for this purpose we refer to the existing online databases, although all of them contain mistakes. We plan to publish these data later elsewhere.

Altogether, as shown in **A5.NGS**, **A6.NFS** and **A7.NCS**, we identified 2828 available supraspecific nomina of **Lissamphibia**: 1827 in the genus-series (1642 available and 185 unavailable ones), 592 in the family-series (488 available and 104 unavailable ones) and 409 in the class-series (402 available and 7 unavailable ones).

In Appendix **A8.ECT**, we provide a list of the 96 lissamphibian ectonyms published since 1992, which, for reasons explained above, we consider unavailable both under the *Code* and DONS, and which should not be used in taxonomic publications following these Rules.

### 3.3. The cladonomy

*TREE* is based exclusively on molecular data. Although in *CLAD* we incorporated the nomina of all the all-fossil generic and suprageneric taxa of **Lissamphibia**, we did this only for the record and for completeness of lissamphibian nomina, on the basis of the recent literature, but, except in one case (subfamily *Salteniinae*), we incorporated no new data on these taxa and we do not take a stand on the validity of the cladistic and taxonomic allocation of these taxa in *CLAD*. These all-fossil taxa and nomina are not further addressed in the discussions below.

For every suprageneric taxon listed as valid in *CLAD* for which we use an already available nomen, we provide below its ***protonym*** (original spelling and rank) with its auctorship and rank, as well as the reference to the first use of its ***eunym*** (valid nomen with its correct spelling and rank), and its ***getangiotaxon*** (immediately superordinate taxon), ***adelphotaxon/a*** (parordinate taxon/a) and ***getendotaxon/a*** (immediately subordinate taxon). For every new nomen, we provide its getangiotaxon, adelphotaxon/a and getendotaxon/a, its onomatophore (nucleospecies, nucleogenus or conucleogenera), its etymology, stem and, for genus-series nomina, grammatical gender, and a diagnosis of the taxon. If necessary, taxonomic, nomenclatural or other comments are provided.

We only gave diagnoses for the taxa for which we provide new nomina, in order to make the latter available. Most diagnoses were built on the basis of a careful analysis of the literature concerning the included taxa. They are therefore very heterogeneous in terms of quality and completeness. In fact, this huge work allowed us to measure how incomplete and superficial is the state of knowledge concerning the morphology and anatomy of adults and larvae, the cytogenetics, bioacoustics, ethology and life history of most species in most amphibian groups. More worrying is the fact that, as today most phylogenetic information used for the classification of amphibians derives from nucleic acid sequencing, very few cladistic analyses based on non-molecular characters have been carried out recently. Such analyses, sometimes very enlightening, had been produced in the eighties and nineties, but with the rise and success of molecular phylogeny most of them were not updated and are now obsolete. As a consequence, in a vast majority of cases we were only able to provide diagnoses, as defined by Dubois (2017*d*), but not apognoses, or, to put it differently, we do not know which characters in our diagnoses are indeed synapomorphies of the taxon and which ones are only 'differential' characters providing no cladogenetic information.

In the present work, we introduce 10 new class-series nomina, 171 new family-series nomina, 14 new genus-series nomina and one new species-series nomen (Table **T15.NEW)**, and we revalidate (resurrect) many other nomina that had been considered invalid either for a long time or just in the recent years. All these nomina are necessary to comply with our initial aims and requirements, which were to produce an ergotaxonomy being strictly bijective with the tree on which it is based. We have no doubt that the present work is only a progress report that will soon be obsolete when more species and more genes are sequenced, and possibly also with an increase in the number and quality of non-molecular characters of extant amphibians. This will be followed by a triple process of {z1} synonymisation of some of the nomina considered valid here, {z2} modification of the contents and diagnoses of the taxa designated by some of these nomina, and {z3} erection of new taxa and introduction of new nomina for the latter. This has nothing surprising, strange or negative: this is the normal process of taxonomic research, which supports the idea that fighting for 'taxonomic and nomenclatural stability' is a counter-productive approach, that should not be backed (Dubois 1998, 2010*c*). Taxonomy can only progress this way, by successive trials and errors. The double process of ***synonymisation*** and ***revalidation*** (so-called 'resurrection') of nomina is a permanent one in taxonomy, and testifies to the progress of our knowledge on the biodiversity of our planet. Trying articially to stop it would lead to 'freezing' research in this domain. Such a freezing might be appreciated by administrators, technocrats, lawyers and even some conservation biologists, whose dream is to have 'final' lists of taxa with 'fixed' nomina, but this would be at the expense of both our knowledge and of our actions for the preservation of biodiversity—even if the latter is already largely a lost cause.

Table **T14.NUM** provides the numbers of generic and suprageneric taxa and nomina below class of extant **Lissamphibia** recognised as valid here. Among them, the number of new taxa introduced in the present work for extant lissamphibian taxa is high: 13/575 (2.3 %) at the rank genus (Appendix **A5.NGS**), 171/573 (29.8 %) in the family-series (Appendix **A6.NFS**) and 10/34 (29.4 %) in the class-series below the rank class (Appendix **A7.NCS**), i.e. 194/1182 (16.4 %) in total. But this number is of a much lower magnitude than the total number of available extant lissamphibian nomina already published but now considered invalid synonyms (Table **T16.SYN**): 869/1824 (47.6 %) in the genus-series, 204/487 (41.8 %) in the family-series and 367/409 (89.7 %) in the class-series, i.e. 1344/2825 (47.6 %) in total. So, even if half of them were synonymised this would have a feeble impact on the ***Synonymy Load Index*** (SLI = number of invalid nomina / number of available nomina) in amphibians, while the progress in the resolution of the taxonomy of amphibians provided by the other ones would be substantial. Furthermore, as discussed below (see our section 4.3.1.3 Tomoidy), it can be quite safely expected that the progressive resolution of the polytomies still present in *TREE* will be followed by an increase in the number of taxa/nomina rather than a decrease.

The ***Principle of Coordination*** allows ***nomenclatural parsimony*** in the family-series. In this nominal-series, a given nomen can be used at several ranks (these are different ***parohypses*** of the same nomen). This can be measured by a ***Nomenclatural Parsimony Index*** (NPI = number of nomina / number of parohypses). If we consider only the nomina of extant lissamphibian taxa (Table **T17.PAR**), we need only 356 nomina for 573 parohypses, many of them being used as valid at two to 12 ranks, which amounts to a NPI of 62.1 %, an impressive figure indeed, which speaks in favour of the nomenclatural Principle of Coordination. The same would apply in the genus-series if a comprehensive ergotaxonomy of all extant **Lissamphibia** using consistently the rank subgenus was implemented, and in the species-series if the four ranks recognised by the *Code* (supraspecies, species, exerge and subspecies) were used, as proposed by Dubois & Raffaëlli (2009, 2012) in the **Urodela**. But in the class-series, where the Principle of Coordination cannot apply (for reasons explained above), the number of nomina needed is the same (34) as the number of taxa (Table **T14.NUM**).

**TABLE 16.SYN.** Synonymy load in extant **Lissamphibia**. (i.e., excluding all-fossil supraspecific taxa) according to the taxonomy adopted here.
Synonymy load index: SLI = number of akyronyms / number of hoplonyms.
In this Table, exoplonyms are included in anoplonyms.

| Nominal-series | Nomina | Hoplonyms | Anoplonyms | Kyronyms | Akyronyms | SLI |
|---|---|---|---|---|---|---|
| Class-series | 409 | 402 | 7 | 35 | 367 | 91.3 % |
| Family-series | 592 | 488 | 104 | 380 | 108 | 22.1 % |
| Genus-series | 1826 | 1641 | 185 | 770 | 871 | 53.1 % |
| Total | 2827 | 2531 | 296 | 1185 | 1346 | 53.2 % |

**TABLE 17.PAR.** Family-series paronymy in the extant **Lissamphibia** (i.e., excluding all-fossil supraspecific taxa) according to the taxonomy adopted here.

The table gives the numbers (from 1 to 12) of parohypses of all family-series nomina of extant **Lissamphibia** nomina having from 1 to 12 parohypses in *CLAD*. Nomina are listed according to their acrohypses (highest ranked taxon bearing the nomen).

| Acrohypse | 1 | 2 | 3 | 4 | 5 | 6 | 8 | 10 | 12 | Subtotal 2–12 | Total 1–12 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 14. Superfamilia | – | 6 | 3 | 5 | 1 | – | 1 | 1 | 1 | 18 | 18 |
| 15. Epifamilia | – | 7 | 1 | – | – | – | – | – | – | 8 | 8 |
| 16. Apofamilia | – | 3 | 2 | – | 1 | – | – | – | – | 6 | 6 |
| 17. Familia | 20 | 7 | 1 | 5 | 1 | 2 | 1 | – | – | 17 | 37 |
| 18. Subfamilia | 38 | 10 | 6 | 3 | – | – | – | – | – | 19 | 57 |
| 19. Tribus | 38 | 8 | 3 | 2 | 1 | – | – | – | – | 14 | 52 |
| 20. Subtribus | 43 | 10 | 2 | – | – | – | – | – | – | 12 | 55 |
| 21. Infratribus | 32 | 5 | – | – | – | – | – | – | – | 5 | 37 |
| 22. Hypotribus | 21 | 6 | – | – | 1 | – | – | – | – | 7 | 28 |
| 23. Clanus | 18 | 1 | 1 | – | – | – | – | – | – | 2 | 20 |
| 24. Subclanus | 8 | 3 | – | – | – | – | – | – | – | 3 | 11 |
| 25. Infraclanus | 13 | 2 | 1 | – | – | – | – | – | – | 3 | 16 |
| 26. Hypoclanus | 10 | – | – | – | – | – | – | – | – | – | 10 |
| 27. Catoclanus | 1 | – | – | – | – | – | – | – | – | – | 1 |
| Total nomina | 242 | 68 | 20 | 15 | 5 | 2 | 2 | 1 | 1 | 114 | 356 |
| Total parohypses (taxa) | 242 | 136 | 60 | 60 | 25 | 12 | 16 | 10 | 12 | 331 | 573 |

## C.01.01. Subphylum **Vertebrata** Cuvier, 1800

***Protonym***: **Vertébrés** Cuvier, 1800: first unnumbered table [UC].
***Eunym***: Cuvier, 1816: 58.
***Getangiotaxon***: Not treated here.
***Adelphotaxa***: Not treated here.
***Getendotaxa***: **Amphibia** Blainville, 1816; all other vertebrate taxa not treated here.

## C.02.01. Classis **Amphibia** Blainville, 1816

***Protonym***: **Amphybiens** Blainville, 1816: '107' [115] [C].
***Eunym***: Macleay, 1821: 275.
***Getangiotaxon***: Not treated here.
***Adelphotaxa***: Not treated here.
***Getendotaxa***: **Lissamphibia** Gadow, 1898; all-fossil non-lissamphibian amphibian taxa not treated here.

***Comments***: Following the rationale of Dubois (2015*c*), the Duplostentional Nomenclatural System and the tradition in the *Zoological Record* for one and a half century, we apply this nomen, which is a sozodiaphonym (Dubois & Frétey 2021*d*), with this auctorship and date, to the holophyletic group, usually attributed to the rank class (e.g. Cannatella & Hillis 2004, Marjanović & Laurin 2015), covering all the anamniote tetrapods subsequent to the 'lissamphibian-amniote phylogenetic split' (Ruta *et al.* 2003*a*), including the Palaeozoic groups |**Lepospondyli**| and |**Temnospondyli**|. The present work deals only with the subclass **Lissamphibia** of this class, as defined below. The cladistic relationships between this subclass and the other, all-fossil, groups of anamniote vertebrates are still controversial (see e.g. Schoch 2009, Marjanović & Laurin 2015) and therefore their relative hierarchical relationships are not stabilised.

## C.03.01. Subclassis **Lissamphibia** Gadow, 1898

***Protonym and eunym***: **Lissamphibia** Gadow, 1898: xii, 13 [bC].
***Getangiotaxon***: **Amphibia** Blainville, 1816.
***Adelphotaxa***: All-fossil non-lissamphibian amphibian taxa not treated here.
***Getendotaxa***: **Anura** Duméril, 1805; **Gymnophiona** Rafinesque, 1814; **Urodela** Duméril, 1805; **1 C†**.

***Comments***: Following the rationale of Dubois (2020*a*) and the recent tradition in the literature (see Dubois 2015*c*), we apply this nomen, which is a sozodiaphonym (Dubois & Frétey 2021*c*), with this auctorship and date, to the subclass accomodating all the recent amphibians, distributed in the three orders **Anura**, **Gymnophiona** and **Urodela**, as well as the fossil order **Allocaudata**, whose cladistic relationships with these three taxa are unresolved (see e.g. Marjanović & Laurin 2015).

Based on the molecular data of *TREE*, the three extant orders **Anura**, **Gymnophiona** and **Urodela** are well supported holophyletic taxa, and it is the case also for these three groups altogether, but our data do not allow to resolve the relationships between these three groups, which for the time being constitute therefore an unresolved ***trichotomy***. In general, morphological and molecular analyses tend to agree that salamanders and frogs are sister-lineages, and several recent authors (e.g. Frost *et al*. 2006; Roelants *et al.* 2007; San Mauro *et al*. 2010) credited the **Anura** and **Urodela** with a sister-group relationship excluding the **Gymnophiona**. If this hypothesis was supported by future data and analyses, the taxon accommodating the former two taxa should bear the nomen **Batrachia** Brongniart, 1800, which is currently invalid for being a ***hypnokyronym*** (see Dubois 2015*c*, 2016; Dubois & Frétey 2020*a,d*). However, the phylogenetic signal in these datasets has long been noted to be inconsistent or incongruent among partitions (see Siu-Ting *et al.* 2019 and Hime *et al.* 2020, and historical references therein). The most recent genome-scale analysis (Hime *et al.* 2020) recovered 'strong' support for **Batrachia** in combined analyses of 220 nuclear loci, but noted that only 67 individual gene trees actually support this node. While we (and probably most other batrachologists) believe that the dichotomy **Batrachia-Gymnophiona** is likely the 'true' topology, at this stage we continue to reflect this uncertainty in our cladonomy.

Addition of **Batrachia** to the system proposed here would merely require the insertion of an additional rank superorder for this taxon and for its sister-taxon **Gymnophiona**. The latter nomen would therefore apply both to the rank superorder and to the rank order, a rare situation where coordination can be used in the class-series (see Dubois 2015*c*). On the other hand, if, as suggested by Feller & Hedges (1998), the **Gymnophiona** and **Urodela** were found to be sister-taxa excluding the **Anura**, they should be grouped under the nomen **Derotreta** Van der Hoeven, 1833, whereas no nomen would be available for a taxon including the **Anura** and **Gymnophiona** but excluding the **Urodela** (Dubois 2015*c*: 103–104, 108). The synonymies of all these class-series (CS) nomina are provided in Appendix **A7.NCS**.

## C.04.01. Ordo **Anura** Duméril, 1805

***Protonym***: **Anoures** Duméril, 1805: 91 ['F'].
***Eunym***: Ficinus & Carus, 1826: plate.
***Getangiotaxon***: **Lissamphibia** Gadow, 1898.
***Adelphotaxa***: **Gymnophiona** Rafinesque, 1814; **Urodela** Duméril, 1805; **1 C†**.
***Getendotaxa***: **Angusticoela** Reig, 1958; **Hydrobatrachia** Ritgen, 1828; **3 F†**; **39 G†**.

***Comments***: The holophyly of all extant anurans is supported by all phylogenetic studies based on morphology and on molecular data. Numerous CS nomina are available for this taxon (Appendix **A7.NCS**) but the valid one under DONS Criteria is the sozodiaphonym **Anura** Duméril, 1805 (Dubois 2004*b*, 2005*b*, 2015*c*, 2020*a*; Dubois & Ohler 2019; Dubois & Frétey 2020*b*).

As explained in our M&M section, our assignment of the rank family to a taxon relies on a series of Criteria. The first Criterion is the long-term usage of this rank for a valid taxon as documented by the analysis of about 100 ergotaxonomies (classifications adopted as valid) from the late 18th century to 2014. Twenty-five family-series nomina fall into the first quarter of usage employed in 23 to 99 % of the ergotaxonomies. Based on *TREE* and our Criteria, 55 taxa were assigned to the rank family in the **Anura**, which is slightly more than in the recent classifications published. Detailed synonymies of the valid nomina applied to these families are provided in Appendix **A6.NFS**. Syntaxic nomina that apply to the same taxa are listed in Appendices **A7.NCS** and **A8.ECT**. These nomina are unavailable respectively because they were not based on available genus-series (GS) nomina then considered valid (anoplonyms) or because they were purposely proposed outside the frame of the *Code* (ectonyms).

To transpose *TREE* into the ergotaxonomy *CLAD*, we retained up to 12 ranks to describe the relationships below the rank order and above the rank family, nine in the CS and three in the FS.

According to *TREE*, the **Anura** are divided into two highly supported branches, here recognised as suborders: {α1} the **Angusticoela**, synotaxic with the superfamily *leiopelmatoidea* of Dubois (2005*d*) and Zhang *et al.* (2013), a redundant and therefore useless rank in *CLAD*, including the families *Ascaphidae* and *Leiopelmatidae*; and {α2} its sister-taxon the **Hydrobatrachia**, including all other anurans.

### C.05.01. Subordo **Angusticoela** Reig, 1958

***Protonym and eunym***: **Angusticoela** Reig, 1958: 111 [bO].
***Getangiotaxon***: **Anura** Duméril, 1805.
***Adelphotaxon***: **Hydrobatrachia** Ritgen, 1828.
***Getendotaxa***: *Ascaphidae* Fejérváry, 1923; *Leiopelmatidae* Mivart, 1869-|Turbott, 1942|.

***Comments***: The cladistic relationship of this branch to the other anurans and within this branch is stable and recognised in all recent works (Roelants & Bossuyt 2005; Frost *et al.* 2006; Bossuyt & Roelants 2009; Pyron & Wiens 2011; Irisarri *et al.* 2012; Zhang *et al.* 2013; Feng *et al.* 2017).

The nomen **Amphicoela** Noble, 1931 is a distagmonym and a junior homonym of the nomina **Amphicoela** Meyer, 1860 and **Amphicoela** Owen, 1860, and thus cannot be valid for this group (see Appendix **A7.NCS**).

As the FS taxon and nomen *Leiopelmatidae* is retained by the 'Upper Quartile Criterion' [UQC] at the rank family, its sister-taxon *Ascaphidae* must be attributed to the same rank according to the 'Sister-Taxa Criterion' [STC].

### F.17.01. Familia *Ascaphidae* Fejérváry, 1923

***Protonym and eunym***: *Ascaphidae* Fejérváry, 1923: 178 [F].
***Getangiotaxon***: **Angusticoela** Reig, 1958.
***Adelphotaxon***: *Leiopelmatidae* Mivart, 1869-|Turbott, 1942|.
***Getendotaxon***: *Ascaphus* Stejneger, 1899.

### F.17.02. Familia *Leiopelmatidae* Mivart, 1869-|Turbott, 1942|

***Protonyms***: *Liopelmatina* Mivart, 1869: 291 [bF]; |*Leiopelmidae* Turbott, 1942: 247| [F].
***Eunym***: Stephenson 1951: 18.
***Getangiotaxon***: **Angusticoela** Reig, 1958.
***Adelphotaxon***: *Ascaphidae* Fejérváry, 1923.
***Getendotaxa***: *Leiopelmatinae* Mivart, 1869-|Turbott, 1942|; **1 F†**.

### F.18.01. Subfamilia *Leiopelmatinae* Mivart, 1869-|Turbott, 1942|

***Eunym***: Kuhn 1965: 86.
***Getangiotaxon***: *Leiopelmatidae* Mivart, 1869-|Turbott, 1942|.
***Adelphotaxon***: **1 F†**.
***Getendotaxa***: *Leioaspetos* Wells & Wellington, 1985; *Leiopelma* Fitzinger, 1861.

## G.28.005. Genus *Leioaspetos* Wells & Wellington, 1985

***Getangiotaxon***: *Leiopelmatinae* Mivart, 1869-|Turbott, 1942|.
***Adelphotaxon***: *Leiopelma* Fitzinger, 1861.
***Getendotaxon***: *Leioaspetos hamiltoni* (McCulloch, 1919).

***Comments***: The species originally described as *Liopelma hamiltoni* McCulloch, 1919 is a striking example of '*Latonia*-like situation' (LLS) relatively to all other species currently referred to the genus *Leiopelma* Fitzinger, 1861 (see M&M section). The generic nomen *Leioaspetos* Wells & Wellington, 1985 is available for this species, and we recognise this genus as distinct from *Leiopelma* Fitzinger, 1861.

## C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828

***Protonym***: **Hydrobatrachi** Ritgen, 1828: 278 ['F'].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Anura** Duméril, 1805.
***Adelphotaxon***: **Angusticoela** Reig, 1958.
***Getendotaxa***: **Geobatrachia** Ritgen, 1828; **Mediogyrinia** Lataste, 1878; **2 G†**.

***Comments***: The suborder **Hydrobatrachia** includes all the **Anura** except the **Angusticoela**. The synonymic list of this distagmonym includes **Archeobatrachia** Reig, 1958 as originally defined, and its synotaxic list includes the ectonym «Lalagobatrachia», a name coined explicitly as 'unregulated' (Frost *et al.* 2006: 143), i.e. unavailable under the *Code* and DONS.

This taxon includes two well supported branches recognised here as the infraorders **Geobatrachia** and **Mediogyrinia**.

## C.06.01. Infraordo **Geobatrachia** Ritgen, 1828

***Protonym***: **Geobatrachi** Ritgen, 1828: 278 ['F'].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Angusticoela** Reig, 1958.
***Adelphotaxon***: **Mediogyrinia** Lataste, 1878.
***Getendotaxa***: **Dorsipares** Blainville, 1816; **Laevogyrinia** Lataste, 1878; **1 G†**.

***Comments***: The valid nomen under DONS of the well supported branch that includes the **Dorsipares** (families *Pipidae* and *Rhinophrynidae*) and the **Laevogyrinia** (all other frogs) is the distagmonym **Geobatrachia** Ritgen, 1828. This branch was not retrieved in Frost *et al.* (2006), where their «Xenoanura», our **Dorsipares**, was sister-taxon to all frogs but **Angusticoela**. In Roelants & Bossuyt (2005), Bossuyt & Roelants (2009) and Pyron & Wiens (2011), this branch («Xenoanura» or *Pipoidea*) found its position as the sister-branch to what is here called the **Laevogyrinia**.

## C.07.01. Hypoordo **Dorsipares** Blainville, 1816

***Protonym***: **Dorsipares** Blainville, 1816: '111' [119] [bO].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Geobatrachia** Ritgen, 1828.
***Adelphotaxon***: **Laevogyrinia** Lataste, 1878.
***Getendotaxa***: *Pipidae* Gray, 1825-|Fitzinger, 1826|; *Rhinophrynidae* Günther, 1858; **1 F†**; **7 G†**.

***Comments***: This taxon is recognised in all phylogenies and taxonomies based on morphological or molecular data. Besides the all-fossil *Palaeobatrachidae*, it groups two extant families, the *Pipidae* and *Rhinophrynidae*.

The distagmonym **Dorsipares**, being the first available nomen for this taxon, is its valid nomen under DONS. Its long synonymic list (see Appendix **A7.NCS**) includes **Xenoanura** Starrett, 1973, and its synotaxic to the FS nomen *Pipoidea* used by Roelants & Bossuyt (2005) but which is redundant in *CLAD*.

Frost *et al.* (2006) used for this taxon the ectonym «Xenoanura», erroneously credited to Savage (1973: 352) where it had been borrowed from Starrett (1973: 251), and which is an ectonym in their work, like all their other subordinal names above the rank superfamily as they were not attributed to ranks.

Both *Pipidae* and *Rhinophrynidae* are retained at the family rank on account of the [UQC]. Whereas the *Rhinophrynidae* include a single genus *Rhinophrynus*, the *Pipidae* include five extant genera. *Pipa*, the only member of the *Pipinae*, is sister-taxon to the other genera, for which the subfamilial nomen *Dactylethrinae* is available. Within this branch, the tribe *Dactylethrini* (genera *Silurana* and *Xenopus*) constitutes a well-supported sister-branch to the tribe *Hymenochirini* (genera *Hymenochirus* and *Pseudhymenochirus*).

## F.17.03. Familia *Pipidae* Gray, 1825-|Fitzinger, 1826|

***Protonyms***: *Piprina* Gray, 1825: 214 [UC]; |*Pipoidea* Fitzinger, 1826: 37| [F].
***Eunym***: Swainson 1839: 88.
***Getangiotaxon***: **Dorsipares** Blainville, 1816.
***Adelphotaxa***: *Rhinophrynidae* Günther, 1858; **1 F†.**
***Getendotaxa***: *Dactylethrinae* Hogg, 1838; *Pipinae* Gray, 1825-|Fitzinger, 1826|; **1 bF†**; **6 G†**.

***Comments***: Aranciaga-Rolando *et al.* (2019) introduced two ectonyms for all-fossil taxa of this group: «Panpipidae» and «Shelaniinae». Although they 'look like' nomina of respectively familial and subfamilial rank, they are unavailable because these authors did not mention these ranks but designated these names as 'stem-based nomina', because they proposed these new nomina under the designation of '*nomen novum*', which applies to neonyms, not to poieonyms, and because they did not explicitly designate nucleogenera ('type genera') for these nominal taxa (the former not being even based on an available genus-series nomen).

The unavailable nomen «Shelaniinae» applies to a well-diagnosed taxon which we recognise here as a third, all-fossil, subfamily of the family *Pipidae* besides the *Pipinae* and the *Dactylethrinae.* Kuhn (1965: 88) mentioned a family "*Salteniidae*", based on the oldest genus nomen of this group (*Saltenia* Reig, 1959) but without any diagnostic element that could make it nomenclaturally available. He credited 'Kuhn 1963' with authorship of this nomen, but to the best of our knowledge Kuhn did not publish any scientific paper in 1963. In his 1962 work, he placed the genus *Saltenia* in a "Fam. nov." which he did not name but for which he provided a diagnosis and a figure (borrowed from Reig 1959). It is impossible to use Article 13.1.2 of the *Code* to provide nomenclatural availability to the nomen "*Salteniidae*" proposed by Kuhn (1965), because in this work he did not provide the reference of his 1962 work. Furthermore, in his comprehensive list of herpetological higher taxa nomina (Kuhn 1967*b*), he did not mention this nomen. We are therefore led to provide nomenclatural availability to this nomen below.

Beside the two ectonyms mentioned above, Aranciaga-Rolando *et al.* (2019) introduced two new available nomina, the genus nomen *Patagopipa* and the nomen of its nucleospecies ('type species') for the epithet of which they used two alternative spellings: *corsolinii* (pages 727, 728, 730, 731) and *corsolini* (pages 728, 729, 732). Among these two symprotographs ('multiple original spellings'), we hereby designate *corsolinii* as the lectoprotograph ('correct original spelling') of this nomen.

## F.18.†02. Subfamilia *Salteniinae* **nov.**

***Getangiotaxon***: *Pipidae* Gray, 1825-|Fitzinger, 1826|.
***Adelphotaxa***: *Dactylethrinae* Hogg, 1838; *Pipinae* Gray, 1825-|Fitzinger, 1826|.
***Getendotaxa***: *Kuruleufemia* Gómez, 2016 †; *Saltenia* Reig, 1959 †; *Shelania* Casamiquela, 1960 †; *Patagopipa* Aranciaga Rolando, Agnolin & Corsolini, 2019 †.

***Nucleogenus, by present designation***: *Saltenia* Reig, 1959. ● ***Etymology of nomen***: R: Salta, province of Argentina. ● ***Stem of nomen***: *Salteni-*.

***Diagnosis***: Anterior ramus of pterygoid reaching the antorbital plane; eight presacral vertebrae; presacral vertebrae I–II not fused but imbricated medially; marked forward orientation of the transverse process of presacra vertebrae IV; cross-section of distal iliac shaft flattened, dorsoventrally compressed; second pair of ribs anterolaterally oriented. {Aranciaga-Rolando *et al*. 2019: 727}.

## F.18.02. Subfamilia *Dactylethrinae* Hogg, 1838

***Protonym***: *Dactylethridae* Hogg, 1838: 152 [F].
***Eunym***: Metcalf 1923: 391.
***Getangiotaxon***: *Pipidae* Gray, 1825-|Fitzinger, 1826|.
***Adelphotaxon***: *Pipinae* Gray, 1825-|Fitzinger, 1826|.
***Getendotaxa***: *Dactylethrini* Hogg, 1838; *Hymenochirini* Bolkay, 1919.

## F.19.01. Tribus *Dactylethrini* Hogg, 1838

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Dactylethrinae* Hogg, 1838.
***Adelphotaxon***: *Hymenochirini* Bolkay, 1919.
***Getendotaxa***: *Silurana* Gray, 1864; *Xenopus* Wagler *in* Boie, 1827.

## F.19.02. Tribus *Hymenochirini* Bolkay, 1919

***Protonym***: *Hymenochiridae* Bolkay, 1919: 343 [F].
***Eunym***: Bewick, Chain, Heled & Evans 2012: 914.
***Getangiotaxon***: *Dactylethrinae* Hogg, 1838.
***Adelphotaxon***: *Dactylethrini* Hogg, 1838.
***Getendotaxa***: *Hymenochirus* Boulenger, 1896; *Pseudhymenochirus* Chabanaud, 1920.

## F.18.03. Subfamilia *Pipinae* Gray, 1825-|Fitzinger, 1826|

***Eunym***: Metcalf 1923: 3.
***Getangiotaxon***: *Pipidae* Gray, 1825-|Fitzinger, 1826|.
***Adelphotaxon***: *Dactylethrinae* Hogg, 1838.
***Getendotaxon***: *Pipa* Laurenti, 1768.

## F.17.04. Familia *Rhinophrynidae* Günther, 1858

***Protonym and eunym***: *Rhinophrynidae* Günther, 1858: 348 [F].
***Getangiotaxon***: **Dorsipares** Blainville, 1816.
***Adelphotaxa***: *Pipidae* Gray, 1825-|Fitzinger, 1826|; **1 F†**.
***Getendotaxon***: *Rhinophrynus* Duméril & Bibron, 1841.

## C.07.02. Hypoordo **Laevogyrinia** Lataste, 1878

***Protonym***: **Laevogyrinidae** Lataste, 1878: 491 [UC].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Geobatrachia** Ritgen, 1828.
***Adelphotaxon***: **Dorsipares** Blainville, 1816.
***Getendotaxa***: **Archaeosalientia** Roček, 1981; **Ranomorpha** Fejérváry, 1921; **1 GIS** (*Colodactylus* Tschudi, 1845).

***Comments***: This highly supported taxon accomodates the **Archaeosalientia** and the **Ranomorpha**. The sister-group relationship of these two branches was documented by Roelants & Bossuyt (2005), Frost *et al.* (2006), Bossuyt & Roelants (2009) and Pyron & Wiens (2011). Frost *et al.* (2006) used for this taxon the ectonym «Acosmanura» derived from the nomen **Acosmanura** Starrett, 1973 (credited in error to Savage 1973), which is a junior synonym of the distagmonym **Laevogyrinia** Lataste, 1878.

### C.08.01. Superphalanx **Archaeosalientia** Roček, 1981

***Protonym***: **Archaeosalientia** Roček, 1981: 1 [O].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Laevogyrinia** Lataste, 1878.
***Adelphotaxon***: **Ranomorpha** Fejérváry, 1921.
***Getendotaxa***: *Pelobatoidea* Bonaparte, 1850; *Scaphiopodoidea* Cope, 1865; **4 G†**.

***Comments***: The **Archaeosalientia**, a highly supported taxon, contains two superfamilies and is sister-group to the **Ranomorpha**. The nomen **Anomocoela** Nicholls, 1916, used by Frost *et al.* (2006) as the ectonym «Anomocoela», cannot be applied to this taxon as in the original publication Nicholls (1916) included in this taxon the genus *Palaeobatrachus* which is now a member of the **Dorsipares**, thus making his **Anomocoela** a junior synonym of **Geobatrachia**. **Anomocoela** Noble, 1922 is indeed a synonym of **Archaeosalientia** Roček, 1981, but it is invalid under DONS for being a distagmonym and a junior homonym of **Anomocoela** Nicholls, 1916.

This taxon includes four extant families, with the following relationships: ((*Megophryidae*, *Pelobatidae*) (*Pelodytidae*)) (*Scaphiopodidae*). The *Pelobatidae* and the *Pelodytidae* are attributed family-rank following the [UQC]. In consequence, the *Megophryidae*, sister-taxon of the *Pelobatidae*, is also attributed this rank by the [STC], and two epifamilies *Pelobatoidae* and *Pelodytoidae* must be recognised in the superfamily *Pelobatoidea*. The latter is sister to the *Scaphiopodoidea* which contains a single ‘redundant’ family *Scaphiopodidae*, whose rank is imposed by the Mandatory-Rank Criterion [MRC].

### F.14.01. Superfamilia *Pelobatoidea* Bonaparte, 1850

***Protonym***: *Pelobatidae* Bonaparte, 1850: plate [F].
***Eunym***: Bolkay 1919: 348.
***Getangiotaxon***: **Archaeosalientia** Roček, 1981.
***Adelphotaxon***: *Scaphiopodoidea* Cope, 1865.
***Getendotaxa***: *Pelobatoidae* Bonaparte, 1850; *Pelodytoidae* Bonaparte, 1850.

***Comments***: For the nomen of this superfamily, the precedence of *Pelobatidae* Bonaparte, 1850 over *Pelodytina* Bonaparte, 1850 was fixed by the ***Principle of Proedry***, as the first one was established for a taxon of rank family and the second one for a taxon of rank subfamily (Dubois 1983*b*: 271).

### F.15.01. Epifamilia *Pelobatoidae* Bonaparte, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Pelobatoidea* Bonaparte, 1850.
***Adelphotaxon***: *Pelodytoidae* Bonaparte, 1850.
***Getendotaxa***: *Megophryidae* Bonaparte, 1850-|Noble, 1931|; *Pelobatidae* Bonaparte, 1850; **1 G†**.

***Comments***: For the nomen of this epifamily, the precedence of *Pelobatidae* Bonaparte, 1850 over *Megalophreidina* Bonaparte, 1850 was fixed by the Principle of Proedry, as the first one was established for a taxon of rank family and the second one for a taxon of rank subfamily (Dubois 1983*b*: 271).

### F.17.05. Familia *Megophryidae* Bonaparte, 1850-|Noble, 1931|

***Protonyms***: *Megalophryidina* Bonaparte, 1850: plate [bF]; |*Megophryinae* Noble, 1931: 492| [bF].
***Eunym***: Špinar 1983: 55.
***Getangiotaxon***: *Pelobatoidae* Bonaparte, 1850.
***Adelphotaxon***: *Pelobatidae* Bonaparte, 1850.
***Getendotaxa***: *Leptobrachiinae* Dubois, 1983; *Megophryinae* Bonaparte, 1850-|Noble, 1931|.

***Comments***: This family is the species-richest group within the **Archaeosalientia**. We recognise in our classification 11 genera, one of which has to be named as new to resolve paraphyly when dismantling the genus *Megophrys*. The relationships within the family *Megophryidae* are transcribed by the following scheme. The two well-supported branches within the family are recognised as the subfamilies *Leptobrachiinae* and *Megophryinae*. Within the *Leptobrachiinae*, two supported branches form the tribes *Leptobrachiini* and *Leptolalagini*. The latter only includes a single genus *Leptobrachella* (Chen *et al.* 2018), an assemblage that probably will be dismantled when more data on the included species are available. Within the *Leptobrachiini*, the two taxa are the *Leptobrachiina* with a single genus *Leptobrachium* and the *Oreolalagina* including the genera *Oreolalax* and *Scutiger*.

### F.18.04. Subfamilia *Leptobrachiinae* Dubois, 1983

***Protonym and eunym***: *Leptobrachiinae* Dubois, 1983*c*: 147 [bF].
***Getangiotaxon***: *Megophryidae* Bonaparte, 1850-|Noble, 1931|.
***Adelphotaxon***: *Megophryinae* Bonaparte, 1850-|Noble, 1931|.
***Getendotaxa***: *Leptobrachiini* Dubois, 1983; *Leptolalagini* Delorme, Dubois, Grosjean & Ohler, 2006.

### F.19.03. Tribus *Leptobrachiini* Dubois, 1983

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Leptobrachiinae* Dubois, 1983.
***Adelphotaxon***: *Leptolalagini* Delorme, Dubois, Grosjean & Ohler, 2006.
***Getendotaxa***: *Leptobrachiina* Dubois, 1983; *Oreolalagina* Tian & Hu, 1985.

### F.20.01. Subtribus *Leptobrachiina* Dubois, 1983

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Leptobrachiini* Dubois, 1983.
***Adelphotaxon***: *Oreolalagina* Tian & Hu, 1985.
***Getendotaxon***: *Leptobrachium* Tschudi, 1838.

### F.20.02. Subtribus *Oreolalagina* Tian & Hu, 1985

***Protonym***: *Oreolalaxinae* Tian & Hu, 1985: 221 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Leptobrachiini* Dubois, 1983.
***Adelphotaxon***: *Leptobrachiina* Dubois, 1983.
***Getendotaxa***: *Oreolalax* Myers & Leviton, 1962; *Scutiger* Theobald, 1868.

### F.19.04. Tribus *Leptolalagini* Delorme, Dubois, Grosjean & Ohler, 2006

***Protonym***: *Leptolalaginae* Delorme, Dubois, Grosjean & Ohler, 2006: 7 [bF].
***Eunym***: *Hoc loco*.

***Getangiotaxon***: LEPTOBRACHIINAE Dubois, 1983.
***Adelphotaxon***: LEPTOBRACHIINI Dubois, 1983.
***Getendotaxon***: *Leptobrachella* Smith, 1925.

## F.18.05. Subfamilia *MEGOPHRYINAE* Bonaparte, 1850-|Noble, 1931|

***Eunym***: Noble 1931: 492.
***Getangiotaxon***: *MEGOPHRYIDAE* Bonaparte, 1850-|Noble, 1931|.
***Adelphotaxon***: *MEGOPHRYINAE* Bonaparte, 1850-|Noble, 1931|.
***Getendotaxa***: *ATYMPANOPHRYNINI* **nov.**; *BRACHYTARSOPHRYNINI* **nov.**; *MEGOPHRYINI* Bonaparte, 1850-|Noble, 1931|; *XENOPHRYINI* Delorme, Dubois, Grosjean & Ohler, 2006.

***Comments***: This branch received high support in all recent cladistic analyses (Frost *et al.* 2006; Pyron & Wiens 2011; Li *et al.* 2011; Chen *et al.* 2017; Mahony *et al.* 2017). Within this group some relationships are poorly resolved, so we recognise four taxa as tribes. The tribes *ATYMPANOPHRYINI*, *BRACHYTARSOPHRYINI* and *MEGOPHRYINI* each correspond to a single genus, whereas the *XENOPHRYINI* includes four genera of unresolved relationships. This genus level classification follows that adopted by Chen *et al.* (2017) and Deuti *et al.* (2017).

## F.19.05. Tribus *ATYMPANOPHRYINI* **nov.**

***Getangiotaxon***: *MEGOPHRYINAE* Bonaparte, 1850-|Noble, 1931|.
***Adelphotaxa***: *BRACHYTARSOPHRYNINI* **nov.**; *MEGOPHRYINI* Bonaparte, 1850-|Noble, 1931|; *XENOPHRYINI* Delorme, Dubois, Grosjean & Ohler, 2006.
***Getendotaxon***: *Atympanophrys* Tian & Hu, 1983.

***Nucleogenus, by present designation***: *Atympanophrys* Tian & Hu, 1983. ● ***Etymology of nomen***: G: ἀ- (*a*-), prefix expressing absence; τύμπανον (*tympanos*), 'drum'; ὀφρυς (*ophrus*), 'eyebrow'. ● ***Stem of nomen***: *Atympanophry-*.

***Diagnosis***: Medium to large sized megophryids (males SVL 34–90 mm; females SVL 47–110 mm); vomerine teeth absent; tympanum concealed or very small; finger and toe tips rounded; web rudimentary or small; finger I longer or shorter than finger II; finger II shorter than finger IV; inner metatarsal tubercle relatively long (more than half length of toe I); hindlimb long, reaching eye; dorsal skin relatively smooth, with few tubercles; dorsal coloration usually including a triangular spot between eyes and X-shaped dark marking; ventral coloration with reddish pattern. Breeding males with blackish nuptial spines on fingers I and II; internal subgular vocal sacs present or absent. Eggs about 3 mm large, creamy yellow. Larvae with funnel-like mouth, body thin and long, tail tip bluntly pointed, dorsal and ventral body dark coloured. {Fei & Ye 2016}.

## F.19.06. Tribus *BRACHYTARSOPHRYINI* **nov.**

***Getangiotaxon***: *MEGOPHRYINAE* Bonaparte, 1850-|Noble, 1931|.
***Adelphotaxa***: *ATYMPANOPHRYNINI* **nov.**; *MEGOPHRYINI* Bonaparte, 1850-|Noble, 1931|; *XENOPHRYINI* Delorme, Dubois, Grosjean & Ohler, 2006.
***Getendotaxon***: *Brachytarsophrys* Tian & Hu, 1983.

***Nucleogenus, by present designation***: *Brachytarsophrys* Tian & Hu, 1983. ● ***Etymology of nomen***: G: βρᾰχυς (*brachus*), 'short'; ταρσός (*tarsos*), tarsus; G: ὀφρυς (*ophrus*), 'eyebrow'. ● ***Stem of nomen***: *Brachytarsophry-*.

***Diagnosis***: Very large sized megophryids, males (SVL 78–122 mm) smaller than females (SVL 91–137 mm); skin smooth; subarticular tubercles and ridges on fingers and toes absent; inner metacarpal tubercle elliptical; 1–4 large conic tubercles on outer margin of upper eyelid; tongue large, round, slightly incurved; pupil vertical; iris entirely dark brown in life; toes small or moderately webbed; snout rounded, not projecting beyond lower lip; loreal region obviously flared; hind limbs short, heels not meeting; axillary glands small, on sides of chest; femoral glands not visible. Breeding males with nuptial spines on fingers; vocal sac and lineae masculinae present. Eggs entirely cream yellow or cream white. Tadpoles with relatively small body, total length reaching 40 mm; tail muscles well developed; upper caudal fins starting posterior to first muscle node of tail muscle; anterior part of fins low; lateral lymph sacs not dilated; mouth of tadpole funnel shaped; lip margin extremely wide, covered with papillae; labial teeth and horny beaks absent; anal opening located in middle of tail base and anal tube free in lower caudal fins; spiracle located on left side of body; dorsally between body and tail no Y-shaped mark; ventral side purple blue covered with light spots. Skull broad, its width obviously larger than its length, and highly ossified; maxilla overlapping with quadratojugal; maxillary teeth well developed; vomerine ridges present; nasal process of premaxilla inclining slightly backward; nasal bones large, in contact with each other and with frontoparietal; central part of frontoparietal very narrow; ethmoid cartilage only reaching premaxilla; otic ramus of squamosal having a posterior process; prootic separated from exoccipital; dentary and angular bone narrow; pterygoid of moderate size; tympanum hidden, tympanic anulus and columella present; pores of Eustachian tube large; equal in length to coracoid; sacral diapophyse wide and large; urostyle articulation monocondyle. Chromosomes*:* 2 n 26–30; nf 44–52. {Fei & Ye 2016}.

## F.19.07. Tribus *Megophryini* Bonaparte, 1850-|Noble, 1931|

***Eunym***: Dubois 1980: 471.
***Getangiotaxon***: *Megophryinae* Bonaparte, 1850-|Noble, 1931|.
***Adelphotaxa***: *Atympanophrynini* **nov.**; *Brachytarsophrynini* **nov.**; *Xenophryini* Delorme, Dubois, Grosjean & Ohler, 2006.
***Getendotaxon***: *Megophrys* Kuhl & Hasselt, 1822.

## F.19.08. Tribus *Xenophryini* Delorme, Dubois, Grosjean & Ohler, 2006

***Protonym and eunym***: *Xenophryini* Delorme, Dubois, Grosjean & Ohler, 2006: 7 [T].
***Getangiotaxon***: *Megophryinae* Bonaparte, 1850-|Noble, 1931|.
***Adelphotaxa***: *Atympanophrynini* **nov.**; *Brachytarsophrynini* **nov.**; *Megophryini* Bonaparte, 1850-|Noble, 1931|.
***Getendotaxa***: *Grillitschiina* **nov.**; *Ophryophryniina* **nov.**; *Xenophryina* Delorme, Dubois, Grosjean & Ohler, 2006.

## F.20.03. Subtribus *Grillitschiina* **nov.**

***Getangiotaxon***: *Xenophryini* Delorme, Dubois, Grosjean & Ohler, 2006.
***Adelphotaxa***: *Ophryophrynina* **nov.**; *Xenophryina* Delorme, Dubois, Grosjean & Ohler, 2006.
***Getendotaxon***: *Grillitschia* **nov.**

***Nucleogenus, by present designation***: *Grillitschia* **nov.** ● ***Etymology of nomen***: Patronym Grillitsch (see below). ● ***Stem of nomen***: *Grillitschi-*.

***Diagnosis***: See below under *Grillitschia* **nov.**

## G.28.022. Genus *Grillitschia* **nov.**

***Getangiotaxon***: *Grillitschiina* **nov.**
***Adelphotaxon***: None.
***Getendotaxa***: *Grillitschia aceras* (Boulenger, 1903); *Grillitschia longipes* (Boulenger, 1885).

***Etymology of nomen***: This genus is dedicated to Britta Grillitsch (1952–) and Heinz Grillitsch (1951–)

(Wien, Austria) in appreciation of their work on amphibians, particularly on larvae. ● ***Stem of nomen***: *Grillitschi-*. ● ***Grammatical gender of nomen***: feminine.

***Nucleospecies, by present designation***. ● *Megophrys longipes* Boulenger, 1885.

***Diagnosis***: Medium sized species (males SVL 40–60 mm; females SVL 50–86 mm); feebly notched tongue, vomerine teeth present, a moderately enlarged head, a narrow, sharply bent supratympanic fold without a posterior glandular swelling, a pair of dorsolateral folds and a V- or X-shaped fold in shoulder region, upper eyelid with a single horn-like tubercle and a coloration pattern including vertical bars on upper lip. {Boulenger, 1885, 1903; Taylor 1962; Manthey & Grossmann 1997}.

### F.20.04. Subtribus *Ophryophrynina* **nov.**

***Getangiotaxon***: *Xenophryini* Delorme, Dubois, Grosjean & Ohler, 2006.
***Adelphotaxa***: *Grillitschiina* **nov.**; *Xenophryina* Delorme, Dubois, Grosjean & Ohler, 2006.
***Getendotaxa***: *Boulenophrys* Fei, Ye & Jiang *in* Fei & Ye, 2016; *Ophryophryne* Boulenger, 1903.

***Nucleogenus, by present designation***: *Ophryophryne* Boulenger, 1903. ● ***Etymology of nomen***: G: ὀφρυς (*ophrus*), 'eyebrow'; φρύνη (*phryne*), 'toad'. ● ***Stem of nomen***: *Ophryophryn-*.

***Diagnosis***. ● Small to medium sized megophryids (males SVL 26–43 mm, females SVL 34–50); skin usually smooth; snout shape shield-shped; canthus rostralis sharp; upper-lip without white stripe; a tubercle or skin folds on outer margin of upper lid; iris entirely dark, brown in life; web on toes absent or weak; subarticular tubercles absent; longitudinal ridges under toes absent; tibia slightly longer than femur; groin without crescent mark; small white axillary glands on side of chest. Skull weakly or strongly ossified; maxilla overlapping with quadratojugal; vomerine teeth and vomerine ridges absent; nasal bones separated from each other, but in contact with sphenethmoid and separated from frontoparietal; otic ramus of squamosal with a posterior process; tympanum and tympanic anulus present; columella present, pores of Eustachian tube large; cartilaginous mesosternum, equal or longer than coracoid; xiphisternum slender; sacral diapophyses wide and large; sacral-coccygeal articulation monocondyle. Eggs entirely creamy white or creamy yellow; larva with a small body, well developed tail muscles, caudal fins not reaching base of tail, lateral lymph sacs not dilated, funnel shaped mouth, horny jaws absent; 4 pairs of spoon-like prelingual papillae present on mouth floor. In males, nuptial spines on fingers I or I and II; no spines on chest of lip margin; a single internal subgular vocal sac; no lineae masculinae. {Fei & Ye 2016}.

### F.20.05. Subtribus *Xenophryina* Delorme, Dubois, Grosjean & Ohler, 2006

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Xenophryini* Delorme, Dubois, Grosjean & Ohler, 2006.
***Adelphotaxa***: *Grillitschiina* **nov.**; *Ophryophrynina* **nov.**
***Getendotaxon***: *Xenophrys* Günther, 1864.

### F.17.06. Familia *Pelobatidae* Bonaparte, 1850

***Eunym***: Bonaparte 1850: plate.
***Getangiotaxon***: *Pelobatoidae* Bonaparte, 1850.
***Adelphotaxon***: *Megophryidae* Bonaparte, 1850-|Noble, 1931|.
***Getendotaxa***: *Pelobates* Wagler, 1830; **1 G†**.

### F.15.02. Epifamilia *Pelodytoidae* Bonaparte, 1850

***Protonym***: *Pelodytina* Bonaparte, 1850: 7 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Pelobatoidea* Bonaparte, 1850.
***Adelphotaxon***: *Pelobatoidae* Bonaparte, 1850.
***Getendotaxon***: *Pelodytidae* Bonaparte, 1850.

### F.17.07. Familia *Pelodytidae* Bonaparte, 1850

***Eunym***: Cope 1866: 68.
***Getangiotaxon***: *Pelodytoidae* Bonaparte, 1850.
***Adelphotaxon***: None.
***Getendotaxa***: *Pelodytes* Bonaparte, 1838; *Pelodytopsis* Nikolskii, 1896; **2 G†**.

### G.28.028. Genus *Pelodytopsis* Nikolskii, 1896

***Getangiotaxon***: *Pelodytidae* Bonaparte, 1850.
***Adelphotaxa***: *Pelodytes* Bonaparte, 1838; **2 G†**.
***Getendotaxon***: *Pelodytopsis caucasicus* (Boulenger, 1896).

***Comments***: The species originally described as *Pelodytes caucasicus* Boulenger, 1896 is another striking example of '*Latonia*-like situation' (LLS) relatively to all other species currently referred to the genus *Pelodytes* Bonaparte, 1838 (see M&M section). The generic nomen *Pelodytopsis* Nikolskii, 1896 is available for this species, and we recognise this genus as distinct from *Pelodytes* Bonaparte, 1838.

### F.14.02. Superfamilia *Scaphiopodoidea* Cope, 1865

***Protonym***: *Scaphiopodidae* Cope, 1865: 104 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Archaeosalientia** Roček, 1981.
***Adelphotaxon***: *Pelobatoidea* Bonaparte, 1850.
***Getendotaxon***: *Scaphiopodidae* Cope, 1865.

### F.17.08. Familia *Scaphiopodidae* Cope, 1865

***Eunym***: Cope 1865: 104.
***Getangiotaxon***: *Scaphiopodoidea* Cope, 1865.
***Adelphotaxon***: None.
***Getendotaxa***: *Scaphiopus* Holbrook, 1836; *Spea* Cope, 1866.

### C.08.02. Superphalanx **Ranomorpha** Fejérváry, 1921

***Protonym and eunym***: **Ranomorpha** Fejérváry, 1921: 16 [Gs].
***Getangiotaxon***: **Laevogyrinia** Lataste, 1878.
***Adelphotaxon***: **Archaeosalientia** Roček, 1981.
***Getendotaxa***: **Aquipares** Blainville, 1816; **Helanura nov.**

***Comments***: This highly supported branch is recovered in all molecular analyses of anurans (Roelants & Bossuyt 2005; Frost *et al.* 2006; Roelants *et al.* 2007; Bossuyt & Roelants 2009; Pyron & Wiens 2011) and has been designated in these works as **Neobatrachia** Reig, 1958, a distagmonym which is both a junior homonym of **Neobatrachia** Sarasin & Sarasin, 1890 and a junior synonym of **Ranomorpha** Fejérváry, 1921, and is therefore invalid under DONS. It includes two branches, the taxon-rich **Aquipares** and its sister-taxon, the **Helanura**, which corresponds to the single family *Heleophrynidae*.

### C.09.01. Epiphalanx **Aquipares** Blainville, 1816

***Protonym***: **Aquipares** Blainville, 1816: '111' [119] [bO].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Ranomorpha** Fejérváry, 1921.
***Adelphotaxon***: **Helanura nov.**
***Getendotaxa***: **Gondwanura nov.**; **Phaneranura nov.**; **Scoptanura** Starrett, 1973.

***Comments***: The **Aquipares** are a highly supported branch of **Ranomorpha** that contains three taxa, the relationships between which are not resolved in our *TREE*. The name used by Frost *et al.* (2006) for this taxon, «Phthanobatrachia», was explicitly presented as an 'unregulated' name outside the *Code* (Frost *et al.* 2006: 143) and is thus an unavailable ectonym. Even if it was available, it would anyway be an invalid junior synonym of the distagmonym **Aquipares**.

### C.10.01. Phalanx **Gondwanura nov.**

***Getangiotaxon***: **Aquipares** Blainville, 1816.
***Adelphotaxa***: **Phaneranura nov.**; **Scoptanura** Starrett, 1973.
***Getendotaxa***: *Nasikabatrachidae* Biju & Bossuyt, 2003; *Sooglossidae* Noble, 1931.

***Comments***: A highly supported branch in *TREE* accommodates the families *Nasikabatrachidae* and *Sooglossidae*. This relationship was recovered in all recent molecular cladistic analyses. In Frost *et al.* (2006), this taxon was named *Sooglossidae*, of which *Nasikabatrachidae* was considered a synonym, whereas in Bossuyt & Roelants (2009) it was recognised as the superfamily *Sooglossoidea*. Here we credit *Sooglossidae* with the rank family according to the [UQC], and its sister-taxon *Nasikabatrachidae* is afforded the same rank to follow the Non-Redundancy Criterion [NRC], i.e. to avoid redundancy between the nomina of phalanx and family. As no class-group nomen is available for this taxon, we name it **Gondwanura**, which points to its biogeographical origin.

***Conucleogenera, by present designation***: *Nasikabatrachus* Biju & Bossuyt, 2003; *Sooglossus* Boulenger, 1906.

***Etymology of nomen***: Sanskrit: गोण्डवन (*gondavana*, from *wana*, 'forest' and *Goondu*, name of a Dravidian hill people), 'Gondwana'; N: **Anura** Duméril, 1805, derived from G: ἀν- (*an-*), 'without'; οὐρά (*oura*), 'tail'. This nomen refers to the Gondwanian distribution of this relict group of frogs (Biju & Bossuyt 2003).

***Diagnosis***: Very small to large (SVL 9–90 mm) sized frogs; smooth or tubercular skin; absence of columella; presence of a neopalatine bone; coracoids slender, lateral ends as wide or wider than medial ends; presence of a small supplementary bony element on tarsus; sharply pointed terminal phalanges; inguinal amplexus. {Biju & Bossuyt 2003; Van der Meijden *et al.* 2007}.

### F.17.09. Familia *Nasikabatrachidae* Biju & Bossuyt, 2003

***Protonym***: *Nasikabatrachidae* Biju & Bossuyt, 2003: 711 [F].
***Getangiotaxon***: **Gondwanura nov.**
***Adelphotaxon***: *Sooglossidae* Noble, 1931.
***Getendotaxon***: *Nasikabatrachus* Biju & Bossuyt, 2003.

## F.17.10. Familia *Sooglossidae* Noble, 1931

***Protonym***: *Sooglossinae* Noble, 1931: 492 [bF].
***Eunym***: Griffiths 1963: 273.
***Getangiotaxon***: **Gondwanura nov.**
***Adelphotaxon***: *Nasikabatrachidae* Biju & Bossuyt, 2003.
***Getendotaxa***: *Sechellophryne* Nussbaum & Wu, 2007; *Sooglossus* Boulenger, 1906.

## C.10.02. Phalanx **Phaneranura nov.**

***Getangiotaxon***: **Aquipares** Blainville, 1816.
***Adelphotaxa***: **Gondwanura nov.**; **Scoptanura** Starrett, 1973.
***Getendotaxa***: **Bainanura nov.**; **Diplosiphona** Günther, 1859.

***Comments***: This highly supported branch is a member of an unresolved trichotomy with **Gondwanura** and **Scoptanura**. It includes the **Bainanura** and the **Diplosiphona**. This taxon was named «Notogaeanura» in Frost *et al.* (2006) but as this name was explicitly coined outside the *Code*, it is an unavailable ectonym. As no nomen is available for this taxon, we name it here.

***Conucleogenera, by present designation***: *Bufo* Garsault, 1764; *Heleioporus* Gray, 1841.

***Etymology of nomen***: G: φανερός (*phaneros*), 'visible, conspicuous'; N: **Anura** Duméril, 1805, derived from G: ἀν- (*an-*), 'without'; οὐρά (*oura*), 'tail'. This nomen refers to the behaviour of many of these frogs, which often do not hide and are therefore visible in their natural habitat, even in the day time.

***Diagnosis***: Very small to large (SVL 10–110 mm) sized frogs; terrestrial breeding with direct development of terrestrial eggs (ovoviviparity in *Eleutherodactylus jasperi*); an embryonic egg teeth present; arciferal or rarely pseudofirmisternal pectoral girdle; calcanea and astragali partially fused; usually with T-shaped terminal phalanges; intercalary elements of phalanges always lacking. {Hedges *et al.* 2008; Heinicke *et al.* 2009}.

## C.11.01. Subphalanx **Bainanura nov.**

***Getangiotaxon***: **Phaneranura nov.**
***Adelphotaxon***: **Diplosiphona** Günther, 1859.
***Getendotaxa***: **Phoranura nov.**; **Phrynanura nov.**

***Comments***: This branch is within the **Phaneranura** the sister-group of the **Diplosiphona** and has high statistical support. It has been recovered in all cladistic analyses based on molecular data (Bossuyt & Roelants 2009; Pyron & Wiens 2011; Irisarri *et al.* 2012; Zhang *et al.* 2013; Feng *et al.* 2017; Hutter *et al.* 2017; Streicher *et al.* 2018). It includes two highly supported branches, the **Phoranura** (*Dendrobatoidea*) and the **Phrynanura**. In Frost *et al.* (2006), this taxon is termed the «Nobleobatrachia» (an ectonym); in more recent works (Zhang *et al.* 2013; Feng *et al.* 2017; Streicher *et al.* 2017), it is named *Hyloidea*, a nomen here applied to a much less inclusive taxon under DONS Criteria. As there is no class-series nomen available for this taxon, we name it here.

***Conucleogenera, by present designation***: *Bufo* Garsault, 1764; *Dendrobates* Wagler, 1830.

***Etymology of nomen***: G: βαίνω (*baino*), 'I walk'; N: **Anura** Duméril, 1805, derived from G: ἀν- (*an-*), 'without'; οὐρά (*oura*), 'tail'. This nomen refers to the behaviour of many of these frogs, which often walk rather than they jump.

***Diagnosis***: Very small to very large sized frogs (SVL 12–230 mm); morphology frog-, toad- or treefrog-like; sternum present, ossified or cartilaginous; pectoral girdle arciferal or firmisternal; terminal phalanges variable; intercalary elements absent or present; fibulare and tibiale fused at proximal and distal end, or very rarely completely fused; Bidder's organs absent or present; amplexus axillary or absent, rarely inguinal; free living tadpoles, but also various modes of independence from water (nests, dorsal transport of tadpoles, body cavities, endotrophy, viviparity); tadpole with keratinised mouthparts, branchial chambers fused, spiracle positioned on left side of body. {Mendelson *et al.* 2000; Hedges *et al.* 2008; Heinicke *et al.* 2009; Vitt & Caldwell 2014}.

### C.12.01. Infraphalanx **Phoranura nov.**

***Getangiotaxon***: **Bainanura nov.**
***Adelphotaxon***: **Phrynanura nov.**
***Getendotaxa***: *Aromobatidae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006; *Dendrobatidae* ||Bonaparte, 1850||-Cope, 1865.

***Comments***: The position of this branch in the phylogeny of anurans has been highly unstable and debated. It was recognised as a family *Dendrobatidae* or as a superfamily *Dendrobatoidea* grouping the *Aromobatidae* and *Dendrobatidae*. This taxon was proposed to be within the **Ranoidea** which included also the *Microhylidae*, the *Arthroleptidae*, the *Ranidae*, the *Hyperoliidae*, the *Rhacophoridae* and the genus *Hemisus* (Ford & Cannatella 1993), but in recent phylogenies it was part of the **Bainanura** (Darst & Cannatella 2004; Frost *et al.* 2006; Grant *et al.* 2006). Its position within this taxon is not fixed and it was recovered as sister-taxon to hyline frogs (Darst & Cannatella 2004), to *Thoropa*, together being sister-taxon to the *Bufonidae* (Frost *et al.* 2006), as sister-taxon to the *Hylodidae* within the «Athesphatanura» or as sister-taxon to the *Bufonidae* (Bossuyt & Roelants 2009; Pyron & Wiens 2011; Irisarri *et al.* 2012; Frazão *et al.* 2015). Zhang *et al.* (2013) recovered the *Dendrobatidae* within the *Hyloidea* as sister-taxon to all other hyloid frogs, whereas in Streicher *et al.* (2017) it was considered sister-taxon to the *Leptodactylidae* and in Feng *et al.* (2017) as outgroup to a branch including some leptodactyloid and bufonid families. Hutter *et al.* (2017) recovered the *Dendrobatidae* in the same position as our infraphalanx **Phoranura**, as sister-taxon to a large taxon, here named **Phrynanura**, grouping the families *Brachycephalidae*, *Ceuthomantidae*, *Hemiphractidae*, *Bufonidae*, *Odontophrynidae*, *Allophrynidae*, *Centrolenidae*, *Ceratophryidae*, *Cycloramphidae*, *Rhinodermatidae*, *Telmatobiidae*, *Hylidae*, *Phyllomedusidae* and *Leptodactylidae*. As no class-series nomen has been given to this taxon so far, we name it here.

The **Phoranura** consist in the *Aromobatidae* and the *Dendrobatidae*. Santos *et al.* (2009) recognised a single family *Dendrobatidae* including the *Allobatinae* and *Dendrobatinae* and they synonymised all the genera of *Dendrobatinae* under *Dendrobates*. Brown *et al.* (2011) and Grant *et al.* (2017) argued for maintaining a classification that reflects more precisely the variation within the taxon here named **Phoranura**. Here the *Dendrobatidae* are attributed family rank based on the [UQC] and consequently the *Aromobatidae* are also afforded this rank based on the [STC] and on the [NRC], i.e. to avoid redundancy between the family and the infraphalanx.

***Conucleogenera, by present designation***: *Aromobates* Myers, Paolillo & Daly, 1991; *Dendrobates* Wagler, 1830.

***Etymology of nomen***: G: φέρω (*phero*), 'I bear'; N: **Anura** Duméril, 1805, derived from G: ἀν- (*an-*), 'without'; οὐρά (*oura*), 'tail'. This nomen refers to the fact that in the species of this group the adult male or female carries the tadpoles on its back from a small water collection to another one (Grant *et al.* 2006).

***Diagnosis***: Small to medium sized frogs (SVL 13–50 mm); supernumerary tubercles on hand present; tarsal ridge present; a weak metatarsal ridge; insertion of distal tendon of *musculus semitendinosus* dorsal to *m. gracilis*; presence of a binding tendon straping *m. semitendinosus* to outer edge of *m. gracilis*; dorsal flap of *m. depressor mandibulae* present; tympanum conceiled superficially by *m. depressor mandibulae*; *m. intermandibularis* supplementary elements oriented anteromedially; amplexus absent; presence of dorsal transport of tadpoles; epicoracoids completely fused, non-overlapping; omosternum medially ossified; maxillary teeth nonpedicellate; retroarticular process of mandible present; chromosome number 24. {Silverstone 1975; Myers & Daly 1976; Myers 1982; Savage 2002; Grant *et al.* 2006; Paez-Vacas *et al.* 2010; Brown *et al.* 2011; Grant & Myers 2013}.

### F.17.11. Familia *Aromobatidae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006

***Protonym and eunym***: *Aromobatidae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006: 4 [F].

***Getangiotaxon***: **Phoranura nov.**

***Adelphotaxon***: *Dendrobatidae* ||Bonaparte, 1850||-Cope, 1865.

***Getendotaxa***: *Allobatinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006; *Anomaloglossinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006; *Aromobatinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.

***Comments***: Three highly supported branches are recognised within the *Aromobatidae* but the relationships between them are not resolved. They are transposed in the current ergotaxonomy as the subfamily *Allobatinae*, with the single genus *Allobates*, the subfamily *Anomaloglossinae*, with the genera *Anomaloglossus* and *Rheobates*, and the subfamily *Aromobatinae*, with the genera *Aromobates* and *Mannophryne* (Grant *et al.* 2006, 2017).

### F.18.06. Subfamilia *Allobatinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006

***Protonym and eunym***: *Allobatinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006: 4 [bF].

***Getangiotaxon***: *Allobatidae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.

***Adelphotaxa***: *Anomaloglossinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006; *Aromobatinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.

***Getendotaxon***: *Allobates* Zimmermann & Zimmermann, 1988.

### F.18.07. Subfamilia *Anomaloglossinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006

***Protonym and eunym***: *Anomaloglossinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006: 4 [bF].

***Getangiotaxon***: *Allobatidae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.

***Adelphotaxa***: *Allobatinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006; *Aromobatinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.

***Getendotaxa***: *Anomaloglossus* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006; *Rheobates* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.

### F.18.08. Subfamilia *Aromobatinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006

***Eunym***: Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006: 4.

***Getangiotaxon***: *Allobatidae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.

***Adelphotaxa***: *Allobatinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006; *Anomaloglossinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.

***Getendotaxa***: *Aromobates* Myers, Paolillo & Daly, 1991; *Mannophryne* La Marca, 1992.

## F.17.12. Familia *Dendrobatidae* ||Bonaparte, 1850||-Cope, 1865

***Protonyms and eunym***: ||*Eubaphidae* Bonaparte, 1850: plate|| [F]; *Dendrobatidae* Cope, 1865: 100 [F].

***Getangiotaxon***: **Phoranura nov.**

***Adelphotaxon***: *Aromobatidae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.

***Getendotaxa***: *Colostethinae* Cope, 1867; *Dendrobatinae* ||Bonaparte, 1850||-Cope, 1865; *Hyloxalinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.

***Comments***: The family *Dendrobatidae* reveals three branches of unresolved relationships, recognised here as the subfamilies *Colostethinae*, *Dendrobatinae* and *Hyloxalinae*.

Within the *Colostethinae*, the tribes *Colostethini* (genera *Ameerega*, *Colostethus* and *Leucostethus* of unresolved mutual relationships) and *Epipedobatini* (genera *Epipedobates* and *Silverstoneia*; relationships agreeing with Grant *et al.* 2017) are here recognised.

The *Dendrobatinae* are here divided into two tribes *Dendrobatini* and *Phyllobatini*. The first covers two branches regognised as the subtribes *Andinobatina* and *Dendrobatina*. The *Andinobatina* includes the infratribes *Andinobatinia*, with the genera *Andinobates* and *Ranitomeyia*, and *Excidobatinia*, with the single genus *Excidobates*. The relationships within the subtribe *Dendrobatina* are not resolved and four genera, *Adelphobates*, *Dendrobates*, *Minyobates* and *Oophaga*, are recognised within this taxon. The positions of the genus-series taxa within this subtribe are not fixed in our classification as the relationships between the branches do not have sufficient support in our tree. This is also reflected by the variable position of *Minyobates* in the recent phylogenies published. Thus in the tree of Grant *et al*. (2006, 2017) it is sister-taxon to the branch encompassing *Ranitomeya*, *Adelphobates*, *Oophaga* and *Dendrobates*, whereas Santos *et al.* (2009) included it into their *Dendrobates galactonotus* group which groups species of *Adelphobates* and *Minyobates*, and Brown *et al.* (2011) recognised a genus *Minyobates* as sister to *Adelphobates*, *Oophaga* and *Dendrobates*. The second tribe of *Dendrobatinae*, the *Phyllobatini*, includes a single genus *Phyllobates*.

The subfamily *Hyloxalinae* is represented in *TREE* by a single genus *Hyloxalus*, but it also includes the genera *Ectopoglossus* and *Paruwrobates* (Grant *et al.* 2017), not represented in *TREE*. This arrangement corresponds in the relationships and in the proposed classification to those presented by Grant *et al.* (2006, 2017) and Brown *et al.* (2011). This differs from the classification proposed by Santos *et al.* (2009) in that these authors synonymised all the genera of *Dendrobatinae* under *Dendrobates*. Brown *et al.* (2011) and Grant *et al.* (2017) argued for maintaining a classification that reflects more precisely the variation within *Dendrobates* s.l. and we follow them. The family-series taxa of this classification are formally named below.

## F.18.09. Subfamilia *Colostethinae* Cope, 1867

***Protonym***: *Colostethidae* Cope, 1867: 191 [F].

***Eunym***: Bauer 1987: 5.

***Getangiotaxon***: *Dendrobatidae* ||Bonaparte, 1850||-Cope, 1865.

***Adelphotaxa***: *Dendrobatinae* ||Bonaparte, 1850||-Cope, 1865; *Hyloxalinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.

***Getendotaxa***: *Colostethini* Cope, 1867; *Epipedobatini* **nov.**

## F.19.09. Tribus *Colostethini* Cope, 1867

***Eunym***: *Hoc loco*.

***Getangiotaxon***: *Colostethinae* Cope, 1867.

***Adelphotaxon***: *Epipedobatini* **nov.**

***Getendotaxa***: *Ameerega* Bauer, 1986; *Colostethus* Cope, 1866; *Leucostethus* Grant, Rada, Anganoy-Criollo, Batista, Dias, Jeckel, Machado & Rueda-Almonacid, 2017.

### F.19.10. Tribus *Epipedobatini* **nov.**

***Getangiotaxon***: *Colostethinae* Cope, 1867.
***Adelphotaxon***: *Colostethini* Cope, 1867.
***Getendotaxa***: *Epipedobates* Myers, 1987; *Silverstoneia* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.

***Nucleogenus, by present designation***: *Epipedobates* Myers, 1987. ● ***Etymology of nomen***: G: ἐπίπεδος (*epipedos*), 'on the ground, level, flat'; ϐατης (*bates*), 'who walks', from βαίνω (*baino*), 'I walk'. ● ***Stem of nomen***: *Epipedobat*-.

***Diagnosis***: Small, cryptic colored frogs; skin smooth, granular or tubercular; pale oblique lateral stripe present; ventrolateral stripes present or absent; narrow to moderately expanded finger discs; median lingual process absent; larval vent tube dextral; testes entirely pigmented; no dark throat collar. {Grant *et al.* 2006}.

### F.18.10. Subfamilia *Dendrobatinae* ||Bonaparte, 1850||-Cope, 1865

***Eunym***: Gadow 1901: xi, 272.
***Getangiotaxon***: *Dendrobatidae* ||Bonaparte, 1850||-Cope, 1865.
***Adelphotaxa***: *Colostethinae* Cope, 1867; *Hyloxalinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006.
***Getendotaxa***: *Dendrobatini* ||Bonaparte, 1850||-Cope, 1865; *Phyllobatini* Fitzinger, 1843.

### F.19.11. Tribus *Dendrobatini* ||Bonaparte, 1850||-Cope, 1865

***Eunym***: Grant, Rada, Anganoy-Criollo, Batista, Dias, Jeckel, Machado & Rueda-Almonacid 2017: 27.
***Getangiotaxon***: *Dendrobatinae* ||Bonaparte, 1850||-Cope, 1865.
***Adelphotaxon***: *Phyllobatini* Fitzinger, 1843.
***Getendotaxa***: *Andinobatina* **nov.**; *Dendrobatina* ||Bonaparte, 1850||-Cope, 1865.

### F.20.06. Subtribus *Andinobatina* **nov.**

***Getangiotaxon***: *Dendrobatini* ||Bonaparte, 1850||-Cope, 1865.
***Adelphotaxon***: *Dendrobatina* ||Bonaparte, 1850||-Cope, 1865.
***Getendotaxa***: *Andinobatinia* **nov.**; *Excidobatinia* **nov.**

***Nucleogenus, by present designation***: *Andinobates* Twomey, Brown, Amézquita & Mejía-Vargas *in* Brown, Twomey, Amézquita, Souza, Caldwell, Lötters, May, Melo-Sampaio, Mejía-Vargas, Pérez-Peña, Pepper, Poelman, Sanchez-Rodriguez & Summers, 2011. ● ***Etymology of nomen***: Spanish: *andino*, 'Andean' (of or from the Andes); G: βαίνω (*baino*), 'I walk'. ● ***Stem of nomen***: *Andinobat*-.

***Diagnosis***: Small, darkly or brilliantly colored frogs; head narrower than body; vocal slits in males; lateral and dorsal stripes usually absent or incomplete; finger discs expanded or narrow; median lingual process absent; larval vent tube dextral or medial; larval oral disc emarginate; lipophilic alkaloids secreted in the skin in most species; testes pigmented in most species; dark throat collar absent. {Grant *et al.* 2006; Twomey & Brown, 2008; Brown *et al.* 2011}.

### F.21.01. Infratribus *Andinobatinia* **nov.**

***Getangiotaxon***: *Andinobatina* **nov.**
***Adelphotaxon***: *Excidobatinia* **nov.**

***Getendotaxa***: *Andinobates* Twomey, Brown, Amézquita & Mejía-Vargas *in* Brown, Twomey, Amézquita, Souza, Caldwell, Lötters, May, Melo-Sampaio, Mejía-Vargas, Pérez-Peña, Pepper, Poelman, Sanchez-Rodriguez & Summers, 2011; *Ranitomeya* Bauer, 1985.

## F.21.02. Infratribus *Excidobatinia* **nov.**

***Getangiotaxon***: *Andinobatina* **nov.**
***Adelphotaxon***: *Andinobatinia* **nov.**
***Getendotaxon***: *Excidobates* Twomey & Brown, 2008.

***Nucleogenus, by present designation***: *Excidobates* Twomey & Brown, 2008. ● ***Etymology of nomen***: L: *excido*, 'I disappear, I am forgotten'; G: ϐατης (*bates*), 'who walks', from βαίνω (*baino*), 'I walk'. ● ***Stem of nomen***: *Excidobat-*.

***Diagnosis***: Small, darkly colored frogs; dark dorsal spots present; dorsal stripes absent or incomplete; skin smooth or granular; pale spots under the chin and on the ventral surface of thighs; head narrower than body; vocal slits in males; tongue ovoid; finger discs moderately expanded; labial tooth rows in tadpoles following formula 2:2+2/1+1:3; well developed keratinised jaw sheaths; medial indentation in posterior jaw sheath present or absent; vent dextral; spiracle sinistral. {Twomey & Brown, 2008}.

## F.20.07. Subtribus *Dendrobatina* ||Bonaparte, 1850||-Cope, 1865

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Dendrobatini* ||Bonaparte, 1850||-Cope, 1865.
***Adelphotaxon***: *Andinobatina* **nov.**
***Getendotaxa***: *Adelphobates* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006; *Dendrobates* Wagler, 1830; *Minyobates* Myers, 1987; *Oophaga* Bauer, 1994.

## F.19.12. Tribus *Phyllobatini* Fitzinger, 1843

***Protonym***: *Phyllobatae* Fitzinger, 1843: 32 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Dendrobatinae* ||Bonaparte, 1850||-Cope, 1865.
***Adelphotaxon***: *Dendrobatini* ||Bonaparte, 1850||-Cope, 1865.
***Getendotaxon***: *Phyllobates* Duméril & Bibron, 1841.

## F.18.11. Subfamilia *Hyloxalinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006

***Protonym and eunym***: *Hyloxalinae* Grant, Frost, Caldwell, Gagliardo, Haddad, Kok, Means, Noonan, Schargel & Wheeler, 2006: 4 [F].
***Getangiotaxon***: *Dendrobatidae* ||Bonaparte, 1850||-Cope, 1865.
***Adelphotaxa***: *Colostethinae* Cope, 1867; *Dendrobatinae* ||Bonaparte, 1850||-Cope, 1865.
***Getendotaxa***: *Ectopoglossus* Grant, Rada, Anganoy-Criollo, Batista, Dias, Jeckel, Machado, and Rueda-Almonacid, 2017; *Hyloxalus* Jiménez de la Espada, 1870; *Paruwrobates* Bauer, 1994.

## C.12.02. Infraphalanx **Phrynanura nov.**

***Getangiotaxon***: **Bainanura nov.**
***Adelphotaxon***: **Phoranura nov.**
***Getendotaxa***: **Gaianura nov.**; **Hemiphractiformia** Brocchi, 1881; **Hylobatrachia** Ritgen, 1828.

***Comments***: This taxon, retrieved in the tree of Hutter *et al.* (2017), accommodates all 'hyloid' frogs except the **Phoranura** (*Dendrobatoidea*). It includes the **Gaianura**, **Hemiphractiformia** and **Hylobatrachia**. The relationships between these three well supported branches are unresolved, even the sister-taxon relationship between **Gaianura** and **Hemiphractiformia** not having significant support (SHL 65).

***Conucleogenera, by present designation***: *Brachycephalus* Fitzinger, 1826; *Bufo* Garsault, 1764; *Hemiphractus* Wagler, 1828.

***Etymology of nomen***: G: φρύνη (*phryne*), 'toad'; N: **Anura** Duméril, 1805, derived from G: ἀν- (*an*-), 'without'; οὑρά (*oura*), 'tail'. This nomen refers to the fact that this taxon includes the *Bufonidae*, a family many members of which are often designated by the common language 'toad', and many nominal genera of which are based on the Greek root φρύνη.

***Diagnosis***: Very small to very large sized frogs (SVL 12–230 mm); morphology frog-, toad- or treefrog-like; sternum present, ossified or cartilaginous; pectoral girdle arciferal, rarely pseudofirmisternal; terminal phalanges variable; intercalary elements absent or present; transverse process of sacral vertebra cylindrical or moderately expanded, bicondylar articulation; palatines and frontoparietals paired; fibulare and tibiale fused at proximal and distal end, or rarely completely fused; Bidder's organs absent or present; amplexus axillary, rarely inguinal; breeding free living tadpoles, but also various modes of independence from water (nests, body cavities, endotrophy, viviparity); tadpole with keratinised mouthparts, a unique branchial chamber, spiracle positioned on left side of body. {Mendelson *et al.* 2000; Vitt *et al.* 2014; Castroviejo-Fisher 2015}.

## C.13.01. Hypophalanx **Gaianura nov.**

***Getangiotaxon***: **Phrynanura nov.**
***Adelphotaxa***: **Hemiphractiformia** Brocchi, 1881; **Hylobatrachia** Ritgen, 1828.
***Getendotaxa***: *Brachycephalidae* Günther, 1858; *Ceuthomantidae* Heinicke, Duellman, Trueb, Means, MacCulloch & Hedges, 2009.

***Comments***: The sister-taxon relationship of this highly supported branch with the **Hemiphractiformia** has poor support, so we treat these two taxa as hypophalanges, along with the **Hylobatrachia**. The **Gaianura** include the families *Brachycephalidae* (with the subfamilies *Brachycephalinae*, *Craugastorinae* and *Eleutherodactylinae*) and *Ceuthomantidae*. The *Brachycephalidae* are attributed family rank by the [UQC] and consequently the *Ceuthomantidae* as well, according to the [STC].

The taxon **Gaianura** was recognised by Darst & Cannatella (2004), Heinicke *et al.* (2007), Bossuyt & Roelants (2009), Pyron & Wiens (2011), Zhang *et al.* (2013), Feng *et al.* (2017), Hutter *et al.* (2017) and Streicher *et al.* (2018) without formally naming it. Frost *et al.* (2006) used the family nomen *Brachycephalidae* for this taxon. Hedges *et al.* (2008) created for this taxon the unranked ectonym «Terrarana». Heinicke *et al.* (2009) created a junior homonymous ectonym having the same spelling «Terrarana» but a distinct etymology, hence being a distinct name, which was used by Taboada *et al.* (2013) and under the form «Terraranae», first suggested by Dubois (2009*a*), who however had considered it in error as a class-series nomen, by Duellman *et al.* (2016) and Heinicke *et al.* (2018). Padial *et al.* (2014) used the superfamilial nomen *Brachycephaloidea* for this taxon. Under DONS, there is no class-series nomen available for this taxon and we hereby name it **Gaianura**.

***Conucleogenera, by present designation***: *Brachycephalus* Fitzinger, 1826; *Ceuthomantis* Heinicke, Duellman, Trueb, Means, MacCulloch & Hedges, 2009.

***Etymology of nomen***: G: γαῖα (*gaia*), 'earth' (as opposed to water); N: **Anura** Duméril, 1805, derived from G: ἀν- (*an*-), 'without'; οὑρά (*oura*), 'tail'. This nomen refers to the fact that the species of this group of frogs (except *Eleutherodactylus jasperi*) lay their eggs under some shelter on the ground, where they undergo direct development (Hedges *et al.* 2008).

***Diagnosis***: Very small to large (SVL 10–110 mm) sized species; terrestrial breeding with direct development of terrestrial eggs (ovoviviparity in *Eleutherodactylus jasperi*); an embryonic egg teeth present; arciferal or rarely pseudofirmisternal pectoral girdle; calcanea and astragali partially fused; usually with T-shaped terminal phalanges; intercalary elements of phalanges always lacking; Bidder's organs absent. {Hedges *et al.* 2008; Heinicke *et al.* 2009}.

### F.17.13. Familia *Brachycephalidae* Günther, 1858

***Protonym***: *Brachycephalina* Günther, 1858: 344 [Sc].
***Eunym***: Günther 1858: 346.
***Getangiotaxon***: **Gaianura nov.**
***Adelphotaxon***: *Ceuthomantidae* Heinicke, Duellman, Trueb, Means, MacCulloch & Hedges, 2009.
***Getendotaxa***: *Brachycephalinae* Günther, 1858; *Craugastorinae* Hedges, Duellman & Heinicke, 2008; *Eleutherodactylinae* Lutz, 1954; **2 GIS** (*Atopophrynus* Lynch & Ruíz-Carranza, 1982; *Geobatrachus* Ruthven, 1915).

***Comments***: We recognise the three well supported taxa within the *Brachycephalidae* as the subfamilies *Brachycephalinae* (with two valid genera *Brachycephalus* and *Ischnocnema*), *Craugastorinae* and *Eleutherodactylinae* that both show a more complex structure. For the genera *Atopophrynus* and *Geobatrachus*, no molecular data are available and so far these brachycephalid taxa have not been allocated in the subfamilial classification.

The *Craugastorinae* show two tribes, the *Craugastorini*, including the genera *Craugastor* and *Haddadus*, and the tribe *Strabomantini*. The latter tribe is divided into two subtribes, the *Strabomantina* and *Pristimantina*. The *Strabomantina* show two supported branches, the *Holoadeninia* and the *Strabomantinia* which correspond to the genus *Strabomantis*. The relationships within the *Holoadeninia* are not resolved, so the branches with high support are recognised here as four hypotribes: *Barycholinoa* **nov.**, for the genera *Bahius* **nov.**, *Barycholos* and *Phyllonates*; *Bryophryninoa* **nov.**, for the genus *Bryophryne*; *Holoadeninoa* for the genera *Euparkerella* and *Holoaden*; and *Noblellinoa* **nov.**, for the genera *Microkayla*, *Noblella*, *Psychrophrynella* and *Qosqophryne*; the genera *Niceforonia* and *Tachiramantis*, for which no molecular data are available, are referred to this infratribe on morphological grounds but have not been so far allocated to any of these four taxa. The supported branches of the second subtribe *Pristimantina* are recognised as the infratribe *Hypodactylinia*, corresponding to the genus *Hypodactylus*, and the infratribe *Pristimantinia*. In the latter taxon two well supported taxa are recognised as the hypotribes *Oreobatinoa* **nov.** and *Pristimantinoa*, holding the genera *Pristimantis* and *Yunganastes*. The hypotribe *Oreobatinoa* contains two supported taxa recognised as *Oreobatites* **nov.**, for the genera *Lynchius* and *Oreobates*, and *Phrynopodites* **nov.**, for the genus *Phrynopus*.

The *Eleutherodactylinae* include two highly supported branches recognised as the tribes *Eleutherodactylini*, with two subtribes *Diasporina* **nov.** (genus *Diasporus*) and *Eleutherodactylina* (genera *Eleutherodactylus* and *Euhyas*), and *Phyzelaphrynini* with the genera *Adelophryne* and *Phyzelaphryne*.

In the recent literature, the main relationships within the *Brachycephalidae* have been rather stable, but different taxonomic interpretations have been provided. The structure of the trees has varied, in particular concerning the position of the genera *Ceuthomantis* and *Dischidodactylus* (but see below for the history of the classification of this group) which are here considered to constitute the sister-taxon to the *Brachycephalidae*. Darst & Cannatella (2004) were the first to show that *Brachycephalus* belonged in the same branch as *Eleutherodactylus* and related genera but did not propose a formal naming for this branch, for which they used the incorrect designation '*Eleutherodactylini: Leptodactylidae*' in their figure 2. This taxon was named *Leptodactylidae Brachycephalinae* by Dubois (2005*d*) and *Brachycephalidae* by Frost *et al.* (2006). Hedges *et al.* (2008) and Heinicke *et al.* (2018) recognised four families that correspond to the two subfamilies *Brachycephalinae* and *Eleutherodactylinae* and to the two tribes (*Craugastorini* and *Strabomantini*) of the *Craugastorinae* in our classification. Padial *et al.* (2014) recognised three families, including the genus *Ceuthomantis* within the *Craugastoridae Pristimantinae*. The sister-taxon relationships of *Phyzelaphryne* and *Adelophryne*, *Diasporus* and *Eleutherodactylus*, *Craugastor* and *Haddadus*, *Ischnocnema* and *Brachycephalus*, and *Yunganastes* and

*Pristimantis*, have been confirmed in all recent works, but the other relationships between genera are not consensual.

### F.18.12. Subfamilia *Brachycephalinae* Günther, 1858

***Eunym***: Noble 1931: 507.
***Getangiotaxon***: *Brachycephalidae* Günther, 1858.
***Adelphotaxa***: *Craugastorinae* Hedges, Duellman & Heinicke, 2008; *Eleutherodactylinae* Lutz, 1954.
***Getendotaxa***: *Brachycephalus* Fitzinger, 1826; *Ischnocnema* Reinhardt & Lütken, 1862.

### F.18.13. Subfamilia *Craugastorinae* Hedges, Duellman & Heinicke, 2008

***Protonym***: *Craugastoridae* Hedges, Duellman & Heinicke, 2008: 3 [F].
***Eunym***: Pyron & Wiens 2011: 547.
***Getangiotaxon***: *Brachycephalidae* Günther, 1858.
***Adelphotaxa***: *Brachycephalinae* Günther, 1858; *Eleutherodactylinae* Lutz, 1954.
***Getendotaxa***: *Craugastorini* Hedges, Duellman & Heinicke, 2008; *Strabomantini* Hedges, Duellman & Heinicke, 2008.

### F.19.13. Tribus *Craugastorini* Hedges, Duellman & Heinicke, 2008

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Craugastorinae* Hedges, Duellman & Heinicke, 2008.
***Adelphotaxon***: *Strabomantini* Hedges, Duellman & Heinicke, 2008.
***Getendotaxa***: *Craugastor* Cope, 1862; *Haddadus* Hedges, Duellman & Heinicke, 2008.

### F.19.14. Tribus *Strabomantini* Hedges, Duellman & Heinicke, 2008

***Protonym***: *Strabomantidae* Hedges, Duellman & Heinicke, 2008: 5 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Craugastorinae* Hedges, Duellman & Heinicke, 2008.
***Adelphotaxon***: *Craugastorini* Hedges, Duellman & Heinicke, 2008.
***Getendotaxa***: *Strabomantina* Hedges, Duellman & Heinicke, 2008; *Pristimantina* Ohler & Dubois, 2012.

### F.20.08. Subtribus *Strabomantina* Hedges, Duellman & Heinicke, 2008

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Strabomantini* Hedges, Duellman & Heinicke, 2008.
***Adelphotaxon***: *Pristimantina* Ohler & Dubois, 2012.
***Getendotaxa***: *Holoadeninia* Hedges, Duellman & Heinicke, 2008; *Strabomantinia* Hedges, Duellman & Heinicke, 2008.

### F.21.03. Infratribus *Holoadeninia* Hedges, Duellman & Heinicke, 2008

***Protonym***: *Holoadeninae* Hedges, Duellman & Heinicke, 2008: 5 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Strabomantina* Hedges, Duellman & Heinicke, 2008.
***Adelphotaxon***: *Strabomantinia* Hedges, Duellman & Heinicke, 2008.
***Getendotaxa***: *Barycholinoa* **nov.**; *Bryophryninoa* **nov.**; *Holoadeninoa* Hedges, Duellman & Heinicke, 2008; *Noblellinoa* **nov.**; **2 GIS** (*Niceforonia* Goin & Cochran, 1963; *Tachiramantis* Heinicke, Barrio-Amoros & Hedges, 2015).

## F.22.01. Hypotribus *Barycholinoa* **nov.**

***Getangiotaxon***: *Holoadeninia* Hedges, Duellman & Heinicke, 2008.
***Adelphotaxa***: *Bryophryninoa* **nov.**; *Holoadeninoa* Hedges, Duellman & Heinicke, 2008; *Noblellinoa* **nov.**; **2 GIS** (*Niceforonia* Goin & Cochran, 1963; *Tachiramantis* Heinicke, Barrio-Amoros & Hedges, 2015).
***Getendotaxa***: *Bahius* **nov.**; *Barycholos* Heyer, 1969; *Phyllonastes* Heyer, 1977.

***Nucleogenus, by present designation***: *Barycholos* Heyer, 1969. ● ***Etymology of nomen***: G: βαρύχολος (*barycholos*), 'savage'. Named in honor of Jay M. Savage (Heyer 1969). ● ***Stem of nomen***: *Barychol-*.

***Diagnosis***: Small sized direct-developing frogs; head narrower than body; pupil horizontal; tympanum distinct or absent; dentigerous process absent or present; condition of *adductor mandibulae* muscle 'S'; terminal phalanges knob-shaped; finger I shorter or longer than finger II; toe III about equal in length of toe V; tubercle finger IV in some species reduced to a single tubercle; supernumerary tubercles on palm present; toe tips pointed or enlarged, then forming discs with grooves; inner tarsal tubercle present; inner metatarsal tubercle large, rounded not cornified; outer metatarsal tubercle present; feet not webbed; dorsum smooth or finely areolate; venter granulate; nuptial pads usually absent on male thumb. {Bokermann 1975; Lynch 1986; Hedges *et al.* 2008; Lehr & Catenazzi 2009; Dias *et al.* 2017}.

## G.28.063. Genus *Bahius* **nov.**

***Getangiotaxon***: *Barycholinoa* **nov.**
***Adelphotaxa***: *Barycholos* Heyer, 1969; *Phyllonastes* Heyer, 1977.
***Getendotaxon***: *Bahius bilineatus* (Bokermann, 1975).

***Etymology of nomen***: Portuguese: *bahia*, obsolete spelling of *baía*, 'bay'. This nomen refers to the name 'Bahia' of the state of Brazil where these frogs occur. ● ***Stem of nomen***: *Bahi-*. ● ***Grammatical gender of nomen***: masculine.

***Nucleospecies, by present desigation***: *Eleutherodactylus bilineatus* Bokermann, 1975.

***Diagnosis***: Small sized (SVL 20–30 mm) species with a white dorsolateral stripe on either side of the dark-colored dorsum, throat and chest dark with white speckles, reduced adhesive toe pads, and well-developed acuminate subarticular tubercles. {Bokermann 1975}.

## F.22.02. Hypotribus *Bryophryninoa* **nov.**

***Getangiotaxon***: *Holoadeninia* Hedges, Duellman & Heinicke, 2008.
***Adelphotaxa***: *Barycholinoa* **nov.**; *Holoadeninoa* Hedges, Duellman & Heinicke, 2008; *Noblellinoa* **nov.**; **2 GIS** (*Niceforonia* Goin & Cochran, 1963; *Tachiramantis* Heinicke, Barrio-Amoros & Hedges, 2015).
***Getendotaxon***: *Bryophryne* Hedges, Duellman & Heinicke, 2008.

***Nucleogenus, by present designation***: *Bryophryne* Hedges, Duellman & Heinicke, 2008. ● ***Etymology of nomen***: G: βρύον, moss; φρύνη, 'toad'. ● ***Stem of nomen***: *Bryophryn-*.

***Diagnosis***: Small, direct-developing frogs with head narrower than body, lack of tympanic membrane, tympanic anulus, columella, cavum tympanicum, cranial crests, and dentigerous process of vomers; 'S' condition of *adductor mandibulae* muscle; knob-shaped terminal phalanges; finger I shorter than finger II; toes III and V about equal in length; subarticular tubercles not projecting; dorsum finely areolate; venter coarsely areolate. {Hedges *et al.* 2008}.

### F.22.03. Hypotribus *Holoadeninoa* Hedges, Duellman & Heinicke, 2008

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Holoadeninia* Hedges, Duellman & Heinicke, 2008.
***Adelphotaxa***: *Barycholinoa* **nov.**; *Bryophryninoa* **nov.**; *Noblellinoa* **nov.**; **2 GIS** (*Niceforonia* Goin & Cochran, 1963; *Tachiramantis* Heinicke, Barrio-Amoros & Hedges, 2015).
***Getendotaxa***: *Euparkerella* Griffiths, 1959; *Holoaden* Miranda-Ribeiro, 1920.

### F.22.04. Hypotribus *Noblellinoa* nov.

***Getangiotaxon***: *Holoadeninia* Hedges, Duellman & Heinicke, 2008.
***Adelphotaxa***: *Barycholinoa* **nov.**; *Bryophryninoa* **nov.**; *Holoadeninoa* Hedges, Duellman & Heinicke, 2008; **2 GIS** (*Niceforonia* Goin & Cochran, 1963; *Tachiramantis* Heinicke, Barrio-Amoros & Hedges, 2015).
***Getendotaxa***: *Microkayla* Riva, Chaparro, Castroviejo-Fisher & Padial, 2017; *Noblella* Barbour, 1930; *Psychrophrynella* Hedges, Duellman & Heinicke, 2008; *Qosqophryne* Catenazzi, Mamani, Lehr & May, 2020.

***Nucleogenus, by present designation***: *Noblella* Barbour, 1930. ● ***Etymology of nomen***: derived from the patronym of G. K. Noble (1894–1940). ● ***Stem of nomen***: *Noblell-*.

***Diagnosis***: Small sized frogs (SVL 14–34 mm); head not wider than body; tympanum visible of hidden; cranial crests absent; vomerine ridges usually absent; 'S' condition of *adductor mandibulae* muscle; terminal discs narrow or slightly expanded; toe V longer than III. {Hedges *et al.* 2008}.

### F.21.04. Infratribus *Strabomantinia* Hedges, Duellman & Heinicke, 2008

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Strabomantina* Hedges, Duellman & Heinicke, 2008.
***Adelphotaxon***: *Holoadeninia* Hedges, Duellman & Heinicke, 2008.
***Getendotaxon***: *Strabomantis* Peters, 1863.

### F.20.09. Subtribus *Pristimantina* Ohler & Dubois, 2012

***Protonym***: *Pristimantinae* Ohler & Dubois, 2012: 165 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Strabomantini* Hedges, Duellman & Heinicke, 2008.
***Adelphotaxon***: *Strabomantina* Hedges, Duellman & Heinicke, 2008.
***Getendotaxa***: *Hypodactylinia* Heinicke, Lemmon, Lemmon, McGrath & Hedges, 2018; *Pristimantinia* Ohler & Dubois, 2012.

### F.21.05. Infratribus *Hypodactylinia* Heinicke, Lemmon, Lemmon, McGrath & Hedges, 2018

***Protonym***: *Hypodactylinae* Heinicke, Lemmon, Lemmon, McGrath & Hedges, 2018: 152 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Pristimantina* Ohler & Dubois, 2012.
***Adelphotaxon***: *Pristimantinia* Ohler & Dubois, 2012.
***Getendotaxon***: *Hypodactylus* Hedges, Duellman & Heinicke, 2008.

## F.21.06. Infratribus *Pristimantinia* Ohler & Dubois, 2012

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Pristimantina* Ohler & Dubois, 2012.
***Adelphotaxon***: *Hypodactylinia* Heinicke, Lemmon, Lemmon, McGrath & Hedges, 2018.
***Getendotaxa***: *Oreobatinoa* **nov.**; *Pristimantinoa* Ohler & Dubois, 2012.

## F.22.05. Hypotribus *Oreobatinoa* **nov.**

***Getangiotaxon***: *Pristimantinia* Ohler & Dubois, 2012.
***Adelphotaxon***: *Pristimantinoa* Ohler & Dubois, 2012.
***Getendotaxa***: *Oreobatites* **nov.**; *Phrynopodites* **nov.**

***Nucleogenus, by present designation***: *Oreobates* Jiménez de la Espada, 1872. ● ***Etymology of nomen***: G: ὄρος (*oros*), 'mountain'; βατέω (*bateo*), 'to walk'. ● ***Stem of nomen***: *Oreobat-*.

***Diagnosis***: Small, direct-developing frogs with head narrower than or as wide as body; tympanic membrane and anulus present or absent; cranial crests absent; dentigerous process of vomers prominent or absent; 'S' condition of *adductor mandibulae* muscle; terminal digits narrow, rounded or bulbous; and knob- or T-shaped terminal phalanges. {Hedges *et al.* 2008}.

## F.23.01. Clanus *Oreobatites* **nov.**

***Getangiotaxon***: *Oreobatinoa* **nov.**
***Adelphotaxon***: *Phrynopodites* **nov.**
***Getendotaxa***: *Lynchius* Hedges, Duellman & Heinicke, 2008; *Oreobates* Jiménez de la Espada, 1872.

## F.23.02. Clanus *Phrynopodites* **nov.**

***Getangiotaxon***: *Oreobatinoa* **nov.**
***Adelphotaxon***: *Oreobatites* **nov.**
***Getendotaxon***: *Phrynopus* Peters, 1873.

***Nucleogenus, by present designation***: *Phrynopus* Peters, 1873. ● ***Etymology of nomen***: G: φρύνη (*phryne*), 'toad'; πούς (*pous*), 'foot'. ● ***Stem of nomen***: *Phrynopod-*.

***Diagnosis***: Small, direct-developing frogs with head narrower than body; differentiated tympanic membrane; tympanic anulus usually absent; cranial crests absent; dentigerous process of vomers usually absent; 'S' condition of *adductor mandibulae* muscle; terminal digits narrow, rounded or bulbous; and knob-shaped terminal phalanges. {Hedges *et al.* 2008}.

## F.22.06. Hypotribus *Pristimantinoa* Ohler & Dubois, 2012

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Pristimantinia* Ohler & Dubois, 2012.
***Adelphotaxon***: *Oreobatinoa* **nov.**
***Getendotaxa***: *Pristimantis* Jiménez de la Espada, 1870; *Yunganastes* Padial, Castroviejo-Fisher, Köhler, Domic & Riva, 2007.

### F.18.14. Subfamilia *Eleutherodactylinae* Lutz, 1954

***Protonym and eunym***: *Eleutherodactylinae* Lutz, 1954: 157 [bF].
***Getangiotaxon***: *Brachycephalidae* Günther, 1858.
***Adelphotaxa***: *Brachycephalinae* Günther, 1858; *Craugastorinae* Hedges, Duellman & Heinicke, 2008.
***Getendotaxa***: *Eleutherodactylini* Lutz, 1954; *Phyzelaphrynini* Hedges, Duellman & Heinicke, 2008

### F.19.15. Tribus *Eleutherodactylini* Lutz, 1954

***Eunym***: Lynch 1969: 3.
***Getangiotaxon***: *Eleutherodactylinae* Lutz, 1954.
***Adelphotaxon***: *Phyzelaphrynini* Hedges, Duellman & Heinicke, 2008.
***Getendotaxa***: *Diasporina* **nov.**; *Eleutherodactylina* Lutz, 1954.

### F.20.10. Subtribus *Diasporina* **nov.**

***Getangiotaxon***: *Eleutherodactylini* Lutz, 1954.
***Adelphotaxon***: *Eleutherodactylina* Lutz, 1954.
***Getendotaxon***: *Diasporus* Hedges, Duellman & Heinicke, 2008.

***Nucleogenus, by present designation***: *Diasporus* Hedges, Duellman & Heinicke, 2008. ● ***Etymology of nomen***: G: διασπορά (*diaspora*), 'dispersion'; explained as 'a dispersion from', in allusion to the close relationship of this mainland group to the Caribbean branch, inferring an ancient dispersal event (Hedges *et al.* 2008). ● ***Stem of nomen***: *Diaspor-*.

***Diagnosis***: Small sized frogs (SVL 10.9–26 mm); head distinct from body; head width 32–41 % of SVL; tympanic membrane usually differentiated; cranial crests absent; vomerine ridges usually prominent; 'S' condition condition of *adductor mandibulae* musculature; toe pads expanded with or without lanceolate or papillate tips; circumferential grooves present; terminal phalanges T-shaped; finger I shorter than finger II; toe V much longer than toe III; subarticular tubercles not prominent; dorsum smooth to rugose; venter roughly areolate. {Hedges *et al.* 2008}.

### F.20.11. Subtribus *Eleutherodactylina* Lutz, 1954

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Eleutherodactylini* Lutz, 1954.
***Adelphotaxon***: *Diasporina* **nov.**
***Getendotaxa***: *Eleutherodactylus* Duméril & Bibron, 1841; *Euhyas* Fitzinger, 1843.

### F.19.16. Tribus *Phyzelaphrynini* Hedges, Duellman & Heinicke, 2008

***Protonym***: *Phyzelaphryninae* Hedges, Duellman & Heinicke, 2008: 5 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Eleutherodactylinae* Lutz, 1954.
***Adelphotaxon***: *Eleutherodactylini* Lutz, 1954.
***Getendotaxa***: *Adelophryne* Hoegmood & Lescure, 1984; *Phyzelaphryne* Heyer, 1977.

### F.17.14. Familia *Ceuthomantidae* Heinicke, Duellman, Trueb, Means, MacCulloch & Hedges, 2009

***Protonym and eunym***: *Ceuthomantidae* Heinicke, Duellman, Trueb, Means, MacCulloch & Hedges, 2009: 1 [F].

***Getangiotaxon***: **Gaianura nov.**
***Adelphotaxon***: *Brachycephalidae* Günther, 1858.
***Getendotaxa***: *Ceuthomantis* Heinicke, Duellman, Trueb, Means, MacCulloch & Hedges, 2009; *Dischidodactylus* Lynch, 1979.

***Comments***: This family was erected by Heinicke *et al.* (2009) because of its sister-group relationship to all other **Gaianura**, the *Brachycephalidae*. This position was confirmed by Pyron & Wiens (2011) and accepted by Blackburn & Wake (2011). The position of the genus *Ceuthomantis* is quite different in Padial *et al.* (2014), where it is sister-branch to the branch formed by *Pristimantis* and *Yunganastes* within their *Pristimantinae*. *TREE* supports this lineage as sister-branch to our *Brachycephalidae*, therefore it is recognised as a family following the [STC].

## C.13.02. Hypophalanx **Hemiphractiformia** Brocchi, 1881

***Protonym***: **Hemiphractiformes** Brocchi, 1881: 9 [UC].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Phrynanura nov.**
***Adelphotaxa***: **Gaianura nov.**; **Hylobatrachia** Ritgen, 1828.
***Getendotaxon***: *Hemiphractidae* Peters, 1862.

***Comments***: The **Hemiphractiformia** englobe a single family *Hemiphractidae*. This taxon is recognised in all recent phylogenies based on molecular data but its position is debated. In Frost *et al.* (2006), it is a holophyletic group but it is sister-taxon to the «Meridianura» (ectonym) that group all other **Bainanura**. In Zhang *et al.* (2013), Feng *et al.* (2017) and Streicher *et al.* (2018), it is within the **Bainanura** but in various positions. In Hutter *et al.* (2017), it is outgroup of a group formed by the **Gaianura** and **Hylobatrachia**, but this relationship has only a weak support. Its position in *TREE* and *CLAD* is well supported and similar to that in Pyron & Wiens (2011).

## F.17.15. Familia *Hemiphractidae* Peters, 1862

***Protonym and eunym***: *Hemiphractidae* Peters, 1862: 146 [F].
***Getangiotaxon***: **Hemiphractiformia** Brocchi, 1881.
***Adelphotaxon***: None.
***Getendotaxa***: *Amphignathodontinae* Boulenger, 1882; *Cryptobatrachinae* Frost, Grant, Faivovich, Bazin, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006; *Flectonotinae* **nov.**; *Fritzianinae* **nov.**; *Hemiphractinae* Peters, 1862; *Stefaniinae* **nov.**

***Comments***: Darst & Cannatella (2004) found the *Hemiphractidae* (their *Hemiphractinae*) being polyphyletic and not in close relationship with the *Hylidae*. In Faivovich *et al.* (2005), *Hemiphractus*, as the only representative of the *Hemiphractidae*, appears as sister-taxon to *Brachycephalidae* species. Wiens *et al.* (2005*b*, 2006, 2007) found molecular evidence that hemiphractid taxa are related to part of the polyphyletic *Leptodactylidae*. Frost *et al.* (2006) confirmed the distant relationship of these taxa to the *Hylidae* and revealed three distant branches recognised as the families *Amphignathodontidae* (*Flectonotus* and *Gastrotheca*), *Cryptobatrachidae* (*Cryptobatrachus* and *Stefania*) and *Hemiphractidae* (*Hemiphractus*). Guayasamin *et al.* (2008) and Pyron & Wiens (2011) recovered a holophyletic branch and consequently recognised a single family *Hemiphractidae*. This family was accepted by Blackburn & Duellman (2013) and Duellman (2015), and supported by a larger sampling including representatives of all genera by Castroviejo-Fisher *et al.* (2015). The position of the family in *TREE* is different from the relationships obtained by Castroviejo-Fisher *et al.* (2015) although the branch can also be described as being within the hypophalanx **Phaneranura** (their «Nobleobatrachia»). In our classification it is one of three hypophalanges, but the relationships among these three cannot be resolved.

Although the branches recognised as genera in the proposed classification have significant support (above 90 in *TREE*), the relationships between them cannot be considered as stable. In Blackburn

& Duellman (2013), *Flectonotus* is outgroup to all other *Hemiphractidae*. Within the remaining genera, *Hemiphractus* is outgroup to an aggregate that holds *Fritziana*, *Gastrotheca* and *Stephania* without statistically support to the relationships between these groups. The classification within the *Hemiphractidae* proposed by Castroviejo-Fisher *et al.* (2015) is based on a larger sampling and more genes and recognises the five genera and *Cryptobatrachus* with a different relationship. Based on a dataset with the complete sampling, *Flectonotus* and *Cryptobatrachus* are sister-taxa to a taxon that groups the other four genera. Within these groups, *Stefania* is sister-taxon to a group that includes *Fritziana*, as sister-taxon to *Hemiphractus* and *Gastrotheca*. In *TREE*, we did not find high statistical support for the relationships among these six branches, but between Duellman's (2015) subgenera *Eotheca*, *Cryptotheca*, *Gastrotheca* and *Australotheca*, which we recognise at the genus level (the latter, being preoccupied, under its neonym *Alainia*). Among these branches, *Cryptotheca* is sister-taxon to *Amphignathodon*, and *Alainia* to *Gastrotheca*. To account provisionally for these partly unresolved relationships, we recognise six subfamilies: the *Amphignathodontinae* including three tribes, *Amphignathodontini* (with *Amphignathodon* and *Cryptotheca*), *Eothecini* (with *Eotheca*) and *Gastrothecini* (with *Alainia* and *Gastrotheca*), the *Cryptobatrachinae* (with *Cryptobatrachus*), the *Flectonotinae* (with *Flectonotus*), the *Fritzianinae* (with *Fritziana*), the *Hemiphractinae* (with *Hemiphractus*) and the *Stefaniinae* (with *Stefania*). The reason why we recognise these taxa as subfamilies and not as families is explained in the M&M section above as the Nomenclatural Thrift Criterion [NTC].

## F.18.15. Subfamilia *Amphignathodontinae* Boulenger, 1882

***Protonym***: *Amphignatodontidae* Boulenger, 1882: xvi, 449 [F].

***Eunym***: Gadow 1901: xi, 188.

***Getangiotaxon***: *Hemiphractidae* Peters, 1862.

***Adelphotaxa***: *Cryptobatrachinae* Frost, Grant, Faivovich, Bazin, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006; *Flectonotinae* **nov.**; *Fritzianinae* **nov.**; *Hemiphractinae* Peters, 1862; *Stefaniinae* **nov.**

***Getendotaxa***: *Amphignathodontini* Boulenger, 1882; *Eothecini* **nov.**; *Gastrothecini* Noble, 1927.

## F.19.17. Tribus *Amphignathodontini* Boulenger, 1882

***Eunym***: *Hoc loco*.

***Getangiotaxon***: *Amphignathodontinae* Boulenger, 1882.

***Adelphotaxa***: *Eothecini* **nov.**; *Gastrothecini* Noble, 1927.

***Getendotaxa***: *Amphignathodon* Boulenger, 1882; *Cryptotheca* Duellman, 2015.

## F.19.18. Tribus *Eothecini* **nov.**

***Getangiotaxon***: *Amphignathodontinae* Boulenger, 1882.

***Adelphotaxa***: *Amphignathodontini* Boulenger, 1882; *Gastrothecini* **nov.**

***Getendotaxon***: *Eotheca* Duellman, 2015.

***Nucleogenus, by present designation***: *Eotheca* Duellman, 2015. ● ***Etymology of nomen***: G: έῷος (*eoos*), 'early'; θήκη (*theke*), 'box, chest'; referring to the basal position of this taxon relative to *Gastrotheca* (Duellman 2015). ● ***Stem of nomen***: *Eothec*-.

***Diagnosis***: Small to large sized (males SVL 28–90 mm; females SVL 33–110 mm) hemiphractid frogs; head large, with co-ossified skin of the dermal roof bones of the skull; lack of dermal ornamentation; dorsum tan or greenish tan, with or without brown ornamentation; osteological synapomophies include a complete temporal arcade over the ortic region; alary process of premaxillae nearly vertical; lateral profile of snout high and truncate; presence of a massive postorbital process on maxilla with a horizontal articulation with wide zygomatic ramus of squamosal; otic plate of squamosal barely developed and narrowly overlapping cartilaginous lateral margin of *crista parotica*; neopalatines separated; vomerine ridges between the anterior part of choanae; eggs undergoing direct development into froglets. {Duellman 2015}.

### F.19.19. Tribus *Gastrothecini* Noble, 1927

***Protonym***: *Gastrothecinae* Noble, 1927: 93 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Amphignathodontinae* Boulenger, 1882.
***Adelphotaxa***: *Amphignathodontini* Boulenger, 1882; *Eothecini* **nov.**
***Getendotaxa***: *Alainia* Duellman & Cannatella, 2018; *Gastrotheca* Fitzinger, 1843.

### F.18.16. Subfamilia *Cryptobatrachinae* Frost, Grant, Faivovich, Bazin, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006

***Protonym***: *Cryptobatrachidae* Frost, Grant, Faivovich, Bazin, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006: 6 [F].
***Eunym***: Castroviejo-Fisher, Padial, Riva, Pombal, Silva, Rojas-Runjaic, Medina-Méndez & Frost 2015: 20.
***Getangiotaxon***: *Hemiphractidae* Peters, 1862.
***Adelphotaxa***: *Amphignathodontinae* Boulenger, 1882; *Flectonotinae* **nov.**; *Fritzianinae* **nov.**; *Hemiphractinae* Peters, 1862; *Stefaniinae* **nov.**
***Getendotaxon***: *Cryptobatrachus* Ruthven, 1916.

### F.18.17. Subfamilia *Flectonotinae* nov.

***Getangiotaxon***: *Hemiphractidae* Peters, 1862.
***Adelphotaxa***: *Amphignathodontinae* Boulenger, 1882; *Cryptobatrachinae* Frost, Grant, Faivovich, Bazin, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006; *Fritzianinae* **nov.**; *Hemiphractinae* Peters, 1862; *Stefaniinae* **nov.**
***Getendotaxon***: *Flectonotus* Miranda-Ribeiro, 1926.

***Nucleogenus, by present designation***: *Flectonotus* Miranda-Ribeiro, 1926. ● ***Etymology of nomen***: L: *flecto*, 'bend'; G: νῶτος (*notos*), 'the back'. ● ***Stem of nomen***: *Flectonot-*.

***Diagnosis***: Small sized (males SVL 16–26 mm; females SVL 19–32 mm) hemiphractid frogs; dermal bones of skull not co-ossified with overlying skin; frontoparietals medially articulated throughout their lengths; nasal small, not articulated; neopalatines edentate and not serrated; procoelous presacral vertebrae lacking elongate neural spines; adhesive pad on subarticular tubercle of antepenultimate articulation absent; vocal slits and vocal sac absent; fleshy proboscis on tip of snout and fleshy tubercles on upper eyelids absent; first finger shorter than second; nuptial pads present; eggs developing into non-feeding tadpoles in a pouch with a longitudinal opening on back of female. {Duellman 2015}.

### F.18.18. Subfamilia *Fritzianinae* nov.

***Getangiotaxon***: *Hemiphractidae* Peters, 1862.
***Adelphotaxa***: *Amphignathodontinae* Boulenger, 1882; *Cryptobatrachinae* Frost, Grant, Faivovich, Bazin, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006; *Flectonotinae* **nov.**; *Hemiphractinae* Peters, 1862; *Stefaniinae* **nov.**
***Getendotaxon***: *Fritziana* Mello-Leitão, 1937.

***Nucleogenus, by present designation***: *Fritziana* Mello-Leitão, 1937. ● ***Etymology of nomen***: P: Fritz Müller (1821–1897), Brasilian zoologist and naturalist; L: *-iana*, feminine suffix. ● ***Stem of nomen***: *Fritzian-*.

***Diagnosis***: Small sized (males SVL 18–34 mm; females SVL 25–39 mm) hemiphractid frogs; dermal bones of skull not co-ossified with overlying skin; frontoparietals medially articulated throughout their lengths; nasal large, nearly in contact anterior to sphenethmoid; neopalatines edentate and not serrated; procoelous presacral vertebrae lacking elongate neural spines; adhesive pad on subarticular tubercle of antepenultimate articulation absent; vocal slits and vocal sac present; a fleshy proboscis on tip of snout and fleshy tubercles on upper eylids absent; first finger shorter than second; nuptial pads present; eggs developing into non-feeding tadpoles in a basin between lateral folds of skin on back of female. {Duellman 2015}.

## F.18.19. Subfamilia *HEMIPHRACTINAE* Peters, 1862

***Eunym***: Gadow 1901: xi, 210.
***Getangiotaxon***: *HEMIPHRACTIDAE* Peters, 1862.
***Adelphotaxa***: *AMPHIGNATHODONTINAE* Boulenger, 1882; *CRYPTOBATRACHINAE* Frost, Grant, Faivovich, Bazin, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006; *FLECTONOTINAE* **nov.**; *FRITZIANINAE* **nov.**; *STEFANIINAE* **nov.**
***Getendotaxon***: *Hemiphractus* Wagler, 1828.

## F.18.20. Subfamilia *STEFANIINAE* **nov.**

***Getangiotaxon***: *HEMIPHRACTIDAE* Peters, 1862.
***Adelphotaxa***: *AMPHIGNATHODONTINAE* Boulenger, 1882; *CRYPTOBATRACHINAE* Frost, Grant, Faivovich, Bazin, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006; *FLECTONOTINAE* **nov.**; *FRITZIANINAE* **nov.**; *HEMIPHRACTINAE* Peters, 1862.
***Getendotaxon***: *Stefania* Rivero, 1968.

***Nucleogenus, by present designation***: *Stefania* Rivero, 1968. ● ***Etymology of nomen***: P: Luis Stefani Raffucci (1901–1971), Chancellor of the University of Costa Rica. ● ***Stem of nomen***: *Stefani-*.

***Diagnosis***: Small to large sized (males SVL 34–67 mm; females SVL 37–96 mm) hemiphractid frogs; dermal bones of skull not co-ossified with overlying skin; frontoparietals with lateral elevated edges, medially articulated throughout their lengths; nasal large, in contact anterior to sphenethmoid; neopalatines without ventral spur; procoelous presacral vertebrae lacking elongate neural spines; adhesive pad on subarticular tubercle of antepenultimate articulation absent; vocal slits and vocal sac absent; fleshy proboscis on tip of snout and fleshy tubercles on upper eyelids absent; first finger shorter than second; nuptial pads present; males much smaller than females; eggs developing into froglets on back of female. {Duellman 1970, 2015}.

## C.13.03. Hypophalanx **HYLOBATRACHIA** Ritgen, 1828

***Protonym***: **HYLOBATRACHI** Ritgen, 1828: 278 [‘F’].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **PHRYNANURA nov.**
***Adelphotaxa***: **HEMIPHRACTIFORMIA** Brocchi, 1881; **GAIANURA nov.**
***Getendotaxa***: *BUFONOIDEA* Gray, 1825; *CENTROLENOIDEA* Taylor, 1951; *CERATOPHRYOIDEA* Tschudi, 1838; *HYLOIDEA* Rafinesque, 1815-|Gray, 1825|; *LEPTODACTYLOIDEA* ||Tschudi, 1838||-Werner, 1896; **1 GIS** (*Ancudia* Philippi, 1902).

***Comments***: This branch has high support in *TREE*. It was recognised with this content first by Pyron & Wiens (2011) and more recently by Hutter *et al.* (2017). It includes five branches having each high support but their pentatomy is not resolved, as the relationships between them are not supported by values of SHL of 90 or above. They are therefore attributed here to the rank superfamily: *Bufonoidea*, *Centrolenoidea*, *Ceratophryoidea*, *Hyloidea* and *Leptodactyloidea*.

### F.14.03. Superfamilia *Bufonoidea* Gray, 1825

***Protonym***: *Bufonina* Gray, 1825: 214 [UC].
***Eunym***: Gill 1884: 621.
***Getangiotaxon***: **Hylobatrachia** Ritgen, 1828
***Adelphotaxa***: *Centrolenoidea* Taylor, 1951; *Ceratophryoidea* Tschudi, 1838; *Hyloidea* Rafinesque, 1815-|Gray, 1825|; *Leptodactyloidea* ||Tschudi, 1838||-Werner, 1896; **1 GIS** (*Ancudia* Philippi, 1902).
***Getendotaxa***: *Bufonidae* Gray, 1825; *Odontophrynidae* Lynch, 1971.

***Comments***: This branch, recognised in *CLAD* as the superfamily *Bufonoidea*, accommodates two highly supported taxa, the families *Bufonidae* and *Odontophrynidae*. The family rank is attributed to the taxon named *Bufonidae* through the [UQC] and to the *Odontophrynidae* through the [STC]. Whereas the *Odontophrynidae* show a relatively simple structure including two highly supported taxa, recognised as the subfamilies *Odontophryninae* for the genera *Macrogenioglottus* and *Odontophrynus*, and *Proceratophryinae* for the genus *Proceratophrys*, the *Bufonidae*, including more than 50 genus-level taxa, have a very complex hierarchical structure, and require nine FS ranks, from subfamily to hypoclanus, which is the highest number of infrafamilial FS ranks used in *CLAD* in a family.

### F.17.16. Familia *Bufonidae* Gray, 1825

***Eunym***: Bell 1839: 105.
***Getangiotaxon***: *Bufonoidea* Gray, 1825.
***Adelphotaxon***: *Odontophrynidae* Lynch, 1971.
***Getendotaxa***: *Bufoninae* Gray, 1825; *Melanophryniscinae* **nov.**

***Comments***: The *Bufonidae* (true toads) are an interesting group concerning character evolution as they consist in numerous taxa worldwide having a conservative morphology and life history, intermingled with other taxa that show a wide array of adaptations to various habitats, life histories and breeding modes combined with derived morphology. Traditionally, the toad-like forms were kept in a large genus *Bufo*, whereas various other genera were erected to account for this diversity of adaptations, but this made the traditional genus *Bufo* largely paraphyletic. There were two possible taxonomic solutions to this situation: either, as suggested e.g. by Dubois & Bour (2010*a*), to increase the coverage of the genus *Bufo* in order to include several of these 'specialised lineages' either as synonyms or, for some of them at least, as (holophyletic) subgenera; or to dismantle the traditional genus *Bufo*. Given the absence of collective reflection on the 'genus concept' in zoology discussed above in the M&M section, starting with Frost *et al.* (2006) the second solution was implemented without real discussion, and in complete contradiction with the attitude adopted in the same work in other amphibian groups, for example the 'genus' *Nanorana*, which showed a similar morphological and ecological heterogeneity but for which lumping was preferred to dismantlement without discussion.

As a matter of fact, the holophyly of the extensive genus *Bufo*, as understood e.g. by Blair (1972), excluding these 'satellite specialised genera', was challenged by a series of authors (e.g. Graybeal 1997, Pauly *et al.* 2004), until Frost *et al.* (2006) took the decision to propose a classification replacing the paraphyletic genus *Bufo* and its 'satellites' by a series of redefined holophyletic genera. Their family *Bufonidae* included 17 genera but did not recognise groups among these taxa. In fact, their tree showed several groupings that we recovered again in *TREE* but with a wider sampling of genera. In *TREE*, *Melanophryniscus* is sister-branch to all other *Bufonidae* (as found in all subsequent molecular phylogenies) and *Atelopus* is with *Osornophryne* (but *Oreophrynella* is missing). The following relationships found by Frost *et al.* (2006) are confirmed: *Bufo margaritifer* is close to *Rhamphophryne* (Chaparro *et al.* 2007; our data), thus the latter is a junior subjective synonym of *Rhinella*; a branch with *Bufo asper*, now *Pedostibes asper*, and *Pedostibes hosei*, now *Rentapia hosei*, appears as the hypoclanus *Rentapiitues* in our classification; and a branch groups the African bufonids, *Sclerophrys* (as *Amietophryne*), *Mertensophryne*, *Vandijkophryne* and *Capensibufo*, as the subclanus *Stephopaedities* in our classification. But other associations proposed by Frost *et al.* (2006) within the *Bufonidae* were not confirmed by further studies (Van Bocxlaer *et al.* 2009; Pyron & Wiens 2011; Liedtke *et al.* 2016; our data).

The recently published phylogenies recovered a similar pattern concerning the relationships of the basal genera but the relationships within the 'Old World toads' remain largely unresolved (Matsui *et al.* 2007; Van Bocxlaer *et al.* 2009; Pyron & Wiens 2001; Portik & Papenfuss 2015). In a phylogenetic study on mainly African bufonids, Liedtke *et al.* (2016) could resolve some of these relationships. They proposed a two-fold origin of African bufonids but one of their branches only has a support of 60 %. Most of the groups of Eurasian bufonids have low support, so that few relationships within these toads appear robust, leading to a poorly resolved classification when submitted to our Criteria.

*Melanophryniscus*, the sister-branch to all other *Bufonidae* (Van Bocxlaer *et al* 2009; Pyron & Wiens 2011; Portik & Papenfuss 2015; Liedtke *et al.* 2016) requires erection of a subfamily *Melanophryniscinae* opposed to the *Bufoninae*. Then *Frostius* is the highly supported sister-branch to all other members of the subfamily *Bufoninae*, deserving erection of the tribe *Frostiini*, represented by a single species, opposed to the tribe *Bufonini*.

### F.18.21. Subfamilia *Bufoninae* Gray, 1825

***Eunym***: Fejérváry 1917: 26.
***Getangiotaxon***: *Bufonidae* Gray, 1825.
***Adelphotaxon***: *Melanophryniscinae* **nov.**
***Getendotaxa***: *Bufonini* Gray, 1825; *Frostiini* **nov.**

### F.19.20. Tribus *Bufonini* Gray, 1825

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bufoninae* Gray, 1825.
***Adelphotaxon***: *Frostiini* **nov.**
***Getendotaxa***: *Atelopodina* Fitzinger, 1843; *Bufonina* Gray, 1825; *Oreophrynellina* **nov.**, *Osornophrynina* **nov.**; **2 GIS** (*Metaphryniscus* Señaris, Ayarzagüena & Gorzula, 1994; *Truebella* Graybeal & Cannatella, 1995).

***Comments***: The tribe *Bufonini* holds four highly supported branches (SHL 100) recognised here as the subtribes *Atelopodina*, *Bufonina*, *Oreophrynellina* and *Osornophrynina*, but the relationships between them does not have sufficient statistical support. As previous studies did not include members of *Frostius*, *Oreophrynella* and *Amazophrynella*, the relationships among the branches shared by all analyses cannot be compared without important assumptions. Therefore we will only present results of our study. The *Oreophrynellina*, for the genus *Oreophrynella*, is the sister-branch to the *Osornophrynina*, for the genus *Osornophryne*, but with a SHL of only 86; the *Atelopodina*, including the genus *Atelopus*, is sister-branch to this taxon with a SHL of only 70. Members of the genera *Metaphryniscus* and *Truebella* have not been sequenced, so they cannot be allocated to a group within the tribe *Bufonini*.

### F.20.12. Subtribus *Atelopodina* Fitzinger, 1843

***Protonym***: *Atelopoda* Fitzinger, 1843: 32 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bufonini* Gray, 1825.
***Adelphotaxa***: *Bufonina* Gray, 1825; *Oreophrynellina* **nov.**, *Osornophrynina* **nov.**; **2 GIS** (*Metaphryniscus* Señaris, Ayarzagüena & Gorzula, 1994; *Truebella* Graybeal & Cannatella, 1995).
***Getendotaxon***: *Atelopus* Duméril & Bibron, 1841

## G.28.099. Genus *Atelopus* Duméril & Bibron, 1841

***Getangiotaxon***: ATELOPODINA Fitzinger, 1843.
***Adelphotaxon***: None.
***Getendotaxa***: About a hundred species.

***Comments***: We hereby designate *Hylaemorphus dumerilii* Schmidt, 1857 as type-species of the nominal genus *Hylaemorphus* Schmidt, 1857. The origin was indicated as 'Neu-Granada' [Vice-Royalty of New Granada], a political unit which included the northern part of South America and the southern part of Central America. As announced in Schmidt (1857), the genus *Hylaemorphus* and the two included species were redescribed in detail as new by Schmidt in 1858. He then indicated a more precise origin for the ***symphoronts*** of *Hylaemorphus dumerilii*, namely 'Provinz Verugua' [Veraguas, now in Panama] (Schmidt 1858). This is near the ***onymotope*** of the ***neophoront*** of *Phrynidium varium* Lichtenstein, Weinland & Martens, 1856, written as 'Veragoa': both refer to the province Veragua in western Panama. Savage (1972) designated ZMB 3379 as neotype of both *Hylaemorphus dumerilii* and *Hylaemorphus bibronii*, although in Schmidt (1858) these species do not have the same origin, in particular in altitudinal distribution: *Hylaemorphus dumerilii* was collected at 8000 feet [2530 m] altitude and *Hylaemorphus bibronii* from an unprecise place between 2000 and 3000 feet [630–950 m], 'unweit Panama' [near Panama]. In 1928, Dunn could study the original type specimens deposited in the Krakau collection (Savage 1972), but Henryk Szarski could not find these specimens in the early seventies (Savage 1972: 89). Thus the neotype designation of Savage (1972) is valid and the onymotope for both species is now 'Veragua', Panama. Savage (1972) argued that the specimen of *Hylaemorphus bibronii* figured by Schmidt (1858) resembles populations of *Atelopus varius* from the Pacific slopes of Volcan Chiriqui. A frog from this population would have been a much better choice for a neotype.

When describing *Phrynidium varium*, Lichtenstein *et al.* (1856) established the new genus *Phrynidium* with four included nominal species-series taxa: *Phrynidium varium*, *Phrynidium varium* var. (a) *maculatum*, *Phrynidium varium* var. (b) *adspersum* and *Phrynidium crucigerum*. In his historical survey of the classification of *Atelopus*, McDiarmid (1971) did not designate a type-species for *Phrynidium*, but Lötters *et al.* (1998) did so by mentioning *Phrynidium varium* as 'type-species'. This designation is valid although these authors were not aware that the genus was described on the basis of several nominal taxa (see Article 69.1.1 of the *Code*).

If in the future this genus was to be dismantled as two genera (or subgenera), the nomen *Phrynidium* would be available for the Andean-Choco-Central American branch of Lötters *et al.* (2011).

## F.20.13. Subtribus BUFONINA Gray, 1825

***Eunym***: *Hoc loco*.
***Getangiotaxon***: BUFONINI Gray, 1825.
***Adelphotaxa***: ATELOPODINA Fitzinger, 1843; OREOPHRYNELLINA **nov.**, OSORNOPHRYNINA **nov.**; **2 GIS** (*Metaphryniscus* Señaris, Ayarzagüena & Gorzula, 1994; *Truebella* Graybeal & Cannatella, 1995).
***Getendotaxa***: AMAZOPHRYNELLINIA **nov.**; BUFONINIA Gray, 1825; DENDROPHRYNISCINIA Jiménez de la Espada, 1870.

***Comments***: The branch named BUFONINA includes three highly supported branches, attributed to the infratribes AMAZOPHRYNELLINIA for the genus level taxon *Amazophrynella*, DENDROPHRYNISCINIA for the genus *Dendrophryniscus*, and BUFONINIA for 43 genera. Within these three, AMAZOPHRYNELLINIA and DENDROPHRYNISCINIA appear in *TREE* as sister-branches, but only with a SHL of 77, below the significance level retained.

## F.21.07. Infratribus AMAZOPHRYNELLINIA **nov.**

***Getangiotaxon***: BUFONINA Gray, 1825.
***Adelphotaxa***: BUFONINIA Gray, 1825; DENDROPHRYNISCINIA Jiménez de la Espada, 1870.
***Getendotaxon***: *Amazophrynella* Fouquet, Recoder, Teixeira, Cassimiron Amaro, Camacho, Demasceno, Carnaval, Moritz & Rodrigues, 2012.

***Nucleogenus, by present designation***: *Amazophrynella* Fouquet, Recoder, Teixeira, Cassimiron Amaro, Camacho, Demasceno, Carnaval, Moritz & Rodrigues, 2012. ● ***Etymology of nomen***: R: Amazonia, for the distribution area; N: *Phrynella* Boulenger, 1887, derived from G: φρύνη (*phryne*), 'toad'; L: -*ella*, a feminine suffix indicating a diminutive form. ● ***Stem of nomen***: *Amazophrynell-*.

***Diagnosis***: Small toads without parotoid glands, no external tympanum, no cranial crests, uniformly granular skin, basally webbed feet, long hind-limbs, no vocal slits, snout pointed in profile, longitudinally elliptical subarticular tubercles, blotches or spots on venter, proportionally large limbs and eyes, and short snout. {Fouquet *et al.* 2012}.

## F.21.08. Infratribus *Bufoninia* Gray, 1825

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bufonina* Gray, 1825.
***Adelphotaxa***: *Amazophrynellinia* **nov.**; *Dendrophryniscinia* Jiménez de la Espada, 1870.
***Getendotaxa***: *Bufoninoa* Gray, 1825; *Nannophryninoa* **nov.**

***Comments***: Within the infratribe *Bufoninia*, *Nannophryne*, allocated to the hypotribe *Nannophryninoa*, is sister-branch to the remaining genera, which form the hypotribe *Bufoninoa*.

## F.22.07. Hypotribus *Bufoninoa* Gray, 1825

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bufoninia* Gray, 1825.
***Adelphotaxon***: *Nannophryninoa* **nov.**
***Getendotaxa***: *Bufonites* Gray, 1825; *Peltophrynites* **nov.**; *Rhaeboites* **nov.**

***Comments***: This hypotribe *Bufoninoa* holds three highly supported branches with poorly supported mutual relationships, attributed to the clans *Bufonites*, *Peltophrynites* for *Peltophryne*, and *Rhaeboites* for *Rhaebo*.

## F.23.03. Clanus *Bufonites* Gray, 1825

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bufoninoa* Gray, 1825.
***Adelphotaxa***: *Peltophrynites* **nov.**; *Rhaeboites* **nov.**
***Getendotaxa***: *Bufonities* Gray, 1825; *Phryniscities* Günther, 1858; *Stephopaedities* Dubois, 1987.

***Comments***: The clan *Bufonites* includes three branches attributed to the hierarchical rank subclan, *Bufonities*, *Phryniscities* and *Stephopaedities*.

## F.24.01. Subclanus *Bufonities* Gray, 1825

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bufonites* Gray, 1825.
***Adelphotaxa***: *Phryniscities* Günther, 1858; *Stephopaedities* Dubois, 1987.
***Getendotaxa***: *Adenomitoes* Cope, 1861; *Ansoniities* **nov.**; *Bufonitoes* Gray, 1825; *Bufotitoes* **nov.**; *Nectophrynitoes* Laurent, 1942; *Sabahphrynitoes* **nov.**; *Strauchbufonitoes* **nov.**; *Tornieriobatitoes* Miranda-Ribeiro, 1926; **1 G†; 2 GIS** (*Altiphrynoides* Dubois, 1987; *Parapelophryne* Fei, Ye & Jiang, 2003).

***Comments***: Matsui *et al.* (2007), on the basis of an analysis of a small sample of Asian taxa, confirmed the holophyly of a branch that corresponds to our subclanus *Bufonities*, within which the relationships were poorly supported.

This taxon was confirmed and called 'Old World toads' by Van Bocxlaer *et al.* (2009), Liedtke *et al.* (2016) and our work, but did not have significant support in Pyron & Wiens (2011) and Portik & Pappenfuss (2015). The relationships within this taxon are poorly supported (see below). The genera *Altiphrynoides*, *Blythophryne*, *Bufoides*, *Palaeophrynos*, *Parapelophryne* and *Pseudobufo* can be allocated to the subclan *Bufonities* or some of its subordinate CS taxa on morphological evidence, but no molecular data are available to propose more precise relationships within this subclan. The other genera can be allocated molecularly to eight branches with high support, recognised here as infraclans.

*Adenomus*, *Duttaphrynus* and four other genera form a highly supported taxon (Pyron & Wiens 2011), here called the hypoclan *Adenomitues*. This taxon is sister-group to *Bufotes* in Pyron & Wiens (2011) but here it is sister-group to *Pedostibes*, the hypoclan *Pedostibitues*, both forming the infraclan *Adenomitoes* in *CLAD*. The latter does not include *Ansonia* and *Pelophryne* as proposed by Van Bocxclaer *et al.* (2009). In our classification, the infraclan *Ansoniitoes* includes a series of genera that have low support concerning their relationships, except for *Ansonia* and *Pelophryne*, for which we define the hypoclan *Ansoniitues*, and *Phrynoidis* and *Rentapia*, for which we erect the hypoclan *Rentapiitues*. As to the remaining genera of this infraclan, their relationships remaining unclear, they have to be recognised at the same hierarchical level, as the hypoclans *Barbarophrynitues* for *Barbarophryne*, *Ingerophrynitues* for *Ingerophrynus* and *Blairitues* for *Blaira*.

The infraclan *Nectophrynitoes* accommodates three supported taxa, the hypoclans *Epidaleitues* for *Epidalea*, *Leptophrynitues* for *Leptophryne* and *Nectophrynitues* for the genera *Didynamipus*, *Laurentophryne*, *Mo*, *Nectophryne*, *Nimbaphrynoides*, *Werneria* and *Wolterstorffina*. There is no significant support for a holophyletic *Werneria* (SHL 84) and the members of these two taxa can be diagnosed morphologically, so we formally attribute below to the lineage of *Werneria bambutensis* the new genus nomen *Mo*.

As already revealed by Van Bocxlaer *et al.* (2009), there is a close phylogenetic relationship between *Churamiti*, *Nectophrynoides* and *Schismaderma*, presented in the following classification scheme. The infraclan *Tornieriobatitoes* represents three genera, *Churamiti* being sister-taxon of *Nectophrynoides*, recognised as the hypoclan *Tornieriobatitues*, and *Schismaderma* being the sister-taxon to this group is subsequently recognised as the hypoclan *Schismadermatitues*.

Each of the remaining genera forms an independent lineage as the phylogenetic relationships in *TREE* do not show sufficient support. These lineages are recognised as the hypoclans *Bufonitoes* for *Bufo*, *Bufotitoes* for *Bufotes*, *Sabahphrynitoes* for *Sabahphrynus* and *Strauchbufonitoes* for *Strauchbufo*.

Three nomina ("*Ghatophryne*", "*Xanthophryne*" and "*Xanthophryne tigerinus*") currently in use in the literature for taxa referred to the subclan *Bufonities* are nomenclaturally unavailable for having been published before 2012 by Biju *et al.* (2009) in the online-only journal *BMC Research Notes.* The deposition of facsimiles of this work in six libraries, announced in this publication, does not make it available, because these facsimiles do not comply with the requirement to have been "obtainable, when first issued, free of charge or by purchase" (Article 8.1.2) and because "facsimiles or reproductions obtained on demand of an unpublished work [Art. 8], even if previously deposited in a library or other archive" do not constitute published works (Article 9.12). Dubois *et al.* (2013) published a clear warning in this respect, but it was ignored by all subsequent authors who cited these nomina, none of which provided available nomina for these taxa. We therefore propose here new nomina for these three taxa.

### F.25.01. Infraclanus *Adenomitoes* Cope, 1861

***Protonym***: *Adenominae* Cope, 1861: 371 [F].

***Eunym***: *Hoc loco*.

***Getangiotaxon***: *Bufonities* Gray, 1825.

***Adelphotaxa***: *Ansoniitoes* **nov.**; *Bufonitoes* Gray, 1825; *Bufotitoes* **nov.**; *Nectophrynitoes* Laurent, 1942; *Sabahphrynitoes* **nov.**; *Strauchbufonitoes* **nov.**; *Tornieriobatitoes* Miranda-Ribeiro, 1926; **1 G†**; **2 GIS** (*Altiphrynoides* Dubois, 1987; *Parapelophryne* Fei, Ye & Jiang, 2003).

***Getendotaxa***: *Adenomitues* Cope, 1861; *Pedostibitues* **nov.**

## F.26.01. Hypoclanus *Adenomitues* Cope, 1861

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Adenomitoes* Cope, 1861.
***Adelphotaxon***: *Pedostibitues* **nov.**
***Getendotaxa***: *Adenomityes* Cope, 1861; *Bedukityes* **nov.**

***Comments***: The nomen "*Xanthophryne*", introduced in a online-only journal before 2012, is not available according to the *Code*, as pointed out by Dubois *et al.* (2013) but ignored by all subsequent authors who cited this nomen. Besides, recognition of a taxon "*Xanthophryne*" makes the genus *Duttaphrynus* paraphyletic. We are therefore led to introduce two genus-series nomina in this group, which are here used at rank genus but could also be so at rank subgenus: *Beduka* for "*Xanthophryne*" and *Firouzophrynus* for the '*Bufo stomaticus* group' of Inger (1972) and Dubois & Ohler (1999).

## F.27.01. Catoclanus *Adenomityes* Cope, 1861

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Adenomitues* Cope, 1861.
***Adelphotaxon***: *Bedukityes* **nov.**
***Getendotaxa***: *Beduka* **nov.**; *Blythophryne* Chandramouli, Vasudevan, Harikrishnan, Dutta, Janani, Sharma, Das & Aggarwal, 2016; *Bufoides* Pillai & Yazdani, 1973; *Duttaphrynus* Frost, Grant, Faivovich, Bazin, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006; *Firouzophrynus* Safaei-Mahroo & Ghaffari, 2020.

***Nucleogenus, by present designation***: *Beduka* **nov.** ● ***Etymology of nomen***: Marathi language of Maharashtra: *beduka*, 'toad'. ● ***Stem of nomen***: *Beduk-*.

***Diagnosis***: Small to very large toads (males SVL 22–103 mm, females SVL 22–133 mm); dorsal skin with keratinised tips on tubercles; canthal, preorbital, supraorbital and postorbital ridge present or absent; tympanum present, but may be hidden; parotoid glands present; fingers free, rarely with basal webbing; that of toes very variable, from free toes to completely webbed toes; finger and toe tips rounded, rarely dilated into discs, grooves always absent; tarsal folds absent; eggs small to large sized with dark pigmented animal pole; a single median, external vocal sac in adult males; tadpoles with keratodonts, but no ventral sucker as in sister-taxon *Adenomus*. {Inger 1972; Dubois 1974; Sarkar 1984; Chanda 1994; Manamendra-Arachchi & Pethiyagoda 1998; Dubois & Ohler 1999; Wogan *et al.* 2003; Biju *et al.* 2009; Chandramouli *et al.* 2011, 2016; Deuti *et al.* 2012; Meegaskumbura *et al.* 2015*a*; Gaitonde *et al.* 2016; Chandramouli & Amarasinghe 2016; personal observations by AD and AO}.

## G.28.105. Genus *Beduka* **nov.**

***Getangiotaxon***: *Bedukityes* **nov.**
***Adelphotaxa***: *Blythophryne* Chandramouli, Vasudevan, Harikrishnan, Dutta, Janani, Sharma, Das & Aggarwal, 2016; *Bufoides* Pillai & Yazdani, 1973; *Duttaphrynus* Frost, Grant, Faivovich, Bazin, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006; *Firouzophrynus* Safaei-Mahroo & Ghaffari, 2020.
***Getendotaxa***: *Beduka amboli* **nov.**; *Beduka koynayensis* (Soman, 1963).

***Nucleospecies, by present desigation***: *Bufo koynayensis* Soman, 1963. ● ***Etymology of nomen***: Marathi language of Maharashtra: *beduka*, 'toad'. This nomen points to the geographic distribution of this genus, in the Western Ghats of southern India. ● ***Stem of nomen***: *Beduk-*. ● ***Grammatical gender of nomen***: feminine.

***Diagnosis***: Small sized toads (males SVL 26.5–32.9 mm, females SVL 33.3–35.3 mm); dorsal coloration light brown and chrome-yellow; flanks and sides of abdomen with chrome-yellow patches or bands; dorsal skin with keratinised tubercles; canthal ridge discontinuous and weak; preorbital ridge discontinuous and weak; tympanum indistinct; parotoid glands present, but rather weak; fingers and toes without webbing; finger and toe tips rounded; tarsal folds absent; eggs in clutches, black and white color; a single, median, external vocal sac; tadpoles with keratodonts present; habitat on lateritic rock. {Biju *et al.* 2009; Meegaskumbura *et al.* 2015; Gaitonde *et al.* 2016}.

***Comments:*** As explained above, the nomen "*Xanthophryne*", published online only before 2012 by Biju *et al.* (2009), is nomenclaturally unavailable. We provide here a new nomen for this taxon, which is much shorter than the original one as it does not end with the six-letter ending -*phryne* currently overused in bufonid nomenclature in our opinion (see in this respect Dubois & Raffaëlli 2009 and Dubois 2010).

### S.29.01. Species *Beduka amboli* **nov.**

***Getangiotaxon***: *Beduka* **nov.**
***Adelphotaxon***: *Beduka koynayensis* (Soman, 1963).
***Getendotaxon***: None.

***Holophoront (holotype), by present desigation***: BNHS 5175, adult male, SVL 30.5 mm. ● ***Etymology of nomen***: Amboli, name of onymotope (type locality) of this species in Maharashtra, India. ● ***Grammatical status of epithet***: noun in apposition.

***Diagnosis***: See the diagnosis of "*Xanthophryne tigerinus*" in Biju *et al.* (2009: 4).

***Comments:*** As explained above, the nomen "*Xanthophryne tigerinus*", published online only before 2012 by Biju *et al.* (2009), is nomenclaturally unavailable. We provide here a new nomen for this taxon. We did not take over the epithet *tigerina* (misspelt *tigerinus* in the original description), because it is already used in the nomen of a common frog species of southern India, *Hoplobatrachus tigerinus* (Daudin, 1802), and as such is liable to cause confusion in faunistic lists, ecological works or even in careless taxonomic publications.

### F.26.02. Hypoclanus *PEDOSTIBITUES* **nov.**

***Getangiotaxon***: *ADENOMITOES* Cope, 1861.
***Adelphotaxon***: *ADENOMITUES* **nov.**
***Getendotaxon***: *Pedostibes* Günther, 1876.

***Nucleogenus, by present designation***: *Pedostibes* Günther, 1876. ● ***Etymology of nomen***: G: πεδοστῐ́βής (*pedostibes*), 'walking on the earth'. ● ***Stem of nomen***: *Pedostib*-.

***Diagnosis***: Small, arboreal toads with horizontal pupils, elliptical tongue, partially webbed fingers and toes, terminal digits expanded into truncated discs, and united outer metatarsals. {Boulenger 1890*b*; Graybeal & Cannatella 1995}.

### F.25.02. Infraclanus *ANSONIITOES* **nov.**

***Getangiotaxon***: *BUFONITIES* Gray, 1825.
***Adelphotaxa***: *ADENOMITOES* Cope, 1861; *BUFONITOES* Gray, 1825; *BUFOTITOES* **nov.**; *NECTOPHRYNITOES* Laurent, 1942; *SABAHPHRYNITOES* **nov.**; *STRAUCHBUFONITOES* **nov.**; *TORNIERIOBATITOES* Miranda-Ribeiro, 1926; **1 G†**; **2 GIS** (*Altiphrynoides* Dubois, 1987; *Parapelophryne* Fei, Ye & Jiang, 2003).
***Getendotaxa***: *ANSONIITUES* **nov.**; *BARBAROPHRYNITUES* **nov.**; *BLAIRITUES* **nov.**; *INGEROPHRYNITUES* **nov.**; *RENTAPIITUES* **nov.**; **2 GIS** (*Pseudobufo* Tschudi, 1838; *Sigalegalephrynus* Smart, Sarker, Arifin, Harvey, Sidik, Hamidy, Kurniawan & Smith, 2017).

***Nucleogenus, by present designation***: *Ansonia* Stoliczka, 1870. ● ***Etymology of nomen***: P: Dedicated to Archibald Edward Harbond Anson (1826–1925), Lieutenant Governor of Penang from 1867 to 1882. ● ***Stem of nomen***: *Ansoni-*.

***Diagnosis***: Very small to large sized toads (males SVL 13–80 mm; females SVL 13–105 mm); vocal sac present; webbing on hand present or absent; webbing foot often large; iris golden to red-brown colours, rarely green; tympanum distinct or absent; skin of belly coarsely granular; toe tips rounded, in some groups expanded; tarsal ridge present or absent; skin head cranial crests usually absent; parotoid glands present, often roundish, or absent; skin on dorsum with scattered warts, sometimes bearing horny structures; colour of dorsum brownish, usually with spotted pattern; eggs pigmented or non-pigmented, small to large sized (1.2–2.8 mm), numerous or few in number; tadpoles stream-living, usually of general bufonid type but also with adaptations to this habitat; one genus showing phytotelm breeding. {Barbour 1938; Grismer 2006; Pramuk 2006; Matsui *et al.* 2007; Biju *et al.* 2009; Beukema *et al.* 2013}.

## F.26.03. Hypoclanus *Ansoniitues* **nov.**

***Getangiotaxon***: *Ansoniitoes* **nov.**
***Adelphotaxa***: *Barbarophrynitues* **nov.**; *Blairitues* **nov.**; *Ingerophrynitues* **nov.**; *Rentapiitues* **nov.**; **2 GIS** (*Pseudobufo* Tschudi, 1838; *Sigalegalephrynus* Smart, Sarker, Arifin, Harvey, Sidik, Hamidy, Kurniawan & Smith, 2017).
***Getendotaxa***: *Ansonia* Stoliczka, 1870; *Pelophryne* Barbour, 1938.

## F.26.04. Hypoclanus *Barbarophrynitues* **nov.**

***Getangiotaxon***: *Ansoniitoes* **nov.**
***Adelphotaxa***: *Ansoniitues* **nov.**; *Blairitues* **nov.**; *Ingerophrynitues* **nov.**; *Rentapiitues* **nov.**; **2 GIS** (*Pseudobufo* Tschudi, 1838; *Sigalegalephrynus* Smart, Sarker, Arifin, Harvey, Sidik, Hamidy, Kurniawan & Smith, 2017).
***Getendotaxon***: *Barbarophryne* Beukema, Pous, Donaire-Barroso, Bogaerts, Garcia-Porta, Escoriza, Arribas, El Mouden & Carranza, 2013.

***Nucleogenus, by present designation***: *Barbarophryne* Beukema, de Pous, Donaire-Barroso, Bogaerts, Garcia-Porta, Escoriza, Arribas, El Mouden & Carranza, 2013. ● ***Etymology of nomen***: L: *barbaro*, relative to Barbary, NW African region north of the Sahara; G: φρύνη (*phryne*), 'toad'. ● ***Stem of nomen***: *Barbarophryn-*.

***Diagnosis***: Small toads, lacking warts on the dorsal surface of the head, nearly circular parotoid glands, nearly round tympanum, lacking gland on the tibia, and paired distal subarticular tubercles on the fourth toe. {Beukema *et al.* 2013}.

## F.26.05. Hypoclanus *Blairitues* **nov.**

***Getangiotaxon***: *Ansoniitoes* **nov.**
***Adelphotaxa***: *Ansoniitues* **nov.**; *Barbarophrynitues* **nov.**; *Ingerophrynitues* **nov.**; *Rentapiitues* **nov.**; **2 GIS** (*Pseudobufo* Tschudi, 1838; *Sigalegalephrynus* Smart, Sarker, Arifin, Harvey, Sidik, Hamidy, Kurniawan & Smith, 2017).
***Getendotaxon***: *Blaira* **nov.**

***Nucleogenus, by present designation***: *Blaira* **nov.** ● ***Etymology of nomen***: P: Dedicated to William Franklin Blair, (1912–1984), zoologist, for his contribution to the knowledge about the evolution of toads. ● ***Stem of nomen***: *Blair-*.● ***Grammatical gender of nomen***: feminine.

***Diagnosis***: See below under *Blaira* **nov.**

### G.28.115. Genus *Blaira* **nov.**

***Getangiotaxon***: *Blairitues* **nov.**
***Adelphotaxon***: None.
***Getendotaxa***: *Blaira ornata* (Günther, 1876); *Blaira rubigina* (Pillai & Pattabiraman, 1981).

***Nucleospecies, by present designation***: *Ansonia ornata* Günther, 1876. ● ***Etymology of nomen***: P: Dedicated to William Franklin Blair, (1912–1984), zoologist, for his contribution to the knowledge about the evolution of toads. ● ***Stem of nomen***: *Blair-*. ● ***Grammatical gender of nomen***: feminine.

***Diagnosis***: Small toads, reddish-brown dorsal coloration, dark brownish-black ventral coloration with prominent yellowish-orange spots, no cranial ridges, no parotoid glands evident, no webbing on fingers, moderate webbing on toes, sparse granular projections on dorsal skin, non-pigmented eggs, and tadpoles with suctorial disc. {Biju *et al.* 2009}.

***Comments:*** As explained above, the nomen "*Ghatophryne*", published online only before 2012 by Biju *et al.* (2009), is nomenclaturally unavailable. We provide here a new nomen for this taxon, which is much shorter than the original one as it does not end with the six-letter ending *-phryne* currently over-used in bufonid nomenclature in our opinion (see in this respect Dubois & Raffaëlli 2009 and Dubois 2010).

### F.26.06. Hypoclanus *Ingerophrynitues* **nov.**

***Getangiotaxon***: *Ansoniitoes* **nov.**
***Adelphotaxa***: *Ansoniitues* **nov.**; *Barbarophrynitues* **nov.**; *Blairitues* **nov.**; *Rentapiitues* **nov.**; **2 GIS** (*Pseudobufo* Tschudi, 1838; *Sigalegalephrynus* Smart, Sarker, Arifin, Harvey, Sidik, Hamidy, Kurniawan & Smith, 2017).
***Getendotaxon***: *Ingerophrynus* Frost, Grant, Faivovich, Bain, Haas, Haddad, de Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006.

***Nucleogenus, by present designation***: *Ingerophrynus* Frost, Grant, Faivovich, Bain, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006. ● ***Etymology of nomen***: P: Robert Frederick Inger (1920–2019); G: φρύνη (*phryne*), 'toad'. ● ***Stem of nomen***: *Ingerophryn-*. ● ***Grammatical gender of nomen***: masculine.

***Diagnosis***: Small to medium sized toads; granular dorsal skin; most species with brownish dorsal coloration; tympanum present or absent; cranial crests absent or well-developed; parotoid glands lacking or distinct; and reduced to moderately-developed toe webbing. {Matsui *et al.* 2007}.

### F.26.07. Hypoclanus *Rentapiitues* **nov.**

***Getangiotaxon***: *Ansoniitoes* **nov.**
***Adelphotaxa***: *Ansoniitues* **nov.**; *Barbarophrynitues* **nov.**; *Blairitues* **nov.**; *Ingerophrynitues* **nov.**; **2 GIS** (*Pseudobufo* Tschudi, 1838; *Sigalegalephrynus* Smart, Sarker, Arifin, Harvey, Sidik, Hamidy, Kurniawan & Smith, 2017).
***Getendotaxa***: *Phrynoidis* Fitzinger *in* Treitschke, 1842; *Rentapia* Chan, Grismer, Zachariah, Brown & Abraham, 2016.

***Nucleogenus, by present designation***: *Rentapia* Chan, Grismer, Zachariah, Brown & Abraham, 2016. ● ***Etymology of nomen***: P: After the legendary Iban warrior Libau Rentap, Borneo, Malaysia. ● ***Stem of nomen***: *Rentapi-*. ● ***Grammatical gender of nomen***: masculine.

***Diagnosis***: Medium sized toads; most species with rugose or granular or smooth skin and brownish or greenish dorsal coloration; horizontal pupil; conspicuous channeled groove on posterior margin of neural arch; transverse process of vertebra VII oriented perpendicularly; posteromedial margin of the sacrum relatively smooth; and dorsal crest of ilial shaft present and well-developed in medial view. {Pramuk 2006}.

## F.25.03. Infraclanus *Bufonitoes* Gray, 1825

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bufonities* Gray, 1825.
***Adelphotaxa***: *Adenomitoes* Cope, 1861; *Ansoniitoes* **nov.**; *Bufotitoes* **nov.**; *Nectophrynitoes* Laurent, 1942; *Sabahphrynitoes* **nov.**; *Strauchbufonitoes* **nov.**; *Tornieriobatitoes* Miranda-Ribeiro, 1926; **1 G†**; **2 GIS** (*Altiphrynoides* Dubois, 1987; *Parapelophryne* Fei, Ye & Jiang, 2003).
***Getendotaxon***: *Bufo* Garsault, 1764.

## F.25.04. Infraclanus *Bufotitoes* nov.

***Getangiotaxon***: *Bufonities* Gray, 1825.
***Adelphotaxa***: *Adenomitoes* Cope, 1861; *Ansoniitoes* **nov.**; *Bufonitoes* Gray, 1825; *Nectophrynitoes* Laurent, 1942; *Sabahphrynitoes* **nov.**; *Strauchbufonitoes* **nov.**; *Tornieriobatitoes* Miranda-Ribeiro, 1926; **1 G†**; **2 GIS** (*Altiphrynoides* Dubois, 1987; *Parapelophryne* Fei, Ye & Jiang, 2003).
***Getendotaxon***: *Bufotes* Rafinesque, 1815.

***Nucleogenus, by present designation***: *Bufotes* Rafinesque, 1815. ● ***Etymology of nomen***: N: *Bufo* Laurenti, 1768, derived from L: *bufo*, 'toad'; G: -τες (*-tes*), suffix meaning 'one who does'. ● ***Stem of nomen***: *Bufot-*.

***Diagnosis***: Medium to large sized toads (SVL 38–97 mm); ratio of seventh to third transverse process of vertebrae 0.575–0.725; vertebral crest median; main slip from humerodorsalis muscle to 4th finger present; supinator manus humeralis present; cranial crest none; tibia gland absent; tarsal ridge present; vocal sac present, with gular pigmentation; subarticular tubercles on forth toe usually single; mating call series of notes with well defined internote intervals (type IIIa of Martin 1972); release calls pulsed structure with distinct interpulse intervals; chromosomses *viridis*-like chromosome set. {Inger 1972; Eiselt & Schmidtler 1973; Stöck *et al.* 2001*a–b*; Fei & Ye 2016).

## F.25.05. Infraclanus *Nectophrynitoes* Laurent, 1942

***Protonym***: *Nectophrynidae* Laurent, 1942: 6 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bufonities* Gray, 1825.
***Adelphotaxa***: *Adenomitoes* Cope, 1861; *Ansoniitoes* **nov.**; *Bufonitoes* Gray, 1825; *Bufotitoes* **nov.**; *Sabahphrynitoes* **nov.**; *Strauchbufonitoes* **nov.**; *Tornieriobatitoes* Miranda-Ribeiro, 1926; **1 G†**; **2 GIS** (*Altiphrynoides* Dubois, 1987; *Parapelophryne* Fei, Ye & Jiang, 2003).
***Getendotaxa***: *Epidaleitues* **nov.**; *Leptophrynitues* **nov.**; *Nectophrynitoes* Laurent, 1942.

## F.26.08. Hypoclanus *Epidaleitues* nov.

***Getangiotaxon***: *Nectophrynitoes* Laurent, 1942.
***Adelphotaxa***: *Leptophrynitues* **nov.**; *Nectophrynitoes* Laurent, 1942.
***Getendotaxon***: *Epidalea* Cope, 1864.

***Nucleogenus, by present designation***: *Epidalea* Cope, 1864. ● ***Etymology of nomen***: G: ἐπί (*epi*), 'afterwards'; δείλη (*deile*), 'evening'. ● ***Stem of nomen***: *Epidale-*.

***Diagnosis***: Medium sized toads (SVL 41–66 mm), cranial crests absent, tarsal ridge present, vocal sac present, surrounding muscle and connective tissue with melanophores, tibia gland present, supinator manus humeralis present, humerodorsalis with main slips to third and fourth fingers and an accessory slip to fourth metacarpal, adductor longus present, vertebral column with a single median crest, seventh transverse process 0.576–0.725 of third, occipital canal exposed, dorsal surface of skull smooth or weakly pitted, squamosal without a dorsal otic plate, transverse parasphenoid ridge absent, and palatine usually smooth. {Inger 1972}.

F.26.09. Hypoclanus *Leptophrynitues* **nov.**

***Getangiotaxon***: *Nectophrynitoes* Laurent, 1942.
***Adelphotaxa***: *Epidaleitues* **nov.**; *Nectophrynitues* Laurent, 1942.
***Getendotaxon***: *Leptophryne* Fitzinger, 1843.

***Nucleogenus, by present designation***: *Leptophryne* Fitzinger, 1843. ● ***Etymology of nomen***: G: λεπτός (*leptos*), 'thin, delicate'; φρύνη (*phryne*), 'toad'. ● ***Stem of nomen***: *Leptophryn-*.

***Diagnosis***: Small, slender toads with long limbs; no bony crests on head; short snout projecting slightly over the mouth; distinct tympanum smaller than eye; small round discs on tips of fingers and toes; no webbing on fingers; toes webbed over half their lengths; Bidder's organ; epicoracoid cartilage partially fused; elongated subarticular tubercle at the base of each toe. {Graybeal & Cannatella 1995; Malkmus *et al.* 2002}.

F.26.10. Hypoclanus *Nectophrynitues* Laurent, 1942

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Nectophrynitoes* Laurent, 1942.
***Adelphotaxa***: *Epidaleitues* **nov.**; *Leptophrynitues* **nov.**
***Getendotaxa***: *Didynamipus* Andersson, 1903; *Laurentophryne* Tihen, 1960; *Mo* **nov.**; *Nectophryne* Buchholz & Peters *in* Peters, 1875; *Nimbaphrynoides* Dubois, 1987; *Werneria* Poche, 1903; *Wolterstorffina* Mertens, 1939.

G.28.125. Genus *Mo* **nov.**

***Getangiotaxon***: *Nectophrynitues* Laurent, 1942
***Adelphotaxa***: *Didynamipus* Andersson, 1903; *Laurentophryne* Tihen, 1960; *Nectophryne* Buchholz & Peters *in* Peters, 1875; *Nimbaphrynoides* Dubois, 1987; *Werneria* Poche, 1903; *Wolterstorffina* Mertens, 1939.
***Getendotaxon***: *Mo bambutensis* (Amiet, 1972).

***Nucleospecies, by present designation***: *Bufo bambutensis* Amiet, 1972. ● ***Etymology of nomen***: P: 'Mo', the nickname of Mark-Oliver Rödel (1965–), German herpetologist, to whom this genus is dedicated in appreciation of his contribution to the progress of our knowledge on African amphibians. ● ***Stem of nomen***: *Mo-*. ● ***Grammatical gender of nomen***: masculine.

***Diagnosis***: Small sized toads (males SVL 28–33 mm; females SVL 30–38 mm); body stout; snout rounded; skin with micro-reticulations; dorsolateral lines absent; belly without spotted pattern; hindlegs short and thick, without black bars; webbing large, toes with broad fringes; terminal phalange enlarged; males bearing minute spines on head; first finger with smooth subdigital pad; 380–480 unpigmented eggs, 2 mm in diameter; probably rather aquatic habits. {Amiet 1976; Rödel *et al.* 2004; Hirschfeld *et al.* 2012}.

F.25.06. Infraclanus *Sabahphrynitoes* **nov.**

***Getangiotaxon***: *Bufonities* Gray, 1825.
***Adelphotaxa***: *Adenomitoes* Cope, 1861; *Ansoniitoes* **nov.**; *Bufonitoes* Gray, 1825; *Bufotitoes* **nov.**; *Nectophrynitoes* Laurent, 1942; *Strauchbufonitoes* **nov.**; *Tornieriobatitoes* Miranda-Ribeiro, 1926; **1 G†**; **2 GIS** (*Altiphrynoides* Dubois, 1987; *Parapelophryne* Fei, Ye & Jiang, 2003).
***Getendotaxon***: *Sabahphrynus* Matsui, Yambun & Sudin, 2007.

***Nucleogenus, by present designation***: *Sabahphrynus* Matsui, Yambun & Sudin, 2007. ● ***Etymology of nomen***: R: Sabah, state of Malaysia; G: φρύνη (*phryne*), 'toad'.● ***Stem of nomen***: *Sabahphryn-*.

***Diagnosis***: Small sized toads (males SVL 40–42 mm; females SVL 45–50 mm); lacking tympanic anulus, columella and Eustachian tube; cranial crests on head absent; parotoid glands absent; fingers expanded into distinct pads; distal phalanges T-shaped; webbing on feet moderate; male without vocal sac opening; ova numerous (1000), small and unpigmented; coccyx articulated to sacrum; eight presacral vertebrae; quadratojugal complete; pectoral girdle arciferal. {Matsui *et al.* 2007}.

### F.25.07. Infraclanus *Strauchbufonitoes* **nov.**

***Getangiotaxon***: *Bufonities* Gray, 1825.
***Adelphotaxa***: *Adenomitoes* Cope, 1861; *Ansoniitoes* **nov.**; *Bufonitoes* Gray, 1825; *Bufotitoes* **nov.**; *Nectophrynitoes* Laurent, 1942; *Sabahphrynitoes* **nov.**; *Tornieriobatitoes* Miranda-Ribeiro, 1926; **1 G†**; **2 GIS** (*Altiphrynoides* Dubois, 1987; *Parapelophryne* Fei, Ye & Jiang, 2003).
***Getendotaxon***: *Strauchbufo* Fei, Ye & Jiang, 2012.

***Nucleogenus, by present designation***: *Strauchbufo* Fei, Ye & Jiang, 2012. ● ***Etymology of nomen***: P: Alexander Strauch (1832–1893); L: *bufo*, 'toad'. ● ***Stem of nomen***: *Strauchbufon-*.

***Diagnosis***: Small toads with prominent parotoid glands, horizontal pupil, tympanic membrane not visible, male guttural resonator present, longitudinal skin fold on internal edge of tarsus, singular subarticular tubercles on toes, tip of 4th finger does not reach 1st articulation of 3rd finger, dorsal coloration olive or greenish-gray wit large dark spots and narrow middorsal line, and belly light gray with few dark spots. {Inger 1972; Fei & Ye 2016}.

### F.25.08. Infraclanus *Tornieriobatitoes* Miranda-Ribeiro, 1926

***Protonym***: *Tornieriobatidae* Miranda-Ribeiro, 1926: 19 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bufonities* Gray, 1825.
***Adelphotaxa***: *Adenomitoes* Cope, 1861; *Ansoniitoes* **nov.**; *Bufonitoes* Gray, 1825; *Bufotitoes* **nov.**; *Nectophrynitoes* Laurent, 1942; *Sabahphrynitoes* **nov.**; *Strauchbufonitoes* **nov.**; **1 G†**; **2 GIS** (*Altiphrynoides* Dubois, 1987; *Parapelophryne* Fei, Ye & Jiang, 2003).
***Getendotaxa***: *Schismadermatitues* **nov.**; *Tornieriobatitues* Miranda-Ribeiro, 1926.

### F.26.11. Hypoclanus *Schismadermatitues* **nov.**

***Getangiotaxon***: *Tornieriobatitoes* Miranda-Ribeiro, 1926.
***Adelphotaxon***: *Tornieriobatitues* Miranda-Ribeiro, 1926.
***Getendotaxon***: *Schismaderma* Smith, 1849.

***Nucleogenus, by present designation***: *Schismaderma* Smith, 1849. ● ***Etymology of nomen***: G: σχίσμα (*schisma*), 'division'; δέρμα (*derma*), 'skin'; referring to the ridge separating dorsal surface from flanks (Du Preez & Carruthers 2009). ● ***Stem of nomen***: *Schismadermat-*.

***Diagnosis***: Medium sized toads with flaps on head, tarsal fold, single subarticular tubercles under the fingers, large externally visible tympanum, no parotoid glands, glandular ridge running dorsolaterally from tympanum to leg insertions outlined in black, reddish-brown dorsal coloration, usually a pair of round markings on sacral region, vocal sac and nuptial pads in breeding males, and U-shaped fold on the back of the larvae. {Graybeal & Cannatella 1995; Frost *et al.* 2006; Mercurio 2011).

F.26.12. Hypoclanus *Tornieriobatitues* Miranda-Ribeiro, 1926

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Tornieriobatitoes* Miranda-Ribeiro, 1926.
***Adelphotaxon***: *Schismadermatitues* **nov.**
***Getendotaxa***: *Churamiti* Channing & Stanley, 2002; *Nectophrynoides* Noble, 1926.

F.24.02. Subclanus *Phryniscities* Günther, 1858

***Protonym***: *Phryniscidae* Günther, 1858: 346 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bufonites* Gray, 1825.
***Adelphotaxa***: *Bufonities* Gray, 1825; *Stephopaedities* Dubois, 1987.
***Getendotaxa***: *Anaxyritoes* **nov.**; *Phryniscitoes* Günther, 1858.

***Comments***: This branch and its internal relationships were revealed by Pramuk (2006) and Pramuk *et al.* (2008) but their relationship in these works is different fom those found by Van Bocxlaer *et al.* (2009). Within the subclan *Phryniscitnies*, *Anaxyrus* is sister-taxon to *Incilius*; together they constitute the infraclan *Anaxyritoes*. Its sister-taxon, the infraclan *Phrynisciotes*, includes only the genus *Rhinella*.

F.25.09. Infraclanus *Anaxyritoes* **nov.**

***Getangiotaxon***: *Phryniscities* Günther, 1858.
***Adelphotaxon***: *Phryniscitoes* Günther, 1858.
***Getendotaxa***: *Anaxyrus* Tschudi, 1845; *Incilius* Cope, 1863.

***Nucleogenus, by present designation***: *Anaxyrus* Tschudi, 1845. ● ***Etymology of nomen***: G: ἄναζ (*anax*), ‘king’; οῦσος (*oyros*), ‘mountain’. ● ***Stem of nomen***: *Anaxyr-*.

***Diagnosis***: Medium sized toads with warty or granular dorsal skin; primarily grayish, brownish, or yellowish dorsal coloration; no known morphological synapomorphies; numerous molecular synapomorphies. {Frost *et al.* 2006}.

F.25.10. Infraclanus *Phryniscitoes* Günther, 1858

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Phryniscities* Günther, 1858.
***Adelphotaxon***: *Anaxyritoes* **nov.**
***Getendotaxon***: *Rhinella* Fitzinger, 1826.

F.24.03. Subclanus *Stephopaedities* Dubois, 1987

***Protonym***: *Stephopaedini* Dubois, 1987: 27 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bufonites* Gray, 1825.
***Adelphotaxa***: *Bufonities* Gray, 1825; *Phryniscities* Günther, 1858.
***Getendotaxa***: *Capensibufonitoes* **nov.**; *Sclerophryitoes* **nov.**; *Stephopaeditoes* Dubois, 1987; *Vandijkophrynitoes* **nov.**

***Comments***: This taxon was revealed by Liedtke *et al.* (2016). This subclan *Stephopaedities* accommodates five genus level taxa. *Mertensophryne* is sister-taxon to *Poyntonophrynus*, forming the infraclan *Stephopaeditoes*. The relationships between this taxon and the other taxa do not have high support. These lineages are therefore recognised provisionally as taxa at the same level, the hypoclans *Capensibufonitoes* for *Capensibufo*, *Sclerophryitoes* for *Sclerophrys* and *Vandijkophrynitoes* for *Vandijkophrynus*.

## F.25.11. Infraclanus *Capensibufonitoes* **nov.**

***Getangiotaxon***: *Stephopaeditíes* Dubois, 1987.
***Adelphotaxa***: *Sclerophryitoes* **nov.**; *Stephopaeditoes* Dubois, 1987; *Vandijkophrynitoes* **nov.**
***Getendotaxon***: *Capensibufo* Grandison, 1980.

***Nucleogenus, by present designation***: *Capensibufo* Grandison, 1980. ● ***Etymology of nomen***: R: Cap, region of South Africa; L: *-ensis,* suffix meaning 'originating from'; N: *Bufo* Laurenti, 1768, derived from L: *bufo*, 'toad'. ● ***Stem of nomen***: *Capensibufon-*.

***Diagnosis***: Small to medium sized toads; toes without webbing; large, pigmented eyes; small clutch sizes; omosternum present; paired subarticular tubercles in most species; reduced palatine; pterygoid not contacting parasphenoid; and large frontoparietal fontanelle. {Graybeal & Cannatella 1995}.

## F.25.12. Infraclanus *Sclerophryitoes* **nov.**

***Getangiotaxon***: *Stephopaedities* Dubois, 1987.
***Adelphotaxa***: *Capensibufonitoes* **nov.**; *Stephopaeditoes* Dubois, 1987; *Vandijkophrynitoes* **nov.**
***Getendotaxon***: *Sclerophrys* Tschudi, 1838.

***Nucleogenus, by present designation***: *Sclerophrys* Tschudi, 1838. ● ***Etymology of nomen***: G: σκλερός (*skleros*), 'hard'; ὀφρυς (*ophrus*), 'eyebrow'. ● ***Stem of nomen***: *Sclerophry-*.

***Diagnosis***: Medium sized toads; karyotype 2 n = 20 or 22; no known morphological synapomorphies; molecular transformations in several genes can be used to diagnose taxon. {Frost *et al.* 2006}.

## F.25.13. Infraclanus *Stephopaeditoes* Dubois, 1987

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Stephopaedities* Dubois, 1987.
***Adelphotaxa***: *Capensibufonitoes* **nov.**; *Sclerophryitoes* **nov.**; *Vandijkophrynitoes* **nov.**
***Getendotaxa***: *Mertensophryne* Tihen, 1960; *Poyntonophrynus* Frost, Grant, Faivovich, Bazin, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006.

## F.25.14. Infraclanus *Vandijkophrynitoes* **nov.**

***Getangiotaxon***: *Stephopaedities* Dubois, 1987.
***Adelphotaxa***: *Capensibufonitoes* **nov.**; *Sclerophryitoes* **nov.**; *Stephopaeditoes* Dubois, 1987.
***Getendotaxon***: *Vandijkophrynus* Frost, Grant, Faivovich, Bain, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006.

***Nucleogenus, by present designation***: *Vandijkophrynus* Frost, Grant, Faivovich, Bain, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006. ● ***Etymology of nomen***: P: David Eduard (Eddie) Van Dijk (1925–), South African herpetologist; G: φρύνη (*phryne*), 'toad'. ● ***Stem of nomen***: *Vandijkophryn-*.

***Diagnosis***: Small to medium sized toads with robust body and limbs; morphologically confused and difficult to distinguish; poorly to well-developed parotoid glands; numerous small, flattened warts scattered over smooth dorsal skin; distinct, pale vertebral stripe in some species; dark, reticulate dorsal color-pattern; horizontal pupil; small, distinct tympanum; axillary amplexus. {Tandy & Keith 1972}.

### F.23.04. Clanus *Peltophrynites* **nov.**

***Getangiotaxon***: *Bufoninoa* Gray, 1825.
***Adelphotaxa***: *Bufonites* Gray, 1825; *Rhaeboites* **nov.**
***Getendotaxon***: *Peltophryne* Fitzinger, 1843.

***Nucleogenus, by present designation***: *Peltophryne* Fitzinger, 1843. ● ***Etymology of nomen***: G: πέλτη (*pelte*), 'small shield'; φρύνη (*phryne*), 'toad'. ● ***Stem of nomen***: *Peltophryn-*.

***Diagnosis***: Small to medium sized, robustly built toads; primarily brown to reddish-brown or yellowish-brown dorsal coloration; maxillae extend anteriorly, meeting in front of the premaxillae; zygomatic ramus of squamosal extending ventrally, abutting maxilla; zygomatic ramus connected by a flange to ventral ramus of squamosal. {Graybeal & Cannatella 1995}.

### F.23.05. Clanus *Rhaeboites* **nov.**

***Getangiotaxon***: *Bufoninoa* Gray, 1825.
***Adelphotaxa***: *Bufonites* Gray, 1825; *Peltophrynites* **nov.**
***Getendotaxon***: *Rhaebo* Fitzinger, 1843.

***Nucleogenus, by present designation***: *Rhaebo* Fitzinger, 1843. ● ***Etymology of nomen***: G: ῥαιβός (*raibos*), with bent legs. ● ***Comments:*** To avoid homonymy with the family-series nomen *Rhaebinae* based on *Rhaebus* Fischer de Waldheim, 1824 (**Coleoptera**), we use the entire nomen *Rhaebo*, of unclear etymology, as the stem for this nomen, following Recommendation 29A of Article 29.6. ● ***Stem of nomen***: *Rhaebo-*.

***Diagnosis***: Medium to large sized toads with smooth, glandular skin; dark brown, yellowish-brown, or reddish-brown dorsal coloration; lacking cephalic crests; yellowish-orange skin secretions; omosternum present; and hypertrophied testes. {Frost *et al.* 2006; Pramuk 2006}.

### F.22.08. Hypotribus *Nannophryninoa* **nov.**

***Getangiotaxon***: *Bufoninia* Gray, 1825.
***Adelphotaxon***: *Bufoninoa* Gray, 1825
***Getendotaxon***: *Nannophryne* Günther, 1870.

***Nucleogenus, by present designation***: *Nannophryne* Günther, 1870. ● ***Etymology of nomen***: G: νάννος (*nannos*), 'dwarf'; φρύνη (*phryne*), 'toad'. ● ***Stem of nomen***: *Nannophryn-*.

***Diagnosis***: Small to medium sized toads with blunt snouts, tympanum not visible externally, ovoid parotoid, skin smooth and glandular, moderately to lightly ossified skulls lacking dermal sculpturing and exostosing, otic ramus usually not enlarged, and cranial crests lacking. {Pramuk 2006}.

### F.21.09. Infratribus *Dendrophryniscinia* Jiménez de la Espada, 1870

***Protonym***: *Dendrophryniscina* Jiménez de la Espada, 1870: 65 [Sc].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bufonina* Gray, 1825.
***Adelphotaxa***: *Amazophrynellinia* **nov.**; *Bufoninia* Gray, 1825.
***Getendotaxon***: *Dendrophryniscus* Jiménez de la Espada, 1870.

## F.20.14. Subtribus *Oreophrynellina* **nov.**

***Getangiotaxon***: *Bufonini* Gray, 1825.
***Adelphotaxa***: *Atelopodina* Fitzinger, 1843; *Bufonina* Gray, 1825; *Osornophrynina* **nov.**; **2 GIS** (*Metaphryniscus* Señaris, Ayarzagüena & Gorzula, 1994; *Truebella* Graybeal & Cannatella, 1995).
***Getendotaxon***: *Oreophrynella* Boulenger, 1895.

***Nucleogenus, by present designation***: *Oreophrynella* Boulenger, 1895. ● ***Etymology of nomen***: G: ὄρος (*oros*), 'mountain'; N: *Phrynella* Boulenger, 1887, derived from G: φρύνη (*phryne*), 'toad'; L: -*ella*, a feminine suffix indicating a diminutive form.● ***Stem of nomen***: *Oreophrynell*-.

***Diagnosis***: Small, stout toads with robust limbs; rugose or granular dorsal skin; generally dark brown to black dorsal coloration; stubbed fingers and toes; first toe elongate and opposable to the remaining three; first two vertebrae fused; six presacral vertebrae; significantly reduced frontoparietals. {Graybeal & Cannatella 1995}.

## F.20.15. Subtribus *Osornophrynina* **nov.**

***Getangiotaxon***: *Bufonini* Gray, 1825.
***Adelphotaxa***: *Atelopodina* Fitzinger, 1843; *Bufonina* Gray, 1825; *Oreophrynellina* **nov.**; **2 GIS** (*Metaphryniscus* Señaris, Ayarzagüena & Gorzula, 1994; *Truebella* Graybeal & Cannatella, 1995).
***Getendotaxon***: *Osornophryne* Ruiz-Carranza & Hernández-Camacho, 1976.

***Nucleogenus, by present designation***: *Osornophryne* Ruiz-Carranza & Hernández-Camacho, 1976. ● ***Etymology of nomen***: P: Ernest and Hernando Osorno Mesa, Columbian herpetologists; G: φρύνη (*phryne*), 'toad'. ● ***Stem of nomen***: *Osornophryn*-.

***Diagnosis***: Small, robust toads with stout limbs; generally brownish ventral coloration with incomplete lighter-colored glandular ridges dorsolaterally in some species; skin roughly granular; inguinal amplexus; six presacral vertebrae; absence of alary and posterolateral processes of hyoid; epicoracoid cartilages fused, parotoids absent; palmate hands and feet; coccyx expanded laterally; hand formula 2-2-3-2; small clutches of large, unpigmented eggs. {Cannatella 1986; Graybeal & Cannatella 1995}.

## F.19.21. Tribus *Frostiini* **nov.**

***Getangiotaxon***: *Bufoninae* Gray, 1825.
***Adelphotaxon***: *Bufonini* Gray, 1825.
***Getendotaxon***: *Frostius* Cannatella, 1986.

***Nucleogenus, by present designation***: *Frostius* Cannatella, 1986. ● ***Etymology of nomen***: P: Darrel Frost (1951–). ● ***Stem of nomen***: *Frosti*-.

***Diagnosis***: Small, stout toads; dark brown to blackish dorsal coloration; epicoracoid cartilages fused, typanum visible externally, tadpoles not gastromyzophorous. {Cannatella 1986; Graybeal & Cannatella 1995}.

***Comments:*** When describing the genus *Frostius*, Cannatella (1986) showed that it shared morphological characters with *Atelopus*, *Melanophryniscus*, *Dendrophryniscus*, *Oreophrynella* and *Osornophryne*, and his phylogenetic analysis proposed it to be sister-taxon either to *Atelopus* or to the taxon grouping *Atelopus* and *Osornophryne*. In a phylogeny based on molecular data (Peloso *et al.* 2012), *Frostius* is sister-taxon to *Oreophrynella*, this group being sister-taxon to *Amazophrynella*. In *TREE*, this taxon is sister-taxon to all other *Bufoninae* and we propose it as a new tribe *Frostiini* in our classification.

## F.18.22. Subfamilia *Melanophryniscinae* **nov.**

***Getangiotaxon***: *Bufonidae* Gray, 1825.
***Adelphotaxon***: *Bufoninae* Gray, 1825.
***Getendotaxon***: *Melanophryniscus* Gallardo, 1961.

***Nucleogenus, by present designation***: *Melanophryniscus* Gallardo, 1961. ● ***Etymology of nomen***: G: μέλαν (*melan*), 'black'; φρύνη (*phryne*), 'toad'; L: -*iscus*, diminutive ending. ● ***Stem of nomen***: *Melanophrynisc*-.

***Diagnosis***: Small, stout toads; granular projections dorsal skin; frequently dark dorsal coloration with brilliant yellow and red ventral blotches; tadpoles with one pair of subhyoid muscles until Gosner's (1960) larval stage 44, elongated processus anterior dorsalis of the suprarostral alae, and absence of a chondrified commissura quadratoorbitalis (diagnostic for *Melanophryniscus* against all other bufonids); diploid karyotype 2 n = 22 (six large and five small pairs); absence of the zygomatic ramus of the squamosal, exostosed frontoparietals diverging anteriorly, ossified orbitosphenoid cartilage, frontoparietals fused posteriorly, and parasphenoid fused to the chondrocranium. {Graybeal & Cannatella 1995; Larson P. *et al.* 2003; Baldo *et al.* 2012, 2014).

***Comments:*** The sister-group relationship of *Melanophryniscus* to all other *Bufonidae* was found by several recent molecular studies (Van Bocxlaer *et al*. 2007; Pyron & Wiens 2011; Portik & Papenfuss 2015; Liedtke *et al.* 2016). In our classification, being the sister-taxon to the *Bufoninae*, it is recognised as the new subfamily *Melanophryniscinae*.

## F.17.17. Familia *Odontophrynidae* Lynch, 1971

***Protonym***: *Odontophrynini* Lynch, 1971: 130 [T].
***Eunym***: Pyron & Wiens 2011: 543.
***Getangiotaxon***: *Bufonoidea* Gray, 1825.
***Adelphotaxon***: *Bufonidae* Gray, 1825.
***Getendotaxa***: *Odontophryninae* Lynch, 1971; *Proceratophryinae* **nov.**

***Comments***: This family-level taxon was first defined based on morphological similarity as the tribe *Odontophrynini* by Lynch (1971) including the same taxa as the present family, *Odontophrynus*, with *Macrogenioglottus* as synonym, and *Proceratophrys*. Heinicke *et al.* (2009) found *Odontophrynus* as sister-group to the *Bufonidae*. The strong support for a holophyletic grouping of the genera *Macrogenioglottus* and *Odontophrynus*, with *Proceratophrys* as sister-taxon, was found by Pyron & Wiens (2011). But it was only Streicher *et al.* (2018) who found support to the sister-taxon relationship of *Odontophrynidae* and *Bufonidae*, as we confirm in *TREE*. Here we recognise this taxon at the family rank based on the Sister-Taxa Criterion [STC]. The taxon grouping *Macrogenioglottus* and *Odontophrynus* is recognised as the subfamily *Odontophryninae*, and consequently the sister-taxon including the unique genus *Proceratophrys* as the subfamily *Proceratophryinae* **nov.**

## F.18.23. Subfamilia *Odontophryninae* Lynch, 1971

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Odontophrynidae* Lynch, 1971.
***Adelphotaxon***: *Proceratophryinae* **nov.**
***Getendotaxa***: *Macrogenioglottus* Carvalho, 1946; *Odontophrynus* Reinhardt & Lütken, 1862.

## F.18.24. Subfamilia *Proceratophryinae* **nov.**

***Getangiotaxon***: *Odontophrynidae* Lynch, 1971.
***Adelphotaxon***: *Odontophryninae* Lynch, 1971

***Getendotaxon***: *Proceratophrys* Miranda-Ribeiro, 1920.

***Nucleogenus, by present designation***: *Proceratophrys* Miranda-Ribeiro, 1920. ● ***Etymology of nomen***: G: προ (*pro*), 'before'; κερᾶς (*keras*), 'horn; ὀφρυς (*ophrus*), 'eyebrow'. ● ***Stem of nomen***: *Proceratophry-*.

***Diagnosis***: Adults SVL 30–95 mm; skin granular; body lacking glands; toes free of webbing, usually with lateral fringes, outer metatarsal tubercle present, inner metatarsal tubercle small or enlarged and spade-like, digital tips narrow, no finger webbing, numerous conical supernumerary thenar and plantar tubercles, first finger longer than second; males lacking nuptial asperities on thumb; cervical cotylar arrangement type II (Lynch 1971), cotyles closely approximated; sacral diapophyses rounded; alary processes of premaxillae long, strongly directed posterodorsally, except in the *Proceratophrys bigibbosa* group, relatively narrow at base; palatal shelf of maxilla broad, pterygoid process prominent; maxillae slightly expanded posteriorly; nasals relatively narrow, keeled, separated medially or in contact medially; nasals in contact with frontoparietals; frontoparietals bear lateral crests which meet posteriorly; frontoparietal crests heavily exostosed posteriorly in *P. cristiceps* and probably in *P. bigibbosa*; zygomatic ramus of squamosal broad and elongate, in sutural contact with maxilla, weakly exostosed; otic ramus of squamosal large, exostosed, expanded medially into relatively large otic plate; squamosal-maxillary angle 40–50°; occipital condyles large, not stalked, closely juxtaposed. {Lynch 1971; Martins & Giaretta 2011}.

## F.14.04. Superfamilia *Centrolenoidea* Taylor, 1951

***Protonym***: *Centrolenidae* Taylor, 1951: 36 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Hylobatrachia** Ritgen, 1828
***Adelphotaxa***: *Bufonoidea* Gray, 1825; *Ceratophryoidea* Tschudi, 1838; *Hyloidea* Rafinesque, 1815-|Gray, 1825|; *Leptodactyloidea* ||Tschudi, 1838||-Werner, 1896; **1 GIS** (*Ancudia* Philippi, 1902).
***Getendotaxa***: *Allophrynidae* Goin, Goin & Zug, 1978; *Centrolenidae* Taylor, 1951.

***Comments***: The superfamily *Centrolenoidea*, named «Allocentroleniae», an unranked ectonym, by Guayasamin *et al.* (2009), is one branch within an unresolved ensemble that is recognised here as **Hylobatrachia**. It contains the *Allophrynidae* and the *Centrolenidae*. The branch named *Centrolenidae* is attributed to the rank family because it has been highly used [UQC]; consequently its sister-taxon is recognised at the same rank. Although this relationship was suggested by Noble (1931), it was highly debated and not recognised until evidence from molecular data confirmed it (Austin *et al.* 2002; Frost *et al.* 2006; Guayasamin & Trueb 2007; Guayasamin *et al.* 2009; Pyron & Wiens 2011).

## F.17.18. Familia *Allophrynidae* Goin, Goin & Zug, 1978

***Protonym and eunym***: *Allophrynidae* Goin, Goin & Zug, 1978: 240 [F].
***Getangiotaxon***: *Centrolenoidea* Taylor, 1951.
***Adelphotaxon***: *Centrolenidae* Taylor, 1951.
***Getendotaxon***: *Allophryne* Gaige, 1926.

## F.17.19. Familia *Centrolenidae* Taylor, 1951

***Eunym***: Taylor 1951: 36.
***Getangiotaxon***: *Centrolenoidea* Taylor, 1951.
***Adelphotaxon***: *Allophrynidae* Goin, Goin & Zug, 1978.
***Getendotaxa***: *Centroleninae* Taylor, 1951; *Hyalinobatrachinae* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009; *Ikakoginae* **nov.**

***Comments***: The classification within the family *Centrolenidae* is still not settled, as indicated by the changes between the classifications recently published and that proposed here. Several relationships within this family do not have sufficient support to be recognised in the proposed classification. Species sampling in some works on molecular relationships including members of this family is insufficient to give well supported results on relationships within the taxa (Darst & Cannatella 2004; Faivovich *et al.* 2005; Frost *et al.* 2006; Streicher *et al.* 2018). Guayasamin *et al.* (2008, 2009), Hutter *et al.* (2013) and Castroviejo-Fisher *et al.* (2014) provided a phylogeny of the family and a classification based on these relationships (considering a boostrap of 70 % as sufficient for support). They recognised two subfamilies *Centroleninae* and *Hyalinobatrachinae*, and included the genus *Ikakogi* as *incertae sedis*. An unnamed taxon, including the genera *Centrolene* and *Nymphargus*, was recognised as sister-taxon to the tribe *Cochranellini* which included the genera ((((*Cochranella* (*Espadrana*, *Chimerella*)) (*Rulyrana*, *Sachatamia*) *Teratohyla*) *Vitreorana*).

The relationships within the subfamily *Centroleninae* found in *TREE* are different from those in Guayasamin *et al.* (2009), Pyron & Wiens (2011), Hutter *et al.* (2013) and Castroviejo-Fisher *et al.* (2014). In our classification, the family includes three highly supported taxa, recognised as the subfamilies *Centroleninae*, *Hyalinobatrachinae* and *Ikakoginae*. The relationships between these three taxa do not have sufficient support to be formally recognised. The subfamily *Ikakoginae* includes a single genus *Ikakogi*, and *Hyalinobatrachinae* englobes the genera *Celsiella* and *Hyalinobatrachus*, as found in the previous works. The subfamily *Centroleninae* has a more complex structure, including three taxa of poorly supported relationships, recognised as tribes, the *Centrolenini* for *Centrolene*, the *Nymphargini* for *Nymphargus* and the *Cochranellini*. The latter tribe holds three well supported subtribes of unsupported mutual relationships, the *Cochranellina*, *Teratohylina* and *Vitroranina*. The two latter stand each for a single genus, but the *Cochranellina* split into two well supported taxa, the infratribe *Cochranellinia* for *Cochranella*, and the infratribe *Espadaraninia*. The latter infratribe includes three taxa of unsupported mutual relationships, recognised as the hypotribes *Chimerellinoa* for *Chimerella*, *Espadaraninoa* for *Espadarana*, and *Rulyraninoa*. The genera in the latter hypotribe form two well supported taxa, the new genus *Audaciella* being the sister-group to a taxon holding the genera *Rulyrana* and *Sachatamia*, formally recognised as the clans *Audacielliones* and *Rulyraniones*.

## F.18.25. Subfamilia *Centroleninae* Taylor, 1951

***Eunym***: Barrio 1968: 165; Lutz 1968: 22.

***Getangiotaxon***: *Centrolenidae* Taylor, 1951.

***Adelphotaxa***: *Hyalinobatrachinae* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009; *Ikakoginae* **nov.**

***Getendotaxa***: *Centrolenini* Taylor, 1951; *Cochranellini* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009; *Nymphargini* **nov.**

## F.19.22. Tribus *Centrolenini* Taylor, 1951

***Eunym***: *Hoc loco*.

***Getangiotaxon***: *Centroleninae* Taylor, 1951.

***Adelphotaxa***: *Cochranellini* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009; *Nymphargini* **nov.**

***Getendotaxon***: *Centrolene* Jiménez de la Espada, 1872.

## F.19.23. Tribus *Cochranellini* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009

***Protonym and eunym***: *Cochranellini* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009: 3 [T].

***Getangiotaxon***: *Centroleninae* Taylor, 1951.

***Adelphotaxa***: *Centrolenini* Taylor, 1951; *Nymphargini* **nov.**

***Getendotaxa***: *Cochranellina* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009; *Teratohylina* **nov.**; *Vitreoranina* **nov.**

## F.20.16. Subtribus *Cochranellina* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Cochranellini* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009.
***Adelphotaxa***: *Teratohylina* **nov.**; *Vitreoranina* **nov.**
***Getendotaxa***: *Cochranellinia* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009; *Espadaraninia* **nov.**

## F.21.10. Infratribus *Cochranellinia* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Cochranellina* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009.
***Adelphotaxon***: *Espadaraninia* **nov.**
***Getendotaxon***: *Cochranella* Taylor, 1951.

## F.21.11. Infratribus *Espadaraninia* nov.

***Getangiotaxon***: *Cochranellina* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009.
***Adelphotaxon***: *Cochranellinia* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009.
***Getendotaxa***: *Chimerellinoa* **nov.**; *Espadaraninoa* **nov.**; *Rulyraninoa* **nov.**

***Nucleogenus, by present designation***: *Espadarana* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009. ● ***Etymology of nomen***: P: Marcos Jiménez de la Espada (1831–1898), a Spanish zoologist; L: *rana*, 'frog'. ● ***Stem of nomen***: *Espadaran-*.

***Diagnosis***: Small glassfrogs with humeral spines present or absent; green bones; dentigerous process of vomer present or absent, teeth present or absent; males calling from upper surfaces of leaves. {Guayasamin *et al.* 2009}.

## F.22.09. Hypotribus *Chimerellinoa* nov.

***Getangiotaxon***: *Espadaraninia* **nov.**
***Adelphotaxa***: *Espadaraninoa* **nov.**; *Rulyraninoa* **nov.**
***Getendotaxon***: *Chimerella* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009.

***Nucleogenus, by present designation***: *Chimerella* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009. ● ***Etymology of nomen***: G: χίμαιρα (*chimaira*), a composite creature; L: suffix -*ella,* a diminutive form. ● ***Stem of nomen***: *Chimerell-*.

***Diagnosis***: Small glassfrogs with small humeral spines in adult males; lobed liver covered by a white hepatic peritoneum; ventral parietal peritoneum completely transparent; webbing reduced or absent between inner fingers, moderate between outer fingers; pale green bones; dentigerous process of vomer present, lacking teeth; males calling from upper surfaces of leaves. {Guayasamin *et al.* 2009}.

## F.22.10. Hypotribus *Espadaraninoa* nov.

***Getangiotaxon***: *Espadaraninia* **nov.**
***Adelphotaxa***: *Chimerellinoa* **nov.**; *Rulyraninoa* **nov.**.
***Getendotaxon***: *Espadarana* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009.

### F.22.11. Hypotribus *Rulyraninoa* **nov.**

***Getangiotaxon***: *Espadaraninia* **nov.**
***Adelphotaxa***: *Espadaraninoa* **nov.**; *Rulyraninoa* **nov.**
***Getendotaxa***: *Audaciellites* **nov.**; *Rulyranites* **nov.**

***Nucleogenus, by present designation***: *Rulyrana* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009. ● ***Etymology of nomen***: P: 'RuLy', concatenation of the first two letters of the names of Pedro Ruiz-Carranza (1932–1998) and John D. Lynch (1941–); L: *rana*, 'frog'. ● ***Stem of nomen***: *Rulyran-*.

***Diagnosis***: Small glassfrogs with or without humeral spines; ventral parietal peritoneum white anteriorly and transparent posteriorly; green bones; vomerine teeth usually present; males calling and females depositing clutches on the upper surfaces of leaves or rocks. {Lynch & Duellman 1973; Duellman & Schulte 1993; Cisneros-Heredia & McDiarmid 2007; see also Guayasamin *et al.* 2009; Twomey *et al.* 2014}.

### F.23.06. Clanus *Audaciellites* **nov.**

***Getangiotaxon***: *Rulyraninoa* **nov.**
***Adelphotaxon***: *Rulyranites* **nov.**
***Getendotaxon***: *Audaciella* **nov.**

***Nucleogenus, by present designation***: *Audaciella* **nov.** ● ***Etymology of nomen***: L: *audax*, 'daring'; -*ella*, a feminine suffix indicating a diminutive form. ● ***Stem of nomen***: *Audaciell-*.

***Diagnosis***: Small glassfrogs with vomerine teeth; green bones; parietal peritoneum white; visceral peritoneum clear; most species with green dorsal coloration, with golden or bluish-white flecks; snout rounded or truncate in profile; dorsal skin shagreened with or without spicules; arms and legs lacking dorsal folds; humeral spines; distinct tympanum; enlarged prepollex; no prepollical spine; pair of enlarged tubercles below vent; first finger longer than second. {Lynch & Duellman 1973; Cisneros-Heredia 2007; Duellman & Schulte 1993; see also Guayasamin *et al.* 2009; Twomey *et al.* 2014}.

### G.28.159. Genus *Audaciella* **nov.**

***Getangiotaxon***: *Audaciellites* **nov.**
***Adelphotaxon***: None.
***Getendotaxa***: *Audaciella audax* (Lynch & Duellman, 1973); *Audaciella durrellorum* (Cisneros-Heredia, 2007); *Audaciella fernandoi* (Duelman & Schulte, 1993).

***Nucleospecies, by present designation***: *Centrolenella audax* Lynch & Duellman, 1973. ● ***Etymology of nomen***: L: *audax*, 'daring'; -*ella*, a feminine suffix indicating a diminutive form. ● ***Stem of nomen***: *Audaciell-*. ● ***Grammatical gender of nomen***: feminine.

***Diagnosis***: Small glassfrogs with vomerine teeth; green bones; parietal peritoneum white; visceral peritoneum clear; most species with green dorsal coloration, with golden or bluish-white flecks; snout rounded or truncate in profile; dorsal skin shagreened with or without spicules; arms and legs lacking dorsal folds; humeral spines; distinct tympanum; enlarged prepollex; no prepollical spine; pair of enlarged tubercles below vent; first finger longer than second. {Lynch & Duellman 1973; Duellman & Schulte 1993; Cisneros-Heredia 2007; see also Guayasamin *et al.* 2009; Twomey *et al.* 2014}.

## F.23.07. Clanus *Rulyranites* **nov.**

***Getangiotaxon***: *Rulyraninoa* **nov.**
***Adelphotaxon***: *Audaciellites* **nov.**
***Getendotaxa***: *Rulyrana* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada, and Vilà, 2009; *Sachatamia* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada, and Vilà, 2009.

## F.20.17. Subtribus *Teratohylina* **nov.**

***Getangiotaxon***: *Cochranellini* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009.
***Adelphotaxa***: *Cochranellina* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009; *Vitreoranina* **nov.**
***Getendotaxon***: *Teratohyla* Taylor, 1951.

***Nucleogenus, by present designation***: *Teratohyla* Taylor, 1951. ● ***Etymology of nomen***: G: τεραός (*teratos*), monster, anormal production; N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Teratohyl*-.

***Diagnosis***: Small glassfrogs without humeral spines; liver covered by a white or transparent hepatic peritoneum; digestive tract translucent or white; ventral parietal peritoneum white anteriorly and transparent posteriorly, or completely transparent; moderate to extensive webbing between fingers III and IV; bones pale to dark green in life; dentigerous process of vomer present, with or without teeth; males calling and females depositing eggs on upper surfaces and tips of leaves; prepollical spine protruding or not. {Guayasamin *et al.* 2009}.

## F.20.18. Subtribus *Vitreoranina* **nov.**

***Getangiotaxon***: *Cochranellini* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009.
***Adelphotaxa***: *Cochranellina* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009; *Teratohylina* **nov.**
***Getendotaxon***: *Vitreorana* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009.

***Nucleogenus, by present designation***: *Vitreorana* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009. ● ***Etymology of nomen***: L: *vitreum,* 'glass'; N: *Rana* Linnaeus, 1758, derived from *rana*, 'frog'. ● ***Stem of nomen***: *Vitreoran*-.

***Diagnosis***: Small glassfrogs with a white hepatic peritoneum covering or partially covering the liver, and most species with white gastrointestinal peritoneum. {Guayasamin *et al.* 2009}.

## F.19.24. Tribus *Nymphargini* **nov.**

***Getangiotaxon***: *Centroleninae* Taylor, 1951.
***Adelphotaxa***: *Cochranellini* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009; *Nymphargini* **nov.**
***Getendotaxon***: *Nymphargus* Cisnero-Heredia & McDiarmid, 2007.

***Nucleogenus, by present designation***: *Nymphargus* Cisnero-Heredia & McDiarmid, 2007. ● ***Etymology of nomen***: G: Νύμφαη (*nymphae*), 'Nymphs', Greek godesses; Αργός (*Argos*), 'Argos', nephew of nymph Io having a hundred eyes. ● ***Stem of nomen***: *Nympharg*-.

***Diagnosis***: Small glassfrogs with reduced webbing between fingers III and IV; humeral spines absent except in males of *Nymphargus grandisonae*; tri- or tetra-lobed liver with transparent hepatic peritoneum; ventral parietal peritoneum white anteriorly and transparent posteriorly; bones green, or white in *N. rosadus* and *N. anomalus*; conspicuous spinules on dorsum of most breeding males; type I nuptial pads in breeding males; male advertisement call and female clutch deposition on upper sides of streamside leaves. {Guayasamin *et al.* 2009}.

### F.18.26. Subfamilia *Hyalinobatrachinae* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009

***Protonym and eunym***: *Hyalinobatrachinae* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009: 36 [F].

***Getangiotaxon***: *Centrolenidae* Taylor, 1951.

***Adelphotaxa***: *Centroleninae* Taylor, 1951; *Ikakoginae* **nov.**

***Getendotaxa***: *Celsiella* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009; *Hyalinobatrachium* Ruíz-Carranza & Lynch, 1991.

***Comments***: The original spelling of this subfamial nomen is incorrect, missing an I, but it should not be corrected because of the new Article 29.4, which states that now such incorrect spellings should not be corrected, a highly confusing Rule (see Dubois & Aescht 2019o: 125–126).

### F.18.27. Subfamilia *Ikakoginae* **nov.**

***Getangiotaxon***: *Centrolenidae* Taylor, 1951.

***Adelphotaxa***: *Centroleninae* Taylor, 1951; *Hyalinobatrachinae* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009.

***Getendotaxon***: *Ikakogi* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009.

***Nucleogenus, by present designation***: *Ikakogi* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009. ● ***Etymology of nomen***: P: Ika (or Ijka) and Kogi people, descendants of the Tayrona, who inhabit the Sierra Nevada de Santa Marta, Colombia. ● ***Stem of nomen***: *Ikakog-*.

***Diagnosis***: Small glassfrogs with conspicuous humeral spines and enlarged crista medialis extending the entire length of the humerus, white bones, ventral parietal peritoneum white anteriorly and transparent posteriorly, and transparent hepatic and visceral peritonea. {Guayasamin *et al.* 2009}.

### F.14.05. Superfamilia *Ceratophryoidea* Tschudi, 1838

***Protonym***: *Ceratophrydes* Tschudi, 1838: 26 [F].

***Eunym***: *Hoc loco*.

***Getangiotaxon***: **Hylobatrachia** Ritgen, 1828.

***Adelphotaxa***: *Bufonoidea* Gray, 1825; *Centrolenoidea* Taylor, 1951; *Hyloidea* Rafinesque, 1815-|Gray, 1825|; *Leptodactyloidea* ||Tschudi, 1838||-Werner, 1896; **1 GIS** (*Ancudia* Philippi, 1902).

***Getendotaxa***: *Ceratophryoidae* Tschudi, 1838; *Telmatobioidae* Fitzinger, 1843.

### F.15.03. Epifamilia *Ceratophryoidae* Tschudi, 1838

***Eunym***: *Hoc loco*.

***Getangiotaxon***: *Ceratophryoidea* Tschudi, 1838.

***Adelphotaxon***: *Telmatobioidae* Fitzinger, 1843.

***Getendotaxon***: *Ceratophryidae* Tschudi, 1838.

## F.17.20. Familia *Ceratophryidae* Tschudi, 1838

***Eunym***: Parker 1935: 12.
***Getangiotaxon***: *Ceratophryoidae* Tschudi, 1838.
***Adelphotaxon***: None.
***Getendotaxa***: *Ceratophryinae* Tschudi, 1838; *Lepidobatrachinae* Bauer, 1987; *Stombinae* Gallardo 1965.

***Comments***: Within the family *Ceratophryidae*, on the basis of *TREE* we recognise the four genera *Ceratophrys*, *Chacophrys*, *Lepidobatrachus* and *Stombus* (which includes the species *Stombus cornutus* and *Stombus calcaratus*). In Faivovich *et al.* (2014), *Ceratophrys stolzmanni* was sister-group to the taxon recognised as *Stombus*. The low support of this relationship does not allow further taxonomic decision. This result may point to absence of informative characters or sampling gaps.

## F.18.28. Subfamilia *Ceratophryinae* Tschudi, 1838

***Eunym***: Parker 1935: 511.
***Getangiotaxon***: *Ceratophryidae* Tschudi, 1838.
***Adelphotaxa***: *Lepidobatrachinae* Bauer, 1987; *Stombinae* Gallardo 1965.
***Getendotaxa***: *Ceratophrys* Neuwied, 1824; **1 G†**.

## F.18.29. Subfamilia *Lepidobatrachinae* Bauer, 1987

***Protonym***: *Lepidobatrachidae* Bauer, 1987: 5 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ceratophryidae* Tschudi, 1838.
***Adelphotaxa***: *Ceratophryinae* Tschudi, 1838; *Stombinae* Gallardo 1965.
***Getendotaxa***: *Chacophrys* Reig & Limeses, 1963; *Lepidobatrachus* Budgett, 1899; **1 G†**.

## F.18.30. Subfamilia *Stombinae* Gallardo 1965

***Protonym and eunym***: *Stombinae* Gallardo 1965: 5 [bF].
***Getangiotaxon***: *Ceratophryidae* Tschudi, 1838.
***Adelphotaxa***: *Ceratophryinae* Tschudi, 1838; *Lepidobatrachinae* Bauer, 1987.
***Getendotaxon***: *Stombus* Gravenhorst, 1825.

## F.15.04. Epifamilia *Telmatobioidae* Fitzinger, 1843

***Protonym***: *Telmatobii* Fitzinger, 1843: 32 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ceratophryoidea* Tschudi, 1838.
***Adelphotaxon***: *Ceratophryoidae* Tschudi, 1838.
***Getendotaxa***: *Cyclorampheidae* Bonaparte, 1850-|Bonaparte, 1852|; *Telmatobieidae* Fitzinger, 1843.

***Comments***: Within the epifamily *Telmatobioidae*, two well supported branches are recognised here, the apofamilies *Cyclorampheidae* and *Telmatobieidae*.

## F.16.01. Apofamilia *Cyclorampheidae* Bonaparte, 1850-|Bonaparte, 1852|

***Protonyms***: *Cyclorhamphina* Bonaparte, 1850: plate [bF]; |*Cycloramphina* Bonaparte, 1852: 477| [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Telmatobioidae* Fitzinger, 1843.

***Adelphotaxon***: *TELMATOBIEIDAE* Fitzinger, 1843.
***Getendotaxon***: *CYCLORAMPHIDAE* Bonaparte, 1850-|Bonaparte, 1852|.

***Comments***: The major relationships within this taxon are not highly supported in *TREE*, but high support exists for the taxa *Alsodes* and *Eupsophus*, *Atelognathus* and *Chaltenobatrachus* with its sister-taxon including *Batrachyla* and *Hylorina*, *Cycloramphus* and *Thoropa*, *Crossodactylus* and *Hylodes*, whereas *Limnomedusa* forms a lineage that cannot be grouped with any of the other groups with sufficient support. Pending the resolution of this polytomy, these branches are provisionally recognised here as the subfamilies *ALSODINAE*, *BATRACHYLINAE*, *CYCLORAMPHINAE*, *HYLODINAE* and *LIMNOMEDUSINAE* of a single family *CYCLORAMPHIDAE*, by virtue of the Nomenclatural Thrift Criterion [NTC]. Within the *BATRACHYLINAE*, two sister-taxa are recognised as the tribes *ATELOGNATHINI* and *BATRACHYLINI*.

## F.17.21. Familia *CYCLORAMPHIDAE* Bonaparte, 1850-|Bonaparte, 1852|

***Eunym***: Frost, Grant, Faivovich, Bain, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler 2006: 6.
***Getangiotaxon***: *CYCLORAMPHEIDAE* Bonaparte, 1850-|Bonaparte, 1852|.
***Adelphotaxon***: None.
***Getendotaxa***: *ALSODINAE* Mivart, 1869; *BATRACHYLINAE* Gallardo, 1965; *CYCLORAMPHINAE* Bonaparte, 1850-|Bonaparte, 1852|; *HYLODINAE* Günther, 1858; *LIMNOMEDUSINAE* **nov.**

## F.18.31. Subfamilia *ALSODINAE* Mivart, 1869

***Protonym***: *ALSODINA* Mivart, 1869: 290 [bF].
***Eunym***: Pyron & Wiens 2011: 546.
***Getangiotaxon***: *CYCLORAMPHIDAE* Bonaparte, 1850-|Bonaparte, 1852|.
***Adelphotaxa***: *BATRACHYLINAE* Gallardo, 1965; *CYCLORAMPHINAE* Bonaparte, 1850-|Bonaparte, 1852|; *HYLODINAE* Günther, 1858; *LIMNOMEDUSINAE* **nov.**
***Getendotaxa***: *Alsodes* Bell, 1843; *Eupsophus* Fitzinger, 1843.

***Comments***: Pyron & Wiens (2011) and Streicher *et al.* (2018) found a relationship between *Alsodes* and *Eupsophus* but Pyron and Wiens (2011) also included *Limnomedusa* in the family *ALSODIDAE*. This classification cannot be retained as a taxon with *Limnomedusa*, *Alsodes* and *Eupsophus* does not have sufficient support in *TREE*.

## F.18.32. Subfamilia *BATRACHYLINAE* Gallardo, 1965

***Protonym and eunym***: *BATRACHYLINAE* Gallardo, 1965: 83 [bF].
***Getangiotaxon***: *CYCLORAMPHIDAE* Bonaparte, 1850-|Bonaparte, 1852|.
***Adelphotaxa***: *ALSODINAE* Mivart, 1869; *CYCLORAMPHINAE* Bonaparte, 1850-|Bonaparte, 1852|; *HYLODINAE* Günther, 1858; *LIMNOMEDUSINAE* **nov.**
***Getendotaxa***: *ATELOGNATHINI* **nov.**; *BATRACHYLINI* Gallardo, 1965.

***Comments***: Streicher *et al.* (2018) found a sister-group relationship between *Atelognathus* and *Chaltenobatrachus*, as well as between *Batrachyla* and *Hylorina*. Here we recognise these two groups as the tribes *ATELOGNATHINI* and *BATRACHYLINI*.

## F.19.25. Tribus *ATELOGNATHINI* **nov.**

***Getangiotaxon***: *BATRACHYLINAE* Gallardo, 1965.
***Adelphotaxon***: *BATRACHYLINI* Gallardo, 1965.
***Getendotaxa***: *Atelognathus* Lynch, 1978; *Chaltenobatrachus* Basso, Úbeda, Bunge & Martinazzo, 2011.

***Nucleogenus, by present designation***: *Atelognathus* Lynch, 1978. ● ***Etymology of nomen***: G: ἀτελής (*ateles*), 'incomplete'; γνάθος (*gnathos*), 'jaw'. ● ***Stem of nomen***: *Atelognath-*.

***Diagnosis***: Patagonian frogs formerly assigned to the *Leptodactylidae Telmatobiinae*, with large frontoparietal fontanelles, short palatine bones not contacting the maxilla or calcified sphenethmoid, large nasal bones in median contact, no quadratojugals, columellar plectra, tympanic anuli and cavi tympani. {Lynch 1978}.

### F.19.26. Tribus *Batrachylini* Gallardo, 1965

***Eunym***: Lynch 1971: 123.
***Getangiotaxon***: *Batrachylinae* Gallardo, 1965.
***Adelphotaxon***: *Atelognathini* **nov.**
***Getendotaxa***: *Batrachyla* Bell, 1843; *Hylorina* Bell, 1843.

### F.18.33. Subfamilia *Cycloramphinae* Bonaparte, 1850-|Bonaparte, 1852|

***Eunym***: Ardila-Robayo 1979: 455.
***Getangiotaxon***: *Cycloramphidae* Bonaparte, 1850-|Bonaparte, 1852|.
***Adelphotaxa***: *Alsodinae* Mivart, 1869; *Batrachylinae* Gallardo, 1965; *Hylodinae* Günther, 1858; *Limnomedusinae* **nov.**
***Getendotaxa***: *Cycloramphus* Tschudi, 1838; *Thoropa* Cope, 1865.

***Comments***: The sister-group relationship between *Cycloramphus* and *Thoropa* was confirmed by Pyron & Wiens (2011) and by Streicher *et al.* (2018). As, in *TREE*, the position of *Cystignathus parvulus* Girard, 1853, onomatophore of the generic nomen *Zachaenus*, would render *Cycloramphus* polyphyletic, we treat here *Zachaenus* Cope, 1866 as a subjective junior synonym of *Cycloramphus* Tschudi, 1838

### F.18.34. Subfamilia *Hylodinae* Günther, 1858

***Protonym***: *Hylodidae* Günther, 1858: 346 [F].
***Eunym***: Savage 1973: 354.
***Getangiotaxon***: *Cycloramphidae* Bonaparte, 1850-|Bonaparte, 1852|.
***Adelphotaxa***: *Alsodinae* Mivart, 1869; *Batrachylinae* Gallardo, 1965; *Cycloramphinae* Bonaparte, 1850-|Bonaparte, 1852|; *Limnomedusinae* **nov.**
***Getendotaxa***: *Crossodactylus* Duméril & Bibron, 1841; *Hylodes* Fitzinger, 1826.

***Comments***: The holophyly of the group composed of the genera *Crossodactylus* and *Hylodes* was found by Frost *et al.* (2006), who recognised the genus *Megaelosia* Miranda-Ribeiro, 1923, here considered as a synonym of *Hylodes* Fitzinger, 1826.

### F.18.35. Subfamilia *Limnomedusinae* **nov.**

***Getangiotaxon***: *Cycloramphidae* Bonaparte, 1850-|Bonaparte, 1852|.
***Adelphotaxa***: *Alsodinae* Mivart, 1869; *Batrachylinae* Gallardo, 1965; *Cycloramphinae* Bonaparte, 1850-|Bonaparte, 1852|; *Hylodinae* Günther, 1858
***Getendotaxon***: *Limnomedusa* Fitzinger, 1843.

***Nucleogenus, by present designation***: *Limnomedusa* Fitzinger, 1843. ● ***Etymology of nomen***: G: λίμνη (*limne*), 'lake, pond'; Μέδουσα (*Medousa*), monster with snakes in her hair, from 'guardian, protectress'. ● ***Stem of nomen***: *Limnomedus-*.

***Diagnosis***: Medium sized frogs formerly assigned to the *Alsodidae*, diagnosable based primarily on larval morphology, with small oral disc, intra-angular margins, rostral gap, intra-marginal lateral papillae present only in supra-angular region, lacking intra-marginal mental papillae, marginal papillae present in multiple rows mentally, rostrodonts wider than deep, normal keratodont formula, level of nostril aperture not raised, lateral sinistral spiracle, proctodeal tube, medial vent opening, normal tail fins, lacking oral disc sucker, lacking abdominal sucker, eggs are laid and hatch out of water, larval development occurs out of water, and larvae are active feeders. {Lavilla 1988}.

### F.16.02. Apofamilia *Telmatobieidae* Fitzinger, 1843

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Telmatobioidae* Fitzinger, 1843.
***Adelphotaxon***: *Cyclorampheidae* Bonaparte, 1850-|Bonaparte, 1852|.
***Getendotaxa***: *Rhinodermatidae* Bonaparte, 1850; *Telmatobiidae* Fitzinger, 1843.

***Comments***: The holophyly of a branch including *Insuetophrynus* and *Rhinoderma* has been recognised using molecular evidence by Pyron & Wiens (2011) and Streicher *et al.* (2018). According to the Criterion [UQC], this taxon must be referred to the rank family, and this also applies to its sister-taxon *Telmatobiidae*.

### F.17.22. Familia *Rhinodermatidae* Bonaparte, 1850

***Protonym***: *Rhinodermina* Bonaparte, 1850: plate [bF].
***Eunym***: Günther 1858: 346.
***Getangiotaxon***: *Telmatobieidae* Fitzinger, 1843.
***Adelphotaxon***: *Telmatobiidae* Fitzinger, 1843.
***Getendotaxa***: *Insuetophrynus* Barrio, 1970; *Rhinoderma* Duméril & Bibon, 1841.

### F.17.23. Familia *Telmatobiidae* Fitzinger, 1843

***Eunym***: Miranda-Ribeiro 1920: 320.
***Getangiotaxon***: *Telmatobieidae* Fitzinger, 1843.
***Adelphotaxon***: *Rhinodermatidae* Bonaparte, 1850.
***Getendotaxa***: *Telmatobius* Wiegmann, 1834; **1 G†**.

***Comments***: This branch is recognised at the rank family *Telmatobiidae* in our classification by virtue of the Criterion [STC]. Frost *et al.* (2006) referred this taxon to the rank subfamily, whereas Bossuyt & Roelants (2009), Pyron & Wiens (2011), Zhang *et al.* (2013), Feng *et al.* (2017), Hutter *et al.* (2017) and Streicher *et al.* (2018) used the family rank for it.

### F.14.06. Superfamilia *Hyloidea* Rafinesque, 1815-|Gray, 1825|

***Protonyms***: *Hylarinia* Rafinesque, 1815: 78 [F]; |*Hylina* Gray, 1825: 213| [UF].
***Eunym***: Dubois 1983: 272.
***Getangiotaxon***: **Hylobatrachia** Ritgen, 1828.
***Adelphotaxa***: *Bufonoidea* Gray, 1825; *Centrolenoidea* Taylor, 1951; *Ceratophryoidea* Tschudi, 1838; *Leptodactyloidea* ||Tschudi, 1838||-Werner, 1896; **1 GIS** (*Ancudia* Philippi, 1902).
***Getendotaxa***: *Hylidae* Rafinesque, 1815-|Gray, 1825|; *Phyllomedusidae* Günther, 1858.

***Comments***: In our classification, the superfamily *Hyloidea* groups two taxa of rank family, the *Hylidae* and the *Phyllomedusidae*. The extension of this taxon corresponds to the *Hylidae* of Faivovich *et al.* (2005), Frost *et al.* (2006), Pyron & Wiens (2011), Fouquet *et al.* (2013), Zhang *et al.* (2013), Feng *et* *al.* (2017), Hutter *et al.* (2017) and Streicher *et al.* (2018), and to the «Arboranae» of Duellman *et al.* (2016).

### F.17.24. Familia *Hylidae* Rafinesque, 1815-|Gray, 1825|

***Eunym***: Bonaparte 1850: plate.
***Getangiotaxon***: *Hyloidea* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxon***: *Phyllomedusidae* Günther, 1858.
***Getendotaxa***: *Cophomantinae* Hoffmann, 1878; *Hylinae* Rafinesque, 1815; **3 G†**.

***Comments***: The extension of this taxon corresponds to that of the *Hylinae* of Faivovich *et al.* (2005), Frost *et al.* (2006), Pyron & Wiens (2011), Zhang *et al.* (2013), Feng *et al.* (2017), Hutter *et al.* (2017) and Streicher *et al.* (2018).

### F.18.36. Subfamilia *Cophomantinae* Hoffmann, 1878

***Protonym***: *Cophomantina* Hoffmann, 1878: 614 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hylidae* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxon***: *Hylinae* Rafinesque, 1815-|Gray, 1825|.
***Getendotaxa***: *Cophomantini* Hoffmann, 1878; *Myersiohylini* **nov.**; *Nesorohylini* **nov.**

***Comments***: This taxon corresponds to the subfamily *Cophomantinae* of Duellman *et al.* (2016) and to the tribe *Cophomantini* of Faivovich *et al.* (2005) and Pinheiro *et al.* (2019). As the relationships within this branch are not resolved, we recognise three tribes, the *Cophomantini* with two subtribes *Cophomantina* and *Hyloscirtina*, the *Myersiohylini* for the genus *Myersiohyla* and the *Nesorohylini* for the genus *Nesorohyla*.

### F.19.27. Tribus *Cophomantini* Hoffmann, 1878

***Eunym***: Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler 2005: 3.
***Getangiotaxon***: *Cophomantinae* Hoffmann, 1878.
***Adelphotaxa***: *Myersiohylini* **nov.**; *Nesorohylini* **nov.**
***Getendotaxon***: *Cophomantina* Hoffmann, 1878; *Hyloscirtina* **nov.**

***Comments***: Within this tribe, we recognise two highly supported branches as the subtribes *Hyloscirtina*, for the genera *Colomascirtus* and *Hyloscirtus*, and *Cophomantina*, including two sister-groups described as infratribes, *Bokermannohylinia* for *Bokermannohyla* and *Cophomantinia* for *Aplastodiscus* and *Boana*. The relationship between these groups have been revealed by Faivovich *et al.* (2005), Wiens *et al.* (2010), Brunetti *et al.* (2015) and Duellman *et al.* (2016).

### F.20.19. Subtribus *Cophomantina* Hoffmann, 1878

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Cophomantini* Hoffmann, 1878.
***Adelphotaxon***: *Hyloscirtina* **nov.**
***Getendotaxa***: *Bokermannohylinia* **nov.**; *Cophomantinia* Hoffmann, 1878.

### F.21.12. Infratribus *Bokermannohylinia* **nov.**

***Getangiotaxon***: *Cophomantina* Hoffmann, 1878.

***Adelphotaxon***: *Cophomantinia* Hoffmann, 1878.
***Getendotaxon***: *Bokermannohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005.

***Nucleogenus, by present designation***: *Bokermannohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005. ● ***Etymology of nomen***: P: Werner Carlos Augusto Bokermann (1929–1995); N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Bokermannohyl-*.

***Diagnosis***: Small to large sized treefrogs (males SVL 30–104 mm; females SVL 42–88 mm); vocal sac subgular, or rarely laterally extended; tympanum small, large in a few species; dorsal pattern generally with presence of transverse dark brown cross bars; thighs and flanks with dark bars; color of groin and concealed surfaces of arms and legs uniform light or yellow or reddish; prepollex always well developed, with curved spine exposed or not. {Cochran 1955; Bokermann 1965; Caramaschi & Feio 1990; Faivovich *et al.* 2005; Lugli & Haddad 2006; Carvalho *et al.* 2012}.

## F.21.13. Infratribus *Cophomantinia* Hoffmann, 1878

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Cophomantina* Hoffmann, 1878.
***Adelphotaxon***: *Bokermannohylinia* **nov.**
***Getendotaxa***: *Aplastodiscus* Lutz, 1950; *Boana* Gray, 1825.

## F.20.20. Subtribus *Hyloscirtina* **nov.**

***Getangiotaxon***: *Cophomantini* Hoffmann, 1878.
***Adelphotaxon***: *Cophomantina* Hoffmann, 1878
***Getendotaxa***: *Colomascirtus* Duellman, Marion & Hedges, 2016; *Hyloscirtus* Peters, 1882.

***Nucleogenus, by present designation***: *Hyloscirtus* Peters, 1882. ● ***Etymology of nomen***: N: *Hyla*, of debated etymology; G: σκιρτάω (*skirtao*), 'to jump'. ● ***Stem of nomen***: *Hyloscirt-*.

***Diagnosis***: Medium sized, primarily South American treefrogs (a group generally lacking clear morphological synapomorphies); apognosable by 56 transformations in DNA sequences from regions in the nucleus and mitochondrion, and by wide dermal fringes on the fingers and toes. {Faivovich *et al.* 2005}.

***Comments***: Pinheiro *et al.* (2019) did not recognise *Colomascirtus*, but they obtained a tree of similar topology and recognised three species groups, the *bogotensis* group corresponding to *Hyloscirtus*, and the *armatus* and *larinopygion* groups, corresponding to *Colomascirtus.* The two groups that we recognise here as genera are holophyletic and have high support.

## F.19.28. Tribus *Myersiohylini* **nov.**

***Getangiotaxon***: *Cophomantinae* Hoffmann, 1878.
***Adelphotaxa***: *Cophomantini* Hoffmann, 1878; *Nesorohylini* **nov.**
***Getendotaxon***: *Myersiohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005.

***Nucleogenus, by present designation***: *Myersiohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005. ● ***Etymology of nomen***: P: Charles W. Myers (1936–); N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Myersiohyl-*.

***Diagnosis***: South American treefrogs (a group generally lacking clear morphological synapomorphies) apognosable at present only by 48 transformations in DNA sequences for mitochondrial and ribosomal genes, with no known morphological synapomorphies. {Faivovich *et al.* 2005}.

***Comments***: The taxon named *Myersiohylini* is sister-group to all other *Cophomantinae* except *Nesorohyla kanaima* (Faivovich *et al.* 2005; Wiens *et al.* 2010; Duellman *et al.* 2016), but this relationship does not have a strong support in *TREE*, so we are bound to recognise three tribes in the subfamily

### F.19.29. Tribus *Nesorohylini* **nov.**

***Getangiotaxon***: *Cophomantinae* Hoffmann, 1878.
***Adelphotaxa***: *Myersiohylini* **nov.**; *Nesorohylini* **nov.**
***Getendotaxon***: *Nesorohyla* Pinheiro, Kok, Noonan, Means & Haddad, 2018.

***Nucleogenus, by present designation***: *Nesorohyla* Pinheiro, Kok, Noonan, Means & Haddad, 2018. ● ***Etymology of nomen***: G: νῆσος (*nesos*), 'island'; G: ὄρος (*oros*), 'mountain'; N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Nesorohyl-*.

***Diagnosis***: As for the genus *Nesorohyla* (the former '*Hyla geographica* group'), diagnosable by moderately slender body with distinct head, smooth dorsal skin, skin on head not co-ossified with underlying dermal elements, distinct tympanum, prepollex not modified as a projecting spine, unwebbed fingers and reduced fringes, moderate (~ 1/3) webbing of toes and reduced fringes, lacking limb fringes, two small and blunt calcar tubercles, lacking axillary membrane, long diagonal vomerine odontophores, dorsal coloration brown, iris dark; nuptial pads light colored, on inner margin of finger I and prepollex; tadpole with oral disc showing short anterior and posterior gaps on marginal papillae, three emarginations on posterior labium, keratodont formula 2+2/1+1:3 and pigmented eggs. {Duellman & Hoogmoed 1992; Faivovich *et al.* 2005; Pinheiro *et al.* 2019}.

***Comments***: The onomatophore of *Nesorohyla* is sister-group to all other *Cophomantinae* in all recent trees (Wiens *et al.* 2010; Duellman *et al.* 2016) but this relationship does not have strong support in *TREE*.

### F.18.37. Subfamilia *Hylinae* Rafinesque, 1815-|Gray, 1825|

***Eunym***: Gadow 1901: 189.
***Getangiotaxon***: *Hylidae* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxon***: *Cophomantinae* Hoffmann, 1878.
***Getendotaxa***: *Dendropsophini* Fitzinger, 1843; *Hylini* Rafinesque, 1815-|Gray, 1825|; *Lophyohylini* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|; *Scinaxini* Duellman, Marion & Hedges, 2016.

***Comments***: The relationships within the branch here recognised as subfamily *Hylinae* are poorly resolved. In consequence, we transcribe the relationships revealed by *TREE* by attributing the rank tribe to the four highly supported taxa in this group: *Dendropsophini*, *Hylini*, *Lophyohylini* and *Scinaxini*.

### F.19.30. Tribus *Dendropsophini* Fitzinger, 1843

***Protonym***: *Dendropsophi* Fitzinger, 1843: 31 [F].
***Eunym***: Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler 2005: 3.
***Getangiotaxon***: *Hylinae* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxa***: *Hylini* Rafinesque, 1815-|Gray, 1825|; *Lophyohylini* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|; *Scinaxini* Duellman, Marion & Hedges, 2016.
***Getendotaxa***: *Dendropsophina* Fitzinger, 1843; *Pseudina* Fitzinger, 1843.

***Comments***: This group reveals two highly supported branches, recognised here as the subtribes *Dendropsophina*, containing the genera *Dendropsophus* and *Xenohyla*, and *Pseudina*, for the genera *Pseudis* and *Scarthyla*.

## F.20.21. Subtribus *Dendropsophina* Fitzinger, 1843

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Dendropsophini* Fitzinger, 1843.
***Adelphotaxon***: *Pseudina* Fitzinger, 1843.
***Getendotaxa***: *Dendropsophus* Fitzinger, 1843; *Xenohyla* Izecksohn, 1998.

## F.20.22. Subtribus *Pseudina* Fitzinger, 1843

***Protonym***: *Pseudae* Fitzinger, 1843: 33 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Dendropsophini* Fitzinger, 1843.
***Adelphotaxon***: *Dendropsophina* Fitzinger, 1843.
***Getendotaxa***: *Pseudis* Wagler, 1830; *Scarthyla* Duellman & Sá, 1988.

## F.19.31. Tribus *Hylini* Rafinesque, 1815-|Gray, 1825|

***Eunym***: Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler 2005: 3.
***Getangiotaxon***: *Hylinae* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxa***: *Dendropsophini* Fitzinger, 1843; *Lophyohylini* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|; *Scinaxini* Duellman, Marion & Hedges, 2016.
***Getendotaxa***: *Acrisina* Mivart, 1869; *Hylina* Rafinesque, 1815-|Gray, 1825|.

***Comments***: The tribe *Hylini* is composed of two sister-groups, recognised as the subtribes *Acrisina* and *Hylina*. The subtribe *Acrisina* is composed of the sister-genera *Hyliola* and *Pseudacris*, recognised as the infratribe *Hyliolinia*, and their sister-taxon *Acris*, recognised as the infratribe *Acrisinia*. The proposed classification is consistent with Faivovich *et al.* (2005), Wiens *et al.* (2006, 2010), Lemmon *et al.* (2007*a*–*b*), Pyron & Wiens (2011), Barrow *et al.* (2014), Duellman *et al.* (2016) and Dubois *et al.* (2017). *Hyliola* corresponds to the 'West Coast clade' of Barrow *et al.* (2014). Faivovich *et al.* (2018) discussed the available evidence for recognition of this genus, and in favour of 'stability' and in absence of 'taxonomic utility' did not recognise this taxon, but did not formally synonymise its nomen with *Pseudacris*.

## F.20.23. Subtribus *Acrisina* Mivart, 1869

***Protonym***: *Acridina* Mivart, 1869: 292 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hylini* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxon***: *Hylina* Rafinesque, 1815-|Gray, 1825|.
***Getendotaxa***: *Acrisinia* Mivart, 1869; *Hyliolinia* Dubois, Duellman & Ohler, 2017.

***Comments***: Dubois *et al.* (2017) provided a detailed discussion of the status of the nomen *Acridina*, introduced by Mivart (1869: 299) for a subfamily, and emended by Kuhn (1965: 96) into *Acridinae*. In order to resolve the nomenclatural problem posed by the homonymy between this nomen and the nomen *Acrididae* Macleay, 1821 (**Orthoptera**), they emended the amphibian nomen into *Acrisinae*, using the whole generic nomen *Acris* as stem for this family-series nomen. In order to validate formally this emendation, they announced their intention to submit the case to the Commission, but did not do it yet, in view of the slowness or failure of the latter to deal with cases submitted to it, as had already been the case for many other nomenclatural problems concerning amphibians, in the past but even recently (see Dubois 2005*b*: 417–418; Dubois *et al.* 2019: 52). This action should now be undertaken by anyone having more trust in the Commission's efficiency.

### F.21.14. Infratribus *Acrisinia* Mivart, 1869

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Acrisina* Mivart, 1869.
***Adelphotaxon***: *Hyliolinia* Dubois, Duellman & Ohler, 2017.
***Getendotaxon***: *Acris* Duméril & Bibron, 1841.

### F.21.15. Infratribus *Hyliolinia* Dubois, Duellman & Ohler, 2017

***Protonym***: *Hyliolinae* Dubois, Duellman & Ohler, 2017: 55 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Acrisina* Mivart, 1869.
***Adelphotaxon***: *Acrisinia* Mivart, 1869.
***Getendotaxa***: *Hyliola* Mocquard, 1899; *Pseudacris* Fitzinger, 1843.

### F.20.24. Subtribus *Hylina* Rafinesque, 1815-|Gray, 1825|

***Eunym***: Hoc loco.
***Getangiotaxon***: *Hylini* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxon***: *Acrisina* Mivart, 1869.
***Getendotaxa***: *Hylinia* Rafinesque, 1815-|Gray, 1825|; *Plectrohylinia* **nov.**

***Comments***: This subtribe accommodates two highly supported branches recognised in our classification as the infratribes *Hylinia* and *Plectrohylinia*. The latter includes the genera *Exerodonta* and *Plectrohyla*, whereas the former includes three hypotribes, *Charadrahylinoa*, *Hylinoa* and *Rheohylinoa*, of unresolved relationships. The first of these hypotribes includes the genera *Charadrahyla* and *Megastomatohyla*. The other hypotribes are discussed below.

### F.21.16. Infratribus *Hylinia* Rafinesque, 1815-|Gray, 1825|

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hylina* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxon***: *Plectrohylinia* **nov.**
***Getendotaxa***: *Charadrahylinoa* **nov.**; *Hylinoa* Rafinesque, 1815-|Gray, 1825|; *Rheohylinoa* **nov.**

***Comments***: The infratribe *Hylinia* includes three well supported branches that are recognised as the hypotribes *Charadrahylinoa*, *Hylinoa* and *Rheohylinoa*.

Pyron & Wiens (2011), Smith *et al.* (2007), Wiens *et al.* (2010), Duellman *et al.* (2016), and Hutter *et al.* (2017) found highly supported relationships between *Charadrahyla* and *Megastomatohyla*, our *Charadrahylinoa*, whereas in Faivovich *et al.* (2005) *Chararahyla* was outgroup to the taxon including *Hyla*, and *Megastomatohyla* outgroup to the rest of our *Hylinia* but *Charadrahyla*.

The hypotribe *Hylinoa* splits into two well supported branches, the clans *Hylites*, for *Dryophytes* and *Hyla*, and *Triprionites*, with the subclans *Isthmohylities*, for *Isthmohyla*, *Tlalocohylities*, for *Tlalocohyla*, and *Triprionities*. This latter taxon holds three subgroups of unsupported relationships, recognised as infraclans in our classification: *Diaglenitoes* for *Diaglena*, *Smiliscitoes* for *Smilisca*, and *Triprionitoes* for *Anotheca* and *Triprion*.

In Faivovich *et al.* (2005), Smith *et al.* (2007), Duellman *et al.* (2010), Wiens *et al.* (2010) and Duellman *et al.* (2016), as well as in *TREE*, *Isthmohyla* is sister-taxon to a group that includes (*Anotheca* and *Triprion*) and *Smilisca*. As *Triprion* is rendered paraphyletic by the position of *Anotheca* (Smith *et al.* 2007; Pyron & Wiens 2011), we recognised, as did Wiens *et al.* (2010) and Duellman *et al.* (2016), the genus *Diaglena* for *Triprion spatulatus*; others synonymised *Anotheca* and *Diaglena* with *Triprion*, a genus that then encloses our *Triprionities*, and did not take into account long recognised morphological differentiations within this group. The highly supported sister-group relationship of

*Smilisca* with *Triprionitoes* in the tree of Pyron & Wiens (2011) is not recovered in *TREE*. Inversely, Pyron & Wiens (2011) only had a bootstrap support of 77 for the relationship within two taxa of their *Hyla*, our *Hylites*, but this taxon has high support in Smith *et al.* (2007) and Duellman *et al.* (2016). Here we follow the latter authors, who recognised the highly supported subgroups as genera.

The *Rheohylinoa*, third taxon within the *Hylinia* includes three clans: *Ecnomiohylites* for *Ecnomiohyla*, *Ptychohylites* for *Atlantihyla*, *Bromeliohyla*, *Duellmanohyla*, *Ptychohyla* and *Quilticohyla*, and *Rheohylites* for *Rheohyla*. The relationships within them are not sufficiently supported for recognising further taxa. The recognition of the genera *Rheohyla* for *Hyla miotympanum* and *Bromeliohyla* for *Hyla bromeliacia* rendered *Ecnomiohyla* holophyletic (Duellman *et al.* 2016). We also follow Wiens *et al.* (2010) in transferring *Hyla salvadorensis* from *Ptychohyla* to *Duellmanohyla*.

This group allows to stress a point that applies indeed to most of the phylogeny and taxonomy of amphibians, i.e. the fact that molecular evidence is growing quickly while morphological, anatomical or etho-ecological characters are not studied and analysed in the same path. As a result, the argumentation in support of new taxa, although they fulfil the first command of holophyly, is poor concerning biological and evolutionary significance. This explains the weak concepts used in many taxonomic decisions, particularly at low taxonominal ranks. Some authors (e.g. Faivovich *et al.* 2005) have complained about this in hylids, but this applies to most of the taxonomy of amphibians, in which most taxa are just defined by diagnoses or idiognoses but not by apognoses (for the distinctions between these concepts, see Dubois 2017*d* and the M&M section above).

### F.22.12. Hypotribus *Charadrahylinoa* **nov.**

***Getangiotaxon***: *Hylinia* Rafinesque, 1815-|Gray, 1825|.

***Adelphotaxa***: *Hylinoa* Rafinesque, 1815-|Gray, 1825|; *Rheohylinoa* **nov.**

***Getendotaxa***: *Charadrahyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005; *Megastomatohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005.

***Nucleogenus, by present designation***:*Charadrahyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005. ● ***Etymology of nomen***: G: χἄράδρα (*charadra*), 'ravine'; N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Charadrahyl-*.

***Diagnosis***: Medium to large sized frogs; dorsum color green or brown with darker blotches or spots; limbs banded; palpebral membrane clear; fingers one-third to two thirds webbed; toes about three-forth webbed; dermal appendages absent; fringes absent; an axillary membrane usually present but sometimes absent; vocal sac absent or a barely distensible single, median subgular, vocal sac; nuptial pads usually present; anterior arm of squamosal not extending to the maxillary; prevomerine teeth present; tadpoles mouth ventral; 2–7 upper and 3–11 lower keratodont rows. {Duellman 1970; Canseco-Marquez *et al.* 2017; Jiménez-Arcos *et al.* 2019}.

As a study of morphological synapomorphies is lacking, the taxon is apognosable by a number of molecular synapomorphies in the DNA sequence of several nuclear, mitochondrial, and ribosomal genes. {Faivovich *et al.* 2005}.

### F.22.13. Hypotribus *Hylinoa* Rafinesque, 1815-|Gray, 1825|

***Eunym***: *Hoc loco*.

***Getangiotaxon***: *Hylinia* Rafinesque, 1815-|Gray, 1825|.

***Adelphotaxa***: *Charadrahylinoa* **nov.**; *Rheohylinoa* **nov.**

***Getendotaxa***: *Hylites* Rafinesque, 1815; *Triprionites* Miranda-Ribeiro, 1926.

### F.23.08. Clanus *Hylites* Rafinesque, 1815-|Gray, 1825|

***Eunym***: *Hoc loco*.

***Getangiotaxon***: *Hylinoa* Rafinesque, 1815-|Gray, 1825|.

***Adelphotaxon***: *Triprionites* Miranda-Ribeiro, 1926.
***Getendotaxa***: *Dryophytes* Fitzinger, 1843; *Hyla* Laurenti, 1768.

## F.23.09. Clanus *Triprionites* Miranda-Ribeiro, 1926

***Protonym***: *Triprioninae* Miranda-Ribeiro, 1926: 64 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hylinoa* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxon***: *Hylites* Rafinesque, 1815-|Gray, 1825|.
***Getendotaxa***: *Isthmohylities* **nov.**; *Tlalocohylities* **nov.**; *Triprionites* Miranda-Ribeiro, 1926.

## F.24.04. Subclanus *Isthmohylities* **nov.**

***Getangiotaxon***: *Triprionites* Miranda-Ribeiro, 1926.
***Adelphotaxa***: *Tlalocohylities* **nov.**; *Triprionites* Miranda-Ribeiro, 1926.
***Getendotaxon***: *Isthmohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005.

***Nucleogenus, by present designation***: *Isthmohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005. ● ***Etymology of nomen***: G: ίσθμός (*isthmos*), 'isthmus', referring to the distribution of the genus; N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Isthmohyl-*.

***Diagnosis***: Medium sized frogs, dorsum brownish or green, usually mottled or marked by blotches; transverse bands on limbs usually lacking; palpebral membrane clear; fingers up to one-third webbed; toes half to three-forth webbed; axillary membrane usually absent; dermal folds on hindlimbs absent; a single, median subgular vocal sac present; horny nuptial pads on prepollex usually present. {Duellman 2001}.

Morphological characters have not been studied by phylogenetic methods, so synapomorphic characters are not defined but the taxon is apognosable by 42 molecular synapomorphies in the DNA sequences of several nuclear, mitochondrial and ribosomal genes. {Faivovich *et al.* 2005}.

## F.24.05. Subclanus *Tlalocohylities* **nov.**

***Getangiotaxon***: *Triprionites* Miranda-Ribeiro, 1926.
***Adelphotaxa*** *Isthmohylities* **nov.**; *Triprionites* Miranda-Ribeiro, 1926.
***Getendotaxon***: *Tlalocohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005.

***Nucleogenus, by present designation***: *Tlalocohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005. ● ***Etymology of nomen***: R: Tlaloc, the Olmec god of the rain; N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Tlalocohyl-*.

***Diagnosis***: Small to medium sized frogs; dorsum yellowish or light gray; hidden surfaces of legs and webbing or thigh yellow or red; palpebral membrane clear; fingers one-fourth to tree-fifth webbed; toes two-third to three-fourth webbed; dermal appendages and fringes of limbs absent; an axillary membrane present; tympanum visible; vocal sac single, median, subgular; nuptial pads absent or present; skulls weakly to moderately ossified; nasals separated medially; quadratojugals bony and in contact with maxillary; anterior arm of squamosal no more than half of the distance to maxillar; prevomerine teeth present, but may be absent; tadpoles with an anteroventral mouth; two upper three lower keratodont rows; tail with rather deep, terminally pointed fins. {Duellman 2001}.

Taxon apognosable by 92 molecular synapomorphies in the DNA sequences of several nuclear, mitochondrial and ribosomal genes. {Faivovich *et al.* 2005}.

### F.24.06. Subclanus *Triprionities* Miranda-Ribeiro, 1926.

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Triprionites* Miranda-Ribeiro, 1926.
***Adelphotaxa***: *Isthmohylities* **nov.**; *Tlalocohylities* **nov.**
***Getendotaxa***: *Diaglenitoes* **nov.**; *Smiliscitoes* **nov.**; *Triprionitoes* Miranda-Ribeiro, 1926.

### F.25.15. Infraclanus *Diaglenitoes* **nov.**

***Getangiotaxon***: *Triprionities* Miranda-Ribeiro, 1926.
***Adelphotaxa***: *Smiliscitoes* **nov.**; *Triprionitoes* Miranda-Ribeiro, 1926.
***Getendotaxon***: *Diaglena* Cope, 1887.

***Nucleogenus, by present designation***: *Diaglena* Cope, 1887. ● ***Etymology of nomen***: G: διά (*dia*), 'accross'; γλήνη (*glene*), 'pupilla'; referring to the horizontal shape of the pupilla as stated in the original description (Cope 1887). ● ***Stem of nomen***: *Diaglen*-.

***Diagnosis***: Large sized species (males SVL 69–87 mm, females SVL 90–101 mm); dorsum color greenish to yellowish with green to yellow flecks of variable extend; tympanum partly hidden; axillary membrane absent; horny nuptial pad on prepollex in breeding males; webbing between fingers I and II absent, between fingers III and IV rudimentary; tarsal fold present; toes about two-thirds webbed; anal flap absent; large prenasals, greatly expanded maxillaries, odontoids on palatines, spines on top of head absent and no dermal sphenethmoid. {Duellman 2001}.

### F.25.16. Infraclanus *Smiliscitoes* **nov.**

***Getangiotaxon***: *Triprionities* Miranda-Ribeiro, 1926.
***Adelphotaxa***: *Diaglenitoes* **nov.**; *Triprionitoes* Miranda-Ribeiro, 1926.
***Getendotaxon***: *Smilisca* Cope, 1865.

***Nucleogenus, by present designation***: *Smilisca* Cope, 1865. ● ***Etymology of nomen***: G: σμῑλη (*smile*), 'knife', -ῐσχου (-*iskou*), a diminutive suffix; meaning 'little knife' (Duellman 2001). ● ***Stem of nomen***: *Smilisc*-.

***Diagnosis***: Medium to large sized frogs; a blotched or barred dorsal pattern in green or brown; flanks are mottled, spotted or veined; ventrally white; pupil horizontally elongated; palpebral membrane clear; toes at least three-fourths webbed; paired, subgular greatly distensible vocal sacs; breeding males with horny brown nuptial pads; skull broad, well ossified; lacks dermal co-ossification; nasals moderately slender, separated medially; frontoparietal fontanelle usually present; vomerine teeth present; tadpoles with two upper and three lower keratodont rows; mouth bordered by papillae. {Faivovich *et al.* 2005}.

No morphological synapomorphies (Duellman 2001), but taxon apognosable by 92 molecular synapomorphies in the DNA sequences of several nuclear, mitochondrial and ribosomal genes. {Faivovich *et al.* 2005}.

### F.25.17. Infraclanus *Triprionitoes* Miranda-Ribeiro, 1926

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Triprionities* Miranda-Ribeiro, 1926.
***Adelphotaxa***: *Smiliscitoes* **nov.**; *Triprionitoes* Miranda-Ribeiro, 1926.
***Getendotaxa***: *Anotheca* Smith, 1939; *Triprion* Cope, 1866.

## F.22.14. Hypotribus *Rheohylinoa* **nov.**

***Getangiotaxon***: *Hylinia* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxa***: *Hylinoa* Rafinesque, 1815-|Gray, 1825|; *Charadrahylinoa* **nov.**
***Getendotaxa***: *Ecnomiohylites* **nov.**; *Ptychohylites* **nov.**; *Rheohylites* **nov.**

***Nucleogenus, by present designation***: *Rheohyla* Duellman, Marion & Hedges, 2016. ● ***Etymology of nomen***: G: ῥέος (*rheos*), 'stream', referring to the breeding site of *Rheohyla* species; N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Rheohyl-*.

***Diagnosis***: Small to medium sized species; dorsum greenish to brownish usually with various markings; palpebral membrane unmarked but some species with pigmentation; fingers one-forth to two-thirds webbed; toes one-third to four-fifth webbed; fringes absent or tubercles in rows, or indented dermal fringes (*Ecnomiohyla*); an axillary membrane usually absent; a single, median, subgular vocal sac usually present; nuptial pads present; skull moderately ossified; frontoparietal fontanelle present; quadratojugals present, reduced or absent; anterior arm of squamosal extend to one-half of the distance to the maxillary; vomerine teeth present; tadpoles with ventral mouth (funnel-shaped in *Duellmanohyla*); 1–7 upper, 3–7 lower keratodont rows; moderately long tails, with low web. {Duellman 2001; Campbell & Duellman 2000; McCranie & Castaneda 2006; Duellman *et al.* 2016; Canseco-Marquez *et al.* 2017}.

## F.23.10. Clanus *Ecnomiohylites* **nov.**

***Getangiotaxon***: *Rheohylinoa* **nov.**
***Adelphotaxa***: *Ptychohylites* **nov.**; *Rheohylites* **nov.**
***Getendotaxon***: *Ecnomiohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005.

***Nucleogenus, by present designation***: *Ecnomiohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005. ● ***Etymology of nomen***: G: ἐκνόμιος (*ecnomios*), 'marvelous, unusual'; N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Ecnomiohyl-*.

***Diagnosis***: Medium to large sized species; dorsum green or brownish mottled or not with brown or dark green; palpebral membrane clear or pigmented; hands and feet very large; toe pads large; finger web at least two-thirds webbed; toes web more than three-fourths webbed; indented dermal fringes on outer edge of forearm and fourth finger, and on the outer edge of the foot and fifth toe; a single, median, subgular vocal sac (absent in one species); first finger of adult males with a variously modified propollex; skull moderately well ossified; frontoparietal fontanelle present; in some species co-ossification of skin with the fronto-parietals and squamosals; quadratojugals in bony contact with the maxillary; anterior arm of squamosal extend no more than one-half of the distance to the maxillary; vomerine teeth present {Duellman 2001; Batista *et al.* 2014}.

The included genus can be apognosed by molecular synapomorphies (37 transformations in nuclear and mitochondrial protein and ribosomal genes). {Faivovich *et al.* 2005}.

## F.23.11. Clanus *Ptychohylites* **nov.**

***Getangiotaxon***: *Rheohylinoa* **nov.**
***Adelphotaxa***: *Ecnomiohylites* **nov.**; *Rheohylites* **nov.**
***Getendotaxa***: *Atlantihyla* Faivovich, Pereyra, Luna, Hertz, Blotto, Vásquez-Almazán, McCranie, Sánchez, Baêta, Araujo-Vieira, Köhler, Kubicki, Campbell, Frost, Wheeler & Haddad, 2018; *Bromeliohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005; *Duellmanohyla* Campbell & Smith,1992; *Ptychohyla* Taylor, 1944; *Quilticohyla* Faivovich, Pereyra, Luna, Hertz, Blotto, Vásquez-Almazán, McCranie, Sánchez, Baêta, Araujo-Vieira, Köhler, Kubicki, Campbell, Frost, Wheeler & Haddad, 2018.

***Nucleogenus, by present designation***: *Ptychohyla* Taylor, 1944. ● ***Etymology of nomen***: G: πτυχή (*ptyche*), 'fold'; N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Ptychohyl-*.

***Diagnosis***: Small to medium sized species; dorsum green or shades of brown, usually with some markings; palpebral membrane unmarked or with pigmentation; fingers one-fourth to one half webbed; toes one-thirds to four-fifths webbed; fringes with a row of tubercles on forearm or without such fringe; axillary membrane absent; vocal sac present, sometimes absent; nuptial pads present; ventrolateral macroglands (but absent in *Bromeliohyla* and *Duellmanohyla*); skull moderately ossified; frontoparietal fontanella present; nasals slender, separated medially; quadratojugals usually present; anterior arm of squamosal extending one-third or one-half of distance to the maxillary; vomerine teeth present; tadpoles with a ventral mouth (funnel-shaped in *Duellmanohyla*); 2–6 upper, 5–7 lower keratodont rows; long tails with low fins. {Duellman 2001; Campbell & Duellman 2000; McCranie & Castaneda 2006; Canseco-Marquez *et al.* 2017}.

This taxon is apognosable by a number of molecular synapomorphies in the DNA sequences of several nuclear, mitochondrial and ribosomal genes; diagnostic morphological characteristics include a well-developed lingual flange of the pars palatina of the premaxillary (*Ptychohyla*); tadpoles with dorsoventrally flattened bodies and elongated tails hatching from eggs laid in bromeliad cavities (*Bromeliohyla*); and red irises, a labial stripe expanded below orbit, lack of nuptial excrescences, ventrally oriented funnel-shaped oral disc in the tadpoles, labial tooth rows reduced in length, and lateral processes on upper jaw sheath absent in *Duellmanohyla.* {Faivovich *et al.* 2005}.

## F.23.12. Clanus *Rheohylites* **nov.**

***Getangiotaxon***: *Rheohylinoa* **nov.**
***Adelphotaxa***: *Ecnomiohylites* **nov.**; *Ptychohylites* **nov.**
***Getendotaxon***: *Rheohyla* Duellman, Marion & Hedges, 2016.

## F.21.17. Infratribus *Plectrohylinia* **nov.**

***Getangiotaxon***: *Hylina* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxon***: *Hylinia* Rafinesque, 1815-|Gray, 1825|.
***Getendotaxa***: *Exerodonta* Brocchi, 1879; *Plectrohyla* Brocchi, 1877.

***Nucleogenus, by present designation***: *Plectrohyla* Brocchi, 1877. ● ***Etymology of nomen***: G: πλῆκτρον (*plektron*), 'spur', referring to the shape of the prepollex; N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Plectrohyl-*.

***Diagnosis***: Small to large frogs (adults SVL 20–90 mm); fingers long with small or absent webbing and rounded pads; toes largely to extensively webbed; tadpoles with moderately depressed body and long, muscular tail with moderately developed fins; oral disc with several rows of papillae; 2–3 upper and 3–7 lower keratodont rows. {Duellman & Campbell 1992; Mendelson & Campbell 1994; Campbell & Duellman 2000; Duellman 2001}.

Apognosable by a number of molecular synapomorphies in the DNA sequences of several nuclear, mitochondrial and ribosomal genes; no morphological synapomorphies are known at present. {Faivovich *et al.* 2005}.

## F.19.32. Tribus *Lophyohylini* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|

***Protonyms and eunym***: *Lophiohylinae* Miranda-Ribeiro, 1926: 64 [F]; |*Lophyohylini* Fouquette & Dubois, 2014: 7| [T].
***Getangiotaxon***: *Hylinae* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxa***: *Dendropsophini* Fitzinger, 1843; *Hylini* Rafinesque, 1815-|Gray, 1825|; *Scinaxini* Duellman, Marion & Hedges, 2016.
***Getendotaxa***: *Itapohylina* **nov.**; *Lophyohylina* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|; *Phytotryadina* **nov.**; *Trachycephalina* Lutz, 1969.

***Comments***: The relationships within the tribe *LOPHYOHYLINI* are poorly resolved and consequently four subtribes are recognised in our classification: the *ITAPOTIHYLINA* for *Itapotihyla*, the *LOPHYOHYLINA*, detailed below, the *PHYTOTRYADINA* for *Phytotriades* and the *TRACHYCEPHALINA*, detailed below. Due to support values below our limit, within the subtribe *LOPHYOHYLINA* we recognise three infratribes: the *LOPHYOHYLINIA* for *Phyllodytes* (the valid nomen for *Lophyohyla*), the *OSTEOCEPHALINIA* for *Dryaderces*, *Osteocephalus* and *Tepuihyla*, and the *OSTEOPILINIA* for *Osteopilus*. The *TRACHYCEPHALINA* include three infratribes: the *CORYTHOMANTINIA* for *Corythomantis*, the *NYCTIMANTINIA* for *Aparasphenodon*, *Argenteohyla* and *Nyctimantis*, and the *TRACHYCEPHALINIA* for *Trachycephalus*.

Faivovich *et al.* (2010) found *Phyllodytes* to be sister-taxon to all other *LOPHYOHYLINI* (their *LOPHIOHYLINI*) which is in *TREE* sister-taxon to a taxon grouping *Osteopilus*, *Tepuihyla* and *Osteocephalus*. Although there are numerous poorly supported taxa in the *LOPHYOHYLINI*, some relationships seem rather stable. As in *TREE*, *Tepuihyla* was recovered sister-taxon to *Osteocephalus* (Faivovich *et al.* 2010; Wiens *et al.* 2010; Pyron & Wiens 2011; Duellman *et al.* 2016). Most recent works found *Aparasphenodon*, *Argenteohyla* and *Nyctimantis* forming a holophyletic taxon (Faivovich *et al.* 2010; Wiens *et al.* 2010; Pyron & Wiens 2011; Duellman *et al.* 2016) as does this group with the genera *Trachycephalus* and *Corythomantis*, but the relationships within this taxon shown in these trees have not been confirmed in *TREE*.

## F.20.25. Subtribus *ITAPOTIHYLINA* **nov.**

***Getangiotaxon***: *LOPHYOHYLINI* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|.

***Adelphotaxa***: *LOPHYOHYLINA* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|; *PHYTOTRYADINA* **nov.**; *TRACHYCEPHALINA* Lutz, 1969.

***Getendotaxon***: *Itapotihyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005.

***Nucleogenus, by present designation***: *Itapotihyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005. ● ***Etymology of nomen***: R: Itapoti (Tupi-Guarani term), *itá*, 'rock' and *poti*, 'flower or to flourish', which means lichen or moss, referring to the skin of the frog; N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Itapotihyl-*.

***Diagnosis***: Large sized frogs; dorsum of males bearing small tubercles; skin of flanks tubercular, on forearms web extending to base of penultimate phalange of finger III; presence of indented dermal folds on outer edges of hands and feet; a row of tubercles on posterior edge of jaw; a white subanal fold; dorsum greenish or brownish with darker shades; belly and ventral surfaces of thighs yellowish orange; lips unmarked; tadpole with robust and elongated body, eyes positioned laterally, tail muscle high and obtusely pointed, dorsal fin higher than ventral fin, oral disc anteroventral, with 2 upper and 5 lower keratodont rows. {Duellman 1974; Pimenta & Canedo 2007}.

Apognosable by 122 molecular synapomorphies in the DNA sequences of several nuclear, mitochondrial, and ribosomal genes; a potential morphological synapomorphy is a prominent subcloacal flap. {Faivovich *et al.* 2005}.

## F.20.26. Subtribus *LOPHYOHYLINA* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|

***Eunym***: *Hoc loco*.

***Getangiotaxon***: *LOPHYOHYLINI* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|.

***Adelphotaxa***: *ITAPOTIHYLINA* **nov.**; *PHYTOTRYADINA* **nov.**; *TRACHYCEPHALINA* Lutz, 1969.

***Getendotaxa***: *LOPHYOHYLINIA* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|; *OSTEOCEPHALINIA* **nov.**; *OSTEOPILINIA* **nov.**

## F.21.18. Infratribus *LOPHYOHYLINIA* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|

***Eunym***: *Hoc loco*.

***Getangiotaxon***: *LOPHYOHYLINA* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|.

***Adelphotaxa***: *Osteocephalinia* **nov.**; *Osteopilinia* **nov.**
***Getendotaxon***: *Phyllodytes* Wagler, 1830.

## F.21.19. Infratribus *Osteocephalinia* **nov.**

***Getangiotaxon***: *Lophyohylina* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|.
***Adelphotaxa***: *Lophyohylinia* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|; *Osteopilinia* **nov.**
***Getendotaxa***: *Dryaderces* Faivovich, Padial, Castroviejo-Fisher, Lyra, Berneck, Iglesias, Kok, MacCulloch, Rodrigues, Verdade, Torres-Gastello, Chaparro, Valdujo, Reichle, Moravec, Gvoždík, Gagliardi-Urrutia, Ernst, Riva, Means, Lima, Señaris, Wheeler & Haddad, 2013; *Osteocephalus* Steindachner, 1862; *Tepuihyla* Ayarzagüena, Señaris & Gorzula, 1993.

***Nucleogenus, by present designation***: *Osteocephalus* Steindachner, 1862. ● ***Etymology of nomen***: G: όστέον (*osteon*), 'bone'; κεφαλή (*kephale*), 'head'. ● ***Stem of nomen***: *Osteocephal*-.

***Diagnosis***: Small to large sized; dorsal skin with tubercles, which in males usually bear spinules, but females often smooth; dorsum color brownish or green; palpebral membrane clear; pupil horizontal; skull usually broader than long; discs large; fingers basic to half webbed; toes half to almost entirely webbed; tympanum large; vocal sac single or paired, sometimes absent; nuptial pads usually present; skulls well ossified, exostosed and/or co-ossified in some species; dentigerous processus of vomer angular, but also straight; in larvae two upper and three to six lower keratodont rows. {Duellman & Trueb 1971; Ayarzagüena *et al.* 1993; Jungfer & Hödl 2002; Jungfer *et al.* 2013; Hoogmoed 2013}.

Apognosable by a number of molecular synapomorphies in the DNA sequences of several nuclear, mitochondrial and ribosomal genes. {Faivovich *et al.* 2005}.

## F.21.20. Infratribus *Osteopilinia* **nov.**

***Getangiotaxon***: *Lophyohylina* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|.
***Adelphotaxa***: *Lophyohylinia* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|; *Osteocephalinia* **nov.**
***Getendotaxon***: *Osteopilus* Fitzinger, 1843.

***Nucleogenus, by present designation***: *Osteopilus* Fitzinger, 1843. ● ***Etymology of nomen***: G: όστέον (*osteon*), 'bone'; πῖλος (*pilos*), 'felt', referring to the finely granular bones of the skull. ● ***Stem of nomen***: *Osteopil*-.

***Diagnosis***: Medium to large sized frogs; skulls about as long as broad; dermal oofing bones well ossified, exostosed and co-ossified; prenasal and internasal bones absent; dermal sphenethmoid present large, curved vomerine ridge bearing teeth; vocal sac single and subgular; tympanum large; finger and toe pads large and round; in breeding males nuptial pads present; no fringes on hind or forelimbs. {Trueb & Tyler 1974}.

Apognosable by 43 molecular synapomorphies in the DNA sequences of several nuclear, mitochondrial and ribosomal genes. {Faivovich *et al.* 2005}.

## F.20.27. Subtribus *Phytotryadina* **nov.**

***Getangiotaxon***: *Lophyohylini* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|.
***Adelphotaxa***: *Itapotihylina* **nov.**; *Lophyohylina* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|; *Trachycephalina* Lutz, 1969.
***Getendotaxon***: *Phytotriades* Jowers, Downie & Cohen, 2009.

***Nucleogenus, by present designation***: *Phytotriades* Jowers, Downie & Cohen, 2009. ● ***Etymology of nomen***: G: φῠτόν (*phyton*), 'plant'; τρεῖς (*treis*), 'three', referring to Trinidad, where the frog is endemic. ● ***Stem of nomen***: *Osteopil*-.

***Diagnosis***: Small sized frogs, head slightly broader than long, snout truncate, tympanum hidden; finger and toe tips dilated into well-developed pads; fingers free, toes slightly webbed; skin smooth, brown and gold, with golden longitudinal stripes; on lower jaw a series of fine bony tooth-like serrations, decreasing in size from the symphysis; single subgular vocal sac. {Boulenger 1917; Kenny 1969; Jowers *et al.* 2008}.

## F.20.28. Subtribus *Trachycephalina* Lutz, 1969

***Protonym***: *Trachycephalinae* Lutz, 1969: 275 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Lophyohylini* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|.
***Adelphotaxa***: *Itapotihylina* **nov.**; *Lophyohylina* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|; *Phytotryadina* **nov.**
***Getendotaxa***: *Corythomantinia* **nov.**; *Nyctimantinia* **nov.**; *Trachycephalinia* Lutz, 1969.

## F.21.21. Infratribus *Corythomantinia* **nov.**

***Getangiotaxon***: *Trachycephalina* Lutz, 1969.
***Adelphotaxa***: *Nyctimantinia* **nov.**; *Trachycephalinia* Lutz, 1969.
***Getendotaxon***: *Corythomantis* Boulenger, 1896.

***Nucleogenus, by present designation***: *Corythomantis* Boulenger, 1896. ● ***Etymology of nomen***: G: κορύθιον (*korythion*), 'small helmet'; μάντις (*mantis*), 'a green garden frog' called so as predicting the weather. ● ***Stem of nomen***: *Corythomant-*.

***Diagnosis***: Large sized frogs with depressed head, skull longer than broad, with projecting labial borders, surface of dermal roofing bones consisting of reticulate network of ridges; nasals concealed with alary process of premaxillaries; vomerine teeth present; tympanum distinct; fingers free, toes two-thirds webbed; tips dilated into pads; single, median, subgular vocal sac. {Boulenger 1896; Trueb 1970*a*; Pombal *et al.* 2012}.

Apognosable by 132 molecular transformations in the DNA sequences of several nuclear, mitochondrial and ribosomal genes. {Faivovich *et al.* 2005}.

## F.21.22. Infratribus *Nyctimantinia* **nov.**

***Getangiotaxon***: *Trachycephalina* Lutz, 1969.
***Adelphotaxa***: *Corythomantinia* **nov.**; *Trachycephalinia* Lutz, 1969.
***Getendotaxa***: *Aparasphenodon* Miranda-Ribeiro, 1920; *Argenteohyla* Trueb, 1970; *Nyctimantis* Boulenger, 1882.

***Nucleogenus, by present designation***: *Nyctimantis* Boulenger, 1882. ● ***Etymology of nomen***: G: νύξ (*nux*), 'night'; μάντις (*mantis*), 'a green garden frog' called so as predicting the weather. ● ***Stem of nomen***: *Nyctimant-*.

***Diagnosis***: Medium sized frogs; dorsum skin smooth; skull longer than broad or slightly broader than long; discs moderate; fingers with reduced webbing; toes up to two-thirds webbed; vocal sac single or paired (*Argenteohyla*); dermal ornation on skulls present; canthal ridges distinct; palatine bones present; vomerine teeth present. {Trueb 1970*a–b*; Duellman & Trueb 1976}.

Apognosable by a number of molecular transformations in the DNA sequences of several nuclear, mitochondrial and ribosomal genes; diagnostic morphological characters include a prenasal bone (*Aparasphenodon*); articulation of the zygomatic ramus of the squamosal with the pars fascialis of the maxillary, and reduced finger and toe discs (*Argenteohyla*); and an irregular orbital flange in the frontoparietal, and sphenethmoid concealed dorsally by frontoparietals and nasals in *Nyctimantis.* {Faivovich *et al.* 2005}.

## F.21.23. Infratribus *Trachycephalinia* Lutz, 1969.

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Trachycephalina* Lutz, 1969.
***Adelphotaxa***: *Corythomantinia* **nov.**; *Nyctimantinia* **nov.**
***Getendotaxon***: *Trachycephalus* Tschudi, 1838.

## F.19.33. Tribus *Scinaxini* Duellman, Marion & Hedges, 2016

***Protonym***: *Scinaxinae* Duellman, Marion & Hedges, 2016: 3, 25 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hylinae* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxa***: *Dendropsophini* Fitzinger, 1843; *Hylini* Rafinesque, 1815-|Gray, 1825|; *Lophyohylini* Miranda-Ribeiro, 1926-|Fouquette & Dubois, 2014|.
***Getendotaxa***: *Scinaxina* Duellman, Marion & Hedges, 2016; *Sphaenorhynchina* Faivovich *et al.*, 2018.

***Comments***: This taxon was documented by Wiens *et al.* (2010), Pyron & Wiens (2011) and Faivovich *et al.* (2018), and recognised as a subfamily by Duellman *et al.* (2016). These authors recognised the genera *Ololygon* Fitzinger, 1843 and *Julianus* Duellman, Marion & Hedges, 2016, as distinct from *Scinax*, but Lourenço *et al.* (2016) and Faivovich *et al.* (2018) considered these two nomina as synonyms of the latter. We follow them.

The recent erection of the well-supported genus *Gabohyla*, for the species *Sphaenorhynchus pauloalvini* not represented in *TREE*, leads us to recognise two subtribes *Scinaxina* and *Sphaenorhynchina* in this tribe.

Wagler (1830: 201) provided the etymology of his generic nomen *Scinax*: "Σκιναξ agilis ad subsiliendum" ('agile to jump'). The genitive of the Greek adjective σκίναξ being σκίνακος, the subfamilial nomen coined by Duellman *et al.* (2016) should have been spelt *Scinacinae*, and the incorrect original spelling should have been corrected before 2000, but it is no more the case under the 1999 *Code* because of the new Article 29.4, which states that now such incorrect spellings should not be corrected, a highly confusing Rule (see Dubois & Aescht 2019*o*: 125–126).

## F.20.29. Subtribus *Scinaxina* Duellman, Marion & Hedges, 2016

***Protonym***: *Scinaxinae* Duellman, Marion & Hedges, 2016: 3, 25 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Scinaxini* Duellman, Marion & Hedges, 2016.
***Adelphotaxon***: *Sphaenorhynchina* Faivovich, Pereyra, Luna, Hertz, Blotto, Vásquez-Almazán, McCranie, Sánchez, Baêta, Araujo-Vieira, Köhler, Kubicki, Campbell, Frost, Wheeler & Haddad, 2018.
***Getendotaxon***: *Scinax* Wagler, 1830.

## F.20.30. Subtribus *Sphaenorhynchina* Faivovich *et al.*, 2018

***Protonym***: *Sphaenorhynchini* Faivovich, Pereyra, Luna, Hertz, Blotto, Vásquez-Almazán, McCranie, Sánchez, Baêta, Araujo-Vieira, Köhler, Kubicki, Campbell, Frost, Wheeler & Haddad, 2018: 25 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Scinaxini* Duellman, Marion & Hedges, 2016.
***Adelphotaxon***: *Scinaxina* Duellman, Marion & Hedges, 2016.
***Getendotaxa***: *Gabohyla* Araujo-Vieira, Luna, Caramaschi & Haddad, 2020; *Sphaenorhynchus* Tschudi, 1838.

## F.17.25. Familia *Phyllomedusidae* Günther, 1858

***Protonym and eunym***: *Phyllomedusidae* Günther, 1858: 346 [F].

***Getangiotaxon***: *Hyloidea* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxon***: *Hylidae* Rafinesque, 1815-|Gray, 1825|.
***Getendotaxa***: *Pelodryadinae* Günther, 1859; *Phyllomedusinae* Günther, 1858.

***Comments***: Most recent authors (e.g. Bossuyt & Roelants 2009) considered the *Pelodryadidae* and the *Phyllomedusidae* as two distinct families. However, on the basis of *TREE*, we consider that they constitute together the sister-taxon to the family *Hylidae* whose rank is fixed by the [UQC]. By virtue of the [STC], they should therefore be lumped as two subfamilies of a single family for which the valid nomen, according to the Principle of Priority, is *Phyllomedusidae*.

### F.18.38. Subfamilia *Pelodryadinae* Günther, 1859

***Protonym***: *Pelodryadidae* Günther, 1859: ix, 119 [F].
***Eunym***: Dowling & Duellman 1978: 37.1.
***Getangiotaxon***: *Phyllomedusidae* Günther, 1858.
***Adelphotaxon***: *Phyllomedusinae* Günther, 1858.
***Getendotaxa***: *Litoria* Tschudi, 1838; *Nyctimystes* Stejneger, 1916; *Ranoidea* Tschudi, 1838.

***Comments***: As stated by Faivovich *et al.* (2010), we encounter "almost complete ignorance about phylogenetic relationships within the *Pelodryadinae*", and therefore, as we have no evidence for further resolution of the relationships within this taxon, here we recognise the three highly supported groups as the genera *Litoria*, *Nyctimystes* and *Ranoidea*. Numerous currently synonymous genus- and family-series nomina (see Dubois & Frétey 2016 and Appendices **A5.NGS** and **A6.NFS**) are available for further subdivisions of this species-rich assemblage, but they must await further taxonomic and phylogenetic studies to be re-evaluated.

### F.18.39. Subfamilia *Phyllomedusinae* Günther, 1858

***Eunym***: Miranda-Ribeiro 1926: 64.
***Getangiotaxon***: *Hyloidea* Rafinesque, 1815-|Gray, 1825|.
***Adelphotaxon***: *Pelodryadinae* Günther, 1859.
***Getendotaxa***: *Agalychnini* **nov.**; *Cruziohylini* **nov.**; *Phrynomedusini* **nov.**; *Phyllomedusini* Günther, 1858.

***Comments***: The relationships within this subfamily do not have sufficient support for a resolved classification, so four groups must be recognised as tribes: *Agalychnini* for the genera *Agalychnis* and *Hylomantis*, *Cruziohylini* for the genus *Cruziohyla*, *Phrynomedusini* for the genus *Phrynomedusa*, and *Phyllomedusini*. This latter tribe shows resolved relationships, with a subtribe *Phasmahylina* for the genus *Phasmahyla*, being sister-taxon to a subtribe *Phyllomedusina*. Within this latter subtribe, the intratribe *Phyllomedusinia*, corresponding to genus *Phyllomedusa*, is sister-group to the *Pithecopodinia*, which groups the genera *Callimedusa* and *Pithecopus*. These relationships are largely confirmed by all recent studies. Faivovich *et al.* (2010) and Duellman *et al.* (2016) found sister-taxa relationship between *Agalychnis* and *Hylomantis*, our *Agalychnini*, and similar relationships between the taxa that we recognise as *Phyllomedusini*.

### F.19.34. Tribus *Agalychnini* **nov.**

***Getangiotaxon***: *Phyllomedusinae* Günther, 1858.
***Adelphotaxa***: *Cruziohylini* **nov.**; *Phrynomedusini* **nov.**; *Phyllomedusini* Günther, 1858.
***Getendotaxa***: *Agalychnis* Cope, 1864; *Hylomantis* Peters, 1873.

***Nucleogenus, by present designation***: *Agalychnis* Cope, 1864. ● ***Etymology of nomen***: G: άγα (*aga*), 'very'; λυχνίς (*lychnis*), 'red flower or gem'. ● ***Stem of nomen***: *Agalychn*-.

***Diagnosis***: Small to large sized frogs with a green dorsum; white, yellow or orange ventrally; pupil vertical, iris red or yellow; palpebral membrane reticulated; fingers and toes at least half webbed; toe pads large; first toe shorter than second and not opposable to the others; a single, median subgular vocal sac; skin of dorsum smooth or granulate; if present, poorly developed parotoid glands; no cranial co-ossification; breeding males with horny brown nuptial pads on finger I; skull shallow, parietal slopes downward anteriorly; large frontoparietal fontanelle, moderately developed squamosals with short anterior arms not extending beyond one-half distance to maxillary; nasals large, narrowly separated medially; sphenethmoid only moderately ossified; teeth on premaxillaries, maxillaries and vomers; pelagic tadpoles; with terminal mouth, anteriorly directed; mouth with two or three rows of papillae, but median part of upper lip free of papillae; 2 upper and 3 lower rows of keratodonts; caudal musculature slender, ventral fin deeper than dorsal fin; apognosable by a number of molecular transformations in the DNA sequences of several nuclear, mitochondrial, and ribosomal genes; diagnostic morphological characters include extensive webbing on the hands and feet and a yellow, red, or dark red iris in *Agalychnis*. {Duellman 1970; Faivovich *et al.* 2005}.

### F.19.35. Tribus *Cruziohylini* **nov.**

***Getangiotaxon***: *Phyllomedusinae* Günther, 1858.
***Adelphotaxa***: *Agalychnini* **nov.**; *Phrynomedusini* **nov.**; *Phyllomedusini* Günther, 1858.
***Getendotaxon***: *Cruziohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005.

***Nucleogenus, by present designation***: *Cruziohyla* Faivovich, Haddad, Garcia, Frost, Campbell & Wheeler, 2005. ● ***Etymology of nomen***: P: Carlos Alberto Gonçalves da Cruz (1944–), herpetologist, Brasil; N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Cruziohyl-*.

***Diagnosis***: Medium to large sized frogs; moderate to large distinct tympanum; fingers and toes moderately to extensively webbed; snout in profile sloping or truncate; green dorsum with speckles or spots; barring of various extension on lateral surfaces of flanks; dermal flaps on heel, tarsus or forelimbs and lower jaw; morphological synapomorphies include the extensive hand and foot webbing and the development of tadpoles in water-filled depressions on fallen trees. {Faivovich *et al.* 2005}.

Apognosable by 171 molecular transformations in the DNA sequences of several nuclear, mitochondrial and ribosomal genes. {Faivovich *et al.* 2005; Gray 2018}.

### F.19.36. Tribus *Phrynomedusini* **nov.**

***Getangiotaxon***: *Phyllomedusinae* Günther, 1858.
***Adelphotaxa***: *Agalychnini* **nov.**; *Cruziohylini* **nov.**; *Phyllomedusini* Günther, 1858.
***Getendotaxon***: *Phrynomedusa* Miranda-Ribeiro, 1923.

***Nucleogenus, by present designation***: *Phrynomedusa* Miranda-Ribeiro, 1923. ● ***Etymology of nomen***: G: φρύνη (*phryne*), 'toad'; μέδουσα (*medousa*), name of a Gorgon, from μέδω (*medo*), 'rule over'. ● ***Stem of nomen***: *Phrynomedus-*.

***Diagnosis***: Small treefrogs; iris bicolored with a diffuse horizontal dark stripe; palpebral reticulation absent; dorsum smooth; parotoid glands absent; dorsolateral glands absent; vocal sacs present; nuptial pads keratinised and covering metacarpus and proximal phalanx; webbing absent between finger I and II, reduced between others; flanks, medial and lateral regions of thighs without flash color ornamentation; cloacal opening at upper level of thighs; calcar triangular on tarsus; webbing between toes reduced; U-shaped aponeurosis of *musculus intermandibularis* and *musculus interhyoideus*; posterolateral elements of *musculus intermandibularis* inserting on aponeurosis; posterolateral elements of *musculus intermandibularis* triangular; third ramus of *depressor mandibulae* absent; tadpoles with complete row of marginal papillae in oral disc. {Faivovich *et al.* 2005}.

Apognosable by 171 molecular transformations in the DNA sequences of several nuclear, mitochondrial, and ribosomal genes; diagnostic morphological characters include extensive webbing on the hands and feet, and development of larvae in the cavities of fallen trees. {Faivovich *et al.* 2005; Baêta *et al.* 2016}.

### F.19.37. Tribus *Phyllomedusini* Günther, 1858

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Phyllomedusinae* Günther, 1858.
***Adelphotaxa***: *Agalychnini* **nov.**; *Cruziohylini* **nov.**; *Phrynomedusini* **nov.**
***Getendotaxa***: *Phasmahylina* **nov.**; *Phyllomedusina* Günther, 1858.

### F.20.31. Subtribus *Phasmahylina* **nov.**

***Getangiotaxon***: *Phyllomedusini* Günther, 1858.
***Adelphotaxon***: *Phyllomedusina* Günther, 1858.
***Getendotaxon***: *Phasmahyla* Cruz, 1991.

***Nucleogenus, by present designation***: *Phasmahyla* Cruz, 1991. ● ***Etymology of nomen***: G: φάσμα (*phasma*), 'monster, phantom'; N: *Hyla*, of debated etymology. ● ***Stem of nomen***: *Phasmahyl-*.

***Diagnosis***: Small sized phyllomedusids (SVL 29–46 mm); dorsal skin showing moderate rugosity; arms and legs with bluish rounded spots; ventral parts whitish; slits of vocal sacs absent; two superior branches of squamosal present, about half the length of inferior branch, articulated with posterior branch of pterygoid at level of occipital condyles; quadratojugal present; processus cultriform of parasphenoid truncate and serrated; prevomer poorly developed without teeth; alar processus of premaxillar poorly developed and dorsally directed; parotoid glands absent, but a pair of dorsolateral glands; digital pads rounded, moderate; webbing on hand absent or rudimentary, on feet rudimentary; nuptial pad of males composed of numerous horny granules distributed to antepenultimate phalange of first finger; carpal tubercle developed and oval, subarticular tubercles developed, conical and slightly projected; internal metatarsal tubercle small and oval; presence of a small rounded appendix on tibiotarsal articulation; tibia slim, longer than femur; spawning in rolled or gathered leaves above water surface; tadpoles with mouth in anterodorsal position with a dermal funnel-shaped fold, its surface covered with papillae of different size; one series of keratodonts superior to mouth, two series inferior; tadpoles living in mountain creeks and streams in forested mountains. {Cruz 1991}.

### F.20.32. Subtribus *Phyllomedusina* Günther, 1858

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Phyllomedusini* Günther, 1858.
***Adelphotaxon***: *Phasmahylina* **nov.**
***Getendotaxa***: *Phyllomedusinia* Günther, 1858; *Pithecopodinia* Lutz, 1969.

### F.21.24. Infratribus *Phyllomedusinia* Günther, 1858

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Phyllomedusina* Günther, 1858.
***Adelphotaxon***: *Pithecopodinia* Lutz, 1969.
***Getendotaxon***: *Phyllomedusa* Wagler, 1830.

### F.21.25. Infratribus *Pithecopodinia* Lutz, 1969

***Protonym***: *Pithecopinae* Lutz, 1969: 274 [bF].

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Phyllomedusina* Günther, 1858.
***Adelphotaxon***: *Phyllomedusinia* Günther, 1858.
***Getendotaxa***: *Callimedusa* Duellman, Marion & Hedges, 2016; *Pithecopus* Cope, 1866.

### F.14.07. Superfamilia *Leptodactyloidea* ||Tschudi, 1838||-Werner, 1896

***Protonyms***: ||*Cystignathi* Tschudi, 1838: 25|| [F]; *Leptodactylidae* Werner, 1896: 357 [F].
***Eunym***: Reig 1972: 29.
***Getangiotaxon***: **Hylobatrachia** Ritgen, 1828.
***Adelphotaxa***: *Bufonoidea* Gray, 1825; *Centrolenoidea* Taylor, 1951; *Ceratophryoidea* Tschudi, 1838; *Hyloidea* Rafinesque, 1815-|Gray, 1825|; **1 GIS** (*Ancudia* Philippi, 1902).
***Getendotaxon***: *Leptodactylidae* ||Tschudi, 1838||-Werner, 1896.

***Comments***: The extent of the family *Leptodactylidae* has much changed following the results of recent phylognetic studies. Pyron & Wiens (2011) proposed three subfamilies in this family, the *Leiuperinae*, *Leptodactylinae* and *Paratelmatobiinae*. Here, following our rationale, this branch is recognised as the superfamily *Leptodactyloidea* and includes four subfamilies. The taxon *Leptodactylidae* is referred to the rank family because of the [UQC], whereas the four taxa it contains are recognised as the subfamilies *Leiuperinae*, *Leptodactylinae*, *Paratelmatobiinae* and *Pseudopaludicolinae* on account of the [NTC]. Although we confirm the holophyly of the *Leptodactyloidea*, on the contrary of Grant *et al.* (2017), the relationships between the four main taxa it contains here recognised as subfamilies are not sufficiently supported to allow for a resolved classification.

### F.17.26. Familia *Leptodactylidae* ||Tschudi, 1838||-Werner, 1896

***Eunym***: Werner 1896: 357.
***Getangiotaxon***: *Leptodactyloidea* ||Tschudi, 1838||-Werner, 1896.
***Adelphotaxon***: None.
***Getendotaxa***: *Leiuperinae* Bonaparte, 1850: *Leptodactylinae* ||Tschudi, 1838||-Werner, 1896; *Paratelmatobiinae* Ohler & Dubois, 2012; *Pseudopaludicolinae* Gallardo, 1965.

### F.18.40. Subfamilia *Leiuperinae* Bonaparte, 1850

***Protonym***: *Leiuperina* Bonaparte, 1850: plate [bF].
***Eunym***: Pyron & Wiens 2011: 574.
***Getangiotaxon***: *Leptodactylidae* ||Tschudi, 1838||-Werner, 1896.
***Adelphotaxa***: *Leptodactylinae* ||Tschudi, 1838||-Werner, 1896; *Paratelmatobiinae* Ohler & Dubois, 2012; *Pseudopaludicolinae* Gallardo, 1965.
***Getendotaxa***: *Leiuperini* Bonaparte, 1850; *Paludicolini* Mivart, 1869.

***Comments***: Grant *et al.* (2006) showed *Pleurodema* to be sister-taxon to a taxon grouping *Edalorhina* and *Physalaemus*. In *TREE* and in Lourenço *et al.* (2015), *Pleurodema* is sister-group to all other members of the *Leiuperinae*, and these two groups are recognised here as the tribes *Leiuperini* and *Paludicolini*. In our taxonomy, the latter tribe includes two taxa, the subtribe *Edalorhinina* for *Edalorhina*, sister-group to the *Paludicolina*, including the genera *Engystomops*, *Eupemphix* and *Physalaemus*, of poorly supported relationships. In Lourenço *et al.* (2015), *Edalorhina* appears as sister-genus to *Engystomops*, and together they are sister-group to *Physalaemus* which includes two taxa, their '*Physalaemus signifer* clade', our *Eupemphix*, and their '*Physalaemus cuvieri* clade', our *Physalaemus*. In *TREE*, we do not have enough support for a genus *Physalaemus* including both groups to be recognised as a single taxon, so we validate *Eupemphix*.

## F.19.38. Tribus *Leiuperini* Bonaparte, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Leiuperinae* Bonaparte, 1850.
***Adelphotaxon***: *Paludicolini* Mivart, 1869.
***Getendotaxon***: *Pleurodema* Tschudi, 1838.

## F.19.39. Tribus *Paludicolini* Mivart, 1869

***Protonym***: *Paludicolina* Mivart, 1869: 290 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Leiuperinae* Bonaparte, 1850.
***Adelphotaxon***: *Leiuperini* Bonaparte, 1850.
***Getendotaxa***: *Edalorhinina* **nov.**; *Paludicolina* Mivart, 1869.

## F.20.33. Tribus *Edalorhinina* **nov.**

***Getangiotaxon***: *Paludicolini* Mivart, 1869.
***Adelphotaxon***: *Paludicolina* Mivart, 1869.
***Getendotaxon***: *Edalorhina* Jiménez de la Espada, 1870.

***Nucleogenus, by present designation***: *Edalorhina* Jiménez de la Espada, 1870. ● ***Etymology of nomen***: G: οἰδᾰλέος (*oidaleos*), 'swollen'; ρίς (*rhis*), 'nose'. ● ***Stem of nomen***: *Edalorhin-*.

***Diagnosis***: South American foam-nesting frogs diagnosable by macroglands present, flash coloration on the thighs, eggs laid in a foam nest during amplexus, spiky dermal projections over the eye, and diploid karyotype 2 n = 22. {Lourenco *et al.* 2000; Faivovich *et al.* 2012}.

## F.20.34. Tribus *Paludicolina* Mivart, 1869

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Paludicolini* Mivart, 1869.
***Adelphotaxon***: *Edalorhinina* **nov.**
***Getendotaxa***: *Engystomops* Jiménez de la Espada, 1872; *Eupemphix* Steindachner, 1863; *Physalaemus* Fitzinger, 1826.

## F.18.41. Subfamilia *Leptodactylinae* ||Tschudi, 1838||-Werner, 1896

***Eunym***: Metcalf 1926: 272.
***Getangiotaxon***: *Leptodactylidae* ||Tschudi, 1838||-Werner, 1896.
***Adelphotaxa***: *Leiuperinae* Bonaparte, 1850; *Paratelmatobiinae* Ohler & Dubois, 2012; *Pseudopaludicolinae* Gallardo, 1965.
***Getendotaxa***: *Adenomerini* Hoffmann, 1878; *Leptodactylini* ||Tschudi, 1838||-Werner, 1896.

## F.19.40. Tribus *Adenomerini* Hoffmann, 1878

***Protonym***: *Adenomeridae* Hoffmann, 1878: 613 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Leptodactylinae* ||Tschudi, 1838||-Werner, 1896.
***Adelphotaxon***: *Leptodactylini* ||Tschudi, 1838||-Werner, 1896.
***Getendotaxa***: *Adenomera* Steindachner, 1867; *Lithodytes* Fitzinger, 1843.

### F.19.41. Tribus *Leptodactylini* ||Tschudi, 1838||-Werner, 1896

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Leptodactylinae* ||Tschudi, 1838||-Werner, 1896.
***Adelphotaxon***: *Adenomerini* Hoffmann, 1878.
***Getendotaxon***: *Leptodactylus* Fitzinger, 1826.

### F.18.42. Subfamilia *Paratelmatobiinae* Ohler & Dubois, 2012

***Protonym and eunym***: *Paratelmatobiinae* Ohler & Dubois, 2012: 613 [bF].
***Getangiotaxon***: *Leptodactylidae* ||Tschudi, 1838||-Werner, 1896.
***Adelphotaxa***: *Leiuperinae* Bonaparte, 1850; *Leptodactylinae* ||Tschudi, 1838||-Werner, 1896; *Pseudopaludicolinae* Gallardo, 1965.
***Getendotaxa***: *Crossodactylodes* Cochran, 1938; *Rupirana* Heyer, 1999.

### F.18.43. Subfamilia *Pseudopaludicolinae* Gallardo, 1965

***Protonym and eunym***: *Pseudopaludicolinae* Gallardo, 1965: 84 [bF].
***Getangiotaxon***: *Leptodactylidae* ||Tschudi, 1838||-Werner, 1896.
***Adelphotaxa***: *Leiuperinae* Bonaparte, 1850; *Leptodactylinae* ||Tschudi, 1838||-Werner, 1896; *Paratelmatobiinae* Ohler & Dubois, 2012.
***Getendotaxon***: *Pseudopaludicola* Miranda-Ribeiro, 1926.

***Comments***: *Pseudopaludicola* was included by Grant *et al.* (2006) in the family *Leiuperidae*, whereas in Lourenço *et al.* (2015) it was outgroup to a branch including *Leptodactylus* and the genera here included in the *Leiuperinae*. Pyron & Wiens (2011) found *Pseudopaludicola* being sister-taxon to all other species of their *Leiuperinae*, although with rather feeble support. In *TREE*, we did not find sufficient support to confirm the holophyly of a group including the *Leiuperinae* and the *Pseudopaludicolinae*. Therefore, following the [STC], the group corresponding to the genus *Pseudopaludicola* is recognised at the subfamily rank pending further results concerning the relationships within the *Leptodactylidae*.

### C.11.02. Subphalanx **Diplosiphona** Günther, 1859

***Protonym***: **Diplosiphona** Günther, 1859: vii, 3 [Sr].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Phaneranura nov.**
***Adelphotaxon***: **Bainanura nov.**
***Getendotaxa***: *Calyptocephalellidae* Reig, 1960; *Myobatrachidae* Schlegel, 1850.

***Comments***: The subphalanx **Diplosiphona** is sister-taxon of the **Bainanura** and includes two family rank taxa, the *Calyptocephalellidae*, for the South American genera *Calyptocephalella* and *Telmatobufo*, and the *Myobatrachidae*, an Australian and New Guinean group. This relationship was first obtained by San Mauro *et al.* (2005) and then confirmed by Frost *et al.* (2006) and Pyron & Wiens (2011). This group named *Myobatrachidae* is attributed to the family rank because of the [UQC] and consequently its sister-group *Calyptocephalellidae* is attributed the same rank following the [STC].

### F.17.27. Familia *Calyptocephalellidae* Reig, 1960

***Protonym***: *Calyptocephalellinae* Reig, 1960: 113 [bF].
***Eunym***: Bossuyt & Roelants 2009: 359.
***Getangiotaxon***: **Diplosiphona** Günther, 1859.
***Adelphotaxon***: *Myobatrachidae* Schlegel, 1850.
***Getendotaxa***: *Calyptocephalella* Strand, 1928; *Telmatobufo* Schmidt, 1952.

## F.17.28. Familia *Myobatrachidae* Schlegel, 1850

***Protonym and eunym***: *Myobatrachidae* Schlegel, 1850: 10 [F].
***Getangiotaxon***: **Diplosiphona** Günther, 1859.
***Adelphotaxon***: *Calyptocephalellidae* Reig, 1960.
***Getendotaxa***: *Limnodynastinae* Lynch, 1971; *Mixophyinae* **nov.**; *Myobatrachinae* Schlegel, 1850; *Rheobatrachinae* Heyer & Liem, 1976; **1 G†**.

***Comments***: This family includes four taxa of insufficiently supported relationships, the subfamilies *Limnodynastinae* and *Myobatrachinae*, discussed in detail below, and the subfamilies *Mixophyinae*, for the genus *Mixophyes*, and *Rheobatrachinae*, for the genus *Rheobatrachus*. In recent classifications, this family was attributed the rank superfamily and thus the subfamilies below were recognised at the family rank, but this does not follow the rationale applied here throughout. Frost *et al*. (2006) recovered *Mixophyes* as sister-group to *Rheobatrachus* and included this genus in their *Myobatrachidae*, whereas Bossuyt & Roelants (2009) recognised three family rank taxa *Limnodynastidae*, *Myobatrachidae* and *Rheobatrachidae*. In Pyron & Wiens (2011), *Rheobatrachus* was sister-group to all other *Myobatrachinae*, and *Mixophyes* sister-group to all *Myobatrachinae* except *Rheobatrachus*, but these relationships had rather low support, resulting in fact in relationships similar to *TREE*.

## F.18.44. Subfamilia *Limnodynastinae* Lynch, 1971

***Protonym***: *Limnodynastini* Lynch, 1971: 83 [T].
***Eunym***: Heyer & Liem 1976: 5.
***Getangiotaxon***: *Myobatrachidae* Schlegel, 1850.
***Adelphotaxa***: *Mixophyinae* **nov.**; *Myobatrachinae* Schlegel, 1850; *Rheobatrachinae* Heyer & Liem, 1976; **1 G†**.
***Getendotaxa***: *Limnodynastini* Lynch, 1971; *Notadenini* **nov.**

***Comments***: Within this subfamily two tribes are recognised, the *Notadenini* for *Notaden*, sister-group to the *Limnodynastini*. The latter tribe includes four subtribes of unresolved relationships: *Heleioporina* for *Heleioporus*, *Limnodynastina* for *Adelotus*, *Limnodynastes* and *Philoria*, *Neobatrachina* for *Neobatrachus*, and *Platyplectrina* for *Platyplectrum*. As *Lechriodus melanopyga*, the onomatophore of *Lechriodus* Boulenger, 1882, and *L. fletcheri* render *Platyplectrum* paraphyletic, *Lechriodus* is here considered a subjective junior synonym of *Platyplectrum* Günther, 1863.

## F.19.42. Tribus *Limnodynastini* Lynch, 1971

***Eunym***: Lynch 1971: 83.
***Getangiotaxon***: *Limnodynastinae* Lynch, 1971.
***Adelphotaxon***: *Notadenini* **nov.**
***Getendotaxa***: *Heleioporina* Bauer, 1987; *Limnodynastina* Lynch, 1971; *Neobatrachina* **nov.**; *Platyplectrina* **nov.**

## F.20.35. Subtribus *Heleioporina* Bauer, 1987

***Protonym***: *Heleioporidae* Bauer, 1987: 52 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Limnodynastini* Lynch, 1971.
***Adelphotaxa***: *Limnodynastina* Lynch, 1971; *Neobatrachina* **nov.**; *Platyplectrina* **nov.**
***Getendotaxon***: *Heleioporus* Gray, 1841.

## F.20.36. Subtribus *Limnodynastina* Lynch, 1971

***Eunym***: *Hoc loco*.

***Getangiotaxon***: LIMNODYNASTINI Lynch, 1971.
***Adelphotaxa***: HELEIOPORINA Bauer, 1987; NEOBATRACHINA **nov.**; PLATYPLECTRINA **nov.**
***Getendotaxa***: *Adelotus* Ogilby, 1907; *Limnodynastes* Fitzinger, 1843; *Philoria* Spencer, 1901.

## F.20.37. Subtribus *NEOBATRACHINA* **nov.**

***Getangiotaxon***: LIMNODYNASTINI Lynch, 1971.
***Adelphotaxa***: HELEIOPORINA Bauer, 1987; LIMNODYNASTINA Lynch, 1971; PLATYPLECTRINA **nov.**
***Getendotaxon***: *Neobatrachus* Peters, 1863.

***Nucleogenus, by present designation***: *Neobatrachus* Peters, 1863. ● ***Etymology of nomen***: G: νέος (*neos*), 'new'; βάτραχος (*batrachos*), 'frog'. ● ***Stem of nomen***: *Neobatrach-*.

***Diagnosis***: Small sized, heavy bodied frogs, diagnosable by fusion of cervical and second vertebrae; minute omosternum; toothed maxillary arch, teeth blunt and pedicellate; long alary processes of premaxillae directed posterodorsally, relatively wide at base; palatal shelf of premaxilla narrow, palatal process long; facial lobe of maxilla deep, not exostosed; palatal shelf of maxilla narrow, no pterygoid process; nasals small and separated medially; nasals in contact with maxillae, not pterygoids; nasals not in contact with frontoparietals; frontoparietal fontanelle medium sized; frontoparietals not ornamented; epiotic eminences prominent; cristae paroticae long and narrow; carotid artery lying in a deep groove, exposed dorsally; zygomatic ramus of squamosal minute; otic ramus of squamosal very small, developed medially into a small otic plate; squamosal-maxillary angle 50–55°; prevomers of moderate size, entire, toothed, narrowly separated medially; palatines thin and widely separated medially; sphenethmoid entire, extending anteriorly beneath nasals; anterior ramus of parasphenoid narrow, weakly keeled; parasphenoid alae oriented at right angles to anterior ramus, narrowly overlapped laterally by median rami of pterygoids; pterygoids relatively large, anterior rami in long contact with maxillae, not reaching palatines; occipital condyles relatively small, not stalked, narrowly separated medially; mandible lacking odontoids; *m. depressor mandibulae* in two slips; pupil vertical; males with median subgular vocal sac; nuptial pad (callosities) on thumb and second finger; lacking glands on body; tongue large, round, free behind; toes one-fourth to fully webbed, outer metatarsal tubercle absent, inner metatarsal tubercle spade-like, tips of digits narrow, first finger longer than second; larvae with dextral vent, 3/3 tooth rows, labial papillae interrupted anteriorly; amplexus inguinal; eggs deposited in long strings in slow moving streams and temporary ponds; adult SVL < 50 mm; and tympanum indistinct externally, concealed beneath skin. {Lynch 1971}.

## F.20.38. Subtribus *PLATYPLECTRINA* **nov.**

***Getangiotaxon***: LIMNODYNASTINI Lynch, 1971.
***Adelphotaxa***: HELEIOPORINA Bauer, 1987; LIMNODYNASTINA Lynch, 1971; NEOBATRACHINA **nov.**
***Getendotaxon***: *Platyplectrum* Günther, 1863.

***Nucleogenus, by present designation***: *Platyplectrum* Günther, 1863. ● ***Etymology of nomen***: G: πλατύς (*platys*), 'flat'; πλῆκτρον (*plectron*), 'spur'. ● ***Stem of nomen***: *Platyplectr-*.

***Diagnosis***: Medium sized, heavy-bodied frogs, apognosable by numerous molecular synapomorphies (Frost *et al.* 2006) and cervical and second vertebrae free; omosternum present, moderate sized; toothed maxillary arch, teeth blunt and pedicellate; alary processes of premaxillae directed posterodorsally, wide at base; palatal shelf of premaxilla moderate in width and deeply incised; facial lobe of maxilla deep, not exostosed; palatal shelf of maxilla relatively narrow, small pterygoid process; nasals moderate sized, apparently in median contact; nasals in contact with maxillae, not with pterygoids; nasals not in contact with frontoparietals; frontoparietal fontanelle lacking; frontoparietals not ornamented; epiotic eminences poorly defined; cristae paroticae long and relatively broad; carotid artery enclosed in long, roofed, bony canal; zygomatic ramus of squamosal slightly shorter than otic ramus; otic ramus of squamosal of moderate length, expanded medially into small otic plate; squamosal-maxillary angle about 50°; prevomers entire, toothed, large, dentigerous rami in tenuous median contact; palatines large, narrowly separated medially; sphenethmoid entire, extending anteriorly beneath posterior edge of nasals; anterior ramus of parasphenoid narrow, not keeled; parasphenoid alae oriented at right angles to anterior ramus, overlapped laterally by median rami of pterygoids; pterygoids relatively large, anterior rami in long contact with maxillae, nearly reaching palatines; occipital condyles moderately large, not stalked, narrowly separated medially; mandible lacking odontoids; *m. depressor mandibulae* in two slips; horizontal pupils; males with median subgular vocal sac; nuptial asperities of many small spines on thumb; body lacking glands; tongue round, posterior edge free; toes lack webbing, outer metatarsal tubercle absent, digital tips narrow, first finger as long as second; larvae with dextral vent, 2/3 tooth rows, labial papillae broadly interrupted anteriorly; amplexus inguinal; eggs laids in foam nest in temporary ponds and puddles; and tympanum visible externally. {Lynch 1971}.

### F.19.43. Tribus *Notadenini* **nov.**

***Getangiotaxon***: *Limnodynastinae* Lynch, 1971.
***Adelphotaxon***: *Limnodynastini* Lynch, 1971.
***Getendotaxon***: *Notaden* Günther, 1873.

***Nucleogenus, by present designation***: *Notaden* Günther, 1873. ● ***Etymology of nomen***: G: νῶτος (*notos*), 'back'; ἀδέν (*aden*), 'gland'. ● ***Stem of nomen***: *Notaden-*.

***Diagnosis***: Small sized, heavy bodied frogs, diagnosable by inguinal amplexus; lack of foam nesting; cervical and second vertebrae fused; omosternum absent; maxillary arch edentate; alary processes of premaxillae elongate, directed dorsally, narrow at base; palatal shelf of premaxilla narrow, palatal process relatively short; facial lobe of maxilla shallow; palatal shelf of maxilla absent; incomplete maxillary arch, maxilla not contacting quadratojugal or premaxilla, quadratojugal present; nasals small and separated medially; nasals not in contact with maxillae or pterygoids; nasals barely in contact with frontoparietals; large frontoparietal fontanelle; frontoparietals not ornamented; epiotic eminences prominent; cristae paroticae short, stocky; carotid artery lies in a shallow groove exposed dorsally; zygomatic and otic rami of squamosal lacking; squamosal-maxillary angle ~ 80°; prevomers moderately large, entire, toothed, separated medially; palatines reduced in size, not contacting maxillae and widely separated medially; sphenethmoid entire, small, not extending anteriorly to nasals; anterior ramus of parasphenoid broad, short, not keeled; parasphenoid alae oriented at right angles to anterior ramus, not overlapped laterally by median rami of pterygoids; pterygoids small, anterior rami in long contact with maxillae, usually contacting palatines; occipital condyles large, not stalked, narrowly separated medially; mandible lacking odontoids; *m. depressor mandibulae* in two slips; pupil horizontal; males with median subgular vocal sac; nuptial pad on thumb; at least two ill-defined glands on dorsum, less discrete but more extensive than in *Heleioporus*; tongue large, round, not free behind; toes one-half to two-thirds webbed, outer metatarsal tubercle absent, inner metatarsal tubercle spade-like, tips of digits narrow, first finger as long as second; larvae with median vent, 3/3 tooth rows, labial papillae interrupted anteriorly; and tympanum concealed. {Lynch, 1971; Frost *et al.* 2006}.

### F.18.45. Subfamilia *Mixophyinae* **nov.**

***Getangiotaxon***: *Myobatrachidae* Schlegel, 1850.
***Adelphotaxa***: *Limnodynastinae* Lynch, 1971; *Myobatrachinae* Schlegel, 1850; *Rheobatrachinae* Heyer & Liem, 1976; **1 G†**.
***Getendotaxon***: *Mixophyes* Günther, 1864.

***Nucleogenus, by present designation***: *Mixophyes* Günther, 1864. ● ***Etymology of nomen***: G: μίλα (*miga*), 'mixed'; φυή (*phye*), 'stature, shape'. ● ***Stem of nomen***: *Mixophy-*.

***Diagnosis***: Medium sized, heavy bodied frogs, diagnosable by cervical and second vertebrae free; omosternum present and relatively large; maxillary arch toothed, teeth blunt and pedicellate; alary processes of premaxillae directed posterodorsally, broad at base; palatal shelf of premaxilla narrow, palatal process elongate; facial lobe of maxilla deep with a slight squamosal process, not exostosed; palatal shelf of maxilla very narrow, no pterygoid process; nasals large, in median contact anteriorly, separated posteriorly, exposing sphenethmoid; nasals in contact with maxillae, not in contact with pterygoids; nasals in tenuous contact with frontoparietals; frontoparietal fontanelle absent; frontoparietals not ornamented; epiotic eminences prominent; cristae paroticae long and narrow; carotid artery enclosed in a complete bony canal; zygomatic ramus of squamosal elongate, tendon contacting squamosal process of maxilla; otic ramus of squamosal long, developed medially into otic plate; squamosal-maxillary angle ~ 5–50°; prevomers small, entire, toothed, separated medially; palatines thin, separated medially, bearing odontoid ridges; sphenethmoid entire, extending anteriorly to anterior edge of nasals; anterior ramus of parasphenoid narrow, not keeled; parasphenoid alae deflected posteriorly, overlapped laterally by median rami of pterygoids; pterygoids large, anterior rami in long contact with maxillae, nearly reaching palatines and nasals; occipital condyles moderate sized, not stalked, separated medially; mandible lacking odontoids; *m. depressor mandibulae* in two slips; vertical pupils; males with median subgular vocal sac, nuptial asperities on thumb; lacking glands on dorsum; tongue large, rounded, only posterior edge free; toes two-thirds webbed, outer metatarsal tubercle absent, inner metatarsal tubercle not spade-like, tips of digits narrow; larvae with dextral vent, 6/3 tooth rows, labial papillae not interrupted anteriorly; inguinal amplexus; eggs laid in terrestrial situations and hatch upon flooding; males and females ~ 50–100mm SVL as adults; and tympanum visible externally. {Lynch, 1971; Frost *et al.* 2006}.

## F.18.46. Subfamilia *Myobatrachinae* Schlegel, 1850

***Eunym***: Parker 1940: 2.
***Getangiotaxon***: *Myobatrachidae* Schlegel, 1850.
***Adelphotaxa***: *Limnodynastinae* Lynch, 1971; *Mixophyinae* **nov.**; *Rheobatrachinae* Heyer & Liem, 1976; **1 G†**.
***Getendotaxa***: *Myobatrachini* Schlegel, 1850; *Taudactylini* **nov.**

***Comments***: The branch recognised as the tribe *Taudactylini*, corresponding to the genus *Taudactylus*, is sister-group to all other *Myobatrachinae*, forming the tribe *Myobatrachini*. Within this tribe we recognise the subtribes *Criniina* and *Myobatrachina*. Within the subtribe *Criniina*, the genus *Crinia*, within the infratribe *Criniinia*, is sister-group of the *Assinia*. The later infratribe hold two sister-groups here treated as hypotribes, *Assinoa* for *Assa* and *Geocrinia*, and *Paracriniinoa* for *Paracrinia*. The subtribe *Myobatrachina* includes three infratribes of unresolved relationships, the *Myobatrachinia*, the *Spicospininia*, for the genus *Spicospina*, and the *Uperoleiinia*, for the genus *Uperoleia*. In the *Myobatrachinia*, the genus *Pseudophryne*, in the hypotribe *Pseudophryninoa*, is sister-group to the other genera (*Arenophryne*, *Metacrinia* and *Myobatrachus*) placed in the *Myobatrachinoa*. The *Assinoa* (*Assa* and *Geocrinia*) and *Paracrinia* form a holophyletic group in Pyron & Wiens (2011), corresponding to our *Assinia*. The other relationships of Pyron & Wiens (2011) are not recognised here formally, as in *TREE* they do not have sufficient support according to our Criteria.

## F.19.44. Tribus *Myobatrachini* Schlegel, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Myobatrachinae* Schlegel, 1850.
***Adelphotaxon***: *Taudactylini* **nov.**
***Getendotaxa***: *Criniina* Cope, 1866; *Myobatrachina* Schlegel, 1850.

## F.20.39. Subtribus *Criniina* Cope, 1866

***Protonym***: *Criniae* Cope, 1866: 89 [Gr].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Myobatrachini* Schlegel, 1850.

***Adelphotaxon***: *Myobatrachina* Schlegel, 1850.
***Getendotaxa***: *Assinia* **nov.**; *Criniinia* Cope, 1866.

### F.21.26. Infratribus *Assinia* **nov.**

***Getangiotaxon***: *Criniina* Cope, 1866.
***Adelphotaxon***: *Criniinia* Cope, 1866.
***Getendotaxa***: *Assinoa* **nov.**; *Paracriniinoa* **nov.**

***Nucleogenus, by present designation***: *Assa* Tyler, 1972. ● ***Etymology of nomen***: L: *assa*, 'dry-nurse', referring to the breeding behaviour of the species, carrying the young but not feeding them. ● ***Stem of nomen***: *Ass-*.

***Diagnosis***: Small, heavy bodied frogs, diagnosable by outer metatarsal tubercle small and not compressed and prevomerine bones small but complete (*Paracrinia*); or outer metatarsal tubercle absent (*Assa, Geocrinia*); prevomerine teeth usually missing (*Assa*); prevomerine bones small but complete, prevomerine teeth present, skin of venter smooth, toe fringes absent; eggs laid out of water; larvae entering water after early development in *Geocrinia.* {Lynch, 1971; Frost *et al.* 2006}.

### F.22.15. Hypotribus *Assinoa* **nov.**

***Getangiotaxon***: *Assinia* **nov.**
***Adelphotaxon***: *Paracriniinoa* **nov.**
***Getendotaxa***: *Assa* Tyler, 1972; *Geocrinia* Blake, 1973.

### F.22.16. Hypotribus *Paracriniinoa* **nov.**

***Getangiotaxon***: *Assinia* **nov.**
***Adelphotaxon***: *Assinoa* **nov.**
***Getendotaxon***: *Paracrinia* Heyer & Liem, 1976.

***Nucleogenus, by present designation***: *Paracrinia* Heyer & Liem, 1976. ● ***Etymology of nomen***: G: πᾰρά (*para*), 'near', beside; κρίνω (*krino*), 'to separate'; referring to the unwebbed digits. ● ***Stem of nomen***: *Paracrin-*.

***Diagnosis***: Small, heavy-bodied frogs, diagnosable by outer metatarsal tubercle small and not compressed and prevomerine bones small but complete. {Lynch 1971; Frost *et al.* 2006}.

### F.21.27. Infratribus *Criniinia* Cope, 1866

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Criniina* Cope, 1866.
***Adelphotaxon***: *Assinia* **nov.**
***Getendotaxon***: *Crinia* Tschudi, 1838.

### F.20.40. Subtribus *Myobatrachina* Schlegel, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Myobatrachini* Schlegel, 1850.
***Adelphotaxon***: *Criniina* Cope, 1866.
***Getendotaxa***: *Myobatrachinia* Schlegel, 1850; *Spicospininia* **nov.**; *Uperoleiinia* Günther 1858.

## F.21.28. Infratribus *Myobatrachinia* Schlegel, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Myobatrachina* Schlegel, 1850.
***Adelphotaxa***: *Spicospininia* **nov.**; *Uperoleiinia* Günther 1858.
***Getendotaxa***: *Myobatrachinoa* Schlegel, 1850; *Pseudophryninoa* Bauer, 1987.

## F.22.17. Hypotribus *Myobatrachinoa* Schlegel, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Myobatrachinia* Schlegel, 1850.
***Adelphotaxon***: *Pseudophryninoa* Bauer, 1987.
***Getendotaxa***: *Arenophryne* Tyler, 1976; *Metacrinia* Parker, 1940; *Myobatrachus* Schlegel, 1850.

## F.22.18. Hypotribus *Pseudophryninoa* Bauer, 1987

***Protonym***: *Pseudophrynoidea* Bauer, 1987: 51 [pF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Myobatrachinia* Schlegel, 1850.
***Adelphotaxon***: *Myobatrachinoa* Schlegel, 1850.
***Getendotaxon***: *Pseudophryne* Fitzinger, 1843.

## F.21.29. Infratribus *Spicospininia* **nov.**

***Getangiotaxon***: *Myobatrachina* Schlegel, 1850.
***Adelphotaxa***: *Myobatrachinia* Schlegel, 1850; *Uperoleiinia* Günther 1858.
***Getendotaxon***: *Spicospina* Roberts, Horwitz, Wardell-Johnson, Maxson & Mahony, 1997.

***Nucleogenus, by present designation***: *Spicospina* Roberts, Horwitz, Wardell-Johnson, Maxson & Mahony, 1997. ● ***Etymology of nomen***: L: *spicus*, 'spike'; *spina*, 'vertebra'; referring to the spines on the posterior margins and the transverse process of the vertebrae. ● ***Stem of nomen***: *Spicospin*-.

***Diagnosis***: Small, heavy bodied frogs, diagnosable by pectoral girdle arciferal; alary process of hyoid plate broad; cricoid cartilage divided ventrally; eight amphicoelous, non-imbricate, presacral vertebrae; *M. intermandibularis* not underlying the *M. submentalis*; prevomer absent; sphenethmoid complete, ossified; cervical cotyles widely separated; moderately broad sacral diapophyses; tympanum and columella present; all presacral vertebrae with a shallow dorsal keel-more marked on first three; small irregular spines on posterior, dorsal margin of first four vertebrae; third pre-sacral vertebra with flat, broad, triangular, arrow-head shaped spine directed upwards and backward on proximal, dorsal, posterior margin of both transverse processes; xiphisternum large, ossified centrally in an arrow-head shape; massive parotoid glands; ventral skin smooth; knobbed terminal phalanges; dentate maxillary arch; maxillary teeth pedicellate; anterior corn of hyoid with inward directed hook on anterior margin; nasals narrow, small and widely separated; toes and fingers free, no fringe or web; phalangeal formula of hand 2-2-3-3; phalangeal formula of foot 2-2-3-4-3; amplexus inguinal; eggs deposited singly in water. {Roberts *et al.* 1997}.

## F.21.30. Infratribus *Uperoleiinia* Günther 1858

***Protonym***: *Uperoliidae* Günther 1858: 346 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Myobatrachina* Schlegel, 1850.
***Adelphotaxa***: *Myobatrachinia* Schlegel, 1850; *Spicospininia* **nov.**
***Getendotaxon***: *Uperoleia* Gray, 1841.

## F.19.45. Tribus *Taudactylini* **nov.**

***Getangiotaxon***: *Myobatrachinae* Schlegel, 1850.
***Adelphotaxon***: *Myobatrachini* Schlegel, 1850.
***Getendotaxon***: *Taudactylus* Straughan & Lee, 1966.

***Nucleogenus, by present designation***: *Taudactylus* Straughan & Lee, 1966. ● ***Etymology of nomen***: G: ταῦ (*tau*), 'the letter T'; δάκτυλος (*dactulos*), 'digit, finger, toe'. ● ***Stem of nomen***: *Taudactyl*-.

***Diagnosis***: Small, heavy-bodied frogs; omosternum absent; maxillary arch toothed, teeth blunt and pedicellate; alary processes of premaxillae directed very slightly posterodorsally, narrow at base; palatal shelf of premaxilla relatively broad laterally, narrow medially, bearing greatly elongated palatal process; facial lobe of maxilla shallow; palatal shelf of maxilla of moderate width, narrowing posteriorly, pterygoid process minute; quadratojugal shallow, long and thin; nasals very small, widely separated medially; nasals not in contact with maxillae or pterygoids; nasals not in contact with frontoparietals; frontoparietal fontanelle present, small and narrow; frontoparietals not ornamented; epiotic eminences obsolete; cristae paroticae short, stocky; carotid artery passing dorsal to skull bones; zygomatic ramus of squamosal short, thin, about one-third length of otic ramus, therefore proportionately longer than zygomatic rami of other myobatrachines; otic ramus of squamosal long, not expanded medially into otic plate; squamosal-maxillary angle ~ 55°; columella present; prevomers minute, fragmented, dentigerous rami absent, restricted to medial edges of choanae; palatines narrow, widely separated medially; sphenethmoid divided; anterior ramus of parasphenoid long, narrow, reaching level of palatines, not keeled; parasphenoid alae short, deflected posteriorly, not overlapped by median rami of pterygoids; pterygoids comparatively large, anterior rami in short contact with maxillae, not reaching palatines; occipital condyles small, stalked, widely separated medially; terminal phalanges T-shaped; *m. depressor mandibulae* in two slips; pupil horizontal; males with median, subgular vocal sac; diffuse nuptial pad on thumb; body lacking glands; tongue long, narrow, posterior edge free; toes not webbed, bearing distinct lateral fringes, outer metatarsal tubercle absent; and tympanum concealed. {Lynch 1971}.

## F.18.47. Subfamilia *Rheobatrachinae* Heyer & Liem, 1976

***Protonym and eunym***: *Rheobatrachinae* Heyer & Liem, 1976: 11 [bF].
***Getangiotaxon***: *Myobatrachidae* Schlegel, 1850.
***Adelphotaxa***: *Limnodynastinae* Lynch, 1971; *Mixophyinae* **nov.**; *Myobatrachinae* Schlegel, 1850; **1 G†**.
***Getendotaxon***: *Rheobatrachus* Liem, 1973.

## C.10.03. Phalanx **Scoptanura** Starrett, 1973

***Protonym***: **Scoptanura** Starrett, 1973: 251 [UC].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Aquipares** Blainville, 1816.
***Adelphotaxa***: **Gondwanura nov.**; **Phaneranura nov.**
***Getendotaxa***: **Ecostata** Lataste, 1879; **Gastrechmia** Cope, 1867; **Pananura nov.**; **1 G†**.

***Comments***: The phalanx **Scoptanura** is one of the three branches in the **Aquipares**, sister-group to the **Gondwanura** and **Phaneranura**. For this taxon, that is recognised in all phylogenetic analyses, the superfamilial nomen *Ranoidea* was used by Ford & Cannatella (1993), Darst & Cannatella (2004), Pyron & Wiens (2011), Zhang *et al.* (2013) and Feng *et al.* (2017), whereas Frost *et al.* (2006), Bossuyt & Roelants (2009) and Irisarri *et al.* (2012) used the ectonym «Ranoides». It includes three taxa, here treated as the subphalanges **Ecostata**, **Gastrechmia** and **Pananura**, as the relationship between **Ecostata** and **Gastrechmia** has only a SHL-aLRT value of 70, thus below the set threshold.

## C.11.03. Subphalanx **Ecostata** Lataste, 1879

***Protonym***: **Ecostati** Lataste, 1879: 339 [‘bT’].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Scoptanura** Starrett, 1973.
***Adelphotaxa***: **Gastrechmia** Cope, 1867; **Pananura nov.**; **1 G†**.
***Getendotaxa***: *Microhylidae* ||Fitzinger, 1843||-Noble, 1931; *Phrynomeridae* Noble, 1931.

***Comments***: The highly supported branch **Ecostata** groups the *Microhylidae* and the *Phrynomeridae*. It would be named *Microhyloidea* if the use of the superfamily level was warranted, which is not the case here as it would be redundant with the subphalanx. It was recovered by Bossuyt & Roelants (2009), Pyron & Wiens (2011) and Feng *et al.* (2017), and named *Microhyloidea* or *Microhylidae*, depending if *Phrynomeridae* was recognised at the family level, or as subfamily within the *Microhylidae*. Here we refer both taxa to the rank family level as *Microhylidae* is imposed at this rank by the [UQC], and *Phrynomeridae* has to be at the same rank according to the [STC].

## F.17.29. Familia *Microhylidae* ||Fitzinger, 1843||-Noble, 1931

***Protonyms***: ||*Gastrophrynae* Fitzinger, 1843: 33|| [F]; *Microhylinae* Noble, 1931: 451 [bF].
***Eunym***: Parker 1934: i.
***Getangiotaxon***: **Ecostata** Lataste, 1879.
***Adelphotaxon***: *Phrynomeridae* Noble, 1931.
***Getendotaxa***: *Adelastinae* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler, 2016; *Asterophryinae* Günther, 1858; *Cophylinae* Cope, 1889; *Gastrophryninae* Fitzinger, 1843; *Hoplophryninae* Noble, 1931; *Kalophryninae* Mivart, 1869; *Melanobatrachinae* Noble, 1931; *Microhylinae* ||Fitzinger, 1843||-Noble, 1931; *Otophryninae* Wassersug & Pyburn, 1987.

***Comments***: In *TREE*, the relationships within this family are poorly resolved, resulting in the recognition of nine subfamily rank taxa: the *Adelastinae* for *Adelastes*; the *Hoplophryninae* for *Hoplophryne* and *Parhoplophryne*; the *Kalophryninae* for *Kalophrynus*; the *Melanobatrachinae* for *Melanobatrachus*; the *Otophryninae* for *Otophryne* and *Synapturanus*; and the *Asterophryinae*, the *Cophylinae*, the *Gastrophryninae* and the *Microhylinae*, discussed in more details below.

Similar subfamilial classifications were proposed by most authors (Frost *et al.* 2006, Van der Meijden *et al.* 2007, Pyron & Wiens 2011, Kurabayashi *et al.* 2011, Sá *et al.* 2012, Frazão *et al.* 2015, Feng *et al.* 2017). However, Bossuyt & Roelants (2009) recognised these groups at the family level, which was not followed later. Peloso *et al.* (2016) found *Chaperina* as sister-group to all other *Microhylidae* and thus recognised a new subfamily for this taxon. In Tu *et al.* (2018), *Chaperina* was downgraded to the status of a genus within the subfamily *Microhylinae*. Here we recognise for this genus a subtribe within the *Microhylinae*. In *TREE*, we found *Phrynomantis* as sister-group to all other *Microhylidae*, so that we recognised this taxon as the family *Phrynomeridae*. This position was found by Kurabayashi *et al.* (2011) and Tu *et al.* (2018) but in other phylogenies *Phrynomantis* was within the *Microhylidae* in various positions. Van der Meijden *et al.* (2007) and Matsui *et al.* (2011) recovered it as sister-group to the *Gastrophryninae*, whereas it was within a taxon grouping *Kalophryninae* and *Otophryninae* in the tree of Sá *et al.* (2012), and Peloso *et al.* (2016) found it sister-group to the *Melanobatrachinae*.

## F.18.48. Subfamilia *Adelastinae* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler, 2016

***Protonym and eunym***: *Adelastinae* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler, 2016: 131 [bF].
***Getangiotaxon***: *Microhylidae* ||Fitzinger, 1843||-Noble, 1931.
***Adelphotaxa***: *Asterophryinae* Günther, 1858; *Cophylinae* Cope, 1889; *Gastrophryninae* Fitzinger, 1843; *Hoplophryninae* Noble, 1931; *Kalophryninae* Mivart, 1869; *Melanobatrachinae* Noble, 1931; *Microhylinae* ||Fitzinger, 1843||-Noble, 1931; *Otophryninae* Wassersug & Pyburn, 1987.
***Getendotaxon***: *Adelastes* Zweifel, 1986.

## F.18.49. Subfamilia *Asterophryinae* Günther, 1858

***Protonym***: *Asterophrydidae* Günther, 1858: 346 [F].
***Eunym***: Fejérváry 1923: 181.
***Getangiotaxon***: *Microhylidae* ||Fitzinger, 1843||-Noble, 1931.
***Adelphotaxa***: *Adelastinae* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler, 2016; *Cophylinae* Cope, 1889; *Gastrophryninae* Fitzinger, 1843; *Hoplophryninae* Noble, 1931; *Kalophryninae* Mivart, 1869; *Melanobatrachinae* Noble, 1931; *Microhylinae* ||Fitzinger, 1843||-Noble, 1931; *Otophryninae* Wassersug & Pyburn, 1987.
***Getendotaxa***: *Asterophryini* Günther, 1858; *Gastrophrynoidini* **nov.**

***Comments***: Within the subfamily *Asterophryinae*, two tribes are recognised here, the *Asterophryini* for *Asterophrys*, and the *Gastrophynoidini* for *Gastrophrynoides*, *Siamophryne* and *Vietnamophryne*. Our *TREE* does not allow to build a clear generic classification within the tribe *Asterophryini*. Although several groups in this assemblage have high support, within most of them the species are currently allocated in the literature to several genera, whereas no nomina are available for other groups, so that the current generic classification does not reflect the well supported phylogenetic hypotheses. As a consequence, we provisionally synonymise all genus group nomina available in this tribe under a single genus *Asterophrys*. Recent works on this group by Rivera *et al.* (2017) and Tu *et al.* (2018) did not resolve paraphyly and polyphyly of generic taxa but continue to recognise about 15 poorly diagnosed such taxa on weak phylogenetic grounds. This group needs a fundamental taxonomic revision before robust inter-group phylogenetic relationships can be proposed.

## F.19.46. Tribus *Asterophryini* Günther, 1858

***Eunym***: Burton 1986: 444.
***Getangiotaxon***: *Asterophryinae* Günther, 1858.
***Adelphotaxon***: *Gastrophrynoidini* **nov.**
***Getendotaxon***: *Asterophrys* Tschudi, 1838.

## F.19.47. Tribus *Gastrophynoidini* **nov.**

***Getangiotaxon***: *Asterophryinae* Günther, 1858.
***Adelphotaxon***: *Asterophryini* Günther, 1858
***Getendotaxa***: *Gastrophrynoides* Noble, 1926; *Siamophryne* Suwannapoom, Sumontha, Tunprasert, Ruangsuwan, Pawangkhanant, Korost & Poyarkov, 2018; *Vietnamophryne* Poyarkov, Suwannapoom, Pawangkhanant, Aksornneam, Duong, Korost & Che, 2018.

***Nucleogenus, by present designation***: *Gastrophrynoides* Noble, 1926. ● ***Etymology of nomen***: G: γαστὴρ (*gaster*), 'belly'; φρύνη (*phryne*), 'toad'; εἶδος (*eidos*), 'shape'. ● ***Stem of nomen***: *Gastrophrynoid-*.

***Diagnosis***: Small sized microhylid frogs (15–40 mm); vomeropalatine small, no vomerine teeth; clavicles absent or present as slender tiny bones; omosternum absent; sternum cartilaginous or only partly calcified cartilage; vertebrae procoelous with eight presacral vertebrae lacking neural crests; terminal phalanges T-shaped or bobbin-shaped; pupil rounded; tympanum distinct; tongue entire, spatulate or oval; two or one transverse palatal fold; digits enlarged to small discs, or rounded; webbing reduced or absent; a distinct inner metatarsal tubercle, outer metatarsal tubercle absent; skin granular to smooth. {Noble 1926; Parker 1934; Inger 1966; Poyarkov *et al.* 2018; Suwannapoom *et al.* 2018}.

***Comments***: As the recently described genera *Siamophryne* and *Vietnamophryne* are not represented in *TREE*, we do not propose formal classification within the *Gastrophynoidini*.

### F.18.50. Subfamilia *Cophylinae* Cope, 1889

***Protonym***: *Cophylidae* Cope, 1889: 248 [F].
***Eunym***: Parker 1934: v.
***Getangiotaxon***: *Microhylidae* ||Fitzinger, 1843||-Noble, 1931.
***Adelphotaxa***: *Adelastinae* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler, 2016; *Asterophryinae* Günther, 1858; *Gastrophryninae* Fitzinger, 1843; *Hoplophryninae* Noble, 1931; *Kalophryninae* Mivart, 1869; *Melanobatrachinae* Noble, 1931; *Microhylinae* ||Fitzinger, 1843||-Noble, 1931; *Otophryninae* Wassersug & Pyburn, 1987.
***Getendotaxa***: *Cophylini* Cope, 1889; *Scaphiophrynini* Laurent, 1946.

***Comments***: Here we include *Paradoxophyla* and *Scaphiophryne*, often recognised as the subfamily *Scaphiophryninae*, as a tribe *Scaphiophrynini* in the subfamily *Cophylinae*. In *TREE*, this tribe is sister-group to the *Cophylini*. Within the latter tribe, four subtribes, the mutual relationships of which are not sufficiently supported, are recognised: the *Anodonthylina* for *Anodonthyla*, the *Cophylina* for *Cophyla* and *Mantipus*, the *Platypelina* for *Platypelis*, and the *Rhombophrynina* for *Rhombophryne*. In the recent phylogenies, *Madecassophryne* is sister-taxon to all other *Cophylini*. In *TREE*, many groups have poor support so we could not identify sister-group relationships. In Scherz *et al.* (2019), *Cophyla* is sister-taxon to *Platypelis*, *Plethodontohyla* to the new genus *Mini*, and these four are sister-group to *Anodonthyla*. Scherz *et al.* (2019) also recognised a holophyletic *Rhombophryne*, sister-group to *Stumpffia*. In *TREE*, the *Rhombophryne serratopalpebrosa* group (Scherz *et al.* 2017) is sister-group to *Stumpffia* with low support (87). In order to recognise a highly supported holophyletic taxon, *Stumpffia* is here considered synonym of *Rhombophryne*. Another important difference with our taxonomy is the position of *Anilany* which is sister-group to *Rhombophryne* and *Stumpffia* in Scherz *et al.* (2019) but here treated as a synonym of *Cophyla* as we did with *Plethodontohyla* and *Mini*, in order to have holophyletic and highly supported taxa.

### F.19.48. Tribus *Cophylini* Cope, 1889

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Cophylinae* Cope, 1889.
***Adelphotaxon***: *Scaphiophrynini* Laurent, 1946.
***Getendotaxa***: *Anodonthylina* **nov.**; *Cophylina* Cope, 1889; *Platypelina* **nov.**; *Rhombophrynina* Noble, 1931; **1 GIS** (*Madecassophryne* Guibé, 1974).

### F.20.41. Subtribus *Anodonthylina* **nov.**

***Getangiotaxon***: *Cophylini* Cope, 1889.
***Adelphotaxa***: *Cophylina* Cope, 1889; *Platypelina* **nov.**; *Rhombophrynina* Noble, 1931; **1 GIS** (*Madecassophryne* Guibé, 1974).
***Getendotaxon***: *Anodonthyla* Müller, 1892.

***Nucleogenus, by present designation***: *Anodonthyla* Müller, 1892. ● ***Etymology of nomen***: G: ανοδόντος (*anodontos*), 'toothless'; N: *Hyla* Laurenti, 1768, of debated etymology. ● ***Stem of nomen***: *Anodonthyl-*.

***Diagnosis***: Small sized microhylids (SVL 22–38 mm); maxillary teeth present; prevomer small, absence of postchoanal vomer; clavicle and procoracoid present, well developed, reaching scapula and mid-line of girdle; omosternum and sternum well developed, cartilaginous; terminal phalanges T-shaped; pupil horizontal; tympanum distinct or indistinct about half eye length; tongue slightly notched; tips of digits dilated; first finger much shorter than second; a large, cultriform prepollex present; toes web absent; an inner but no outer metatarsal tubercle; skin finely granular at least on belly. {Müller 1892; Parker 1934; Scherz *et al.* 2019}.

### F.20.42. Subtribus *Cophylina* Cope, 1889

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Cophylini* Cope, 1889.
***Adelphotaxa***: *Anodonthylina* **nov.**; *Platypelina* **nov.**; *Rhombophrynina* Noble, 1931; **1 GIS** (*Madecassophryne* Guibé, 1974).
***Getendotaxa***: *Cophyla* Boettger, 1880; *Mantipus* Peters, 1883.

### F.20.43. Subtribus *Platypelina* **nov.**

***Getangiotaxon***: *Cophylini* Cope, 1889.
***Adelphotaxa***: *Anodonthylina* **nov.**; *Cophylina* Cope, 1889; *Rhombophrynina* Noble, 1931; **1 GIS** (*Madecassophryne* Guibé, 1974).
***Getendotaxon***: *Platypelis* Boulenger, 1882.

***Nucleogenus, by present designation***: *Platypelis* Boulenger, 1882. ● ***Etymology of nomen***: G: πλατυς (*platus*), 'wide'; πέλις or πελλίς (*pelis*), 'pelvis'. ● ***Stem of nomen***: *Platypel-*.

***Diagnosis***: Small sized microhylids (SVL 26–40 mm); maxillary teeth present; prevomer divided, postchoanal portion long in contact medially, overlying palatine and bearing teeth; clavicle present, but reduced, not reaching mid-line of girdle or scapula; procoracoid broad, curved, insertion on middle of anterior border of coracoid; sternum large, cartilaginous; omosternum small and cartilaginous or absent; vertebrae procoelous; terminal phalanges expanded; pupil horizontal; tympanum hidden or distinct, about half eye length; tongue oval, large, entire; palate without dermal folds; tips of digits broadly dilated; first finger much shorter than second; toes feebly webbed; a feeble inner metatarsal tubercle; outer metatarsal tubercle absent; skin smooth or with warts. {Parker 1934}.

### F.20.44. Subtribus *Rhombophrynina* Noble, 1931

***Protonym***: *Rhombophryninae* Noble, 1931: 529 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Cophylini* Cope, 1889.
***Adelphotaxa***: *Anodonthylina* **nov.**; *Cophylina* Cope, 1889; *Platypelina* **nov.**; **1 GIS** (*Madecassophryne* Guibé, 1974).
***Getendotaxon***: *Rhombophryne* Boettger, 1880.

### F.19.49. Tribus *Scaphiophrynini* Laurent, 1946

***Protonym***: *Scaphiophryninae* Laurent, 1946: 337 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Cophylinae* Cope, 1889.
***Adelphotaxon***: *Cophylini* Cope, 1889.
***Getendotaxa***: *Paradoxophyla* Blommers-Schlösser, 1991; *Scaphiophryne* Boulenger, 1882.

### F.18.51. Subfamilia *Gastrophryninae* Fitzinger, 1843

***Protonym***: *Gastrophrynae* Fitzinger, 1843: 33 [F].
***Eunym***: Metcalf 1923: 294.
***Getangiotaxon***: *Microhylidae* ||Fitzinger, 1843||-Noble, 1931.
***Adelphotaxa***: *Adelastinae* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler, 2016; *Asterophryinae* Günther, 1858; *Cophylinae* Cope, 1889; *Hoplophryninae* Noble, 1931; *Kalophryninae* Mivart, 1869; *Melanobatrachinae* Noble, 1931; *Microhylinae* ||Fitzinger, 1843||-Noble, 1931; *Otophryninae* Wassersug & Pyburn, 1987.

***Getendotaxa***: *Chiasmocleini* **nov.**; *Ctenophrynini* **nov.**; *Gastrophrynini* Fitzinger, 1843.

***Comments***: The subfamily *Gastrophryninae* includes three tribes, the *Chiasmocleini* for *Chiasmocleis*, the *Ctenophrynini* for *Ctenophryne*, and the *Gastrophrynini*. The latter tribe has a complex structure, including three subtribes, the *Dasypopina* for *Dasypops* and *Myersiella*, the *Stereocyclopina* for *Stereocyclops*, and the *Gastrophrynina*, including five infratribes of unsupported relationships, the *Arcovomerinia* for *Arcovomer*, the *Dermatonotinia* for *Dermatonotus*, the *Engystomatinia* for *Engystoma*, the *Gastrophryninia* for *Gastrophryne* and *Hypopachus*, and the *Hamptophryninia* for *Hamptophryne*. The sister-branch relationships of these groups were found by Greenbaum *et al.* (2011) and Pyron & Wiens (2011) but in both works some of the genera of this subfamily were missing in the analysis. In Tu *et al.* (2018), most of the intra-generic relationships have high support. The sister-group relationship between *Dasypops* and *Myersiella* is confirmed, as well as the sister-group relationship between *Gastrophryne* and *Hypopachus*. This latter taxon is sister-taxon to *Engystoma* (a genus often called by error *Elachistocleis*). These authors found also a highly supported relationship between *Dermatonotus* and *Stereocyclops*, which is not supported in our *TREE*.

## F.19.50. Tribus *Chiasmocleini* **nov.**

***Getangiotaxon***: *Gastrophryninae* Fitzinger, 1843.
***Adelphotaxa***: *Ctenophrynini* **nov.**; *Gastrophrynini* Fitzinger, 1843.
***Getendotaxon***: *Chiasmocleis* Méhelÿ, 1904.

***Nucleogenus, by present designation***: *Chiasmocleis* Méhelÿ, 1904. ● ***Etymology of nomen***: G: χιασμος (*chiasmos*), 'in shape of X'; κλειδίος (*cleidos*), 'clavicle'; referring to the position of the clavicles in relation to the coracoid (see Méhelÿ 1904, plate 103 figure 4). ● ***Stem of nomen***: *Chiasmocle-*.

***Diagnosis***: Small sized microhylids (males SVL 13–32 mm, females SVL 11–42 mm); vomerine teeth absent; maxillary and jugal widely separated; prevomer divided, post-choanal portion absent; neopalatine not distinguishable; clavicles present, short, reaching mid-line of the girdle, but, meeting coracoid in its lateral half and not reaching scapula; epicoracoids long; procoracoid present, short, reaching mid-line of girdle, but, meeting coracoid in its lateral half, and not reaching glenoid region; sternum cartilaginous; omosternum absent; vertebrae diplasiocoelous; terminal phalanges simple; occipital fold absent; pupil round; tongue oval, entire and free behind; two smooth dermal ridges on palate; tympanum hidden; finger tips without or with very small terminal discs; web between fingers with more or less distinct fleshy webbing or fringes; first finger much shorter than second, second shorter than fourth; web between toes very variable, often absent or small, but varying up to large web; toe tips rounded or swollen; outer metatarsals fused; outer metatarsal tubercle absent; inner metatarsal tubercle small; hind limb length short to moderately long; skin smooth, scattered spines sometimes on some body parts; sexual dimorphism developed; eggs usually small and pigmented, but also large and unpigmented; larva aquatic, free living, of typical microhylid morphology, rarely endotrophic. {Parker 1934; Zweifel 1986; Caramaschi & Cruz 1997; Cruz *et al.* 1999, 2007; Canedo *et al.* 2004; Funk & Cannatella 2009; Morales & McDiarmid 2009; Peloso *et al.* 2014; Tonini *et al.* 2014; Sá *et al.* 2018}.

## G.28.290. Genus *Chiasmocleis* Méhelÿ, 1904

***Getangiotaxon***: *Chiasmocleini* **nov.**
***Adelphotaxon***: None.
***Getendotaxa***: *Chiasmocleis* Méhelÿ, 1904; *Relictocleis* **nov.**; *Syncope* Walker, 1973.

***Comments***: Peloso *et al.* (2014) synonymised the gastrophrynine generic nomen *Syncope* Walker, 1973 with *Chiasmocleis* Méhelÿ, 1904. Sá *et al.* (2018) provided a molecular phylogenetic analysis of this group and recognised three well-supported branches in it. For two of them they used the nomina *Chiasmocleis* and *Syncope* at subgeneric rank and they erected a new subgeneric nomen "*Relictus*" for the latter. However, this nomen was shown by Dubois *et al.* (2018) to be both unavailable (for having been published online without *Zoobank* designation and for missing a diagnosis) and invalid (for being a junior homonym). This was followed by three other publications by the original authors or part of them trying without success to make the nomen "*Relictus*" and later the nomen "*Unicus*" available for this subgenus (see Dubois & Frétey 2020*a*: 26, footnote 1): in Sá *et al.* (2019*a*), the nomen "*Relictus*" was still unavailable (for still missing a diagnosis); in Sá *et al.* (2019*b*), the nomen "*Unicus*" was also unavailable (both for still missing a diagnosis, but also for being presented as a neonym for an unavailable nomen, therefore unavailable itself according to Article 13.1.3); and in Sá *et al.* (2019*c*), with a different auctorship, the nomen "*Unicus*" was still unavailable (for missing the explicit intention of the authors to establish a new nominal taxon, as required by Article 16.1 and crediting this nomen to a previous work, but also for being presented as a neonym for an unavailable nomen, therefore unavailable itself). The following sentence in the latter paper shows that the authors, referees and editor of this paper have still not understood what availability and auctorship are in zoological nomenclature: "With this publication, we therefore render the nomen *Unicus* de Sá, Tonini, van Huss, Long, Cuddy, Forlani, Peloso, Zaher and Haddad, 2019 available for *Chiasmocleis (Unicus) gnoma*." Had this sentence been missing in this paper, it could be debated whether the latter had provided nomenclatural availability to a nomen "*Unicus* Sá, Tonini, Huss, Zaher & Haddad, 2019", but unfortunately it is not the case. *Errare humanum est, perseverare diabolicum*: it is now time to provide an available nomen for this taxon, for those who wish to use the subgeneric rank in amphibian taxonomy. For this purpose, we propose the nomen *Relictocleis*.

## G.29.001. Subgenus *Relictocleis* **nov.**

***Getangiotaxon***: *Chiasmocleis* Méhelÿ, 1904.
***Adelphotaxa***: *Chiasmocleis* Méhelÿ, 1904; *Syncope* Walker, 1973.
***Getendotaxon***: *Chiasmocleis (Relictocleis) gnoma* Canedo, Dixo & Pombal, 2004.

***Etymology of nomen***: L: *relictus*, 'left, remaining', from *relinquo*, 'I leave, I abandon'; N: ending of *Chiasmocleis* Méhelÿ, 1904. ● ***Stem of nomen***: *Relictocle-*. ● ***Grammatical gender of nomen***: feminine.

***Nucleospecies, by present designation***: *Chiasmocleis gnoma* Canedo, Dixo & Pombal, 2004.

***Diagnosis***: Small sized species (males SVL 12.8–15.5 mm, females SVL 13.1–17.9 mm); nasals fused with each other along the most of their mid line, an autapomorphic trait that differentiates *Relictocleis* from *Chiasmocleis* and *Syncope* in which the nasals are separated along their medial length; neopalatine bones present, elongated and thin, slightly beneath the anterior margin of the *planum anterorbitale* and fused with the vomers and the underlying and well-ossified sphenethmoid, whereas in *Chiasmocleis* and *Syncope* they are reduced or absent; zygomatic ramus of the squamosal absent, whereas it is present in most species of *Chiasmocleis* and *Syncope*; pars facialis of the maxilla well-developed and bearing a rounded opening anteriorly; phalangeal formula of the manus of *Relictocleis* 1-2-3-3, whereas it is 2-2-3-3 in *Chiasmocleis* and 1-2-3-2 in *Syncope* except in *C. hudsoni* which has the formula 1-2-3-3; presence in *Relictocleis* of several autapomorphic substitutions in mitochondrial and nuclear markers. {Canedo *et al*. 2004; Sá *et al.* 2019*c*).

***Comments***: Article 11.8 of the *Code* states that, to be available, a generic nomen "must be, or be treated as, a noun in the nominative singular". This is a fully 'ineffective' and 'void' statement, that could well be removed from the *Code*, because we know of no case where a generic zoological nomen would have been considered unavailable for being originally an adjective, a rather common situation indeed (e.g., in amphibians, *Rugosa* Fei, Ye & Huang, 1990) or for 'looking like' a Latin plural for having an ending that did not exist in any Latin declension (see Dubois 2018) in the nominative singular (e.g., in amphibians, *Churamiti* Channing & Stanley, 2002 or *Ikakogi* Guayasamin, Castroviejo-Fisher, Trueb, Ayarzagüena, Rada & Vilà, 2009). In all such cases, even if they did not mention it in the original publication, it may be agreed that, by using it as a generic nomen, the original author had *ipso facto* "treated it as a noun in the nominative singular". Despite this tolerance of the *Code*, we are not in favour of establishing generic nomina which are clearly based on Latin adjectives or on terms that look like plural Latin terms, and we prefer to use from the start genuine nouns in the nominative singular. The new nomen we provide for this taxon is clearly a noun in the nominative singular, not an adjective, as were the first two unavailable nomina originally given to this genus.

### F.19.51. Tribus *Ctenophrynini* **nov.**

***Getangiotaxon***: *Gastrophryninae* Fitzinger, 1843.
***Adelphotaxa***: *Chiasmocleini* **nov.**; *Gastrophrynini* Fitzinger, 1843.
***Getendotaxon***: *Ctenophryne* Mocquard, 1904.

***Nucleogenus, by present designation***: *Ctenophryne* Mocquard, 1904. ● ***Etymology of nomen***: G: κτεισ (*cleis*), 'comb'; φρύνη (*phryne*), 'toad'; referring to the shape of the posterior transversal fold on the pharingial roof (Moquard 1904: 308). ● ***Stem of nomen***: *Ctenophryn-*.

***Diagnosis***: As for the single genus, small to medium sized microhylids (SVL 43 mm); clavicles, procoracoids and omosternum absent; sternum cartilaginous; terminal phalanges pointed or dilated; pupil vertical; tympanum hidden; tongue oval, large, notched, entirely adherent with a median furrow; two dermal ridges across palate anterior to pharynx, a shorter and a longer denticulate; digits slightly dilated; toes largely webbed; a flat inner metatarsal tubercle; outer metatarsal tubercle absent; skin smooth. {Parker 1934}.

### F.19.52. Tribus *Gastrophrynini* Fitzinger, 1843

***Eunym***: Dubois 2005: 15.
***Getangiotaxon***: *Gastrophryninae* Fitzinger, 1843.
***Adelphotaxa***: *Chiasmocleini* **nov.**; *Ctenophrynini* **nov.**
***Getendotaxa***: *Dasypopina* **nov.**; *Gastrophrynina* Fitzinger, 1843; *Stereocyclopina* **nov.**

### F.20.45. Subtribus *Dasypopina* **nov.**

***Getangiotaxon***: *Gastrophrynini* Fitzinger, 1843.
***Adelphotaxa***: *Gastrophrynina* Fitzinger, 1843; *Stereocyclopina* **nov.**
***Getendotaxa***: *Dasypops* Miranda-Ribeiro, 1924; *Myersiella* Carvalho, 1954.

***Nucleogenus, by present designation***: *Dasypops* Miranda-Ribeiro, 1924. ● ***Etymology of nomen***: G: δᾰσύς (*dasus*), 'hairy, rough'; ὤψ (*ops*), 'eye, face'; referring to the shape of eye and nictitating membrane. ● ***Stem of nomen***: *Dasypop-*.

***Diagnosis***: Small to medium sized microhylid frogs (males SVL 20–46 mm, females SVL 25–33 mm); vomerine and maxillary teeth absent; clavicles absent or reduced; procoracoid absent; coracoid ossified, short and broad, arched; sternum cartilaginous, large semicircular; omosternum absent; pupil circular; tongue large, free posteriorly; dermal folds on palate present; tympanum indistinguishable or absent; finger tips cylindrical or enlarged; web between fingers absent; first finger shorter than second, fourth shorter or equal to second; toe tips enlarged; web between toes absent or reduced; outer metatarsals fused; outer metatarsal tubercle absent; inner metatarsal tubercle small and distinct, or indistinct; hind limbs short; skin smooth or rough. {Miranda-Ribero 1924; Carvalho 1954; Bokermann 1952; Nelson & Lescure 1975}.

### F.20.46. Subtribus *Gastrophrynina* Fitzinger, 1843

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Gastrophrynini* Fitzinger, 1843.

***Adelphotaxa***: *Dasypopina* **nov.**; *Stereocyclopina* **nov.**
***Getendotaxa***: *Arcovomerinia* **nov.**; *Dermatonotinia* **nov.**; *Engystomatinia* Bonaparte, 1850; *Gastrophryninia* Fitzinger, 1843; *Hamptophryninia* **nov.**

## F.21.31. Infratribus *Arcovomerinia* **nov.**

***Getangiotaxon***: *Gastrophrynina* Fitzinger, 1843.
***Adelphotaxa***: *Dermatonotinia* **nov.**; *Engystomatinia* Bonaparte, 1850; *Gastrophryninia* Fitzinger, 1843; *Hamptophryninia* **nov.**
***Getendotaxon***: *Arcovomer* Carvalho, 1954.

***Nucleogenus, by present designation***: *Arcovomer* Carvalho, 1954. ● ***Etymology of nomen***: L: *arcus*, arched; *vomer*, 'ploughshare'; referring to the particular shape of the prevomer (Carvalho 1954). ● ***Stem of nomen***: *Arcovomer-*.

***Diagnosis***: Very small sized microhylid (male SVL 16 mm); prevomer divided, postchoanal parts fused on mid-line forming a single arc-like element, center lying in front of anterior tip of parasphenoid, lateral wings curving forward under ethmoids and supporting cartilage of ethmoids; ethmoids separate; palatine absent; quadratojugal not in contact with maxillary; vertebrae diplasiocoelous; clavicle curved, not extending to glenoid cartilage, resting at mid-point of coracoid on a block-like vestige of procoracoid and separating clavicle from coracoid; terminal phalanges T-shaped; fingers and toes not webbed, tips truncate; inner metatarsal tubercle present, outer metatarsal tubercle absent; pupil rounded; tongue narrow, long, entire. {Carvalho 1954}.

## F.21.32. Infratribus *Dermatonotinia* **nov.**

***Getangiotaxon***: *Gastrophrynina* Fitzinger, 1843.
***Adelphotaxa***: *Arcovomerinia* **nov.**; *Engystomatinia* Bonaparte, 1850; *Gastrophryninia* Fitzinger, 1843; *Hamptophryninia* **nov.**
***Getendotaxon***: *Dermatonotus* Méhelÿ, 1904.

***Nucleogenus, by present designation***: *Dermatonotus* Méhelÿ, 1904. ● ***Etymology of nomen***: G: δερματινος, 'leathery'; referring to the particular skin (Méhelÿ 1904: table 13 figure 3). ● ***Stem of nomen***: *Dermatonot-*.

***Diagnosis***: Large sized microhylids (males SVL 52–62 mm, females SVL 62–73 mm); vomerine teeth absent, but a ridge between choanae; premaxillaries separate from maxillary bones; clavicles straight, almost reaching midline of girdle; procoracoid ossified, in middle united with a rhomboidal cartilaginous plate; sternum as an anchor-shaped cartilaginous plate; omosternum absent; diapophyses of sacral vertebra strongly dilated; lower surface of terminal phalanges with a shovel-shaped dilatation; pupil vertical; tongue large, elliptic, entire, free in its posterior half; tympanum hidden; finger tips not dilated; web between fingers absent; first finger much shorter than second, fourth subequal to second; web between toes absent; toe tips blunt; outer metatarsals united; outer metatarsal tubercle absent; inner metatarsal tubercle oval, very prominent; hind limbs short; skin smooth, strongly thickened on dorsum, leather-like, porous. {Méhelÿ 1904; Giaretta *et al.* 2013}.

## F.21.33. Infratribus *Engystomatinia* Bonaparte, 1850

***Protonym***: *Engystomidae* Bonaparte, 1850: plate [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Gastrophrynina* Fitzinger, 1843.
***Adelphotaxa***: *Arcovomerinia* **nov.**; *Dermatonotinia* **nov.**; *Gastrophryninia* Fitzinger, 1843; *Hamptophryninia* **nov.**
***Getendotaxon***: *Engystoma* Fitzinger, 1826.

## G.28.296. Genus *Engystoma* Fitzinger, 1826

***Getangiotaxon***: *Engystomatinia* Bonaparte, 1850.
***Adelphotaxon***: None.
***Getendotaxa***: *Engystoma bicolor* (Guérin-Méneville, 1838); *Engystoma bumbameuboi* (Caramaschi, 2010); *Engystoma carvalhoi* (Caramaschi, 2010); *Engystoma cesarii* Miranda-Ribeiro, 1920; *Engystoma corumbaense* (Piva, Caramaschi & Albuquerque, 2017); *Engystoma erythrogaster* (Kwet & Di-Bernardo, 1998); *Engystoma haroi* (Pereyra, Akmentins, Laufer & Vaira, 2013); *Engystoma helianneae* (Caramaschi, 2010); *Engystoma magnum* (Toledo, 2010); *Engystoma matogrosso* (Caramaschi, 2010); *Engystoma muiraquitan* (Nunes-de-Almeida & Toledo, 2012); *Engystoma ovale* (Schneider, 1799); *Engystoma panamense* (Dunn, Trapido & Evans, 1948); *Engystoma pearsei* (Ruthven, 1914); *Engystoma piauiense* (Caramaschi & Jim, 1983); *Engystoma skotogaster* (Lavilla, Vaira & Ferrari, 2003); *Engystoma surinamense* (Daudin, 1802); *Engystoma surumu* (Caramaschi, 2010).

***Etymology of nomen***: G: ἐγγυς (*eggys*), 'close', στόμα (*stoma*), 'mouth'. ● ***Stem of nomen***: *Engystom-*. ● ***Grammatical gender of nomen***: neuter.

***Comments***: The generic nomen *Engystoma* was established by Fitzinger (1826), who did not designate a type species for it. Duméril & Bibron (1841: 740) designated the nominal species *Rana ovalis* Schneider, 1799 as type of this genus, and this nomen was consistently used for a genus including this species by various authors until Stejneger (1910) stated in error that the type species of this genus was *Rana gibbosa* Linnaeus, 1758, then (and still now) referred to the genus *Breviceps* Merrem, 1820. Parker (1927) established the genus nomen *Elachistocleis* for *Rana ovalis*, and this generic nomen was used for this and related species by various authors since then. In 1982, Dubois discovered that Stejneger's (1910) statement was wrong, and, in order to maintain nomenclatural stability, submitted a detailed application to the Commission asking it to use its plenary power to designate *Rana gibbosa* as type species of *Engystoma*, thus making it an invalid objective junior synonym of *Breviceps*. The secretariat of the Commission acknowledged reception of this application and announced it in the *Bulletin of Zoological Nomenclature* (Anonymous 1982: 230), although with a misprint in the nomen of the genus (*Elachistocles*), but never published the application and the latter was never submitted to the Commission for vote. After several mails to this secretariat asking for this publication, Dubois (1987*f*) finally published it elsewhere, but this case was never settled by the Commission. This refusal to address this problem cannot but be interpreted as meaning that for the Commission there existed, in fact, no nomenclatural problem, and that the regular Rules of the *Code* must apply in this case. The first idea that comes to mind then is to use Article 23.9 of the *Code* on reversal of precedence, but this is not possible, as the condition of Article 23.9.1.1 is not met, the generic nomen having been used as valid after 1899, and even after 1910, in several publications, either under its protograph and eugraph *Engystoma* (e.g.: Strecker 1909; Brimley 1915; Nieden 1926; Stabler & Chen 1936; Metcalf 1940) or under its autoneonym *Engistoma* Peracca, 1904. The replacement of *Elachistocleis* by *Engystoma*, which we implement here, just restores a common practice from 1841 to 1910, and has another nomenclatural advantage, in terms of nomenclatural parsimony: it allows to use for the infratribe here recognised for this genus the nomen *Engystomidae* Bonaparte, 1850 for which no synonym would be available to replace it if its type species was modified (see Appendix **A6.NFS**), which would require the introduction of a new FS nomen. This nomen also has been used as valid after 1899 (e.g.: Méhelÿ 1901; Nieden 1926) and could also not be rejected by Article 23.9.

## F.21.34. Infratribus *Gastrophryninia* Fitzinger, 1843

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Gastrophrynina* Fitzinger, 1843.
***Adelphotaxa***: *Arcovomerinia* **nov.**; *Dermatonotinia* **nov.**; *Engystomatinia* Bonaparte, 1850; *Hamptophryninia* **nov.**
***Getendotaxa***: *Gastrophryne* Fitzinger, 1843; *Hypopachus* Keferstein, 1867.

## F.21.35. Infratribus *Hamptophryninia* **nov.**

***Getangiotaxon***: *Gastrophrynina* Fitzinger, 1843.
***Adelphotaxa***: *Arcovomerinia* **nov.**; *Dermatonotinia* **nov.**; *Engystomatinia* Bonaparte, 1850; *Gastrophryninia* Fitzinger, 1843.
***Getendotaxon***: *Hamptophryne* Carvalho, 1954.

***Nucleogenus, by present designation***: *Hamptophryne* Carvalho, 1954. ● ***Etymology of nomen***: N: Hampton, in honor of Hampton Wildman Parker (1897–1968), London, specialist of microhylids; G: φρύνη (*phryne*), 'toad'. ● ***Stem of nomen***: *Hamptophryn-*.

***Diagnosis***: Medium sized microhylids (males SVL 34–50 mm, females SVL 39–44 mm); vomerine teeth absent; maxillary arcade incomplete, maxilla and quadratojugal not in contact; prevomer divided, posterior part reduced to a small osseous plate lying more or less free in mucosa of palate; quadratojugal in contact with maxillary; clavicles not reaching glenoid cartilage, resting at distal end on coracoid, at proximal end on tip of reduced vertebrae diplasiocoelous; terminal phalanges slightly expanded; pupil round; tympanum hidden; finger tips blunt; web between fingers absent or basal, fingers with or without narrow fringes; web between toes absent or small; toe tips blunt; first finger much shorter than second, fourth subequal to second; outer metatarsal tubercle absent; inner metatarsal tubercle distinct or prominent; hind limbs short; skin smooth or shagreened. {Parker 1927, 1934; Carvalho 1954; Wild 1995; Funk & Cannatella 2009}.

## F.20.47. Subtribus *Stereocyclopina* **nov.**

***Getangiotaxon***: *Gastrophrynini* Fitzinger, 1843.
***Adelphotaxa***: *Dasypopina* **nov.**; *Gastrophrynina* Fitzinger, 1843.
***Getendotaxon***: *Stereocyclops* Cope, 1870.

***Nucleogenus, by present designation***: *Stereocyclops* Cope, 1870. ● ***Etymology of nomen***: G: στερεός (*stereos*), 'hard'; κύκλωψ (*cyclops*), 'Cyclops', from κύκλος (*cyclos*), 'round' and ὤψ (*ops*),' eye'. ● ***Stem of nomen***: *Stereocyclop-*.

***Diagnosis***: Small to medium sized *Gastrophrynini* (males SVL 24–49 mm; females SVL 25–57 mm); vomerine and maxillary teeth absent; quadratojugal and maxilla in firm bony contact; palatine palatal folds present; clavicles long or short, when short not reaching glenoid cartilage; procoracoid cartilage well developed, extending from mid-line of girdle to glenoid cartilage, touching mesial part of coracoid and supporting clavicle in its entire length; two fenestrae on each side of pectoral girdle between procoracoid and coracoid; xiphisternum cartilaginous and broad; vertebrae diplasiocoelous; terminal phalanges simple or slightly expanded; occipital fold present; pupil oval horizontal; tongue large not notched; dermal fords on palate present; tympanum indistinct; finger tips rounded, not enlarged; web on hand absent, narrow fringes sometimes present; first finger shorter than second; fourth longer or subequal to second; web on feet absent or a small webbing present; toe tips rounded, not enlarged; outer metatarsal tubercle absent or indistinct; inner metatarsal tubercle well developed; hindlimbs short to rather long; skin smooth, but dermal spines present in some body parts; larva aquatic, free living, of typical microhylid morphology. {Cope 1869*a*; Wettstein 1934; Carvalho 1948, 1954; Targino & Pombal 2011; Caramaschi *et al.* 2012}.

## F.18.52. Subfamilia *Hoplophryninae* Noble, 1931

***Protonym and eunym***: *Hoplophryninae* Noble, 1931: 539 [bF].
***Getangiotaxon***: *Microhylidae* ||Fitzinger, 1843||-Noble, 1931.
***Adelphotaxa***: *Adelastinae* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler, 2016; *Asterophryinae* Günther, 1858; *Cophylinae* Cope, 1889; *Gastrophryninae* Fitzinger, 1843; *Kalophryninae* Mivart, 1869; *Melanobatrachinae* Noble, 1931; *Microhylinae* ||Fitzinger, 1843||-Noble, 1931; *Otophryninae* Wassersug & Pyburn, 1987.
***Getendotaxa***: *Hoplophryne* Barbour, 1928; *Parhoplophryne* Barbour, 1928.

## F.18.53. Subfamilia *Kalophryninae* Mivart, 1869

***Protonym***: *Kalophrynina* Mivart, 1869: 289 [bF].
***Eunym***: Noble 1931: 536.
***Getangiotaxon***: *Microhylidae* ||Fitzinger, 1843||-Noble, 1931.
***Adelphotaxa***: *Adelastinae* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler, 2016; *Asterophryinae* Günther, 1858; *Cophylinae* Cope, 1889; *Gastrophryninae* Fitzinger, 1843; *Hoplophryninae* Noble, 1931; *Melanobatrachinae* Noble, 1931; *Microhylinae* ||Fitzinger, 1843||-Noble, 1931; *Otophryninae* Wassersug & Pyburn, 1987.
***Getendotaxon***: *Kalophrynus* Tschudi, 1838.

## F.18.54. Subfamilia *Melanobatrachinae* Noble, 1931

***Protonym and eunym***: *Melanobatrachinae* Noble, 1931: 538 [bF].
***Getangiotaxon***: *Microhylidae* ||Fitzinger, 1843||-Noble, 1931.
***Adelphotaxa***: *Adelastinae* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler, 2016; *Asterophryinae* Günther, 1858; *Cophylinae* Cope, 1889; *Gastrophryninae* Fitzinger, 1843; *Hoplophryninae* Noble, 1931; *Kalophryninae* Mivart, 1869; *Microhylinae* ||Fitzinger, 1843||-Noble, 1931; *Otophryninae* Wassersug & Pyburn, 1987.
***Getendotaxon***: *Melanobatrachus* Beddome, 1878.

## F.18.55. Subfamilia *Microhylinae* ||Fitzinger, 1843||-Noble, 1931

***Eunym***: Noble 1931: 451.
***Getangiotaxon***: *Microhylidae* ||Fitzinger, 1843||-Noble, 1931.
***Adelphotaxa***: *Adelastinae* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler, 2016; *Asterophryinae* Günther, 1858; *Cophylinae* Cope, 1889; *Gastrophryninae* Fitzinger, 1843; *Hoplophryninae* Noble, 1931; *Kalophryninae* Mivart, 1869; *Melanobatrachinae* Noble, 1931; *Otophryninae* Wassersug & Pyburn, 1987.
***Getendotaxa***: *Dyscophini* Boulenger, 1882; *Microhylini* ||Fitzinger, 1843||-Noble, 1931.

***Comments***: In the subfamily *Microhylinae*, according to *TREE*, the tribe *Dyscophini* (credited with the rank subfamily by Tu *et al.* 2018) for *Dyscophus*, is sister-group to all other *Microhylinae*, recognised as the tribe *Microhylini*. Within this tribe four subtribes of unsupported relationships are recognised, the *Chaperinina* for *Chaperina*, the *Microhylina* for *Glyphoglossus* and *Microhyla*, the *Micrylettina* for *Micryletta* and *Mysticellus*, and the *Hylaedactylina*, that include three infratribes, the *Cacopinia* for *Uperodon*, the *Hylaedactylinia* for *Kaloula*, and the *Phrynellinia* for *Metaphrynella* and *Phrynella*.

Tu *et al.* (2018) found in our tribe *Microhylini* two highly supported branches, grouping in a taxon the subtribes *Chaperinina* and *Microhylina*, and in a second taxon the subtribes *Hylaedactylina* and *Micrylettina*.

Matsui *et al.* (2011) found the species attributed to the genus *Microhyla* forming two paraphyletic groups, including one composed of *Calluella* and *Glyphoglossus*. These three groups are highly supported but their relationships are poorly resolved. Tu *et al.* (2018) and Garg & Biju (2019) found the same relationships between the last two genera and considered *Calluella* as a junior subjective synonym of *Glyphoglossus*. In *TREE*, *Glyphoglossus* is sister-taxon to a holophyletic *Microhyla*, and we maintain both genera.

## F.19.53. Tribus *Dyscophini* Boulenger, 1882

***Protonym***: *Dyscophidae* Boulenger, 1882: 179 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Microhylinae* ||Fitzinger, 1843||-Noble, 1931.

***Adelphotaxon***: *Microhylini* ||Fitzinger, 1843||-Noble, 1931.
***Getendotaxon***: *Dyscophus* Grandidier, 1872.

### F.19.54. Tribus *Microhylini* ||Fitzinger, 1843||-Noble, 1931

***Eunym***: Dubois 2005*d*: 15.
***Getangiotaxon***: *Microhylinae* ||Fitzinger, 1843||-Noble, 1931.
***Adelphotaxon***: *Dyscophini* Boulenger, 1882.
***Getendotaxa***: *Chaperinina* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler 2016; *Hylaedactylina* Fitzinger, 1843; *Microhylina* ||Fitzinger, 1843||-Noble, 1931; *Micrylettina* **nov.**

### F.20.48. Subtribus *Chaperinina* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler 2016

***Protonym***: *Chaperininae* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler 2016: 135 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Microhylini* ||Fitzinger, 1843||-Noble, 1931.
***Adelphotaxa***: *Hylaedactylina* Fitzinger, 1843; *Microhylina* ||Fitzinger, 1843||-Noble, 1931; *Micrylettina* **nov.**
***Getendotaxon***: *Chaperina* Mocquard, 1892.

### F.20.49. Subtribus *Hylaedactylina* Fitzinger, 1843

***Protonym***: *Hylaedactyli* Fitzinger, 1843: 33 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Microhylini* ||Fitzinger, 1843||-Noble, 1931.
***Adelphotaxa***: *Chaperinina* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler 2016; *Microhylina* ||Fitzinger, 1843||-Noble, 1931; *Micrylettina* **nov.**
***Getendotaxa***: *Cacopinia* Noble, 1931; *Hylaedactylinia* Fitzinger, 1843; *Phrynellinia* **nov.**

### F.21.36. Infratribus *Cacopinia* Noble, 1931

***Protonym***: *Cacopinae* Noble, 1931: 532 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hylaedactylina* Fitzinger, 1843.
***Adelphotaxa***: *Hylaedactylinia* Fitzinger, 1843; *Phrynellinia* **nov.**
***Getendotaxon***: *Uperodon* Duméril & Bibron, 1841.

### F.21.37. Infratribus *Hylaedactylinia* Fitzinger, 1843

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hylaedactylina* Fitzinger, 1843.
***Adelphotaxa***: *Cacopinia* Noble, 1931; *Phrynellinia* **nov.**
***Getendotaxon***: *Kaloula* Gray, 1831.

### F.21.38. Infratribus *Phrynellinia* **nov.**

***Getangiotaxon***: *Hylaedactylina* Fitzinger, 1843.
***Adelphotaxa***: *Cacopinia* Noble, 1931; *Hylaedactylinia* Fitzinger, 1843.
***Getendotaxa***: *Metaphrynella* Parker, 1934; *Phrynella* Boulenger, 1887.

***Nucleogenus, by present designation***: *Phrynella* Boulenger, 1887. ● ***Etymology of nomen***: G: φρύνη (*phryne*), 'toad'; L: -*ella*, a feminine suffix indicating a diminutive form. ● ***Stem of nomen***: *Phrynell*-.

***Diagnosis***: Small to medium sized microhylids (SVL males 19–45 mm; females 23–45 mm); vomerine and maxillary teeth absent; prevomer divided; palatine, clavicles and procoracoid absent; sternum cartilaginous; omosternum absent or small; vertebrae procoelous; terminal phalanges Y-shaped; pupil horizontal; tongue oval, scarcely free; two transverse ridges on palate; tympanum hidden; finger tips strongly dilated; subarticular tubercles of hands enlarged to form accessory adhesive organs; rudiment of web on hand; feet largely webbed; toe tips with distinct discs; first finger shorter than second, second little shorter than fourth; outer metatarsal tubercle absent; inner metatarsal tubercle present; hind limb length short; skin smooth or pustular; dorsal coloration dark with light lines or dark pattern; mid-dorsal stripe absent; ventral coloration light with or without spots. {Parker 1934; Inger 1966; Manthey & Grossmann 1997}.

### F.20.50. Subtribus *Microhylina* ||Fitzinger, 1843||-Noble, 1931

***Eunym***: *Hoc loco*.

***Getangiotaxon***: *Microhylini* ||Fitzinger, 1843||-Noble, 1931.

***Adelphotaxa***: *Chaperinina* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler 2016; *Hylaedactylina* Fitzinger, 1843; *Micrylettina* **nov.**

***Getendotaxa***: *Glyphoglossus* Günther, 1869; *Microhyla* Tschudi, 1838.

### F.20.51. Subtribus *Micrylettina* **nov.**

***Getangiotaxon***: *Microhylini* ||Fitzinger, 1843||-Noble, 1931.

***Adelphotaxa***: *Chaperinina* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler 2016; *Hylaedactylina* Fitzinger, 1843; *Microhylina* ||Fitzinger, 1843||-Noble, 1931.

***Getendotaxa***: *Micryletta* Dubois, 1987; *Mysticellus* Garg & Biju, 2019.

***Nucleogenus, by present designation***: *Micryletta* Dubois, 1987. ● ***Etymology of nomen***: N: *Micrhyla* Duméril & Bibron, 1841, neonym for *Microhyla* Tschudi, 1838, derived from: G: μικρός (*micros*), 'small'; N: *Hyla*, of debated etymology; -*etta*, a feminine suffix indicating jumping behaviour of these frogs. ● ***Stem of nomen***: *Micrylett*-.

***Diagnosis***: Small sized microhylid (SVL males 19–28 mm; females SVL 22–29 mm); vomerine teeth absent; maxillary teeth absent; prevomer divided; palatine absent; ethmoid strongly developed; clavicles absent; procoracoid absent; sternum cartilaginous; omosternum absent; vertebrae diplasiocoelous; terminal phalanges simple; occipital fold absent; pupil oval or rounded; finger tips blunt; supernumerary tubercles present, distinct; first finger shorter than second; web between fingers absent; web between toes absent or with small rudiment; toe tips blunt; outer metatarsals fused; inner metatarsal tubercle prominent; hind limbs short; skin smooth or shagreened; ventral coloration clear, more or less spotted. {Boulenger 1909; Parker 1934; Tarkhnishvili 1994; Manthey & Grossmann 1997; Garg & Biju 2019}.

### F.18.56. Subfamilia *Otophryninae* Wassersug & Pyburn, 1987

***Protonym and eunym***: *Otophryninae* Wassersug & Pyburn, 1987: 532 [bF].

***Getangiotaxon***: *Microhylidae* ||Fitzinger, 1843||-Noble, 1931.

***Adelphotaxa***: *Adelastinae* Peloso, Frost, Richards, Rodrigues, Donnellan, Matsui, Raxworthy, Biju, Lemmon, Lemmon & Wheeler, 2016; *Asterophryinae* Günther, 1858; *Cophylinae* Cope, 1889; *Gastrophryninae* Fitzinger, 1843; *Hoplophryninae* Noble, 1931; *Kalophryninae* Mivart, 1869; *Melanobatrachinae* Noble, 1931; *Microhylinae* ||Fitzinger, 1843||-Noble, 1931.

***Getendotaxa***: *Otophryne* Boulenger, 1900; *Synapturanus* Carvalho, 1954.

## F.17.30. Familia *Phrynomeridae* Noble, 1931

***Protonym***: *Phrynomerinae* Noble, 1931: 538 [bF].
***Eunym***: Parker 1934: 9.
***Getangiotaxon***: **Ecostata** Lataste, 1879.
***Adelphotaxon***: *Microhylidae* ||Fitzinger, 1843||-Noble, 1931.
***Getendotaxon***: *Phrynomantis* Peters, 1867.

***Comments***: The position of *Phrynomantis* is highly variable in the phylogenetic trees published but in the recent works including exhaustive sampling (Bossuyt & Roelants 2009; Pyron & Wiens 2011; Tu *et al.* 2019) as well as in *TREE* it shows to be the sister-taxon to all microhylid taxa. Thus, here we recognise it on the basis of the [STC] at the family rank as *Phrynomeridae*.

## C.11.04. Subphalanx **Gastrechmia** Cope, 1867

***Protonym***: **Gastrechmia** Cope, 1867: 190 [bO].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Scoptanura** Starrett, 1973.
***Adelphotaxa***: **Ecostata** Lataste, 1879; **Pananura nov.**; **1 G†**.
***Getendotaxa***: *Arthroleptoidea* Mivart, 1869; *Brevicipitoidea* Bonaparte, 1850.

***Comments***: This highly supported branch groups the families *Arthroleptidae*, *Brevicipitidae*, *Hemisotidae* and *Hyperoliidae*. The branch was first recovered for *Arthroleptis*, *Leptopelis*, *Heterixalus*, *Hyperolius*, *Kassina* and *Breviceps* by Van der Meijden *et al.* (2004) and recognised by them as *Arthroleptoidae*. It was documented by Frost *et al.* (2006), Bossuyt & Roelants (2009), Frazão *et al.* (2015), Feng *et al.* (2017) and Portik & Blackburn (2016), and given the ectonym «Afrobatrachia» by Frost *et al.* (2006). Zhang *et al.* (2013) recognised this taxon as *Brevicipitoidae*. All recent works, as well as *TREE*, find a sister-group relationship between a taxon grouping the *Arthroleptidae* and *Hyperoliidae* and a second taxon grouping the *Brevicipitidae* and *Hemisotidae*. Here this first taxon is named *Arthroleptoidea* and the second *Brevicipitoidea*. *Hyperoliidae* and *Hemisotidae* are attributed to the family rank by virtue of the [UQC], and all the other ranks derive from this.

## F.14.08. Superfamilia *Arthroleptoidea* Mivart, 1869

***Protonym***: *Arthroleptina* Mivart, 1869: 294 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Gastrechmia** Cope, 1867.
***Adelphotaxon***: *Brevicipitoidea* Bonaparte, 1850.
***Getendotaxa***: *Arthroleptidae* Mivart, 1869; *Hyperoliidae* Laurent, 1943.

## F.17.31. Familia *Arthroleptidae* Mivart, 1869

***Eunym***: Laurent 1972: 200.
***Getangiotaxon***: *Arthroleptoidea* Mivart, 1869.
***Adelphotaxon***: *Hyperoliidae* Laurent, 1943.
***Getendotaxa***: *Arthroleptinae* Mivart, 1869; *Astylosterninae* Noble, 1927; *Leptopelinae* Laurent, 1972.

***Comments***: The family *Arthroleptidae* is recognised at the family rank according to the sister-taxon Criterion [STC]. It includes three taxa of unresolved relationships that are recognised as the subfamilies *Arthroleptinae* for the single genus *Arthroleptis*, *Leptopelinae* for *Leptopelis*, and *Astylosterninae*. This latter subfamily includes two taxa, the tribe *Leptodactylodontini* for *Leptodactylodon*, and the tribe *Astylosternini*, for the sister-taxa *Nyctibates* and *Scotobleps*, and their sister-taxon *Astylosternus*.

To keep a holophyletic taxon with high support for *Astylosternus*, we synonymised *Trichobatrachus* with the latter. As there is no support for the holophyly of *Cardioglossa*, it is synonymised with *Astylosternus*. The analysis of Portik & Blackburn (2016) results in similar relationships within the *Arthroleptidae* but they obtained holophyletic groups for *Astylosternus*, with *Trichobatrachus* as sister taxon, and *Cardioglossa*, with *Arthroleptis* as sister-taxon.

### F.18.57. Subfamilia *Arthroleptinae* Mivart, 1869

***Eunym***: Noble 1931: 515.
***Getangiotaxon***: *Arthroleptidae* Mivart, 1869.
***Adelphotaxa***: *Astylosterninae* Noble, 1927; *Leptopelinae* Laurent, 1972.
***Getendotaxon***: *Arthroleptis* Smith, 1849.

### F.18.58. Subfamilia *Astylosterninae* Noble, 1927

***Protonym and eunym***: *Astylosterninae* Noble, 1927: 110 [bF].
***Getangiotaxon***: *Arthroleptidae* Mivart, 1869.
***Adelphotaxa***: *Arthroleptinae* Mivart, 1869; *Leptopelinae* Laurent, 1972.
***Getendotaxa***: *Astylosternini* Noble, 1927; *Leptodactylodontini* **nov.**

### F.19.55. Tribus *Astylosternini* Noble, 1927

***Eunym***: Frost, Grant, Faivovich, Bain, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler 2006: 234.
***Getangiotaxon***: *Arthroleptinae* Mivart, 1869.
***Adelphotaxon***: *Leptodactylodontini* **nov.**
***Getendotaxa***: *Astylosternus* Werner, 1898; *Nyctibates* Boulenger, 1904; *Scotobleps* Boulenger, 1900.

### F.19.56. Tribus *Leptodactylodontini* **nov.**

***Getangiotaxon***: *Arthroleptinae* Mivart, 1869.
***Adelphotaxon***: *Astylosternini* Noble, 1927.
***Getendotaxon***: *Leptodactylodon* Andersson, 1903.

***Nucleogenus, by present designation***: *Leptodactylodon* Andersson, 1903. ● ***Etymology of nomen***: G: λεπτός (*leptos*), 'thin'; δάκτυλος (*dactulos*), 'digit, finger, toe'; ὀδούς (*odous*), 'tooth', referring to the shape of the terminal phalanges. ● ***Stem of nomen***: *Leptodactylodont-*.

***Diagnosis***: Small to medium sized frogs (males SVL 20–44 mm; females SVL 22–42 mm); stocky habitus, legs relatively short, small head, snout rounded; small eyes with oval horizontal pupilla; webbing absent on foot; terminal phalanges not exsertile, slightly pointed; males with two groups of nuptial spines on inner side of hand and on first finger; omosternum not forked, enlarged; tadpoles with large buccal labia, keratodonts absent, mouth sheath with long tooth sharp serrations. {Amiet 1981}.

### F.18.59. Subfamilia *Leptopelinae* Laurent, 1972

***Protonym***: *Leptopelini* Laurent, 1972: 201 [T].
***Eunym***: Dubois 1981: 227.
***Getangiotaxon***: *Arthroleptidae* Mivart, 1869.
***Adelphotaxa***: *Arthroleptinae* Mivart, 1869; *Astylosterninae* Noble, 1927.
***Getendotaxon***: *Leptopelis* Günther, 1859.

## F.17.32. Familia *Hyperoliidae* Laurent, 1943

***Protonym***: *Hyperoliinae* Laurent, 1943: 16 [bF].
***Eunym***: Laurent 1951: 116.
***Getangiotaxon***: *Arthroleptoidea* Mivart, 1869.
***Adelphotaxon***: *Arthroleptidae* Mivart, 1869.
***Getendotaxa***: *Cryptothylacinae* **nov.**; *Hyperoliinae* Laurent, 1943; **3 GIS** (*Arlequinus* Perret, 1988; *Callixalus* Laurent, 1950; *Chrysobatrachus* Laurent, 1951).

***Comments***: This taxon is attributed to the family rank following the [UQC]. Within this family, two groups are recognised as subfamilies: the *Cryptothylacinae* for *Cryptothylax*, the sister-group to the rest of the *Hyperoliidae*, recognised as the *Hyperoliinae*. Within the *Hyperoliinae* there is support for three taxa with unresolved mutual relationships, recognised as the tribes *Acanthixalini* for *Acanthixalus*, *Kassinini* for *Hylambates*, *Kassina*, *Kassinula*, *Paracassina* and *Semnodactylus*, and the *Hyperoliini*. This is quite different from the results of Portik & Blackburn (2016) as their tree of *Hyperoliidae* consists in two taxa, one for our *Kassinini*, sister-group to all other *Hyperoliidae*, which include our *Cryptothylacinae*, *Acanthixalini* and *Hyperoliini*. Other groups supported in *TREE* find also support in Portik & Blackburn (2016), as the sister-taxon relationship of *Heterixalus* and *Tachycnemis*, that form a holophyletic relationship with *Afrixalus*, recognised in our classification as *Tachycneminia*. In *TREE*, the inclusion of *Kassina maculata* within a group of species that were attributed to the genus *Phlyctimantis* by Portik & Blackburn (2016) is confirmed. However, this taxon should be named *Hylambates* Duméril, 1853, following the Principle of Priority, as *Phlyctimantis* Laurent & Combaz, 1950 is its subjective junior synonym. Contrary to what appears in *ASW* <2020*a*>, the fact that Opinion 849 (Anonymous 1968) have afforded priority to *Kassina* Girard, 1853 over *Hylambates* Duméril, 1853 when both nomina are considered synonyms has not resulted in the 'suppression' (invalidation) of the latter and has no bearing on its validity when it is not considered synonym of *Kassina*! Therefore the species included in this genus should be known as *Hylambates boulengeri* (Perret, 1986), *Hylambates keithae* (Schiøtz, 1975), *Hylambates leonardi* Boulenger, 1906, *Hylambates maculatus* Duméril, 1953 and *Hylambates verrucosus* Boulenger, 1912.

## F.18.60. Subfamilia *Cryptothylacinae* **nov.**

***Getangiotaxon***: *Hyperoliidae* Laurent, 1943.
***Adelphotaxa***: *Hyperoliinae* Laurent, 1943; **3 GIS** (*Arlequinus* Perret, 1988; *Callixalus* Laurent, 1950; *Chrysobatrachus* Laurent, 1951).
***Getendotaxon***: *Cryptothylax* Laurent & Combaz, 1950.

***Nucleogenus, by present designation***: *Cryptothylax* Laurent & Combaz, 1950. ● ***Etymology of nomen***: G: κρυπτός (*kryptos*), 'hidden'; θΰλακος (*thylakos*), 'sack'; referring to absence of extensible vocal sac. ● ***Stem of nomen***: *Cryptothylac-*.

***Diagnosis***: Large sized hyperoliids (males SVL 39–54 mm; females SVL 48–58 mm); body slender, skin shagreen with small warts on dorsum; gular glands very large, obscuring gular region; vocal sac absent; finger and toes with enlarged pads with ventro-marginal groove anteriorly; fingers slightly webbed; toes largely webbed; tadpole with 1/3 rows of keratodonts. {Liem 1970; Drewes 1984}.

## F.18.61. Subfamilia *Hyperoliinae* Laurent, 1943

***Eunym***: Laurent 1943: 16.
***Getangiotaxon***: *Hyperoliidae* Laurent, 1943.
***Adelphotaxa***: *Cryptothylacinae* **nov.**; **3 GIS** (*Arlequinus* Perret, 1988; *Callixalus* Laurent, 1950; *Chrysobatrachus* Laurent, 1951).
***Getendotaxa***: *Acanthixalini* **nov.**; *Hyperoliini* Laurent, 1943; *Kassinini* Laurent, 1972.

## F.19.57. Tribus *Acanthixalini* **nov.**

***Getangiotaxon***: *Hyperoliinae* Laurent, 1943.
***Adelphotaxa***: *Hyperoliini* Laurent, 1943; *Kassinini* Laurent, 1972.
***Getendotaxon***: *Acanthixalus* Laurent, 1944.

***Nucleogenus, by present designation***: *Acanthixalus* Laurent, 1944. ● ***Etymology of nomen***: G: ἄκαντα (*acantha*), 'thorn'; N: *Ixalus* Duméril & Bibron, 1841, derived from ιξαλος (*ixalos*), 'jumping, dancing'. ● ***Stem of nomen***: *Acanthixal-*.

***Diagnosis***: Small sized frogs (SVL 32–36 mm); pupil horizontal; paired oval gular glands; tarsal spines present; tympanum absent; vertebrae procoelous; posterolateral process of hyoid present. {Drewes 1984}.

## F.19.58. Tribus *Hyperoliini* Laurent, 1943

***Eunym***: Laurent 1972: 201.
***Getangiotaxon***: *Hyperoliinae* Laurent, 1943.
***Adelphotaxa***: *Acanthixalini* **nov.**; *Kassinini* Laurent, 1972.
***Getendotaxa***: *Hyperoliina* Laurent, 1943; *Morerellina* **nov.**; *Opisthothylacina* **nov.**; *Tachycnemina* Channing, 1989.

***Comments***: In *TREE*, the relationships within the *Hyperoliini* are poorly resolved, so we recognise four subtribes, the *Hyperoliina* for *Hyperolius*, the *Morerellina* for *Morerella*, the *Opisthothylacina* for *Opisthothylax*, and the *Tachycnemina*. In the latter subtribe, *Heterixalus* is sister-genus to *Tachycnemis*, constituting together the infratribe *Tachycneminia*, and *Afrixalus*, the infratribe *Afrixalinia*, is sister-taxon to this group.

## F.20.52. Subtribus *Hyperoliina* Laurent, 1943

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hyperoliini* Laurent, 1943.
***Adelphotaxa***: *Morerellina* **nov.**; *Opisthothylacina* **nov.**; *Tachycnemina* Channing, 1989.
***Getendotaxon***: *Hyperolius* Rapp, 1842.

## F.20.53. Subtribus *Morerellina* **nov.**

***Getangiotaxon***: *Hyperoliini* Laurent, 1943.
***Adelphotaxa***: *Hyperoliina* Laurent, 1943; *Opisthothylacina* **nov.**; *Tachycnemina* Channing, 1989.
***Getendotaxon***: *Morerella* Rödel, Kosuch, Grafe, Boistel & Veith *in* Rödel, Kosuch, Grafe, Boistel, Assemian, Kouamé, Tohé, Gourène, Perret, Henle, Tafforeau, Pollet & Veith, 2009.

***Nucleogenus, by present designation***: *Morerella* Rödel, Kosuch, Grafe, Boistel & Veith *in* Rödel, Kosuch, Grafe, Boistel, Assemian, Kouamé, Tohé, Gourène, Perret, Henle, Tafforeau, Pollet & Veith, 2009. ● ***Etymology of nomen***: P: Jean-Jacques Morère (1947–), French batrachologist. ● ***Stem of nomen***: *Morerell-*.

***Diagnosis***: Medium sized tree-frogs (males mean SVL 29 mm; females mean SVL 32 mm); slender body; large protruding eyes; pupil horizontal; tympanum small but distinct; males with medium sized, medioposterior gular gland without dilatable skin of vocal sac; males with small spines on back and limbs; sphenethmoid not visible dorsally; ventroanterior portion of sphenethmoid unfused, consisting of two elements; non-imbricate neural arches not completely roofing spinal canal; transverse processes of eighth vertebra not angled markedly forward; a greatly forked omosternum; space between arms more than twice width of one arm; posterolateral process of hyoid absent; sternum completely ossified; pads on finger and toe tips round; intercalary elements of phalanges completely mineralised; short advertisement call, tonal grouped and not pulsed; arboreal eggs and aquatic larval stages. {Rödel *et al*. 2009}.

### F.20.54. Subtribus *Opisthothylacina* **nov.**

***Getangiotaxon***: *Hyperoliini* Laurent, 1943.
***Adelphotaxa***: *Hyperoliina* Laurent, 1943; *Morerellina* **nov.**; *Tachycnemina* Channing, 1989.
***Getendotaxon***: *Opisthothylax* Perret, 1966.

***Nucleogenus, by present designation***: *Opisthothylax* Perret, 1966. ● ***Etymology of nomen***: G: όπίσθεν (*opisthen*), 'behind'; θΰλακος (*thylakos*), 'sack'; referring to the position of the gular gland in male. ● ***Stem of nomen***: *Opisthothylac-*.

***Diagnosis***: Small sized frogs (SVL 30–33 mm); pupil vertical, tympanum absent; skin of dorsum and limbs very warty; males with a medioposterior gular gland on non-distensible skin of vocal sac; tympanum absent; chromosome complement 2 n = 24 with the presence of a distinctive pair of subtelocentric chromosomes; eggs large, not pigmented, 8–10 per clutch in foam nest deposited in folded leaves; tadpole without keratodonts. {Amiet 1974; Drewes 1984}.

### F.20.55. Subtribus *Tachycnemina* Channing, 1989

***Protonym***: *Tachycneminae* Channing, 1989: 116 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hyperoliini* Laurent, 1943.
***Adelphotaxa***: *Hyperoliina* Laurent, 1943; *Morerellina* **nov.**; *Opisthothylacina* **nov.**
***Getendotaxa***: *Afrixalinia* **nov.**; *Tachycneminia* Channing, 1989.

### F.21.39. Infratribus *Afrixalinia* **nov.**

***Getangiotaxon***: *Tachycnemina* Channing, 1989.
***Adelphotaxon***: *Tachycneminia* Channing, 1989.
***Getendotaxon***: *Afrixalus* Laurent, 1944.

***Nucleogenus, by present designation***: *Afrixalus* Laurent, 1944. ● ***Etymology of nomen***: R: Africa; N: *Ixalus* Duméril & Bibron, 1841, derived from ιξαλος (*ixalos*), 'jumping, dancing'. ● ***Stem of nomen***: *Afrixal-*.

***Diagnosis***: Small sized frogs (SVL 20–35 mm); pupil vertical; skin of males usually spinulous; tympanum usually distinct; toes usually half-webbed; posterolateral process of hyoid absent; keratodont formula usually 0/10. {Liem 1970; Drewes 1984}.

### F.21.40. Infratribus *Tachycneminia* Channing, 1989.

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Tachycnemina* Channing, 1989.
***Adelphotaxon***: *Afrixalinia* **nov.**
***Getendotaxa***: *Heterixalus* Laurent, 1944; *Tachycnemis* Fitzinger, 1843.

### F.19.59. Tribus *Kassinini* Laurent, 1972

***Protonym and eunym***: *Kassinini* Laurent, 1972: 201 [T].

***Getangiotaxon***: *Hyperoliinae* Laurent, 1943.
***Adelphotaxa***: *Acanthixalini* **nov.**; *Hyperoliini* Laurent, 1943.
***Getendotaxa***: *Hylambates* Duméril, 1853; *Kassina* Girard, 1853; *Kassinula* Laurent, 1940; *Paracassina* Peracca, 1907; *Semnodactylus* Hoffman, 1939.

### F.14.09. Superfamilia *Brevicipitoidea* Bonaparte, 1850

***Protonym***: *Brevicipitina* Bonaparte, 1850: plate [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Gastrechmia** Cope, 1867.
***Adelphotaxon***: *Arthroleptoidea* Mivart, 1869.
***Getendotaxa***: *Brevicipitidae* Bonaparte, 1850; *Hemisotidae* Cope, 1867.

### F.17.33. Familia *Brevicipitidae* Bonaparte, 1850

***Eunym***: Cope 1867: 191.
***Getangiotaxon***: *Brevicipitoidea* Bonaparte, 1850.
***Adelphotaxon***: *Hemisotidae* Cope, 1867.
***Getendotaxa***: *Brevicipitinae* Bonaparte, 1850; *Callulininae* **nov.**

***Comments***: Within the family *Brevicipitidae*, two groups have high support, recognised here as the subfamily *Brevicipitinae* for *Breviceps*, and *Callulininae* for four branches of unsupported relationships, the genus-group taxa *Balebreviceps*, *Callulina*, *Probreviceps* and *Spelaeophryne*. These two groups were confirmed in Pyron & Wiens (2011) and Portik & Blackburn (2016). Further studies are needed for clarifying the relationships within the *Callulininae*.

### F.18.62. Subfamilia *Brevicipitinae* Bonaparte, 1850

***Eunym***: Van Kampen 1923: x.
***Getangiotaxon***: *Brevicipitidae* Bonaparte, 1850.
***Adelphotaxon***: *Callulininae* **nov.**
***Getendotaxon***: *Breviceps* Merrem, 1820.

### F.18.63. Subfamilia *Callulininae* **nov**

***Getangiotaxon***: *Brevicipitidae* Bonaparte, 1850.
***Adelphotaxon***: *Brevicipitinae* Bonaparte, 1850.
***Getendotaxa***: *Balebreviceps* Largen & Drewes, 1989; *Callulina* Nieden, 1911; *Probreviceps* Parker, 1931; *Spelaeophryne* Ahl, 1924.

***Nucleogenus, by present designation***: *Callulina* Nieden, 1911. ● ***Etymology of nomen***: N: *Callula* Günther, 1864, autoneonym for *Kaloula* Gray, 1831, derived from G: κάλλος (*kallos*), 'beautiful'; L: *-ina*, diminutive suffix for feminine nouns. ● ***Stem of nomen***: *Callulin-*.

***Diagnosis***: Small to medium sized frogs (males SVL 28–52 mm; females SVL 42–60 mm); horizontal pupilla; large subcircular not incurved tongue; tips of fingers and toes pointed or enlarged; distal metatarsals not separated by web; omosternum very small to moderately sized, cartilaginous; sternum absent; apophyses of sacral vertebra enlarged; coccyx and sacrum fused; distal phlanges blunt or t-shaped. {Nieden 1911; Ahl 1924; Parker 1931; Largen & Drewes 1989; Channing & Howell 2006; Loader *et al.* 2010}.

## F.17.34. Familia *Hemisotidae* Cope, 1867

***Protonym***: *Hemisidae* Cope, 1867: 198 [F].
***Eunym***: Frost & Savage 1987: 24.
***Getangiotaxon***: *Brevicipitoidea* Bonaparte, 1850.
***Adelphotaxon***: *Brevicipitidae* Bonaparte, 1850.
***Getendotaxon***: *Hemisus* Günther, 1859.

## C.11.05. Subphalanx **Pananura nov.**

***Getangiotaxon***: **Scoptanura** Starrett, 1973.
***Adelphotaxa***: **Ecostata** Lataste, 1879; **Gastrechmia** Cope, 1867; **1 G**†.
***Getendotaxa***: **Ecaudata** Scopoli, 1777; **Savanura nov.**

***Comments***: This highly supported taxon has been recognised in all recent classifications (Frost *et al.* 2006; Roelants *et al.* 2007; Bossuyt & Roelants 2009; Pyron & Wiens 2011; Irisarri *et al.* 2012; Zhang *et al.* 2013; Feng *et al.* 2017) and named «Natatanura» by Frost *et al.* (2006) and *Ranoidae* by Zhang *et al.* (2013). It includes two major taxa, the **Ecaudata** and the **Savanura**. As the name «Natatanura» is an ectonym expressly proposed outside the *Code*, it is not available and we here name the new infraphalanx **Pananura**.

***Conucleogenera, by present designation***: *Hildebrandtia* Nieden, 1907; *Rana* Linnaeus, 1758.

***Etymology of nomen***: G: πᾶς (*pas*), 'all, every'; N: **Anura** Duméril, 1805, derived from G: ἀν- (*an*-), 'without'; οὐρά (*oura*), 'tail'. This nomen refers to the very wide distribution of this group of frogs, which covers most land masses except central and southern Australia and New Zealand (Frost *et al.* 2006).

***Diagnosis***: Small to very large sized frogs (SVL 14–320 mm); tongue present; pectoral girdle firmisternal; omosternum generally ossified; metasternum ossified or not; scapula not covered by clavicle; astragal and calcaneum separate; parahyoid not ossified; eight presacral vertebrae, usually biconcave, often procoelous; ribs absent; transverse process of presacral vertebrae generally long; transverse process of sacral vertebra cylindical or feebly dilated; sacrum not fused to urostyle, bicondylar articulation; urostyle without transversal process; articulations of atlas largely separated; Bidder's organs absent; amplexus usually axillary, rarely inguinal; parasphenoid without posterio-lateral processes; free living tadpoles or different adaptations to independence from water, also direct development in several groups; tadpoles with horny beak and keratodonts; spiracle unique, on left side of body. {Laurent 1986; Frost *et al.* 2006; Vitt & Caldwell 2014}.

Scott (2005) presented the following morphological apomorphies for this group: relative length of transverse processes of presacral vertebra VIII roughly equal in length to transverse processes of presacral vertebra IV; neural spines of presacral vertebrae II–IV present; dorsal ridge of urostyle well developed, extending more than half length of urostyle; anterodorsal process at anterior edge of dorsal ridge of urostyle strongly developed, large and distinct; sacral diapophyses undilated; omosternum style present, large and well ossified; frontoparietal fenestra reduced to merely a suture, frontoparietals large and touching centrally; femoral granules obvious, well-defined, extending 1⁄2 to 3⁄4 length of thigh from vent. Haas (2003) proposed as synapomorphies for this taxon: anterior insertion of *musculus subarcualis rectus* II–IV on ceratobranchial III; *commissura proximalis* II and III absent.

## C.12.03. Infraphalanx **Ecaudata** Scopoli, 1777

***Protonym***: **Ecaudata** Scopoli, 1777: 464 [O].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Pananura nov.**
***Adelphotaxon***: **Savanura nov.**
***Getendotaxa***: *Odontobatrachoidea* Barej, Schmitz, Günther, Loader, Mahlow & Rödel, 2014; *Phrynobatrachoidea* Laurent, 1941; *Ranoidea* Batsch, 1796.

***Comments***: The **Ecaudata** groups all the genera that were previously in the *Ranidae* or *Ranoidea*, to the exclusion of the *Ptychadenidae*. Frost *et al.* (2006) used the ectonym «Victoranura» for this taxon but two *Code*-compliant nomina, **Ecaudata** Scopoli, 1777 being the oldest, were already available for this taxon. It has been recognised in most recent molecular phylogenies (Frost *et al.* 2006; Bossuyt & Roelants 2009; Pyron & Wiens 2011; Yuan *et al.* 2018). This group includes three taxa, attributed here to the rank superfamily, the *Odontobatrachoidea*, *Phrynobatrachoidea* and *Ranoidea*, the relationships between which are not resolved in *TREE*. The *Phrynobatrachoidea* and *Ranoidea* appear as sister-groups but with a SHL support of 75 only, these two being sister-group to the *Odontobatrachoidea*. The **Ecaudata** include now 16 families of poorly resolved mutual relationships. Both the *Phrynobatrachoidea* and *Odontobatrachoidea* include a single family rank taxon, respectively the *Phrynobatrachidae* and the *Odontobatrachidae*. Within the superfamily *Ranoidea*, the branches *Ranidae* and *Rhacophoridae* are sister-groups and have long been given family rank in a large number of classifications, and thus are credited with this rank here on account of the Upper Quartile Criterion. The ranks of all the other suprageneric taxa derive directly from this and from the topology of *TREE*. These two families constitute together the apofamily *Raneidae*, which is part of an unresolved ***tetratomy*** with the apofamilies *Dicroglosseidae*, *Nyctibatracheidae* and *Ranixaleidae*. Altogether, these four taxa make up the epifamily *Ranoidae*, which is part of an unresolved ***hexatomy*** with the epifamilies *Conrauidae*, *Ericabatrachoidae*, *Micrixaloidae*, *Petropedetoidae* and *Pyxicephaloidae* which altogether constitute the *Ranoidea*.

Among the latter, the *Dicroglosseidae* incorporate the families *Dicroglossidae* and *Occidozygidae*, whereas the *Ceratobatracheidae* include the families *Alcalidae* and *Ceratobatrachidae*, assigned to the rank family due to the Non-Redundancy Criterion [NRC]. Frost *et al.* (2006) retained 10 families in their classification within our **Pananura**. The relationships between these families are quite different from ours in their work, as the *Ceratobatrachidae* are outgroup to all others, the *Phrynobatrachidae* are sister-taxon to the *Pyxicephaloidea*, which include the *Petropedetidae* and *Pyxicephalidae* (with *Cacosterninae* as subfamily), and the *Nyctibatrachidae* are sister-groups to the *Ranidae*, and together sister-group to their *Rhacophoroidea*. Bossuyt & Roelants (2009) recovered a sister-group relationship between *Mantellidae* and *Rhacophoridae*, and between *Dicroglossidae* and *Ranidae*, these two taxa forming a taxon with *Nyctibatrachidae* as sister-group. In their tree, *Micrixalidae* and *Ranixalidae* form a taxon with *Ceratobatrachidae* as outgroup. These two assemblages form a taxon with *Petropedetidae* and *Pyxicephalidae*, having *Phrynobatrachidae* as outgroup. Finally, the *Ptychadenidae*, as in *TREE*, are sister-group to the **Ecaudata**. Pyron & Wiens (2001) recognised ten families, with very similar relationships as found in *TREE*. The differences come mainly from divergences in the methodology of transcription of these relationships into a classification. The *Ptychadenidae* are within the **Ecaudata** in the trees presented by Zhang *et al.* (2013), Frazão *et al.* (2015), Feng *et al.* (2017) and Yuan *et al.* (2018). In these trees, the *Mantellidae* and *Rhacophoridae* are sister-group to *Ranidae*, but the positions of other groups are highly variable. The family classification derived from *TREE* is discussed below under the respective family nomina concerned.

## F.14.10. Superfamilia *Odontobatrachoidea* Barej, Schmitz, Günther, Loader, Mahlow & Rödel, 2014

***Protonym***: *Odontobatrachidae* Barej, Schmitz, Günther, Loader, Mahlow & Rödel, 2014: 1 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Ecaudata** Scopoli, 1777.
***Adelphotaxa***: *Phrynobatrachoidea* Laurent, 1941; *Ranoidea* Batsch, 1796.
***Getendotaxon***: *Odontobatrachidae* Barej, Schmitz, Günther, Loader, Mahlow & Rödel, 2014.

## F.17.35. Familia *Odontobatrachidae* Barej, Schmitz, Günther, Loader, Mahlow & Rödel, 2014

***Eunym***: Barej, Schmitz, Günther, Loader, Mahlow & Rödel, 2014: 1.
***Getangiotaxon***: *Odontobatrachoidea* Barej, Schmitz, Günther, Loader, Mahlow & Rödel, 2014.

***Adelphotaxon***: None.

***Getendotaxon***: *Odontobatrachus* Barej, Rödel, Loader & Schmitz *in* Barej, Rödel, Loader, Menegon, Gonwouo, Penner, Gvoždík, Günther, Bell, Nagel & Schmitz, 2014.

***Comments***: One of the most interesting discoveries of the recent years, this family has been defined by Barej *et al.* (2014) in resolving the paraphyly of the *Petropedetidae*. In their tree, this branch is sister-taxon to the *Dicroglossidae* within the **Pananura**. The difference with our taxonomy clearly comes from the sampling of taxa by these authors, mainly limited to African species. The single genus holds now five species (Barej *et al.* 2015).

## F.14.11. Superfamilia *Phrynobatrachoidea* Laurent, 1941

***Protonym***: *Phrynobatrachinae* Laurent, 1941: 192 [bF].

***Eunym***: *Hoc loco*.

***Getangiotaxon***: **Ecaudata** Scopoli, 1777.

***Adelphotaxa***: *Odontobatrachoidea* Barej, Schmitz, Günther, Loader, Mahlow & Rödel, 2014; *Ranoidea* Batsch, 1796.

***Getendotaxon***: *Phrynobatrachidae* Laurent, 1941.

## F.17.36. Familia *Phrynobatrachidae* Laurent, 1941

***Eunym***: Laurent, 1941: 192.

***Getangiotaxon***: *Phrynobatrachoidea* Laurent, 1941.

***Adelphotaxon***: None.

***Getendotaxa***: *Phrynobatrachus* Günther, 1862; *Phrynodon* Parker, 1935.

***Comments***: Zimkus *et al.* (2010, 2012) identified three taxa within the *Phrynobatrachidae*. Further studies are requested for the taxonomic recognition of these groups as genera (Zimkus *et al.* 2010). At this stage, these data support at least the resurrection of the genus *Phrynodon* as distinct from *Phrynobatrachus*, but for a more comprehensive taxon than the monotypic genus traditionally recognised under this nomen.

## F.14.12. Superfamilia *Ranoidea* Batsch, 1796

***Protonym***: *Ranina* Batsch, 1796: 179 [F].

***Eunym***: Bolkay 1929: 58.

***Getangiotaxon***: **Ecaudata** Scopoli, 1777.

***Adelphotaxa***: *Odontobatrachoidea* Barej, Schmitz, Günther, Loader, Mahlow & Rödel, 2014; *Phrynobatrachoidea* Laurent, 1941.

***Getendotaxa***: *Conrauoidae* Dubois, 1992; *Ericabatrachoidae* **nov.**; *Micrixaloidae* Dubois, Ohler & Biju, 2001; *Petropedetoidae* Noble, 1931; *Pyxicephaloidae* Bonaparte, 1850; *Ranoidae* Batsch, 1796.

***Comments***: Within this superfamily, six highly supported branches are recognised as epifamilies: the *Conrauoidae*, *Ericabatrachoidae*, *Micrixaloidae*, *Petropedetoidae*, *Pyxicephaloidae* and *Ranoidae*. The relationships between these groups are not resolved.

## F.15.05. Epifamilia *Conrauoidae* Dubois, 1992

***Protonym***: *Conrauoini* Dubois, 1992: 314 [T].

***Eunym***: Hoc loco.

***Getangiotaxon***: *Ranoidea* Batsch, 1796.

***Adelphotaxa***: *Ericabatrachoidae* **nov.**; *Micrixaloidae* Dubois, Ohler & Biju, 2001; *Petropedetoidae* Noble, 1931; *Pyxicephaloidae* Bonaparte, 1850; *Ranoidae* Batsch, 1796.

***Getendotaxon***: *Conrauidae* Dubois, 1992.

## F.17.37. Familia *Conrauidae* Dubois, 1992

***Eunym***: Pyron & Wiens 2011: 547.
***Getangiotaxon***: *Conrauoidae* Dubois, 1992.
***Adelphotaxon***: None.
***Getendotaxon***: *Conraua* Nieden, 1908.

***Comments***: The epifamily *Conrauoidae* includes a single genus, *Conraua*, whose relationships with the five other epifamilies of *Ranoidea* are not clarified. This taxon is recognised at the family rank as *Conrauidae* by application of the Consistent Naming Criterion [CNC] to the single genus *Conraua*. The position of this genus within the *Ranoidea* is highly variable in recent phylogenies: it has been included in the *Petropedetidae* by Frost *et al.* (2006), found as sister-group to *Petropedetes* (Zimkus *et al.* 2010), sister-group, given the rank family, to all other *Ranoidea* (Pyron & Wiens 2011), sister-group to the *Pyxicephalidae* and *Petropedetidae* (Barej *et al.* 2014) or sister-group to the *Petropedetidae* (Feng *et al.* 2017; Yuan *et al.* 2018). Here we recognise it provisionally as an independent lineage as the support for its relationships with other ranoid groups is below our Criteria.

## F.15.06. Epifamilia *Ericabatrachoidae* **nov.**

***Getangiotaxon***: *Ranoidea* Batsch, 1796.
***Adelphotaxa***: *Conrauoidae* Dubois, 1992; *Micrixaloidae* Dubois, Ohler & Biju, 2001; *Petropedetoidae* Noble, 1931; *Pyxicephaloidae* Bonaparte, 1850; *Ranoidae* Batsch, 1796.
***Getendotaxon***: *Ericabatrachidae* **nov.**

***Nucleogenus, by present designation***: *Ericabatrachus* Largen, 1991. ● ***Etymology of nomen***: N: *Erica*, referring to the distribution below the timber-line of *Erica arborea* woodland; G: βάτραχος (*batrachos*), 'frog'. ● ***Stem of nomen***: *Ericabatrach-*.

***Diagnosis***: Small sized frogs (males SVL 19–22 mm, females SVL 23–27 mm); vomerine teeth absent; maxillary teeth present; terminal phalanges simple; tongue deeply notched bearing a pointed median papilla; pupil oval, horizontal; tympanum poorly distinct; finger tips moderately dilated, bifid discs; first finger distinctly reduced; web between fingers absent; web between toes rudimentary; outer metatarsals fused; outer metatarsal tubercle absent; inner metatarsal tubercle small, oval; hind limbs moderately long; skin rugose, densely covered with tiny warts and scattered small tubercles; dorsal coloration grayish with obscure darker pattern; mid-dorsal stripe absent; ventral coloration dark gray-brown and whitish mottling; females with large unpigmented eggs; males with oval femoral glands and with subgular vocal sac. {Largen 1991}.

## F.17.38. Familia *Ericabatrachidae* **nov.**

***Getangiotaxon***: *Ericabatrachoidae* **nov.**
***Adelphotaxon***: None.
***Getendotaxon***: *Ericabatrachus* Largen, 1991.

***Comments***: The epifamily *Ericabatrachoidae* includes a single genus, *Ericabatrachus*, whose relationships with the five other epifamilies of *Ranoidea* are not clarified. This taxon is recognised at the family rank as *Ericabatrachidae* by application of the Consistent Naming Criterion [CNC] to the single genus *Ericabatrachus*. The position of this genus within the *Ranoidea* is not resolved in *TREE*. Siu-Ting *et al.* (2014) proposed it as sister-group to *Petropedetes*, a relationship also found in *TREE*, but with poor support.

### F.15.07. Epifamilia *Micrixaloidae* Dubois, Ohler & Biju, 2001

***Protonym***: *Micrixalinae* Dubois, Ohler & Biju, 2001: 56 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranoidea* Batsch, 1796.
***Adelphotaxa***: *Conrauoidae* Dubois, 1992; *Ericabatrachoidae* **nov.**; *Petropedetoidae* Noble, 1931; *Pyxicephaloidae* Bonaparte, 1850; *Ranoidae* Batsch, 1796.
***Getendotaxon***: *Micrixalidae* Dubois, Ohler & Biju, 2001.

### F.17.39. Familia *Micrixalidae* Dubois, Ohler & Biju, 2001

***Eunym***: Frost, Grant, Faivovich, Bain, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler 2006: 7.
***Getangiotaxon***: *Micrixaloidae* Dubois, Ohler & Biju, 2001.
***Adelphotaxon***: None.
***Getendotaxon***: *Micrixalus* Boulenger, 1888.

***Comments***: Within the epifamily *Micrixaloidae*, the rank family is given to the lowest FS taxon including the genus *Micrixalus* by application of the [CNC]. This taxon was recognised as a family by Frost *et al.* (2006) within the «Telmatobatrachia», as sister-group of the «Ametrobatrachia». In Bossuyt & Roelants (2009), it was sister-taxon to the *Ranixalidae*. In the tree of Pyron & Wiens (2011) it was sister-taxon to all the **Ecaudata**, including *Phrynobatrachus*. It was sister-group to our epifamilia *Ranoidae* in Barej *et al.* (2014).

### F.15.08. Epifamilia *Petropedetoidae* Noble, 1931

***Protonym***: *Petropedetinae* Noble, 1931: 520 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranoidea* Batsch, 1796.
***Adelphotaxa***: *Conrauoidae* Dubois, 1992; *Ericabatrachoidae* **nov.**; *Micrixaloidae* Dubois, Ohler & Biju, 2001; *Pyxicephaloidae* Bonaparte, 1850; *Ranoidae* Batsch, 1796.
***Getendotaxon***: *Petropedetidae* Noble, 1931.

### F.17.40. Familia *Petropedetidae* Noble, 1931

***Eunym***: Bauer 1985: 3.
***Getangiotaxon***: *Petropedetoidae* Noble, 1931.
***Adelphotaxa***: *Conrauoidae* Dubois, 1992; *Ericabatrachoidae* **nov.**; *Micrixaloidae* Dubois, Ohler & Biju, 2001; *Pyxicephaloidae* Bonaparte, 1850; *Ranoidae* Batsch, 1796.
***Getendotaxa***: *Arthroleptides* Nieden, 1911; *Petropedetes* Reichenow, 1874.

***Comments***: This is another holophyletic lineage which has to be recognised both as an epifamily and a family according to the [CNC]. It includes two genera, *Arthroleptides* and *Petropedetes* (Barej *et al.* 2014).

### F.15.09. Epifamilia *Pyxicephaloidae* Bonaparte, 1850

***Protonym***: *Pyxicephalina* Bonaparte, 1850: plate [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranoidea* Batsch, 1796.
***Adelphotaxa***: *Conrauoidae* Dubois, 1992; *Ericabatrachoidae* **nov.**; *Micrixaloidae* Dubois, Ohler & Biju, 2001; *Petropedetoidae* Noble, 1931; *Ranoidae* Batsch, 1796.

***Getendotaxa***: *Cacosternidae* Noble, 1931; *Pyxicephalidae* Bonaparte, 1850.

***Comments***: This epifamily includes two taxa, the family *Pyxicephalidae*, for the genera *Aubria* and *Pyxicephalus*, and the family *Cacosternidae*. These two taxa are recognised at the rank family on account of the [MRC] and the [NRC]. Frost *et al.* (2006) and Pyron & Wiens (2011) gave them the rank subfamily.

## F.17.41. Familia *Cacosternidae* Noble, 1931

***Protonym***: *Cacosterninae* Noble, 1931: 527 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Pyxicephaloidae* Bonaparte, 1850.
***Adelphotaxon***: *Pyxicephalidae* Bonaparte, 1850.
***Getendotaxa***: *Anhydrophryninae* **nov.**; *Cacosterninae* Noble, 1931; *Tomopterninae* Dubois, 1987.

***Comments***: Most authors recognise this taxon as a subfamily of the *Pyxicephalidae*. The family as here understood includes three well supported branches, with poor support concerning their mutual relationships, recognised here as the sufamilies *Anhydrophryninae* for *Anhydrophryne*, *Tomopterninae* for *Nothophryne* and *Tomopterna* (Bittencourt-Silva *et al.* 2016) and the *Cacosterninae*. The relationships within the latter subfamily are discussed below.

## F.18.64. Subfamilia *Anhydrophryninae* **nov.**

***Getangiotaxon***: *Cacosternidae* Noble, 1931.
***Adelphotaxa***: *Cacosterninae* Noble, 1931; *Tomopterninae* Dubois, 1987.
***Getendotaxon***: *Anhydrophryne* Hewitt, 1919.

***Nucleogenus, by present designation***: *Anhydrophryne* Hewitt, 1919. ● ***Etymology of nomen***: G: ἄνυδρος (*anhydros*), 'waterless'; φρύνη (*phryne*), 'toad'; referring to the reproduction independent from free water. ● ***Stem of nomen***: *Anhydrophryn-*.

***Diagnosis***: Small sized frogs (males mean SVL 17 mm, females mean SVL 20 mm); horizontal pupillae; distinct rather large tympanum; broad dark band on canthal and tympanic region; subarticular tubercles poorly developed on hands and feet; webbing absent on hands and feet; metatarsal tubercles poorly developed or absent; dorsal skin rather smooth; terrestrial nest, development within egg envelopes, no free living tadpole. {Bishop 1985; Du Preez & Carruthers 2009}.

## F.18.65. Subfamilia *Cacosterninae* Noble, 1931

***Eunym***: Noble 1931: 527.
***Getangiotaxon***: *Cacosternidae* Noble, 1931.
***Adelphotaxa***: *Anhydrophryninae* **nov.**; *Tomopterninae* Dubois, 1987.
***Getendotaxa***: *Cacosternini* Noble, 1931; *Natalobatrachini* **nov.**; *Strongylopini* Scott, 2005.

***Comments***: The relationships between three highly supported branches within the subfamily are poorly resolved. These three taxa are recognised here as the tribe *Cacosternini*, including the sister-taxa *Cacosternum* and *Microbatrachella* constituting the subtribe *Cacosternina*, and their sister-taxon, the subtribe *Poyntoniina* for *Poyntonia*, the tribe *Natalobatrachini* for *Arthroleptella* and *Natalobatrachus*, and the tribe *Strongylopini* for *Amietia* and *Strongylopus*.

### F.19.60. Tribus *Cacosternini* Noble, 1931

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Cacosterninae* Noble, 1931.
***Adelphotaxa***: *Natalobatrachini* **nov.**; *Strongylopini* Scott, 2005.
***Getendotaxa***: *Cacosternina* Noble, 1931; *Poyntoniina* **nov.**

### F.20.56. Subtribus *Cacosternina* Noble, 1931

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Cacosternini* Noble, 1931.
***Adelphotaxon***: *Poyntoniina* **nov.**
***Getendotaxa***: *Cacosternum* Boulenger, 1887; *Microbatrachella* Hewitt, 1926.

### F.20.57. Subtribus *Poyntoniina* **nov.**

***Getangiotaxon***: *Cacosternini* Noble, 1931.
***Adelphotaxon***: *Cacosternina* Noble, 1931.
***Getendotaxon***: *Poyntonia* Channing & Boycott, 1989.

***Nucleogenus, by present designation***: *Poyntonia* Channing & Boycott, 1989. ● ***Etymology of nomen***: P: John Charles Poynton (1931–), South African herpetologist. ● ***Stem of nomen***: *Poyntoni-*.

***Diagnosis***: Small sized frogs (23–30 mm); maxillary and premaxillary teeth present; vomerine teeth absent; pupil horizontal; tympanum not visible; white or orange stripes under tympanic ridge; glandular region behind eyes; fingers and toes blunt, without discs; tarsal tubercle and outer metatarsal tubercle absent; rudimentary web extending with fringes on fingers; moderate webbing between toes; dorsal skin with warts bearing granules; dorsal colour gray-brown, often with middorsal line; tadpoles brownish, long and streamlined; keratodont formulae 1/2 or 2:2+2/2, free living in shallow seepage areas. {Channing & Boycott 1989; Du Preez & Carruthers 2009}.

### F.19.61. Tribus *Natalobatrachini* **nov.**

***Getangiotaxon***: *Cacosterninae* Noble, 1931.
***Adelphotaxa***: *Cacosternini* Noble, 1931; *Strongylopini* Scott, 2005.
***Getendotaxa***: *Arthroleptella* Hewitt, 1926; *Natalobatrachus* Hewitt & Methuen, 1912.

***Nucleogenus, by present designation***: *Natalobatrachus* Hewitt, 1912. ● ***Etymology of nomen***: L: *natalis*, 'relating to birth', referring to the date of discovery, Christmas day, of the region now known as the South African province Natal; G: βάτραχος (*batrachos*), 'frog'. ● ***Stem of nomen***: *Natalobatrach-*.

***Diagnosis***: Very small to small sized cacosternids (males SVL 12–30 mm, females SVL 14–37 mm); metasternum with a well developed bony rod; pupillae horizontal; tympanum indistinct or distinct; tympanic ridge present; finger tips swollen to expanded; short limbs; tips of toes slighly expanded; toes and fingers without webbing; tubercles on hand indistinct; moderately developed subarticular tubercles; inner metatarsal tubercle distinct; outer metatarsal tubercle very weak or absent; web on toes absent or extending half; dorsum dark colored; ventral body light or dark colored but throat and chest in males dark; vocal sacs present or absent; egg slightly pigmented or white; direct development or free swimming larvae. {Hewitt & Methuen, 1912; Hewitt 1926, 1927; Turner & Channing 2008; Du Preez & Carruthers 2009}.

## F.19.62. Tribus *Strongylopini* Scott, 2005

***Protonym***: *Strongylopinae* Scott, 2005: 507 [bF].
***Eunym***: *Hoc loco.*
***Getangiotaxon***: *Cacosterninae* Noble, 1931.
***Adelphotaxa***: *Cacosternini* Noble, 1931; *Natalobatrachini* **nov.**
***Getendotaxa***: *Amietia* Dubois, 1987; *Strongylopus* Tschudi, 1838.

## F.18.66. Subfamilia *Tomopterninae* Dubois, 1987

***Protonym***: *Tomopternini* Dubois, 1987: 56 [T].
***Eunym***: Dubois 1992: 336.
***Getangiotaxon***: *Cacosternidae* Noble, 1931.
***Adelphotaxa***: *Anhydrophryninae* **nov.**; *Cacosterninae* Noble, 1931.
***Getendotaxa***: *Nothophryne* Poynton, 1963; *Tomopterna* Duméril & Bibron, 1841.

## F.17.42. Familia *Pyxicephalidae* Bonaparte, 1850

***Eunym***: Roelants, Gower, Wilkinson, Simon, Biju, Guillaume, Moriau & Bossuyt 2007: 889.
***Getangiotaxon***: *Pyxicephaloidae* Bonaparte, 1850.
***Adelphotaxon***: *Cacosternidae* Noble, 1931.
***Getendotaxa***: *Aubria* Boulenger, 1917; *Pyxicephalus* Tschudi, 1838.

## F.15.10. Epifamilia *Ranoidae* Batsch, 1796

***Eunym***: Dubois 1992: 309.
***Getangiotaxon***: *Ranoidea* Batsch, 1796.
***Adelphotaxa***: *Conrauoidae* Dubois, 1992; *Ericabatrachoidae* **nov.**; *Micrixaloidae* Dubois, Ohler & Biju, 2001; *Petropedetoidae* Noble, 1931; *Pyxicephaloidae* Bonaparte, 1850.
***Getendotaxa***: *Ceratobatracheidae* Boulenger, 1884; *Dicroglosseidae* Dubois, 1987; *Nyctibatracheidae* Blommers-Schlösser, 1993; *Raneidae* Batsch, 1796; *Ranixaleidae* Dubois, 1987.

***Comments***: This epifamily was recognised in Frost *et al.* (2006) as the «Saukrobatrachia», including the *Dicroglossidae* and the «Aglaioanura» which included the *Rhacophoroidea* and the *Ranoidea*, which in their turn included the *Nyctibatrachidae* and the *Ranidae*, but not the *Ceratobatrachidae*. In Bossuyt & Roelants (2009), two taxa were proposed within this group, one with *Ceratobatrachidae* being sister-group to a branch formed of the *Micrixalidae* and *Ranixalidae*, and a second with *Nyctibatrachidae* as sister-branch of (*Mantellidae* and *Rhacophoridae*) and (*Dicroglossidae* and *Ranidae*). The branch including the *Ceratobatrachidae* was confirmed by Pyron &Wiens (2011), who found high support for the *Nyctibatrachidae*, *Ceratobatrachidae*, *Ranixalidae*, *Dicroglossidae*, *Mantellidae*, *Rhacophoridae* and *Ranidae*. Whereas sister-group relationships between (*Rhacophoridae* and *Mantellidae*) and *Ranidae*, and *Dicroglossinae* and *Occydozyginae* were confirmed in most recent phylogenies (Zhang *et al.* 2013, Feng *et al.* 2017; Yuan *et al.* 2018), the position of the *Nyctibatrachidae* and *Ranixalidae* is not stable. Brown *et al.* (2015) proposed a classification of the *Ceratobatracheidae* that was expanded here to include the genus *Liurana* following Yan *et al.* (2016).

In *TREE*, the relationships between the five branches that constitute the epifamily *Ranoidae* are not resolved and these five branches are here recognised at the same rank, as apofamilies *Ceratobatracheidae*, *Dicroglosseidae*, *Nyctibatracheidae*, *Raneidae* and *Ranixaleidae*. The apofamily *Ceratobatracheidae* includes three branches, here recognised as subfamilies of a single family *Ceratobatrachidae* based on the [NTC], the subfamily *Alcalinae* with the only genus *Alcalus*, the subfamily *Ceratobatrachinae* with the genera *Cornufer* and *Platymantis*, and the subfamily *Liuraninae* for the single genus *Liurana*. The apofamily *Dicroglosseidae* has two highly supported branches recognised as the families *Dicroglossidae* and *Occidozygidae* following the [NRC]. The detailed classification is provided below. The apofamily *Nyctibatracheidae* includes a single family, the *Nyctibatrachidae*, with two genera, *Lankanectes* and *Nyctibatrachus*. The fourth group, the apofamily *Raneidae*, includes two highly supported groups recognised as the families *Ranidae* and *Rhacophoridae*, whose detailed classification is presented below. Finally, the apofamily *Ranixaleidae* accommodates a single family rank taxon, the *Ranixalidae*, with the genera *Indirana* and *Walkerana*.

### F.16.03. Apofamilia *Ceratobatracheidae* Boulenger, 1884

***Protonym***: *Ceratobatrachidae* Boulenger, 1884: 212 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranoidae* Batsch, 1796.
***Adelphotaxa***: *Dicroglosseidae* Dubois, 1987; *Nyctibatracheidae* Blommers-Schlösser, 1993; *Raneidae* Batsch, 1796; *Ranixaleidae* Dubois, 1987.
***Getendotaxon***: *Ceratobatrachidae* Boulenger, 1884.

### F.17.43. Familia *Ceratobatrachidae* Boulenger, 1884

***Eunym***: Boulenger, 1884: 212.
***Getangiotaxon***: *Ceratobatracheidae* Boulenger, 1884.
***Adelphotaxon***: None.
***Getendotaxa***: *Alcalinae* Brown, Siler, Richards, Diesmos & Cannatella, 2015; *Ceratobatrachinae* Boulenger, 1884; *Liuraninae* Fei, Ye & Jiang, 2010.

### F.18.67. Subfamilia *Alcalinae* Brown, Siler, Richards, Diesmos & Cannatella, 2015

***Protonym and eunym***: *Alcalinae* Brown, Siler, Richards, Diesmos & Cannatella, 2015: 142 [bF].
***Getangiotaxon***: *Ceratobatrachidae* Boulenger, 1884.
***Adelphotaxa***: *Ceratobatrachinae* Boulenger, 1884; *Liuraninae* Fei, Ye & Jiang, 2010.
***Getendotaxon***: *Alcalus* Brown, Siler, Richards, Diesmos & Cannatella, 2015.

### F.18.68. Subfamilia *Ceratobatrachinae* Boulenger, 1884

***Eunym***: Gadow 1901: xi, 237.
***Getangiotaxon***: *Ceratobatrachidae* Boulenger, 1884.
***Adelphotaxa***: *Alcalinae* Brown, Siler, Richards, Diesmos & Cannatella, 2015; *Liuraninae* Fei, Ye & Jiang, 2010.
***Getendotaxa***: *Cornufer* Tschudi, 1838; *Platymantis* Günther, 1859.

### F.18.69. Subfamilia *Liuraninae* Fei, Ye & Jiang, 2010

***Protonym and eunym***: *Liuraninae* Fei, Ye & Jiang, 2010: 12 [bF].
***Getangiotaxon***: *Ceratobatrachidae* Boulenger, 1884.
***Adelphotaxa***: *Alcalinae* Brown, Siler, Richards, Diesmos & Cannatella, 2015; *Ceratobatrachinae* Boulenger, 1884.
***Getendotaxon***: *Liurana* Dubois, 1987.

### F.16.04. Apofamilia *Dicroglosseidae* Dubois, 1987

***Protonym***: *Dicroglossini* Dubois, 1987*b*: 57 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranoidae* Batsch, 1796.

***Adelphotaxa***: *Ceratobatracheidae* Boulenger, 1884; *Nyctibatracheidae* Blommers-Schlösser, 1993; *Raneidae* Batsch, 1796; *Ranixaleidae* Dubois, 1987.
***Getendotaxa***: *Dicroglossidae* Dubois, 1987; *Occidozygidae* Fei, Ye & Huang, 1990.

## F.17.44. Familia *Dicroglossidae* Dubois, 1987

***Eunym***: Frost, Grant, Faivovich, Bain, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler 2006: 7.
***Getangiotaxon***: *Dicroglosseidae* Dubois, 1987.
***Adelphotaxon***: *Occidozygidae* Fei, Ye & Huang, 1990.
***Getendotaxa***: *Dicroglossinae* Dubois, 1987; *Limnonectinae* Dubois, 1992; *Painae* Dubois, 1992; **1 GIS** (*Chrysopaa* Ohler & Dubois, 2006).

***Comments***: The family *Dicroglossidae* here corresponds to the *Dicroglossinae* of Roelants *et al.* (2004), Frost *et al.* (2006), Pyron & Wiens (2011) and Yuan *et al.* (2018). Its recognition at the family rank is a consequence of application of consistent Rules throughout *TREE*. The relationships between the three highly supported taxa obtained within this family are not resolved, so they are recognised equally as the subfamilies *Dicroglossinae*, *Limnonectinae* for the single genus *Limnonectes*, and *Painae*. These three groups have been revealed by Roelants *et al.* (2004) but in their tree the branch here named *Limnonectinae* was sister-group to a branch combining the *Dicroglossinae* and *Painae*.

The nomen *Dicroglossidae* first appeared in the literature in Anderson (1871: 38), who used it without stating that it was a new nomen and without diagnosis, comment or included species. Dubois (1987*b*: 57–58) guessed that it was based on the generic nomen *Dicroglossus* Günther, 1860, a junior synonym of *Euphlyctis* Fitzinger, 1843 (see Dubois 1975), and used it, under the apograph *Dicroglossini*, for a tribe including this genus and a few others. Since then, this nomen and its parographs have had a large use in the literature for several taxa from the rank tribe to the rank superfamily. However, Ohler & Dubois (2014) provided evidence that Anderson's (1871) nomen was not a new nomen but just a misspelling for *Discoglossidae* Günther, 1858, based on the generic nomen *Discoglossus* Otth, 1837. In order not to upset nomenclatural stability, they proposed to maintain the nomen *Dicroglossidae* and its parographs as valid, but credited to Dubois (1987*b*), who had first used it explicitly as a family-series nomen based on the generic nomen *Dicroglossus*. Ohler *et al.* (2014) submitted to the Commission an application asking it to use its Plenary Power to implement this nomenclatural act. This application was published in the *BZN*, and the Case 3666 first announced on the Commission website as under study by the Commission, but later withdrawn from this website without explanation, although no vote on this case, and even no comment on it, was published in the *BZN*. In the absence of decision of the Commission on this case, we simply consider the nomen "*Dicroglossidae* Anderson, 1870" as unavailable and 'non-existent', and we credit the nomen *Dicroglossini* to Dubois (1987*b*).

## F.18.70. Subfamilia *Dicroglossinae* Dubois, 1987

***Eunym***: Dubois 1992: 313.
***Getangiotaxon***: *Dicroglossidae* Dubois, 1987.
***Adelphotaxa***: *Limnonectinae* Dubois, 1992; *Painae* Dubois, 1992.
***Getendotaxa***: *Dicroglossini* Dubois, 1987; *Fejervaryini* Fei, Ye & Jiang, 2010.

***Comments***: The two highly supported branches within this subfamily are recognised here as the tribes *Dicroglossini* and *Fejervaryini*. Within the *Dicroglossini*, two subtribes are erected: *Nannophryina*, including the single genus *Nannophrys*, is sister-group to *Dicroglossina*, recognised for the genera *Euphlyctis*, *Hoplobatrachus* and *Phrynoderma*. The validation of *Phrynoderma* Fitzinger, 1843 for *Phrynoderma hexadactylum* and *Phrynoderma aloysii* is necessary as *Euphlyctis* including these two species has very poor support in *TREE* (SHL 11 %). The relationships among the three genera of *Fejervaryini* are not resolved.

### F.19.63. Tribus *Dicroglossini* Dubois, 1987

***Eunym***: Dubois 1987*b*: 57.
***Getangiotaxon***: *Dicroglossinae* Dubois, 1987.
***Adelphotaxon***: *Fejervaryini* Fei, Ye & Jiang, 2010.
***Getendotaxa***: *Dicroglossina* Dubois, 1987; *Nannophryina* Fei, Ye & Jiang, 2010.

### F.20.58. Subtribus *Dicroglossina* Dubois, 1987

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Dicroglossini* Dubois, 1987.
***Adelphotaxon***: *Nannophryina* Fei, Ye & Jiang, 2010.
***Getendotaxa***: *Euphlyctis* Fitzinger, 1843; *Hoplobatrachus* Peters, 1863; *Phrynoderma* Fitzinger, 1843.

***Comments***: As noted by Kosuch *et al.* (2001), the original description of *Rana chinensis* Osbeck, 1765 clearly applies to the species long designated in the literature as *Rana rugulosa* Wiegmann, 1834 or *Hoplobatrachus rugulosus*, so this species should be known as *Hoplobatrachus chinensis*. Contrary to the remarks in *ASW* <2020*a*>, the designation of the specimen CIB 980505 from near Guangzhou City, Guangdong, China by Fei *et al.* (2009: 1320) as neotype for this nominal species was not unwarranted but was necessary to identify objectively the taxon to which the nomen *Rana chinensis* applies. As this nomen was used as valid after 1899 by several authors, including non-taxonomists, it cannot and should not be rejected under Article 23.9 and it should be used as valid.

### G.28.372. Genus *Phrynoderma* Fitzinger, 1843

***Getangiotaxon***: *Dicroglossina* Dubois, 1987.
***Adelphotaxa***: *Euphlyctis* Fitzinger, 1843; *Hoplobatrachus* Peters, 1863.
***Getendotaxa***: *Phrynoderma aloysii* (Joshy, Alam, Kurabayashi, Sumida & Kuramoto, 2009); *Phrynoderma hexadactylum* (Lesson, 1834); *Phrynoderma karaavali* (Priti, Naik, Seshadri, Singal, Vidisha, Ravikanth & Gururaja, 2016).

***Etymology of nomen***: G: φρύνη (*phryne*), 'toad'; δέρμα (*derma*), 'skin'. ● ***Stem of nomen***: *Phrynoderm-*. ● ***Grammatical gender of nomen***: neuter.

***Comments***: The nomen *Phrynoderma* Sturm, 1843 (**Coleoptera**) was published as a synonym of *Zopherus* Gray, 1832 and was not treated as available before 1961, so that it was not made available through Article 11.6.1. Therefore, it does not threaten the nomen *Phrynoderma* Fitzinger, 1843 as a potential senior homonym, and the latter can be used as valid.

### F.20.59. Subtribus *Nannophryina* Fei, Ye & Jiang, 2010

***Protonym***: *Nannophryini* Fei, Ye & Jiang, 2010: 17 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Dicroglossini* Dubois, 1987.
***Adelphotaxon***: *Dicroglossina* Dubois, 1987.
***Getendotaxon***: *Nannophrys* Günther, 1869.

### F.19.64. Tribus *Fejervaryini* Fei, Ye & Jiang, 2010

***Protonym and eunym***: *Fejervaryini* Fei, Ye & Jiang, 2010: 17 [T].
***Getangiotaxon***: *Dicroglossinae* Dubois, 1987.
***Adelphotaxon***: *Dicroglossini* Dubois, 1987.
***Getendotaxa***: *Fejervarya* Bolkay, 1915; *Minervarya* Dubois, Ohler & Biju, 2001; *Sphaerotheca* Günther, 1859.

### F.18.71. Subfamilia *Limnonectinae* Dubois, 1992

***Protonym***: *Limnonectini* Dubois, 1992: 315 [T].
***Eunym***: Fei, Ye & Jiang, 2010: 27.
***Getangiotaxon***: *Dicroglossidae* Dubois, 1987.
***Adelphotaxa***: *Limnonectinae* Dubois, 1992; *Painae* Dubois, 1992.
***Getendotaxon***: *Limnonectes* Fitzinger, 1843.

### F.18.72. Subfamilia *Painae* Dubois, 1992

***Protonym***: *Paini* Dubois, 1992: 317 [T].
***Eunym***: Fei, Ye & Jiang, 2010: 17.
***Getangiotaxon***: *Dicroglossidae* Dubois, 1987.
***Adelphotaxa***: *Dicroglossinae* Dubois, 1987; *Limnonectinae* Dubois, 1992.
***Getendotaxa***: *Paini* Dubois, 1992; *Quasipaini* Fei, Ye & Jiang, 2010; **1 GIS** (*Allopaa* Ohler & Dubois, 2006).

***Comments***: *TREE* confirmed the holophyly of the subfamily *Painae* which includes two highly resolved branches (Roelants *et al.* 2004; Jiang *et al.* 2005; Ohler & Dubois 2006; Che *et al.* 2010; Pyron & Wiens 2011), recognised here as the tribes *Paini* and *Quasipaini*. The holophyly of *Quasipaa* has been confirmed in several analyses (Jiang *et al.* 2005; Ohler & Dubois 2006; Che *et al.* 2010; Pyron & Wiens 2011), in which it appears as sister-group to a jumble called *Nanorana* in these works, but on the basis of a very incomplete taxonomic sample studied molecularly. Our conclusions combine phylogenetic relationships based on molecules with the morphological data obtained on far more taxa within this group (Ohler & Dubois 2006). Here within the *Paini* two subtribes correspond to the highly supported groups, recognised formally as the *Paina* for the genera *Nanorana* and *Paa*, and the *Chaparanina*, with poorly resolved internal relationships, which leads us to recognise three infratribes, the *Chaparaninia* for *Chaparana* and *Gynandropaa*, the *Diplopainia* for *Diplopaa*, and the *Feiraninia* for *Feirana*. The tribe *Quasipaini* contains three taxa with poorly supported mutual relationships, the subtribes *Annandiina* for *Annandia*, *Eripaina* for *Eripaa* and *Quasipaina* for *Quasipaa* and *Yerana*.

### F.19.65. Tribus *Paini* Dubois, 1992

***Eunym***: Dubois 1992: 317.
***Getangiotaxon***: *Painae* Dubois, 1992.
***Adelphotaxa***: *Quasipaini* Fei, Ye & Jiang, 2010; **1 GIS** (*Allopaa* Ohler & Dubois, 2006).
***Getendotaxa***: *Chaparanina* **nov.**; *Paina* Dubois, 1992.

### F.20.60. Subtribus *Chaparanina* **nov.**

***Getangiotaxon***: *Paini* Dubois, 1992.
***Adelphotaxon***: *Paina* Dubois, 1992.
***Getendotaxa***: *Chaparaninia* **nov.**; *Diplopainia* **nov.**; *Feiraninia* **nov.**; **1 GIS** (*Ombropaa* **nov**).

***Nucleogenus, by present designation***: *Chaparana* Bourret, 1939. ● ***Etymology of nomen***: R: *Chapa*, French writing for Sapa, town in northern Vietnam, in the distribution area of the species; N: *Rana* Linnaeus, 1758, from L: *rana*, 'frog'. ● ***Stem of nomen***: *Chaparan-*. ● ***Grammatical gender of nomen***: feminine.

***Diagnosis***: Large sized dicroglossids (males 65–107 mm, females 70–97 mm); tympanum indistinct or distinct; length of first finger shorter or longer than second; webbing between fingers absent; finger tips blunt; proximal subarticular tubercles of fingers relatively small; leg length longer or shorter than half snout vent length; toe tips blunt; webbing between toes very variable, complete to very incurved between extremities of adjacent toes; flap of skin along toe V from tip of toe to first subarticular tubercle or beyond; tarsal fold absent or present; skin on dorsum smooth or with warts; laterodorsal folds narrow, continuous, discontinuous or absent; skin on belly smooth; large black spines potentially present on fingers I to II, throat and chest but always absent on arm and belly; vent of male without or with spines or with dermal flap; vocal sacs absent or present; forearm in adult breeding male enlarged or not; dorsal colour brown or greenish with darker pattern; chevron potentially present; mid-dorsal line absent; ventral colour light, uniform or with spots; eggs dark animal pole; tadpoles keratodont formula 7–9/3. {Boulenger 1920*b*; Fei 1999; Dubois & Ohler 2005; Ohler & Dubois 2006}.

### G.28.380. Genus *Ombropaa* **nov.**

***Getangiotaxon***: CHAPARANINA **nov.**
***Adelphotaxon***: None.
***Getendotaxon***: *Ombropaa gammii* (Anderson, 1871).

***Nucleospecies, by present designation***: *Rana gammii* Anderson, 1871. ● ***Etymology of nomen***: G: ὄμβρος (*ombros*), 'storm of rain, shower'; N: *Paa* Dubois, 1975, derived from Nepali language: *Paa*, 'frog'; referring to the tendency of these frogs to be active by heavy rainy nights (Dubois 1976: 206–207, 1992: 318). ● ***Stem of nomen***: *Ombropa-*. ● ***Grammatical gender of nomen***: feminine.

***Diagnosis***: Medium sized dicroglossids (males 55–63 mm; females 61–88 mm); snout length distinctly longer than eye length; internarial distance larger than distance between eyelids; tympanum distinct; length of first finger shorter than second; tips of toes blunt; proximal subarticular tubercles small; shank longer than half body length; webbing between toes complete, without incurvation between toes; flap of skin along toe V extending to the proximal subarticular tubercle; tarsal fold absent; skin on dorsum smooth; laterodorsal folds narrow, as a continuous line; skin belly smooth; dorsal colour olive gray-brown; middorsal chevron present in some individuals; mid-dorsal line absent; ventral colour yellowish; in adult male nuptial spines absent on fingers I to III, prepollex, forearm, chest and belly, and forearm not enlarged; adult breeding males with a large zone bearing spines, around and inside vent, and vocal sacs present; eggs with dark animal pole; tadpoles with a bunch of papillae at the corner of mouth. {Anderson 1871; Dubois 1976, 1992; Ohler & Dubois 2006; personal observations by AD and AO}.

***Comments***: Dubois (1976) described the only known species of this genus as *Rana (Paa) sikimensis* Jerdon, 1870, but he stated that he had not found the type specimen(s) of this species in the collection of the Zoological Survey of India (ZSI) in Calcutta. He considered the nomina *Rana gammii* Anderson, 1871 and *Rana assamensis* Sclater, 1892 as synonyms of this nomen. Chanda *et al.* (2000) reported having identified the specimen ZSI 9580 from Darjeeling as one of the syntypes (symphoronts) of *Rana sikimensis* Jerdon, 1870. In 2000, Annemarie Ohler and Stéphane Grosjean visited the ZSI and had the opportunity to examine this specimen, which we hereby designate as lectotype (lectophoront) of this nominal species. It is an adult male (SVL 84.0 mm) with nuptial spines on the chest and on the first three fingers, which does not belong in the species described by Dubois (1976) under this nomen but in the 'form' described by this author (pages 61–62) as '*Rana (Paa) liebigii* with vocal sacs' but which we now regard as a species of *Paa* distinct from *Paa liebigii*, present in eastern Nepal and in Sikkim. The nomen *Paa sikimensis* (Jerdon, 1870) is therefore available for this species, which differs from *Paa liebigii*, the males of which do not have vocal sacs, by several constant characters (Dubois & Ohler, unpublished).

Dubois (1976: 191–192) also reported having looked for the syntypes of *Rana gammii* Anderson, 1871 in the ZSI. He gave arguments for considering that the specimen ZSI 9173, designated by Annandale (1917: 138–139) as lectotype of this nominal species, was not one of these syntypes, so that this lectotype designation is invalid. On the other hand, he suggested that the four specimens ZSI 9664–9667, kept then under the nomen *Rana vicina* Stoliczka, 1872 and without mention of origin, could be the syntypes of *Rana gammii*. One of them, ZSI 9667 (adult male, SVL 62 mm), has a large spiny zone around vent, corresponding to the figure 4 of Annandale (1917: 137). This male secondary character, also illustrated by Dubois (1976: 201, figure 76) on the basis of a '*Rana sikimensis*' specimen from Nepal, exists only, in the Himalayas, in the latter species—but also in the genus *Chaparana* from northern Indochina and southern China (Dubois & Ohler 2005) and in the genus *Diplopaa* (Fei 1999; Yang *et al.* 2011). Chanda *et al.* (2000: 109) stated that the four specimens ZSI 9664–9667, from "Darjeeling, Alt. 4000 ft. to 6000 ft.”, were indeed the syntypes of *Rana gammii.* We hereby designate the specimen ZSI 9667, figured by Annandale (1917), as lectotype of *Rana gammii* Anderson, 1871.

Dubois (1992: 318) erected a subgenus *Ombrana* of the genus *Chaparana* Bourret, 1939 for the species *Rana sikimensis* Jerdon, 1870. The biological species for which this genus-series nomen was intended is that for which the valid nomen was established above to be *Rana gammii* Anderson, 1871, but the nominal species actually designated is in fact a member of the taxon now known as *Paa* Dubois, 1975, of which *Ombrana* is therefore an invalid junior synonym. No other nomen being available for the genus including *Rana gammii* Anderson, 1871, we are led to propose the new nomen *Ombropaa* for this taxon.

### F.21.41. Infratribus *Chaparaninia* **nov.**

***Getangiotaxon***: *Chaparanina* **nov.**
***Adelphotaxa***: *Diplopainia* **nov.**; *Feiraninia* **nov.**; **2 GIS** (*Chrysopaa* Ohler & Dubois, 2006; *Ombropaa* **nov.**).
***Getendotaxa***: *Chaparana* Bourret, 1939; *Gynandropaa* Dubois, 1992.

### F.21.42. Infratribus *Diplopainia* **nov.**

***Getangiotaxon***: *Chaparanina* **nov.**
***Adelphotaxa***: *Chaparaninia* **nov.**; *Feiraninia* **nov.**; **2 GIS** (*Chrysopaa* Ohler & Dubois, 2006; *Ombropaa* **nov**).
***Getendotaxon***: *Diplopaa* **nov.**

***Nucleogenus, by present designation***: *Diplopaa* **nov.** ● ***Etymology of nomen***: G: διπλόος (*diploos*), ‘double’; N: *Paa* Dubois, 1975, derived from Nepali language: *Paa*, ‘frog’; referring to the presence of spines both on fingers and vent of adult breeding male. ● ***Stem of nomen***: *Diplopa-*.

***Diagnosis***: Large sized dicroglossids (males SVL 51–90 mm, females SVL 50–103 mm); snout length longer than eye length; internarial distance larger than distance between eyelids; tympanum small, poorly distinct; first finger longer than second; webbing between fingers absent; finger tips rounded; proximal subarticular tubercles of fingers enlarged; leg length longer snout-vent length; toe tips rounded; webbing between toes full; flap of skin along toe V extending near base of metatarsus; tarsal fold absent; skin on dorsum with small rounded warts or spinules, more dense in posterior part; laterodorsal folds as row of warts in a line; skin belly smooth; adult breeding male with nuptial pads absent or present on first finger and prepollex, forearm not enlarged; vent of breeding male with spines around and inside; vocal sacs present or absent; dorsal colour brownish with indistinct markings; chevron absent; mid-dorsal line absent; ventral colour grayish white with or without spots; eggs with dark animal pole; tadpoles with gray body, with darker or lighter spots, lower labial papillae in two rows, lower corners of mouth with additional papillae; tadpoles keratodont formula 5–7/3. {Fei 1999; Yang *et al.* 2011}.

### G.28.383. Genus *Diplopaa* **nov.**

***Getangiotaxon***: *Diplopainia* **nov.**
***Adelphotaxon***: None.
***Getendotaxa***: *Diplopaa kangxianensis* (Yang, Wang, Hu & Jiang, 2011); *Diplopaa taihangnica* (Chen & Jiang, 2002).

***Nucleospecies, by present designation***: *Paa (Feirana) taihangnica* Chen & Jiang, 2002. ● ***Etymology of nomen***: G: διπλόος (*diploos*), ‘double’; N: *Paa* Dubois, 1975, derived from Nepali language: *Paa*, ‘frog’; referring to the presence of spines both on fingers and vent of adult breeding male. ● ***Stem of nomen***: *Diplopa-*. ● ***Grammatical gender of nomen***: feminine.

***Diagnosis***: Large sized dicroglossids (males SVL 51–90 mm, females SVL 50–103 mm); snout length longer than eye length; internarial distance larger than distance between eyelids; tympanum small, poorly distinct; first finger longer than second; webbing between fingers absent; finger tips rounded;

proximal subarticular tubercles of fingers enlarged; leg length longer snout-vent length; toe tips rounded; webbing between toes full; flap of skin along toe V extending near base of metatarsus; tarsal fold absent; skin on dorsum with small rounded warts or spinules, more dense in posterior part; laterodorsal folds as rows of warts in a line; skin belly smooth; adult breeding male with nuptial pads absent or present on first finger and prepollex, forearm not enlarged; vent of male with spines around and inside; vocal sacs present or absent; dorsal colour brownish with indistinct markings; chevron absent; mid-dorsal line absent; ventral colour grayish white with or without spots; eggs with dark animal pole; tadpoles with gray body, with darker or lighter spots, lower labial papillae in two rows, lower corners of mouth with additional papillae; tadpoles keratodont formula 5–7/3. {Fei 1999; Yang *et al.* 2011}.

### F.21.43. Infratribus *Feiraninia* **nov.**

***Getangiotaxon***: *Chaparanina* **nov.**
***Adelphotaxa***: *Chaparaninia* **nov.**; *Diplopainia* **nov.**; **2 GIS** (*Chrysopaa* Ohler & Dubois, 2006; *Ombropaa* **nov.**).
***Getendotaxon***: *Feirana* Dubois, 1992.

***Nucleogenus, by present designation***: *Feirana* Dubois, 1992. ● ***Etymology of nomen***: P: Fei Liang (1936–), Chinese herpetologist; N: *Rana* Linnaeus, 1758, from L: *rana*, 'frog'. ● ***Stem of nomen***: *Feiran-*.

***Diagnosis***: Large sized dicroglossids (males SVL 79.0–89.0 mm, females SVL 85.0–97.0 mm); tympanum small, poorly distinct; length of finger shorter than second; webbing between fingers absent; finger tips rounded; proximal subarticular tubercles of fingers relatively small; leg length longer than half snout-vent length; toe tips rounded; webbing between toes complete; flap of skin along toe V from tip of toe to between subarticular tubercle of toe V and base of metatarsus; tarsal fold absent; skin on dorsum relatively smooth, with rounded tubercles, particular in lateral part; laterodorsal folds discontinuous; skin belly smooth; adult breeding male with nuptial pads spines absent on fingers, arm, forearm, throat, chest, belly, and forearm not enlarged; vent of breeding male with square dermal flap; vocal sacs absent; dorsal colour dull green with lighter flecks; chevron sometimes present; mid-dorsal line absent; eggs with dark animal pole; tadpoles body brownish-green, tail with dark spots; two rows of lower labial papillae; tadpoles keratodont formula 7–9/3. {Fei 1999; Ohler & Dubois 2006}.

### F.20.61. Subtribus *Paina* Dubois, 1992

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Paini* Dubois, 1992.
***Adelphotaxon***: *Chaparanina* **nov.**
***Getendotaxa***: *Nanorana* Günther, 1896; *Paa* Dubois, 1975.

### F.19.66. Tribus *Quasipaini* Fei, Ye & Jiang, 2010

***Protonym and eunym***: *Quasipaini* Fei, Ye & Jiang, 2010: 17 [T].
***Getangiotaxon***: *Painae* Dubois, 1992.
***Adelphotaxa***: *Paini* Dubois, 1992; **1 GIS** (*Allopaa* Ohler & Dubois, 2006).
***Getendotaxa***: *Annandiina* Fei, Ye & Jiang, 2010; *Eripaina* **nov.**; *Quasipaina* Fei, Ye & Jiang, 2010.

### F.20.62. Subtribus *Annandiina* Fei, Ye & Jiang, 2010

***Protonym***: *Annandiini* Fei, Ye & Jiang, 2010: 17 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Quasipaini* Fei, Ye & Jiang, 2010.
***Adelphotaxa***: *Eripaina* **nov.**; *Quasipaina* Fei, Ye & Jiang, 2010.

***Getendotaxon***: *Annandia* Dubois, 1992.

## F.20.63. Subtribus *Eripaina* **nov.**

***Getangiotaxon***: *Quasipaini* Fei, Ye & Jiang, 2010.
***Adelphotaxa***: *Annandiina* Fei, Ye & Jiang, 2010; *Quasipaina* Fei, Ye & Jiang, 2010.
***Getendotaxon***: *Eripaa* Dubois, 1992.

***Nucleogenus, by present designation***: *Eripaa* Dubois, 1992. ● ***Etymology of nomen***: L: *ericius*, hedgehog; N: *Paa* Dubois, 1975, derived from Nepali language: *Paa*, 'frog'; referring to the spines on forearm and chest of these frogs. ● ***Stem of nomen***: *Eripa-*.

***Diagnosis***: Large sized dicroglossids (up to 106 mm); snout shorter than eye; tympanum indistinct in external observation; first finger longer than second; webbing between fingers absent; finger tips enlarged; proximal subarticular tubercles of fingers large; leg length longer than half of snout-vent length; toe tips distinctly enlarged; webbing between toes complete, not incurved between extremities of adjacent toes; flap of skin along toe V from tip of toe to base of metatarsus of toe V; tarsal fold present, well developed; skin on dorsum longitudinally elongate, regularly arranged warts on mid-dorsal skin; laterodorsal folds absent; adult breeding male with large, distinct, black spines on finger I, sometimes on fingers II and III, forearm, breast and belly, but absent on throat; spines of forearm, chest and belly in a unique patch arranged in clusters; vent of breeding male without morphological differentiation; vocal sacs absent; forearm in breeding male enlarged; dorsal colour brownish; chevron always absent; mid-dorsal line always absent; ventral colour dirty white; eggs with coloured animal pole; tadpoles large, body stout, oval; tail fin with black spots but without a transverse bar between tail and body; beak undivided, outer surface of lower beak smooth, upper beak dimpled in middle; tadpoles keratodont formula 2:5+5/1+1:2; three rows of papillae on lower labium. {Ohler & Dubois 2006; Inthara *et al*. 2009}.

## F.20.64. Subtribus *Quasipaina* Fei, Ye & Jiang, 2010

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Quasipaini* Fei, Ye & Jiang, 2010.
***Adelphotaxa***: *Annandiina* Fei, Ye & Jiang, 2010; *Eripaina* **nov.**
***Getendotaxa***: *Quasipaa* Dubois, 1992; *Yerana* Jiang, Chen & Wang, 2006.

## F.17.45. Familia *Occidozygidae* Fei, Ye & Huang, 1990

***Protonym***: *Occidozyginae* Fei, Ye & Huang, 1990: 4, 123 [bF].
***Eunym***: Borah, Bordoloi, Purkayastha, Das, Dubois & Ohler 2013: 39.
***Getangiotaxon***: *Dicroglosseidae* Dubois, 1987.
***Adelphotaxon***: *Dicroglossidae* Dubois, 1987.
***Getendotaxa***: *Ingeraninae* Fei, Ye & Jiang, 2010; *Occidozyginae* Fei, Ye & Huang, 1990.

***Comments***: This family includes two subgroups here recognised as the subfamilies *Ingeraninae* for *Ingerana*, and *Occidozyginae* for a group of genera of unresolved relationships. For reasons previously given (Dubois 1987*a*; Dubois & Ohler 2001), we do not synonymise *Phrynoglossus* with *Occidozyga*, and we now recognise within the subfamily two other genera, *Oreobatrachus* Boulenger, 1896, for *Oreobatrachus baluensis*, and *Frethia* **nov.**, for the species *F. celebensis*, *F. diminutiva*, *F. floresiana*, *F. laevis*, *F. semipalmata* and *F. tompotika*, in order to have only holophyletic genera.

## F.18.73. Subfamilia *Ingeraninae* Fei, Ye & Jiang, 2010

***Getangiotaxon***: *Occidozygidae* Fei, Ye & Huang, 1990.
***Adelphotaxon***: *Occidozyginae* Fei, Ye & Huang, 1990.
***Getendotaxon***: *Ingerana* Dubois, 1987.

## F.18.74. Subfamilia *Occidozyginae* Fei, Ye & Huang, 1990

***Eunym***: Fei, Ye & Huang 1990: 4, 123.
***Getangiotaxon***: *Occidozygidae* Fei, Ye & Huang, 1990.
***Adelphotaxon***: *Ingeraninae* Fei, Ye & Jiang, 2010.
***Getendotaxa***: *Frethia* **nov.**; *Occidozyga* Kuhl & Van Hasselt, 1822; *Oreobatrachus* Boulenger, 1896; *Phrynoglossus* Peters, 1867.

## G.28.392. Genus *Frethia* **nov.**

***Getangiotaxon***: *Occidozyginae* Fei, Ye & Huang, 1990
***Adelphotaxa***: *Occidozyga* Kuhl & Van Hasselt, 1822; *Oreobatrachus* Boulenger, 1896; *Phrynoglossus* Peters, 1867.
***Getendotaxa***: *Frethia celebensis* (Smith, 1927); *Frethia diminutiva* (Taylor, 1922); *Frethia floresiana* (Mertens, 1927); *Frethia laevis* (Günther, 1859); *Frethia semipalmata* (Smith, 1927); *Frethia tompotika* (Iskandar, Arifin & Rachmanasah, 2011).

***Nucleospecies, by present designation***: *Oxyglossus laevis* Günther, 1859. ● ***Etymology of nomen***: P: nomen composed of the first three letters of the patronym and the first three letters of the forename of Thierry Frétey (1963–), French herpetologist, to whom we are indebted for his valuable help throughout the years and particularly during the preparation of this work. ● ***Stem of nomen***: *Frethi-*. ● ***Grammatical gender of nomen***: feminine.

***Diagnosis***: Small to medium sized frogs (males SVL 25.5–41.6 mm; females SVL 31.6–61.8 mm); internarial distance larger than distance between upper eyelids, which is shorter than width of upper eyelids; distance of nostrils to snout shorter then distance from nostril to eye; tympanum hidden; tongue ovoid, not pointed and not notched; vomerine ridge and vomerine teeth absent; first finger as long as second or shorter; no web between fingers; tips of fingers pointed or slightly swollen; shanks short; toe tips with distinctly swollen tips but no grooves; webbing complete or incurved but with fringes up to discs; inner metatarsal tubercle oval, rather prominent; outer metatarsal tubercle absent; tarsal tubercle absent; dorsal skin smooth, with a few scattered, small, smooth tubercles or white spinules on posterior portion of back and dorsal surface of legs; ventral body smooth; males with nuptial pads extending from terminal joint of finger to the wrist on dorsal and median surfaces of finger I; small white spinules on throat, chest and belly variously developed; medium subgular internal vocal sacs, with elongated openings; females known to show male sexual characters; amplexus axillar; brownish with darker more or less distinct patterns on back, including a middorsal line or band in some specimens; ventral body whitish, immaculate or with various darker pattern; chest from cream colour with a few dark spots to almost solid black; limbs with dark crossbars or spots; occur usually in water bodies, like pools, streams and creeks, rice paddies, small mud puddles. {Günther 1859; Mertens 1927; Smith 1927; Inger 1954, 1966; personal observations by AO and AD}.

***Comments***: Nicholls (1916: 82) had coined the nomen "*Oxyrhachis*" for the species *Oxyglossus laevis* Günther, 1859. Unfortunately, this nomen is both an anoplonym and a junior homonym of *Oxyrhachis* Germar, 1833 (**Hemiptera**). Therefore it cannot be used for an anuran genus, and a new nomen had to be coined for the latter.

## F.16.05. Apofamilia *Nyctibatracheidae* Blommers-Schlösser, 1993

***Protonym***: *Nyctibatrachinae* Blommers-Schlösser, 1993: 199 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranoidae* Batsch, 1796.
***Adelphotaxa***: *Ceratobatracheidae* Boulenger, 1884; *Dicroglosseidae* Dubois, 1987; *Raneidae* Batsch, 1796; *Ranixaleidae* Dubois, 1987.
***Getendotaxa***: *Astrobatrachidae* Vijayakumar, Pyron, Dinesh, Torsekar, Srikanthan, Swamy, Stanley, Blackburn & Shanker, 2019; *Nyctibatrachidae* Blommers-Schlösser, 1993.

## F.17.46. Familia *Astrobatrachidae* Vijayakumar, Pyron, Dinesh, Torsekar, Srikanthan, Swamy, Stanley, Blackburn & Shanker, 2019

***Protonym***: *Astrobatrachinae* Vijayakumar, Pyron, Dinesh, Torsekar, Srikanthan, Swamy, Stanley, Blackburn & Shanker, 2019: 1 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Nyctibatracheidae* Blommers-Schlösser, 1993.
***Adelphotaxon***: *Nyctibatrachidae* Blommers-Schlösser, 1993.
***Getendotaxon***: *Astrobatrachus* Vijayakumar, Pyron, Dinesh, Torsekar, Srikanthan, Swamy, Stanley, Blackburn & Shanker, 2019.

## F.17.47. Familia *Nyctibatrachidae* Blommers-Schlösser, 1993

***Eunym***: Blommers-Schlösser 1993: 199.
***Getangiotaxon***: *Nyctibatracheidae* Blommers-Schlösser, 1993.
***Adelphotaxon***: *Astrobatrachidae* Vijayakumar, Pyron, Dinesh, Torsekar, Srikanthan, Swamy, Stanley, Blackburn & Shanker, 2019.
***Getendotaxa***: *Lankanectes* Dubois & Ohler, 2001; *Nyctibatrachus* Boulenger, 1882.

## F.16.06. Apofamilia *Raneidae* Batsch, 1796

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranoidae* Batsch, 1796.
***Adelphotaxa***: *Ceratobatracheidae* Boulenger, 1884; *Dicroglosseidae* Dubois, 1987; *Nyctibatracheidae* Blommers-Schlösser, 1993; *Ranixaleidae* Dubois, 1987.
***Getendotaxa***: *Ranidae* Batsch, 1796; *Rhacophoridae* ||Günther, 1858||-Hoffman, 1932.

## F.17.48. Familia *Ranidae* Batsch, 1796

***Eunym***: Boie 1828: 363.
***Getangiotaxon***: *Raneidae* Batsch, 1796.
***Adelphotaxon***: *Rhacophoridae* ||Günther, 1858||-Hoffman, 1932.
***Getendotaxa***: *Raninae* Batsch, 1796; *Stauroinae* Dubois, 2005.

***Comments***: The rank family and the nomen *Ranidae* are attributed to this branch based on the [UQC]. This taxon includes two branches, the subfamily *Stauroinae* and its sister-branch, composed of all other *Ranidae*, formally named as the subfamily *Raninae*. This branch includes two highly supported branches, recognised in this classification as the tribes *Meristogenyini*, for the genera *Clinotarsus* and *Meristogenys*, and *Ranini*, for the other genera of the subfamily. Beside identification errors for some ranid species, Frost *et al.* (2006)'s tree shows a different relationship within this family but confirms its sister-group relationship with the *Rhacophoridae*, including the *Mantellinae*. In their work, the *Nyctibatrachinae* are sister-group to the other *Ranidae*, and *Staurois* has a similar positon as sister-group of the remaining *Ranidae*. Within their *Raninae* the relationships are obscured by small sampling, specific identification or generic allocation problems. The relationships of the major groups in the *Ranidae* are similar in Wiens *et al.* (2009), Pyron & Wiens (2011) and Yuan *et al.* (2018). Huang & Tu (2016) found different relationships within the *Ranidae*, but their sampling was biased and support values for their branches were not indicated.

## F.18.75. Subfamilia *Raninae* Batsch, 1796

***Eunym***: Boulenger 1888: 205.
***Getangiotaxon***: *Ranidae* Batsch, 1796.
***Adelphotaxon***: *Stauroinae* Dubois, 2005.
***Getendotaxa***: *Meristogenyini* Fei, Ye & Jiang, 2010; *Ranini* Batsch, 1796; **1 GIS** (*Pterorana* Kiyasetuo & Khare, 1986).

## F.19.67. Tribus *Meristogenyini* Fei, Ye & Jiang, 2010

***Protonym***: *Meristogenyinae* Fei, Ye & Jiang, 2010: 18 [bF].
***Eunym***: Fei, Ye & Jiang 2010: 18.
***Getangiotaxon***: *Raninae* Batsch, 1796.
***Adelphotaxa***: *Ranini* Batsch, 1796; **1 GIS** (*Pterorana* Kiyasetuo & Khare, 1986).
***Getendotaxa***: *Clinotarsus* Mivart, 1869; *Meristogenys* Yang, 1991; *Sumaterana* Arifin, Smart, Hertwig, Smith, Iskandar & Haas, 2018.

***Comments***: As in *TREE* the species attributed to *Huia* Yang, 1991 do not form a highly supported branch, they are included in *Meristogenys*, of which the nomen *Huia* is considered a subjective junior synonym.

## F.19.68. Tribus *Ranini* Batsch, 1796

***Eunym***: Dubois 1992: 320.
***Getangiotaxon***: *Raninae* Batsch, 1796.
***Adelphotaxa***: *Meristogenyini* Fei, Ye & Jiang, 2010; **1 GIS** (*Pterorana* Kiyasetuo & Khare, 1986).
***Getendotaxa***: *Amolopina* Fei, Ye & Huang, 1990; *Ranina* Batsch, 1796; **1 G†**.

***Comments***: The genus *Amolops*, only member of the subtribe *Amolopina*, is the sister-taxon to all other members of the tribe *Ranini*, formally recognised here as the subtribe *Ranina*. Within this subtribe, the infratribe *Pelophylacinia*, for the single genus *Pelophylax*, is the sister-group to the *Raninia* with five lineages of unresolved relationships, assigned to the hypotribes *Glandiraninoa* for *Glandirana*, *Limnodytinoa* for *Abavorana* and *Hylarana*, *Rugosinoa* for *Rugosa*, *Sanguiraninoa* for *Sanguirana* and *Raninoa* for the other genera. Oliver *et al.* (2015) proposed a classification of *Hylarana sensu lato* with more or less supported genera. As the relationships within the species assigned to this group are not resolved with high support in our classification, all genus-series nomina available within this group are here considered synonyms of *Hylarana* (see Appendices **A5.NGS** and **A9.CLAD-1**). Within the hypotribe *Raninoa*, three clans of unresolved relationships are taxonomically recognised here, namely the *Nidiranites* for *Babina* and *Nidirana*, the *Odorranites* for *Odorrana*, and the *Ranites*. This latter branch groups three subclans, the *Lithobatities* for *Aquarana*, *Boreorana* and *Lithobates*, the *Pseudoranities* for *Pseudorana* and the *Ranities* for an infraclan *Liuhuranitoes*, for the single genus *Liururana*, and an infraclan *Ranitoes*, for the genera *Amerana* and *Rana*.

The holophyly of the *Amolopina* recovered here seems confirmed by recent results (Cai *et al.* 2007, Wiens *et al.* 2009, Pyron & Wiens 2011), but the study of Huang & Tu (2016) found a paraphyletic *Amolops*. The holophyly of the *Pelophylacinia* is stable but its position is not stable: in *TREE*, Wiens *et al.* (2009) and Pyron & Wiens (2011), *Pelophylax* is member of a group that is sister-group to *Amolops*, whereas in Yuan *et al.* (2018) it is sister-taxon to the group that includes *Amolops* and the other ranids, in Cai *et al.* (2007) it is sister-group to a taxon including *Meristogenys* and *Huia*, and in Huang & Tu (2016) it is sister-taxon to some *Amolops* species.

In the remaining ranids, here formally named *Raninoa*, few highly supported relationships are confirmed in *TREE*. Thus, the relationship of *Babina* and *Nidirana* was confirmed by Lyu *et al.* (2017) who, analysing *Babina* and *Nidirana sensu stricto*, could resurrect the genus *Nidirana*, previously well defined morphologically and ethologically by several synapomorphies (Dubois 1992), but strangely synonymised with *Babina* by Frost *et al.* (2006). Finally, the close relationship of the genus *Rana* with a part of North American ranids, the *Amerana* (the '*boylii* group') is supported here, as it was in Wiens *et al.* (2009), and as is the sister-group relationship of this group to *Liuhurana*.

We recognise a new genus *Boreorana* for *Rana sylvatica* which is in a '*Latonia*-like situation' (LLS) relatively to *Lithobates*, with which its relationship does not have high support. In Frost *et al.* (2006), *Rana sylvatica* was recovered as sister-group to a taxon that includes *Lithobates*, *Typheropsis*, *Sierrana* and *Pantherana* species, whereas in Wiens *et al.* (2009) and Pyron & Wiens (2011) it was sister-taxon to *Aquarana*.

## F.20.65. Subtribus *Amolopina* Fei, Ye & Huang, 1990

***Protonym***: *Amolopinae* Fei, Ye & Huang, 1990: 4, 123 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranini* Batsch, 1796.
***Adelphotaxa***: *Ranina* Batsch, 1796; **1 G†**.
***Getendotaxon***: *Amolops* Cope, 1865.

## F.20.66. Subtribus *Ranina* Batsch, 1796

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranini* Batsch, 1796.
***Adelphotaxa***: *Amolopina* Fei, Ye & Huang, 1990; **1 G†**.
***Getendotaxa***: *Pelophylacinia* **nov.**; *Raninia* Batsch, 1796.

## F.21.44. Infratribus *Pelophylacinia* nov.

***Getangiotaxon***: *Ranina* Batsch, 1796.
***Adelphotaxon***: *Raninia* Batsch, 1796.
***Getendotaxon***: *Pelophylax* Fitzinger, 1843.

***Nucleogenus, by present designation***: *Pelophylax* Fitzinger, 1843. ● ***Etymology of nomen***: G: πελός (*pelos*), 'mud'; φύλαξ (*phylax*), 'guardian'. ● ***Stem of nomen***: *Pelophylac-*.

***Diagnosis***: Medium to large sized ranids (males SVL 38–106 mm; females SVL 38–103 mm) with long limbs; first finger longer than second; tips of digits pointed; external metatarsal tubercle present or absent; web on toes usually large; metatarsals widely separated by web; large, prominent latero-dorsal folds present; male with or without external vocal sac; nuptial pads on first finger; tympanum smaller than eye in both sexes; dorsal pattern without black chevron but with large spots; a mediodorsal line present or absent; tadpoles without ventral sucker; tadpoles keratodont formula 1–3/2–3. {Dubois 1992; Fei 1999; Gül *et al.* 2011}.

## F.21.45. Infratribus *Raninia* Batsch, 1796

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranina* Batsch, 1796.
***Adelphotaxon***: *Pelophylacinia* **nov.**
***Getendotaxa***: *Glandiraninoa* Fei, Ye & Jiang, 2010; *Limnodytinoa* Fitzinger, 1843; *Raninoa* Batsch, 1796; *Rugosinoa* **nov.**; *Sanguiraninoa* Fei, Ye & Jiang, 2010.

## F.22.19. Hypotribus *Glandiraninoa* Fei, Ye & Jiang, 2010

***Protonym***: *Glandiranini* Fei, Ye & Jiang, 2010: 18 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Raninia* Batsch, 1796.
***Adelphotaxa***: *Limnodytinoa* Fitzinger, 1843; *Raninoa* Batsch, 1796; *Rugosinoa* **nov.**; *Sanguiraninoa* Fei, Ye & Jiang, 2010.
***Getendotaxon***: *Glandirana* Fei, Ye & Huang, 1990.

## F.22.20. Hypotribus *Limnodytinoa* Fitzinger, 1843

***Protonym***: *Limnodytae* Fitzinger, 1843: 31 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Raninia* Batsch, 1796.
***Adelphotaxa***: *Glandiraninoa* Fei, Ye & Jiang, 2010; *Raninoa* Batsch, 1796; *Rugosinoa* **nov.**; *Sanguiraninoa* Fei, Ye & Jiang, 2010.
***Getendotaxa***: *Abavorana* Oliver, Prendini, Kraus & Raxworthy, 2015; *Hylarana* Tschudi, 1838.

## F.22.21. Hypotribus *Raninoa* Batsch, 1796

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Raninia* Batsch, 1796.
***Adelphotaxa***: *Glandiraninoa* Fei, Ye & Jiang, 2010; *Limnodytinoa* Fitzinger, 1843; *Rugosinoa* **nov.**; *Sanguiraninoa* Fei, Ye & Jiang, 2010.
***Getendotaxa***: *Nidiranites* Fei, Ye & Jiang, 2010; *Odorranites* Fei, Ye & Jiang, 2010; *Ranites* Batsch, 1796.

## F.23.13. Clanus *Nidiranites* Fei, Ye & Jiang, 2010

***Protonym***: *Nidiranini* Fei, Ye & Jiang, 2010: 18 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Raninoa* Batsch, 1796.
***Adelphotaxa***: *Odorranites* Fei, Ye & Jiang, 2010; *Ranites* Batsch, 1796.
***Getendotaxa***: *Babina* Thompson, 1912; *Nidirana* Dubois, 1992.

## F.23.14. Clanus *Odorranites* Fei, Ye & Jiang, 2010

***Protonym***: *Odorranini* Fei, Ye & Jiang, 2010: 18 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Raninoa* Batsch, 1796.
***Adelphotaxa***: *Nidiranites* Fei, Ye & Jiang, 2010; *Ranites* Batsch, 1796.
***Getendotaxon***: *Odorrana* Fei, Ye & Huang, 1990.

## F.23.15. Clanus *Ranites* Batsch, 1796

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Raninoa* Batsch, 1796.
***Adelphotaxa***: *Nidiranites* Fei, Ye & Jiang, 2010; *Odorranites* Fei, Ye & Jiang, 2010.
***Getendotaxa***: *Lithobatities* **nov.**; *Pseudoranities* **nov.**; *Ranities* Batsch, 1796.

## F.24.07. Subclanus *Lithobatities* **nov.**

***Getangiotaxon***: *Ranites* Batsch, 1796.
***Adelphotaxa***: *Pseudoranities* **nov.**; *Ranities* Batsch, 1796.
***Getendotaxa***: *Aquarana* Dubois, 1992; *Boreorana* **nov.**; *Lithobates* Fitzinger, 1843.

***Nucleogenus, by present designation***: *Lithobates* Fitzinger, 1843. ● ***Etymology of nomen***: G: λίθος (*lithos*), 'stone'; βαίνω (*baino*), 'I walk'. ● ***Stem of nomen***: *Lithobat-*.

***Diagnosis***: Ranid frogs of medium to very large, rarely small size (males SVL 34–158 mm; females SVL 32–200 mm); snout as long or little longer than eye; internarial distance larger or as large as interorbital distance; tympanum in adult males highly variable, attaining in many species sizes larger than eye length but always larger than half eye diameter; first finger usually longer or of same size as second, rarely shorter; webbing between fingers absent; tips of fingers pointed or obtuse rarely with small dicks; legs short, medium or long; toe tips variable, pointed obtuse, expanded and some species showing small discs; webbing usually full to large, rarely less; metatarsals separated from distal half to base; inner metatarsal tubercle usually short and feebly prominent, rarely prominent and hard or of moderate length; outer metatarsal tubercle usually absent, rarely a small tubercle present; dorsal skin smooth or bearing granules, round or elongate warts or a combination of these structures; laterodorsal folds absent or present as a narrow to broad, flat or prominent glandular band, sometimes not continuous or only extending on anterior dorsum; skin on abdomen smooth; nuptial pads present or absent (not expressly stated in numerous species descriptions); external or internal vocal sacs usually present; dorsum brown, olive or green, uniform, or anterior part of brighter colour, or with mottling, with marbling or with small or large spots, set irregularly or in a line, sometimes outlined by a light halo; chevron on back absent; abdomen usually white, cream or yellow but marbling or spots quite often present on throat and chest, more rarely on abdomen, few species dark coloured ventral surface. {Boulenger 1883, 1920*a*; Günther 1900; Taylor 1939, 1942; Goin & Netting 1940; Zweifel 1957; Smith 1959; Sanders 1973; Pace 1974; Frost & Bagnara 1976; Hillis *et al.* 1984; Platz & Frost 1984; Moler 1985; Hillis & Frost 1985; Hillis & Sá 1988; Dubois 1992; Webb 2001}.

## G.28.412. Genus *Boreorana* **nov.**

***Getangiotaxon***: *Lithobatities* **nov.**
***Adelphotaxa***: *Aquarana* Dubois, 1992; *Lithobates* Fitzinger, 1843..
***Getendotaxon***: *Boreorana sylvatica* (Le Conte, 1825).

***Nucleospecies, by present designation***: *Rana sylvatica* Le Conte, 1825. ● ***Etymology of nomen***: G: Βορέας (*boreas*), Greek god of North wind; N: *Rana* Linnaeus, 1758, from L: *rana*, 'frog'. ● ***Stem of nomen***: *Boreoran-*. ● ***Grammatical gender of nomen***: feminine.

***Diagnosis***: Medium sized ranid frogs (males SVL 32–63 mm; females SVL 42–83 mm); umbraculum of iris absent; tips of digits and toes not enlarged, not bearing pads; humeral gland in males absent; suprabrachial glands in male absent; fissura metotica dorsalis absent; no fusion of sacral and presacral vertebrae; mid-dorsal chevron potentially present; mediodorsal line potentially present; chromosome complement 2 n = 26; eggs pigmented, moderate in size (2 mm), clutch size from 300 to 1500 eggs; tadpoles with 3 keratodont rows on upper lip and 4 on lower lip; keratodont on margin of oral disc absent; ventral sucker absent. {Case 1979; Dubois 1992; Dodd 2013}.

## F.24.08. Subclanus *Pseudoranities* **nov.**

***Getangiotaxon***: *Ranites* Batsch, 1796.
***Adelphotaxa***: *Lithobatities* **nov.**; *Ranities* Batsch, 1796.
***Getendotaxon***: *Pseudorana* Fei, Ye & Huang, 1990.

***Nucleogenus, by present designation***: *Pseudorana* Fei, Ye & Huang, 1990. ● ***Etymology of nomen***: G: ψεύδω (*pseudo*), 'cheat, false'; N: *Rana* Linnaeus, 1758, from L: *rana*, 'frog'. ● ***Stem of nomen***: *Pseudoran-*.

***Diagnosis***: Medium sized ranids (males SVL 32–50 mm; females SVL 43–53 mm); first finger longer than second; long legs; thin dorsolateral folds; smooth dorsal and ventral skin; tips of fingers dilated without grooves, tips of toes dilated with ventrolateral grooves; inner metatarsal tubercle distinct, outer one small; web between toes large; metatarsals only shortly separated; presence of a dark middorsal chevron; nuptial pads on first finger, vocal sacs absent or present; tadpoles with ventral sucker but without dermal glands; tadpoles keratodont formula 5–7/5–8. {Dubois 1992; Fei 1999}.

## F.24.09. Subclanus *Ranities* Batsch, 1796

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranites* Batsch, 1796.
***Adelphotaxa***: *Lithobatities* **nov.**; *Pseudoranities* **nov.**
***Getendotaxa***: *Liuhuranitoes* **nov.**; *Ranitoes* Batsch, 1796.

## F.25.18. Infraclanus *Liuhuranitoes* nov.

***Getangiotaxon***: *Ranities* Batsch, 1796.
***Adelphotaxon***: *Ranitoes* Batsch, 1796.
***Getendotaxon***: *Liuhurana* Fei, Ye, Jiang, Dubois & Ohler *in* Fei, Ye & Jiang 2010.

***Nucleogenus, by present designation***: *Liuhurana* Fei, Ye, Jiang, Dubois & Ohler *in* Fei, Ye & Jiang 2010. ● ***Etymology of nomen***: P: concatenation of the names of Liu Chengchao (1900–1976) and Hu Shuqin (1914–1992), Chinese herpetologists; N: *Rana* Linnaeus, 1758, from L: *rana*, 'frog'. ● ***Stem of nomen***: *Liuhuran-*.

***Diagnosis***: Small sized ranids (males SVL 30–32 mm; female SVL 39 mm); first finger longer than second; short legs; well developed dorsolateral folds present; smooth dorsal and ventral skin; tips of fingers and toes pointed, inner metatarsal tubercle distinct, outer one absent; web on toes moderate; metatarsals only distally separated; large glands on tibia, tarsus and metatarsus, smaller glands on forearm, a suprabrachial gland; a dark middorsal chevron absent; nuptial pads on first finger, paired subgular vocal sacs present; tadpoles without ventral sucker; tadpoles keratodont formula 2/4. {Liu 1950; Fei *et al.* 2010}.

## F.25.19. Infraclanus *Ranitoes* Batsch, 1796

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranities* Batsch, 1796.
***Adelphotaxon***: *Liuhuranitoes* **nov.**
***Getendotaxa***: *Amerana* Dubois, 1992; *Rana* Linnaeus, 1758.

## F.22.22. Hypotribus *Rugosinoa* nov.

***Getangiotaxon***: *Raninia* Batsch, 1796.
***Adelphotaxa***: *Glandiraninoa* Fei, Ye & Jiang, 2010; *Limnodytinoa* Fitzinger, 1843; *Raninoa* Batsch, 1796; *Sanguiraninoa* Fei, Ye & Jiang, 2010.
***Getendotaxon***: *Rugosa* Fei, Ye & Huang, 1990.

***Nucleogenus, by present designation***: *Rugosa* Fei, Ye & Huang, 1990. ● ***Etymology of nomen***: L: *rugosus*, 'wrinkled'. ● ***Stem of nomen***: *Rugos*-.

***Diagnosis***: Medium sized ranids (males SVL 37–51 mm; females SVL 44–59 mm) with short limbs; first finger longer than second; tips of digits rounded; external metatarsal tubercle present; toes entirely webbed; metatarsals widely separated by web; latero-dorsal folds absent, but upper parts of body strongly granular and showing numerous short longitudinal folds; male with or without internal vocal sac; nuptial pads on base of first finger; tympanum smaller than eye in both sexes; dorsal pattern without black chevron or large spots. {Dubois 1992; Fei 1999; Maeda & Matsui 1999}.

### F.22.23. Hypotribus *Sanguiraninoa* Fei, Ye & Jiang, 2010

***Protonym***: *Sanguiranini* Fei, Ye & Jiang, 2010: 18 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Raninia* Batsch, 1796.
***Adelphotaxa***: *Glandiraninoa* Fei, Ye & Jiang, 2010; *Limnodytinoa* Fitzinger, 1843; *Raninoa* Batsch, 1796; *Rugosinoa* **nov.**
***Getendotaxon***: *Sanguirana* Dubois, 1992.

### F.18.76. Subfamilia *Stauroinae* Dubois, 2005

***Protonym***: *Stauroini* Dubois, 2005: 5 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranidae* Batsch, 1796.
***Adelphotaxon***: *Raninae* Batsch, 1796.
***Getendotaxon***: *Staurois* Cope, 1865.

### F.17.49. Familia *Rhacophoridae* ||Günther, 1858||-Hoffman, 1932

***Protonyms and eunym***: ||*Polypedatidae* Günther, 1858: 346|| [F]; *Rhacophoridae* Hoffman, 1932: 562 [F].
***Getangiotaxon***: *Raneidae* Batsch, 1796.
***Adelphotaxon***: *Ranidae* Batsch, 1796.
***Getendotaxa***: *Mantellinae* Laurent, 1946; *Rhacophorinae* ||Günther, 1858||-Hoffman, 1932.

***Comments***: The sister-group relationship of the branches here named *Mantellinae* and *Rhacophorinae* has been confirmed in all recent works (Bossuyt & Milinkovitch 2000; Emerson *et al.* 2000; Roelants *et al.* 2004; Frost *et al.* 2006; Bossuyt & Roelants 2009; Pyron & Wiens 2011; Yuan *et al.* 2018). As the *Rhacophoridae* and their sister-taxon *Ranidae* are both attributed to the rank family by the [UQC], the immediately included taxa, which are not credited with the rank family by the [UQC], are attributed to the just subordinate rank, which is subfamily.

### F.18.77. Subfamilia *Mantellinae* Laurent, 1946

***Protonym and eunym***: *Mantellinae* Laurent, 1946: 336 [bF].
***Getangiotaxon***: *Rhacophoridae* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxon***: *Rhacophorinae* ||Günther, 1858||-Hoffman, 1932.
***Getendotaxa***: *Boophini* Vences & Glaw, 2001; *Laliostomini* Vences & Glaw, 2001; *Mantellini* Laurent, 1946; *Tsingymantini* **nov.**

***Comments***: In *TREE*, the relationships within the four included branches of this subfamily do not have enough support, so we recognise them at the same rank, as the tribes *Boophini* for *Boophis*, *Laliostomini* for *Aglyptodactylus* and *Laliostoma*, *Tsingymantini* for *Tsingymantis*, and *Mantellini*. The latter tribe includes two branches, taxonomically recognised as the subtribes *Mantellina* and *Mantidactylina*. The *Mantellina* include the infratribe *Blommeriinia* for *Blommersia* and *Guibemantis*, and the infratribe *Mantellinia* for *Mantella* and *Wakea*. Within the subtribe *Mantidactylina*, the infratribe *Spinomantinia*, for *Spinomantis*, is sister-taxon to the infratribe *Mantidactylinia*, with *Boehmantinoa* for *Boehmantis*, and *Mantidactylinoa* for *Gephyromantis* and *Mantidactylus*.

The taxon here recognised as the subfamily *Mantellinae* was since the beginning of molecular studies identified as a holophyletic group (Bossuyt & Milinkovitch 2000; Richards *et al.* 2000; Vences *et al.* 2000, 2003; Frost *et al.* 2006; Bossuyt & Roelants 2009; Pyron & Wiens 2011; Wollenberg *et al.* 2011; Yuan *et al.* 2018), but the relationships within this group have changed. Glaw & Vences (2006) recognised a family rank taxon *Mantellidae* with three subfamilies, whereas in the trees of Frost *et al.* (2006) and Wollenberg *et al.* (2011) the *Boophinae* appeared as the sister-taxon of the *Mantellinae* composed of the *Laliostomini* and *Mantellini*, whereas in Richards *et al.* (2000) and Kurabayashi *et al.* (2008) the *Boophinae* were sister-taxon to the *Laliostominae*. The position of the *Tsingymantini* was also disputed. Considered basal to the *Mantellinae* (our *Mantellini*) based on morphological characters (Raselimanana *et al.* 2007), it was sister-taxon to this group in Wollenberg *et al.* (2011), whereas in Kurabayashi *et al.* (2008) it appeared as sister-taxon to their *Boophinae* and *Laliostominae*.

### F.19.69. Tribus *Boophini* Vences & Glaw, 2001

***Protonym***: *Boophinae* Vences & Glaw, 2001: 85 [bF].
***Eunym***: Dubois 2005: 16.
***Getangiotaxon***: *Mantellinae* Laurent, 1946.
***Adelphotaxa***: *Laliostomini* Vences & Glaw, 2001; *Mantellini* Laurent, 1946; *Tsingymantini* **nov.**
***Getendotaxon***: *Boophis* Tschudi, 1838.

### F.19.70. Tribus *Laliostomini* Vences & Glaw, 2001

***Protonym***: *Laliostominae* Vences & Glaw, 2001: 85 [bF].
***Eunym***: Dubois 2005: 16.
***Getangiotaxon***: *Mantellinae* Laurent, 1946.
***Adelphotaxa***: *Boophini* Vences & Glaw, 2001; *Mantellini* Laurent, 1946; *Tsingymantini* **nov.**
***Getendotaxa***: *Aglyptodactylus* Boulenger, 1919; *Laliostoma* Glaw, Vences & Böhme, 1998.

***Comments***: The generic nomen *Laliostoma* was derived from the Greek roots λαλιά (*lalia*), 'chat' and στόμα (*stoma*), 'mouth' (Glaw *et al.* 1998). The genitive of στόμα being στόματος, the subfamilal nomen introduced by Vences & Glaw (2001) based on this generic nomen should have been spelt *Laliostomatinae*, just like in the case of *Ambystomatidae* or *Engystomatidae*. Before 2000, the incorrect original spelling should have been corrected, but it is no more the case under the 1999 *Code* because of the new Article 29.4, which states that such incorrect spellings should be maintained, a highly confusing Rule, especially in this case, as several family-series nomina, based on the same final stem like -*stoma*, must now have different endings according to whether they were made available before 2000 or after 1999 (see Dubois 2005*e*: 74–75; Dubois & Aescht 2019*o*: 125–126).

### F.19.71. Tribus *Mantellini* Laurent, 1946

***Eunym***: Dubois 2005: 16.
***Getangiotaxon***: *Mantellinae* Laurent, 1946.
***Adelphotaxa***: *Boophini* Vences & Glaw, 2001; *Laliostomini* Vences & Glaw, 2001; *Tsingymantini* **nov.**
***Getendotaxa***: *Mantellina* Laurent, 1946; *Mantidactylina* **nov.**

## F.20.67. Subtribus *Mantellina* Laurent, 1946

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Mantellini* Laurent, 1946.
***Adelphotaxon***: *Mantidactylina* **nov.**
***Getendotaxa***: *Blommersiinia* **nov.**; *Mantellinia* Laurent, 1946.

## F.21.46. Infratribus *Blommersiinia* **nov.**

***Getangiotaxon***: *Mantellina* Laurent, 1946.
***Adelphotaxon***: *Mantellinia* Laurent, 1946.
***Getendotaxa***: *Blommersia* Dubois, 1992; *Guibemantis* Dubois, 1992.

***Nucleogenus, by present designation***: *Blommersia* Dubois, 1992. ● ***Etymology of nomen***: P: Rose Marie Antoinette Blommers-Schlösser (1944–), Dutch herpetologist. ● ***Stem of nomen***: *Blommersi-*.

***Diagnosis***: Small to medium sized frogs (SVL 15–60 mm); webbing between toes rudimentary to extended; metatarsalia connected or separated; inner and outer metatarsal tubercle present; finger tips slightly to distinctly enlarged; femoral glands type 1 (Glaw *et al*. 2000) in male, absent in female; tibial glands absent; vocal sac single, subgular; maxillary teeth present; vomerine teeth present or absent; tongue weakly or distinctly bifid; vertebral column diplasiocoelous or procoelous; tympanum same size in male and female; habits terrestrial, arboreal or phytotelmic; nocturnal or diurnal activity; eggs pigmented, brownish or greenish, laid above the water or hidden in cavities on the ground; tadpoles free swimming and feeding; keratodont formula 1:(2+2)–(6+6)/3. {Blommers-Schlösser & Blanc 1991; Dubois 1992; Glaw & Vences 1994, 2006, 2007; Lehtinen *et al.* 2012}.

## F.21.47. Infratribus *Mantellinia* Laurent, 1946

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Mantellina* Laurent, 1946.
***Adelphotaxon***: *Blommersiinia* **nov.**
***Getendotaxa***: *Mantella* Boulenger, 1882; *Wakea* Glaw & Vences, 2006.

## F.20.68. Subtribus *Mantidactylina* **nov.**

***Getangiotaxon***: *Mantellini* Laurent, 1946.
***Adelphotaxon***: *Mantellina* Laurent, 1946.
***Getendotaxa***: *Mantidactylinia* **nov.**; *Spinomantinia* **nov.**

***Nucleogenus, by present designation***: *Mantidactylus* Boulenger, 1895. ● ***Etymology of nomen***: G: μάντις (*mantis*), 'green garden frog' called so as predicting the weather; δάκτυλος (*dactulos*), 'digit, finger, toe'. ● ***Stem of nomen***: *Mantidactyl-*.

***Diagnosis***: Small to large sized frogs (SVL 17–120 mm); webbing between toes often moderately extended, but also full, rudimentary or absent; metatarsalia connected or separated; inner metatarsal tubercle present or absent; outer metatarsal tubercle generally present; finger tips moderately enlarged, but also slightly or strongly enlarged; femoral glands type 2, 3 or 4 in male, small or absent in female, or not recognisable externally; tibial glands present or absent; vocal sac single, subgular paired or bilobate; maxillary teeth present or absent; vomerine teeth present or absent; tongue bifid; vertebral column diplasiocoelous or procoelous; tympanum moderate or very small, in male mostly larger then in female, or of same size; habits terrestrial or arboreal, along torrents, small streams or stagnant water bodies, or independent from water bodies; diurnal and nocturnal activity; eggs terrestrial or arboreal; parental care in some species; tadpoles free swimming and exotrophic, or endotrophic with direct development or non-feeding larvae, nests known for some species. {Guibé 1978; Glaw & Vences 2006}.

### F.21.48. Infratribus *Mantidactylinia* **nov.**

***Getangiotaxon***: *Mantidactylina* **nov.**
***Adelphotaxon***: *Spinomantinia* **nov.**
***Getendotaxa***: *Boehmantinoa* **nov.**; *Mantidactylinoa* **nov.**

### F.22.24. Hypotribus *Boehmantinoa* **nov.**

***Getangiotaxon***: *Mantidactylinia* **nov.**
***Adelphotaxon***: *Mantidactylinoa* **nov.**
***Getendotaxon***: *Boehmantis* Glaw & Vences, 2006.

***Nucleogenus, by present designation***: *Boehmantis* Glaw & Vences, 2006. ● ***Etymology of nomen***: P: Wolfgang Böhme (1944–), German herpetologist; G: μάντις (*mantis*), 'green garden frog' called so as predicting the weather. ● ***Stem of nomen***: *Boehmant*-.

***Diagnosis***: Large sized frogs (SVL 60–80 mm); webbing between toes extended; metatarsalia separated; inner metatarsal tubercle present; outer metatarsal tubercle absent; finger tips strongly enlarged; femoral glands not recognisable externally in males and females; tibial glands absent; vocal sac single, subgular; maxillary teeth present; vomerine teeth present; tongue bifid; tympanum very small; habits terrestrial in torrents; nocturnal activity; eggs pigmented; parental care not observed; tadpoles exotrophic; tadpoles keratodont formula 4:(2+2)–(4+4)/3. {Glaw & Vences 2006; Andreone & Nussbaum 2006}.

### F.22.25. Hypotribus *Mantidactylinoa* **nov.**

***Getangiotaxon***: *Mantidactylinia* **nov.**
***Adelphotaxon***: *Boehmantinoa* **nov.**
***Getendotaxa***: *Gephyromantis* Methuen, 1920; *Mantidactylus* Boulenger, 1895.

### F.21.49. Infratribus *Spinomantinia* **nov.**

***Getangiotaxon***: *Mantidactylina* **nov.**
***Adelphotaxon***: *Mantidactylinia* **nov.**
***Getendotaxon***: *Spinomantis* Dubois, 1992.

***Nucleogenus, by present designation***: *Spinomantis* Dubois, 1992. ● ***Etymology of nomen***: L: *spina*, 'spine'; G: μάντις (*mantis*), 'green garden frog' called so as predicting the weather. ● ***Stem of nomen***: *Spinomant*-.

***Diagnosis***: Small to medium sized frogs (SVL 22–60 mm); webbing between toes rudimentary to moderate; metatarsalia connected or separated; inner metatarsal tubercle present; outer metatarsal tubercle generally present; finger tips distinctly enlarged; femoral glands type 2 in male, absent in female; tibial glands absent; vocal sac single, subgular, or paired or slightly bilobed; maxillary teeth present; vomerine teeth generally present; tongue bifid; vertebral column diplasiocoelous; tympanum same size in male and female; in arboreal or terrestrial habitat along or in small streams; generally nocturnal or partly diurnal activity; eggs yellowish; tadpoles free swimming and feeding; keratodont formula 0–1:(2+2)–(3+3)/(1+1):1–2. {Glaw & Vences 2006; Vejarano *et al.* 2006}.

### F.19.72. Tribus *Tsingymantini* **nov.**

***Getangiotaxon***: *Mantellinae* Laurent, 1946.
***Adelphotaxa***: *Boophini* Vences & Glaw, 2001; *Laliostomini* Vences & Glaw, 2001; *Mantellini* Laurent, 1946.

***Getendotaxon***: *Tsingymantis* Glaw, Hoegg & Vences, 2006.

***Nucleogenus, by present designation***: *Tsingymantis* Glaw, Hoegg & Vences, 2006. ● ***Etymology of nomen***: R: *tsingy*, Malagasy word for eroded karstic limestone formations where these frogs live; G: μάντις (*mantis*), 'green garden frog' called so as predicting the weather. ● ***Stem of nomen***: *Tsingymant-*.

***Diagnosis***: Medium sized mantellids (SVL 53–67 mm); webbing between toes small; metatarsalia largely connected; inner metatarsal tubercle very distinct; outer metatarsal tubercle absent; finger tips strongly enlarged; femoral glands not recognisable in both sexes; tibial glands absent; vocal sac not observed externally; maxillary teeth present; vomerine teeth present; tongue bifid; tympanum large, slightly larger in males; habits terrestrial; nocturnal activity; eggs pigmented; tadpoles free swimming and feeding; keratodont formula 1:4+4/1+1:2. {Glaw *et al.* 2006; Raselimanana *et al*. 2007; Randrianiaina *et al.* 2011}.

## F.18.78. Subfamilia *Rhacophorinae* ||Günther, 1858||-Hoffman, 1932

***Eunym***: Laurent 1943: 16.
***Getangiotaxon***: *Rhacophoridae* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxon***: *Mantellinae* Laurent, 1946.
***Getendotaxa***: *Buergeriini* Channing, 1989; *Rhacophorini* ||Günther, 1858||-Hoffman, 1932; **1 G†**; **1 GIS** (*Dendrobatorana* Ahl, 1927).

***Comments***: The subfamily *Rhacophorinae* consists in two tribes, the *Buergeriini* for *Buergeria*, which is sister-branch to the *Rhacophorini*, including all other *Rhacophorinae*. This relationship was first revealed by Bossuyt *et al.* (2006) and confirmed by Wilkinson *et al.* (2002), Grosjean *et al.* (2008), Li *et al.* (2008), Yu *et al.* (2009), Wiens *et al.* (2009), Pyron & Wiens (2011), Hertwig *et al.* (2013), Meegaskumbura *et al*. (2015*a*) and Chan *et al.* (2018).

In the latter tribe, the subtribe *Romerina*, for *Romerus*, is sister-branch to the subtribe *Rhacophorina*, including all other members of the tribe. The position of *Romerus* within the *Rhacophorinae* was revealed by Li *et al.* (2008) who however proposed for this genus a nomen, "*Liuixalus*" , which is not available as no diagnostic characters were given in their work. We provide here an available nomen for this genus, the phylogenetic position of which was confirmed by other authors.

In the subtribe *Rhacophorina*, two branches are revealed, recognised as the infratribes *Nyctixalinia* for *Nyctixalus* and *Theloderma*, and *Rhacophorinia* for the remaining genera. The sister-group relationship of *Nyctixalus* and *Theloderma* was found by Wilkinson *et al.* (2002), Grosjean *et al.* (2008), Li *et al*. (2008), Yu *et al.* (2009), Wiens *et al.* (2009), Li *et al.* (2009), Pyron & Wiens (2011), Hertwig *et al.* (2013), Meegaskumbura *et al.* (2015*a*) and Chan *et al.* (2018).

The relationship among the *Rhacophorinia* are not resolved and five hypotribes are recognised here: the *Gracixalinoa* for *Gracixalus*, the *Orixalinoa* for *Orixalus*, the *Vampyriinoa* for *Vampyrus*, the *Philautinoa* and the *Rhacophorinoa*. Within the hypotribe *Philautinoa*, the unresolved relationships lead to the recognition of four clans, the *Kurixalites* for *Kurixalus*, the *Nasutixalites* for *Nasutixalus*, the *Philautites* for *Philautus*, and the *Mercuranites*, with two subclans, *Beddomixalities* for *Beddomixalus*, and *Mercuranities* for *Mercurana*, *Pseudophilautus* and *Raorchestes*. Within the hypotribe *Rhacophorinoa*, the clan *Chirixalites*, for *Chirixalus* and *Chiromantis*, is sister-taxon to the *Rhacophorites*. This latter clan contains four taxa of unresolved relationships, the subclans *Feihylities* for *Feihyla*, *Rhacophorities* for *Leptomantis*, *Rhacophorus* and *Zhangixalus*, the *Tamixalities* for *Tamixalus*, and the *Polypedatities*, for the infraclans *Ghatixalitoes* for *Ghatixalus*, and *Polypedatitoes* for *Polypedates* and *Taruga*.

The supported sister-taxa relationships of the species attributed to *Chirixalus* and *Chiromantis*, *Polypedates* and *Taruga*, and *Leptomantis*, *Rhacophorus* and *Zhangixalus* have been confirmed in most recent molecular phylogenies (Wilkinson *et al.* 2002; Grosjean *et al.* 2008; Li *et al.* 2008; Yu *et al.* 2009; Wiens *et al.* 2009; Li *et al.* 2009; Pyron & Wiens 2011; Hertwig *et al.* 2013; Meegaskumbura *et al.* 2015*b*; Chan *et al.* 2018), although the taxonomic conclusions were often not formally done, as statistical support was low for many groupings or taxon sampling was not sufficient. The tree published by Chan *et al.* (2018) has resolved relationships for all the genera retained here, and might be the basis for of a better resolved classification of the subfamily *Rhacophorinae*.

## F.19.73. Tribus *Buergeriini* Channing, 1989

***Protonym***: *Buergeriinae* Channing, 1989: 116 [bF].
***Eunym***: Dubois 2005: 335.
***Getangiotaxon***: *Rhacophorinae* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxa***: *Rhacophorini* ||Günther, 1858||-Hoffman, 1932; **1 G†**; **1 GIS** (*Dendrobatorana* Ahl, 1927).
***Getendotaxon***: *Buergeria* Tschudi, 1838.

## F.19.74. Tribus *Rhacophorini* ||Günther, 1858||-Hoffman, 1932

***Eunym***: Dubois 1992: 336.
***Getangiotaxon***: *Rhacophorinae* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxa***: *Buergeriini* Channing, 1989; **1 G†**; **1 GIS** (*Dendrobatorana* Ahl, 1927).
***Getendotaxa***: *Rhacophorina* ||Günther, 1858||-Hoffman, 1932; *Romerina* **nov.**

## F.20.69. Subtribus *Rhacophorina* ||Günther, 1858||-Hoffman, 1932

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Rhacophorini* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxon***: *Romerina* **nov.**
***Getendotaxa***: *Nyctixalinia* Grosjean, Delorme, Dubois & Ohler, 2008; *Rhacophorinia* ||Günther, 1858||-Hoffman, 1932.

## F.21.50. Infratribus *Nyctixalinia* Grosjean, Delorme, Dubois & Ohler, 2008

***Protonym***: *Nyctixalini* Grosjean, Delorme, Dubois & Ohler, 2008: 174 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Rhacophorina* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxon***: *Rhacophorinia* ||Günther, 1858||-Hoffman, 1932.
***Getendotaxa***: *Nyctixalus* Boulenger, 1882; *Theloderma* Tschudi, 1838.

## F.21.51. Infratribus *Rhacophorinia* ||Günther, 1858||-Hoffman, 1932

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Rhacophorina* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxon***: *Nyctixalinia* Grosjean, Delorme, Dubois & Ohler, 2008.
***Getendotaxa***: *Gracixalinoa* **nov.**; *Orixalinoa* **nov.**; *Philautinoa* Dubois, 1981; *Rhacophorinoa* ||Günther, 1858||-Hoffman, 1932; *Vampyriinoa* **nov.**

## F.22.26. Hypotribus *Gracixalinoa* **nov.**

***Getangiotaxon***: *Rhacophorinia* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxa***: *Orixalinoa* **nov.**; *Philautinoa* Dubois, 1981; *Rhacophorinoa* ||Günther, 1858||-Hoffman, 1932; *Vampyriinoa* **nov.**
***Getendotaxon***: *Gracixalus* Delorme, Dubois, Grosjean & Ohler, 2005.

***Nucleogenus, by present designation***: *Gracixalus* Delorme, Dubois, Grosjean & Ohler, 2005. ● ***Etymology of nomen***: L: *gracilis*, 'thin, slender'; N: *Ixalus* Duméril & Bibron, 1841, derived from G: ιξαλος (*ixalos*), 'jumping, dancing'. ● ***Stem of nomen***: *Gracixal*-.

***Diagnosis***: Small sized rhacophorids (SVL < 25 mm); no vomerine teeth; tongue notched; tympanum distinct; distance between nostrils smaller than distance between eyes; finger tips largely expanded with circumventral grooves, toe tips slightly smaller; web between fingers absent, web between toes small to moderate, no web between metatarsals; dorsal skin usually smooth with granules, in particular on eyelids; dorsum bearing patterns like an interorbital band or triangle and a X-shaped pattern between shoulders; dark canthal and tympanic band sometimes continued on flanks by a series of dark spots; eggs laid on vegetation overhanging water bodies; life cycle including free swimming and feeding larvae; keratodont formula 1:4+4/3. {Delorme *et al.* 2005; Rowley *et al.* 2011}.

### F.22.27. Hypotribus *Orixalinoa* **nov.**

***Getangiotaxon***: *Rhacophorinia* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxa***: *Gracixalinoa* **nov.**; *Philautinoa* Dubois, 1981; *Rhacophorinoa* ||Günther, 1858||-Hoffman, 1932; *Vampyriinoa* **nov.**
***Getendotaxon***: *Orixalus* **nov.**

***Nucleogenus, by present designation***: *Orixalus* **nov.** ● ***Etymology of nomen***: G: ὄρος (*oros*), 'mountain'; N: *Ixalus* Duméril & Bibron, 1841, derived from G: ιξαλος (*ixalos*), 'jumping, dancing'; referring to the distribution across the mountains in northern Indochinese region. ● ***Stem of nomen***: *Orixal-*.

***Diagnosis***: Small to medium sized frogs (males SVL 23–42 mm; females SVL 29–43 mm); webbing between toes moderate or small, 2–3.5 phalanges free on toe IV; metatarsalia not separate or separate; inner metatarsal tubercle distinct, usually small; outer absent; finger and toe tips expanded into large discs; at least a few tubercles present on upper eyelids; dorsal skin smooth, with tubercles or granules; nuptial pads present on finger I; inner subgular vocal sacs present; maxillary teeth present; vomerine teeth absent; tongue usually deeply notched; tympanum distinct; distance between nostrils smaller than distance between upper eyelids; dorsal color brown, or green with blotches, with darker pattern including an interorbital triangle continued by paired bands on side of back; ventral color whitish or gray with darker markings or spots; living on vegetation, or in karst environment; active at night; eggs bicolored, but egg laying not observed; parental care not observed; tadpoles unknown. {Boulenger 1893; Hu *et al.* 1978; Fei 1999; Matsui & Orlov 2004; Mo *et al.* 2013; Nguyen *et al.* 2013}.

### G.28.438. Genus *Orixalus* **nov.**

***Getangiotaxon***: *Orixalinoa* **nov.**
***Adelphotaxon***: None.
***Getendotaxa***: *Orixalus ananjevae* (Matsui & Orlov, 2004); *Orixalus carinensis* (Boulenger, 1893); *Orixalus jinxiuensis* (Hu *in* Hu, Fei & Ye, 1978); *Orixalus nonggangensis* (Mo, Zhang, Luo, Zhou & Chen, 2013); *Orixalus waza* (Nguyen, Le, Pham, Nguyen, Bonkowski & Ziegler, 2013).

***Nucleospecies, by present designation***: *Chirixalus nonggangensis* Mo, Zhang, Luo, Zhou & Chen, 2013. ● ***Etymology of nomen***: G: ὄρος (*oros*), 'mountain'; N: *Ixalus* Duméril & Bibron, 1841, derived from G: ιξαλος (*ixalos*), 'jumping, dancing'; referring to the distribution across the mountains in northern Indochinese region. ● ***Stem of nomen***: *Orixal-*. 'frog'. ● ***Grammatical gender of nomen***: masculine.

***Diagnosis***: Small to medium sized frogs (males SVL 23–42 mm; females SVL 29–43 mm); webbing between toes moderate or small, 2–3.5 phalanges free on toe IV; metatarsalia not separate or separate; inner metatarsal tubercle distinct, usually small; outer absent; finger and toe tips expanded into large discs; at least a few tubercles present on upper eyelids; dorsal skin smooth, with tubercles or granules; nuptial pads present on finger I; inner subgular vocal sacs present; maxillary teeth present; vomerine teeth absent; tongue usually deeply notched; tympanum distinct; distance between nostrils smaller than distance between upper eyelids; dorsal color brown, or green with blotches, with darker pattern including an interorbital triangle continued by paired bands on side of back; ventral color whitish or gray with darker markings or spots; living on vegetation, or in karst environment; active at night; eggs bicolored, but egg laying not observed; parental care not observed; tadpoles unknown. {Boulenger, 1893; Hu *et al.* 1978; Fei 1999; Matsui & Orlov 2004; Mo *et al.* 2013; Nguyen *et al.* 2013}.

## F.22.28. Hypotribus *Philautinoa* Dubois, 1981

***Protonym***: *Philautinae* Dubois, 1981: 227 [bF].
***Eunym***: Hoc loco.
***Getangiotaxon***: *Rhacophorinia* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxa***: *Gracixalinoa* **nov.**; *Orixalinoa* **nov.**; *Rhacophorinoa* ||Günther, 1858||-Hoffman, 1932; *Vampyriinoa* **nov.**
***Getendotaxa***: *Kurixalites* **nov.**; *Mercuranites* **nov.**; *Nasutixalites* **nov.**; *Philautites* Dubois, 1981.

## F.23.16. Clanus *Kurixalites* **nov.**

***Getangiotaxon***: *Philautinoa* Dubois, 1981.
***Adelphotaxa***: *Mercuranites* **nov.**; *Nasutixalites* **nov.**; *Philautites* Dubois, 1981.
***Getendotaxon***: *Kurixalus* Ye, Fei & Dubois *in* Fei, 1999.

***Nucleogenus, by present designation***: *Kurixalus* Ye, Fei & Dubois *in* Fei, 1999. ● ***Etymology of nomen***: P: Mitsuru Kuramoto (1934–), Japanese herpetologist; N: *Ixalus* Duméril & Bibron, 1841, derived from G: ιξαλος (*ixalos*), 'jumping, dancing'. ● ***Stem of nomen***: *Kurixal-*.

***Diagnosis***: Small to medium sized rhacophorids (males SVL 23–37 mm; females SVL 29–50 mm); snout length usually subequal to eye but also shorter or much longer than eye; a more or less prominent conical projection on snout usually present; pupil horizontal; internaral distance smaller to larger than distance between upper eyelid; vomerine teeth in two small patches near choanae, widely separated from each other usually present; tongue emarginated; tympanum distinct, rarely hidden, about half eye size; a rudimentary web between fingers; well developed or small discs with circumferential grooves present on all toes and fingers; webbing between toes moderately developed; metatarsalia separated; a rather elongate, not very prominent inner metatarsal tubercle present; outer metatarsal tubercle absent; skin on dorsum smooth or bearing various densities of tubercles giving in many species a rough aspect; a fringe composed of tubercles or more developed dermal appendages on the edge of forearm and tarsus present in most species; some also showing dermal appendages below vent and on heels, in one species these structures all absent; skin on belly granular; white or yellowish nuptial pads present, forming large swellings in one species; presence of inner subgular vocal sac; dorsum of gray or brown, rarely green shades with darker patterns; ventrally whitish with or without darker spots; habits forests or swamps on low vegetation; nocturnal; large whitish eggs laid either on the ground or in phytotelm; aquatic tadpoles. {Günther 1858; Boulenger 1893; Boettger 1895; Annandale 1912; Bourret 1942; Inger 1947, 1966; Taylor 1962; Kuramoto & Wang 1987; Fei 1999; Inger *et al.* 1999; Matsui & Orlov 2004; Nguyen *et al.* 2014*a–b*; personal observations by AO).

## F.23.17. Clanus *Mercuranites* **nov.**

***Getangiotaxon***: *Philautinoa* Dubois, 1981.
***Adelphotaxa***: *Kurixalites* **nov.**; *Nasutixalites* **nov.**; *Philautites* Dubois, 1981.
***Getendotaxa***: *Beddomixalities* **nov.**; *Mercuranities* **nov.**

***Nucleogenus, by present designation***: *Mercurana* Abraham, Pyron, Ansil, Zachariah & Zachariah, 2013. ● ***Etymology of nomen***: P: Freddie Mercury (1946–1991), lead singer of the British rock band Queen; N: *Rana* Linnaeus, 1758, derived from L: *rana*, 'frog'. ● ***Stem of nomen***: *Mercuran-*.

***Diagnosis***: Body length usually very small or small, rarely medium sized frogs (males SVL 11–42 mm; females SVL 15–65 mm); snout shorter, longer or subequal to eye length; pupil horizontal; internarial distance shorter than distance between upper eyelids; vomerine teeth absent or weekly developed; tongue emarginated, with or without papillae; tympanum distinct or indistinct, rarely hidden; upper eyelid usually smooth but sometimes bearing tubercles or granules; webbing between fingers absent or rarely rudimentary; fingers bearing distinctly enlarged discs; webbing between toes rudimentary to large; metatarsalia fused or slightly separated; inner metatarsal tubercle short, moderately developed or indistinct; outer metatarsal tubercle absent; dorsal skin in many species smooth or shagreened but often granular at least at some parts of body or in some species presence of horny spinules; rarely with horny ridges or with prominent symmetrical glandular swellings; skin on belly granular; nuptial pad present or absent; a large or rarely small subgular median vocal sac present (in all species for which indicated); dorsal coloration brownish or green usually with various patterns, including interorbital band, dorsolateral bands or various smaller patches or spots, rarely uniform; few species bright or uniformly coloured; ventral coloration usually light coloured including various shades of gray or yellow, either uniformly of with spots or variegations, few species with dark or bright coloured belly; arboreal forest dwelling species occurring in primary forests but also in disturbed habitats and plantations or grassland; observed on bushes and trees up to 20 m but often on forest floor in leaf litter or under stones; nocturnal rarely diurnal; eggs of large size, few to more rarly moderate in number, laid on ground or on leaves or phytotelms; usually direct development but two lineages with free living aquatic tadpoles. {Boulenger 1882*b*, 1893, 1906; Smith 1924; Das & Chanda 1998; Bossuyt & Dubois 2001; Bossuyt *et al.* 2001; Bossuyt 2002; Biju 2003; Kuramoto & Joshy 2003; Biju & Bossuyt 2005*a–b*, 2006, 2009; Gururaja *et al.* 2007; Biju *et al.* 2010; Zachariah *et al.* 2011; Seshadri *et al.* 2012; Orlov *et al.* 2012; Abraham *et al.* 2013; Padhye *et al.* 2013; Wickramasinghe *et al.* 2013*a–b*; Vijayakumar *et al.* 2014}.

### F.24.10. Subclanus *Beddomixalities* **nov.**

***Getangiotaxon***: *Mercuranites* **nov.**
***Adelphotaxon***: *Mercuranities* **nov.**
***Getendotaxon***: *Beddomixalus* Abraham, Pyron, Ansil, Zachariah & Zachariah, 2013.

***Nucleogenus, by present designation***: *Beddomixalus* Abraham, Pyron, Ansil, Zachariah & Zachariah, 2013. ● ***Etymology of nomen***: P: Richard Henry Beddome (1830–1911), British working on herpetofauna of India; N: *Ixalus* Duméril & Bibron, 1841, derived from G: ιξαλος (*ixalos*), 'jumping, dancing'. ● ***Stem of nomen***: *Beddomixal-*.

***Diagnosis***: Slender, medium sized frogs (males SVL 40–42 mm; female SVL 61 mm); snout longer than eye length; pupil horizontal; internarial distance shorter than distance between upper eyelids; vomerine teeth absent; tongue emarginated, without papillae; tympanum distinct; upper eyelid smooth; webbing between fingers absent; fingers bearing distinctly enlarged discs; webbing between toes moderate; metatarsalia slightly separated; inner metatarsal tubercle short, moderately developed; outer metatarsal tubercle absent; dorsal skin granular; skin on belly granular; nuptial pad absent; a small subgular vocal sac present; dorsal coloration brownish with a pair of distinct yellowish parallel longitudinal strips from eye to vent; ventral coloration uniformly white; an arboreal, forest dwelling species occurring arround seasonal swamps or marshes near mid to high-elevation forests; clutches of 175 large sized, white eggs laid on soil or grass and subsequently washed by rainwater to pools; tadpoles free living with oval and depressed body, blackish dorsally and pinkish ventrally; keratodont formula 1:4+4/3. {Zachariah *et al.* 2011; Abraham *et al.* 2013}.

### F.24.11. Subclanus *Mercuranities* **nov.**

***Getangiotaxon***: *Mercuranites* **nov.**
***Adelphotaxon***: *Beddomixalities* **nov.**
***Getendotaxa***: *Mercurana* Abraham, Pyron, Ansil, Zachariah & Zachariah, 2013; *Pseudophilautus* Laurent, 1943; *Raorchestes* Biju, Shouche, Dubois, Dutta & Bossuyt, 2010.

### F.23.18. Clanus *Nasutixalites* **nov.**

***Getangiotaxon***: *Philautinoa* Dubois, 1981.
***Adelphotaxa***: *Kurixalites* **nov.**; *Mercuranites* **nov.**; *Philautites* Dubois, 1981.

***Getendotaxon***: *Nasutixalus* Jiang, Yan, Wang & Che *in* Jiang, Yan, Wang, Zou, Li & Che, 2016.

***Nucleogenus, by present designation***: *Nasutixalus* Jiang, Yan, Wang & Che *in* Jiang, Yan, Wang, Zou, Li & Che, 2016. ● ***Etymology of nomen***: L: *nasutus*, 'large-nosed'; N: *Ixalus* Duméril & Bibron, 1841, derived from G: ιξαλος (*ixalos*), 'jumping, dancing'. ● ***Stem of nomen***: *Nasutixal*-.

***Diagnosis***: Small sized rhacophorids (males SVL 37–45 mm; female SVL 47 mm); snout rounded; canthus rostralis obtuse and raised prominently, forming a ridge from nostril to anterior corner of eyes; web rudimentary on hand; moderate webbing on foot; phalange 'Y' shaped, visible from dorsal side of fingers and toes; skin of dorsal surfaces relatively smooth with small tubercles; phytotelm-breeding; eggs non pigmented, creamy-white; oophagous tadpole lacking keratinised tooth rows. {Jiang *et al.* 2016; Biju *et al.* 2016}.

### F.23.19. Clanus *Philautites* Dubois, 1981

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Philautinoa* Dubois, 1981.
***Adelphotaxa***: *Kurixalites* **nov.**; *Mercuranites* **nov.**; *Nasutixalites* **nov.**
***Getendotaxon***: *Philautus* Gistel, 1848.

### F.22.29. Hypotribus *Rhacophorinoa* ||Günther, 1858||-Hoffman, 1932

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Rhacophorinia* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxa***: *Gracixalinoa* **nov.**; *Orixalinoa* **nov.**; *Philautinoa* Dubois, 1981; *Vampyriinoa* **nov.**
***Getendotaxa***: *Chirixalites* **nov.**; *Rhacophorites* ||Günther, 1858||-Hoffman, 1932.

### F.23.20. Clanus *Chirixalites* nov.

***Getangiotaxon***: *Rhacophorinoa* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxon***: *Rhacophorites* ||Günther, 1858||-Hoffman, 1932.
***Getendotaxa***: *Chirixalus* Boulenger, 1893; *Chiromantis* Peters, 1854.

***Nucleogenus, by present designation***: *Chirixalus* Boulenger, 1893. ● ***Etymology of nomen***: G: χείρ (*cheir*), 'hand'; N: *Ixalus* Duméril & Bibron, 1841, derived from G: ιξαλος (*ixalos*), 'jumping, dancing'. ● ***Stem of nomen***: *Chirixal*-.

***Diagnosis***: Small to large size frogs (males SVL 22–75 mm, females SVL 29–92 mm); snout length shorter or longer than eye diameter; pupil horizontal; vomerine teeth absent or present; tongue notched; tympanum distinct; two inner fingers opposed to two outer ones; webbing between fingers rudimentary or small; intercalary elements present; finger tips dilated into large discs; webbing between toes half to full (1–2 phalanges free on toe IV); metatarsalia separate; inner metatarsal tubercles small, outer absent; skin on dorsum smooth or warty; skin belly granular; nuptial pads on fingers I and II; an internal subgular vocal sac; dorsal color uniform, often light colored, with darker pattern; ventral color whitish, with traces of pigmented spots; habits arboreal, on shrubs or trees, in forests or savannah; unpigmented rather large eggs in foam nests; described tadpoles uniformly gray with round body and rather short tail, keratodont formula 1:<2–4>/<0–3>:2–3; omosternum forked or unforked; sternum with bony style. {Boulenger 1893; Annandale 1915; Cochran 1927; Taylor 1962; Schiøtz 1999}.

### F.23.21. Clanus *Rhacophorites* ||Günther, 1858||-Hoffman, 1932

***Eunym***: *Hoc loco*.

***Getangiotaxon***: *Rhacophorinoa* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxon***: *Chirixalites* **nov.**
***Getendotaxa***: *Feihylities* **nov.**; *Polypedatities* Günther, 1858; *Rhacophorities* ||Günther, 1858||-Hoffman, 1932; *Tamixalities* **nov.**

## F.24.12. Subclanus *Feihylities* nov.

***Getangiotaxon***: *Rhacophorites* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxa***: *Polypedatities* Günther, 1858; *Rhacophorities* ||Günther, 1858||-Hoffman, 1932; *Tamixalities* **nov.**
***Getendotaxon***: *Feihyla* Frost, Grant, Faivovich, Bain, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006.

***Nucleogenus, by present designation***: *Feihyla* Frost, Grant, Faivovich, Bain, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler, 2006. ● ***Etymology of nomen***: P: Fei Liang (1936–), Chinese herpetologist; N: *Hyla* Laurenti, 1768, of debated etymology. ● ***Stem of nomen***: *Feihyl-*.

***Diagnosis***: Small sized frogs (males SVL 18–29 mm; females SVL 23–32 mm); snout length equal or longer to eye; distance between nostrils shorter than distance between upper eyelids; vomerine teeth absent; tongue notched; tympanum may be hidden or distinct; upper eyelid spines absent; fingers I and II opposed to fingers III and IV; rudimentary webbing between fingers III and IV; finger tips widely enlarged; webbing between toes moderate to large (1.5 to 3 phalanges free on toe IV); metatarsalia separate at distal part; innermetatarsal tubercles usually small, outer absent; dorsal skin smooth, males usually showing fine spinucules; skin on belly granular; nuptial pads absent or whitish pod on finger I; an internal subgular vocal sac with bilateral slit-like openings; dorsally usually uniform brown or yellow, sometimes leave green, often with dorsolateral bands or spots on dorsum; ventral color uniformly unpigmented; found perched on low vegetation near water bodies; active at night; eggs unpigmented or pigmented, in clutches, sometimes in foam nests; tadpoles small sized (stage 36 about 35 mm); pigmentation on body and tail; keratodont formula 4–5/3. {Boulenger 1887; Smith 1924; Cochran 1927; Pope 1931; Bourret 1942; Taylor 1962; Dring 1983; Inger *et al.* 1999; Fei *et al.* 2010; Matsui *et al.* 2014}.

## F.24.13. Subclanus *Polypedatities* Günther, 1858

***Protonym***: *Polypedatidae* Günther, 1858: 346 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Rhacophorites* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxa***: *Feihylities* **nov.**; *Rhacophorities* ||Günther, 1858||-Hoffman, 1932; *Tamixalities* **nov.**
***Getendotaxa***: *Ghatixalitoes* **nov.**; *Polypedatitoes* Günther, 1858.

## F.25.20. Infraclanus *Ghatixalitoes* nov.

***Getangiotaxon***: *Polypedatities* Günther, 1858.
***Adelphotaxon***: *Polypedatitoes* Günther, 1858.
***Getendotaxon***: *Ghatixalus* Biju, Roelants & Bossuyt, 2008.

***Nucleogenus, by present designation***: *Ghatixalus* Biju, Roelants & Bossuyt, 2008. ● ***Etymology of nomen***: R: *Ghat*, Sanskrit, 'step', referring to the mountain range of the Western Ghats; N: *Ixalus* Duméril & Bibron, 1841, derived from G: ιξαλος (*ixalos*), 'jumping, dancing'. ● ***Stem of nomen***: *Ghatixal-*.

***Diagnosis***: Medium sized frogs (males SVL 39–51mm; females SVL 58–67 mm); webbing between fingers moderate, between toes extensive; metatarsalia not separate; inner metatarsal tubercle short, rather distinct, outer absent; finger tips enlarged; nuptial pads present on finger I; vocal sacs indicated by a pair of openings; maxillary and vomerine teeth present; tongue emarginate; tympanum distinct; dorsal pattern with dominant blotches; ventral color uniform; life cycle associated with mountain streams and at higher altitudes; nocturnal activity; eggs laid in foam nests, entirely white; free swimming tadpoles. {Biju *et al.* 2008}.

### F.25.21. Infraclanus *Polypedatitoes* Günther, 1858

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Polypedatities* Günther, 1858.
***Adelphotaxon***: *Ghatixalitoes* **nov.**
***Getendotaxa***: *Polypedates* Tschudi, 1838; *Taruga* Meegaskumbura, Meegaskumbura, Bowatte, Manamendra-Arachchi, Pethiyagoda, Hanken & Schneider, 2010.

### F.24.14. Subclanus *Rhacophorities* ||Günther, 1858||-Hoffman, 1932

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Rhacophorites* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxa***: *Feihylities* **nov.**; *Polypedatities* Günther, 1858; *Tamixalities* **nov.**
***Getendotaxa***: *Leptomantis* Peters, 1867; *Rhacophorus* Kuhl & Van Hasselt, 1822; *Zhangixalus* Li, Jiang, Ren & Jiang, 2019.

### F.24.15. Subclanus *Tamixalities* **nov.**

***Getangiotaxon***: *Rhacophorites* ||Günther, 1858||-Hoffman, 1932.
***Adelphotaxa***: *Feihylities* **nov.**; *Polypedatities* Günther, 1858; *Rhacophorities* ||Günther, 1858||-Hoffman, 1932.
***Getendotaxon***: *Tamixalus* **nov.**

***Nucleogenus, by present designation***: *Tamixalus* **nov.** ● ***Etymology of nomen***: Tamil language: *Tamil*, referring to the name of the distribution area, Tamil Nadu; N: *Ixalus* Duméril & Bibron, 1841, derived from G: ιξαλος (*ixalos*), 'jumping, dancing'. ● ***Stem of nomen***: *Tamixal-*.

***Diagnosis***: Medium sized frogs (males SVL 33–47 mm); dorsal skin with prominent granular projections; intercalary elements present; webbing between fingers and toes complete; metatarsalia separate; a distinct oval inner metatarsal tubercle; outer metatarsal tubercle absent; pads on fingers and toes well developed; nuptial pads present; maxillary and vomerine teeth present; tongue notched; tympanum distinct, rounded; observed high on leaves and stems of shrubs and trees; active at night; eggs of creamy white color laid in foam nest; parental care not known; tadpoles not described. {Biju *et al.* 2013}.

### G.28.455. Genus *Tamixalus* **nov.**

***Getangiotaxon***: *Tamixalities* **nov.**
***Adelphotaxon***: None.
***Getendotaxon***: *Tamixalus calcadensis* (Ahl, 1927).

***Nucleospecies, by present designation***: *Rhacophorus calcadensis* Ahl, 1927. ● ***Etymology of nomen***: Tamil language: *Tamil*, referring to the name of the distribution area, Tamil Nadu; N: *Ixalus* Duméril & Bibron, 1841, derived from G: ιξαλος (*ixalos*), 'jumping, dancing'. ● ***Stem of nomen***: *Tamixal-*. ● ***Grammatical gender of nomen***: masculine.

***Diagnosis***: Medium sized frogs (males SVL 33–47 mm); dorsal skin with prominent granular projections; intercalary elements present; webbing between fingers and toes complete; metatarsalia separate; a distinct oval inner metatarsal tubercle; outer metatarsal tubercle absent; pads on fingers and toes well developed; nuptial pads present; maxillary and vomerine teeth present; tongue notched; tympanum distinct, rounded; observed high on leaves and stems of shrubs and trees; active at night; eggs of creamy white color laid in foam nest; parental care not known; tadpoles not described. {Biju *et al.* 2013}.

### F.22.30. Hypotribus *Vampyriinoa* **nov.**

***Getangiotaxon***: *Rhacophorinia* ||Günther, 1858||-Hoffman, 1932.

***Adelphotaxa***: *Gracixalinoa* **nov.**; *Orixalinoa* **nov.**; *Philautinoa* Dubois, 1981; *Rhacophorinoa* ||Günther, 1858||-Hoffman, 1932.

***Getendotaxon***: *Vampyrius* **nov.**

***Nucleogenus, by present designation***: *Vampyrius* **nov.** ● ***Etymology of nomen***: English: *vampire*, derived from the German *Vampir*, derived in turn from the Serbian *vampire* (Вампир), a nocturnal being feeding on life substance; referring to the two large keratinised labial teeth on lower lip of tadpole. ● ***Stem of nomen***: *Vampyri-*.

***Diagnosis***: Medium sized frogs (males SVL 42–45 mm; females SVL 39–53 mm); intercalary elements present; webbing between fingers moderate; webbing between toes moderate; metatarsalia separate; inner metatarsal tubercle low, oval; outer metatarsal tubercle absent; finger tips with well developed discs; nuptial pads absent; an external paired subgular vocal sac present; maxillary and vomerine teeth present; tongue deeply notched; tympanum barely visible; observed on trees near phytotelms where eggs are laid in foam nests; females observed to lay trophic eggs in phytotelms; tadpoles showing greatly reduced oral disc, only an upper jaw sheath and a pair of keratinised hooks on the edge of the lower labium; tadpoles feeding on eggs. {Rowley *et al.* 2010, 2012; Vassilieva *et al.* 2013}.

### G.28.456. Genus *Vampyrius* **nov.**

***Getangiotaxon***: *Vampyriinoa* **nov.**

***Adelphotaxon***: None.

***Getendotaxon***: *Vampyrius vampyrus* (Rowley, Le, Thi, Stuart & Hoang, 2010).

***Nucleospecies, by present designation***: *Rhacophorus vampyrus* Rowley, Le, Thi, Stuart & Hoang, 2010. ● ***Etymology of nomen***: English: *vampire*, derived from the German *Vampir*, derived in turn from the Serbian *vampir* (Вампир), a nocturnal being feeding on life substance; referring to the two large keratinised labial teeth on lower lip of tadpole. ● ***Stem of nomen***: *Vampyri-*. ● ***Grammatical gender of nomen***: masculine.

***Diagnosis***: Medium sized frogs (males SVL 42–45 mm; females SVL 39–53 mm); intercalary elements present; webbing between fingers moderate; webbing between toes moderate; metatarsalia separate; inner metatarsal tubercle low, oval; outer metatarsal tubercle absent; finger tips with well developed discs; nuptial pads absent; an external paired subgular vocal sac present; maxillary and vomerine teeth present; tongue deeply notched; tympanum barely visible; observed on trees near phytotelms where eggs are laid in foam nests; females observed to lay trophic eggs in phytotelms; tadpoles showing greatly reduced oral disc, only an upper jaw sheath and a pair of keratinised hooks on the edge of the lower labium; they are feeding on eggs. {Rowley *et al.* 2010, 2012; Vassilieva *et al.* 2013}.

### F.20.70. Subtribus *Romerina* **nov.**

***Getangiotaxon***: *Rhacophorini* ||Günther, 1858||-Hoffman, 1932.

***Adelphotaxon***: *Rhacophorina* ||Günther, 1858||-Hoffman, 1932

***Getendotaxon***: *Romerus* **nov.**

***Nucleogenus, by present designation***: *Romerus* **nov.** ● ***Etymology of nomen***: P: John D. Romer (1920–1982), British herpetologist who worked in Hongkong. ● ***Stem of nomen***: *Romer*-.

***Diagnosis***: Very small sized rhacophorids (males SVL 16–20 mm; females SVL 18–22 mm); head longer than wide; vomerine teeth absent; tympanum present; pads on fingers and toes relatively small; webbing on hand reduced; webbing on feet small; tibia relatively long (more than 50 % of SVL); serrated ridges on forearm and tarsus absent; dorsal pattern with a more or less distinct darker X and interobital band; free living tadpoles. {Milto *et al.* 2013; Qin *et al.* 2015}.

### G.28.457. Genus *Romerus* **nov**.

***Getangiotaxon***: *Romerina* **nov.**
***Adelphotaxon***: None.
***Getendotaxa***: *Romerus calcarius* (Milto, Poyarkov, Orlov & Nguyen, 2013); *Romerus hainanus* (Liu & Hu, 2004); *Romerus jinxiuensis* (Hu *in* Hu, Fei & Ye, 1978); *Romerus ocellatus* (Liu & Hu, 1973); *Romerus romeri* (Smith, 1953); *Romerus shiwandashan* (Li, Mo, Xie & Jiang *in* Qin, Mo, Jiang, Cai, Xie, Jiang, Murphy, Li & Wang, 2015).

***Nucleospecies, by present designation***: *Philautus romeri* Smith, 1953. ● ***Etymology of nomen***: P: John D. Romer (1920–1982), British herpetologist who worked in Hongkong. ● ***Stem of nomen***: *Romer*-. ● ***Grammatical gender of nomen***: masculine.

***Diagnosis***: Very small sized rhacophorids (males SVL 16–20 mm; females SVL 18–22 mm); head longer than wide; vomerine teeth absent; tympanum present; pads on fingers and toes relatively small; webbing on hand reduced; webbing on feet small; tibia relatively long (more than 50 % of SVL); serrated ridges on forearm and tarsus absent; dorsal pattern with a more or less distinct darker X and interobital band; free living tadpoles. (Milto *et al.* 2013; Qin *et al.* 2015).

***Comments***: ● Li *et al.* (2008) proposed the nomen "*Liuxalus*" for this genus without giving a diagnosis in the original description. The authors referred to a list of positions and nucleic acid name abbreviations that should be compared with the aligned matrix, but this information was not given in the publication or in a work published earlier. In consequence, the nomen is not available according to Article 13.1.1 of the *Code*. Here we propose formally a new nomen for this taxon.

### F.16.07. Apofamilia *Ranixaleidae* Dubois, 1987

***Protonym***: *Ranixalini* Dubois, 1987: 66 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Ranoidae* Batsch, 1796.
***Adelphotaxa***: *Ceratobatracheidae* Boulenger, 1884; *Dicroglosseidae* Dubois, 1987; *Nyctibatracheidae* Blommers-Schlösser, 1993; *Raneidae* Batsch, 1796.
***Getendotaxon***: *Ranixalidae* Dubois, 1987.

### F.17.50. Familia *Ranixalidae* Dubois, 1987

***Eunym***: Van Bocxlaer, Roelants, Biju, Nagaraju & Bossuyt 2006: 2.
***Getangiotaxon***: *Ranixaleidae* Dubois, 1987.
***Adelphotaxon***: None.
***Getendotaxa***: *Indirana* Laurent, 1986; *Walkerana* Dahanukar, Modak, Krutha, Nameer, Padhye & Molur, 2016.

### C.12.04. Infraphalanx **Savanura nov.**

***Getangiotaxon***: **Pananura nov.**

***Adelphotaxon***: **Ecaudata** Scopoli, 1777
***Getendotaxon***: *Ptychadenidae* Dubois, 1987.

***Uninucleogenus, by present designation***: *Hildebrandtia* Nieden, 1907

***Etymology of nomen***: Spanish: *çabana*, from the Taïno (Haïti) *zavana* or *zabana*, 'savannah'; G: ἀν- (*an-*), 'without'; οὐρά (*oura*), 'tail'. This nomen refers to the savannicolous life habits of many species of *Ptychadena*, its most speciose genus (Rödel 2000; Channing 2001; Du Preez & Carruthers 2009).

***Diagnosis***: Small to medium sized frogs (SVL 25–85 mm); snout much longer than eye; dorsal skin usually with paired folds; external vocal sacs present; otic plate absent or rudimentary; neopalatines absent; 'point' overlap of medial ramus of pterygoid and anterior lateral border of parasphenoid ala in an anterior-posterior plane; clavicles reduced, well separated in midline; style of sternum ossified, short, compact; eighth presacral and sacral vertebrae fused; dorsal protuberance on ilium not or only slightly differentiated from dorsal prominence which is smooth surfaced and confluent with a well developed ilial crest; eggs floating in single layer on lentic water bodies; tadpole with reduced number of keratodont rows (2/2, 1/2 or 0/2). {Clarke 1981, 1982; Rödel 2000; Frost *et al.* 2006; Du Preez & Carruthers 2009}.

***Comments***: The **Savanura** are sister-group to the **Ecaudata** within the **Pananura**. They include a single family, the *Ptychadenidae*. This position of the *Ptychadenidae* was first recovered by Frost *et al.* (2006), then confirmed by Bossuyt & Roelants (2009) and Pyron & Wiens (2011), but this taxon is within the **Ecaudata** in Zhang *et al.* (2013) and Frazão *et al.* (2015).

## F.17.51. Familia *Ptychadenidae* Dubois, 1987

***Protonym***: *Ptychadenini* Dubois, 1987: 55 [T].
***Eunym***: Frost, Grant, Faivovich, Bain, Haas, Haddad, Sá, Channing, Wilkinson, Donnellan, Raxworthy, Campbell, Blotto, Moler, Drewes, Nussbaum, Lynch, Green & Wheeler 2006: 7.
***Getangiotaxon***: **Savanura nov.**
***Adelphotaxon***: **Ecaudata** Scopoli, 1777.
***Getendotaxa***: *Hildebrandtia* Nieden, 1907; *Lanzarana* Clarke, 1982; *Ptychadena* Boulenger, 1917.

## C.09.02. Epiphalanx **Helanura nov.**

***Getangiotaxon***: **Ranomorpha** Fejérváry, 1921.
***Adelphotaxon***: **Aquipares** Blainville, 1816.
***Getendotaxon***: *Heleophrynidae* Noble, 1931.

***Uninucleogenus, by present designation***: *Heleophryne* Sclater, 1898.

***Etymology of nomen***: G: ἕλος (*elos*), 'marsh, swamp'; ἀν- (*an-*), 'without'; οὐρά (*oura*), 'tail'. This nomen refers to the aquatic life history of these frogs.
***Diagnosis***: Small to medium sized frogs (SVL 25–65 mm); morphology adapted to stream living; pupil vertical; expanded digital tips present; dorsal colour pattern showing large dark spots on paler, brown or green, background; inguinal amplexus; larvae adapted to living in rocky streams, showing numerous morphological apomorphies, in particular loss of upper jaw sheaths (lower present only in one species). {Haas 2003; Du Preez & Carruthers 2009}.

***Comments***: The **Helanura** are sister-group to the **Aquipares**, the other group of the **Ranomorpha** (the «Neobatrachia» of some authors). This relationship was recovered by Frost *et al.* (2006), Bossuyt & Roelants (2009), Pyron & Wiens (2011), Irisarri *et al.* (2012), Zhang *et al.* (2013) and Feng *et al.* (2017). Although it holds a single family, the *Heleophrynidae*, as sister-taxon to the **Aquipares** this taxon deserves to be named as a phalanx, to comply with the hierarchy of class-series ranks adopted here.

### F.17.52. Familia *Heleophrynidae* Noble, 1931

***Protonym***: *Heleophryninae* Noble, 1931: 498 [bF].
***Eunym***: Hoffman 1935: 2.
***Getangiotaxon***: **Helanura nov.**
***Adelphotaxon***: None.
***Getendotaxa***: *Hadromophryne* Van Dijk, 2008; *Heleophryne* Sclater, 1898.

### C.06.02. Infraordo **Mediogyrinia** Lataste, 1878

***Protonym***: **Mediogyrinidae** Lataste, 1878: 491 [UC].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Angusticoela** Reig, 1958.
***Adelphotaxon***: **Geobatrachia** Ritgen, 1828.
***Getendotaxa***: *Alytoidea* Fitzinger, 1843; *Bombinatoroidea* Gray, 1825; **1 F†**; **5 G†**.

***Comments***: The branch **Mediogyrinia**, grouping the families *Alytidae*, *Discoglossidae* and *Bombinatoridae*, is recognised in all molecular phylogenies recently published. The relationships within this group are stable in the molecular phylogenies (Roelants & Bossuyt 2005; Frost *et al.* 2006; Bossuyt & Roelants 2009; Pyron & Wiens 2011; Irisarri *et al.* 2012; Zhang *et al.* 2013; Feng *et al.* 2017) but the taxonomic interpretations varied. This taxon was named «Costata» by Frost *et al.* (2006) and Bossuyt & Roelants (2009), and *Discoglossoidea* by Roelants & Bossuyt (2005) and Pyron & Wiens (2011). As a class-series nomen, **Costata** Lataste, 1879 would be invalid for this taxon for being a junior synonym of **Mediogyrinia** Lataste, 1878. As for *Discoglossoidea* Günther, 1858, it is a family-group nomen that cannot be parordinate to a class-series nomen (and if used at this rank it should anyhow be replaced by the older nomen *Alytoidea* Fitzinger, 1843).

In our classification, after applying the [UQC], we retained three family-rank taxa, the *Alytidae*, *Discoglossidae* and *Bombinatoridae*. The *Alytidae* are sister-group to the *Discoglossidae*. As both *Alytidae* and *Bombinatoridae* are among the familial nomina retained by the [UQC], *Discoglossidae* as sister-taxon to *Alytidae* must be attributed family rank by the [STC]. The taxon grouping *Alytidae* and *Discoglossidae* therefore has to be referred to the rank superfamily, as *Alytoidea*, and consequently its sister-group also, as *Bombinatoroidea*.

### F.14.13. Superfamilia *Alytoidea* Fitzinger, 1843

***Protonym***: *Alytae* Fitzinger, 1843: 32 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Mediogyrinia** Lataste, 1878.
***Adelphotaxon***: *Bombinatoroidea* Gray, 1825.
***Getendotaxa***: *Alytidae* Fitzinger, 1843; *Discoglossidae* Günther, 1858.

### F.17.53. Familia *Alytidae* Fitzinger, 1843

***Eunym***: Günther, 1858: 346.
***Getangiotaxon***: *Alytoidea* Fitzinger, 1843.
***Adelphotaxon***: *Discoglossidae* Günther, 1858.
***Getendotaxa***: *Alytes* Wagler, 1829; **1 G†**.

### F.17.54. Familia *Discoglossidae* Günther, 1858

***Protonym and eunym***: *Discoglossidae* Günther, 1858: 346 [F].
***Getangiotaxon***: *Alytoidea* Fitzinger, 1843.

***Adelphotaxon***: *Alytidae* Fitzinger, 1843.
***Getendotaxa***: *Discoglossus* Otth, 1837; *Latonia* Meyer, 1843; **6 G†**.

### F.14.14. Superfamilia *Bombinatoroidea* Gray, 1825

***Protonym***: *Bombinatorina* Gray, 1825: 214 [UF].
***Eunym***: Dubois 2005: 7.
***Getangiotaxon***: **Mediogyrinia** Lataste, 1878.
***Adelphotaxon***: *Alytoidea* Fitzinger, 1843.
***Getendotaxon***: *Bombinatoridae* Gray, 1825.

### F.17.63. Familia *Bombinatoridae* Gray, 1825

***Eunym***: Gray 1831: 38.
***Getangiotaxon***: *Bombinatoroidea* Gray, 1825.
***Adelphotaxon***: None.
***Getendotaxa***: *Barbourula* Taylor & Noble, 1924; *Bombina* Oken, 1816; **1 G†**.

### C.04.02. Ordo **Gymnophiona** Rafinesque, 1814

***Protonym***: **Gymnophia** Rafinesque, 1814: 104 [O].
***Eunym***: Müller 1832: 198.
***Getangiotaxon***: **Lissamphibia** Gadow, 1898.
***Adelphotaxa***: **Anura** Duméril, 1805; **Urodela** Duméril, 1805; **1 C†**.
***Getendotaxa***: **Plesiophiona nov.**; **Pseudophiona** Blainville, 1816; **1 F†**; **1 G†**.

***Comments***: The holophyly of all extant caecilians is supported by all phylogenetic studies based on morphology and on molecular data. Numerous CS nomina are available for this taxon (Appendix **A7.NCS**) but the valid one under DONS Criteria is the sozodiaphonym **Gymnophiona** Rafinesque, 1814 (Dubois 2004*b*, 2005*b*, 2015*c*, 2020; Dubois & Ohler 2019; Dubois & Frétey 2020*d*).

The phylogenetic relationships within *TREE* have the same structure as the previous phylogenies published (San Mauro *et al.* 2014). They show a well resolved, statistically supported and highly hierarchical structure. Its translation into a classification according to our above defined Criteria (see M&M section) leads to major changes in the nomina of several taxa and also in the definitions and contents of some of them. As a consequence, the classification *CLAD* presented here is quite different from the previous classifications, for two main reasons: {β1} all hypothesised sister-groups have the same hierarchical rank; and {β2} through the [UQC], we applied statistical measure of usage of family level nomina to fix application of suprageneric ranks in the proposed classification.

Wilkinson *et al.* (2011) proposed a classification of the **Gymnophiona** with nine families. San Mauro *et al.* (2014) and *ASW* <2020*a*> recognised 10 families, adding the recently described *Chikilidae*. The present classification *CLAD* proposes five families with a complex infrafamilial classification. The family-ranked taxa *Caeciliidae*, *Ichthyophidae* and *Rhinatrematidae* are kept for being supported by usage [UQC]. Then, through use of the Sister-Taxa Criterion [STC], the family *Scolecomorphidae* is recognised as sister-taxon to *Caeciliidae*, and the family *Ureotyphlidae* as sister-taxon to *Ichthyophidae*. The contents of *Rhinatrematidae* and of *Scolecomorphidae* remain unchanged. The former *Herpelidae* and *Chikilidae* form a holophyletic group, here recognised as the subfamily *Herpelinae* of *Caeciliidae* and containing two tribes, the *Herpelini* and *Chikilini*. The ***hyponymous*** subfamily *Caeciliinae* of the *Caeciliidae* accommodates two tribes, the *Caeciliini* and *Siphonopini*. The *Caeciliini* incude two subtribes, the *Caeciliina* (the former *Caeciliidae*) and *Typhlonectina* (the former *Typhlonectidae*). The tribe *Siphonopini* consists in two subtribes, the *Grandisoniina* (corresponding to the former *Indotyphlidae*) and *Siphonopina*. The *Siphonopina* include the *Desmophinia* (the former *Desmophidae*) and *Siphonopinia* (the former *Siphonopidae*).

These changes relative to recent usage may seem to be quite important modifications. Nevertheless we have to keep in mind that the modern classification of **Gymnophiona** was founded in the work of Taylor (1968), not even five decades ago. This founding classification proposed four families. Successively the authors added family-rank taxa or synonymised other taxa, but the four families of Taylor (1968) were kept and are still valid in our much modified arrangement. Lescure *et al.* (1986) increased the number of families to ten but a new analysis of morphological data led to a proposal of a classification with six families (Nussbaum & Wilkinson 1989). The classification proposed by Frost *et al.* (2006), based on molecular data, established three new families in order to resolve the paraphyly created by the placement of *Uraeotyphlidae*, and recognised the former families *Scolecomorphidae* and *Typhlonectidae*, deeply imbedded within the *Caeciliidae*, as their subfamilies *Scolecomorphinae* and *Typhlonectinae*. However, in keeping the families *Typhlonectidae* and *Scolecomorphidae* despite the paraphyly of the *Caeciliidae*, this amounted to using the phenetic argument of 'degree of distinctiveness' (Nussbaum & Wilkinson 1989; Wilkinson *et al.* 2011). It is this distinctiveness that seems to have guided the use of the rank family for the highly embedded branches in the **Gymnophiona** classification, instead of the hierarchical structure of relationships within the order.

In *CLAD*, the **Gymnophiona** are divided into two suborders that both have high support in our phylogeny. The suborder **Plesiophiona nov.**, which consists in a single family *Rhinatrematidae*, is sister-group to suborder **Pseudophiona** including all other **Gymnophiona**. The Appendix **A9.CLAD-1** gives all details of classification, including fossil taxa, and the Appendices **A6.NFS** and **A5.NGS** provide information upon respectively family- and class-series nomina, in particular available synonyms and the status of available and unavailable nomina. In what follows, all the generic and specific nomina listed as valid designate taxa represented by at least one specimen in *TREE*, except those followed by °. For genus-series nomina, complete synonymies and homonymies are given in Appendix **A5.NGS**, but in the discussion below only the valid nomina are mentioned.

## C.05.03. Subordo **Plesiophiona nov.**

***Getangiotaxon***: **Gymnophiona** Rafinesque, 1814.
***Adelphotaxa***: **Pseudophiona** Blainville, 1816; **1 F†**; **1 G†**.
***Getendotaxon***: *Rhinatrematidae* Nussbaum, 1977.

***Uninucleogenus, by present designation***: *Rhinatrema* Duméril & Bibron, 1841.

***Etymology of nomen***: G: πλησιός (*plesios*), 'near, close'; ὄφις (*ophis*), 'snake'. This nomen is based on the same stem as the ordinal nomen **Gymnophiona** and the subordinal nomen **Pseudophiona**, and suggests the phylogenetic proximity of the species of this group with those of the latter.

***Diagnosis***: Presence of a posterior notch in the squamosal accommodating a distinct process of the *os basale*; lack of a distinct basipterygoid process; reduction of the posterior hyobranchial apperatus including reduction of absence of ceratobranchials 2 and 3, position of larynx posterior to glossal skeleton; absence of the *musculus subarcualis rectus* II and II; sinoatrial aperture partial divided; left pulmonary artery supplying oesophagus. {Wilkinson & Nussbaum 2006}.

## F.17.56. Familia *Rhinatrematidae* Nussbaum, 1977

***Protonym and eunym***: *Rhinatrematidae* Nussbaum, 1977: 1 [F].
***Getangiotaxon***: **Plesiophiona nov.**
***Adelphotaxon***: None.
***Getendotaxon***: *Rhinatrema* Duméril & Bibron, 1841.

## C.05.04. Subordo **Pseudophiona** Blainville, 1816

***Protonym***: **Pseudophydiens** Blainville, 1816: '111' [119] [O].
***Eunym***: *Hoc loco*.

***Getangiotaxon***: **Gymnophiona** Rafinesque, 1814.
***Adelphotaxa***: **Plesiophiona nov.**; **1 F†**; **1 G†**.
***Getendotaxa***: *Caecilioidea* Rafinesque, 1814-|Gray, 1825|; *Ichthyophioidea* Taylor, 1968.

***Comments***: This suborder includes two sister-groups, which both have high support, and that are recognised here as superfamilies: the *Caecilioidea* and the *Ichthyophioidea*. These superfamilies include respectively the families *Caeciliidae* and *Scolecoporphidae*, and *Ichthyophidae* and *Uraeotyphlidae*.

### F.14.15. Superfamilia *Caecilioidea* Rafinesque, 1814-|Gray, 1825|

***Protonyms***: *Ceciliina* Rafinesque, 1814: 104 [F]; |*Caeciliadae* Gray, 1825: 217| [F].
***Eunym***: Lescure, Renous & Gasc 1986: 167.
***Getangiotaxon***: **Pseudophiona** Blainville, 1816.
***Adelphotaxon***: *Ichthyophioidea* Taylor, 1968.
***Getendotaxa***: *Caeciliidae* Rafinesque, 1814-|Gray, 1825|; *Scolecomorphidae* Taylor, 1969.

***Comments***: Wilkinson & Nussbaum (2006) proposed the ectonym «Teresomata» "as a rankless name for [a] suprafamilial clade", sister-group to the *Ureotyphlopidae* and *Ichthyophiidae* of their classification. In our classification this taxon is the superfamily *Caecilioidea*.

### F.17.57. Familia *Caeciliidae* Rafinesque, 1814-|Gray, 1825|

***Eunym***: Bonaparte 1850: plate.
***Getangiotaxon***: *Caecilioidea* Rafinesque, 1814-|Gray, 1825|.
***Adelphotaxon***: *Scolecomorphidae* Taylor, 1969.
***Getendotaxa***: *Caeciliinae* Rafinesque, 1814-|Gray, 1825|; *Herpelinae* Laurent, 1984.

### F.18.79. Subfamilia *Caeciliinae* Rafinesque, 1814-|Gray, 1825|

***Eunym***: Taylor 1969: 303.
***Getangiotaxon***: *Caeciliidae* Rafinesque, 1814-|Gray, 1825|.
***Adelphotaxon***: *Herpelinae* Laurent, 1984.
***Getendotaxa***: *Caeciliini* Rafinesque, 1814-|Gray, 1825|; *Siphonopini* Bonaparte, 1850.

### F.19.75. Tribus *Caeciliini* Rafinesque, 1814-|Gray, 1825|

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Caeciliinae* Rafinesque, 1814-|Gray, 1825|.
***Adelphotaxon***: *Siphonopini* Bonaparte, 1850.
***Getendotaxa***: *Caeciliina* Rafinesque, 1814-|Gray, 1825|; *Typhlonectina* Taylor, 1968.

### F.20.71. Subtribus *Caeciliina* Rafinesque, 1814-|Gray, 1825|

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Caeciliini* Rafinesque, 1814-|Gray, 1825|.
***Adelphotaxon***: *Typhlonectina* Taylor, 1968.
***Getendotaxa***: *Caecilia* Linnaeus, 1758; *Oscaecilia* Taylor, 1968.

## F.20.72. Subtribus *Typhlonectina* Taylor, 1968

***Protonym***: *Typhlonectidae* Taylor, 1968: xi, 231 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Caeciliini* Rafinesque, 1814-|Gray, 1825|.
***Adelphotaxon***: *Caeciliina* Rafinesque, 1814.
***Getendotaxa***: *Atretochoana* Nussbaum & Wilkinson, 1995; *Chthonerpeton* Peters, 1880; *Nectocaecilia* Taylor, 1968; *Potamotyphlus* Taylor, 1968; *Typhlonectes* Peters, 1880.

***Comments***: In *TREE*, only two genera of this subtribe, *Chthonerpeton* and *Typhlonectes*, are represented. In the tree of San Mauro *et al.* (2014), a third genus, *Potamotyphlus*, was added to the molecular phylogeny, and *Chthonerpeton* appears as sister-group to a group formed by *Potamotyphlus* and *Typhlonectes*. Allocation of *Atretochoana* and *Nectocaecilia* to the *Typhlonectina* is based on Wilkinson & Nussbaum (1997, 1999).

## F.19.76. Tribus *Siphonopini* Bonaparte, 1850

***Protonym***: *Siphonopina* Bonaparte, 1850: plate [bF].
***Eunym***: Lescure, Renous & Gasc 1986: 166.
***Getangiotaxon***: *Caeciliinae* Rafinesque, 1814-|Gray, 1825|.
***Adelphotaxon***: *Caeciliini* Rafinesque, 1814-|Gray, 1825|.
***Getendotaxa***: *Grandisoniina* Lescure, Renous & Gasc, 1986; *Siphonopina* Bonaparte, 1850.

## F.20.73. Subtribus *Grandisoniina* Lescure, Renous & Gasc, 1986

***Protonym***: *Grandisoniilae* Lescure, Renous & Gasc, 1986: 163 [iF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Siphonopini* Bonaparte, 1850.
***Adelphotaxon***: *Typhlonectina* Taylor, 1968.
***Getendotaxa***: *Grandisoniinia* Lescure, Renous & Gasc, 1986; *Indotyphlinia* Lescure, Renous & Gasc, 1986; **1 GIS** (*Sylvacaecilia* Wake, 1987).

***Comments***: This taxon corresponds to that named *Indotyphlidae* by San Mauro *et al.* (2014) but which should have been named *Grandisoniidae* following the *Code*. The latter nomen had been created by Lescure *et al.* (1986) for a subfamily *Grandisoninae* with the same date as the tribe nomen *Indotyphlini*. According to Article 24.1 of the *Code*, the nomen published at higher rank, *Grandisoniinae*, has permanent precedence over the nomen of lower rank published in the same work, *Indotyphlini* (Principle of Proedry).

According to Wilkinson *et al.* (2011), the genus *Sylvacaecilia* should belong in their *Indotyphlidae*, our *Grandisoniina*, without more precision on its place in the hierarchy.

## F.21.52. Infratribus *Grandisoniinia* Lescure, Renous & Gasc, 1986

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Grandisoniina* Lescure, Renous & Gasc, 1986.
***Adelphotaxon***: *Indotyphlinia* Lescure, Renous & Gasc, 1986.
***Getendotaxa***: *Hypogeophis* Peters, 1880; *Idiocranium* Parker, 1936; *Praslinia* Boulenger, 1909;.

***Comments***: In San Mauro *et al.* (2014), *Idiocranium* is sister-group to the other genera included in *Grandisoniina* (their *Indotyphlidae*), and *Grandisonia* (two species) is highly supported and has *Hypogeophis* as sister-group, represented by two specimens of a single species, thus insinuating a support for the genus. With a larger sample of species represented in *TREE*, the holophyly of these two genera is not supported, and we treat *Grandisonia* as a synonym of *Hypogeophis*.

### F.21.53. Infratribus *Indotyphlinia* Lescure, Renous & Gasc, 1986

***Protonym***: *Indotyphlini* Lescure, Renous & Gasc, 1986: 164 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Grandisoniina* Lescure, Renous & Gasc, 1986.
***Adelphotaxon***: *Grandisoniinia* Lescure, Renous & Gasc, 1986.
***Getendotaxa***: *Gegeneophis* Peters, 1880; *Indotyphlus* Taylor, 1960.

### F.20.74. Subtribus *Siphonopina* Bonaparte, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Siphonopini* Bonaparte, 1850.
***Adelphotaxon***: *Grandisoniina* Lescure, Renous & Gasc, 1986.
***Getendotaxa***: *Dermophiinia* Taylor, 1969; *Siphonopinia* Bonaparte, 1850.

### F.21.54. Infratribus *Dermophiinia* Taylor, 1969

***Protonym***: *Dermophinae* Taylor, 1969: 303 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Siphonopina* Bonaparte, 1850.
***Adelphotaxon***: *Siphonopinia* Bonaparte, 1850.
***Getendotaxa***: *Dermophiinoa* Taylor, 1969; *Geotrypetinoa* Lescure, Renous & Gasc, 1986.

### F.22.31. Hypotribus *Dermophiinoa* Taylor, 1969

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Dermophiinia* Taylor, 1969.
***Adelphotaxon***: *Geotrypetinoa* Lescure, Renous & Gasc, 1986.
***Getendotaxa***: *Gymnopis* Peters, 1874; *Schistometopum* Parker, 1941.

***Comments***: In their tree, San Mauro *et al*. (2014) did not find support for the holophyly of *Gymnopis* nor of *Dermophis* (represented by a single species). *TREE* supports the holophyly of a taxon grouping *Gymnopis* and *Dermophis* species. Accordingly, we consider that, pending additional data, these species should be grouped in a single genus for which the nomen *Gymnopis* has priority.

### F.22.32. Hypotribus *Geotrypetinoa* Lescure, Renous & Gasc, 1986

***Protonym***: *Geotrypetidae* Lescure, Renous & Gasc, 1986: 145 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Dermophiinia* Taylor, 1969.
***Adelphotaxon***: *Dermophiinoa* Taylor, 1969.
***Getendotaxon***: *Geotrypetes* Peters, 1880.

### F.21.55. Infratribus *Siphonopinia* Bonaparte, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Siphonopina* Bonaparte, 1850.
***Adelphotaxon***: *Dermophiinia* Taylor, 1969.
***Getendotaxa***: *Microcaeciliinoa* **nov.**; *Siphonopinoa* Bonaparte, 1850; **2 GIS** (*Brasilotyphlus* Taylor, 1968; *Mimosiphonops* Taylor, 1968).

***Comments***: According to Wilkinson *et al*. (2011), *Brasilotyphlus* and *Mimosiphonops* are members of their *Siphonopidae*, the present *Siphonopinia*, without more precision on their place in the hierarchy.

### F.22.33. Hypotribus *Microcaeciliinoa* **nov.**

***Getangiotaxon***: *Siphonopinia* Bonaparte, 1850.
***Adelphotaxa***: *Siphonopinoa* Bonaparte, 1850; **2 GIS** (*Brasilotyphlus* Taylor, 1968; *Mimosiphonops* Taylor, 1968).
***Getendotaxon***: *Microcaecilia* Taylor, 1968.

***Nucleogenus, by present designation***: *Microcaecilia* Taylor, 1968. ● ***Etymology of nomen***: G: μικρός (*micros*), 'small'; N: *Caecilia* Linnaeus, 1758, derived from L: *caecilia*, 'slow worm, blind snake'. ● ***Stem of nomen***: *Microcaecili-*.

***Diagnosis***: Eye under bone; temporal fossae absent; mesethmoid not exposed dorsally; no splenial teeth; secondary grooves usually present, absent in one species; scales present; tentacular opening closer to eye than to external naris; no unsegmented terminal shield; no narial plugs; no diastema between vomerine and palatine teeth; terminal keel present or absent. {Wilkinson & Nussbaum 2006; Wilkinson *et al.* 2013, 2014}.

### F.22.34. Hypotribus *Siphonopinoa* Bonaparte, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Siphonopinia* Bonaparte, 1850.
***Adelphotaxa***: *Microcaeciliinoa* **nov.**; **2 GIS** (*Brasilotyphlus* Taylor, 1968; *Mimosiphonops* Taylor, 1968).
***Getendotaxa***: *Luetkenotyphlus* Taylor, 1968; *Siphonops* Wagler, 1828.

### F.18.80. Subfamilia *Herpelinae* Laurent, 1984

***Protonym and eunym***: *Herpelinae* Laurent, 1984: 199 [bF].
***Getangiotaxon***: *Caeciliidae* Rafinesque, 1814-|Gray, 1825|.
***Adelphotaxon***: *Caeciliinae* Rafinesque, 1814-|Gray, 1825|.
***Getendotaxa***: *Chikilini* Kamei, San Mauro, Gower, Van Bocxlaer, Sheratt, Thomas, Babu, Bossuyt, Wilkinson & Biju, 2012; *Herpelini* Laurent, 1984.

***Comments***: This taxon includes the tribes *Herpelini* corresponding to the *Herpelidae* and *Chikilini* corresponding to the *Chikilidae* of recent auhors (San Mauro *et al.* 2014). This sister-group relationship is strongly supported in *TREE*.

### F.19.77. Tribus *Chikilini* Kamei, San Mauro, Gower, Van Bocxlaer, Sheratt, Thomas, Babu, Bossuyt, Wilkinson & Biju, 2012

***Protonym***: *Chikilidae* Kamei, San Mauro, Gower, Van Bocxlaer, Sheratt, Thomas, Babu, Bossuyt, Wilkinson & Biju, 2012: 1 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Herpelinae* Laurent, 1984.
***Adelphotaxon***: *Herpelini* Laurent, 1984.
***Getendotaxon***: *Chikila* Kamei, San Mauro, Gower, Van Bocxlaer, Sheratt, Thomas, Babu, Bossuyt, Wilkinson & Biju, 2012.

### F.19.78. Tribus *Herpelini* Laurent, 1984

***Eunym***: Lescure, Renous & Gasc 1986: 163.
***Getangiotaxon***: *Herpelinae* Laurent, 1984.
***Adelphotaxon***: *Chikilini* Kamei, San Mauro, Gower, Van Bocxlaer, Sheratt, Thomas, Babu, Bossuyt, Wilkinson & Biju, 2012.
***Getendotaxa***: *Boulengerula* Tornier, 1896; *Herpele* Peters, 1880.

### F.17.58. Familia *Scolecomorphidae* Taylor, 1969

***Protonym and eunym***: *Scolecomorphidae* Taylor, 1969: 297 [F].
***Getangiotaxon***: *Caecilioidea* Rafinesque, 1814-|Gray, 1825|.
***Adelphotaxon***: *Caeciliidae* Rafinesque, 1814-|Gray, 1825|.
***Getendotaxa***: *Crotaphatrema* Nussbaum, 1985; *Scolecomorphus* Boulenger, 1883.

### F.14.16. Superfamilia *Ichthyophioidea* Taylor, 1968

***Protonym***: *Ichthyophiidae* Taylor, 1968: x, 46 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Pseudophiona** Blainville, 1816.
***Adelphotaxon***: *Caecilioidea* Rafinesque, 1814-|Gray, 1825|.
***Getendotaxa***: *Ichthyophiidae* Taylor, 1968; *Uraeotyphlidae* Nussbaum, 1979.

### 17.59. Familia *Ichthyophiidae* Taylor, 1968

***Eunym***: Taylor 1968: x, 46.
***Getangiotaxon***: *Ichthyophioidea* Taylor, 1968.
***Adelphotaxon***: *Uraeotyphlidae* Nussbaum, 1979.
***Getendotaxa***: *Caudacaecilia* Taylor, 1968; *Ichthyophis* Fitzinger, 1826.

### F.17.60. Familia *Uraeotyphlidae* Nussbaum, 1979

***Protonym***: *Uraeotyphlinae* Nussbaum, 1979: 14 [bF].
***Eunym***: Lescure, Renous & Gasc 1986: 145.
***Getangiotaxon***: *Ichthyophioidea* Taylor, 1968.
***Adelphotaxon***: *Ichthyophiidae* Taylor, 1968.
***Getendotaxon***: *Uraeotyphlus* Peters, 1880.

***Comments***: This branch is sister-group to the *Ichthyophiidae*, a nomen validated at family rank through the [UQC]. Altogether, both groups form a taxon with high support.

The sister-group relationship of the species *Ichthyophis bombayensis* with the genus *Uraeotyphlus* has been recovered in all molecular phylogenies since Gower *et al.* (2002). It renders the genus *Ichthyophis* paraphyletic. We transfer this species to the genus *Uraetyphlus* as *Uraetyphlus bombayensis* (Taylor, 1960), which resolves the taxonomic incongruity, pending confirmation in further taxonomic works.

### C.04.03. Ordo **Urodela** Duméril, 1805

***Protonym***: **Urodèles** Duméril, 1805: 91 [‘F’].
***Eunym***: Knauer 1878: 93.
***Getangiotaxon***: **Lissamphibia** Gadow, 1898.

***Adelphotaxa***: **Anura** Duméril, 1805; **Gymnophiona** Rafinesque, 1814; **1 C†**.
***Getendotaxa***: **Imperfectibranchia** Hogg, 1838; **Meantes** Linné, 1767; **Pseudosauria** Blainville, 1816; **5 F†**; **21 G†**.

***Comments***: The holophyly of all extant urodeles is supported by all phylogenetic studies based on morphology and on molecular data. Numerous CS nomina are available for this taxon (Appendix **A7.NCS**) but the valid one under DONS Criteria is the sozodiaphonym **Urodela** Duméril, 1805 (Dubois 2004*b*, 2005*d*, 2015*c*, 2020*a*; Dubois & Raffaëlli 2012; Dubois & Ohler 2019; Dubois & Frétey 2020*c*). Frost *et al.* (2006: 356) tried to impose the use of the nomen **Caudata** for this order on the ground that this was the nomen used by "most working systematists" but they provided a single reference in support of this allegation (Duellman & Trueb 1985, misquoted as '1986'), which was clearly wrong (see Dubois & Raffaëlli 2012: 109). Quite strangely a number of authors uncritically followed this misleading statement, which indeed modified the 'usage' after 2006, but in case of nomenclatural conflict of zygonymy between two nomina which both have been used widely in the literature for two centuries, penny-pinching calculations cannot play the role of a 'justice of the peace' as suggested by some 'Google taxonomists' (see Dubois 2007*b*) and we need explicit Criteria to settle the conflict. In the present case all possible Criteria require to keep **Urodela**, the 'sister-nomen' to **Anura** (while **Caudata** was the 'sister-nomen' to **Ecaudata**), as the valid nomen of this taxon (Dubois 2015*c*, Dubois & Ohler 2019, Dubois & Frétey 2020*c*).

Applying the [UQC], we retained 9 family-rank taxa of **Urodela**, distributed in three suborders, the **Imperfectibranchia**, the **Meantes** and the **Pseudosauria**. The suborder **Imperfectibranchia** includes two families, the *Cryptobranchidae* and the *Hynobiidae*, the suborder **Meantes** includes a single family *Sirenidae*, and the suborder **Pseudosauria** includes 6 family-rank taxa, the *Amphiumidae*, the *Plethodontidae*, the *Rhyacotritonidae*, the *Proteidae*, the *Ambystomatidae* and the *Salamandridae*. These taxa are confirmed by morphological and molecular data (Larson A. *et al.* 2003) and are accepted by most authors today.

The relationship between the *Cryptobranchidae* and the *Hynobiidae* found support in most recent studies (Gao & Shubin 2001; Larson A. *et al.* 2003; Wiens *et al.* 2005*a*; Frost *et al*. 2006; Roelants *et al*. 2007; Pyron & Wiens 2011; Dubois & Raffaëlli 2012; Shen *et al*. 2013; Pyron 2014), and the taxon here recognised as the suborder **Imperfectibranchia** is called 'suborder **Cryptobranchoidea**' by some authors (Larson A. *et al.* 2003; Vieites *et al.* 2009). The position of **Meantes**, and its only family *Sirenidae* has been highly variable in the recent literature. In their review, Larson A. *et al.* (2003) and Zhang & Wake (2009) considered this family as basal to all other **Urodela**, whereas in Weisrock *et al.* (2005) it was sister-group to the *Salamandroidea*, and in Frost *et al.* (2006) and Gao & Shubin (2012) it appeared as sister-taxon to the *Proteidae*. However, already Wiens *et al.* (2005*a*) and later Roelants *et al.* (2009), Vieites *et al.* (2009), Shen *et al.* (2013) and Pyron (2014) had retrieved this taxon as sister to a taxon that groups all **Pseudosauria** taxa. As in *TREE* the support for this grouping is below the threshold retained, we recognise three groups as suborders.

### C.05.05. Subordo **Imperfectibranchia** Hogg, 1838

***Protonym***: **Imperfectibranchia** Hogg, 1838: 152 [O].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: **Urodela** Duméril, 1805.
***Adelphotaxa***: **Meantes** Linné, 1767; **Pseudosauria** Blainville, 1816; **5 F†**; **21 G†**.
***Getendotaxa***: *Cryptobranchidae* Fitzinger, 1826; *Hynobiidae* ||Hallowell, 1856||-Cope, 1859; **2 G†**.

***Comments***: Following Noble (1931), this group was recognised as a suborder by various recent authors, but named '**Cryptobranchoidea**'. This paronym was initially an aponym, first-used by Dunn (1922), of the family-series nomen *Cryptobranchidae* Fitzinger, 1826, but it became then a new class-series nomen **Cryptobranchoidea** Noble, 1931. For this taxon the oldest available class-series nomen is **Imperfectibranchia** Hogg, 1838, which should be used (Dubois & Raffaëlli 2012). Two highly supported branches, found in all recent phylogenies (see Larson A. *et al.* 2003 for a review; Weisrock *et al.* 2005; Wiens *et al.* 2005*a*; Frost *et al.* 2006; Roelants *et al.* 2007; Vieites *et al.* 2009; Zhang & Wake 2009; Shen *et al.* 2013) as well as in *TREE*, are here recognised as the families *Hynobiidae* and

*Cryptobranchidae*. In our classification the family rank is attributed to the *Hynobiidae* by the [UQC], and to the *Cryptobranchidae* by the [STC].

## F.17.61. Familia *Cryptobranchidae* Fitzinger, 1826

***Protonym***: *Cryptobranchoidea* Fitzinger, 1826: 41 [F].
***Eunym***: Cope 1889: 18.
***Getangiotaxon***: **Imperfectibranchia** Hogg, 1838.
***Adelphotaxa***: *Hynobiidae* ||Hallowell, 1856||-Cope, 1859; **2 G†**.
***Getendotaxa***: *Andrias* Tschudi, 1837; *Cryptobranchus* Leuckart, 1821; **7 G†**.

***Comments***: This family includes two extant genera, *Andrias* and *Cryptobranchus*. It found support in most recent studies that included relevant samples (Larson A. *et al.* 2003; Wiens *et al.* 2005*a*; Frost *et al.* 2006; Zhang & Wake 2009; Pyron & Wiens 2011; Chen *et al.* 2011).

## F.17.62. Familia *Hynobiidae* ||Hallowell, 1856||-Cope, 1859

***Protonyms***: ||*Ellipsoglossidae* Hallowell, 1856: 11|| [bF]; *Hynobiinae* Cope, 1859: 125 [bF].
***Eunym***: Cope 1866: 107.
***Getangiotaxon***: **Imperfectibranchia** Hogg, 1838.
***Adelphotaxa***: *Cryptobranchidae* Fitzinger, 1826; *Onychodactylinae* Dubois & Raffaelli, 2012; **2 G†**.
***Getendotaxon***: *Hynobiinae* ||Hallowell, 1856||-Cope, 1859.

***Comments***: The family *Hynobiidae* includes two branches, recognised here as the subfamily *Onychodactylinae* for the single genus *Onychodactylus*, and the subfamily *Hynobiinae*. The position of *Onychodactylus* in relation to the other *Hynobiidae* was already presented by Larson A. *et al.* (2003) and found in all recent studies (Zhang *et al.* 2006; Peng *et al.* 2010; Pyron & Wiens 2011; Chen G. *et al.* 2011; Weisrock *et al.* 2013; Chen M. Y. *et al.* 2015).

## F.18.81. Subfamilia *Hynobiinae* ||Hallowell, 1856||-Cope, 1859

***Eunym***: Cope 1859: 125.
***Getangiotaxon***: *Hynobiidae* ||Hallowell, 1856||-Cope, 1859.
***Adelphotaxa***: *Onychodactylinae* Dubois & Raffaelli, 2012; **2 G†**.
***Getendotaxa***: *Hynobiini* ||Hallowell, 1856||-Cope, 1859; *Ranodontini* Thorn, 1966.

***Comments***: The subfamily *Hynobiinae* includes two branches recognised here as the tribes *Hynobiini* and *Ranodontini*. Within the *Hynobiini,* three branches of unresolved relationships form the subtribes *Pachyhynobiina* for *Pachyhynobius*, *Salamandrellina* for *Salamandrella*, and *Hynobiina*. This latter subtribe includes two infratribes, the *Protohynobiinia* for the genera *Batrachuperus*, *Liua* and *Pseudohynobius*, and the *Hynobiinia* with two hypotribes, the *Satobiinoa* for *Satobius*, and the *Hynobiinoa*, including *Hynobius*, *Pachypalaminus* and *Poyarius*.

In fact, the relationships within this subfamily are still not settled. This may be partly due to the sampling which is incomplete in many studies due to the large geographic range of this taxon.

The sister-group relationship between *Hynobius* and *Poyarius* seems to be confirmed (Zhang *et al.* 2006; Xiong *et al.* 2007; Peng *et al.* 2010; Chen G. *et al.* 2011; Weisrock *et al.* 2013). The position of *Pachypalaminus* is close to these two genera, but either *Poyarius* is sister-branch of *Pachypalaminus* and both sister to *Hynobius* (Pyron & Wiens 2011) or *Hynobius* and *Pachypalaminus* are sister-branches (Nishikawa *et al.* 2010). This group, named here the hypotribe *Hynobiinoa*, is sister to the hypotribe *Satobiinoa*, for the single genus *Satobius*. These two hypotribes form a holophyletic group here recognised as the infratribe *Hynobiinia*. Most taxonomists keep all the species of this group in a single genus *Hynobius*.

The three genera *Batrachuperus*, *Liua* and *Pseudohynobius*, forming a holophyletic group of high support, recognised in the present classification as the infratribe *Protohynobiinia*, are retained by all recent authors (Zeng *et al.* 2006; Xiong *et al.* 2007; Peng *et al.* 2010; Pyron & Wiens 2011; Chen G. *et al.* 2011; Weisrock *et al.* 2013; Chen M. Y. *et al.* 2015).

There seems to exist an agreement of relationships within our tribe *Ranodontini* (Zhang *et al.* 2006; Xiong *et al.* 2007; Pyron & Wiens 2011; Weisrock *et al.* 2013), although the taxonomic and nomenclatural treatment is not much disputed. Some authors consider *Paradactylodon* as available (Stöck *et al.* 2019), whereas it is a *nomen nudum* (Dubois & Raffaelli 2012) because no explicit diagnostic characters are mentioned in the original description (e.g., the latter states that there exists a differential character concerning the vomero-palatine ridge shape to separate the genus from *Salamandrella*, but this character is not given!; see above Figure **F3.NDD**).

The position of *Pachyhynobius* and *Salamandrella* is not fixed. Here these two genera are referred to two subtribes, the *Pachyhynobiina* and the *Salamandrellina*, sister-taxa of unresolved relationships with the *Hynobiina*. In other phylogenies, *Pachyhynobius* is either sister-group to all other *Hynobiinae* (Xiong *et al.* 2007; Peng *et al.* 2010; Chan G. *et al.* 2011) or sister to ((*Protohynobiinia* + *Salamandrella*) + *Hynobiinoa*) (Zhang *et al.* 2006; Chen M. Y. *et al.* 2015). In Pyron & Wiens (2011), *Pachyhynobius* and *Salamandrella* are sister-group to all other *Hynobiinae*, whereas in Weisrock *et al.* (2013) *Pachyhynobius* is sister-group to the *Ranodontini*. Similarly, the position of *Salamandrella* changes in the different phylogenies published. It has been considered as sister-taxon to the *Protohynobiinia* (Zhang *et al.* 2006; Peng *et al.* 2010; Chen G. *et al.* 2011; Chen M. Y. *et al*. 2015), to the *Ranodontini* (Xiong *et al.* 2007), to *Hynobius* (Nishikawa *et al.* 2010), to *Pachyhynobius* (Pyron & Wiens 2011), or still sister-group to all other *Hynobiinae* (Weisrock *et al.* 2013).

## F.19.79. Tribus *Hynobiini* ||Hallowell, 1856||-Cope, 1859

***Eunym***: Dubois & Raffaëlli 2012: 113.
***Getangiotaxon***: *Hynobiinae* ||Hallowell, 1856||-Cope, 1859.
***Adelphotaxon***: *Ranodontini* Thorn, 1966.
***Getendotaxa***: *Hynobiina* ||Hallowell, 1856||-Cope, 1859; *Pachyhynobiina* Dubois & Raffaelli, 2012; *Salamandrellina* Dubois & Raffaelli, 2012.

## F.20.75. Subtribus *Hynobiina* ||Hallowell, 1856||-Cope, 1859

***Eunym***: Dubois & Raffaëlli 2012: 113.
***Getangiotaxon***: *Hynobiini* ||Hallowell, 1856||-Cope, 1859.
***Adelphotaxa***: *Pachyhynobiina* Dubois & Raffaelli, 2012; *Salamandrellina* Dubois & Raffaelli, 2012.
***Getendotaxa***: *Hynobiinia* ||Hallowell, 1856||-Cope, 1859; *Protohynobiinia* Fei & Ye, 2000.

## F.21.56. Infratribus *Hynobiinia* ||Hallowell, 1856||-Cope, 1859

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hynobiina* ||Hallowell, 1856||-Cope, 1859.
***Adelphotaxon***: *Protohynobiinia* Fei & Ye, 2000.
***Getendotaxa***: *Hynobiinoa* ||Hallowell, 1856||-Cope, 1859; *Satobiinoa* **nov.**

## F.22.35. Hypotribus *Hynobiinoa* ||Hallowell, 1856||-Cope, 1859

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hynobiinia* ||Hallowell, 1856||-Cope, 1859.
***Adelphotaxon***: *Satobiinoa* **nov.**
***Getendotaxa***: *Hynobius* Tschudi, 1838; *Pachypalaminus* Thompson, 1912; *Poyarius* Dubois & Raffaelli, 2012.

## F.22.36. Hypotribus *Satobiinoa* **nov.**

***Getangiotaxon***: *Hynobiinia* ||Hallowell, 1856||-Cope, 1859.
***Adelphotaxon***: *Hynobiinoa* ||Hallowell, 1856||-Cope, 1859.
***Getendotaxon***: *Satobius* Adler & Zhao, 1990.

***Nucleogenus, by present designation***: *Satobius* Adler & Zhao, 1990. ● ***Etymology of nomen***: P: Ikio Sato (1902–1945), Japanese zoologist; G: βίος (*bios*), 'life'. ● ***Stem of nomen***: *Satobi-*.

***Diagnosis***: Salamanders with very long limbs and toes (tips of digits of limbs adpressed along body in joining direction overlap up to 4 intercostal distances in adults); tail longer than head and body length; small head and long neck; no premaxillary fontanelle or basibranchial radii; two short series of vomerine teeth arranged in transverse arcs between internal nares; vomer sutured to anterior end of parasphenoid; lungs present; chromosome complement 2 n = 40; duration of larval stage one year of more, sometimes neoteny; adults terrestrial and aquatic outside breeding season. {Adler & Zhao 1990}.

## F.21.57. Infratribus *Protohynobiinia* Fei & Ye, 2000

***Protonym***: *Protohynobiinae* Fei & Ye, 2000: 64 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hynobiina* ||Hallowell, 1856||-Cope, 1859.
***Adelphotaxon***: *Hynobiinia* ||Hallowell, 1856||-Cope, 1859.
***Getendotaxa***: *Batrachuperus* Boulenger, 1878; *Liua* Zhao, 1983; *Pseudohynobius* Fei & Yang, 1983.

## F.20.76. Subtribus *Pachyhynobiina* Dubois & Raffaëlli, 2012

***Protonym***: *Pachyhynobiini* Dubois & Raffaëlli, 2012: 113 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hynobiini* ||Hallowell, 1856||-Cope, 1859.
***Adelphotaxa***: *Hynobiina* ||Hallowell, 1856||-Cope, 1859; *Salamandrellina* Dubois & Raffaelli, 2012.
***Getendotaxon***: *Pachyhynobius* Fei, Qu & Wu, 1983.

## F.20.77. Subtribus *Salamandrellina* Dubois & Raffaëlli, 2012

***Protonym and eunym***: *Salamandrellina* Dubois & Raffaëlli, 2012: 113 [bT].
***Getangiotaxon***: *Hynobiini* ||Hallowell, 1856||-Cope, 1859.
***Adelphotaxa***: *Hynobiina* ||Hallowell, 1856||-Cope, 1859; *Pachyhynobiina* Dubois & Raffaelli, 2012.
***Getendotaxon***: *Salamandrella* Dybowsky, 1870.

## F.19.80. Tribus *Ranodontini* Thorn, 1966

***Protonym***: *Ranodontidae* Thorn, 1966: 108 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hynobiinae* ||Hallowell, 1856||-Cope, 1859.
***Adelphotaxon***: *Hynobiini* ||Hallowell, 1856||-Cope, 1859.
***Getendotaxa***: *Iranodontina* **nov.**; *Ranodontina* Thorn, 1966.

## F.20.78. Subtribus *Iranodontina* **nov.**

***Getangiotaxon***: *Ranodontini* Thorn, 1966.
***Adelphotaxon***: *Ranodontina* Thorn, 1966.

***Getendotaxa***: *Afghanodon* Dubois & Raffaelli, 2012; *Iranodon* Dubois & Raffaelli, 2012.

***Nucleogenus, by present designation***: *Iranodon* Dubois & Raffaëlli, 2012. ● ***Etymology of nomen***: R: Iran, name of country of origin; G: ὀδούς (*odous*), 'tooth'. ● ***Stem of nomen***: *Iranodont*-.
***Diagnosis***: Small sized salamanders (up to 22 cm total length); rectangular or rounded head; vomerine ridges forming V; lungs present; 11–14 costal folds; hindlimbs with 4 toes; presence of keratinisation on digits; chromosome complement 2 n = 62. {Dubois & Raffaëlli 2012}.

### F.20.79. Subtribus *RANODONTINA* Thorn, 1966

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *RANODONTINI* Thorn, 1966.
***Adelphotaxon***: *IRANODONTINA* **nov.**
***Getendotaxon***: *Ranodon* Kessler, 1866.

### F.18.82. Subfamilia *ONYCHODACTYLINAE* Dubois & Raffaëlli, 2012

***Protonym and eunym***: *ONYCHODACTYLINAE* Dubois & Raffaëlli, 2012: 108 [F].
***Getangiotaxon***: *HYNOBIIDAE* ||Hallowell, 1856||-Cope, 1859.
***Adelphotaxa***: *HYNOBIINAE* ||Hallowell, 1856||-Cope, 1859; **2 G†**.
***Getendotaxon***: *Onychodactylus* Tschudi, 1838.

### C.05.06. Subordo **MEANTES** Linné, 1767

***Protonym***: **MEANTES** Linné, 1767: unnumbered additional page [O].
***Eunym***: Stejneger & Barbour 1917: 24.
***Getangiotaxon***: **URODELA** Duméril, 1805.
***Adelphotaxa***: **IMPERFECTIBRANCHIA** Hogg, 1838; **PSEUDOSAURIA** Blainville, 1816; **5 F†**; **21 G†**.
***Getendotaxa***: *SIRENIDAE* Gray, 1825; **1 F†**.

### F.17.63. Familia *SIRENIDAE* Gray, 1825

***Protonym and eunym***: *SIRENIDAE* Gray, 1825: 108 [F].
***Getangiotaxon***: **MEANTES** Linnaeus, 1767.
***Adelphotaxon***: **1 F†**.
***Getendotaxa***: *Pseudobranchus* Gray, 1825; *Siren* Österdam, 1766.

***Comments***: The family *SIRENIDAE* is the single extant family-rank taxon in the **MEANTES**. It includes two highly supported branches, the genera *Pseudobranchus* and *Siren*.

### C.05.07. Subordo **PSEUDOSAURIA** Blainville, 1816

***Protonym***: **PSEUDO-SAURIENS** Blainville, 1816: '111' [119] [O].
***Eunym***: *Hoc loco.*
***Getangiotaxon***: **URODELA** Duméril, 1805.
***Adelphotaxa***: **IMPERFECTIBRANCHIA** Hogg, 1838; **MEANTES** Linné, 1767; **5 F†**; **21 G†**.
***Getendotaxa***: *AMPHIUMOIDEA* Gray, 1825; *SALAMANDROIDEA* Goldfuss, 1820; **2 G†**.

***Comments***: The **PSEUDOSAURIA** are divided in two highly supported branches, recognised here as the superfamilies *AMPHIUMOIDEA* and *SALAMANDROIDEA*. The *AMPHIUMOIDEA* split into two highly supported branches, the epifamilies *PROTEOIDAE* for the single family *PROTEIDAE* including the genera *Necturus* and *Proteus*, and the *Amphiumoidae*. The latter taxon includes two branches, allocated to the apofamilies *Rhyacotritoneidae*, for the single family *Rhyacotritonidae* with the single genus *Rhyacotriton*, and *Amphiumeidae*. The latter taxon includes two highly supported taxa, recognised as the families *Amphiumidae*, for the single genus *Amphiuma*, and *Plethodontidae*, whose classification is described below. The superfamily *Salamandroidea* splits into two highly supported branches, recognised as the family *Ambystomatidae*, for the genera *Ambystoma* and *Dicamptodon*, and the *Salamandridae*, whose classification is described below. Besides *Rhyacotritoneidae*, assigned to the rank family by the Consistent Naming Criterium [CNC], all these families are recognised at the family rank by the Upper Quartile Criterium [UQC].

The relationship of ((*Amphiumidae* + *Plethodontidae*) + *Rhyacotritonidae*), here named epifamily *Amphiumoidae*, was recovered with molecular data by Wiens *et al.* (2005*a*) and most of the subsequent studies (Frost *et al.* 2006; Roelants *et al.* 2007; Vieites *et al.* 2009; Zhang & Wake 2009; Pyron & Wiens 2011; Zheng *et al.* 2011; Shen *et al.* 2013). The position of the *Proteidae* has been much disputed, but seems confirmed in recent studies as sister-group of the *Amphiumoidae* (Roelants *et al.* 2007; Vieites *et al.* 2009; Zhang & Wake 2009; Pyron & Wiens 2011; Zheng *et al.* 2011; Shen *et al.* 2013).

The sister-group relationship of the *Ambystomatidae* (here including the genus *Dicamptodon*) and *Salamandridae* was recognised already through morphological evidence (Larson 1991; Larson & Dimmick 1993; Gao & Shubin 2001) and later confirmed by molecular data (Wiens *et al.* 2005*a*; Frost *et al.* 2006; Roelants *et al.* 2007; Weisrock *et al.* 2005; Vieites *et al.* 2009; Zhang & Wake 2009; Pyron & Wiens 2011; Shen *et al.* 2013).

### F.14.17. Superfamilia *Amphiumoidea* Gray, 1825

***Protonym***: *Amphiumidae* Gray, 1825: 216 [F].
***Eunym***: Dunn 1922: 426.
***Getangiotaxon***: **Pseudosauria** Blainville, 1816.
***Adelphotaxa***: *Salamandroidea* Goldfuss, 1820; **2 G†**.
***Getendotaxa***: *Amphiumoidae* Gray, 1825; *Proteoidae* Bonaparte, 1831.

### F.15.11. Epifamilia *Amphiumoidae* Gray, 1825

***Eunym***: Dubois & Raffaëlli 2012: 138.
***Getangiotaxon***: *Amphiumoidea* Gray, 1825.
***Adelphotaxon***: *Proteoidae* Bonaparte, 1831.
***Getendotaxa***: *Amphiumeidae* Gray, 1825; *Rhyacotritoneidae* Tihen, 1958.

### F.16.08. Apofamilia *Amphiumeidae* Gray, 1825

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Amphiumoidae* Gray, 1825.
***Adelphotaxon***: *Rhyacotritoneidae* Tihen, 1958.
***Getendotaxa***: *Amphiumidae* Gray, 1825; *Plethodontidae* Gray, 1850.

### F.17.64. Familia *Amphiumidae* Gray, 1825

***Eunym***: Gray 1825: 216.
***Getangiotaxon***: *Amphiumeidae* Gray, 1825.
***Adelphotaxon***: *Plethodontidae* Gray, 1850.
***Getendotaxon***: *Amphiuma* Garden *in* Smith, 1821.

### F.17.65. Familia *Plethodontidae* Gray, 1850

***Protonym and eunym***: *Plethodontidae* Gray, 1850: 5, 31 [F].
***Getangiotaxon***: *Amphiumeidae* Gray, 1825.
***Adelphotaxon***: *Amphiumidae* Gray, 1825.
***Getendotaxa***: *Hemidactyliinae* Hallowell, 1856; *Plethodontinae* Gray, 1850; **1 G†**.

***Comments***: Within the family *Plethodontidae* two branches find high support, recognised as the subfamilies *Hemidactyliinae* and *Plethodontinae*. This dichotomy was first proposed by Vieites *et al.* (2007) and confirmed by subsequent authors (Vieites *et al.* 2011; Kozak *et al.* 2009; Chen G. Y. *et al.* 2011; Pyron & Wiens 2011; Shen *et al.* 2016), but the taxonomic treatment did not always reflect this relationship.

### F.18.83. Subfamilia *Hemidactyliinae* Hallowell, 1856

***Protonym***: *Hemidactylidae* Hallowell, 1856: 11 [bF].
***Eunym***: Chippindale, Bonett, Baldwin & Wiens 2004: 2819.
***Getangiotaxon***: *Plethodontidae* Gray, 1850.
***Adelphotaxa***: *Plethodontinae* Gray, 1850; **1 G†**.
***Getendotaxa***: *Bolitoglossini* Hallowell, 1856; *Hemidactyliini* Hallowell, 1856; *Spelerpini* Cope, 1859.

***Comments***: The subfamily *Hemidactyliinae* contains three branches of unresolved relationships that are here attributed to the rank tribe, as the *Hemidactyliini* for *Hemidactylium*, the *Bolitoglossini*, and the *Spelerpini*. The position of *Hemidactylium* has long been instable, but often it was close to *Batrachoseps* and *Bolitoglossa* (Mueller *et al.* 2004; Macey *et al.* 2005; Vieites *et al.* 2007, 2011; Kozak *et al.* 2009; Chen G. *et al.* 2011; Pyron & Wiens 2011; Shen *et al.* 2016). In the recent work of Shen *et al.* (2016), based on a high number of nuclear markers, the relationship between the *Bolitoglossini* and the *Hemidactyliini* has high support which if confirmed would lead to the synonymisation of *Bolitoglossini* at the rank tribe.

### F.19.81. Tribus *Bolitoglossini* Hallowell, 1856

***Protonym***: *Bolitoglossidae* Hallowell, 1856: 11 [bF].
***Eunym***: Wake 1966: 1.
***Getangiotaxon***: *Hemidactyliinae* Hallowell, 1856.
***Adelphotaxa***: *Hemidactyliini* Hallowell, 1856; *Spelerpini* Cope, 1859.
***Getendotaxa***: *Batrachosepina* Wake, 2012; *Bolitoglossina* Hallowell, 1856.

***Comments***: In *TREE*, the relationships within the *Bolitoglossini* are resolved and form a series of hierarchical family-series taxa. Thus, the subtribe *Batrachosepina*, with the single genus *Batrachoseps*, is sister branch to *Bolitoglossina*. This relationship has been revealed by Vieites *et al.* (2011), Pyron & Wiens (2011), Shen *et al.* (2016) and Rovito & Parra-Olea (2016). This subtribe *Bolitoglossina* includes the infratribes *Bolitoglossinia* and *Thoriinia*. Here we propose a resolved taxonomy using our rationale.

The content of genus-level taxa of the subtribe *Bolitoglossina* corresponds to those of the works of Rovito *et al.* (2015) and Rovito & Parra-Olea (2016), except that here we recognise the subgenera of *Oedipina* as genera and that the relationships between the genera are in part different. Rovito *et al.* (2015) and Rovito & Parra-Olea (2016) had a holophyletic group including (*Parvimolge* + ((*Isthmura* + *Aquiloeurycea*) + *Bolitoglossa*) + (*Ixalotriton* + *Pseudoeurycea*)), whereas in the infratribe *Bolitoglossinia* of *TREE Bolitoglossa* is the sister-branch to all other genera. In our taxonomy the grouping (*Isthmura* + *Aquiloeurycea*) is the only supported one within this infratribe and recognised as the clan *Isthmurites*. The sister-taxon *Thoriinia* of our *Bolitoglossinia* is not holophyletic in the studies of Rovito *et al.* (2015) and Rovito & Parra-Olea (2016) where *Chiropterotriton* and *Thorius* are sister-groups of *Bolitoglossinia*. These authors found a holophyletic group (*Dendrotriton* + (*Cryptotriton*

+ (*Nyctanolis* + (*Nototriton* + (*Bradytriton* + ("*Oeditriton*" + (*Oedopinola* + *Oedipina*)))))). The relationship *Nyctanolis* + (*Nototriton* + (*Bradytriton* + (*Thornella* + (*Oedopinola* + *Oedipina*))))) is also supported in *TREE* and named as the clan *Thornellites*. The works on significant samples of this very speciose group are still in its beginnings and more data are needed to confirm phylogenetic relationships and taxonomic decisions.

### F.20.80. Subtribus *Batrachosepina* Wake, 2012

***Protonym***: *Batrachosepini* Wake, 2012: 76 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bolitoglossini* Hallowell, 1856.
***Adelphotaxon***: *Bolitoglossina* Hallowell, 1856.
***Getendotaxon***: *Batrachoseps* Bonaparte, 1839.

### F.20.81. Subtribus *Bolitoglossina* Hallowell, 1856

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bolitoglossini* Hallowell, 1856.
***Adelphotaxon***: *Batrachosepina* Wake, 2012.
***Getendotaxa***: *Bolitoglossinia* Hallowell, 1856; *Thoriinia* Cope, 1869.

### F.21.58. Infratribus *Bolitoglossinia* Hallowell, 1856

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bolitoglossina* Hallowell, 1856.
***Adelphotaxon***: *Thoriinia* Cope, 1869.
***Getendotaxa***: *Bolitoglossinoa* Hallowell, 1856; *Isthmurinoa* **nov.**

### F.22.37. Hypotribus *Bolitoglossinoa* Hallowell, 1856

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bolitoglossinia* Hallowell, 1856.
***Adelphotaxon***: *Isthmurinoa* **nov.**
***Getendotaxon***: *Bolitoglossa* Duméril, Bibron & Duméril, 1854.

### F.22.38. Hypotribus *Isthmurinoa* **nov.**

***Getangiotaxon***: *Bolitoglossinia* Hallowell, 1856.
***Adelphotaxon***: *Bolitoglossinoa* Hallowell, 1856.
***Getendotaxa***: *Isthmurites* **nov.**; *Parvimolgites* **nov.**; *Pseudoeuryceites* **nov.**

***Nucleogenus, by present designation***: *Isthmura* Dubois & Raffaëlli, 2012. ● ***Etymology of nomen***: G: ἰσθμός (*isthmos*), 'isthmus', which evokes the constricted basis of the tail of these salamanders; οὐρά, *oura*, 'tail'. ● ***Stem of nomen***: *Isthmur*-.

***Diagnosis***: Diminutive to very large sized plethodontids; body stout to slender; limbs and toes short to long; tails moderate to very long; webbing on hands and feet rudimentary to moderate; columella absent or present.{Wake & Elias 1983; Parra-Olea *et al.* 2005; Rovito *et al.* 2015}.

### F.23.22. Clanus *Isthmurites* nov.

***Getangiotaxon***: *Isthmurinoa* **nov.**
***Adelphotaxa***: *Parvimolgites* **nov.**; *Pseudoeuryceites* **nov.**
***Getendotaxa***: *Aquiloeurycea* Rovito, Parra-Olea, Recuero & Wake, 2015; *Isthmura* Dubois & Raffaëlli, 2012.

### F.23.23. Clanus *Parvimolgites* nov.

***Getangiotaxon***: *Isthmurinoa* **nov.**
***Adelphotaxa***: *Isthmurites* **nov.**; *Pseudoeuryceites* **nov.**
***Getendotaxa***: *Ixalotriton* Wake & Johnson, 1989; *Parvimolge* Taylor, 1944.

***Nucleogenus, by present designation***: *Parvimolge* Taylor, 1944. ● ***Etymology of nomen***: L: *parvus*, 'small'; N: *Molge* Merrem, 1820, derived from L: *molge*, modern Latin from German *Molch*, 'amphibian'. ● ***Stem of nomen***: *Parvimolg-*.

***Diagnosis***: Diminutive to relatively large salamanders; body rather strong; limbs, toes and tail relatively short to long; webbing on hand and foot moderate; teeth on maxilla, premaxilla and mandible present; premaxilla single or fused; sublingual fold present. {Taylor 1944; Wake & Johnson 1989}.

### F.23.24. Clanus *Pseudoeuryceites* nov.

***Getangiotaxon***: *Isthmurinoa* **nov.**
***Adelphotaxa***: *Iscthmurites* **nov.**; *Parvimolgites* **nov.**
***Getendotaxon***: *Pseudoeurycea* Taylor, 1944.

***Nucleogenus, by present designation***: *Pseudoeurycea* Taylor, 1944. ● ***Etymology of nomen***: G: ψευδής (*pseudis*), 'false'; Εύρυδίκη (*Eurudike*), 'nymph, wife of Orpheus'. ● ***Stem of nomen***: *Pseudoeuryce-*.

***Diagnosis***: Salamanders with middle digits of and foot free or with rudimentary webbing; vertebral articulation intermediate, lacking any trace of a rounded, terminal condyle; teeth on maxilla, premaxilla and mandible, pleurodont; premaxilla single, with frontal processes on a slight elevation; fronto-premaxillary fontanelle well defined; columella absent from operculum; parasphenoid lacking a lateral notch; no septomaxilla; no lateral spine on posterior parts of centra, except on atlas; presence of a sublingual fold. {Taylor 1944}.

### F.21.59. Infratribus *Thoriinia* Cope, 1869

***Protonym***: *Thoriidae* Cope, 1869: 110 [F].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Bolitoglossina* Hallowell, 1856.
***Adelphotaxon***: *Bolitoglossinia* Hallowell, 1856.
***Getendotaxa***: *Thoriinoa* Cope, 1869; *Thornellinoa* **nov.**

### F.22.39. Hypotribus *Thoriinoa* Cope, 1869

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Thoriinia* Cope, 1869.
***Adelphotaxon***: *Thornellinoa* **nov.**
***Getendotaxa***: *Chiropterotriton* Taylor, 1944; *Cryptotriton* García-París & Wake, 2000; *Thorius* Cope, 1869.

## F.22.40. Hypotribus *Thornellinoa* **nov.**

***Getangiotaxon***: *Thoriinia* Cope, 1869.
***Adelphotaxon***: *Thoriinoa* Cope, 1869.
***Getendotaxa***: *Dendrotritonites* **nov.**; *Nyctanolites* **nov.**; *Thornellites* **nov.**

***Nucleogenus, by present designation***: *Thornella* **nov.** ● ***Etymology of nomen***: P: Robert Thorn (1925–2011), Luxembourg specialist of salamanders; L: *-ella*, a feminine suffix indicating a diminutive form. ● ***Stem of nomen***: *Thornell-*.

***Diagnosis***: Small to large sized plethodontid salamanders; body slender to stout, short or long; tail rounded, but also compressed or rectangular; legs long or short; hands and feet small but also broad; digits rounded, blunt, rarely broad tipped; premaxillary fused, rarely not fused; sublingual fold present; ulnare and intermedium fused or not fused; tarsals four and five fused or not fused; vertebrae short; prefrontals present or absent; tibial spurs present or absent; biology terrestrial, but also arboreal or fossorial. {Wake & Elias 1983; García-París & Wake 2000; McCranie *et al.* 2008}.

## F.23.25. Clanus *Dendrotritonites* **nov.**

***Getangiotaxon***: *Thornellinoa* **nov.**
***Adelphotaxa***: *Nyctanolites* **nov.**; *Thornellites* **nov.**
***Getendotaxon***: *Dendrotriton* Wake & Elias, 1983.

***Nucleogenus, by present designation***: *Dendrotriton* Wake & Elias, 1983. ● ***Etymology of nomen***: G: δένδρεον (*dendreon*), 'tree'; N: *Triton* Laurenti, 1768, derived from G: Τρίτων (*Triton*), 'God of sea'. ● ***Stem of nomen***: *Dendrotriton-*.

***Diagnosis***: Small sized plethodontid salamanders; body slender, short; tail long, rounded; legs long; hands and feet broad; digits long, broad-tipped; premaxillary simple; sublingual fold present; ulnare and intermedium not fused; tarsals four and five not fused; vertebrae short; prefrontals absent; tibial spurs absent; arboreal. {Wake & Elias 1983}.

## F.23.26. Clanus *Nyctanolites* **nov.**

***Getangiotaxon***: *Thornellinoa* **nov.**
***Adelphotaxa***: *Dendrotritonites* **nov.**; *Thornellites* **nov.**
***Getendotaxon***: *Nyctanolis* Elias & Wake, 1983.

***Nucleogenus, by present designation***: *Nyctanolis* Elias & Wake, 1983. ● ***Etymology of nomen***: G: νύξ (*nux*), 'night'; N: *Anolis* Daudin, 1802, derived from French *anolis*, from an undetermined native Caribbean language *anoalli*, *anoli*. ● ***Stem of nomen***: *Nyctanoli-*.

***Diagnosis***: Large sized plethodontid salamanders; body short, rather thin; tail long, rounded; legs, hands and feet long; digits blunt, slightly enlarged; premaxillary double; sublingual fold present; ulnare and intermedium not fused; tarsals four and five not fused; vertebrae short; prefrontals present; tibial spurs present; terrestrial and arboreal. {Wake & Elias 1983}.

## F.23.27. Clanus *Thornellites* **nov.**

***Getangiotaxon***: *Thornellinoa* **nov.**
***Adelphotaxa***: *Dendrotritonites* **nov.**; *Nyctanolites* **nov.**
***Getendotaxa***: *Thornellities* **nov.**; *Nototritonities* **nov.**

### F.24.16. Subclanus *Thornellities* **nov.**

***Getangiotaxon***: *Thornellites* **nov.**
***Adelphotaxon***: *Nototritonities* **nov.**
***Getendotaxa***: *Bradytritonitoes* **nov.**; *Thornellitoes* **nov.**

### F.25.22. Infraclanus *Bradytritonitoes* **nov.**

***Getangiotaxon***: *Thornellities* **nov.**
***Adelphotaxon***: *Thornellitoes* **nov.**
***Getendotaxon***: *Bradytriton* Wake & Elias, 1983.

***Nucleogenus, by present designation***: *Bradytriton* Wake & Elias, 1983. ● ***Etymology of nomen***: G: βράδος (*brados*), 'slowness'; N: *Triton* Laurenti, 1768, derived from G: Τρίτων (*Triton*), 'God of sea'. ● ***Stem of nomen***: *Bradytriton-*.

***Diagnosis***: Medium sized plethodontid salamanders; body stout; tail strongly compressed; legs short; hands and feet small; digits blunt; premaxillaries fused; sublingual fold present; ulnare and intermedium fused; tarsals four and five fused; vertebrae short; prefrontals present; tibial spurs present; terrestrial. {Wake & Elias 1983}.

### F.25.23. Infraclanus *Thornellitoes* **nov.**

***Getangiotaxon***: *Thornellities* **nov.**
***Adelphotaxon***: *Bradytritonitoes* **nov.**
***Getendotaxa***: *Oedipinitues* **nov.**; *Thornellitues* **nov.**

### F.26.13. Hypoclanus *Oedipinitues* **nov.**

***Getangiotaxon***: *Thornellitoes* **nov.**
***Adelphotaxon***: *Thornellitues* **nov.**
***Getendotaxa***: *Oedipina* Keferstein, 1868; *Oedopinola* Hilton, 1946.

***Nucleogenus, by present designation***: *Oedipina* Keferstein, 1868. ● ***Etymology of nomen***: G: οἰδίπους (*oidipous*), 'swollen foot'; *-ina*, feminine suffix. ● ***Stem of nomen***: *Oedipin-*.

***Diagnosis***: Medium to large sized plethodontid salamanders; body long; tail long, rounded; legs relatively long; hands and feet small; premaxillary single; sublingual fold present; ulnare and intermedium fused; tarsals four and five fused; vertebrae short; prefrontals absent; tibial spurs absent; semi-fossorial or fossorial species. {Wake & Elias 1983; García-París & Wake 2000}.

### F.26.14. Hypoclanus *Thornellitues* **nov.**

***Getangiotaxon***: *Thornellitoes* **nov.**
***Adelphotaxon***: *Oedipinitues* **nov.**
***Getendotaxon***: *Thornella* **nov.**

### G.28.533. Genus *Thornella* **nov.**

***Getangiotaxon***: *Thornellitues* **nov.**
***Adelphotaxon***: None.

***Getendotaxa***: *Thornella kasios* (McCranie, Vieites & Wake, 2008); *Thornella nica* (Sunyer, Wake, Townsend, Travers, Rovito, Papenfuss, Obando & Köhler, 2010); *Thornella quadra* (McCranie, Vieites & Wake, 2008).

***Nucleospecies, by present designation***: *Oedipina (Oeditriton) quadra* McCranie, Vieites & Wake, 2008. ● ***Etymology of nomen***: P: Robert Thorn (1925–2011), Luxembourg specialist of salamanders; L: *-ella*, a feminine suffix indicating a diminutive form. ● ***Stem of nomen***: *Thornell-*. ● ***Grammatical gender of nomen***: feminine.

***Diagnosis***: Small to medium sized (SVL 33–56 mm) plethodontid salamanders; body long and slender; tail very long, about twice body length, nearly rectangular or round in cross section; eyes directed frontolaterally; mental glands of males inconspicuous; suborbital groove not intercepting lip line; hands and feet tiny, narrow, elongate; digital tips rouned, blunt, with weak subdigital pads; coloration uniformly dark or with tiny light dots. {McCranie *et al.* 2008; Sunyer *et al.* 2010}.

***Comments***: ● McCranie *et al.* (2008) proposed the nomen "*Oeditriton*" for this taxon (established as a subgenus) without designating a type species for it. The nomen is therefore nomenclaturally unavailable according to Article 13.3 of the *Code*. Here we propose formally a new nomen for this taxon.

### F.24.17. Subclanus *Nototritonities* **nov.**

***Getangiotaxon***: *Thornellites* **nov.**
***Adelphotaxon***: *Thornellities* **nov.**
***Getendotaxon***: *Nototriton* Wake & Elias, 1983.

***Nucleogenus, by present designation***: *Nototriton* Wake & Elias, 1983. ● ***Etymology of nomen***: G: νοτέω (*noteo*), 'to be wet'; N: *Triton* Laurenti, 1768, derived from G: Τρίτων (*Triton*), 'God of sea'. ● ***Stem of nomen***: *Nototriton-*.

***Diagnosis***: Small sized plethodontid salamanders; body slender, trunc short; tail long, rounded; legs moderately long to short; hands and feet small; digits short, not enlarged; premaxillary fused; sublingual fold present; ulnare and intermedium fused; tarsals four and five fused; vertebrae short; prefrontals present; tibial spurs present; biology arboreal, terrestrial or semifossorial. {Wake & Elias 1983}.

### F.19.82. Tribus *Hemidactyliini* Hallowell, 1856

***Eunym***: Wake 1966: 1.
***Getangiotaxon***: *Hemidactyliinae* Hallowell, 1856.
***Adelphotaxa***: *Bolitoglossini* Hallowell, 1856; *Spelerpini* Cope, 1859.
***Getendotaxon***: *Hemidactylium* Tschudi, 1838.

### F.19.83. Tribus *Spelerpini* Cope, 1859

***Protonym***: *Spelerpinae* Cope, 1859: 123 [bF].
***Eunym***: Dubois 2005: 20.
***Getangiotaxon***: *Hemidactyliinae* Hallowell, 1856.
***Adelphotaxa***: *Bolitoglossini* Hallowell, 1856; *Hemidactyliini* Hallowell, 1856.
***Getendotaxa***: *Pseudotritonina* Dubois & Raffaelli, 2012; *Spelerpina* Cope, 1859.

***Comments***: The group here named tribe *Spelerpini* was recognised in all molecular studies of *Plethodontidae* (Mueller *et al.* 2004; Chippindale *et al.* 2004; Macey 2005; Vieites *et al.* 2007, 2011; Camp *et al.* 2009; Kozak *et al.* 2009; Chen G. *et al.* 2011; Pyron & Wiens 2011; Shen *et al.* 2016). In *TREE*, it shows two highly supported branches which are here allocated to the subtribe *Pseudotritonina*, including the genera *Gyrinophilus*, *Pseudotriton* and *Stereochilus*, with unresolved mutual relationships, and the subtribe *Spelerpina* for *Eurycea* and *Urspelerpes*. The lineage here named the subtribe *Pseudotritonina* has been revealed by previous studies, which also recognised *Eurycea* as its sister-taxon (Mueller *et al.* 2004; Chippindale *et al.* 2004; Macey 2005; Vieites *et al.* 2007, 2011; Camp *et al.* 2009; Kozak *et al.* 2009; Chen G. *et al.* 2011; Pyron & Wiens 2011). There is no consensus on the relative position of the other genus-series taxa.

### F.20.82. Subtribus *Pseudotritonina* Dubois & Raffaëlli, 2012

***Protonym and eunym***: *Pseudotritonina* Dubois & Raffaëlli, 2012: 115 [bT].
***Getangiotaxon***: *Spelerpini* Cope, 1859.
***Adelphotaxon***: *Spelerpina* Cope, 1859.
***Getendotaxa***: *Gyrinophilus* Cope, 1869; *Pseudotriton* Tschudi, 1838; *Stereochilus* Cope, 1869.

### F.20.83. Subtribus *Spelerpina* Cope, 1859

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Spelerpini* Cope, 1859.
***Adelphotaxon***: *Pseudotritonina* Dubois & Raffaelli, 2012.
***Getendotaxa***: *Eurycea* Rafinesque, 1822; *Urspelerpes* Camp, Peterman, Milanovich, Lamb, Maerz & Wake, 2009.

### F.18.84. Subfamilia *Plethodontinae* Gray, 1850

***Eunym***: Boulenger 1882: vii, 51.
***Getangiotaxon***: *Plethodontidae* Gray, 1850.
***Adelphotaxa***: *Hemidactyliinae* Hallowell, 1856; **1 G†**.
***Getendotaxa***: *Hydromantini* Wake, 2012; *Plethodontini* Gray, 1850.

***Comments***: The subfamily *Plethodontinae* includes two tribes, the *Hydromantini*, with the subtribe *Hydromantina* for *Hydromantes* and *Speleomantes*, the subtribe *Karseniina* for *Karsenia*, and the tribe *Plethodontini*. Within this latter tribe, the subtribe *Desmognathina* holds the infratribe *Aneidinia* for *Aneides*, and the infratribe *Desmognathinia* for *Desmognathus* and *Phaeognathus*, whereas the subtribe *Ensatinina* includes the single genus *Ensatina*.

The relationships within this subfamily have not attained an agreement and various hypotheses on the relationships have been published. This may be a consequence of taxon sampling, as few works have representatives of all genera in their analysis. Wake (2012) recognised five tribes within the subfamily: the *Aneidini* for *Aneides*, the *Desmognathini* for *Desmognathus* and *Phaeognathus*, the *Ensatini* for *Ensatina*, the *Hydromantini* for *Hydromantes* (including the subgenera *Atylodes*, *Hydromantes* and *Speleomantes*) and *Karsenia*, and the *Plethodontini* for *Plethodon* (with the subgenera *Hightonia* and *Plethodon*). The sister-group relationship of *Desmognathus* and *Phaeognathus* was revealed in most studies (Mueller *et al.* 2004; Chippindale *et al.* 2004; Macey 2005; Vieites *et al.* 2007, 2011; Camp *et al.* 2009; Kozak *et al.* 2009; Pyron & Wiens 2011; Chen G. *et al.* 2011). The taxon *Hydromantini* was resolved by Vieites *et al.* (2007) as in *TREE*, but there is no support for *Karsenia* being sister-taxon to *Hydromantes* and *Speleomantes* in Vieites *et al.* (2011), Pyron & Wiens (2011) and Shen *et al.* (2016), the other works that included this genus. The relationship *Ensatina* + (*Desmognathus* + *Phaeognathus*) has poor support, therefore their relation with *Plethodon* is not resolved and within the *Plethodontini* three subtribes are here recognised. A similar arrangement had been obtained in some works (Chippindale *et al.* 2004; Vieites *et al.* 2007) but in other works *Plethodon* shows very different sister-group relationships. It is sister-group to all other *Plethodontinae* in a number of phylogenies (Mueller *et al.* 2004; Macey 2005; Camp *et al.* 2009; Kozak *et al.* 2009; Pyron & Wiens 2011; Chen G. Y. *et al.* 2011; Shen *et al.* 2016) but sister-group to *Phaeognathus* and *Desmognathus* in Vieites *et al.* (2011).

## F.19.84. Tribus *Hydromantini* Wake, 2012

***Protonym and eunym***: *Hydromantini* Wake, 2012: 80 [T].
***Getangiotaxon***: *Plethodontinae* Gray, 1850.
***Adelphotaxon***: *Plethodontini* Gray, 1850.
***Getendotaxa***: *Hydromantina* Wake, 2012; *Karseniina* Dubois & Raffaelli, 2012.

## F.20.84. Subtribus *Hydromantina* Wake, 2012

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Hydromantini* Wake, 2012.
***Adelphotaxon***: *Karseniina* Dubois & Raffaelli, 2012.
***Getendotaxa***: *Hydromantes* Gistel, 1848; *Speleomantes* Dubois, 1984.

## F.20.85. Subtribus *Karseniina* Dubois & Raffaëlli, 2012

***Protonym***: *Karseniini* Dubois & Raffaëlli, 2012: 117 [T].
***Eunym***: Dubois & Raffaëlli 2012: 118.
***Getangiotaxon***: *Hydromantini* Wake, 2012.
***Adelphotaxon***: *Hydromantina* Wake, 2012.
***Getendotaxon***: *Karsenia* Min, Yang, Bonett, Vieites, Brandon & Wake, 2005.

## F.19.85. Tribus *Plethodontini* Gray, 1850

***Eunym***: Wake 1966: 1.
***Getangiotaxon***: *Plethodontinae* Gray, 1850.
***Adelphotaxon***: *Hydromantini* Wake, 2012.
***Getendotaxa***: *Desmognathina* Gray, 1850; *Ensatinina* Gray, 1850; *Plethodontina* Gray, 1850.

## F.20.86. Subtribus *Desmognathina* Gray, 1850

***Protonym***: *Desmognathina* Gray, 1850: 40 [UF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Plethodontini* Gray, 1850.
***Adelphotaxa***: *Ensatinina* Gray, 1850; *Plethodontina* Gray, 1850.
***Getendotaxa***: *Aneidinia* Wake, 2012; *Desmognathinia* Gray, 1850.

## F.21.60. Infratribus *Aneidinia* Wake, 2012

***Protonym***: *Aneidini* Wake, 2012: 79 [T].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Desmognathina* Gray, 1850.
***Adelphotaxon***: *Desmognathinia* Gray, 1850.
***Getendotaxon***: *Aneides* Baird, 1851.

## F.21.61. Infratribus *Desmognathinia* Gray, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Desmognathina* Gray, 1850.

***Adelphotaxon***: *Aneidinia* Wake, 2012.
***Getendotaxa***: *Desmognathus* Baird, 1850; *Phaeognathus* Highton, 1961.

### F.20.87. Subtribus *Ensatinina* Gray, 1850

***Protonym***: *Ensatinina* Gray, 1850: 48 [UF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Plethodontini* Gray, 1850.
***Adelphotaxa***: *Desmognathina* Gray, 1850; *Plethodontina* Gray, 1850.
***Getendotaxon***: *Ensatina* Gray, 1850.

### F.20.88. Subtribus *Plethodontina* Gray, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Plethodontini* Gray, 1850.
***Adelphotaxa***: *Desmognathina* Gray, 1850; *Ensatinina* Gray, 1850.
***Getendotaxon***: *Plethodon* Tschudi, 1838.

### F.16.09. Apofamilia *Rhyacotritoneidae* Tihen, 1958

***Protonym***: *Rhyacotritoninae* Tihen, 1958: 1 [bF].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Amphiumoidae* Gray, 1825.
***Adelphotaxon***: *Amphiumeidae* Gray, 1825.
***Getendotaxon***: *Rhyacotritonidae* Tihen, 1958.

### F.17.66. Familia *Rhyacotritonidae* Tihen, 1958

***Eunym***: Good & Wake 1992: v, xi, 1, 13.
***Getangiotaxon***: *Rhyacotritoneidae* Tihen, 1958.
***Adelphotaxon***: None.
***Getendotaxon***: *Rhyacotriton* Dunn, 1920.

### F.15.12. Epifamilia *Proteoidae* Bonaparte, 1831

***Protonym***: *Proteina* Bonaparte, 1831: 781 [UF].
***Eunym***: Dubois & Raffaëlli 2012: 98.
***Getangiotaxon***: *Amphiumoidea* Gray, 1825.
***Adelphotaxon***: *Amphiumoidae* Gray, 1825.
***Getendotaxon***: *Proteidae* Bonaparte, 1831.

### F.17.67. Familia *Proteidae* Bonaparte, 1831

***Eunym***: Hogg 1838: 152.
***Getangiotaxon***: *Proteoidae* Bonaparte, 1831.
***Adelphotaxon***: None.
***Getendotaxa***: *Necturus* Rafinesque, 1819; *Proteus* Laurenti, 1768; **3 G†**.

## F.14.18. Superfamilia *Salamandroidea* Goldfuss, 1820

***Protonym***: *Salamandrae* Goldfuss, 1820: 11 [F].
***Eunym***: Garman 1884: 37.
***Getangiotaxon***: **Pseudosauria** Blainville, 1816.
***Adelphotaxa***: *Amphiumoidea* Gray, 1825; **2 G†**.
***Getendotaxa***: *Ambystomatidae* Gray, 1850; *Salamandridae* Goldfuss, 1820.

***Comments***: This superfamily includes two branches, both recognised at the family rank on account of the [UQC], the *Ambystomatidae* for the genera *Ambystoma* and *Dicamptodon*, and the family *Salamandridae*. Several recent authors (Wiens *et al*. 2005*a*; Weisrock *et al*. 2005; Vieites *et al*. 2009; Zhang *et al*. 2009; Pyron & Wiens 2011; Shen *et al*. 2013) recognised a separate family *Dicamptodontidae* for the latter genus, either on the basis of a criterion of morphological divergence or to account for the hypothesised geological age of the cladogenesis that separated these two genera, but such phenetic or chronological criteria do not have to be taken into account in a cladonomy like that presented here, the aim of which is just to reflect as accurately as possible the structure of the cladogram supposed to describe the patterns of relationships between the taxa studied, irrespective of other considerations.

## F.17.68. Familia *Ambystomatidae* Gray, 1850

***Protonym***: *Ambystomina* Gray, 1850: 32 [UF].
***Eunym***: Hay 1892: 415.
***Getangiotaxon***: *Salamandroidea* Goldfuss, 1820.
***Adelphotaxon***: *Salamandridae* Goldfuss, 1820.
***Getendotaxa***: *Ambystoma* Tschudi, 1838; *Dicamptodon* Strauch, 1870; **5 G†**.

## F.17.69. Familia *Salamandridae* Goldfuss, 1820

***Eunym***: Gray 1825: 215.
***Getangiotaxon***: *Salamandroidea* Goldfuss, 1820.
***Adelphotaxon***: *Ambystomatidae* Gray, 1850.
***Getendotaxa***: *Pleurodelinae* Tschudi, 1838; *Salamandrinae* Goldfuss, 1820; *Salamandrininae* Fitzinger, 1843.

***Comments***: Within the family *Salamandridae*, three branches of unresolved mutual relationships are recognised as the subfamilies *Pleurodelinae*, *Salamandrinae* and *Salamandrininae*. The latter includes a single genus, *Salamandrina*. These main groups find general agreement, although the relationships between these groups are not consistent.

Recently, Veith *et al.* (2018) published a historical analysis of the classification of *Salamandridae*. They underlined several points of disagreement with Pyron (2014), in particular the usage of both mitochondrial and nuclear data in a single analysis and non representative sampling for some data. Nevertheless this is a general flaw in systematic studies as methods and taxa discoveries lead to forever changing hypotheses on phylogenetic relationships and the classifications based on these hypotheses.

## F.18.85. Subfamilia *Pleurodelinae* Tschudi, 1838

***Protonym***: *Pleurodeles* Tschudi, 1838: 56 [F].
***Eunym***: Brame 1957: 2.
***Getangiotaxon***: *Salamandridae* Goldfuss, 1820.
***Adelphotaxa***: *Salamandrinae* Goldfuss, 1820; *Salamandrininae* Fitzinger, 1843.
***Getendotaxa***: *Molgini* Bonaparte, 1850; *Pleurodelini* Tschudi, 1838; **9 G†**.

***Comments***: Within the subfamily *Pleurodelinae*, the taxon here recognised as the tribe *Molgini* is sister-taxon to the *Pleurodelini*.

The *Molgini* include two subtribes, the *Tarichina*, including the genera *Notophthalmus* and *Taricha*, and the *Molgina*. In the *Molgina*, two branches are recognised as the infratribes *Euproctinia* for *Euproctus*, and *Molginia*. The relationships of the latter are unresolved and four hypotribes are recognised: the *Cynopinoa*, including the clans *Cynopites* for *Cynops*, *Hypselotritonites* for *Hypselotriton* and *Pachytritonites* for *Laotriton*, *Pachytriton* and *Paramesotriton*; the *Ichthyosaurinoa* for *Ichthyosaura*; the *Lissotritoninoa* for *Lissotriton*; and the *Molginoa* for the clans *Molgites* for *Calotriton* and *Triturus*, and *Neurergites* for *Neurergus* and *Ommatotriton*.

Within the tribe *Pleurodelini*, the subtribe *Pleurodelina*, for *Pleurodeles*, is sister-taxon to the *Tylototritonina*, containing the infratribes *Echinotritoninia* for *Echinotriton*, and *Tylototritoninia* for *Tylototriton* and *Yaotriton*.

The relationships within the *Pleurodelinae* are much more discussed. Zhang *et al.* (2008) attributed nomina to some of their groups that Veith *et al.* (2018) used for the analysis of the relationships within this subfamily. Nevertheless these groups are not homologous by sister-group relationships and thus should not be recognised at similar taxonomic groups in a formal classification. All molecular studies obtain a dichotomy within the subfamily which corresponds to the *Pleurodelini*, their 'primitive newts', and the *Molgini*. Within this latter group, the relationships are much disputed although several holophyletic subgroups are informally recognised. Thus the 'modern Asian newts', our *Cynopinoa*, as well as the 'New World newts', our *Tarichina*, are highly supported holophyletic groups (Titus & Larson 1995; Weisrock *et al.* 2006; Steinfartz *et al.* 2007; Zhang *et al.* 2008; Chen G. *et al.* 2011; Pyron & Wiens 2011). Within the *Cynopinoa*, in *TREE*, no sufficient support for the holophyly of *Cynops sensu lato* has been found (see also Weisrock *et al.* 2006; Zhang *et al.* 2008), thus requiring to recognise two genera *Cynops* and *Hypselotriton* of poorly supported relationships (Dubois & Raffaëlli 2009). In *TREE*, the holophyly of 'European modern newts' does not have sufficient support, but such a group has been revealed by Zhang *et al*. (2008), Chen G. *et al.* (2011) and Veith *et al.* (2018). In other studies this group is still paraphyletic (Titus & Larson 1995; Weisrock *et al.* 2006; Steinfartz *et al.* 2007; Pyron & Wiens 2011).

### F.19.86. Tribus *Molgini* Bonaparte, 1850

***Protonym***: *Molgina* Bonaparte, 1850: plate [bF].
***Eunym***: Dubois & Raffaëlli 2012: 30.
***Getangiotaxon***: *Pleurodelinae* Tschudi, 1838.
***Adelphotaxa***: *Pleurodelini* Tschudi, 1838; **9 G†**.
***Getendotaxa***: *Molgina* Bonaparte, 1850; *Tarichina* Dubois & Raffaelli, 2009.

### F.20.89. Subtribus *Molgina* Bonaparte, 1850

***Eunym***: Dubois & Raffaëlli 2012: 30.
***Getangiotaxon***: *Molgini* Bonaparte, 1850.
***Adelphotaxon***: *Tarichina* Dubois & Raffaelli, 2009.
***Getendotaxa***: *Euproctinia* Dubois & Raffaelli, 2009; *Molginia* Bonaparte, 1850.

### F.21.62. Infratribus *Euproctinia* Dubois & Raffaëlli, 2009

***Protonym***: *Euproctita* Dubois & Raffaëlli, 2009: 50 [iT].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Molgina* Bonaparte, 1850.
***Adelphotaxon***: *Molginia* Bonaparte, 1850.
***Getendotaxon***: *Euproctus* Gené, 1839.

### F.21.63. Infratribus *Molginia* Bonaparte, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Molgina* Bonaparte, 1850.
***Adelphotaxon***: *Euproctinia* Dubois & Raffaelli, 2009.
***Getendotaxa***: *Cynopinoa* Dubois & Raffaelli, 2009; *Ichthyosaurinoa* **nov.**; *Lissotritoninoa* **nov.**; *Molginoa* Bonaparte, 1850.

### F.22.41. Hypotribus *Cynopinoa* Dubois & Raffaëlli, 2009

***Protonym***: *Cynopita* Dubois & Raffaëlli, 2009: 44 [iT].
***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Molginia* Bonaparte, 1850.
***Adelphotaxa***: *Ichthyosaurinoa* **nov.**; *Lissotritoninoa* **nov.**; *Molginoa* Bonaparte, 1850.
***Getendotaxa***: *Cynopites* Dubois & Raffaelli, 2009; *Hypselotritonites* **nov.**; *Pachytritonites* **nov.**

### F.23.28. Clanus *Cynopites* Dubois & Raffaelli, 2009

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Cynopinoa* Dubois & Raffaelli, 2009.
***Adelphotaxa***: *Hypselotritonites* **nov.**; *Pachytritonites* **nov**.
***Getendotaxon***: *Cynops* Tschudi, 1838.

### F.23.29. Clanus *Hypselotritonites* **nov.**

***Getangiotaxon***: *Cynopinoa* Dubois & Raffaelli, 2009.
***Adelphotaxa***: *Cynopites* Dubois & Raffaelli, 2009; *Pachytritonites* **nov**.
***Getendotaxon***: *Hypselotriton* Wolterstorff, 1934.

***Nucleogenus, by present designation***: *Hypselotriton* Wolterstorff, 1934. ● ***Etymology of nomen***: G: ὑφηλός (*upselos*), 'high in trees'; N: *Triton* Laurenti, 1768, derived from G: Τρίτων (*Triton*), 'God of sea'. ● ***Stem of nomen***: *Hypselotriton-*.

***Diagnosis***: Rather small sized newts with strongly developed sexual size dimorphism (males TL 70–120 mm; females TL 90–160 mm); body high and laterally compressed; tail poorly differentiated from body; parotoid glands poorly developed; no vertebral crest or ridge; skin smooth or slightly rugose; premaxillary unique with short posterior processus; no internasal cavity; fronto-squamosal arc ossified rather strongly developed; paroccipital processes present; tongue small, slightly free on sides. {Thorn 1969; Raffaëlli 2013}.

### F.23.30. Clanus *Pachytritonites* **nov.**

***Getangiotaxon***: *Cynopinoa* Dubois & Raffaelli, 2009.
***Adelphotaxa***: *Cynopites* Dubois & Raffaelli, 2009; *Hypselotritonites* **nov.**
***Getendotaxa***: *Laotriton* Dubois & Raffaelli, 2009; *Pachytriton* Boulenger, 1878; *Paramesotriton* Chang, 1936.

***Nucleogenus, by present designation***: *Pachytriton* Boulenger, 1878. ● ***Etymology of nomen***: G: παχύς (*paxus*), 'thick'; N: *Triton* Laurenti, 1768, derived from G: Τρίτων (*Triton*), 'God of sea'. ● ***Stem of nomen***: *Pachytriton-*.

***Diagnosis***: Small to large sized newts (TL 130–250 mm); habitus stout; skull wide; usually 12 vertebrae, but varying from 11 to 13; parotoids prominent; skin granular or smooth; vertebral ridge prominent or absent; lateral ridges present or absent; coloration dull, rarely bright. {Dubois & Raffaëlli 2009}.

## F.22.42. Hypotribus *Ichthyosaurinoa* **nov.**

***Getangiotaxon***: *Molginia* Bonaparte, 1850.
***Adelphotaxa***: *Cynopinoa* Dubois & Raffaelli, 2009; *Lissotritoninoa* **nov.**; *Molginoa* Bonaparte, 1850.
***Getendotaxon***: *Ichthyosaura* Sonnini & Latreille, 1801.

***Nucleogenus, by present designation***: *Ichthyosaura* Sonnini & Latreille, 1801. ● ***Etymology of nomen***: G: ἰχθῦς (*ichthus*), 'fish'; σαύρα (*saura*), 'lizard'. ● ***Stem of nomen***: *Ichthyosaur-*.

***Diagnosis***: Relatively small sized newts (males TL 80–100 mm; females TL 100–120 mm); fronto-squamosal arc ossified, poorly developed; paroccipital processes poorly prominent; internasal cavity elongate and large; posterior process of premaxillary narrow and short; posterior process of axillary short; dermal crest on dorsum entire, not serrated; skin smooth or rugose on dorsum, completely smooth on ventral side; gular fold distinct; prominent sexual color dimorphism with males showing black and white pattern on dermal crest and flanks; ventral coloration orange or red in both sexes. {Boulenger 1910; Thorn 1969}.

## F.22.43. Hypotribus *Lissotritoninoa* **nov.**

***Getangiotaxon***: *Molginia* Bonaparte, 1850.
***Adelphotaxa***: *Cynopinoa* Dubois & Raffaelli, 2009; *Ichthyosaurinoa* **nov.**; *Molginoa* Bonaparte, 1850.
***Getendotaxon***: *Lissotriton* Bell, 1839.

***Nucleogenus, by present designation***: *Lissotriton* Bell, 1839. ● ***Etymology of nomen***: G: λισσός (*lissos*), 'smooth'; N: *Triton* Laurenti, 1768, derived from G: Τρίτων (*Triton*), 'God of sea'. ● ***Stem of nomen***: *Lissotriton-*.

***Diagnosis***: Small sized newts (males TL 45–110 mm; females TL 55–100 mm); fronto-squamosal arc strongly ossified or partly developed; paroccipital processes well developed; internasal fontanella large and oval; posterior process of premaxillary long and divided posteriorly in two branches surrounding internasal cavity. {Bolkay 1928; Thorn 1969}.

## F.22.44. Hypotribus *Molginoa* Bonaparte, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Molginia* Bonaparte, 1850.
***Adelphotaxa***: *Cynopinoa* Dubois & Raffaelli, 2009; *Ichthyosaurinoa* **nov.**; *Lissotritoninoa* **nov.**
***Getendotaxa***: *Molgites* Bonaparte, 1850; *Neurergites* **nov.**

## F.23.31. Clanus *Molgites* Bonaparte, 1850

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Molginoa* Bonaparte, 1850.
***Adelphotaxon***: *Neurergites* **nov.**
***Getendotaxa***: *Calotriton* Gray, 1858; *Triturus* Rafinesque, 1815.

## F.23.32. Clanus *Neurergites* **nov.**

***Getangiotaxon***: *Molginoa* Bonaparte, 1850.
***Adelphotaxon***: *Molgites* Bonaparte, 1850.
***Getendotaxa***: *Neurergus* Cope, 1862; *Ommatotriton* Gray, 1850.

***Nucleogenus, by present designation***: *Neurergus* Cope, 1862. ● ***Etymology of nomen***: G: νεῦρον (*neuron*), 'tendon'; ἔργω (*ergo*), 'to shut in', referring to the fronto-parietal which is replaced by a ligament (Cope 1862). ● ***Stem of nomen***: *Neurerg-*.

***Diagnosis***: Medium to large sized newts (TL 140–190 mm); habitus stout, body flattened; sexual dimorphism moderate; premaxillary unique; fronto-squamosal arc ossified, incomplete; posterior processus of maxillary long, separated or linked to pterygoid; two series of vomero-palatine teeth anteriorly converging and diverging immediately to the posterior from this point; tongue rounded, small free on sides and on posterior part; parotoid glands scarcely distinct; tail long and compressed; reproduction in lotic or lentic habitat. {Thorn 1969; Dubois & Raffaëlli 2009}.

### F.20.90. Subtribus *Tarichina* Dubois & Raffaëlli, 2009

***Protonym and eunym***: *Tarichina* Dubois & Raffaëlli, 2009: 57 [bT].
***Getangiotaxon***: *Molgini* Bonaparte, 1850.
***Adelphotaxon***: *Molgina* Bonaparte, 1850.
***Getendotaxa***: *Notophthalmus* Rafinesque, 1820; *Taricha* Gray, 1850.

### F.19.87. Tribus *Pleurodelini* Tschudi, 1838

***Eunym***: Dubois & Raffaëlli 2009: 30
***Getangiotaxon***: *Pleurodelinae* Tschudi, 1838.
***Adelphotaxa***: *Molgini* Bonaparte, 1850; **9 G†**.
***Getendotaxa***: *Pleurodelina* Tschudi, 1838; *Tylototritonina* **nov.**

### F.20.91. Subtribus *Pleurodelina* Tschudi, 1838

***Eunym***: *Hoc loco*.
***Getangiotaxon***: *Pleurodelini* Tschudi, 1838.
***Adelphotaxon***: *Tylototritonina* **nov.**
***Getendotaxon***: *Pleurodeles* Michahelles, 1830.

### F.20.92. Subtribus *Tylototritonina* **nov.**

***Getangiotaxon***: *Pleurodelini* Tschudi, 1838.
***Adelphotaxon***: *Pleurodelina* Tschudi, 1838.
***Getendotaxa***: *Echinotritoninia* **nov.**; *Tylototritoninia* **nov.**

***Nucleogenus, by present designation***: *Tylototriton* Anderson, 1871. ● ***Etymology of nomen***: G: τύλος (*tulos*), 'callus'; N: *Triton* Laurenti, 1768, derived from G: Τρίτων (*Triton*), 'God of sea'. ● ***Stem of nomen***: *Tylototriton-*.

***Diagnosis***: Small to medium sized salamanders (TL 120–230 mm); habitus stout; cephalic ridges present; vertebral ridge present; dorsal coloration dark, or with bright coloration; ventral coloration dark or light; aquatic during breeding, or completely terrestrial; eggs rather small to large; deposited in water or on land. {Nussbaum & Brodie 1982; Dubois & Raffaëlli 2009; Raffaëlli 2013}.

### F.21.64. Infratribus *Echinotritoninia* **nov.**

***Getangiotaxon***: *Tylototritonina* **nov.**
***Adelphotaxon***: *Tylototritoninia* **nov.**

***Getendotaxon***: *Echinotriton* Nussbaum & Brodie, 1982.

***Nucleogenus, by present designation***: *Echinotriton* Nussbaum & Brodie, 1982. ● ***Etymology of nomen***: G: ἐχῖνος (*echinos*), 'hedgehog'; N: *Triton* Laurenti, 1768, derived from G: Τρίτων (*Triton*), 'God of sea'. ● ***Stem of nomen***: *Echinotriton*-.

***Diagnosis***: Medium sized salamanders (TL 130–160 mm); body stout; cephalic ridges poorly developed; vertebral ridge moderate; dorsal and ventral coloration dark; terrestrial, relatively large eggs (3.0–3.2 mm) deposited on land; an anteriorly curved spine posterolaterally on each quadrate covered by enlarged granular glands; strong anterior ribs; ribs 3–9 elongated, sharp-tipped, and distally free of trunk musculature; ribs bearing 0–3, usually one, dorsally projecting epipleural processes; one lateral row of large primary warts present; 0–3 medial rows of smaller secondary warts present. {Nussbaum & Brodie 1982; Dubois & Raffaëlli 2009; Raffaëlli 2013}.

## F.21.65. Infratribus *Tylototritoninia* **nov.**

***Getangiotaxon***: *Tylototritonina* **nov.**
***Adelphotaxon***: *Echinotritoninia* **nov.**
***Getendotaxa***: *Tylototriton* Anderson, 1871; *Yaotriton* Dubois & Raffaelli, 2009.

## F.18.86. Subfamilia *Salamandrinae* Goldfuss, 1820

***Eunym***: Cope 1859: 125.
***Getangiotaxon***: *Salamandridae* Goldfuss, 1820.
***Adelphotaxa***: *Pleurodelinae* Tschudi, 1838; *Salamandrininae* Fitzinger, 1843.
***Getendotaxa***: *Chioglossini* Dubois & Raffaelli, 2009; *Salamandrini* Goldfuss, 1820; **1 G†**.

***Comments***: Within the second branch of *Salamandridae*, the subfamily *Salamandrinae*, two branches of high support are recognised as the tribes *Chioglossini*, for *Chioglossa* and *Mertensiella*, and *Salamandrini*, for *Lyciasalamandra* and *Salamandra*. The relationship between the genera within this subfamily, called 'true salamanders' by Steinfartz *et al.* (2007), are consistent in most works (Titus & Larson 1995; Weisrock *et al.* 2006; Steinfartz *et al.* 2007; Zhang *et al.* 2008; Chen G. *et al.* 2011; Pyron & Wiens 2011; Veith *et al.* 2018).

## F.19.88. Tribus *Chioglossini* Dubois & Raffaëlli, 2009

***Protonym and eunym***: *Chioglossini* Dubois & Raffaëlli, 2009: 60 [T].
***Getangiotaxon***: *Salamandrinae* Goldfuss, 1820.
***Adelphotaxa***: *Salamandrini* Goldfuss, 1820; **1 G†**.
***Getendotaxa***: *Chioglossa* Bocage, 1864; *Mertensiella* Wolterstorff, 1925.

## F.19.89. Tribus *Salamandrini* Goldfuss, 1820

***Eunym***: Dubois & Raffaëlli 2009: 60.
***Getangiotaxon***: *Salamandrinae* Goldfuss, 1820.
***Adelphotaxa***: *Chioglossini* Dubois & Raffaëlli, 2009; **1 G†**.
***Getendotaxa***: *Lyciasalamandra* Veith & Steinfartz, 2004; *Salamandra* Garsault, 1764.

## F.18.87. Subfamilia *Salamandrininae* Fitzinger, 1843

***Protonym***: *Salamandrinae* Fitzinger, 1843: 33 [F].
***Eunym***: Dubois & Raffaëlli 2009: 29.
***Getangiotaxon***: *Salamandridae* Goldfuss, 1820.
***Adelphotaxa***: *Pleurodelinae* Tschudi, 1838; *Salamandrinae* Goldfuss, 1820.
***Getendotaxon***: *Salamandrina* Fitzinger, 1826.

***Comments***: Three recent works (Zhang *et al.* 2008; Pyron & Wiens 2011; Veith *et al.* 2011) found the *Salamandrininae* to be the sister-group to all other salamandrids but in *TREE* it is sister-group of *Pleurodelinae* with a support value below our threshold value (SHL 84 %).

## 4. Discussion and conclusion

### 4.1. Methodology

This work had four basic aims: {γ1} to provide a new, explicit, consistent, rigorous and repeatable, methodology for the taxonomic and nomenclatural expression of a cladogenetic hypothesis in zoology; {γ2} to provide a new, updated, hypothesis of cladistic relationships among all the suprageneric taxa of extant amphibians, based on the sequencing of as many nuclear and mitochondrial genes from as many species as possible; {γ3} to provide an ergotaxonomy reflecting as closely and unambiguously as possible this phylogeny; {γ4} to provide a nomenclature following precise and consistent Rules and Criteria for this taxonomy. We have indeed reached these four aims. Following the explicit and rigorous methodology explained throughout the text above, we provided a cladogenetic hypothesis, a taxonomy and a nomenclature for all extant amphibians.

#### *4.1.1. Phylogeny*

We built a cladogram (*TREE*) based on a methodology which allows to produce a single tree on the basis of variable numbers of sequences, retrieved from *Genbank*, from 10 nuclear and 5 mitochondrial genes in specimens representing 4060 species currently considered valid in the literature. As with most studies using the 'supermatrix' approach to systematics (Queiroz & Gatesy 2007) which combines multiple matrices of single genes (each from a single specimen) into a single, sparsely-sampled supermatrix, our terminals are 'composite', often consisting of gene sequences from more than one specimen. This means that the trees produced by such analyses are neither 'trees of specimens' nor even simple 'trees of sequences' but in fact 'trees of concepts' as they rely on taxonomic interpretations of different specimens as belonging to the same 'species', which requires the implementation of a 'species concept'. Even if, as discussed above under 2.2.4.2 and 2.2.5.1, different 'species concept' have no doubt governed the recognition of 'species' in different subgroups of amphibians, depending particularly on the period of the last revisionary work, it is likely that most of these 'species' are indeed well-defined holophyletic units. If all the specimens used in the supermatrix have been correctly 'identified', i.e. allocated to these units, then this approach will generally yield highly congruent results. Although this would be 'philosophically' more satisfying, little additional empirical accuracy would be gained by using single specimens for all genes. While we have attempted to minimise incorrectly labeled sequences from *Genbank* (see 4.3.1.2 below), there is no doubt that not all our 'species' are holophyletic, as a few of them are likely to be hybrid populations or clusters of cryptic species, and that some specimens have been misidentified. This represents an additional source of analytical errors in *TREE*. However, given the robust corroboration that *TREE* has brought to the structure of Pyron & Wiens (2011)'s phylogeny, as well as the robustness the original 2014 version of *TREE* when confronted to more recent works noted above under 2.1.1, we suggest this is minimal, at least to the extent that it affects our *CLAD*. Indeed, simulation results (Campbell *et al.* 2009) suggest that the use of composite taxa uniformly increases phylogenetic accuracy over the alternative, which is to only use available sequences from a single specimen and accept a drastic increase in missing data. As 'phylogenomic' studies become the norm (e.g., Hime *et al.* 2020), it is now more common to generate entire matrices of hundreds or thousands of gene regions from single specimens, which should mitigate or eliminate this problem in future large-scale studies of this type.

The number of genes sequenced per species spanned from 1 to 15. Our tree, built in 2014, includes 4060 species, i.e. 55 % of the 7317 species recognised by taxonomists at the end of 2014 and 49.3 % of the 8235 species recognised on 31 October 2020 <*AWb* 2020>. Among all the nodes produced by this analysis, we respected strictly a threshold of 90 % SHL-aLRT support value as a minimum value for considering a node as robust, i.e. as indicating holophyly of all the branches resulting from it. Among the 393 robust suprageneric nodes of *TREE*, 278 (i.e. 70.7 %) result in dichotomies, i.e. indicate fully resolved sister-branches relationships, whereas 115 (i.e. 29.3 %) result in polytomies (trichotomies, tetratomies, etc.), i.e. indicate unresolved relationships between genera (see Table **T13.NOD**).

#### *4.1.2. Taxonomy*

We used these results to build a phylogenetic suprageneric taxonomy or cladonomy (*CLAD*) which reflects exactly (bijectively) the structure of *TREE*: we afforded the status of taxon to all suprageneric nodes meeting the requirement of our 90 % threshold, and we denied it to all those which did not. This means that we did not take any subjective decision as to whether some nodes are 'more important' or 'more significant' than others but that our taxonomic conclusions were imposed by the data and only them. In the present work, we adopted as valid the species and almost all the genera recognised as such in the recent literature, although it is quite clear that, even in the recent years, different authors and different works implemented different species and genus concepts. In a few cases we erected or synonymised genera in order to comply with the requirement of holophyly. But the heart of our work was the suprageneric taxonomy. Based on the crucial distinction between taxonomic category and nomenclatural rank highlighted by Dubois (2005*b* and subsequent works up to Dubois *et al.* 2019), we consider that the hierarchical levels to which all taxa above the rank genus are referred (such as family, order or class) do not qualify as taxonomic categories (defined by biological, chronological or other criteria) but merely as nomenclatural ranks, the hierarchy of which only expresses the succession of nodes taxonomically recognised, i.e. the structure of the tree, irrespective of any phenetic criterion of amount of divergence or of geological age of cladogenesis. In other words, the names of all the ranks above the rank genus are purely arbitrary and fixed only by tradition and consensus but do not 'mean' anything regarding the characteristics of the taxa by themselves, but only refer to their cladistic relationships.

#### *4.1.3. Nomenclature*

We used a set of explicit Rules to attribute ranks and allocate nomina to taxa, following for this work the Nomenclatural Process involving three main steps (nomenclatural assignment and availability, taxonomic allocation, and nomenclatural validity and correctness of nomina) highlighted by Dubois (2005*b*: 380, 2011*a*, 2013) and Dubois *et al.* (2019). Regarding the nomenclatural assignment of ranks to taxa, which as we have seen above does not rely on biological, evolutionary or other criteria, so far, no explicit operational methodology of any kind has ever been proposed to fix these ranks in zootaxonomy, and we here propose one, the Ten Criteria Procedure (see 4.1.4). It is based on a series of ten explicit Criteria allowing to determine automatically (i.e., without subjective opinion or decision) at which level of the hierarchy, in any given branch of a tree, should the rank family be applied. The most important of these Criteria is the Upper Quartile Criterion [UQC], which relies on quantitative data on the usage of family nomina in the literature, not only in the recent one but during the whole history of scientific zoological taxonomy and nomenclature since 1758. Once the rank family has been so fixed, all the other ranks for all other taxa derive automatically from it, following a procedure that we describe in detail. The allocation of nomina to taxa then follows. For all nomina of the nominal-series for which the *International Code of Zoological Nomenclature* (Anonymous 1999, 2012) provides a complete set or Rules, namely those of the species- (SS), genus- (GS) and family-series (FS), i.e. from the rank species to the rank superfamily, we followed strictly the *Code*, as well as the decisions of the International Commission on Zoological Nomenclature whenever appropriate. For all nomina of the class-series (CS, including all ranks above superfamily), for which the *Code* only provides a few Rules concerning nomenclatural availability, we used the Duplostensional Nomenclatural System (DONS) described in detail by Dubois (2006*a*, 2015*c*, 2016, 2020*a*) and Dubois & Frétey (2020*a*). In order to be able to express unambiguously and bijectively the structure of *TREE*, we had to use 31 ranks, two in the species-series, two in the genus-series, 14 in the family-series and 11 in the class-series below the rank class.

### *4.1.4. The Ten Criteria Procedure*

The Ten Criteria Procedure is one of the main contributions of the present work to the theory and practice of zoological taxonomy and nomenclature. It consists in a set of ten Criteria aiming at reflecting bijectively a cladistic tree and allowing back and forth equivalence between them in any suprageneric zoological cladonomy. Among these ten Criteria, four have a general value and six apply specifically to the nomina of families. In both cases, the Criteria may rely only on nomenclatural Rules {N} or on both taxonomic and nomenclatural Criteria {TN}. Three-letter abbreviations are used below to designate these ten criteria, and one-letter abbreviations between square brackets are used in Appendix **A9.CLAD-1** for five of them. Let us remind here the definitions of these ten Criteria and their main consequences.

#### *4.1.4.1. General Criteria*

##### 4.1.4.1.1. [CNC]. Consistent Naming Criterion {TN}

"In any given cladonomy, all sister-branches resulting from nodes having a support value equal to or higher than a given *a priori* threshold must be recognised as distinct taxa, whereas no branch resulting from nodes having a support below this threshold should be so. However, for two sister-branches to be taxonomically recognised, one of them at least must include more than one supraspecific subtaxon (i.e., of rank genus or above)".

##### 4.1.4.1.2. [NPC]. Nomenclatural Precedence Criterion {N}

"In zoological nomenclature, precedence between family-series nomina is established through the same Rules as for species-series and genus-series nomina, i.e., according to the situation, publication priority, airesy, proedry, sozoidy or archoidy. In the class-series, according to the DONS criteria, it is established through sozonymy, or through priority, airesy or proedry among sozodiaphonyms, or through priority, airesy or proedry among distagmonyms."

##### 4.1.4.1.3. [CHC]. Consistent Hierarchy Criterion {N}

"In any given cladonomy, in one branch at least resulting from a node, subordinate and superordinate taxa should be attributed to immediately successive nomenclatural ranks in the taxonominal hierarchy, but some of these ranks may be lacking in its sister-branch(es)."

##### 4.1.4.1.4. [FPC]. Family-Series Precedence Criterion {N}

"In any given suprafamilial cladonomy, whenever the other Criteria allow it, the nominal-series allotment of the suprafamilial taxa should be made giving precedence to the FS over the CS, and allotment to the CS should start only when all the available FS ranks have been used (family-series saturation), at least in one branch of the ergotaxonomy."

*4.1.4.2. Criteria applying only or particularly to families*

4.1.4.2.1. [UQC], [Q]. Upper Quartile Criterion {TN}

"In any given cladonomy, any UQ-nomen (family-series nomen designating a taxon considered valid and having had a number of usages above the upper quartile of usages since 1758) must be maintained as valid at the nomenclatural rank family, irrespective whether it is also used at other superordinate or subordinate ranks."

This Criterion allowed to validate 34 family nomina in our work:

Order **Anura** (24): *Bombinatoridae*; *Brachycephalidae*; *Bufonidae*; *Centrolenidae*; *Dendrobatidae*; *Discoglossidae*; *Heleophrynidae*; *Hemiphractidae*; *Hemisotidae*; *Hylidae*; *Hyperoliidae*; *Leiopelmatidae*; *Leptodactylidae*; *Megophryidae* [Q+]; *Microhylidae*; *Myobatrachidae*; *Pelobatidae*; *Pelodytidae*; *Pipidae*; *Ranidae*; *Rhacophoridae*; *Rhinodermatidae*; *Rhinophrynidae*; *Sooglossidae*.

Order **Gymnophiona** (3): *Caeciliidae*; *Ichthyophiidae*; *Rhinatrematidae*.

Order **Urodela** (9): *Ambystomatidae*; *Amphiumidae*; *Cryptobranchidae* [Q+]; *Hynobiidae*; *Plethodontidae*; *Proteidae*; *Rhyacotritonidae* [Q+]; *Salamandridae*; *Sirenidae*.

4.1.4.2.2. [STC]. Sister-Taxa Criterion {TN}

"In any given cladonomy, parordinate taxa (i.e. taxa that are considered sister-taxa according to the cladistic hypothesis adopted) should always be attributed to the same nomenclatural rank".

Implementation of this Criterion in the three orders of extant amphibians provided the following two lists of 17 FS nomina that, being parordinate with FS nomina above the upper quartile for each order, must apply at least to a family (preceded below by the nomina of their sister-families between square brackets, followed by →):

Order **Anura** (16): [*Brachycephalidae* →] *Ceuthomantidae*; [*Bufonidae* →] *Odontophrynidae*; [*Centrolenidae* →] *Allophrynidae*; [*Dendrobatidae* →] *Aromobatidae*; [*Discoglossidae* →] *Alytidae*; [*Hemisotidae* →] *Brevicipitidae*; [*Hylidae* →] *Phyllomedusidae*; [*Hyperoliidae* →] *Arthroleptidae*; [*Leiopelmatidae* →] *Ascaphidae*; [*Leptodactylidae* →] *Leiuperidae*, *Paratelmatobiidae* and *Pseudopaludicolidae*; [*Microhylidae* →] *Phrynomeridae*; [*Myobatrachidae* →] *Calyptocephalellidae*; [*Rhinodermatidae* →] *Telmatobiidae*; [*Sooglossidae* →] *Nasikabatrachidae*.

Order **Gymnophiona** (1): [*Ichthyophiidae* →] *Uraeotyphlidae*.

4.1.4.2.3. [CPC], [P]. Conflict of Precedence Criterion {N}

"In any given cladonomy, whenever a taxon that could be cladistically subordinate to a UQ-nomen has nomenclatural precedence over it according to the Criterion [NPC], it should be raised to the rank family as parordinate to the UQ-nomen at stake."

Five taxa were raised at the rank family in order to be parordinate to UQ-families as their nomina had precedence over them (the latter are mentioned after them in the following list):

Order **Anura** (4): *Alytidae* (*Discoglossidae*); *Arthroleptidae* (*Hyperoliidae*); *Brevicipitidae* (*Hemisotidae*); *Telmatobiidae* (*Rhinatrematidae*).

Order **Urodela** (1): *Cryptobranchidae* (*Hynobiidae*).

4.1.4.2.4. [NRC], [N]. Non-Redundancy Criterion {N}

"In any given cladonomy, within a given nominal-series, redundant taxa, i.e., having the same intension and extension as their immediate superordinate or subordinate taxon, should be avoided if possible. If allowed by the data, they should be divided in two sister-taxa of the same rank (see Criterion [STC]). This Criterion does not apply automatically to taxa belonging to different nominal-series, if one of the ranks involved in the redundancy is one of the seven mandatory ranks (see text and

Criterion [MRC]). It applies to taxa of the rank family relatively to their just superordinate taxon, except in the situation where this rank corresponds hierarchically to an unresolved polytomy (see Criterion [NTC]).”

This Criterion allowed to validate 17 family nomina in our work.

Eleven families were validated for being parordinate of UQ-families (which are mentioned after them in the following list):

Order **Anura** (9): *Allophrynidae* (*Centrolenidae*); *Aromobatidae* (*Dendrobatidae*); *Ascaphidae* (*Leiopelmatidae*); *Calyptocephalellidae* (*Myobatrachidae*); *Ceuthomantidae* (*Brachycephalidae*); *Nasikabatrachidae* (*Sooglossidae*); *Odontophrynidae* (*Bufonidae*); *Phrynomeridae* (*Microhylidae*); *Phyllomedusidae* (*Hylidae*).

Order **Gymnophiona** (2): *Scolecomorphidae* (*Caeciliidae*); *Uraeotyphlidae* (*Ichthyophiidae*).

Three pairs of families were both validated by the [NRC]:

Order **Anura** (6): *Astrobatrachidae* and *Nyctibatrachidae*; *Cacosternidae* and *Pyxicephalidae*; *Dicroglossidae* and *Occidozygidae*.

4.1.4.2.5. [MRC], [M]. Mandatory Rank Criterion {N}

“In any given cladonomy, all zoological species recognised as valid should be referred formally (at least provisionally) to one taxon of the following mandatory taxonominal ranks: genus, family, order, class, phylum and kingdom.”

This Criterion allowed to validate 17 family nomina in our work.

Order **Anura** (17): *Cacosternidae*; *Ceratobatrachidae*; *Ceratophryidae*; *Conrauidae*; *Cycloramphidae*; *Dicroglossidae*; *Ericabatrachidae*; *Micrixalidae*; *Nyctibatrachidae*; *Occidozygidae*; *Odontobatrachidae*; *Petropedetidae*; *Phrynobatrachidae*; *Ptychadenidae*; *Pyxicephalidae*; *Ranixalidae*; *Scaphiopodidae*.

4.1.4.2.6. [NTC], [T]. Nomenclatural Thrift Criterion. {N}

“In any given cladonomy, whenever according to the data the rank family should be granted to several taxa forming together an unresolved polytomy (more than two sister-taxa), a single family should be provisionally recognised and the polytomy should be downgraded to the rank subfamily.”

This Criterion applies to four family nomina in our work, two of which are UQ-nomina.

Order **Anura** (4): *Ceratobatrachidae*; *Cycloramphidae*; *Hemiphractidae* [Q]; *Leptodactylidae* [Q].

### *4.1.5. Comments on the concept of ‘stability’*

It is easy to predict that the new ideas, concepts and terms, as well as the new classification and nomenclature of amphibians, presented herein, will meet resistance in the communities of taxonomists and batrachologists, and that a major criticism of these proposals will be that they threaten ‘stability’ in its various forms (of concepts and terms, of the *Code*, of classification and nomenclature of taxa).

The concept of ‘stability’, often expressed by the unclear terms of ‘usage’ or ‘dominant usage’, is a complex one, that can be considered from different points of view (Dubois 2005*a*: 383–386, 2010*c*). Let us first set aside the (important) fact that many recent statements about ‘stability’ and ‘usage’ are clearly misleading, being based only on considerations concerning very short recent periods or limited to a small number of authors, a situation well exemplified by the conflict **Urodela-Caudata** (see Dubois & Raffaëlli 2012: 109). Much more importantly, stability by itself is not a scientific aim, but a problem of communication and information. Science is not a dogma or a revealed truth that should be maintained unchanged for decades against all evidence. It is a permanent process of change, of production, refutation and replacement of hypotheses that result in an improvement of our ideas and knowledge. This is particularly true in taxonomy, a domain in which it is quite clear that “stability is ignorance” (Gaffney 1979: 103). Bremer *et al.* (1990) aptly stated: “Taxonomists should pursue their scientific venture and stop worrying about instability in classification. Taxonomy is not a service function for labelling organisms, but a science of its own, dealing with variation, relationships and phylogeny.

Other biologists need to keep themselves informed, and should realize that removal of artificial groups and improvements in classification are desirable". The solution to many so-called problems of stability and usage lies in an improvement of communication systems allowing non-taxonomists to keep updated with taxonomic changes, and also with disagreements between taxonomists, which are normal and healthy in a lively scientific domain—rather than relying on so-called 'authoritative' lists and databases which only reflect the point of views of individuals or groups (see Raposo *et al.* 2017).

More largely, regarding our conceptual and terminological proposals, we think that they should not be rejected blindly or ignored simply on the ground that they are new or 'too complex', but submitted to examination and scientifically argumented agreement or rejection.

As for the attitude of some colleagues, who claim to be interested in 'biology' and 'evolution' but not in trivial matters like nomenclature, and consider that the latter should only be dealt with through tradition, consensus and 'common sense', and do not deserve formal Rules (e.g., regarding the nomenclature of higher taxa), they clearly show their ignorance in this domain and they should rather keep silent about these matters, instead of contributing to the growth of nomenclatural chaos that has been considerable in the recent decades (Dubois 2017*e*). It is quite clear that, in such matters, these three 'methods' do not work. Simple intellectual honesty requires to recognise that, currently, because of the absence of universal Rules for higher nomenclature, no one can know which taxon is designated in any scientific or non-scientific paper by 'controversial' nomina like **Insecta**, **Amphibia**, **Reptilia**, **Aves** or **Mammalia**, originally used in Linnaeus (1758*a*), to mention just a few among many. Who can pretend that this is not harmful for communication about biodiversity, both within the scientific community and between the latter and society as a whole? We just hope that, in the longer run, the necessary improvements in taxonomic and nomenclatural methodology will progressively be implemented, in the frame of permanently changing taxonomic paradigms and of growing information on the relationships between organisms.

## 4.2. Findings and proposals

The consistent application of the methodology outlined above led us to recognise 575 valid generic and 607 valid suprageneric taxa of extant lissamphibians below class with their valid nomina in our cladonomy. The distribution of these taxa among the generic and suprageneric ranks used here is provided in Table **T14.NUM**, which also gives the numbers of new nomina we had to establish to express this taxonomy. We allocated all the taxa and nomina of extant amphibians (subclass **Lissamphibia** of the class **Amphibia**) recognised as valid here to three orders (**Anura**, **Gymnophiona** and **Urodela**), the mutual phylogenetic relationships of which are not resolved. We also provide indications on the taxonomic placement of all the nomina proposed for all-fossil taxa of **Lissamphibia** in our classification, but only based on the current literature, without critical reassessment or validation, as our cladonomy of the extant taxa is almost exclusively based on molecular data, except for the taxa for which no molecular analysis is currently available.

In *CLAD*, we use 9 class-series ranks below order and 14 family-series ranks, i.e. 23 ranks between order and genus, for a group of about 8200 known species. Of course, the complete taxonomy of extant amphibians described in *CLAD* is much too complex and detailed to be mentioned in most publications dealing with the amphibians. In most such works, it will be useful to cite only the nomina of the main ranks of this taxonomy, i.e. those which are usually mentioned in standard scientific publications: the class (**Amphibia**), the three orders (**Anura**, **Gymnophiona**, **Urodela**), the 69 families and the 575 genera, and additionally in a more limited number of works the subclass (**Lissamphibia**), the 18 superfamilies and the 87 subfamilies. Why, then, did we deem useful to provide this expanded hierarchy and these numerous nomina, including many new ones? As explained above, this is in order to comply with the requirement of having a ***bijective taxonomy***, reflecting accurately the structure of the tree on which it is based. Whereas the ranks, particularly those of family and subfamily, used in traditional works, are fully arbitrary and subjective, the 'same' ranks used in *CLAD* result from a precise and repeatable rationale and methodology, detailed throughout our work, which could be used independently by any other taxonomists in the world and which would produce the exactly same results as ours if based on the same data.

The number of ranks used here is much higher than in most ergotaxonomies currently published for taxonomic groups of similar, or even much larger, size. Even classifications based on giant trees with thousands of species make rarely use of more than 20–30 ranks, which means that only such low numbers of nodes separating any terminal taxa from the root are taxonomically recognised. This is not because the tree contains only such numbers of well-supported nodes, but because most authors limit voluntarily the number of ranks to such low numbers for 'practical' reasons of parsimony and 'manageability' of ergotaxonomies. But this is at the expense of the clarity and thoroughness of the phylogenetic information provided by the ergotaxonomy, as the choices of the ranks to be accepted are arbitrary and such classifications reflect only partially the phylogenetic trees on which they are based. If our methodology was adopted in other taxonomic groups, the number of ranks would increase considerably in the most species-rich ones, but naming these ranks would not raise particular problems: the system of nomination of ranks proposed by Dubois (2006*a*: 206–225) uses 19 key ranks and 10 subsidiary ranks, thus allowing to distinguish 209 ranks, and this number could be increased easily if necessary by adding key ranks.

As our purpose here regarding the taxonomy of extant amphibians was limited to three precise aims (using explicit concepts and Criteria to produce a phylogenetic hypothesis, a taxonomy and a nomenclature of this group), we abstained from drawing conclusions or expressing opinions regarding evolutionary, adaptive, biological or ecological, bio- or phylogeographical questions concerning the evolution of amphibians, but our taxonomic and nomenclatural results, based on a consistent methodology, will allow such discussions much better than all the previous taxonomies of amphibians which followed no consistent and explicit rationale for the allocation of ranks and nomina to taxa and were largely of phenetic inspiration, despite their claim to follow a 'phylogenetic' approach.

Our repeatable methodology provides objective and repeatable Criteria allowing to fix the rank family in any given zootaxonomic group. This is particularly useful, because taxa attributed to this rank are very often used in the scientific literature for large scale comparisons and analyses, particularly in evolutionary biology, bio- and phylogeography, ecology and conservation biology. Let us give here just two examples.

{δ1} Here we propose a treatment of the Australo-Papuan *Pelodryadinae* and the Central and South American *Phyllomedusinae* as two sister-subfamilies of a single family *Phyllomedusidae*, sister to the family *Hylidae* and then both families as the two sister-families of a superfamily *Hyloidea*, itself sister to four other subfamilies, etc. This is much more informative in evolutionary and phylogeographic terms than having the *Hylidae*, *Pelodryadidae* and *Phyllomedusidae* as three families 'sister' to 11 other families (Bossuyt & Roelants 2009), or to 49 families and 3 superfamilies placed at the same level <*ASW* 2020*a*>, or taxonomically overlumped by recognition of a single family *Hylidae* for these three groups (Faivovich *et al.* 2005; Frost *et al.* 2006; Blackburn & Wake 2011; Pyron & Wiens 2011; Borkin & Litvinchuk 2014; Hime *et al.* 2020). In all these taxonomic schemes, the 'ranks' carry no clear phenetic or cladistic information, or more exactly no information at all, thus hindering any relevant phylogeographic or evolutionary considerations.

{δ2} An opposite example, oversplit at the taxonomic level family, concerns three groups of salamanders, which have been considered by most recent authors as three families: the holarctic *Salamandridae*, the nearctic *Ambystomatidae* and the nearctic *Dicamptodontidae*. They were considered as three families parordinate to seven others by Blackburn & Wake (2011), Pyron & Wiens (2011), Borkin & Litvinchuk (2014), Hime *et al.* (2020) and <*ASW* 2020*a*>, as three families parordinate to four other families by Zhang & Wake (2009), and as three families grouped in a superfamily in Vieites *et al.* (2009). Such arrangements lead to an overweighting of the 'distances' between branches, for example in biogeographic analyses. Frost *et al.* (2006) recognised two families, *Salamandridae* and *Ambystomatidae*, the latter with two subfamilies *Ambystomatinae* and *Dicamptodontinae*. For reasons explained above we here recognise the same two families as these authors, but without subfamilies in the *Ambystomatidae* which only include two extant sister-genera.

The main differences between our approach and the traditional (even recent) ones, which contrary to the latter produce in an objective manner repeatable results, derive from the following aspects of our methodology: {ε1} the strict respect of an *a priori* threshold (90 %) as the only basis for the decision to recognise, or not, a node of *TREE* as a formal taxon bearing a formal nomen; {ε2} the strict respect of the requirement that parordinate taxa (sister-branches in *TREE*) be always assigned to the same nominal-series and attributed to the same rank in the latter, all other superordinate and subordinate ranks in the same branch being automatically consistent with it; {ε3} the strict respect of an explicit set of Criteria for the fixation of the rank family in any given branch of *TREE*, these Criteria relying mainly, but not only, on usage, but the latter being precisely defined and quantified over the whole history of taxonomic literature, not based on a vague 'impression' and relying only on recent literature; {ε4} the strict respect of the Rules of the *Code* concerning availability, allocation and validity for SS, GS and FS nomina, and of the Criteria of DONS for CS nomina.

Despite the numerous clarifications brought by our work on the phylogeny, taxonomy and nomenclature of extant amphibians, a high number of questions remain unanswered and will require additional works, as stressed below.

## 4.3. What remains to be done

### *4.3.1. Regarding the analysis*

#### *4.3.1.1. Taxonomic sampling*

Our cladonomy is based on molecular data obtained from 4060 specimens which are considered to belong in 4060 distinct biological species of extant amphibians. This represents 49.3 % of the 8235 species recognised more or less consensually by the community of taxonomists worldwide on 31 October 2020 <*AWb* 2020>. Although this proportion is high, it does not allow to pretend that our analysis is a complete one concerning the extant amphibian species of the world, for two reasons: {ζ1} the rate of descriptions of new species published each year in the last decades has been very high (Tapley *et al.* 2018): 140 species were described each year from 2000 (5206 species) to 2020 (8146), and from 2014 to 2020 this mean number raised to 151; therefore we are far from having collected, studied, distinguished, taxonomically recognised and named all the amphibian species still present on earth (this point is discussed in more detail below); {ζ2} our analysis bears mainly on the suprageneric relationships among extant amphibians, and, for reasons explained above, except in a few cases we did not challenge the 'accepted' generic taxonomy of these animals, although it is clearly heterogeneous as it relies on different genus concepts in different higher taxonomic groups of amphibians and in different works. However, if we accept this situation as a provisional starting point, our suprageneric analysis would be fully reliable, or at least acceptable, only if our sample of sequenced species included at least one species unambiguously referred to every genera recognised in this 'consensual' generic taxonomy. This is far from being the case. In this work we recognise 579 valid genera of extant amphibians, but 52 (9.0 %) of them are not represented in our molecular tree. For the taxonomic placement of these 'missing' genera in *CLAD*, except in a few cases where molecular data on some of these genera were published after 2014, we could rely only on the available morphological information on these taxa, which is often very scanty and little reliable. Therefore, to increase the quality of our taxonomy, new collections will be required. The last column of Appendix **A15.MIS** lists the 52 genera which are not represented at all in *TREE* and for which specimens and sequences will have to be incorporated in our matrix (if published after 2014) or obtained from freshly collected specimens, or possibly in some cases from preserved museum collections.

A good sampling at species level is also indispensable for a good resolution of generic taxonomy. It is not appropriate to take taxonomic decisions on the basis of very small molecular samples of the species of genera which according to morphological and other non-molecular data are considered to include five, ten or many more species. As long as only some of these species are included in the analysis, the possibility exists that just one or a few of them are wrongly allocated to genera, which does not result in invalidating the latter (see in this respect Delorme *et al.* 2004). Particularly irrelevant is the decision to synonymise two genera on the basis of only one species of both genera (!) or even one species of one genus *vs.* two of the other one, as easily shown by a few examples in amphibians.

The genus *Nidirana* Dubois, 1992, well supported by several morphological and behavioural synapomorphies, was synonymised by Frost *et al.* (2006) with *Babina* Thompson, 1912 based on molecular data on two species of *Nidirana* only and none of *Babina*, but was revalidated using a molecular sample that included all but one species of the two genera (Lyu *et al.* 2017). The generic and subgeneric classification based on an extensive morphological work on the *Hylarana sensu lato* group (Dubois 1987*b*, 1992) was washed away by Frost *et al.* (2006) according to the molecular data on 11 species of the group (about 10 % of the known species), but many of these taxa were revalidated and new genera added by a molecular study including more than 70 % of the known species (Oliver *et al.* 2015). The members of the HEMIPHRACTIDAE based on strong morphological evidence (Duellman 1970) were distributed in three families (Frost *et al.* 2006) but then several studies (Guayasamin *et al.* 2008; Blackburn & Duellman 2013; Castroviejo-Fischer *et al.* 2015) recovered this branch as holophyletic.

Some such unwarranted decisions based on insufficient sampling may have far-reaching consequences concerning our understanding of evolution and biogeography. The *Chiromantis-Chirixalus* case is particularly striking in this respect. Frost *et al.* (2006) showed that inclusion by Liem (1970: 95) of the species *Ixalus vittatus* Boulenger, 1887 in the genus *Chirixalus* Boulenger, 1893 rendered it paraphyletic, and they removed it from this genus to place it in their new genus *Feihyla*, which was justified on the basis of their data and genus concept, and supported by morphological and biological data (reproductive mode). But then they went one step further and placed the Asian genus *Chirixalus* in the synonymy of the African genus *Chiromantis* Peters, 1854 on the basis of their molecular data on only two species of the former (including its nucleospecies *Chirixalus doriae* Boulenger, 1893) *vs*. a single one of the latter (its nucleospecies *Chiromantis xerampelina* Peters, 1854), although both genera were then considered to include other species. By so doing they created out of nothing the only amphibian genus whose distribution straddled tropical Africa and tropical South-East Asia. Chen *et al.* (2020), using two African and two Asian species, which their analysis showed to be well-supported sister-branches, re-established the genus *Chirixalus* as distinct from *Chiromantis*. This decision is reinforced in *TREE*, based on three African and two Asian species. Admittedly, these two genera still appear as sister-taxa and constitute together our clan *Chirixalites*, which shares with other suprageneric amphibian taxa an African-Asian distribution, but this is quite different from placing them in the same genus, given the key role given to the rank genus in many biogeographic and evolutionary analyses.

#### *4.3.1.2. Nomenclatural sampling*

The situation is even worse if the nomenclatural aspect of our sampling is concerned. In order to have a fully reliable nomenclature, the taxonomic allocation of ***all*** the available extant amphibian generic nomina, not only of those considered valid, should be ascertained, as the subsequent finding that a synonym was wrongly allocated may challenge the validity of another generic nomen. Therefore, the nomenclatural status of all the taxonomic genera recognised in *CLAD* on the basis of the structure of *TREE* depends on a thorough allocation of all these nomina, and the only strict way to reach this aim is to rely on sequences obtained from specimens that can be allocated without doubt to the nucleospecies (type species) of all these generic nomina. The best situation in this respect is when these sequences were obtained from the holophoronts (holotypes), lectophoronts (lectotypes) or neophoronts (neotypes) of these species, or rarely from symphoronts (syntypes) of the latter (which should then be designated as lectophoronts), but this is a rare situation, which applies only to species freshly collected and described as new in the recent years, or in exceptional cases to sequences which could be obtained from onymophoronts kept in collections (e.g. Rancilhac *et al.* 2020). The situation is less good, but still acceptable, when the specimen used for *TREE* had been collected in the original onymotope of the species, or when it was identified at species level by a competent taxonomist, well acquainted with the taxonomic group concerned. Although this is probably the case for a majority of species, it is not always true. Doubts are allowed when a publication reports on sequences stated to have been obtained from species that have been very rarely collected and reported above in the literature and for which no comments are present in the publication showing that the authors were conscious of this fact. In some cases, it may be wondered whether the identification was accurate, or based on a superficial work relying for example on photos in a field guide, on short descriptions or merely on identification keys or on labels on specimens in collections. Examples of such cases were provided by Dubois (2004*a*) concerning amphibians from Nepal and many others could be given.

Therefore, in case of doubt, especially when the position of a species in a tree appears 'strange' in the light of previous morphological or other data, care should always be taken for a competent taxonomist to re-examine the voucher from which the sequences were obtained. But, for this to be possible, this specimen should have been fixed, kept in a permanent collection and its collection location and number should have been published. Although this is more and more the case in recent publications, it has not always been so and this is still not true in some cases. In Jones & Weisrock (2018), numerous species of *Desmognathus* were misidentified in the field, with no voucher information. This was noted by Pyron *et al.* (2020). Even on *Genbank*, not all sequences are connected with a number of voucher. When a return to the vouchers is indeed made, it is not exceptional to disclose wrong identifications, which may have important consequences on the nomenclatural interpretation of a molecular tree, even if the results of the molecular, cladistic and taxonomic analyses are correct: after all, a molecular cladogram is just a tree of sequences, not of taxa. The best example is in Pyron & Wiens (2011), who included numerous misidentified *Genbank* vouchers in their analysis, discussed by Frost <in *ASW* 2020*a*> and Blotto *et al.* (2013). Frost <in *ASW* 2020*a*> wrote in 2011: "Unfortunately, the study includes Genbank sequences that were previously noted to be misidentified. For examples that became evident due to the surprising placement of terminals in their tree, *Poyntonophrynus vertebralis* sequences included by Pyron & Wiens were reidentified as *Amietophrynus maculatus* by Cunningham and Cherry (2004); sequences associated with *Yunganastes pluvicanorus* in the Frost *et al.* (2006) study and reused by Pyron and Wiens were reidentifed as *Pristimantis pharangobates* by Padial (2007) [*presumably Padial et al. 2007 (AD's comment)*]; the 12S and 16S sequences of *Amolops daorum* were reidentified as *Odorrana hmongorum* by Stuart *et al.* (2010)." Most of these errors were fixed in Jetz & Pyron (2018). Other cases of wrong taxonomic allocation of sequences used in phylogenetic analyses were pointed out by Bridge *et al.* (2003) and Vilgalys (2003). For all these reasons, in Appendices **A9.CLAD-1** and **A5.NGS**, we provided information on the quality and reliability of the specific identification of the specimens on which *TREE* is based by referring them to the five following categories regarding their genus-series nomina:

* The nominal genus is represented in *TREE* by specimens referred to its nucleospecies or to an isonym of the latter: *Rana**.

[1] The nominal genus is represented in *TREE* by specimens referred to a doxisonym of its nucleospecies: *Pipa*[1].

[2] The nominal genus is represented in *TREE* by specimens referred to the nucleospecies of a generic nomen being its doxisonym: *Andrias*[2].

[3] The nominal genus is represented in *TREE* but only by specimens referred to the species that include neither its nucleospecies, nor a doxisonym of the latter, nor the nucleospecies of a doxisonym of the generic nomen at stake: *Latonia*[3].

° The nominal genus is not represented at all in *TREE*: *Dischidodactylus*°. (This amounts to the situation of insufficient taxonomic sampling mentioned above).

The reliability of the nomen allocated to a genus in *CLAD* decreases from the first to the last of these five categories. In order to obtain a fully reliable version of *CLAD*, it would be necessary that all available generic nomina nomina belong to the first category. This is of course impossible, but in the coming years the community of amphibian taxonomists should do its best to upgrade the quality of the vouchers on which all the sequences are based. Our Appendix **A5.NGS** establishes the existence in the literature of 1639 available generic nomina of lissamphibians, among which only 770 (47.0 %) are used as valid in *CLAD* including 575 (74.7 % o the valid ones) for extant genera. Appendix **A15.MIS** provides a complete list of the latter, among which the numbers and proportions of those referred to the five categories above are respectively, in the order of their presentation above, of 437 (76.0 %), 45 (7.8 %), 17 (3.0 %), 24 (4.2 %) and 52 (9.0 %). It is quite clear that we are still far from an 'ideal' situation where we would have 100 % of the first category. This suggests that, although in the recent decades some efforts have been made to clarify and stabilise (sometimes through designation and sequencing of lectophoronts or neophoronts) the nomenclatural status of the generic nomina considered valid, this trend should be consolidated and amplified if we want to strive for a reliable and robust generic nomenclature of amphibians.

The situation is worse if we include in this count the 869 available nomina of extant genera (not listed in Appendix **A15.MIS** but appearing in Appendices **A5.NGS** and **A9.CLAD-1**) currently considered invalid synonyms, which include 731 (84.1 %) whose onomatophoronts are present and 138 (15.9 %) whose onomatophoronts are missing. Then the proportions for the total of 1444 nomina are respectively of 1168 (80.9 %) whose onomatophoronts are present and 276 (19.1 %) whose onomatophoronts are missing. As long as these nomina are considered invalid junior (or ***juniorised***) synonyms, this is not a big problem, but it might become so whenever new data or new taxonomic interpretations of the current data lead to the dismantlement of some genera: then it is necessary to know reliably to which taxa do apply such synonyms, in order to avoid the useless establishment of invalid junior synonyms, thus contributing to nomenclatural instability and to avoidable increase of the synonymy load (Table **T15.SYN**). For these reasons, every time the opportunity appears, through study of ancient onymophoronts or through collection of fresh specimens (especially from onymotopes of available nomina), to reduce the number of valid and invalid nomina in the last four categories above, it should be seized.

*4.3.1.3. Tomoidy*

As first clearly stated by Hennig (1950, 1966), the process of evolution can be structurally described (i.e., irrespective of the processes at work), e.g. through a cladogram or a phylogenetic tree, as a succession of cladogenetic events, i.e. of dichotomies or divisions of one lineage or branch in two. These successive dichotomies are traditionally expressed, in taxonomies, by a hierarchical pattern, the most basal dichotomies being given the highest taxonominal ranks and the most terminal ones the lowest ranks (usually species or subspecies). However, most real trees produced by phylogeneticists, obtained either by classical analysis of morphological traits or by sequencing of nucleic acids, are not composed only of dichotomies but of three main patterns, here referred to as three categories of ***tomoidy***: {η1} the pattern of ***dichotomy***, which corresponds to the classical case of splitting of a branch in two, is usually interpreted as expressing a **resolved** cladogenetic relationship; {η2} the pattern of ***polytomy***, which expresses an unresolved relationship (a 'comb', instead of a 'scale' of dichotomies), more than two branches resulting from the 'synchronous' splitting of a single branch; {η3} the third pattern, for which we propose the new term of ***achotomy***, which describes an undivided branch, at least at a given level of a tree (or of the hierarchy expressing it), if not at a more terminal (in a tree) or lower one (in a hierarchy).

The situation of dichotomy is usually considered of clear interpretation, as reflecting a 'real' evolutionary event of cladogenesis. Even if the methodology of construction of the tree of reference is excellent (which is not always the case), this statement is certainly often misleading, given the gigantic incompleteness of the taxonomic record, not only regarding fossil species but also living ones (see below), but there is no way to avoid this difficulty except by increasing our effort of exploration of the planet and of collection of specimens (see also below). But the problems are even worse in the other two categories of tomoidy.

The Hennigian statement that evolution consists only in dichotomies is clearly a methodological 'trick' allowing to simplify, or even simply make possible, cladistic analyses following Hennig's (1950, 1966) proposals, but there is no theoretical reason to dismiss the possibility of real polytomies, e.g. whenever a geological catastrophic event results in the synchronous splitting of a single population into several. Even without needing to have recourse to such a gratuitous hypothesis, whatever the methods used (morphological, cytogenetic, molecular, etc.), it may be difficult to find apomorphies allowing to reconstruct the chronology of several dichotomous events having occurred in a short (in geological terms) period of time. This is true even using molecular markers, or cytogenetic, behavioural, ecophysiological or other biological characters having usually a quicker evolutionary rate than most morphological ones. In such cases, especially when few terminal taxa (species) are at stake, we may have no way to 'resolve' the polytomy, and the latter must be accepted as a final result. But in other cases, the polytomy may be resolved through an increase of the taxonomic sampling or of the number of genes sequenced. In amphibians, the following examples of such resolutions of polytomies through an increase of the taxonomic or molecular coverage illustrate this possibility. On the whole, it is reasonable to consider that a high number of unresolved polytomies in a tree reflects more the defects of our analyses than the existence of genuine polytomies in the evolution of a group. In the frame of a bijective taxonomy reflecting all the nodes of a tree, the progressive resolution of most of these polytomies will result automatically in an increase of the dichotomies and therefore of the number of suprageneric taxa in the group under study. The simplest example of this situation is that of the three orders of the subclass **Lissamphibia** discussed above: as long as the trichotomy is not resolved, we need only three taxa/nomina of rank order (**Anura**, **Gymnophiona** and **Urodela**) to account for the cladonomy, but as soon as a dichotomy between two of these orders is supported we will need for nomina and an additional rank, superorder (see above and Dubois 2015*c*: 108). As we will see below, even without an increase in the numbers of species and genera recognised by taxonomists, this is the general trend that what can be expected from an improvement of our cladistic analyses—and this effect will be increased by the expectable increase in the numbers of species and genera taxonomically recognised.

However, an opposite effect may be expected from the resolution of some polytomies: those which, beside one or several dichotomies and polytomies, involve more than one achotomy. Among the 214 achotomies taxonomically recognised in *CLAD* (179 in **Anura**, 29 in **Urodela** and 6 in **Gymnophiona**), only 100, i.e. 46.7 % (respectively 76, 18 and 6, i.e. 35.5, 8.4 and 2.8 %) are involved isolately in polytomies, whereas 114 (respectively 103, 11 and 0) belong in polytomies involving more than one achotomy (Table **T13.NOD**). The latter branches may appear so only because of insufficient taxonomic or genetic sampling, but may be united as a few dichotomies with better resolution. Depending on the cladistic relationships, the result might then lead to a reduction of the number of suprageneric taxa. Therefore, although it is impossible to model and predict in detail the future evolution of the number of suprageneric taxa/nomina in **Lissamphibia**, on the whole this number should increase rather than decrease, and, for the taxonomists who will adopt a bijective cladonomy, most of the new nomina proposed here will stand.

Table **T13.NOD** analyses the situation regarding tomoidy in the three orders of extant amphibians and in ten ranks or series of ranks which provide a partition in 10 groups of the 25 suprageneric ranks of extant lissamphibians below class used in *CLAD*. This table shows that the mean 'quality' of the resolution of the nodes of the tree (percentage of dichotomies among the 393 robust nodes of *TREE*) is of 70.7 %, but is much better in the caecilians (90.9 %) than in the salamanders (77.4 %) and then than in frogs (68.2 %). If taxa, including those based on achotomies, and not only nodes, are considered, the proportions of dichotomies drop to 45.8 % for all extant lisamphibians, and respectively of 71.4 % for caecilians, 52.7 % for salamanders and 43.1 % of 'well supported' taxa based on 'well resolved' dichotomies. These data suggest that we are still far from having a 'fully resolved' phylogeny of extant lissamphibians, even if limited to the incomplete subsample of the species that have so far been collected and taxonomically recognised.

#### *4.3.1.4. Cladistic methodology*

Studies such as those of Siu-Ting *et al.* (2019) and Hime *et al.* (2020) show the great promise that genome-scale phylogenetics has for resolving deep and intransigent branches in the Tree of Life. Concomitantly, they illustrate the dangers that can befall studies based on only a few loci, or limited taxon sampling. Gene duplication as well as incomplete lineage sorting are well-known processes via which the 'true' species tree (if such a thing exists) may not match individual gene trees (Edwards 2009). But broad sampling of the genome, careful assessment of orthology, and accounting for processes such as gene-tree error can resolve these disagreements in favor of a robust and strongly supported topology.

We must also keep in mind the mounting evidence for the general importance of the third major process driving genealogical discordance, that of reticulation between lineages. This may happen both at deep timescales (Burbrink & Gehara 2018), and particularly among recently diverged lineages (Edwards *et al.* 2016). These may seriously affect both our understanding of species boundaries (and the integrity of their identity as distinct units), as well as relationships among species. For many parts of the Tree of Life, representing phylogenetic relationships as a bifurcating tree may not be accurate, but instead as a reticulating network showing gene-flow across lineages through time (see Pyron *et al.* 2020).

### *4.3.2. Regarding the taxonomic completeness*

> La culture ce n'est pas avoir le cerveau farci de dates, de noms ou de chiffres, c'est la qualité du jugement, l'exigence logique, l'appétit de la preuve, la notion de la complexité des choses et de l'arduité des problèmes. C'est l'habitude du doute, le discernement dans la méfiance, la modestie d'opinion, la patience d'ignorer, la certitude qu'on n'a jamais tout le vrai en partage; c'est avoir l'esprit ferme sans l'avoir rigide, c'est être armé contre le flou et aussi contre la fausse précision, c'est refuser tous les fanatismes et jusqu'à ceux qui s'autorisent de la raison; c'est suspecter les dogmatismes officiels mais sans profit pour les charlatans, c'est révérer le génie mais sans en faire une idole, c'est toujours préférer ce qui est à ce qu'on préférerait qui fût.
>
> [Culture does not consist in having your brain stuffed with dates, names or numbers but in the quality of judgement, logical stringency, craving for evidence, the notion that things are complex and problems arduous. It means being used to doubting, discerning in mistrust, humble in one's opinions, patient in ignorance, and certain that not all the truth has ever been bestowed upon us. It means being firm in mind but not rigid, and being armed against vagueness as well as false precision. It means refusing all kinds of fanaticism, including those grounded upon reason, and suspecting all forms of official dogmatism, yet without profit for the charlatans. It means revering genius but without making an idol of it, and always prefering what is to what one would prefer it were.]
>
> Jean Rostand 1963: 47

*4.3.2.1. Introduction*

So far, we have concentrated our attention, results and recommendations, on the construction of a suprageneric cladonomy of all the known species of amphibians and on suggestions for improving these results. But this aim is of limited scope, for a simple reason: we are still far from having collected all the species of amphibians of our planet, perhaps not even half of them. The lines that follow derive largely from three papers that have not drawn attention from the community of batrachologists (Dubois 2003, 2008*e*, 2009*b*).

We have now fully entered the ***century of extinctions*** (Dubois 2003). In the coming decades, the order of magnitude of species extinctions on this planet, which qualifies as the ***sixth mass extinction*** (Wilson 1988), will be much higher than during the whole history of mankind. Although efforts are currently made to 'conserve' species, they have and will have little effect on the main cause of extinctions for many groups of organisms, namely the destruction, or major modification, of habitats and ecosystems, especially in tropical regions. As noted by Hoffmann *et al.* (2010: 1509), "conservation responses will need to be substantially scaled up to combat the extinction crisis", and in this sentence, 'would need' would have been more appropriate than 'will need'. The scenarios that can be built, through duly considering the data and actions of 'conservation biology', make it quite doubtless that "biodiversity will continue to decline over the 21st century" (Pereira *et al.*, 2010: 1496). This statement is certainly more realistic than loud announcements like that of the '2010 Biodiversity Target' (Anonymous 2011). In April 2002, the Parties of the Convention on Biological Diversity (CBD) "committed themselves to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level as a contribution to poverty alleviation and to the benefit of all life on Earth". Although this target was not reached, which was quite predictable indeed, no perceptible change in the way of working of such corporates is evident. In fact, there is little doubt that millions of species will become extinct before the end of this century, whereas our taxonomic knowledge of most of them is terribly insufficient. This will have irreversible consequences on the incompleteness of our knowledge of biodiversity and evolution on earth: in contrast with regressions of populations, which, even if very drastic, would, at least theoretically, be liable to be reversed if the aggressions of our civilisation on the biosphere were reduced or disappeared, extinctions of species are definitive and 'without consolation'. The combination of this ***taxonomic impediment*** (Anonymous 1994) and its consequence the ***taxonomic gap*** (Dubois 2010*c*) with the ***biodiversity crisis*** (Wilson 1985) qualifies as a new paradigm for biology (Dubois 2007*a*: 27), the ***taxonomic urgency*** (Dubois 2010*c*), but the current ***taxonomic crisis*** (Dubois 2003, 2010*c*; Wheeler 2004; Wheeler *et al.* 2004) will make it difficult, if not fully impossible, for the international scientific community to answer adequately this challenge.

It may seem strange that, until now, the international community of biologists did not elaborate any action program for this century that would take the realistic prospective of a continuation of biodiversity decline into account, just as if ignoring these scenarios of extinction would be enough to avoid them. Against all evidence, most biologists interested in biodiversity 'do as if' the actions undertaken or proposed for limiting biodiversity losses were likely to succeed in conserving most species. Such a 'denial of reality' resembles a 'magic' attitude based on the idea that 'mass extinctions cannot occur because this would be too sad and dreadful'. This has little to do with a scientific attitude, for which, as Rostand's citation above reminds, it is always better to prefer "what is to what one would prefer it were".

Today, it would still be possible, by investing considerable manpower and budgets, to reduce drastically the taxonomic impediment, but this will be impossible in a few decades, when half or more of the species currently living on earth are extinct. This urgency has not yet been identified as such by most scientists, including biologists, and has not been included among the priorities recognised by academic institutions, governmental and international research programs. Until this is done, it will be too late, at least for a large proportion of the 'non-vertebrate' or 'lower vertebrate' species of our planet. This loss will have considerable consequences which are impossible to predict today, in many domains including ecology, forestry, agriculture, fisheries, economy, ethics and aesthetics, including human health. It will also result in a huge and definitive loss of information on the diversity and history of organisms on our planet, which comparative and evolutionary biologists will miss forever (see Dubois 2009*d*).

Amphibians are particularly exemplary in this respect. Although the number of known species of this group has more than doubled in a few decades, we have probably not yet discovered half of the living, or recently extinct, species. More than 30 % of the total number of described amphibian species of the planet are threatened with extinction and 30 % are data deficient (Stuart *et al.* 2004, 2008). Threats on the unknown species are impossible to estimate. However, the size of the group remains ‘manageable’, and these rather large animals can be efficiently discovered and collected by competent field taxonomists. This peculiar situation could allow for the possibility to develop in the coming decades two different projects regarding this group, which may be called ***exhaustive taxonomy*** and ***preventive taxonomy***.

*4.3.2.2. Exhaustive taxonomy*

At any given time of the history of our planet, each taxonomic group has been represented by a certain number of species. It would theoretically be possible to make a complete list of these species, which could be called an ***exhaustive taxonomy*** of the group at stake at a given date. However, no exhaustive taxonomy will ever be possible for extinct species, as most of them disappeared without leaving fossils. This aim is also unrealistic for many extant groups, especially counting dozens or hundreds of thousands of species of small size and living in habitats of difficult access to man. However, such a project would appear more realistic for groups of relatively few large sized animals living usually in habitats readily accessible to man. Amphibians are such a group. Today, it would still be possible for the community of batrachologists to take a strong decision: that of considerably increasing the effort of taxonomic exploration of all the countries, ecosystems and habitats of the planet, in order to approach an ‘almost complete inventory’ of the amphibian species still present on earth. International meetings which would recognise this priority could decide to promote the objective of achieving an (almost) exhaustive taxonomy of amphibians in the first half of our century. This would require a strong ‘political’ decision, a shift in priorities and a modification in well-entrenched habits. Whatever interesting and informative they are, phylogenetic studies contribute only marginally to reducing the taxonomic impediment. Their major contribution to this work is through the recognition of relevant classificatory units at low levels of the nomenclatural hierarchy above species (genera, subgenera, species groups), which facilitate the relevant comparisons of newly discovered organisms with their close relatives, a work which is not possible when these units are not well defined. But phylogenetic data by themselves contribute only marginally to the discovery of new species, as this is not their main focus or target. To take only three examples, extraordinary taxonomic discoveries like those of *Rheobatrachus* and its unique reproductive mode, *Nasikabatrachus* and its unusual morphology and biogeographical affinities, or *Karsenia* and its unexpected distribution, did not result from phylogenetic analysis but from ‘mere’ exploratory work in poorly studied habitats: how many other discoveries of this kind are ‘still’ expecting us, and for how long still?

As stressed by May (2004), regarding the inventory of living species, collecting new specimens in the field everywhere on the planet will remain the rate-limiting step. New species are not in the computers and sequencers of the big cities of the ‘North’, but in the forests, savannahs, mountains, rivers, lakes and marshes of the whole planet and especially of the ‘South’. No ‘technical solution’ will bring these species from the field to the laboratories, even as nucleic acid sequences for barcoding analysis. In particular, the “triumvirate adjoining a unitary taxonomic cyberstructure + automated DNA barcoding + molecular phylogeny” has been qualified as “a threefold myopia” (Carvalho *et al.* 2008). The search for ‘magical solutions’ will not be sufficient to solve the problem of the taxonomic urgency (Wheeler, 2004; Carvalho *et al.*, 2005, 2007, 2008; Crisci, 2006*a–b*; Dubois, 2010*c*). They fail to address the core problems of the taxonomic impediment, which are {θ1} the considerable manpower shortage of taxonomy and {θ2} the many barriers put to the collection of specimens in natural habitats in many parts of the world. In order to face the taxonomic urgency, we would need a strong increase in the active field work by competent taxonomists worldwide. This would require an important increase in the number of positions of professional taxonomists (i.e., salaries) and in the funds allocated to field work, institutional collections of specimens, taxonomic revisions and publications. As well summarised by Carvalho *et al.* (2005), more than ‘miracle solutions’ (mostly based on technology instead of manpower), taxonomy requires “theoretical training, more professionals, a lasting commitment to collections, and recognition as a robust science by peers and policy-makers, without which taxonomy itself may fall victim to extinction”.

Field collection of specimens, for large animals like amphibians and in terrestrial habitats accessible to man, does not require expensive techniques and equipment, but mostly manpower, brains and arms, i.e., salaries, plenty of working time, and the free access to natural habitats, with the possibility to collect and remove specimens from this habitat and store them in permanent collections. Although this may appear 'simple', such a 'program' has become complicated and difficult because of the shortage of salaries for such kinds of work in most countries, of legal restriction on collection and fixation of specimens in many parts of the world, and probably also, although this may appear paradoxical, of the absence of need for complex and costly techniques and equipments: all scientists know that it is much easier today to obtain large amounts of money for very expensive technical investments (which are always welcomed by the companies that produce them) than for salaries.

A recent, but important, problem that would have to be addressed before embarking on such a 'program' would be to deal with the legal aspects of collection of specimens, which is currently hampered by the many barriers put to this kind of research in many countries. Legislative problems barring the collection of specimens by taxonomists derive from a misunderstanding of the real impact of such collections on natural populations (Dubois 2003), and has been denounced by many taxonomists (Prathapan *et al.* 2018), without real effect so far. It is noteworthy and highly significant that the 'Buffon declaration' (Anonymous 2008; see Appendix **A16.BUF** below), adopted in 2007 in the Paris Museum by representatives of 93 natural history institutions from 36 countries and four continents, has never been advertised or even published by any of its promoters and authors.

Development of a strategy for deploying enough manpower for field work to approach an (almost) exhaustive taxonomy of amphibians worldwide would still be possible, but it would be a strong political act from the international scientific community, especially of batrachologists and herpetologists. A strategy could be devised to provide international support to all countries in the world for training amphibian taxonomists, for funding field work and taxonomic research, and for collection facilities.

Within such an international framework, with a strong public international support to this project, each country could endorse the aim of providing an (almost) exhaustive taxonomy of amphibians in its territory, in some cases with the support and contribution of specialists from other countries (at least for training new amphibian specialists).

Such an international strategy would require changes in the minds and habits of many taxonomists. For the time being, taxonomic research is largely an individual or institutional endeavour, and competition between colleagues, teams and institutions, if not countries, is an important characteristic of this work. Admittedly, in the last two decades more and more multi-authored studies have developed, involving often researchers and teams from the North and the South, especially in order to obtain large samples of specimens from various origins and taxa for cladistic analyses. But so far this has been mostly the result of agreements between individuals or institutions, not as an outcome of an international strategy or of cooperative programs carried out according to rational plans and transcending the traditional competitive approach of taxonomy, which is well illustrated by the predominance of a 'mihilist' approach to nomenclature (Dubois 2008*a*, 2015*a*). Therefore the impact of such studies on our knowledge of the amphibian diversity is very uneven from one country or one region of the world to another. This short-minded approach is certainly allowed, and even encouraged, by the current nomenclatural rules according to which the Latin scientific nomen of a species is attached to the name of its 'author', who is the first person (or group of persons) to have published a description of the species. A shift to a different attitude, promoting mutual training and collaboration between specialists worldwide, with a common aim for all, rather than competition for 'priority', would be a major change (Dubois 2008*a*, 2015*a*). But, at the time when species are becoming extinct by thousands in front of us in the almost complete indifference of our societies, would not this aim be more exciting for any taxonomist than to be the 'first one' to describe and name a new species?

#### *4.3.2.3. Preventive taxonomy*

Even if such an international collaborative strategy may sound today a bit like a dream, it would appear possible immediately to develop a new 'culture' in taxonomy, at least regarding special urgencies. In many countries, destruction of natural habitats is progressing at a very fast pace, and leaves little time for long-term or medium-term programs for the collection and study of biodiversity. In such cases, it would be useful to define priorities for urgent taxonomic surveys, especially when the habitat destructions can be foreseen because of well-known collective decisions. From a taxonomic point of view, the urgency of exploration and specimen collection is particularly high for habitats and ecosystems which are known to be soon threatened by programmed deforestation, change in agricultural practices, construction of roads or buildings, flooding by dam lakes or various other expected habitat destructions. The community of taxonomists could consider developing special tools to deal with such situations. For this we could take advantage of the experiences developed in the recent years in other research fields.

The community of archaeologists has implemented ***preventive archaeology*** (see e.g. Bozóki-Ernycy 2007) and ***rescue archaeology*** (see e.g. Demoule 2002), which provide methods, funding and manpower to allow rapid archaeological surveys of sites when their deposits are threatened with partial or total destruction. The community of conservation biologists has developed similar tools, for example the ***Rapid Assessment Programs*** (see e.g. Muchoney *et al.* 1991) which allow realising quick ecological surveys of little-known areas critical for biodiversity conservation. In a few cases, conservation biologists have proved able to carry out important programs to 'save' some of the species of some ecosystems before their destruction, e.g. by displacing them. Among many others, one such example is the program of 'ecological survey' and 'protection of the terrestrial fauna' developed in the nineties in French Guiana concerning 300 $km^2$ of primary forest due to be flooded by the construction of the dam of Petit Saut on the river Sinnamary: this program produced interesting results concerning the consequences of the fragmentation of a humid tropical forest, mostly on the populations of endotherm vertebrates (Lecomte 1997; Forget 2002), but it did not include any taxonomic part, although the species of many groups of 'small organisms' of this area were far from being known. Actually, in some cases, participants of the program were even discouraged from collecting specimens for so-called 'conservation' and legal reasons, although it was clear that in the coming months many of these organisms with limited capacities of displacements were sure to be drowned, or, if displaced somewhere else, would enter in competition with resident populations or species.

Isn't it time for taxonomists to promote a ***preventive taxonomy***? As soon as a threat on a habitat is identified, special field work could be organised, not to 'save' the species, which in most cases is fully unrealistic in most animal groups including amphibians, but to **collect** specimens, tissues and information, to index and store them in safe conditions. This would require the implementation of *ad hoc* techniques for rapid collection of specimens, tissues and data in all taxonomic groups. This would also require solving the legal problems associated with collection and fixation of specimens in such special circumstances. Implementation of preventive taxonomy would probably need, just like in archaeology, the special training of teams of field taxonomists ready for such interventions. Amphibians, being a limited group of rather large organisms, could be an excellent group to test these techniques and start such 'last minute' collections. Even if time and manpower are currently lacking for studying properly these specimens, at least the latter would not completely vanish forever. A testimony of their existence could be kept for the future generations. This material might possibly be used later on for some unexpected discoveries and for a better knowledge of the organisms that were present on the blue planet before mankind appeared and devastated it.

#### *4.3.2.4. Time is for field work and collections*

Taxonomists in the century of extinctions do not only need new data on the known taxa and on 'discovering' new branches of the tree of life. Such 'exciting' new findings do not make obsolete the need of obtention of new specimens and data which do not deserve erection of new taxa. Organic evolution is not teleological. It results from a variable combination of 'chance and necessity' (Monod 1970), i.e. of genetic variation and natural selection, and as such is not deterministic and predictable but statistical. The frequent use in the recent literature (e.g. Wheeler 2001) of the formula 'predictive classification' means that phylogenetic classifications may allow to predict some characters of known species that have not yet been studied, but not the characters, or *a fortiori* the mere existence, of species not yet collected by scientists. In this respect, phylogenetic taxonomy would be more accurately described as 'postdictive'. However accurate they can be, given the data then available, no 'model' or phylogenetic analysis would have allowed to anticipate the existence of *Astrobatrachus*, *Nasikabatrachus*, *Rheobatrachus*, *Karsenia* or *Urspelerpes*, or to foresee that adults of *Barbourula kalimantanensis* lack lungs, that some *Amietia* have 'invented' a corneal elygium, that *Nymbaphrynoides* toads are viviparous, that the tadpoles of *Mertensophryne* have dorsal crowns and that those of *Amolops* and other anurans are gastromyzophorous. The only way to know the biodiversity of our planet is to study it for itself, not only the phylogenetic relationships between its members. We have now reached a point where, for amphibians like for many other groups, “time is for field work and collections” (Dubois 2010–2014). If the international community of batrachologists continues to ignore this imperative and this urgency, it will not be exaggerated to state that it has contributed in its sphere, which is mostly that of **knowledge**, to the irreversible losses caused by our civilisation to the biodiversity of our planet.

## 5. Acknowledgements

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## 6. References

The list below gives the references of all the publications cited in this work, except those cited in Appendix **A5.NGS** and not elsewhere, for reasons of space parsimony (see 3.2 above).

One at least of the three authors of the present work personally examined each of the works cited below, except those we could not obtain, which are marked here as [Not seen].

### Information provided at the end of reference

[1758.la], [1796.ba], etc. ● Identifier of the publication used in the identifiers of nomina and their paronyms in Appendices **A5.NGS**, **A6.NFS**, **A7.NCS** and **A8.ECT**.

[1968] ● Identifier of the publication used in Appendix **A13.QUA**.

{Q} ● Publication used in the computation of the numbers of usages of nomina in Appendix **A13.QUA**.

⌈P00⌋, ⌈P01⌋, etc. ● Note providing actual publication date or relative chronology of publication of works published in the same year, according to either published evidence of more precise publication dates, or citation of one work in the other (first page of citation only mentioned):

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See list of these notes at the end of the list of references.

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## Notes concerning the publication dates of some works:

⌈P00⌋ Year of publication appearing on the title page of the volume.

⌈P01⌋ Brongniart 1800.ba > Latreille 1800.la, where the former is cited (p. ix).

⌈P02⌋ Duméril 1805.da [before 15 november 1805] according to Gregory (2010).

⌈P03⌋ Oppel 1811.oa [January–March 1811] > Oppel 1811.ob [11 May 1811], according to Sherborn (1914).

⌈P04⌋ Cuvier 1816.ca [7 December 1816] according to Cowan (1969).

⌈P05⌋ Bonaparte 1838.ba and Bonaparte 1839.bd: dates according to Salvadori (1888).

⌈P06⌋ Agassiz 1843.aa and Agassiz 1847.aa: dates according to Bowley[+1] (1968).

⌈P07⌋ Schlegel 1850.sa, cited in Bonaparte 1850.bb > Bonaparte 1850.bb [March 1850, according to Duméril[+2] 1854.da: 32.] > Baird 1850.ba, cited in Gray 1850.ga > Gray 1850.ga [June 1850, according to Duméril[+2] 1854.da: 32.]. Note: Given the precise publication dates given by Duméril[+2] , the citations of Gray in Bonaparte 1850.bb must be based on reading by Bonaparte of letters or of manuscript from Gray.

⌈P08⌋ Günther 1859.ga [12 February 1859] according to Sherborn (1934).

⌈P09⌋ Cope 1869.ca: date according to Vanzolini (1977).

⌈P10⌋ Brocchi 1881.ba: date of livraison acccording to Crosnier[+1] (1998).

⌈P11⌋ Stipanicic[+1] 1956.sa: date according to Anonymous (1967: 322).

⌈P12⌋ Thorn 1966.ta: date according to Thorn (1968).

⌈P13⌋ Špinar 1979.sa: date according to Sanchiz (1998).

⌈P14⌋ Laurent 1980.la [18 April 1980]: date according to the last page of the fascicle 104 (4).

⌈P15⌋ Roček 1981.ra: date according to the first page of the paper.

⌈P16⌋ Dubois 1987.da [13 May 1987] < Dubois 1987.db [1 October 1987] according to Dubois (1988*b*).

# 7. Appendices

## Appendix A1.GLO. Glossary

### Technical taxonomic, nomenclatural and other terms used here, and their correspondence with terms used in the *Code*, if available.

**Structure of entries**

For each term used here, this Glossary provides: (1) the grammatical category of the term; (2) the domain of application of the term; (3) the etymology of the term (only for technical terms coined especially for nomenclature and taxonomy); (4) a definition, with comments and/or mention of related terms and antonyms (terms of opposite meaning) if relevant; (5) the reference to first publication of the term, or mention that it is introduced here (*Hoc loco*); (6) the equivalent term or expression used in the *Code* for the same concept, if available.

***(1) Grammatical category of term***

*a*: adjective
*ab*: abbreviation
*av*: adverb
*e*: expression composed of several terms
*n*: noun
*p*: past participle
*pl*: plural
*v*: verb

***(2) Domain of application of term***

AL: taxonomic allocation
AS: nominal-series assignment
AV: nomenclatural availability
CO: nomenclatural correctness
NO: all nomenclatural stages
PH: phylogeny
TA: taxonomy
VA: nomenclatural validity
XE: term used in other domains but not in zoological taxonomy and nomenclature

***(3) Etymology of term*** (only for technical terms coined especially for nomenclature and taxonomy)

G: Greek
L: Latin

***(4) Abbreviation and definition of term***, with comments and/or mention of related terms and antonyms (terms of opposite meaning) if relevant

**Ang**: Angionym: term designating a superordinate class
**Ant**: Antonym: term of opposite meaning
**End**: Endonym: term designating a subordinate class
**Ety**: Etymology of term
**Syn**: Synonym: term of same meaning

***(5) Reference to first publication of the term, or mention that it is introduced here (hoc loco)***

***(6) Equivalent term or expression used in the Code for the same concept, if available***

**Use of italics and bold and other conventions**

**Bold** characters are used only for the titles of entries.
In definitions, terms in ***bold italics*** are defined elsewhere in this Glossary, but terms between ‘simple quotation marks’ are not.
Terms in *italics* are involved in the etymology of a term used here.
The Latin expression *Hoc loco* means: in the present work.

**A-availability**, *e*. ● AV. ● Availability of ***airesy*** (nomenclatural act). ● Dubois 2015*c*: 24. ● *Code*: no term.

**Absolute rank**, *e*. ● NO. ● Nomenclatural rank conceived and used as permanently attached to taxa, as if they expressed their 'nature' or 'essence', in biological or historical terms. ● Dubois 2006*c*: 21, 2007*a*: 34. ● *Code*: no term.

**Acceptable tolerance**, *e*. ● AV. ● Qualification of information, particularly regarding ***taxognosis***, provided in a work introducing a new nomen that allows its nomenclatural availability in borderline situations. ● *Hoc loco*. ● *Code*: no term.

**Achotomy**, *n*. ● PH, TA. ● Ety: G: ἀ- (*a*-), 'without'; δίχα (*dikha*), 'in two'; τομή (*tome*), 'cutting, incision'. ● Absence of partition of a set into subsets. ● *Hoc loco*. ● *Code*: no term.

**Acrohypse**, *n*. ● NO. ● Ety: G: ἄκρος (*acros*), 'highest, upper, extreme'; υψος (*hupsos*), 'height'. ● The highest ***parohypse*** of a nomen in force in a given ergotaxonomy. ● *Hoc loco*. ● *Code*: no term.

**Adelonym**, *n*. ● RE. ● Ety: G: ἀ- (*a*-), 'without'; δηλος (*delos*), 'visible, evident, plain, clear'; ὄνομα (*onoma*), 'name'. ● Unregistered nomen, thus unprotected against potential invalidation of its availability. ● Ant: ***delonym***. ● Dubois 2011*a*: 77. ● *Code*: no term.

**Adelphotaxa**, *n*. ● Plural of ***adelphotaxon***.

**Adelphotaxon** (pl. ***adephotaxa***), *n*. ● VA. ● Ety: ἀδελφός (*adelphos*), 'brother'; τάξις (*taxis*), 'order, arrangement'. ● One of two branches that are supposed, in a given hypothetical cladogeny, to be derived from a common ancestor. ● Ax 1984. ● *Code*: no term.

**Agnostonym**, *n*. ● AV. ● Ety: G: ἄγνωστος (*agnostos*), 'unknown, unrecognisable'; ὄνομα (*onoma*), 'name'. ● A particular case of ***anoplonym***: published but nomenclaturally unavailable nomen according to the *Code*, for having been published after 1999 without explicit statement that it is intentionally new (Article 16.1). ● *Hoc loco*. ● *Code*: unavailable name.

**Agoallelonym**, *n*. ● AV. ● Ety: G: ἄγω (*ago*), 'I command, I guide'; άλλήλων (*allelon*), 'the one… the other…'; ὄνομα (*onoma*), 'name'. ● One among two ***parallelonyms*** which was clearly given preference over the other one (its ***epomallelonym***) in the original publication, and which for this reason has precedence over it. ● Dubois 2015*c*: 43, 70. ● *Code*: no term.

**Airesy**, *n*. ● NO. ● Ety: G: αἵρεσις (*airesis*), 'choice, election'. ● A category of ***onomatergy***: any action of resolution of uncertainties and ambiguities which may have remained after a ***catastasy*** (original publication of a nomen). Airesies consist either in choices between several possibilities (e.g., designation of a single specimen or nominal taxon as onomatophore of a nomen introduced without this information, or fixation of precedence between synchronous doxisonyms or symprotographs) or in the brand new introduction of missing information (e.g., listing subsequently included specimens or nominal taxa in a nominal taxon which until then missed them). Choices made in airesies are left to the freedom of individual authors, but in some cases the *Code* provides Recommendations in this respect (e.g., the Recommendations of Article 74 concerning the designations of lectotypes). Once published, an airesy is irreversible and cannot be modified by individual authors but only through ***archoidy***. ● Dubois 2013: 3. ● *Code*: first reviser action.

**Airetophory**, *n*. ● AL. ● Ety: G: αιρετός, *airetos*, 'chosen, elected'; φέρω, *phero*, 'I bear, I carry'. ● A category of ***airesy***: subsequent restriction or designation of onomatophore for a nomen. ● Dubois 2013: 5. ● *Code*: no term.

**Akyronym**, *n*. ● VA. ● Ety: G: ἄκῡρος (*akyros*), 'invalid, incorrect'; ὄνομα (*onoma*), 'name'. ● Invalid ***hoplonym*** for a given ***taxon*** in a given ***ergotaxonomy***. Its invalidity may be conditional (***junior doxisonym***, ***junior asthenomonym***, ***lethakyronym***) or permanent (***junior isonym***, ***junior hadromonym***, ***archakyronym***, ***archanecdidonym***). ● Ant: ***Kyronym***. ● Dubois 2000*b*: 51. ● *Code*: no term.

**Alienogenera**, *n*. ● Plural of ***Alienogenus***.

**Alienogenus** (pl. ***alienogenera***), *n*. ● AL. ● Ety: L: *alienus*, 'foreign, unrelated'; *genus*, 'birth, origin, class, kind'. ● Genus-series taxomen expressly excluded from the ***protaxon*** for which a class-series nomen was promulgated, serving as ***onomatostasis*** of this class-series nomen. ● End: ***coalienogenus***, ***unialienogenus***. ● Dubois 2005*c*: 203. ● *Code*: no term.

**Alienordinate**, *a*. ● NO, TA. ● Ety: L: *alienus*, 'foreign'; *ordo*, 'series, line, row, order'. ● Qualification of any of two or more taxa that have no direct hierarchical or sister-taxa relation in a given ***ergotaxonomy***. ● Dubois 2006*b*: 827 (as ***xenordinate***), 2008*f*: 60. ● *Code*: no term._

**Alienordination**, *n*. ● NO, TA. ● Ety: see ***Alienordinate***. ● The absence of relation of ***ordination*** between two ***alienordinate*** taxa in a given ***ergotaxonomy***. ● Dubois 2008*f*: 60. ● *Code*: no term.

**Allelonym**, *n*. ● AV. ● Ety: G: άλλήλων (*allelon*), 'the one… the other…'; ὄνομα (*onoma*), 'name'. ● One of two (or several) synonymous nomina used both (or all) as valid for the same taxon (having the same content) in the same publication. ● End: ***archaeoallelonym***, ***neoallelonym*** and ***parallelonym***. ● Dubois 2006*a*: 183, 2011*a*: 41. ● *Code*: no term.

**All-fossil**, *e*. ● XE. ● For a taxon of Amphibia: that is not known to include a single ***extant*** species.

**Allocate**, *v*. ● AL. ● See ***Allocation***.

**Allocated**, *p*. ● AL. ● Qualification of a nomen (***aptonym***) that conforms to the conditions of taxonomic allocation as regulated by the nomenclatural system. ● Ant: ***Unallocated***. ● Dubois 2005*b*: 396. ● *Code*: no term.

**Allocation**, *n*. ● AL. ● ***Onomatergy*** regulated by a nomenclatural system by which a nomen becomes attached to a taxon or several taxa in zoological nomenclature, under a given system of connexion between nomina and taxa (e.g., through ***onomatophores*** or through 'phylogenetic definitions'). ● Dubois 2005*b*: 369. ● *Code*: no term.

**Allochronous**, *a*. ● AV, VA. ● **Ety**: see ***Allochrony***. ● Qualification of distinct events that occurred at different dates. In the context of zoological nomenclature, the fact that two publications were distributed at different dates. ● **Ant**: ***Synchronous***. ● Common language term; Dubois 2013: 5. ● *Code*: no term.

**Allochrony**, *n*. ● AV, VA, XE. ● **Ety**: G: ἄλλος (*allos*), 'other'; χρόνος (*chronos*), 'time'. ● Distinct events that occurred at different dates. ● **Ant**: ***Synchrony***. ● Common language term; Dubois & Aescht 2019*f*: 50–51. ● *Code*: no term.

**Alloneonym**, *n*. ● AV. ● **Ety**: G: ἄλλος (*allos*), 'other'; νέος (*neos*), 'new'; ὄνομα (*onoma*), 'name'. ● ***Neonym*** having a partially or totally different etymology from its ***archaeonym***, i.e., not directly derived from it through unjustified emendation. ● **Ant**: ***Autoneonym***. ● Dubois 2000*b*: 52. ● *Code*: new replacement name, *nomen novum*.

**Allopatry**, *n*. ● XE. ● **Ety**: ἄλλος (*allos*), 'other'; πατρία (*patria*), 'lineage, family'. ● Occurring in different places. ● **Ant**: ***Sympatry***. ● Common term in evolutionary biology. ● *Code*: no term.

**Allot**, *v*. ● VA. ● Process of choice between the family-series or the class-series for the ***nominal-series*** assignment of a nomen in borderline situations (see {k4} and [FPC] in text). ● *Hoc loco*. ● *Code*: no term.

**Allotment**, *n*. ● VA. ● Result of a choice between the family-series or the class-series for the ***nominal-series*** assignment of a nomen in borderline situations (see {k4} and [FPC] in text). ● *Hoc loco*. ● *Code*: no term.

**Ambiostensional**, *n*. ● AL. ● **Ety**: L: *ambo*, 'both, two together'; *ostensio*, 'action of showing'. ● Qualification of a nomenclatural system, the ***Ambiostensional Nomenclatural System*** (***AONS***), which makes use of a double or alternative way of allocating nomina to taxa according to [1] the presence of or [2] the absence of ***intragenera*** in the ***metrotaxon***: i.e., either [1] relying only on ***onomatophores*** (***conucleogenera***) (see ***Metrostensional***) or [2] relying on both ***onomatophores*** (***conucleogenera***) and ***onomatostases*** (***alienogenera***) (see ***Orostensional***) (see Dubois 2006a,*d*, 2007*a*, 2008*f*, 2015*c*; Dubois & Ohler 2009). ● Dubois 2011*a*: 39. ● *Code*: no term.

**Ambiostensional Nomenclatural System (AONS)**, *e*. ● NO. ● A composite class-series nomenclatural system in which ***nesonyms*** and ***ellitonyms*** are allocated to taxa through MONS whereas ***oronyms*** are so through OONS. ● Dubois 2005*c*, 2006*a*, 2011*a*, 2015*c*. ● *Code*: no term.

**Ameletograph**, *n*. ● AV. ● **Ety**: G: ἀμελής (*ameles*), 'inattentive, careless'; γράφω (*grapho*), 'I write'. ● Spelling of a nomen used inadvertently in a publication by an author, editor or publisher. ● **Ant**: ***meletograph***. ● Dubois 2000*b*: 54 (as ***ameletonym***), 2010*a*: 7. ● *Code*: no term.

**Ameletonym**, *n*. ● Obsolete for ***Ameletograph***. ● Dubois 2000*b*: 54.

**Anagenesis**, *n*. ● PH. ● **Ety**: G: ἀνά (*ana*), 'upward'; ένεσις (*genesis*), 'origin, birth, creation, production'. ● Modification of characters within an evolutionary lineage, that may lead to speciation without cladogenesis (see Vaux *et al.* 2016, 2017 and Allmon 2017). ● Rensch 1947: 95. ● *Code*: no term.

**Anaptonym**, *n*. ● AL. ● **Ety**: G: ἀν- (*an-*), 'without'; ἅπτω (*apto*), 'I fasten, I attach, I fix'; ὄνομα (*onoma*), 'name'. ● Nomenclaturally unallocated nomen [1] for not being clearly attached to an ***onomatophore*** in the three lower nominal-series covered by the *Code*, or under MONS in the case of CS ***distagmonyms***, or [2] for being a ***gephyronym*** under OONS in the case of CS ***sozonymorphs***. ● **Ant**: ***aptonym***. ● Dubois 2011*a*: 25, 78. ● *Code*: one among several meanings of the unclear term *nomen dubium.*

**Anchor**, *v*. ● AL. ● To perform an ***onomatergy*** consisting in the designation of an onomatophore for a taxon. ● *Hoc loco*. ● *Code*: no term.

**Anchorage**, *n*. ● AL. ● Result of an ***onomatergy*** consisting in the designation of an onomatophore for a taxon. ● *Hoc loco*. ● *Code*: no term.

**Anecdidonym**, *n*. ● AV. ● **Ety**: G: ἀν- (*an-*), 'without'; ἐκδίδωμι (*ecdidomi*), 'I publish'; ὄνομα (*onoma*), 'name'. ● Nomen unavailable (***anoplonym***) for having been introduced in a publication unavailable under the *Code* or made unavailable by the Commission under the Plenary Power. ● **End**: ***Archanecdidonym***, ***Nomanecdidonym***. ● **Ant**: ***Ecdidonym***. ● Dubois 2015*c*: 24, 71; redefined here. ● *Code*: no term.

**Anemonym**, *n*. ● AV. ● **Ety**: G: ἀν- (*an-*), 'without'; νέμω (*nemo*), 'I distribute, I attribute'; ὄνομα (*onoma*), 'name'. ● A nomen that is not unambiguously assigned or assignable to a nominal-series in the original publication where it is established. ● **Ant**: ***nemonym***. ● *Hoc loco*. ● *Code*: no term.

**Angiotaxon** (pl. ***angiotaxa***), *n*. ● TA. ● **Ety**: G: ἀγγεῖον (*aggeion*), 'hull, capsule'; τάξις (*taxis*), 'order, arrangement'. ● Any taxon which is superordinate to another taxon (its ***endotaxon***) in a given ***ergotaxonomy***. ● Dubois 2005*b*: 406. ● *Code*: no term.

**Anhypotaxy**, *n*. ● TA. ● **Ety**: G: ἀν- (*an-*), 'without'; ὑπό (*hupo*), 'below'; τάξις (*taxis*), 'order, arrangement'. ● Mode of ***hypotaxy*** of a taxon that includes *no* subordinate taxon, being the 'terminal' lower taxon in a nomenclatural hierarchy. Given the current Rules of the *Code*, this can occur only in two cases, when the 'final' taxon is either a species or a subspecies. All nomina at ranks above the rank species designate taxa that include at least one species, even possibly still unnamed and undescribed, so they cannot fall in this category of hypotaxy. ● Dubois & Raffaëlli 2009: 12. ● *Code*: no term.

**Anhypsonym**, *n*. ● AV. ● **Ety**: G: ἀν- (*an-*), 'without'; υψος (*hupsos*), 'height'; ὄνομα (*onoma*), 'name'. ● A category of ***ectonym***: nomen proposed under a nomenclatural system explicitly unranked or pseudoranked and therefore unavailable under the *Code* or under DONS. ● **Ant**: ***hypsonym***. ● Dubois & Frétey 2020*a*: 5, 38. ● *Code*: no term.

**Anoplonym**, *n*. ● AV. ● **Ety**: G: ἄνοπλος (*anoplos*), 'unarmed'; ὄνομα (*onoma*), 'name'. ● Published but nomenclaturally unavailable nomen according to the Rules of the *Code*. ● **End**: ***agnostonym***, ***anecdidonym***, ***atelonym***, ***barbaronym***, ***caconym***, ***eulabonym***, ***gymnonym***. ● **Ant**: ***hoplonym***. ● Dubois 2000*b*: 50. ● *Code*: unavailable name.

**Antonym**, *n*. ● XE. ● **Ety**: G: ἀντί (*anti*), 'against, in front of'; ὄνομα (*onoma*), 'name'. ● Any of two words having opposite meanings. ● Term in traditional use in general language, grammar and linguistics; Dubois & Aescht 2019*h*: 75. ● *Code*: no term.

**Aphonym**, *n*. ● VA. ● **Ety**: G: ἄφωνο (*aphonos*), 'speechless, silent'; ὄνομα (*onoma*), 'name'. ● Nomen clearly mentioned as nomenclaturally ***available*** (in some cases as an available senior homonym making a junior homonym invalid) but never used as ***valid*** by any author and in any publication after 31 December 1899. ● Dubois 2005*a*: 85, 2005*b*: 411. ● *Code*: no term.

**Aphoric**, *a*. ● See ***Aphory***.

**Aphory**, *n*. ● AL. ● **Ety**: G: ἀ- (*a-*), 'without'; φέρω (*phero*), 'I bear'. ● Qualification of a nomen created without any ***onomatophore***. ● Dubois 2005*b*: 404.

**Apofamilia**, *n*. ● NO, TA. ● **Ety**: G: ἀπό (*apo*), 'from, away from'; L: *familia*, 'family'. ● Subsidiary family-series taxonominal rank, between family and epifamily. ● **Syn**: ***apofamily***. ● *Hoc loco*. ● *Code*: no term.

**Apofamily**, *n*. ● NO, TA. ● **Ety**: G: ἀπό (*apo*), 'from, away from'; L: *familia*, 'family'. ● Subsidiary family-series taxonominal rank, between family and epifamily. ● **Syn**: ***apofamilia***. ● *Hoc loco*. ● *Code*: no term.

**Apognosable**, *a*. ● TA. ● **Ety**: see ***apognosis***. ● For a taxon, that can be distinguished from another taxon on the basis of ***character states*** that are considered to be shared by all members of the taxon and absent in all non-members, and that are considered, on the basis of a cladistic analysis and hypothesis, to be autapomorphic for the taxon. ● *Hoc loco*. ● *Code*: no term.

**Apognoses**, *n*. ● Plural of ***Apognosis***.

**Apognosis** (pl. ***apognoses***), *n*. ● TA. ● **Ety**: G: ἀπό (*apo*), 'from, away from'; γνῶσις (*gnosis*), 'knowledge, understanding'. ● A ***cladognosis*** of a taxon based on ***character states*** that are considered to be shared by all members of the taxon and absent in all non-members, and that are considered, on the basis of a cladistic analysis and hypothesis, to be autapomorphic for the taxon. ● **Syn**: 'apomorphy-based definition' (de Queiroz & Gauthier 1990). ● Dubois 1997: 135, 2007*a*: 43; 2017*d*: 71. ● *Code*: no term.

**Apograph**, *n*. ● NO. ● G: **Ety**: ἀπό (*apo*), 'away from, far from'; γράφω (*grapho*), 'I write'. ● Any subsequent ***parograph*** of an existing nomen. ● **Ant**: ***protograph***. ● Dubois 2010*a*: 6. ● *Code*: subsequent spelling.

**Apohypse**, *n*. ● AV. ● **Ety**: G: ἀπό (*apo*), 'away from, far from'; υψος (*hupsos*), 'height'. ● Any subsequent ***parohypse*** of a nomen. ● **Ant**: ***protohypse***. ● Dubois 2010*a*: 6. ● *Code*: no term.

**Apomorphic**, *n*. ● See ***Apomorphy***.

**Apomorphy**, *n*. ● PH, TA. ● **Ety**: G: ἀπό (*apo*), 'away from, far from'; μορφή (*morphe*), 'form, shape'. ● Character state observed in a taxon which is considered derived relative to the plesiomorphic state of this character in a taxon considered as ancestral. ● Hennig 1950. ● *Code*: no term.

**Aponym**, *n*. ● AV. ● **Ety**: G: ἀπό (*apo*), 'away from, far from'; ὄνομα (*onoma*), 'name'. ● Any subsequent ***paronym*** of an existing nomen, modified in spelling (***apograph***), rank (***apohypse***) and/or, if relevant, ***onymorph*** (***aponymorph***). An aponym is ***first-used*** by its ***scriptor***. ● **Ant**: ***protonym***. ● Dubois 2000*b*: 51. ● *Code*: no term.

**Aponymorph**, *n*. ● AV, CO. ● **Ety**: G: άπό (*apo*), 'away from, far from'; ὄνομα (*onoma*), 'name'; μορφή (*morphe*), 'form, shape'. ● Any subsequent ***paronymorph*** of a nomen. ● **Ant**: ***protonymorph***. ● Dubois 2010*a*: 6. ● *Code*: no term.

**Aporionym**, *n*. ● AL. ● **Ety**: G: ἀπορίᾱ (*aporia*), 'embarrassment, doubt, difficulty'; ὄνομα (*onoma*), 'name'. ● Nomen that cannot be clearly referred to a taxon in an ergotaxonomy, either for nomenclatural (***anaptonym***, ***heterosynaptonym***) or for taxonomic (***nyctonym***) reasons. ● Dubois 2008*d*: 378. ● *Code:* one of the meanings of the ambiguous designation *nomen dubium.*

**Aptonym**, *n*. ● AL. ● **Ety**: G: ἅπτω (*apto*), 'I fasten, I attach, I fix'; ὄνομα (*onoma*), 'name'. ● Nomenclaturally allocated nomen according to the Rules of the *Code*, i.e., being clearly attached to an ***onomatophore***. ● **Ant**: ***anaptonym***. ● Dubois 2011*a*: 25, 79. ● *Code*: no term.

**Arbiter**, *n*. ● NO. ● **Ety**: L: *arbiter*, 'umpire, arbitrator'. ● Author of an ***airesy***, i.e. an ***onomatergy*** resolving a conflict of ***zygoidy***. ● Dubois 2013: 3. ● *Code*: first reviser.

**Archaeoallelonym**, *n*. ● AV. ● **Ety**: G: ρχαῖος (*arkhaios*), 'ancient'; άλλήλων (*allelon*), 'the one… the other…'; ὄνομα (*onoma*), 'name'. ● One of two (or several) ***allelonyms*** which is an already available nomen. ● Dubois 2015*c*: 43, 71.

● *Code*: no term.

**Archaeonym**, *n*. ● AV. ● **Ety**: G: ἀρχαῖος (*arkhaios*), 'ancient'; ὄνομα (*onoma*), 'name'. ● Original nomen that has been replaced by a ***neonym***. ● Dubois 2005*a*: 88, 2006*a*: 169, 182. ● *Code*: no term.

**Archakyronym**, *n*. ● VA. ● **Ety**: G: ἄρχω (*archo*), 'to rule, to govern'; ἄκῡρος (*akyros*), 'invalid, incorrect'; ὄνομα (*onoma*), 'name'. ● ***Hoplonym*** permanently invalidated as a result of a specific action of the Commission under its Plenary Power as follows: availability of nomen maintained but removal of its validity (juniorisation) in order to validate another nomen. ● New term. ● *Code*: no term.

**Archanecdidonym**, *n*. ● AV. ● **Ety**: G: ἀν- (*an-*), 'without'; ἐκδίδωμι (*ecdidomi*), 'I publish'; ὄνομα (*onoma*), 'name'. ● Nomen permanently made unavailable by the Commission under the Plenary Power, through removal of availability of the publication where this nomen had been established. ● **Ang**: ***Anecdidonym***. ● *Hoc loco*. ● *Code*: no term.

**Archapograph**, *n*. ● NO. ● **Ety**: G: ἄρχω (*archo*), 'to rule, to govern'; ἀπό (*apo*), 'away from, far from'; γράφω (*grapho*), 'I write'. ● ***Autoneonym*** which has been given the status of ***apograph*** by the *Code* (Articles 33.2.3.1, 35.4.1) or by the Commission under the Plenary Power. ● *Hoc loco*. ● *Code*: no term.

**Archexoplonym**, *n*. ● AV. ● **Ety**: G: ἄρχω (*archo*), 'to rule, to govern'; ἔξοπλος (*exoplos*), 'disarmed'; ὄνομα (*onoma*), 'name'. ● ***Nomen*** permanently made unavailable by the Commission under the Plenary Power through removal of availability of the nomen itself. ● **Ang**: ***Exoplonym***. ● Dubois 2011*a*: 28, 79; redefined *hoc loco*. ● *Code*: no term.

**Archograph**, *n*. ● AV, VA. ● **Ety**: G: ἄρχω (*archo*), 'to rule, to govern'; γράφω (*grapho*), 'I write'. ● ***Eugraph*** that is imposed to a given nomen following a decision of the Commission under the Plenary Power. ● *Hoc loco*. ● *Code*: no term.

**Archoidy**, *n*. ● NO. ● **Ety**: G: ἄρχω (*archo*), 'to rule, to govern'; εἶδος (*eidos*), 'aspect, shape'. ● Modification of the nomenclatural status of a nomen resulting from a specific action of the Commission under the Plenary Power. ● Dubois & Aescht 2019*q*: 146. ● *Code*: no term.

**Archokyronym**, *n*. ● VA. ● **Ety**: G: ἄρχω (*archo*), 'to rule, to govern'; κύριος (*kyrios*), 'proper, correct'; ὄνομα (*onoma*), 'name'. ● ***Kyronym*** as a result of a specific action of the Commission under its Plenary Power through removal of validity to another nomen. ● Dubois 2011*a*: 28, 79. ● *Code*: no term.

**Archoneonym**, *n*. ● NO. ● **Ety**: G: ἄρχω (*archo*), 'to rule, to govern'; νέος (*neos*), 'new'; ὄνομα (*onoma*), 'name'. ● ***Ameletograph*** which has been afforded the status of available ***neonym*** by the Commission under the Plenary Power. ● *Hoc loco*. ● *Code*: no term.

**Archypnonym**, *n*. ● AV. ● **Ety**: G: ἄρχω (*archo*), 'to rule, to govern'; ὕπνος (*hypnos*), 'sleep, sleepiness'; ὄνομα (*onoma*), 'name'. ● ***Hypnonym*** the availability or validity of which was conditionally removed by the Commission under the Plenary Power. ● Dubois 2011*a*: 28, 79. ● *Code*: no term.

**Arhizonym**, *n*. ● AV, CO. ● **Ety**: G: ά- (*a-*), 'without'; ρίζα (*rhiza*), 'root, stem'; ὄνομα (*onoma*), 'name'. ● Suprageneric nomen **HN** not based on the stem of a genus-series nomen. If proposed as a family-series nomen, it is incorrectly formed according to Article 13.2 of the *Code*, and is therefore a family-series ***anoplonym*** (nomenclaturally unavailable). If proposed as a class-series nomen, it may be available under DONS Criteria (if the other conditions of nomenclatural availability are complied with), and if so it should be used under the spelling which has obtained general acceptance in the literature, if it exists. Apart for a few endings (e.g., **-branchia**, **-glossa**, **-phora**), most endings are used only within limited zoological groups. In all cases where several nomina referred to the same taxonomic group share a common ending, the use of this ending should be homogenised in all of them in order to follow its most common spelling (e.g., **-batrachia** instead of **-batrachi**). ● Dubois 2006*a*: 178, 2015*c*: 52. ● *Code*: no term.

**Assign**, *v*. ● AS, AV. ● To implement an ***onomatergy*** of nominal-series assignment of a nomen. ● Common language term, introduced in zoological nomenclature by Dubois (2015*a*: 6). ● *Code*: no term.

**Assigned**, *p*. ● AS, AV. ● Qualification of a nomen (***nemonym***) that conforms to the conditions of nominal-series ***assignment*** of nomina. ● **Ant**: ***unassigned***. ● Common language term, introduced in zoological nomenclature by Dubois (2015*a*: 29). ● *Code*: no term.

**Assignment**, *n*. ● AS. ● ***Onomatergy*** regulated by the *Code* by which a nomen is referred to a ***nominal-series*** (e.g., through original statement of the author of the nomen or through objective criteria). ● Common language term, introduced in zoological nomenclature by Dubois (2015*a*: 71). ● *Code*: no term.

**Asthenomonym**, *n*. ● AV, VA. ● **Ety**: G: ἀσθενής (*asthenes*), 'weak'; ὁμός (*homos*), 'the same'; ὄνομα (*onoma*), 'name'. ● Any of two (or more) available species-series epithets that are conditional ***homonyms*** for being ***homographs*** or ***paromographs*** (but not ***pseudomographs***) and having been introduced for distinct taxomina and originally referred to different genera but subsequently referred to the same genus not being the first published among them, as long as both epithets remain referred to this genus. ● Dubois 2000*b*: 57. ● *Code*: secondary homonym (in part).

**Atelonym**, *n*. ● AV. ● **Ety**: G: ἀτελής (*ateles*), 'unfinished, invalid'; ὄνομα (*onoma*), 'name'. ● A particular case of ***anoplonym***: published but nomenclaturally unavailable nomen according to the *Code*, for not being conform to the provisions of Articles 10, 11 and 14 to 20. ● Dubois 2011*a*: 19, 79. ● *Code*: unavailable name.

**Attribute**, *v.* ● See ***Attribution***.

**Attribution**, *n.* ● NO. ● ***Rank attribution*** of a nomen: the referring of a nomen to a nomenclatural rank within its nominal-series. This attribution is labile, being liable to change whenever the ***ergotaxonom***y changes. ● *Hoc loco*. ● *Code*: no term.

**Auctor** (pl. ***Auctores***), *n.* ● NO, TA. ● **Ety**: L: *auctor*, 'author, founder'. ● In the context of zoological nomenclature, name(s) of the person(s) to whom a published work, nomen or onomatergy is credited, i.e., whose name(s) appear(s) as ***signatory*** in the work itself—not through subsequent investigation (see Dubois 2008*b*). ● Dubois 2013: 3. ● *Hoc loco*. ● *Code*: author.

**Auctorship**, *n.* ● NO, TA. ● **Ety**: see ***Scriptor***. ● In the context of zoological nomenclature, statement of the auctor of a published work, nomen or onomatergy. ● *Code*: no term.

**Author**, *n.* ● NO, TA. ● Person(s) to whom a published work is credited. ● Traditional term in science. ● *Code*: author.

**Authorship**, *n.* ● NO, TA. ● Statement of the author of a published work is credited. ● Traditional term in science. ● *Code*: authorship.

**Autoneonym**, *n.* ● AV. ● **Ety**: G: αὐτός (*autos*), 'same'; νέος (*neos*), 'new'; ὄνομα (*onoma*), 'name'. ● ***Neonym*** having the same etymology as its ***archaeonym***, i.e., directly derived from it through unjustified emendation. ● **Ant**: ***Alloneonym***. ● Dubois 2000*b*: 52. ● *Code*: unjustified emendation.

**Auxorhizonym**, *n.* ● AV. ● **Ety**: G: αὔξη (*auxe*), 'growth'; ρίζα (*rhiza*), 'root, stem'; ὄνομα (*onoma*), 'name'. ● A subcategory of ***pseudorhizonym***: suprageneric nomen **HN** (designating a taxon **HT**) [1] based on the stem of a then ***available*** generic nomen **GN** referred as ***valid*** to **HT** in the ergotaxonomy adopted in the publication where **HN** was introduced, but [2] combined with an ending derived from another or several other terms (e.g., **-**formes, **-**morpha, **-**phora, etc.**)**. If proposed as a family-series nomen, it is incorrectly formed according to the *Code*, and is therefore a FS ***anoplonym***. If proposed as a class-series nomen, common particular cases are those of such nomina the original endings of which were derived from the roots *forma* (Latin) or μορφή, *morphe* (Greek) meaning 'form, shape': under DONS as emended by Dubois & Frétey (2020*a*), it should be fixed under the respective standard endings **-iformia** or **-omorpha**, which are not in a relation of hierarchy but may be both used at whatever rank. ● Dubois 2015*c*: 22; Dubois & Frétey 2020*a* ● *Code*: no term.

**Availability**, *n.* ● AV. ● Result of an ***onomatergy*** regulated by the *Code* by which a nomen is ***promulgated*** in zoological nomenclature complying with the conditions of this code (***hoplonym***) or by which an ***airesy*** is made ***effective***. ● **Ant**: ***unavailability***. ● Term in traditional use in zoological nomenclature. ● *Code*: availability.

**Available**, *a.* ● AV. ● Qualification of a nomen (***hoplonym***) or of an ***airesy*** that conforms to the conditions of nomenclatural ***availability*** as regulated by the *Code*. ● **Ant**: ***unavailable***. ● Traditional term in nomenclature. ● *Code*: available, potentially valid.

**Avatar**, *n.* ● NO, TA. ● **Ety**: Sanskrit: अवतार (*ava-tara*), 'successive incarnation of a divinity'. ● One of several forms or manifestations that an entity (object, person, organism, concept, term, etc.) has taken or can take. In zoological nomenclature, one of the forms that a nomen can take, regarding its spelling, rank and/or onymorph. ● Common language term, recently introduced in zoological nomenclature (Dubois 2005*b*: 396). ● *Code*: no term.

**Barbaronym**, *n.* ● AV. ● **Ety**: G: βάρβαρος (*barbaros*), 'barbarian, foreign'; ὄνομα (*onoma*), 'name'. ● A particular case of ***anoplonym***: published but nomenclaturally unavailable nomen according to the *Code*, for having been published in non-Latinised form and not having been Latinised and adopted as valid before 1900, or for having been published after 1899 (Articles 11.7.1.1, 11.7.2). ● *Hoc loco*. ● *Code*: unavailable name.

**Bidirectional ostension**, *e.* ● AL. ● Composite system of ***ostension*** by inclusion and exclusion, pointing both to one or several member(s) and non-member(s) of a class (such as a taxon) (see Dubois 2006*c*: 25). ● Dubois 2007*a*: 46. ● *Code*: no term.

**Bijection**, *n.* ● PH, TA. ● **Ety**: L: *bis*, 'twice'; *iniectio*, 'forcing a fluid into a body'. ● One-to-one correspondence (every element of one domain is related exactly to one element of the other domain). ● Mathematical term coined by the Bourbaki group (Bourbaki 1970). ● **Syn**: ***Isomorphism***. ● *Code*: no term.

**Bijective**, *a.* ● PH, TA. ● **Ety**: L: *bis*, 'twice'; *iniectio*, 'forcing a fluid into a body'. ● Qualification of a relation between two domains which follows a function of ***bijection***. ● Mathematical term coined by the Bourbaki group (Bourbaki 1970), introduced in zoological taxonomy by Dubois & Aescht (2019*e*). ● *Code*: no term.

**Binomen** (pl. ***binomina***), *n.* ● AV, CO. ● **Ety**: L: *bis*, 'twice'; *nomen*, 'name'. ● Nomen of rank species, composed of two terms, the generic ***substantive*** and the specific ***epithet***. ● Traditional term in zoological nomenclature. ● *Code*: binomen.

**Binomina**, *n.* ● Plural of ***binomen***.

**Binominal**, *a.* ● NO. ● **Ety**: see ***Binomen***. ● Qualification of a nomenclatural system like that of the *Code*, in which taxa of the rank species, and only them, are designated by binomina. ● *Code*: no term.

**Biodiversity crisis**, *e.* ● TA, XE. ● The fact that the biosphere is facing one of the most severe and violent aggressions of its history, because of its exceptional speed. ● Wilson 1985. ● *Code*: no term.

**Boleogenus**, *n*. ● TA. ● **Ety**: English: BOL, abbreviation of 'Barcode of Life'; L: *genus*, 'race, lineage'. ● Phenetic genus concept used in the framework of barcode studies, which relies on molecular 'distances' and 'thresholds' between entities to discriminate genus. ● *Hoc loco*. ● *Code*: no term.

**Boleon** (pl. ***boleons***), *n*. ● TA. ● **Ety**: English: BOL, abbreviation of 'Barcode of Life'. ● Phenetic taxonomic concept used in the framework of barcode studies, which relies on molecular 'distances' and 'thresholds' between entities to discriminate taxa. ● Dubois 2017*c*: 17. ● *Code*: no term.

**Boleospecies**, *n*. ● TA. ● **Ety**: English: BOL, abbreviation of 'Barcode of Life'; L: *species*, 'species'. ● Phenetic species concept used in the framework of barcode studies, which relies on molecular 'distances' and 'thresholds' between entities to discriminate species. ● *Hoc loco*. ● *Code*: no term.

**Branch**, *n*. ● NO, PH, TA, XE. ● A portion of a phylogenetic tree situated between two nodes (dichotomies or polytomies). ● Term in traditional use in evolutionary biology. ● *Code*: no term.

**Caconym**, *n*. ● AV. ● **Ety**: G: κακός (*kakos*), 'bad'; ὄνομα (*onoma*), 'name'. ● In zoological nomenclature, a nomen that is not acceptable for linguistic reasons and is therefore an ***anoplonym***. ● Term in use in biological nomenclature. ● *Code*: no term.

**Catastasy**, *n*. ● NO. ● **Ety**: G: καταστάσις, *katastasis*, 'action of establishing, introducing, instituting'. ● A category of ***onomatergy***: any published founder action of ***promulgation*** of a new nomen. ● Dubois 2013: 3. ● *Code*: no term.

**Categories of usage**, *e*. ● AL, VA. ● Under the ***Duplostensional Nomenclatural System***, precisely defined categories of usage of class-series nomina, according to [1] the numbers of mentions of a nomen and of its alternative nomina and [2] the dates of these mentions. ● **End**: ***sozonymorph*** and ***distagmonym***. ● Common language terms; Dubois 2005*b*, 2010*c*. ● *Code*: no term.

**Cenorhizonym**, *n*. ● AV, CO. ● **Ety**: G: κενός (*kenos*), 'empty, vain'; ῥίζα (*rhiza*), 'root, stem'; ὄνομα (*onoma*), 'name'. ● A category of ***pseudorhizonym***: suprageneric nomen **HN** (designating a taxon **HT**) [1] based on the stem of an ***available*** or ***unavailable*** genus-series nomen **GN**, followed by a simple ending denoting plural (e.g., -ae, -idae, -inae, -idi, -oidea, -acea, etc), but [2] this nomen not being referred as ***valid*** to the taxon **HT** in the ***ergotaxonomy*** adopted in the publication where **HN** was introduced. If proposed as a family-series nomen, it is incorrectly formed according to the *Code*, and is therefore a family-series ***anoplonym***. If proposed as a class-series nomen and available, it should be used with the standard ending **-acei,** which is not in a relation of hierarchy and may be used at whatever rank. ● Dubois & Bour 2011: 157; Dubois 2015*c*: 53; Dubois & Frétey 2020*a*. ● *Code*: no term.

**Century of extinctions**, *e*. ● XE. ● The 21st century, which will witness much more extinctions of biological species than all other centuries in the history of mankind. ● Dubois 2003: S9, S18, 2010*c*,*f*). ● *Code*: no term.

**Character**, *n*. ● TA, AV. ● Any intrinsic feature of organisms used for recognising, comparing, differentiating or classifying taxa. In a given taxon, the same character may occur under several distinct alternative ***character states***. ● Traditional term in zoological taxonomy. ● *Code*: character.

**Character state**, *e*. ● TA, AV. ● Any form that a particular character can take. ● Traditional term in zoological taxonomy. ● *Code*: no term.

**Choronym**, *n*. ● AL. ● **Ety**: G: χώρα (*chora*), 'space of land between two limits, country'; ὄνομα (*onoma*), 'name'. ● Class-series nomen ***sozonymorph***, taxonomically allocated within the frame of a given ***ergotaxonomy*** under DONS Criteria through its ***orotaxon*** if present, and being therefore its ***oronym***. This is possible only if all the ***coalienogenera*** of this nomen are still its ***extragenera*** (excluded from its ***metrotaxon***). If this is not the case, the nomen is a ***gephyronym*** and therefore an ***anaptonym***. ● Dubois 2006*a*: 187. ● *Code*: no term.

**Chresonym**, *n*. ● TA. ● **Ety**: G: χρῆσις (*chresis*), 'use'; ὄνομα (*onoma*), 'name'. ● Subsequent use or citation of a nomen under any of its avatars or ***paronyms*** (***parographs***, ***parohypses*** or ***paronymorphs***). ● **End**: ***orthochresonym*** and ***heterochresonym***. ● Dubois 1982*c*: 267. ● *Code*: no term.

**Chronogenera**, *n*. ● Plural of ***chronogenus***.

**Chronogenus**, *n*. ● TA. ● **Ety**: G: χρόνος (*chronos*), 'time'; γένος (genis), 'race, genus'. ● Genus concept relying on estimates of the absolute geological age of taxa. ● *Hoc loco*. ● *Code*: no term.

**Chronogram**, *n*. ● PH. ● **Ety**: G: χρόνος (*chronos*), 'time'; γράμμα (*gramma*), 'writing'. ● Cladogram of taxa incorporating estimates of the absolute geological age of taxa. ● Santamaría & Therón 2009; Brower 2016: 573. ● *Code*: no term.

**Chrononomy**, *n*. ● TA. ● **Ety**: G: χρόνος (*chronos*), 'time'; νόμος (*nomos*), 'law, rule'. ● A taxonomy relying on estimates of the absolute geological age of taxa. ● *Hoc loco*. ● *Code*: no term.

**Chronotaxa**, *n*. ● Plural of ***chronotaxon***.

**Chronotaxon** (pl. ***chronotaxa***), *n*. ● TA. ● **Ety**: G: χρόνος (*chronos*), 'time'; τάξις (*taxis*), 'order, arrangement'. ● A concept of taxon relying on estimates of the absolute geological age of taxa. ● *Hoc loco*. ● *Code*: no term.

**Circumscription**, *n*. ● AL. ● A synonym of ***extension***. ● Traditional term in philosophy, logics and didactics. ● *Code*: no term.

**Circumspecific**, *a*. ● TA. ● **Ety**: L: *circum*, 'around, near'; *species*, 'view, sight, shape, form, kind, species'. ● That deals with taxa at ranks just above and below the ranks species and subspecies. ● Kiriakoff 1953: 451; Dubois 2011*a*: 80. ● *Code*: no term.

**Clade**, *n*. ● NO, PH, TA, XE. ● **Ety**: G: κλάδος (*klados*), 'shoot, branch'. ● Ambiguous term with four main meanings: [1] in zoological taxonomy and nomenclature, a key rank (***cladus***) of the class-series, between phylum and class (Haeckel 1866*b*; Lankester 1911); [2] in zoological taxonomy and nomenclature, any key rank or 'pseudo-rank' of the family- or class-series , or not even clearly referred to a nominal-series (usual practice in many taxonomic publications nowadays; see e.g. Williams *et al.* 2016); [3] in evolutionary biology, a ***homophyletic*** group of organisms (derived from a common ancestor species), whether complete or not (Huxley 1957); [4] in evolutionary biology, a ***holophyletic*** group of organisms, including an ancestor species and all its descendants (Hennig 1950). See also ***Cladon***. ● *Code*: no term.

**Cladification**, *n*. ● TA. ● Biological classification based exclusively on the result of a cladistic analysis. ● Mayr 1997. ● *Code*: no term.

**Cladistic**, *a*. ● PH, TA. ● Referring to an analysis of genealogical relationships between organisms. ● Cain & Harrison 1960. ● *Code*: no term.

**Cladogenesis**, *n*. ● PH. ● **Ety**: G: κλάδος (*klados*), 'shoot, branch'; ένεσις (*genesis*), 'origin, birth, creation, production'. ● Splitting of an evolutionary lineage, leading to speciation (see Vaux *et al.* 2016, 2017 and Allmon 2017). ● Rensch 1947: 95. ● *Code*: no term.

**Cladogenus**, *n*. ● TA. ● **Ety**: G: κλάδος (*klados*), 'shoot, branch'; γένος (genis), 'race, genus'. ● Genus concept relying exclusively on the result of a cladistic analysis, applying to a group of species considered ***holophyletic*** but without any statement about the limits of this group. ● *Hoc loco*. ● *Code*: no term.

**Cladognoses**, *n*. ● Plural of ***Cladognosis***.

**Cladognosis** (pl. ***cladognoses***), *n*. ● AV, TA. ● **Ety**: G: κλάδος (*klados*), 'shoot, branch'; γιγνώσκω (*gignosko*), 'to know'. ● An intensional definition of a taxon based on a cladistic hypothesis concerning its relationships with other taxa. ● Dubois 1997: 135, 2007*a*: 43, 2017*d*: 70. ● *Code*: no term.

**Cladogram**, *n*. ● PH. ● **Ety**: G: κλάδος (*klados*), 'shoot, branch'; γράμμα (*gramma*), 'writing'. ● Tree-like diagram used to show the genealogical relations between organisms as resulting from a cladistic analysis. ● Mayr 1965: 81 (see Dupuis 1984: 3 and Brower 2016). ● *Code*: no term.

**Cladon** (pl. ***cladons***), *n*. ● TA. ● Taxon based exclusively on the result of a cladistic analysis. ● Mayr 1995. ● *Code*: no term.

**Cladonomy**, *n*. ● TA. ● Taxonomy based exclusively on the result of a cladistic analysis. ● Brummitt 1997; Dubois 1997. ● *Code*: no term.

**Cladus**, *n*. ● NO, TA. ● **Ety**: G: κλάδος (*klados*), 'shoot, branch'. ● In zoological taxonomy and nomenclature, a key rank of the class-series, between phylum and class. ● Haeckel 1866*b*. ● **Syn**: ***clade*** [1]. ● *Code*: no term.

**Clan**, *n*. ● NO, TA. ● **Ety**: Scottish Gaelic: *clann*, 'offspring, children of the family, clan'. ● Secondary family-series key rank in zoological taxonomy and nomenclature, below tribe. ● Bour & Dubois 1985: 83. ● **Syn**: ***clanus***. ● *Code*: no term.

**Clanus**, *n*. ● NO, TA. ● **Ety**: Scottish Gaelic: *clann*, 'offspring, children of the family, clan'. ● Secondary family-series key rank in zoological taxonomy and nomenclature, below tribe. ● Dubois 2006*a*: 208. ● **Syn**: ***clanus***. ● *Code*: no term.

**Class**, *n*. ● NO, TA. ● **Ety**: L: *classis*, 'group, division, class'. ● In zoological taxonomy and nomenclature, a key rank of the class-series, between phylum and order. ● Term in traditional use in taxonomy. ● **Syn**: ***classis***. ● *Code*: class.

**Classification**, *n*. ● NO, TA. ● **Ety**: L: *classis*, 'group, division, class'. ● [1] Any process or system of ordering objects according to *a priori* criteria. [2] The result of this process (see ***ergotaxonomy***). ● Term in traditional use in biology. ● *Code*: classification.

**Classis**, *n*. ● NO, TA. ● **Ety**: L: *classis*, 'group, division, class'. ● In zoological taxonomy and nomenclature, a key rank of the class-series, between phylum and order. ● Term in traditional use in taxonomy. ● **Syn**: ***class***. ● *Code*: no term.

**Class-series (CS)**, *e*. ● NO. ● In the nomenclatural hierarchy, the ***nominal-series*** ranked above the ***family-series***, which is not fully regulated by the *Code.* It includes nomina of taxa at the ranks of phylum, class, order, and any additional ranks that may be required. ● Dubois 2000*b*: 40. ● *Code*: no term.

**Class-series branch (CS-branch)**, *e*. ● NO. ● Any section of a cladistic tree below the rank order and above the rank family in the corresponding ***ergotaxonomy***. ● *Hoc loco*. ● *Code*: no term.

**Coalienogenus** (pl. ***coalienogenera***), *n*. ● AL. ● **Ety**: L: *cum*, 'with'; *alienus*, 'foreign, unrelated'; *genus*, 'birth, origin, class, kind'. ● A category of ***alienogenus***: any member of the indissoluble set of several genus-series taxomina originally excluded from the ***protaxon*** for which a new class-series nomen was ***promulgated***. ● *Hoc loco*. ● *Code*: no term.

**Code**, *n*. ● NO. ● The *International Code on Zoological Nomenclature* (see Anonymous 1999).

**Coinognosis** (pl. ***coinognoses***), *n*. ● AV, TA. ● **Ety**: G: κοινός (*koinos*), 'common, kindred'; γνῶσις (*gnosis*), 'knowledge, understanding'. ● ***Extensional cladognosis*** of a taxon based directly on the hypothesised cladistic relationships of this taxon derived from a cladistic analysis. ● Dubois 2008*f*: 63. ● *Code*: no term.

**Combination**, *n*. ● NO, TA. ● **Ety**: L: *combinatio*, 'mating, assemblage of objects by two'. ● A category of ***onymorph***: any ***paronym*** of a nomen implying an association between a generic ***substantive*** and a specific or subspecific ***final epithet***, irrespective of potential other words in the binomen or trinomen. ● Term in traditional use in zoological nomenclature. ● *Code*: combination.

**Commission**, *n*. ● NO. ● The International Commission on Zoological Nomenclature (see Anonymous 1999).

**Comprehension**, *n*. ● See ***Intension***.

**Compulsory rank**, *e*. ● See ***Mandatory rank***.

**Connector**, *n*. ● NO. ● Group of letters (e.g., *-aid*, *-oid*, *-id*, *-in*, *-it*) connecting (if present) the ***stem*** of a family-series nomen (based on a genus-series nomen) to its ***suffix***, and thus contributing to indicating the rank of the taxon to which it applies. ● Alonso-Zarazaga 2005: 191; Dubois 2006*a*: 211; Dubois & Aescht 2019*m*: 103. ● *Code*: no term.

**Conucleogenera**, *n*. ● Plural of ***conucleogenus***.

**Conucleogenus** (pl. ***conucleogenera***), *n*. ● AL. ● **Ety**: L: *cum*, 'with'; *nucleus*, 'kernel, nut'; *genus*, 'birth, origin, class, kind'. ● Any member of the indissoluble set of several genus-series taxomina originally referred to the ***protaxon*** for which a new class-series nomen was ***promulgated***. ● Dubois 2006*a*: 180. ● *Code*: no term.

**Coordinated**, *p*. ● AV. ● In the context of zoological nomenclature, qualification of a nomen which exists under several ***paronyms*** that are in a relation of ***coordination***. ● Traditional term in zoological nomenclature. ● *Code*: no term.

**Coordination**, *n*. ● AV. ● In the context of zoological nomenclature, the fact that any nomen created for a taxon at any rank within a nominal-series is deemed to have been simultaneously created for all taxa of other (higher or lower) ranks within that nominal-series including its onomatophore that might have to be recognised. ● Traditional term in zoological nomenclature. ● *Code*: coordination.

**Correct**, *a*. ● CO. ● In the context of zoological nomenclature, qualification of a nomen (***eunym***) that conforms to the nomenclatural Rules regarding spelling, rank and, if relevant, onymorph. ● **Ant**: ***incorrect***. ● Traditional term in nomenclature. ● *Code*: correct.

**Correctness**, *n*. ● CO. ● Qualification of a valid nomen (***kyronym***) which bears a ***paronym***—i.e. a spelling (***parograph***), rank (***parohypse***) and, if relevant, onymorph (***paronymorph***)—that is in agreement with the Rules of the *Code*. ● **Ant**: ***incorrectness***. ● Traditional term in nomenclature. ● *Code*: no term.

**Criteria**, *n*. ● Plural of ***criterion***.

**Criterion** (pl. ***criteria***), *n*. ● NO, TA. ● In zoological nomenclature, a rule proposed for implementation as a Rule in the *Code*, but which until this is done does not have the force of law. It may be followed by the zootaxonomists and zoologists who wish so, especially in domains where the *Code* is silent, such as the taxonomic allocation, validity and correctness of class-series nomina. ● Term in traditional use in common language; Dubois 2015*c*. ● *Code*: no term.

**CS**, *ab*. ● See ***Class-series***.

**CS-branch**, *e*. ● See ***Class-series branch***.

**Date**, *n*. ● See ***Publication date***.

**Define**, *v*. ● See ***Definition***.

**Definition**, *n*. ● AV. ● Common language term used with several meanings in zoological taxonomy and nomenclature. [1] Regarding the ***availability*** of a new nomen: a statement in words of ***character states***, which, in combination, are considered to uniquely distinguish the taxon for which the new nomen is proposed from at least one other taxon of the same rank, the latter being explicitly mentioned. [2] Regarding the ***taxonomic allocation*** of a new nomen: see ***intensional definition*** and ***extensional definition***. [3] Regarding ***taxonomic categories***: a statement of the kind of information used to refer, if relevant, a taxon to a taxonomic category, and consequently to a nomenclatural rank. ● Traditional term in zoological taxonomy. ● *Code*: definition.

**Delonym**, *n*. ● RE. ● **Ety**: G: δηλος (*delos*), 'visible, evident, plain, clear'; ὄνομα (*onoma*), 'name'. ● Nomen registered, in an international nomenclatural database recognised by the *Code*, thus permanently available in zoological nomenclature. ● **Ant**: ***adelonym***. ● Dubois 2011*a*: 81. ● *Code*: no term.

**Dendrogram**, *n*. ● PH. ● **Ety**: G: κλάδος (*klados*), 'shoot, branch'; γράμμα (*gramma*), 'writing'. ● Tree-like, branching diagram used to indicate 'degrees of relationships' between organisms. ● Mayr *et al.* 1953: 58 81 (see Brower 2016). ● *Code*: no term.

**Description**, *n*. (***describe***, *v*). ● TA, AV. ● A statement in words of some taxonomic ***character states*** of a specimen. ● Traditional term in zoological taxonomy. ● *Code*: description.

**Designate**, *v*. ● AL. ● In the context of zoological nomenclature, see ***Designation***.

**Designation**, *n*. ● AL. ● In the context of zoological nomenclature, an ***onomatergy*** consisting in electing, by an explicit statement, the ***onomatophore*** of a newly (original designation) or previously (subsequent designation) established nomen. ● Traditional term in zoology and philosophy; Dubois 2006*a*: 181, 251. ● *Code*: typification.

**Diagnogenus**, *n*. ● TA. ● **Ety**: G: διάγνωσις (*diagnosis*), 'distinction, discrimination'; γένος (*genos*), 'race, genus'. ●

Genus concept relying on two Criteria: [1] genera should be groups of species considered to be strictly holophyletic; [2] they should be ***diagnosable*** through characters accessible to the external examination of specimens, i.e. mostly morphological and ecological, but excluding internal anatomical characters, cytogenetic or molecular data. ● *Hoc loco*. ● *Code*: no term.

**Diagnosability**, *a*. ● TA. ● **Ety**: see ***diagnosis***. ● For a taxon, the fact that it can be distinguished from another taxon on the basis of characters accessible to the external examination of specimens or to the study of animals in their natural habitat, i.e. mostly morphological, behavioural and ecological, but excluding internal anatomical characters, cytogenetic or molecular data. ● Vences *et al.* 2013: 217–218. ● *Code*: no term.

**Diagnosable**, *a*. ● TA. ● **Ety**: see ***diagnosis***. ● For a taxon, that can be distinguished from another taxon on the basis of characters. ● Common language term, here used with a precise technical meaning proper to taxonomy. ● *Code*: no term.

**Diagnoses**, *n*. ● Plural of ***diagnosis***.

**Diagnosis** (pl. ***diagnoses***), *n*. ● TA, AV. ● **Ety**: G: διάγνωσις (*diagnosis*), 'distinction, discrimination'. ● An ***intensional*** definition of a taxon based on ***character states***, both apomorphic and plesiomorphic, that are considered to be differential for the taxon, i.e., shared by all members of the taxon and absent in all non-members. ● Traditional term in taxonomy; Dubois 2017*d*: 71. ● *Code*: diagnosis.

**Diagnostic**, *a*. ● TA. ● **Ety**: see ***diagnosis***. ● For a character, that allows distinction between two taxa or more. ● Common language term, here used with a precise technical meaning proper to taxonomy. ● *Code*: no term.

**Dichotomy**, *n*. ● PH, TA. ● **Ety**: G: διχότομος (*dikhotomos*), 'equally divided, cut in half', from δίχα (*dikha*), 'in two'; τομή (*tome*), 'cutting, incision'. ● Partition of a set into two subsets. ● Common language term. ● *Code*: no term.

**Diorismonym**, *n*. ● **Ety**: G: διορισμός (*diorismos*), 'definition'; ὄνομα (*onoma*), 'name'. ● A category of ***ectonym***: ***nomen*** proposed under a nomenclatural system using explicitly ***intensional definitions*** instead of ostension for the allocation of ***nomina*** to taxa and therefore unavailable under DONS. ● Dubois & Frétey 2020*a*: 5, 42. ● *Code*: no term.

**Diplohypotaxy**, *n*. ● TA. ● **Ety**: G: διπλόος (*diploos*), 'double'; ὑπό (*hupo*), 'below'; τάξις (*taxis*), 'order, arrangement'. ● Mode of ***hypotaxy*** of a taxon that includes two ***parordinate*** taxa of just lower rank. In a phylogenetic taxonomic frame, the meaning of this situation is that a simple hypothesis of relationships between these two taxa is adopted, these two parordinate taxa being considered as sister-taxa. Although this interpretation can be challenged by subsequent works, as long as it is not such a taxonomy appears like a 'final' one. ● Dubois & Raffaëlli 2009: 12. ● *Code*: no term.

**Distagmograph** *n*. ● CO. ● **Ety**: G: δισταγμός (*distagmos*), 'doubt, uncertainty'; γράφω (*grapho*), 'I write'. ● Spelling of class-series nomen that has **not** had a universal or significant use in the literature after 31 December 1899 (i.e., that did not appear in at least 100 titles of publications since then). ● **Ant**: ***sozograph***. ● *Hoc loco*. ● *Code*: no term.

**Distagmonym** *n*. ● AV, VA. ● **Ety**: G: δισταγμός (*distagmos*), 'doubt, uncertainty'; ὄνομα (*onoma*), 'name'. ● Class-series nomen that has **not** had a universal or significant use in the literature after 31 December 1899 (i.e., that did not appear in at least 100 titles of publications since then). ● **Ant**: ***sozonymorph***. ● Dubois 2005*a*: 86, 2005*b*: 412. ● *Code*: no term.

**Distributed**, *p*. ● NO, TA. ● For a work produced on paper, on an electronic disc or released by electronic means: publicly issued and dissiminated. ● Common language term, here issued with a technical meaning relating to zoological taxonomy or nomenclature. ● *Code*: distributed.

**Distribution**, *n*. ● NO, TA. ● The public issue and dissemination of a work produced on paper, on an electronic disc or released by electronic means. ● Common language term, here issued with a technical meaning relating to zoological taxonomy or nomenclature. ● *Code*: distribution.

**DONS**, *ab*. ● See ***Duplostensional Nomenclatural System***.

**Double auctorship**, *e*. ● VA. ● Qualification of the auctorship (and date) of a family-series junior synonym validated through Articles 35.4.1 or 40.2 (see Dubois 2015*a*: 31–34). See ***primary auctorship*** and ***secondary auctorship***. ● *Hoc loco*. ● *Code*: no term.

**Doxisonym**, *n*. ● TA, VA. ● **Ety**: G: δόξα (*doxa*), 'opinion'; ἴσος (*isos*), 'equal'; ὄνομα (*onoma*), 'name'. ● A category of ***synonym***: any of two or more nomina based on different onomatophores but considered, for subjective (taxonomic) reasons, to denote the same taxon, whose ***inclusive extension*** includes both their onomatophores. ● Dubois 2000*b*: 57. ● *Code*: subjective synonym.

**D-publication**, *n*. ● AV. ● Publication released on optical disc (CD-Rom, DVD). ● Dubois *et al.* 2013: 5. ● *Code*: work on optical disc.

**Duplostensional Nomenclatural System (DONS)**, *e*. ● NO. ● A composite class-series nomenclatural system in which ***distagmonyms*** are allocated to taxa through MONS whereas ***sozonymorphs*** are so through OONS if they are ***oronyms***, through MONS if they are ***ellitonyms***, or are unallocated if they are ***gephyronyms***. ● Dubois 2015*a*: 13. ● Code: no term.

**Ecdidonym**, *n*. ● AV. ● **Ety**: G: ἐκδίδωμι (*ecdidomi*), 'I publish'; ὄνομα (*onoma*), 'name'. ● Nomen that has been introduced in a publication available under the *Code*. ● **Ant**: ***Anecdidonym***. ● *Hoc loco*. ● *Code*: no term.

**Ecogenus**, *n*. ● TA. ● **Ety**: G: οἶκος (*oikos*), 'house, habitation'; γένος (genis), 'race, genus'. ● Genus concept according to which genera should be groups of species being morphological and ecological units, sharing closely related ecological niches and adaptive zones. ● *Hoc loco*. ● *Code*: no term.

**Ectonym**, *n*. ● AV. ● **Ety**: G: ἐκτός (*ektos*), 'outside, far from'; ονομα (*onoma*), 'name'. ● A nomen originally proposed under a nomenclatural system different from that of the *Code* and incompatible with it. This applies to nomina proposed within the framework of alternative nomenclatural systems, or simply which do not respect some of the basic requirements of the *Code* such as binominal nomenclature for species, the assignment of nomina to nominal-series and ranks, or the taxonomic allocation of nomina through ostension with onomatophores but not through verbal intensional definitions (see e.g. Dubois 2011*a*, 2015*c*; Dubois & Frétey 2020*a*). ● Dubois 2020*a*: 7, 38. ● *Code*: no term.

**Effective**, *a*. ● AL. ● Qualification of an ***onomatergy*** that makes it actual under the Rules of the *Code*. ● Traditional term in common language, introduced in zoological nomenclature by Dubois & Aescht (2019*s*: 166). ● *Code*: no term.

**Elect**, *v*. ● AL. ● In the context of zoological nomenclature, see ***Election***.

**Election**, *n*. ● AL. ● A general term for the fixation of the onomatophore of a nomen, whether by original or by subsequent designation. ● **End**: ***designation***, ***monophory***, ***tautonymy***. ● Traditional term in nomenclature; Dubois & Aescht 2017*e*: 33. ● *Code*: no term.

**Electonucleogenera**, *n*. ● Plural of ***electonucleogenus***.

**Electonucleogenus** (pl. ***electonucleogenera***). ● AL. ● **Ety**: L: *eligo*, 'pick up, choose'; *nucleus*, 'nucleus, core, stone' (from *nux*, 'nut'); *genus*, 'birth, origin, class, kind'. ● Nominal genus subsequently designated among the ***prenucleogenera*** of a family-series being an arhizonym. ● *Hoc loco*. ● *Code*: no term.

**Ellitonym**, *n*. ● AV. ● **Ety**: G: ἐλλιτής (*ellites*), 'lacking, defective'; ὄνομα (*onoma*), 'name'. ● Class-series nomen that misses an ***onomatostasis*** (***alienogenera***) and that therefore can be validated only as a ***metronym*** under the ***Ostensional Nomenclatural Systems***. ● One of the two meanings of the term ***nesonym*** as defined by Dubois (2015*c*: 65), hereby distinguished from the latter. ● *Code*: no term.

**Empire**, *n*. ● NO, TA. ● **Ety**: L: *imperium*, 'supreme power, empire'. ● Highest class-series key rank in biological taxonomy and nomenclature. ● Term in traditional use in taxonomy. ● **Syn**: ***imperium***. ● *Code*: no term.

**Ending**, *n*. ● NO. ● For the purpose of zoological nomenclature, the letter or group of letters at the end of a nomen. In the species- and genus-series, the ending is composed of the ***suffix*** alone; in the family-series, the ending indicates the rank of the taxon and is composed of the ***connector*** (if present) and the ***suffix***. ● **End**: ***fixed ending*** and ***variable ending***. ● Term of grammar, in traditional use in biological nomenclature, redefined by Dubois & Aescht 2019*j,r*). ● *Code*: ending.

**Endonym**, *n*. ● NO. ● **Ety**: G: ἔνδον (*endon*), 'inside of'; ὄνομα (*onoma*), 'name'. ● [1] General meaning: term designating a subordinate class. [2] Specialised meaning in nomenclature: nomen which applies to an ***endotaxon*** in a given ***ergotaxonomy***. ● Dubois & Aescht 2019*h*: 76. ● *Code*: no term.

**Endotaxa**, *n*. ● One of the two plurals of ***endotaxon***.

**Endotaxon** (pl. ***endotaxa***, ***endotaxons***), *n*. ● TA. ● **Ety**: G: ἔνδον (*endon*), 'inside of'; τάξις (*taxis*), 'order, arrangement'. ● Any taxon which is subordinate to another taxon (its ***angiotaxon***) in a given ***ergotaxonomy***. ● Dubois 2005*b*: 406. ● *Code*: no term.

**Endotaxons**, *n*. ● One of the two plurals of ***endotaxon***.

**Endonym**, *n*. ● NO. ● **Ety**: G: ἔνδον (*endon*), 'inside of'; ὄνομα (*onoma*), 'name'. ● ***Nomen*** of an ***endotaxon*** in a given ergotaxonomy. ● Dubois & Aescht 2019*i*: 76. ● *Code*: no term.

**Endotaxa**, *n*. ● One of the two plurals of ***endotaxon***.

**Endotaxon** (*pl*. ***endotaxa***, ***endotaxons***), *n*. ● NO. ● **Ety**: ἔνδον (*endon*), 'inside of'; τάξις (*taxis*), 'class, arrangement'. ● Any taxon which is subordinate to another taxon (its ***angiotaxon***) in a given ergotaxonomy. ● Dubois 2005*b*: 406. ● *Code*: no term.

**Endotaxons**, *n*. ● One of the two plurals of ***endotaxon***.

**Eneonym**, *n*. ● VA. ● **Ety**: G: ἐνεός (*eneos*), "dumb"; ὄνομα (*onoma*), "name". ● Nomen never mentioned as nomenclaturally available by any author and in any publication after 31 December 1899. ● Dubois 2005*a*: 85, 2005*b*: 411. ● *Code*: no term.

**Enneatomy**, *n*. ● PH, TA. ● **Ety**: G: ἐννέα (*ennea*), 'nine'; τομή (*tome*), 'cutting, incision'. ● Partition of a set into nine subsets. ● *Hoc loco*. ● *Code*: no term.

**Epifamilia**, *n*. ● NO, TA. ● **Ety**: G: ἐπί (*epi*), 'on, over'; L: *familia*, 'family'. ● Subsidiary family-series taxonominal rank, between apofamily and superfamily. ● **Syn**: ***epifamily***. ● Bour & Dubois 1985. ● *Code*: no term.

**Epifamily**, *n*. ● NO, TA. ● **Ety**: G: ἐπί (*epi*), 'on, over'; L: *familia*, 'family'. ● Subsidiary family-series taxonominal rank, between apofamily and superfamily. ● **Syn**: ***epifamilia***. ● Bour & Dubois 1985. ● *Code*: no term.

**Epihypse**, *n*. ● NO. ● **Ety**: G: ἐπί (*epi*), 'on, over, above'; υψος (*hupsos*), 'height'. ● Any ***parohypse*** of a nomen being superordinate to another ***parohypse*** of the same nomen. ● Ant: ***hypohypse***. ● Dubois 2006*b*: 828 (as 'epinym'), 2011*a*: 22, 82. ● *Code*: no term.

**EPITA**, *ab*. ● See ***Explicit internal airesy***.

**Epithet**, *n*. ● NO. ● Specific or subspecific ***nomen***, never bearing a capital, being part of a ***binomen*** or ***trinomen***. ● Traditional term in zoological nomenclature. ● *Code*: species-group name [English text]; nom du niveau espèce [French text].

**Epomallelonym**, *n*. ● AV. ● **Ety**: G: ἕπομαι (*epomai*), 'I follow'; ἀλλήλων (*allelon*), 'the one… the other…'; ονομα (*onoma*), 'name'. ● One among two ***parallelonyms*** which was clearly not given preference over the other one (its ***agoallelonym***) in the original publication, and which for this reason does not have precedence over it. ● Dubois 2015*c*: 43, 73. ● *Code*: no term.

**E-publication**, *n*. ● AV. ● Publication distributed electronically online. ● Dubois *et al.* 2013: 5. ● *Code*: work issued and distributed electronically.

**Ergonym**, *n*. ● CO. ● **Ety**: G: ἔργον (*ergon*), 'work, action'; ὄνομα (*onoma*), 'name'. ● ***Eunym*** currently used in all or some ergotaxonomies. ● **Ant**: ***argionym***. ● Dubois 2000*b*: 54. ● *Code*: no term.

**Ergotaxonomy**, *n*. ● NO, TA. ● **Ety**: G: ἔργον (*ergon*), 'work, action'; τάξις (*taxis*), 'order, arrangement'; νόμος (*nomos*), 'law, rule'. ● Any classification considered valid in a certain work by a given author. ● Dubois 2005*b*: 406. ● *Code*: no term.

**ETA**, *ab*. ● See ***External airesy***.

**Eugraph**, *n*. ● CO. ● **Ety**: G: εὖ (*eu*), 'well, easily'; γράφω (*grapho*), 'I write'. ● Correct spelling of a nomen for a given taxon in a given ***ergotaxonomy***. This spelling may be imposed by the *Code* or by DONS to a given nomen, superseding its ***protograph*** if necessary: [1] either for being a ***nomograph*** (***eunomograph*** or ***legonomograph***); [2] or for being an ***archograph***; [3] or for being a ***legethograph***. ● **Ant**: ***nothograph***. ● Dubois 2010*a*: 7, 40. ● *Code*: correct original spelling, justified emendation, mandatory change.

**Eugraphy**, *n*. ● CO. ● **Ety**: see ***Eugraph***. ● Rules and Criteria allowing to establish the ***eugraph*** of a nomen for a given taxon in a given ***ergotaxonomy***, following the *Code* for SS, GS and FS nomina (nomographs and archographs) or DONS for CS nomina (legethographs). ● *Hoc loco*. ● *Code*: no term.

**Euhypse**, *n*. ● CO. ● **Ety**: G: εὖ (*eu*), 'well, easily'; υψος (*hupsos*), 'height'. ● Correct rank of a nomen for a given taxon in a given ***ergotaxonomy***. ● Dubois 2010*a*: 7. ● *Code*: no term.

**Eulabonym**, *n*. ● AV. ● **Ety**: G: εὐλαβής (*eulabes*), 'cautious, circumspect'; ὄνομα (*onoma*), 'name'. ● In zoological nomenclature, a nomen that is proposed conditionally after 1960 and is therefore an ***anoplonym***. ● *Hoc loco*. ● *Code*: no term.

**Eunomograph**, *n*. ● AV, VA. ● **Ety**: G: εὖ (*eu*), 'well, easily'; νόμος (*nomos*), 'law'; γράφω (*grapho*), 'I write'. ● ***Nomograph*** that is imposed by the *Code* to a given nomen in a given ***ergotaxonomy***, superseding the ***protograph*** because the ***protograph*** is an original ***nothograph*** and must go through a ***mandatory spelling correction*** (Dubois 2013: 10). ● *Hoc loco*. ● *Code*: justified emendation.

**Eunym**, *n*. ● CO. ● **Ety**: G: εὖ (*eu*), 'well, easily'; ὄνομα (*onoma*), 'name'. ● Correct ***paronym*** (***eugraph***, ***euhypse*** and, if relevant, ***eunymorph***) of a nomen for a given taxon in a given ***ergotaxonomy***. ● **Ant**: ***nothonym***. ● Dubois 2000*b*: 54. ● *Code*: no term.

**Eunymorph**, *n*. ● CO. ● **Ety**: G: εὖ (*eu*), 'well, easily'; ονομα (*onoma*), 'name'; μορφή (*morphe*), 'form, shape'. ● Correct onymorph of a nomen for a given taxon in a given ***ergotaxonomy***. ● Dubois 2010*a*: 7. ● *Code*: no term.

**Eurydiaphonym**, *n*. ● VA. ● **Ety**: G: εὐρύς (*eurus*), 'broad, wide'; διάφωνος (*diaphonos*), 'discordant'; ὄνομα (*onoma*), 'name'. ● Nomen that has been used as valid for a given taxon, or for taxa having totally or partially identical extensions, in the titles of 100 scientific works after 31 December 1899. ● Dubois 2005*a*: 85, 2005*b*: 412. ● *Code*: no term.

**Exclusive extension**, *e*. ● AL. ● System of ***extension*** by exclusion, listing all non-member(s) of a class (such as a taxon). ● Dubois 2005*b*: 379. ● *Code*: no term.

**Exclusive ostension**, *e*. ● AL. ● System of ***ostension*** by exclusion, pointing to one or several non-member(s) of a class (such as a taxon). ● Dubois 2006*c*: 25. ● *Code*: no term.

**Exhaustive taxonomy**, *e*. ● TA, XE. ● Development of a strategy for deploying enough manpower and funds for field work to approach an (almost) exhaustive taxonomic inventory of a taxonomic group worldwide. ● Dubois 2008*e*. ● *Code*: no term.

**Exonym**, *n*. ● AL. ● **Ety**: G: ἔξω (*exo*), 'out of, outside'; ονομα (*onoma*), 'name'. ● Nomen of an ***exotaxon*** under a given ***ergotaxonomy***. ● *Hoc loco*. ● *Code*: no term.

**Exoplonym**, *n*. ● VA. ● **Ety**: G: ἔξοπλος (*exoplos*), 'disarmed'; ὄνομα (*onoma*), 'name'. ● Nomen permanently made unavailable by the Commission under the Plenary Power, through one of the following actions: [1] removal of availability of the publication where this nomen had been established (***archanecdidonym***); [2] removal of availability of the nomen itself (***archexoplonym***). ● Dubois 2000*b*: 51. ● *Code*: no term.

**Exotaxa**, *n*. ● One of the two plurals of ***exotaxon***.

**Exotaxon** (*pl*. ***exotaxa***, ***exotaxons***), *n*. ● **Ety**: G: ἔξω (*exo*), 'out of, outside'; τάξις (*taxis*), 'class, arrangement'. ● Any external (or 'sister') taxon of a given taxon of the same rank (***parordinate***) in a given ***ergotaxonomy***. Under DONS, this concept applies to any CS taxon including one or several ***alienogenera*** of a CS nomen. ● Dubois & Frétey 2020*a*. ● *Code*: no term.

**Exotaxons**, *n*. ● One of the two plurals of ***endotaxon***.

**Explicit internal airesy (EPITA)**, *e*. ● VA, CO. ● An ***internal airesy*** which is explicit i.e., all competing spellings being mentioned and one of them being designated as correct. ● Dubois 2013: 12. ● *Code*: no term.

**Extant**, *n*. ● XE. ● For a taxon of **Amphibia**: that includes at least one living (non-fossil) species.

**Extension**, *n*. ● AL. ● System of allocation of a nomen to a concept or class (such as a taxon) through providing a list of all objects that satisfy the ***intensional definition*** of a concept (***inclusive extension***), or that do not satisfy it (***exclusive extension***). ● Traditional term in philosophy, logics and didactics (see Dubois 2005*a*: 74, 2005*b*: 379). ● *Code*: no term.

**Extensional**, *a*. ● AL. ● See ***Extension***.

**Extensional definition**, *e*. ● AL. ● Definition of a concept or class (such as a taxon) based on ***extension***. ● Traditional term in philosophy, logics and didactics (see Dubois 2005*b*: 379). ● *Code*: no term.

**External airesy (ETA)**, *e*. ● VA, CO. ● An ***airesy*** taken in case of ***zygography*** under Article 24.2.3 of the *Code* by an author or authors not being the original ***auctor(s)*** of the nomen. To be valid, an external airesy must be explicit, i.e., both competing spellings must be mentioned and one of them must be unambiguously designated as correct. ● Dubois 2013: 12. ● *Code*: no term.

**Extinct**, *n*. ● XE. ● For a taxon of **Amphibia**: an extant taxon all members of which are considered to have become extinct during the Anthropocene.

**Extragenera**, *n*. ● Plural of ***extragenus.***

**Extragenus** (pl. ***extragenera***), *n*. ● AL. ● **Ety**: L: *extra*-, 'out of, outside'; *genus*, 'birth, origin, class, kind'. ● Any of the ***alienogenera*** allowing to ascertain the external limits of a class-series taxon and therefore to identify its sister-taxon or -taxa of same rank (***parordinate***) under the ***Orostensional Nomenclatural System***. ● Dubois 2006*a*: 230. ● *Code*: no term.

**Familia**, *n*. ● NO, TA. ● **Ety**: L: *familia*, 'family'. ● Highest family-series key rank in zoological taxonomy and nomenclature. ● Term in traditional use in taxonomy. ● **Syn**: ***family***. ● *Code*: no term.

**Family**, *n*. ● NO, TA. ● **Ety**: L: *familia*, 'family'. ● Highest family-series key rank in zoological taxonomy and nomenclature. ● Term in traditional use in taxonomy. ● **Syn**: ***familia***. ● *Code*: no term.

**Family-series (FS)**, *e*. ● NO. ● In the nomenclatural hierarchy, the highest-ranking ***nominal-series*** fully regulated by the *Code*. It includes nomina of taxa at the ranks of family, subfamily, tribe, subtribe, superfamily, and any additional ranks that may be required. ● Dubois 2000*b*: 40. ● *Code*: family group [English text]; niveau famille [French text].

**Family-series branch (FS-branch)**, *e*. ● NO. ● Any section of a cladistic tree below the lowest class-series rank and above the rank genus in the corresponding ergotaxonomy. ● *Hoc loco*. ● *Code*: no term.

**Final epithet**, *e*. ● NO.● Epithet designating a taxon, either of specific or of subspecific rank, which is the lowest ranked one in a given classification. ● Term in use in botanical nomenclature (Turland *et al.* 2018), introduced in zoological nomenclature by Dubois (2011*a*: 58, 83). ● *Code*: no term.

**First reviser**, *e*. ● NO. ● *Code*: first reviser. ● See ***Arbiter***.

**First-use**, *n*. ● AV. ● The result of the process by which a ***scriptor*** uses for the first time in the taxonomic literature a new ***aponym*** (***apograph***, ***apohypse*** or ***aponymorph***) for a ***hoplonym***. ● Term in common use with various meanings in common language, here used with a precise technical meaning proper to nomenclature; Dubois 2000*b*: 44. ● *Code*: no term.

**First-use**, *v*. ● AV. ● The process by which a ***scriptor*** uses for the first time in the taxonomic literature a new ***aponym*** (***apograph***, ***apohypse*** or ***aponymorph***) for a ***hoplonym***. ● Term in common use with various meanings in common language, here used in a specialised technical sense proper to nomenclature; *hoc loco*. ● *Code*: no term.

**First-user**, *e*. ● AV. ● Name(s) of the ***scriptor*** who appear(s) as ***author*** of the work where an aponym was first published. ● Dubois 2000*b*: 42. ● See ***Scriptor***.

**Fixed ending**, *e*. ● NO. ● Ending of a nomen that is not liable to change according to the ergotaxonomy adopted. This includes in particular the following two situations: [1] species-series epithet in the genitive case: ***suffix*** reflecting in some cases the genders and numbers of the persons or places referred to by the epithet; [2] genus-series substantive: ***suffix*** indicating its grammatical gender. ● Dubois & Aescht 2019*j*: 103. ● *Code*: no term.

**FRR**, *ab*. ● See ***Fully regulated family-series ranks***.

**FS**, *ab*. ● See ***Family-series***.

**FS-branch**, *e*. ● See ***Family-series branch***.

**Fully regulated family-series ranks (FRR)**, *e*. ● NO. ● Ranks of the family-series for which mandatory endings are prescribed by the *Code* (Articles 29.2 and 34.1): superfamily (-*OIDEA*), family (-*IDAE*), subfamily (-*INAE*), tribe (-*INI*) and subtribe (-*INA*). ● Dubois & Aescht 2019*o*: 128. ● *Code*: no term.

**Gender**, *n*. ● NO. ● In some languages (e.g. Latin languages or German), each of the classes (masculine, feminine, common, neuter) of nouns and pronouns distinguished by different inflections in words syntaxically associated with them. ● Term of grammar, in traditional use in zoological nomenclature. ● *Code*: gender.

**Generic substantive**, *e*. ● NO. ● Generic or subgeneric ***nomen***, always bearing a capital, being part of a ***binomen*** or ***trinomen***. ● Dubois 2000*b*: 40. ● *Code*: generic name, genus name, name of a genus.

**Genion**, *n*. ● TA. ● A taxonomic category of nomenclatural rank genus. ● Dubois 2009*c*: 29, 45. ● *Code*: no term.

**Genus**, *n*. ● NO, TA. ● **Ety**: L: *genus*, 'birth, origin, class, kind'. ● Only genus-series key rank in zoological taxonomy and nomenclature. ● Term in traditional use in taxonomy. ● *Code*: genus.

**Genus-series**, *e*. ● NO. ● In the nomenclatural hierarchy, the ***nominal-series*** ranked between the ***species-series*** and the ***family-series***. It includes taxa at the ranks of genus and subgenus. ● Dubois 2000*b*: 40. ● *Code*: genus group [English text]; niveau genre [French text].

**Gephyronym**, *n*. ● AL. ● **Ety**: G: τέως (*gephyra*), 'bridge', ὄνομα (*onoma*), 'name'. ● Class-series ***sozonymorph*** that cannot be taxonomically allocated within the frame of a given ***ergotaxonomy*** because at least one of its ***coalienogenera*** is now one of its ***intragenera***. This nomen is therefore an ***anaptonym***. ● *Hoc loco*. ● *Code*: no term.

**Gephyrotaxa**, *n*. ● One of the two plurals of ***gephyrotaxon***. ● Dubois 2005*b*: 407.

**Gephyrotaxic**, *a*. ● NO, TA. ● **Ety**: see ***Gephyrotaxy***. ● Qualification of two distinct taxa being in a relation of partial overlap of their ***extensions***, in a given ergotaxonomy, and whose nomina are assigned to the same or different nominal-series. ● Dubois 2005*b*: 407. ● *Code*: no term.

**Gephyrotaxon** (pl. ***gephyrotaxa***, ***gephyrotaxons***), *n*. ● NO, TA. ● **Ety**: see ***Gephyrotaxy***. ● One of two distinct taxa being in a relation of partial overlap of their ***extensions***, in a given ergotaxonomy, and whose nomina are assigned to the same or different nominal-series. ● Dubois 2005*b*: 407. ● *Code*: no term.

**Gephyrotaxons**, *n*. ● One of the two plurals of ***gephyrotaxon***. ● *Hoc loco*.

**Gephyrotaxy**, *n*. ● NO, TA. ● **Ety**: G: περί (*peri*), 'around'; τάξις (*taxis*), 'order, arrangement'. ● Relation of partial overlap of their ***extensions***, in a given ergotaxonomy, and whose nomina are assigned to the same or different nominal-series. ● Dubois 2005*b*: 407. ● *Code*: no term.

**Getalienogenera**, *n*. ● Plural of ***getalienogenus***.

**Getalienogenus** (*pl*. ***getalienogenera***). ● **Ety**: G: γείτων (*geiton*), 'neighbour'; L: *alienus*, 'foreign, unrelated'; *genus*, 'birth, origin, class, kind'. ● Closest ***alienogenus*** of a CS ***nomen*** allowing to ascertain the external limits of the CS taxon designated by this ***nomen*** and therefore to identify its ***parordinate*** sister-taxon or -taxa under the ***Orostensional Nomenclatural System***. ● Dubois 2006*a*: 189, 253 (as 'getextragenus'); renamed by Dubois & Frétey (2020*a*). ● *Code*: no term.

**Getangiotaxa**, *n*. ● Plural of ***getangiotaxon***.

**Getangiotaxon** (pl. ***getangiotaxa***), *n*. ● NO, TA. ● **Ety**: G: γείτων (*geiton*), 'neighbour'; ἀγγεῖον (*aggeion*), 'hull, capsule'; τάξις (*taxis*), 'order, arrangement'. ● Immediate ***angiotaxon*** of a given taxon (its ***getendotaxon*** or one of its ***getendotaxa***) in a given ***ergotaxonomy***. ● Dubois & Berkani 2013: 53. ● *Code*: no term.

**Getendonym**, *n*. ● NO. ● **Ety**: G: γείτων (*geiton*), 'neighbour'; ἔνδον (*endon*), 'within, inside'; ονομα (*onoma*), 'name'. ● ***Nomen*** of a ***getendotaxon*** under a given ***ergotaxonomy***. Under DONS Criteria, class-series nomen/nomina allowing the taxonomic allocation of another class-series taxon through inclusion only. ● *Hoc loco*. ● *Code*: no term.

**Getendotaxa**, *n*. ● Plural of ***getendotaxon***.

**Getendotaxon** (pl. ***getendotaxa***), *n*. ● TA. ● **Ety**: G: γείτων (*geiton*), 'neighbour'; ἔνδον (*endon*), 'within, inside'; τάξις (*taxis*), 'order, arrangement'. ● Immediate subordinate taxon of a given taxon (its ***getangiotaxon***) in a given ***ergotaxonomy***. ● Dubois & Berkani 2013: 53. ● *Code*: no term.

**Getexonym**, *n*. ● NO. ● **Ety**: G: γείτων (*geiton*), 'neighbour'; ἔξω (*exo*), 'out of, outside'; ονομα (*onoma*), 'name'. ● ***Nomen*** of a ***getexotaxon*** under a given ***ergotaxonomy***. Under DONS Criteria, class-series nomen/nomina allowing the taxonomic allocation of another class-series taxon through both inclusion and exclusion.● Dubois & Frétey 2020*a*. ● *Code*: no term.

**Getexotaxa**, *n*. ● Plural of ***getexotaxon***.

**Getexotaxon** (*pl*. ***getexotaxa***), *n*. ● TA. ● **Ety**: G: γείτων (*geiton*), 'neighbour'; ἔξω (*exo*), 'out of, outside'; τάξις (*taxis*), 'order, arrangement'. ● A category of ***exotaxon***: closest external (or 'sister') taxon of a given taxon of the same rank (***parordinate***) in a given ***ergotaxonomy***. Under DONS, this concept applies to the closest CS taxon including one or several ***alienogenera*** of a CS ***nomen*** and allowing to ascertain the external limits of the CS taxon designated by an ***oronym*** and therefore to identify, through its ***getalienogenus*** or ***getalienogenera***, its parordinate CS taxon or taxa under the ***Orostensional Nomenclatural System***. ● Dubois 2015*c*: 74. ● *Code*: no term.

**Getextragenus**, *n*. ● NO. ● Obsolete for ***Getalienogenus***.

**Getonucleogenera**, *n*. ● Plural of ***getonucleogenus.***

**Getonucleogenus** (pl. ***getonucleogenera***), *n*. ● NO. ● **Ety**: G: γείτων (*geiton*), 'neighbour'; L: *nucleus* (from *nux*, 'nut'), 'nucleus, core, stone'; *genus*, 'birth, origin, class, kind'. ● One of the closest ***conucleogenera*** of a class-series taxon, allowing to identify its class-series metronym under the ***Metrostensional Nomenclatural System***. ● *Hoc loco*. ● *Code*: no term.

**Grade**, *n*. ● PH. ● A level of biological organisation and complexity of organisms, term devoid of cladistic meaning. ● Lankester 1877: 399. ● *Code*: no term.

**GS**, *ab*. ● See ***Genus-series***.

**Gymnonym**, *n*. ● AV. ● **Ety**: G: γυμνός (*gymnos*), 'naked'; ὄνομα (*onoma*), 'name'. ● A particular case of ***anoplonym***: published but nomenclaturally unavailable nomen according to the *Code*, for failing to comply with the provisions of Articles 12 or 13 (i.e., missing a diagnosis or description, and in some cases an onomatophore). ● Dubois 2000*b*: 49–50. ● *Code*: *nomen nudum*.

**Gymnonymy**, *n*. ● AV. ● **Ety**: see ***Gymnonym***. ● The fact that a new nomen is nomenclaturally unavailable nomen according to the *Code*, for failing to comply with the provisions of Articles 12 or 13 (i.e., missing a diagnosis or description, and in some cases an onomatophore). ● *Hoc loco*. ● *Code*: no term.

**Hadromonym**, *n*. ● AV, VA. ● **Ety**: G: ἁδρός (*hadros*), 'robust'; ὁμός (*homos*), 'the same'; ὄνομα (*onoma*), 'name'. ● Any of two or more available nomina introduced for distinct taxomina and being permanently ***homonyms*** for being either: [1] in the family-series, ***rhizomographs***; or [2] in the genus-series, ***homographs***; or [3] in the species-series, epithets being ***homographs*** or ***paromographs*** (but not ***pseudomographs***) originally referred to the same ***priscogenus***. ● Dubois 2000*b*: 57. ● *Code*: [1] and [2] homonym; [3] primary homonym and secondary homonym (in part).

**Hemihomonym**, *n*. ● AV, VA. ● **Ety**: G: ἥμισυς (*hemisus*), 'half'; ὁμός (*homos*), 'the same'; ὄνομα (*onoma*), 'name'. ● Any of two or more distinct nomina that are homographs but that belong in different nominal-series (in zoology) or which depend on different Codes (e.g., zoological, botanical and bateriological). ● Starobogatov 1984, 1991: 8; Shipunov 2011: 65. ● *Code*: no term.

**Heptatomy**, *n*. ● PH, TA. ● **Ety**: G: ἑπτά (*hepta*), 'seven'; τομή (*tome*), 'cutting, incision'. ● Partition of a set into seven subsets. ● *Hoc loco*. ● *Code*: no term.

**Heterochresonym**, *n*. ● TA. ● **Ety**: G: ἕτερος (*eteros*), 'other, different'; χρησις (*chresis*), 'use'; ὄνομα (*onoma*), 'name'. ● Chresonym inappropriately used to designate a taxon (misidentification). ● **Ant**: ***orthochresonym***. ● Dubois 2000*b*: 59. ● *Code*: no term.

**Heterosynaptonym**, *n*. ● AL. ● **Ety**: G: ἕτερος (*eteros*), 'other, different'; σύν (*syn*), 'together'; ἅπτω (*apto*), 'fasten, attach, fix'; ὄνομα (*onoma*), 'name'. ● ***Synaptonym*** considered taxonomically heterogeneous (composed of specimens or taxomina currently referred to different taxa). ● **Ant**: ***homosynaptonym***. ● Dubois 2011*a*: 25, 84. ● *Code*: one of the meanings of the ambiguous designation *nomen dubium*.

**Hexatomy**, *n*. ● PH, TA. ● **Ety**: G: ἕξ (*ex*), 'six'; τομή (*tome*), 'cutting, incision'. ● Partition of a set into six subsets. ● Common language term. ● *Code*: no term.

**Holaptonym**, *n*. ● AL. ● **Ety**: G: ὅλος (*holos*), 'complete, entire'; ἅπτω (*apto*), 'fasten, attach, fix'; ὄνομα (*onoma*), 'name'. ● ***Monaptonym*** whose ***monophoric*** onomatophore (***holophoront***, ***nucleospecies*** or ***nucleogenus***) was ***designated*** in the original publication where the nomen was ***promulgated***. ● Dubois 2011*a*: 25, 84. ● *Code*: no term.

**Holophoront**, *n*. ● AL. ● **Ety**: G: ὅλος (*holos*), 'complete, entire'; φέρω (*phero*), 'I bear'; ὄν, ὄντος (*on*, *ontos*), 'being, individual'. ● Single specimen originally ***elected*** as ***onymophoront*** of a species-series nomen. ● Dubois 2005*b*: 403. ● *Code*: holotype.

**Holophyletic**, *a*. ● NO, PH, TA, XE. ● **Ety**: G: ὅλος (*olos*) 'whole, complete'; φυλή (*phulé*), 'tribe, race, class'. ● Concept applying to ***taxa***: qualification of a taxon considered to include all the descendants of its most recent common ancestor as well as the latter. ● **Syn**: ***monophyletic*** sensu Hennig (1950). ● Ashlock 1971: 63. ● *Code*: no term.

**Holophyly**, *n*. ● See ***Holophyletic***.

**Holoprotograph**, *n*. ● AV. ● **Ety**: G: ὅλος (*olos*) 'whole, complete'; πρῶτος (*protos*), 'first, earliest'; γράφω (*grapho*), 'I write'. ● A category of ***protograph***: unique original spelling of a nomen. ● **Ant**: ***symprotograph***. ● Dubois & Aescht 2019*l*: 112. ● *Code*: original spelling.

**Holo-system**, *e*. ● NO, TA. ● **Ety**: G: ὅλος (*olos*) 'whole, complete'; σύστημα (*systema*), 'organised whole'. ● A complete taxonomic or nomenclatural system for a given group of organisms, i.e., allowing unambiguous, objective, repeatable and universal decisions in all cases and situations. ● Dubois 2015*c*: 8, 74. ● *Code*: no term.

**Homograph**, *n*. ● AV, VA. ● **Ety**: G: ὁμός (*homos*), 'the same'; γράφω (*grapho*), 'I write'. ● Any of two or more distinct nomina (having different auctors, dates and onomatophores) of the same ***nominal-series*** having the exactly same spelling (even if having different grammatical genders). ● Term in traditional use in common language, introduced in zoological nomenclature by Dubois (2012*a*: 64). ● *Code*: no term.

**Homographic**, *n*. ● AV, VA. ● **Ety**: see ***Homograph***. ● Term having the exactly same spelling as another one. ● Dubois 2012*a*: 64. ● *Code*: no term.

**Homography**, *n*. ● AV, VA. ● **Ety**: see ***Homograph***. ● The fact that two distinct nomina are ***homographs***. ● Dubois 2012*a*: 64. ● *Code*: no term.

**Homomorph**, *n*. ● AV, VA. ● **Ety**: G: ὁμός (*homos*), 'the same'; μορφή (*morphe*), 'form, shape'. ● Collective designation for the set of all the ***homonymorphs***, i.e., nomina based on the same stem, irrespective of their ***nominal-series*** and of their ending. ● Term in traditional use in common language; Dubois 2015*c*: 17, 74. ● *Code*: no term.

**Homonym**, *n*. ● AV, VA. ● **Ety**: G: ὁμός (*homos*), 'the same'; ὄνομα (*onoma*), 'name'. ● In zoological nomenclature, any of two or more distinct ***hoplonyms*** (having different authors, dates and onomatophores) of the same ***nominal-series*** having spellings deemed to be identical under the *Code*. ● Endonyms: [1] ***homograph***, ***rhizomograph*** and ***paromograph***; [2] ***asthenomonym*** and ***hadromonym***. ● Term in traditional use in common language and in zootaxonomy. ● *Code*: homonym.

**Homonymorph**, *n*. ● AV, VA. ● **Ety**: G: ὁμός (*homos*), 'the same'; ὄνομα (*onoma*), 'name'; μορφή (*morphe*), 'form, shape'. ● Any member of a ***homomorph***. ● Dubois 2015*c*: 17, 74. ● *Code*: no term.

**Homonymous**, *a*. ● AV, VA. ● **Ety**: see ***Homonym***. ● In zoological nomenclature, the qualification of two distinct nomina of the same ***nominal-series*** that are ***homonyms*** under the *Code*. ● Term in traditional use in common language and in zootaxonomy. ● *Code*: homonymous.

**Homonymy**, *n*. ● AV, VA. ● **Ety**: see ***Homonym***. ● In zoological nomenclature, the fact that two distinct nomina of the same ***nominal-series*** are ***homonyms*** under the *Code*. ● Term in traditional use in common language and in zootaxonomy. ● *Code*: homonymy.

**Homophyletic**, *n*. ● NO, PH, TA, XE. ● **Ety**: G: ὅλος (*olos*) 'whole, complete'; φυλή (*phulé*), 'tribe, race, class'. ● Concepts applying to ***taxa***: qualification of a non-polyphyletic taxon, considered to be composed of descendants of a common ancestor (see ***monophyletic***), but including either all of them (see ***holophyletic***) or only some of them (see ***paraphyletic***) ● **Ety**: ***monophyletic*** sensu Haeckel (1866*b*). ● Dubois 1986*b*. ● *Code*: no term.

**Homosynaptonym**, *n*. ● AL. ● **Ety**: G: ὁμός (*homos*), 'the same'; σύν (*syn*), 'together'; ἅπτω (*apto*), 'fasten, attach, fix'; ὄνομα (*onoma*), 'name'. ● ***Synaptonym*** which is either indissoluble (members of a ***hapantotype*** as defined in the *Code*; ***conucleogenera*** of a class-series nomen under DONS) or considered taxonomically homogeneous (composed of specimens or taxomina which are referred to the same taxon). ● **Ant**: ***heterosynaptonym***. ● Dubois 2011*a*: 25, 84. ● *Code*: no term.

**Hoplonym**, *n*. ● AV. ● **Ety**: G: ὅπλον (*hoplon*), 'tool, arm, weapon'; ὄνομα (*onoma*), 'name'. ● Nomenclaturally available nomen according to the Rules of the *Code*. ● **Ant**: ***anoplonym***. ● Dubois 2000*b*: 50. ● *Code*: available name.

**Hypercaconym**, *n*. ● AV. ● **Ety**: G: ὑπέρ (*huper*), 'above, beyond); κακός (*kakos*), 'bad'; ὄνομα (*onoma*), 'name'. ● In zoological nomenclature, a category of ***caconym***: genus-, family- or class-series nomen which is not a uninomen and is therefore an ***anoplonym***. ● *Hoc loco*. ● *Code*: no term.

**Hypnokyronym**, *n*. ● VA. ● **Ety**: G: ὕπνος (*hypnos*), 'sleep, sleepiness'; κύριος (*kyrios*), 'proper, correct'; ὄνομα (*onoma*), 'name'. ● Nomen which under DONS Criteria could potentially be used at valid at a rank lower than a teokyronym (e.g., following the resolution of a polytomy), as long as this does not occur, even in a single work, during a 25-year period subsequent to 31 December 2015. Through an exception to regular DONS Criteria, during this period, this nomen remains permanently allocated to this taxon: if this taxon is not recognised as valid in a given ergotaxonomy, this nomen is simply treated as invalid, and cannot be transferred to a more inclusive taxon, even if under regular DONS Criteria it would have to be so. ● Dubois 2015*c*: 74, 2016: 15. ● *Code*: no term.

**Hypnonym**, *n*. ● VA. ● **Ety**: G: ὕπνος (*hypnos*), 'sleep, sleepiness'; ὄνομα (*onoma*), 'name'. ● Nomen conditionally invalidated (i.e., liable to be reinstored as valid as a result of taxonomic changes), either as a result of the Rules of the *Code* or of an ***archoidy***. ● Dubois 2000*b*: 51. ● *Code*: no term.

**Hypodigm**, *n*. ● TA. ● **Ety**: G: ὑπό (*hypo*), 'below'; δεῖγμα (*deigma*), 'proof, sample, specimen'. ● Set of specimens used by a taxonomist to recognise and describe a new species-series taxon. ● Simpson 1940: 418. ● *Code*: no term.

**Hypohypse**, *n*. ● NO. ● **Ety**: G: ἐπί (*epi*), 'on, over, above'; υψος (*hupsos*), 'height'. ● Any ***parohypse*** of a nomen being subordinate to another ***parohypse*** of the same nomen. ● **Ant**: ***epihypse***. ● Dubois 2006*b*: 828 (as 'hyponym'), 2011*a*: 22, 85. ● *Code*: nominotypical.

**Hyponym**, *n*. ● VA. ● **Ety**: G: ὑπό (*hupo*), 'below'; ὄνομα (*onoma*), 'name'. ● In a given nominal-series, nomen of a subordinate taxon bearing the same nomen (with the same author, date and onomatophore) as its superordinate taxon. ● Dubois 2006*b*: 828. ● *Code*: nominotypical name.

**Hyponymous**, *a*. ● See ***Hyponym***.

**Hypotaxy**, *n*. ● TA. ● **Ety**: G: ὑπό (*hypo*), "below"; τάξις (*taxis*), "order, arrangement". ● Taxonomic or nomenclatural subordination. ● **End**: ***anhypotaxy***, ***diplohypotaxy***, ***monohypotaxy*** and ***polyhypotaxy***. If used in a phylogenetic taxonomic frame, they correspond to different topologies of trees, with or without polytomies, thus partly reflecting the resolution of the tree. ● Dubois & Raffaëlli 2009: 11. ● *Code*: no term.

**Hypsonym**, *n*. ● AV. ● **Ety**: G: υψος (*hupsos*), 'height'; ὄνομα (*onoma*), 'name'. ● Nomen proposed under a nomenclatural system explicitly or implicitly ranked. ● **Ant**: ***Anhypsonym***. ● *Hoc loco*. ● *Code*: no term.

**Idiognoses**, *n*. ● Plural of ***idiognosis***.

**Idiognosis** (pl. ***idiognoses***), *n*. ● TA. ● **Ety**: G: ἴδιος (*idios*), 'one's own, particular, proper'; γιγνώσκω (*gignosko*), 'to know'. ● An intensional definition of a taxon based on ***character states*** that are considered to provide a brief description or characterisation of a taxon, including both diagnostic (differential) characters and characters shared with other taxa. ● Dubois & Raffaëlli 2009: 15. ● *Code*: no term.

**Imperium**, *n*. ● NO, TA. ● **Ety**: L: *imperium*, 'supreme power, empire'. ● Highest class-series key rank in biological taxonomy and nomenclature. ● Term in traditional use in taxonomy. ● **Syn**: ***empire***. ● *Code*: no term.

**Implicit etymological nucleogenus designation**, *e*. ● AL. ● In the family-series, implicit designation of the nucleogenus of a new family-series nomen, derived from the fact that a single nominal genus included in the new family-series taxon bears a nomen the stem of which is unambiguously the stem of the new family-series nomen. Such a mode of designation is invalid after 1999 (Art. 16.2). ● Dubois 1984*b*: 24. ● *Code*: no term.

**Implicit internal airesy (IPITA)**, *e*. ● VA. ● An ***internal airesy*** which is implicit i.e., only one of the competing spellings being mentioned, which is considered by the *Code* to designating it as correct. ● Dubois 2013: 12. ● *Code*: no term.

**Inclusive extension**, *e*. ● AL. ● System of ***extension*** by inclusion, listing all member(s) of a class (such as a taxon). ● Dubois 2005*b*: 379. ● *Code*: no term.

**Inclusive ostension**, *e*. ● AL. ● System of ***ostension*** by inclusion, pointing to one or several member(s) of a class (such as a taxon). ● Dubois 2006*c*: 25. ● *Code*: no term.

**Incorrect**, *a*. ● CO. ● In the context of zoological nomenclature, qualification of a nomen (***nothonym***) that fails to conform to the Rules of the *Code* regarding spelling, rank and, if relevant, ***onymorph***. ● **Ant**: ***correct***. ● Traditional term in nomenclature. ● *Code*: incorrect.

**Incorrectness**, *n*. ● CO. ● Qualification of an available nomen (***kyronym***) which bears a ***paronym***—i.e., a spelling (***parograph***), rank (***parohypse***) and, if relevant, onymorph (***paronymorph***)—that is not in agreement with the Rules of the *Code*. ● **Ant**: ***correctness***. ● Traditional term in nomenclature. ● *Code*: no term.

**Indication**, *n*. ● AV. ● A reference to a previously published information or to an ***onomatergy*** which, in the absence of a description, definition or diagnosis, provides availability to a new nomen, if it satisfies the relevant provisions of Articles 10 and 11 (if published before 1931) and 16.2 (if published before 2000) of the *Code*. ● *Code*: indication.

**Intension**, *n*. ● AL. ● System of allocation of a nomen to a concept or class (such as a taxon) through providing a set of properties or attributes that characterise a concept or a class. ● Traditional term in philosophy, logics and didactics (see Dubois 2005*a*: 74, 2005*b*: 379). ● **Syn**: ***comprehension***. ● *Code*: no term.

**Intensional**, *a*. ● See ***intension***.

**Intensional definition**, *e*. ● AL. ● Definition of a concept or class (such as a taxon) based on ***intension***. ● Traditional term in philosophy, logics and didactics (see Dubois 2005*b*: 379). ● *Code*: no term.

**Intensionally**, *av*. ● See ***intension***.

**Intention**, *n*. ● NO, TA, XE. ● Purpose, aim. ● Traditional term in coomon language. ● *Code*: intention.

**Internal airesy (ITA)**, *e*. ● An ***airesy*** taken in case of ***zygography*** under Article 24.2.4 of the *Code* by the original ***auctor(s)*** of the nomen. ● **End**: ***explicit internal airesy*** and ***implicit internal airesy***. ● Dubois 2013: 12. ● *Code*: no term.

**Intragenera**, *n*. ● Plural of ***intragenus***.

**Intragenus** (pl. ***intragenera***), *n*. ● AL. ● **Ety**: L: *intra-*, 'within, inside'; *genus*, 'birth, origin, class, kind'. ● ***Alienogenus*** of a class-series nomen that in a given ***ergotaxonomy*** is included in the least inclusive class-series taxon (***metrotaxon***) including all the ***conucleogenera*** of this class-series taxon. ● Dubois 2006*a*: 187. ● *Code*: no term.

**Invalid**, *a*. ● VA. ● In the context of zoological nomenclature, qualification of a nomen (***akyronym***) that does not conform to the conditions of nomenclatural validity as regulated by the *Code* (***nomakyronym***, ***lethakyronym***) or that has been invalidated by the Commission (***archakyronym***). ● **Ant**: ***valid***. ● Traditional term in zoological nomenclature. ● *Code*: invalid.

**Invalidate**, *v*. ● VA. ● Common language term, proposed by Dubois (2000*b*: 46) to designate the action of withdrawing the availability or validity to a hoplonym either by an author following the Rules of the *Code* or by the Commission under the Plenary Power. ● *Code*: suppress, invalidate.

**Invalidation**, *n*. ● VA. ● Common language term, proposed by Dubois (2000*b*: 47) to designate the result of the action of withdrawing the availability or validity to a hoplonym either by an author following the Rules of the *Code* or by the Commission under the Plenary Power. ● *Code*: suppression.

**Invalidity**, *n*. ● VA. ● Statement regulated by the *Code* according to which a nomen is determined not to be the one that must be used for to a taxon or several taxa in zoological nomenclature. ● **Ant**: ***validity***. ● Traditional term in zoological nomenclature. ● *Code*: invalidity.

**IPITA**, *ab*. ● See ***Implicit internal airesy***.

**Isomonym**, *n*. ● AV. ● **Ety**: G: ἶσος (*isos*), 'equal'; ὁμός (*homos*), 'the same'; ὄνομα (*onoma*), 'name'. ● Any of two or more distinct ***hoplonyms*** (having different authors, dates and ***onomatophores***) of the same ***nominal-series*** having the exactly same ***onomatophore*** (or ***onomatophore*** and ***onomatostasis*** if relevant) and that are homonyms under the *Code*. ● Dubois 2012*a*: 66, 77. ● *Code*: no term.

**Isomorphism**, *n*. ● PH, TA. ● See ***Bijection***. ● *Code*: no term.

**Isonym**, *n*. ● VA. ● **Ety**: G: ἶσος (*isos*), 'equal'; ὄνομα (*onoma*), 'name'. ● A category of ***synonym***: any of two or more nomina of the same nominal-series based on the same onomatophore. ● Dubois 2000*b*: 57. ● *Code*: objective synonym.

**Isotaxa**, *n*. ● One of the two plurals of ***isotaxon***. ● Dubois 2005*b*: 406.

**Isotaxic**, *a*. ● NO, TA. ● **Ety**: see ***Isotaxy***. ● Qualification of two distinct taxa of the same or different nominal-series having exactly the same ***extension*** in a given ergotaxonomy. ● Dubois 2005*b*: 407. ● *Code*: no term.

**Isotaxon** (pl. ***isotaxa***, ***isotaxons***), *n*. ● NO, TA. ● **Ety**: see ***Isotaxy***. ● One of two distinct taxa of the same or different nominal-series having exactly the same ***extension*** in a given ergotaxonomy. ● Dubois 2005*b*: 407. ● *Code*: no term.

**Isotaxons**, *n*. ● One of the two plurals of ***isotaxon***. ● *Hoc loco*.

**Isotaxy**, *n*. ● NO, TA. ● **Ety**: G: σύν (*syn*), 'together'; τάξις (*taxis*), 'order, arrangement'. ● Relation between two distinct taxa of the same or different nominal-series having exactly the same ***extension*** in a given ergotaxonomy. ● Dubois 2005*b*: 406. ● *Code*: no term.

**ITA**, *ab*. ● See ***Internal airesy***.

**Junior**, *a*. ● NO. ● In the context of zoological nomenclature, and concerning a nomen, an airetophory or or a spelling: published at a date subsequent to that of publication of another nomen, onomatergy or spelling, qualified as ***senior***. ● Traditional term in nomenclature. ● *Code*: junior.

**Juniorisation**, *n*. ● NO. ● In the context of zoological nomenclature, and concerning a conflict of zygoidy between synchronous nomina, spellings or airetophories, ***airesy*** by which a nomen, spelling or airetophory is denied precedence in favour of another one, which is then ***seniorised*** relative to it. ● Dubois 2000*b*: 47. ● *Code*: no term.

**Juniorise**, *v*. ● See ***Juniorisation***.

**Key rank**, *e*. ● NO, TA. ● Main nomenclatural rank of traditional use in zoological nomenclature: e.g., classis, ordo, familia, tribus, genus, species. ● **Ant**: ***subsidiary rank***. ● **End**: ***primary key rank***, ***secondary key rank***. ● Common language terms; Dubois 2006*a*: 208. ● *Code*: no term.

**Khoristarhizonym***, n. ● **Ety**: G: χωριστός (*khoristos*), 'separated'; ἀ- (*a*-), 'without'; ῥίζα (*rhiza*), 'root, stem'; ὄνομα (*onoma*), 'name'. ● ***Arhizonym*** ending with a **complex** original ending in *-form-* or *-morph-*. ● *Hoc loco*. ● *Code*: no term.

**Khoristorhizonym***, n. ● **Ety**: G: χωριστός (*khoristos*), 'separated'; ῥίζα (*rhiza*), 'root, stem'; ὄνομα (*onoma*), 'name'. ● ***Pseudorhizonym*** based on the stem of an available genus-series nomen referred or not as valid to the class-series taxon for which it is proposed, or on the stem of a nomen of another nominal-series or of a non-scientific name of animal, with a **complex** original ending in *-form-* or *-morph-*. ● Dubois & Frétey 2020*a*: 18, 46. ● *Code*: no term.

**Kingdom**, *n*. ● NO, TA. ● A class-series key rank in biological taxonomy and nomenclature, between imperium and phylum. ● Term in traditional use in taxonomy. ● **Syn**: ***regnum***. ● *Code*: no term.

**Klepton** (pl. ***kleptons***), *n*. ● TA. ● **Ety**: G: κλέπτης (*kleptes*), 'thief'. ● Biological entity of hybrid origin which reproduce sexually or parasexually through sexual parasitism at each generation of one or several other entity/ies (mayron/s or klepton/s) closely related phylogenetically; heredity may be clonal, hemiclonal or meroclonal (for details see Dubois 2008*c*, 2009*c*, 2011*b*). ● Dubois & Günther 1982: 290. ● *Code*: no term.

**Klonon** (pl. ***klonons***), *n*. ● TA. ● **Ety**: G: κλών (*klon*), 'twig, shoot, sprout'. ● Biological entity composed only of females which reproduce parasexually or asexually through pathenogenesis, cutting, vegetative multiplication or any other reproductive system by which an organism transmits its genome unchanged (except for new mutations) to its offspring; heredity is clonal in mitoklonons and clonal or meroclonal in meioklonons; many klonons are of hybrid origin (for details see Dubois 2008*c*, 2009*c*, 2011*b*). ● Dubois 1991: 68. ● *Code*: no term.

**Kyon** (pl. ***kyons***), *n*. ● TA. ● Artificial term based on the last two letters of the patronym of Theodosius Dobzhansky (1900–1975), in replacement of his term ***pseudospecies*** (Dobzhansky 1970). ● Biological entity having either a gametogenesis implying ameiosis or metameiosis or a germonogenesis implying gynogenesis or parthenogenesis, or both; some of these entities (***klonons***) maintain themselves independently in nature, whereas others (***kleptons***) depend at each generation on the gametes produced by another entity (mayron or klepton), thus practicing 'sexual parasitism'; most kyons are of hybrid origin (for details see Dubois 2008*c*, 2009*c*, 2011*b*). ● Dubois 2008*c*: 189. ● *Code*: no term.

**Kyronym**, *n*. ● VA. ● **Ety**: G: κύριος (*kyrios*), 'proper, correct'; ὄνομα (*onoma*), 'name'. ● Valid nomen for a given taxon in a given ergotaxonomy. ● **Ant**: ***akyronym***. ● Dubois 2000*b*: 51. ● *Code*: valid name.

**Lectaptonym**, *n*. ● AL. ● **Ety**: G: λεκτός (*lektos*), 'chosen, picked out'; ἅπτω (*apto*), 'fasten, attach, fix'; ὄνομα (*onoma*), 'name'. ● ***Monaptonym*** whose ***monophoric*** onomatophore (***lectophoront***, ***neophoront***, ***nucleospecies*** or ***nucleogenus***) was ***designated*** in a publication subsequent to that where the nomen was ***promulgated***. ● Dubois 2011*a*: 25, 86. ● *Code*: no term.

**Lectophoront**, *n*. ● AL. ● **Ety**: G: λεκτός (*lektos*), 'chosen, picked out'; φέρω (*phero*), 'I bear'; ὄν, ὄντος (*on*, *ontos*), 'being, individual'. ● Single specimen subsequently ***designated*** among a series of ***symphoronts*** for designation as ***onymophoront*** of a species-series nomen. ● Dubois 2005*b*: 403. ● *Code*: lectotype.

**Lectoprotograph**, *n*. ● AV. ● **Ety**: G: λεκτός (*lectos*), 'chosen'; πρῶτος (*protos*), 'first'; γράφω (*grapho*), 'I write'. ● Any original spelling among ***symprotographs*** validated by an ***airesy*** under Article 24.2. ● Dubois 2010*a*: 15. ● *Code*: correct original spelling.

**Legethograph**, *n*. ● AV, VA. ● **Ety**: G: λήγω (*lego*), 'cease, end, terminate'; ἔθος (*ethos*), 'custom, usage'; 'law'; γράφω (*grapho*), 'I write'. ● ***Eugraph*** that is imposed to a given class-series nomen according to the DONS Criteria. ● *Hoc loco*. ● *Code*: no term.

**Legonomograph**, *n*. ● AV, VA. ● **Ety**: G: λήγω (*lego*), 'cease, end, terminate'; νόμος (*nomos*), 'law'; γράφω (*grapho*), 'I write'. ● ***Nomograph*** that is imposed by the *Code* to a given nomen in a given ***ergotaxonomy***, superseding the ***protograph*** because the ***ending*** of the latter must be corrected as a result of a a ***mandatory ending correction*** (Dubois 2013: 10): either a change of combination in the species-series or of rank in the family-series. ● **Syn**: ● *Hoc loco*. ● *Code*: mandatory change.

**Leipoprotograph**, *n*. ● AV. ● **Ety**: G: λείπω (*leipo*), 'I leave, I abandon'; πρῶτος (*protos*), 'first'; γράφω (*grapho*), 'I write'. ● Any original spelling among ***symprotographs*** rejected by an ***airesy*** under Article 24.2. ● Dubois 2010*a*: 15. ● *Code*: incorrect original spelling.

**Lethakyronym**, *n*. ● VA. ● **Ety**: G: λήθη (*lethe*), 'forgetting, forgefulness'; ἄκῡρος (*akyros*), 'invalid, incorrect'; ὄνομα (*onoma*), 'name'. ● ***Akyronym*** invalidated (juniorised) for complying with the conditions for being a ***nomen oblitum*** as defined in Article 23.9 of the 1999 *Code*. ● *Hoc loco*. ● *Code*: no term.

**Lineage**, *n*. ● NO, PH, TA, XE. ● A single line of direct ancestry and descent. Biological entities at different levels of organisation form lineages: for example, genes, cells and organisms all replicate or reproduce to form lineages. Lineages at one level of organisation often make up, or are contained within, lineages at higher levels of organisation; for example, numerous cell lineages often make up an organism lineage. ● Term in traditional use in evolutionary biology; Queiroz 1998, Avise 2008. ● *Code*: no term.

**Mandatory**, *a*. ● NO. ● Required by the nomenclatural Rules. ● Common language term; Dubois & Aescht 2019*o*: 129. ● *Code*: mandatory.

**Linz Zoocode Committee (LZC)**, *e*. ● NO. ● International Committee, founded in 2014, working on the *Zoocode*, a set of proposals of improvements to the *Code*. ● See Dubois *et al.* 2016, 2019.

**Linz Zoocode Proposals (LZP)**, *e*. ● NO. ● Proposals of improvements to the *Code* published by the ***Linz Zoocode Committee***. ● See Dubois *et al.* 2016, 2019.

**LZC**, *ab*. ● NO. ● See ***Linz Zoocode Committee***.

**LZP**, *ab*. ● NO. ● See ***Linz Zoocode Proposals***.

**Mandatory ending correction**, *e*. ● CO. ● A category of ***nomographic correction***: correction of the ending of a nothograh required by the nomenclatural Rules. ● Dubois 2013: 11. ● *Code*: mandatory change.

**Mandatory spelling correction**, *e*. ● CO. ● A category of ***nomographic correction***: correction of a nothograh or of its the stem required by the nomenclatural Rules. ● Dubois 2013: 11. ● *Code*: justified emendation.

**Mandatory rank**, *e*. ● NO, TA. ● Any of the seven taxonominal ranks (kingdom, phylum, class, order, family, genus, species) to which any animal organism should be referred in zoological taxonomy and nomenclature. Dubois 2007*a*: 57 (as ***compulsory rank***), 2020*a*: 6. ● *Code*: no term.

**Mayron** (pl. ***mayrons***), *n*. ● TA. ● Taxonomic species corresponding to the nondimensional 'mixiological species concept' or 'biological species concept' (BSC): independent bisexual panmictic entity, constituting a 'closed' or 'protected' gene pool, composed of organisms with eumeiosis, breeding freely among them but usually not with organisms belonging to other similar entities (see Dubois 2011*b*). ● See Dubois 2007*a*: 48. ● *Code*: no term.

**Median**, *n*. ● NO, XE. ● Second ***quartile*** of a data set, i.e. the value separating the higher half from the lower half of its data set: 50 % of the data lie below this point, and 50 % lie above. ● Term in traditional use in statistics and probability. ● *Code*: no term.

**Meletograph**, *n*. ● AV. ● **Ety**: G: μελέτη (*melete*), 'attention, care'; γράφω (*grapho*), 'I write'. ● Spelling of a nomen used voluntarily/intentionally in a publication by an ***author***, ***scriptor***, editor, printer or publisher. ● **Ant**: ***ameletograph***. ● Dubois 2000*b*: 54 (as ***ameletonym***), 2010*b*: 7. ● *Code*: no term.

**Meletonym**, *n*. ● See ***Meletograph***.

**Mero-system**, *e*. ● NO, TA. ● **Ety**: G: μέρος (*meros*) 'part'; σύστημα (*systema*), 'organised whole'. ● A taxonomic or nomenclatural pro-system which covers only some taxa or ranks only. ● Dubois 2015*c*: 8, 75. ● *Code*: system.

**Mesoneonym**, *n*. ● AV. ● **Ety**: G: μέσος (*mesos*), 'middle, in the middle'; νέος (*neos*), 'new'; ὄνομα (*onoma*), 'name'.

● ***Neonym*** whose etymology is not clearly different or the same as that of its ***archaeonym***. ● *Hoc loco*. ● *Code*: no term.

**Metagraph**, *n*. ● AV. ● **Ety**: G: μετά (*meta*), 'afterwards, after, behind'; γράφω (*grapho*), 'I write'. ● Any spelling of a nomen different from the correct original spelling and which may be either an ***autoneonym*** or a ***symprotograph***, a ***leipoprotograph*** or a ***nomographic correction***. ● *Hoc loco*. ● *Code*: no term.

**Metomonym**, *n*. ● NO. ● **Ety**: G: μετά (*meta*), 'afterwards, after, behind'; ὁμός (*homos*), 'the same'; ὄνομα (*onoma*), 'name'. ● Junior homonym resulting from a replacement or modification of the ***onomatophore*** (or ***onomatophore*** and ***onomatostasis*** if relevant) of a previously introduced ***hoplonym***. ● Dubois 2012*a*: 66, 77. ● *Code*: no term.

**Metronym**, *n*. ● AL. ● **Ety**: G: μήτηρ (*meter*), 'mother'; ὄνομα (*onoma*), 'name'. ● Class-series nomen applying to a ***metrotaxon*** within the frame of a given ***ergotaxonomy***, i.e. to the least inclusive (lowest ranked) class-series taxon including all its ***conucleogenera***. ● Dubois 2011*a*: 88; redefined in Dubois 2015*c*: 77. ● *Code*: no term.

**Metrostensional**, *n*. ● AL. ● **Ety**: G: μήτηρ (*meter*), 'mother'; L: *ostensio*, 'action of showing'. ● Qualification of a nomenclatural system, the ***Metrostensional Nomenclatural System*** (***MONS***), that relies only on ***onomatophores*** (***conucleogenera***) for the taxonomic allocation of class-series nomina (***inclusive ostension***): within a given taxonomic frame, a nomen applies to the least inclusive taxon that includes all its conucleogenera. ● Dubois & Raffaëlli 2012: 88. ● *Code*: no term.

**Metrostensional Nomenclatural System (MONS)**, *e*. ● NO. ● A class-series nomenclatural system which relies only on ***onomatophores*** for the taxonomic allocation of nomina through ***inclusive ostension***: within a given taxonomic frame, a nomen applies to the least inclusive taxon that includes all its onomatophore (see Dubois 2006*c*). ● Dubois & Raffaelli 2012: 88; Dubois 2015*c*: 13.

**Metrotaxa**, *n*. ● Plural of ***metrotaxon***.

**Metrotaxon** (pl. ***metrotaxa***), *n*. ● AL. ● **Ety**: G: μήτηρ (*meter*), 'mother'; τάξις (*taxis*), 'order, arrangement'. ● Within the frame of a given ***ergotaxonomy***, the least inclusive class-series taxon including all the ***conucleogenera*** of a class-series nomen. ● Dubois 2006*a*: 188. ● *Code*: no term.

**Microtaxonomy**, *n*. ● TA. ● Discipline of taxonomy dealing with the study of species and ***circumspecific*** taxa. ● Mayr & Ashlock 1991. ● *Code*: no term.

**Mixogenus**, *n*. ● TA. ● **Ety**: G: μῖξις (*mixis*), 'mixing, sexual intercourse'; γένος (genis), 'race, genus'. ● Genus concept according to which whenever two species are documented to have produced, whether in natural or in artificial conditions, true viable adult diploid hybrids, they should be referred to the same genus, as well as all the other species which by other criteria are considered congeneric with them (Dubois 1981*a,c*, 1982*a*, 1983*a*, 1988*a,c*, 2004*d*). See also ***syngameon*** [2]. ● *Hoc loco*. ● *Code*: no term.

**Mnemokyronym**, *n*. ● VA. ● **Ety**: G: μνήμη (*mneme*), 'memory, remembrance'; κύριος (*kyrios*), 'proper, correct'; ὄνομα (*onoma*), 'name'. ● ***Kyronym*** validated (seniorised) for complying with the conditions for being a *nomen protectum* as defined in Article 23.9 of the 1999 *Code*. ● *Hoc loco*. ● *Code*: nomen protectum.

**Monaptonym**, *n*. ● AL. ● **Ety**: G: μόνος (*monos*), 'single, unique'; ἅπτω (*apto*), 'fasten, attach, fix'; ὄνομα (*onoma*), 'name'. ● ***Aptonym*** whose onomatophore is ***monophoric***, being composed of a single specimen (in the species-series: ***holophoront***, ***lectophoront*** or ***neophoront***) or ***taxomen*** (in the genus-series: ***nucleospecies***; in the family-series and class-series: ***nucleogenus***). ● **Ant**: ***synaptonym***. ● **End**: ***holaptonym*** and ***lectaptonym***. ● Dubois 2011*a*: 25, 86. ● *Code*: no term.

**Monohypotaxy**, *n*. ● TA. ● **Ety**: G: μόνος (*monos*), 'single, unique'; ὑπό (*hupo*), 'below'; τάξις (*taxis*), 'order, arrangement'. ● Mode of ***hypotaxy*** of a taxon that includes only one immediately subordinate taxon. In a phylogenetic taxonomic frame, the two successive ranks are clearly redundant, as they do not provide distinct taxonomic information, but they may be useful for mere nomenclatural reasons (see Dubois, 2007*a*, 2008*f*). ● Dubois & Raffaëlli 2009: 12. ● *Code*: no term.

**Monophory**, *n*. ● AL. ● **Ety**: G: μόνος (*monos*), 'single, unique'; φέρω (*phero*), 'I bear'. ● Qualification of a nomen supported by an ***onomatophore*** composed of a single specimen (in the species-series) or ***taxomen*** (in the three other nominal-series). The designation of this onomatophore may have been original or subsequent. ● Dubois 2005*b*: 404. ● *Code*: monotypy.

**Monophyletic**, *a*. ● NO, PH, TA, XE. ● **Ety**: G: ὅλος (*olos*) 'whole, complete'; φυλή (*phulé*), 'tribe, race, class'. ● Concepts applying to ***taxa***: [1] Haeckel's (1866*b*) concept: non-polyphyletic taxon, considered to be composed of descendants of a common ancestor (see ***homophyletic***), but including either all of them (see holophyletic or only some of them (see ***paraphyletic***); [2] Hennig's (1950) concept: non-polyphyletic and non-paraphyletic taxon, considered to include all the descendants of its most recent common ancestor as well as the latter (see ***holophyletic***). ● Ashlock 1971; Dubois 1986*b*. ● *Code*: no term.

**Monophyly**, *n*. ● See ***Monophyletic***.

**Monosemic**, *a*. ● NO. ● **Ety**: see ***Monosemy***. ● In the context of zoological nomenclature, the qualification of either [1] a nomenclatural system that does not allow the same nomen to designate distinct taxa, or [2] any nomen being in this situation (see Dubois 2007*a*: 41). ● **Ant**: ***polysemic***. ● Term in traditional use in linguistics and grammar. ● *Code*: no term.

**Monosemy**, *a*. ● NO. ● **Ety**: G: μόνος (*monos*), 'single, unique'; σῆμα (sema), 'sign, mark'. ● In the context of zoological nomenclature, the fact that a nomenclatural system does not allow the same nomen to designate distinct taxa. ● **Ant**: ***polysemy***. ● Term in traditional use in linguistics and grammar. ● *Code*: no term.

**Monothetic**, *a*. ● AL. ● **Ety**: G: πολύς (*polys*), 'numerous'; τίθημι (*titemi*), 'I put, I place'. ● In taxonomy, qualification of a diagnosis of taxon involving a unique combination of character states that are both necessary and sufficient for membership in the taxon. ● **Ant**: ***Polythetic***. ● Sneath 1962; Van Regenmortel 2016; Dubois 2017*d*. ● *Code*: no term.

**Monothetic diagnosis**, *e*. ● AL. ● A diagnosis of taxon involving a unique combination of character states that are both necessary and sufficient for membership in the taxon. ● **Ant**: ***Polythetic diagnosis***. ● Sneath 1962; Van Regenmortel 2016; Dubois 2017*d*. ● *Code*: no term.

**Monotypy**, *n*. ● AL, TA. ● **Ety**: G: μόνος (*monos*), 'single, unique'; τύπος (*typos*), 'mark, image, figure, model'. ● A confusing term, used in systematics in two distinct senses: [1] a taxonomic one (see ***monohypotaxy*** and ***anhypotaxy***); [2] a nomenclatural one (see ***monophory***). The use of this term in nomenclature is here discouraged (see Dubois & Raffaëlli 2009: 401–405). ● Traditional term in nomenclature. ● *Code*: monotypy.

**MONS**, *ab*. ● See ***Metrostensional Nomenclatural System***.

**Morphogenus**, *n*. ● TA. ● **Ety**: G: μορφή (*morphe*), 'form, shape'; γένος (*genis*), 'race, genus'. ● Genus concept defined as a group of species sharing morphological characters. ● Term in use in taxonomy. ● *Code*: no term.

**Morphospecies**, *n*. ● TA. ● **Ety**: G: μορφή (*morphe*), 'form, shape'; L: *species*, 'view, sight, shape, form, kind, species'. ● Species concept defined as a group of organisms sharing morphological characters. ● Term in common use in taxonomy. ● *Code*: no term.

**Name**, *n*. ● NO, TA. ● Ambiguous and confusing term used in various senses in the *Code*: [1] scientific name (see ***Nomen***); [2] spelling; [3] rank; [4] combination; [5] onymorph; [6] 'vernacular' name; [7] name of an author in the sense given to this term in the *Code* (see ***Auctor***); [8] name of the first-user of a new spelling, rank or combination for an available scientific name (see ***Scriptor***); [9] various other 'names' (or persons, localities, plants, etc.). ● Because of this ambiguity, the use of this term in nomenclature to designate a scientific name is here discouraged (see Dubois 2000*b*: 39–40; Dubois & Aescht 2016) and the term ***Nomen*** is used instead for this purpose. ● Traditional term in various domains of biology, including nomenclature. ● *Code*: name.

**N-availability**, *e*. ● AV. ● Availability of ***nomen***. ● Dubois 2015*c*: 24. ● *Code*: no term.

**Nemonym**, *n*. ● AV. ● **Ety**: G: νέμω (*nemo*), 'I distribute, I attribute'; ὄνομα (*onoma*), 'name'. ● A nomen that is unambiguously ***assigned*** to a nominal-series in the original publication where it is established. ● *Hoc loco*. ● *Code*: no term.

**Neoallelonym**, *n*. ● AV. ● **Ety**: G: νέος (*neos*), 'new'; άλλήλων (*allelon*), 'the one… the other…'; ὄνομα (*onoma*), 'name'. ● One of two (or several) ***allelonyms*** which is a brand new nomen whereas its allelonym(s) is/are already available nomen/nomina. ● Dubois 2015*c*: 43, 71. ● *Code*: no term.

**Neonym**, *n*. ● AV. ● **Ety**: G: νέος (*neos*), 'new'; ὄνομα (*onoma*), 'name'. ● Nomen proposed expressly to replace an available nomen (its ***archaeonym***), and having the same ***onomatophore*** (and ***onomatostasis*** in the case of CS ***sozonymorphs***). ● **Ant**: ***poieonym***. ● **End**: ***alloneonym*** and ***autoneonym***. ● Dubois 2000*b*: 52. ● *Code*: new replacement name, *nomen novum*, unjustified emendation.

**Neophoront**, *n*. ● AL. ● **Ety**: G: νέος (*neos*), 'new'; φέρω (*phero* φέρω (*phero*), 'I bear'; ὄν, ὄντος (*on*, *ontos*), 'being, individual'. ● Single specimen ***designated*** as ***onymophoront*** of a species-series nomen when the original or subsequent ***onymophoront(s)*** is/are considered to have been lost or destroyed. ● Dubois 2005*b*: 403. ● *Code*: neotype.

**Nesonym**, *n*. ● AL. ● **Ety**: G: νῆσος (*nesos*), 'island'; ὄνομα (*onoma*), 'name'. ● Class-series ***distagmonym***, taxonomically allocated within the frame of a given ***ergotaxonomy*** under DONS Criteria through its ***metrotaxon***, without reference to its ***orotaxon*** if present, and being therefore its ***metronym***. ● Dubois 2006*a*: 188. One of the two meanings of the term ***nesonym*** as defined by Dubois (2015*c*: 65), hereby distinguished from the term ***ellitonym*** and used in this restricted meaning. ● *Code*: no term.

**New replacement name**, *e*. ● See ***Neonym***.

**Nomakyronym**, *n*. ● VA. ● **Ety**: G: νόμος (*nomos*), 'law'; κύριος (*kyrios*), 'proper, correct'; ὄνομα (*onoma*), 'name'. ● ***Akyronym*** as a result of the regular Rules of the *Code* concerning precedence between zygonyms. ● *Hoc loco*. ● *Code*: no term.

**Nomanecdidonym**, *n*. ● AV. ● **Ety**: G: νόμος (*nomos*), 'law'; ἀν- (*an-*), 'without'; ἐκδίδωμι (*ecdidomi*), 'I publish'; ὄνομα (*onoma*), 'name'. ● Nomen not published, after 1757, in the meaning of Articles 3.2, 8–9, 11.1 and 21.8 of the *Code*, or published after 1950 with anonymous authorship (Article 14). ● **Ang**: ***Anecdidonym***. ● *Hoc loco*. ● *Code*: no term.

**Nomen** (pl. ***nomina***), *n*. ● NO, TA. ● **Ety**: L: *nomen*, 'name'. ● Scientific name as defined, and regulated if relevant, by the *Code*. ● Dubois 2000*b*: 39. ● *Code*: scientific name.

**Nomen dubium** (pl. ***nomina dubia***) , *e*. ● NO. ● See ***anaptonym***, ***aporionym***, ***heterosynaptonym*** and ***nyctonym***.
**Nomen novum** (pl. ***nomina nova***) , *e*. ● NO. ● See ***neonym***.
**Nomen nudum** (pl. ***nomina nuda***), *e*. ● NO. ● See ***anoplonym***, ***atelonym*** and ***gymnonym***.
**Nomen oblitum** (pl. ***nomina oblita***), *e*. ● NO. ● See ***aphonym***, ***distagmonyn***, ***lethakyronym***, ***eneonym***, ***schizeurydiaphonym*** and ***stenodiaphonym***.
**Nomen protectum** (pl. ***nomina protecta***), *e*. ● NO. ● See ***sozodiaphonym*** and ***sozonym***.
**Nomenclatural act**, *e*. ● NO. ● See ***Onomatergy***.
**Nomenclatural ambiguity**, *e*. ● VA, CO. ● Any situation in which the nomenclatural status of a nomen is ambiguous. ● Dubois 2011*a*: 22. ● *Code*: no term.
**Nomenclatural foundation**, *e*. ● See ***Principle of Nomenclatural Foundation***.
**Nomenclatural hierarchy**, *e*. ● VA. ● The sequence of nominal-series and nomenclatural ranks having increasing levels of inclusiveness, used to account for the phylogenetic relationships between taxa. ● Term in traditional use in zoological nomenclature and taxonomy. ● *Code*: taxonomic hierarchy.
**Nomenclatural independence**, *e*. ● See ***Principle of Nomenclatural Independence***.
**Nomenclatural parsimony**, *e*. ● AV, VA. ● The need of fewer nomina than taxa to name the latter. ● Dubois 2006*c*: 838, 2008*f*: 55, 61. See also ***Nomenclatural thrift***. ● *Code*: no term.
**Nomenclatural Parsimony Index (NPI)**, *e*. ● AV, VA. ● The ratio, expressed in percent, of the number of nomina to the number of their parohypses used as valid in a given ergotaxonomy. ● *Hoc loco*. ● *Code*: no term.
**Nomenclatural Process**, *e*. ● NO. ● The process through which the valid nomen of a taxon is established. It consists of four main stages, steps or 'floors' (Dubois 2005*a,b,d*, 2015c; Dubois *et al.* 2019): ***availability*** (including nominal-series ***assignment***), ***allocation***, ***validity*** (including ***correctness***) and ***registration***. ● Dubois 2005*b*: 381, 2010*a*: 11, 2011*a*: 11. ● *Code*: no term.
**Nomenclatural rank**, *e*. ● AV, VA. ● The place of a nomen in a nomenclatural hierarchy. In the *Code*, each rank is referred to a given ***nominal-series***. ● Term in traditional use in zoological nomenclature and taxonomy. ● *Code*: rank.
**Nomenclatural robustness**, *e*. ● NO. ● Qualification of a nomenclatural system which displays both stability (i.e., the nomina of taxa do not change as long as the ***ergotaxonomies*** do not change) and flexibility (i.e., in some cases nomina do not change even if the ***ergotaxonomies*** change). ● Dubois 2005*b*, 2011*a*. ● *Code*: no term.
**Nomenclatural stability**, *e*. ● NO. ● Qualification of a nomenclatural system in which the nomina of taxa change as little as possible, or not at all, even if ergotaxonomies change. ● Term in traditional use in zoological nomenclature. ● *Code*: stability.
**Nomenclatural status of nomen**, *e*. ● NO. ● The dimensions of the ***status of a nomen*** which depend only on nomenclatural Rules, and not on the ***ergotaxonomy*** adopted: nominal-series assignment and nomenclatural availability. ● Term in traditional use in zootaxonomy, precisely defined by Dubois (2017*b*: 36). ● *Code*: no term.
**Nomenclatural thrift**, *e*. ● VA. ● The attention given, in order to reduce the ***synonymy load*** of taxonomy, to the need to prevent the creation of 'needless nomina' through appropriate nomenclatural acts—e.g., the adequate designation of onomatophores for nomina that still miss them. See also ***Nomenclatural parsimony***. ● Dubois 2019: 75. ● *Code*: no term.
**Nomenclature**, *n*. ● NO, TA, XE. ● **Ety**: L: *nomenclatura*, 'nomenclature', from *nomen*, 'name' and *calo*, 'I call'. ● [1] A subdiscipline of ***taxonomy*** which is in charge of providing the valid ***nomina*** for the ***taxa***. [2] Any system of ***nomina*** that applies to the ***taxa*** used in a given ***ergotaxonomy***. ● Traditional term in taxonomy. ● *Code*: nomenclature.
**Nomina**, *n*. ● Plural of ***nomen***.
**Nomina dubia**, *e*. ● Plural of ***nomen dubium***.
**Nomina nova**, *e*. ● Plural of ***nomen novum***.
**Nomina nuda**, *e* ● Plural of ***nomen nudum***.
**Nomina oblita**, *e*. ● Plural of ***nomen oblitum***.
**Nomina protecta**, *e*. ● Plural of ***nomen protectum***.
**Nominal taxon**, *e*. ● See ***Taxomen***.
**Nominal-series (NS)**, *e*. ● NO. ● Any of the sets of coordinated nomina interacting for priority and validity regarding synonymy, homonymy and ***onomatergies*** (***species-series***, ***genus-series***, ***family-series*** or ***class-series***). ● Dubois 2000*b*: 40. ● *Code*: group of names [English text]; niveau nomenclatural [French text].
**Nominal-series branch (NS-branch)**, *e*. ● NO. ● Any section of a cladistic tree including only some ranks in the corresponding ergotaxonomy. ● *Hoc loco*. ● *Code*: no term.
**Nominal-series saturation**, *e*. ● VA. ● Situation in which all the ranks allowed by the *Code* in a given nominal-series have been used in a formal ergotaxonomy and nomenclature. ● *Hoc loco*. ● *Code*: no term.
**Nominal-set**, *e*. ● NO. ● Any of the sets of nomina referred to the same nominal-series and the rank designation of which includes the same key term: e.g., the family-set and the tribe-set within the family-series, including respectively the

ranks family, subfamily and superfamily, and tribe and subtribe. ● Dubois & Aescht 2017*c*: 27. ● *Code*: no term.

**Nomograph**, *n*. ● AV, VA. ● **Ety**: G: νόμος (*nomos*), 'law'; γράφω (*grapho*), 'I write'. ● ***Eugraph*** that is imposed by the *Code* to a given nomen in a given ***ergotaxonomy***, superseding the ***protograph*** if necessary. Two categories: [1] ***eunomograph*** because the ***protograph*** is an original ***nothograph***; [2] ***legonomograph*** because the ***ending*** of the ***protograph*** must be corrected as a result of a change of combination in the species-series or of rank in the family-series. ● Dubois 2013: 10. ● *Code*: [1] justified emendation; [2] mandatory change.

**Nomographic correction**, *e*. ● AV, VA. ● **Ety**: see ***Nomograph***. ● Any correction in the spelling, stem or ending of a ***nothograph*** required by the nomenclatural Rules. ● Dubois 2013: 11. ● *Code*: justified emendation, mandatory change.

**Nomography**, *n*. ● AV, VA. ● **Ety**: see ***Nomograph***. ● A Principle of the *Code* according to which a spelling (***eugraph***) is imposed to a given nomen, superseding the ***protograph*** if necessary. ● Dubois 2013: 10. ● *Code*: no term.

**Nomokyronym**, *n*. ● VA. ● **Ety**: G: νόμος (*nomos*), 'law'; κύριος (*kyrios*), 'proper, correct'; ὄνομα (*onoma*), 'name'. ● ***Kyronym*** as a result of the regular Rules of the *Code* concerning precedence between zygonyms. ● *Hoc loco*. ● *Code*: no term.

**Notharchonym**, *n*. ● AV. ● **Ety**: G: νόθος (*nothos*), 'wrong, illegitimate'; ἄρχω (*archo*), 'to rule, to govern'; ὄνομα (*onoma*), 'name'. ● Nomen proposed within the frame of a nomenclatural system alternative to the current *Code* and incompatible with it. ● *Hoc loco*. ● *Code*: no term.

**Nothograph**, *n*. ● CO. ● **Ety**: G: νόθος (*nothos*), 'wrong, illegitimate'; γράφω (*grapho*), 'I write'. ● A category of ***nothonym***: incorrect spelling of a nomen for a given taxon at a given rank in a given ***ergotaxonomy***. ● **Ant**: ***eugraph***. ● Dubois 2010*a*: 29. ● *Code*: incorrect spelling.

**Nothohypse**, *n*. ● CO. ● **Ety**: G: νόθος (*nothos*), 'wrong, illegitimate'; υψος (*hupsos*), 'height'. ● A category of ***nothonym***: incorrect rank of a nomen for a given taxon in a given taxonomy. ● **Ant**: ***euhypse***. ● Dubois 2010*a*: 7. ● *Code*: no term.

**Nothonym**, *n*. ● CO. ● **Ety**: G: νόθος (*nothos*), 'wrong, illegitimate'; ὄνομα (*onoma*), 'name'. ● Incorrect ***paronym*** (***nothograph***, ***nothohypse*** and/or ***nothonymorph***) of a nomen for a given taxon in an ***ergotaxonomy***. ● **Ant**: ***eunym***. ● Dubois 2000*b*: 54. ● *Code*: no term.

**Nothonymorph**, *n*. ● CO. ● **Ety**: G: νόθος (*nothos*), 'wrong, illegitimate'; ονομα (*onoma*), 'name'; μορφή (*morphe*), 'form, shape'. ● A category of ***nothonym***: incorrect onymorph of a nomen for a given taxon in an taxonomy. ● **Ant**: ***eunymorph***. ● Dubois 2010*a*: 7. ● *Code*: no term.

**Nothosozonym**, *n*. ● VA. ● **Ety**: G: νόθος (*nothos*), 'wrong, illegitimate'; σῴζω (*sozo*), 'to keep, to protect'; ὄνομα (*onoma*), 'name'. ● ***Sozonymorph*** that has not been used in any title of scientific publication since 31 December 1899. ● Dubois 2015*c*: 21. ● *Code*: no term.

**NPI**, *ab*. ● See ***Nomenclatural Parsimony Index***.

**NS**, *ab*. ● See ***Nominal-series***.

**NS-branch**, *e*. ● See ***Nominal-series branch***.

**Nucleogenera**, *n*. ● Plural of ***nucleogenus***.

**Nucleogenus** (pl. ***nucleogenera***), *n*. ● AL. ● **Ety**: L: *nucleus* (from *nux*, 'nut'), 'nucleus, core, stone'; *genus*, 'birth, origin, class, kind'. ● Genus-series taxomen serving as ***onomatophore*** of a family-series or class-series nomen. ● **End**: ***conucleogenus***, ***uninucleogenus***. ● Dubois 2005*a*: 77, 2005*b*: 404. ● *Code*: type genus.

**Nucleomen** (pl. ***nucleomina***), *n*. ● AL. ● **Ety**: L: *nucleus* (from *nux*, 'nut'), 'nucleus, core, stone'; *nomen*, 'name'. ● Taxomen serving as ***onomatophore*** of a nomen of a nominal-series above the species-series. ● **End**: ***nucleospecies***, ***nucleogenus***. ● Dubois 2005*a*: 77, 2005*b*: 403. ● *Code*: no term.

**Nucleomina**, *n*. ● Plural of ***nucleomen***.

**Nucleospecies**, *n*. ● AL. ● **Ety**: L: *nucleus* (from *nux*, 'nut'), 'nucleus, core, stone'; *species*, 'idea, kind, species'. ● Species-series taxomen serving as ***onomatophore*** of a genus-series nomen. ● Dubois 2005*a*: 77, 2005*b*: 404. ● *Code*: type species.

**Nyctonym**, *n*. ● AL. ● **Ety**: G: νύξ, νυκτός (*nyx, nyctos*), 'night, darkness'; ὄνομα (*onoma*), 'name'. ● ***Monaptonym*** whose ***monophoric*** onomatophore (***lectophoront***, ***neophoront***, ***nucleospecies*** or ***nucleogenus***) cannot be referred to a known ***ergotaxon***. ● **Ant**: ***photonym***. ● Dubois 2011*a*: 54, 88. ● *Code*: one of the meanings of the ambiguous designation *nomen dubium*.

**Objective**, *a*. ● NO. ● Actual, existing outside and independent of the mind. ● Common language term. ● *Code*: objective.

**Obtainable**, *a*. ● AV. ● [1] In Articles 8.1.3 and 8.4.2.1 of the *Code*: producible, that can be produced. [2] In Article 8.1.2 of the *Code*: acquirable, that can be acquired. ● Common language term, introduced in zoological nomenclature with a formal definition by Dubois & Aescht (2017*f*). ● *Code*: no term.

**Obtained**, *p*. ● AV. ● In Article 9.12 of the *Code*: produced and acquired. ● Common language term, introduced in zoological nomenclature with a formal definition by Dubois & Aescht (2017*f*). ● *Code*: no term.

**Octotomy**, *n.* ● PH, TA. ● **Ety**: G: ὀκτώ (*octo*), 'eight'; τομή (*tome*), 'cutting, incision'. ● Partition of a set into eight subsets. ● *Hoc loco*. ● *Code*: no term.

**Oligocaconym**, *n.* ● AV. ● **Ety**: G: ὀλίγος (*oligos*), 'insufficient'; κακός (*kakos*), 'bad'; ὄνομα (*onoma*), 'name'. ● In zoological nomenclature, a category of ***caconym***: a nomen established in a work that is not consistently binominal for nomina of rank species and is therefore an ***anoplonym*** (Article 11.4). ● *Hoc loco*. ● *Code*: no term.

**Onomatergy**, *n.* ● NO. ● **Ety**: G: ὄνομα (*onoma*), 'name'; εργον, *ergos*, 'work'. ● Any published action resulting in the establishment of a new nomen (***catastasy***) or in affecting the nomenclatural status of an available nomen (***airesy***). ● Dubois 2013: 3. ● *Code*: nomenclatural act.

**Onomatophore**, *n.* ● AL. ● **Ety**: G: ὄνομα (*onoma*), 'name'; φέρω (*phero*), 'I bear, I carry'. ● Objective standard of reference of ***inclusive ostension*** determining the taxonomic allocation of a nomen: within a given ***ergotaxonomic*** frame, the nomen can be potentially applied to any taxon that includes its onomatophore. In the species-series, onomatophores are specimens, whereas in the genus- and family-series they are ***taxomina***. ● **End**: ***onymophoront***, ***nucleomen***. ● Simpson 1940: 421. ● *Code*: type, name-bearing type.

**Onomatostases**, *n.* ● Plural of ***onomatostasis***.

**Onomatostasis** (pl. ***onomatostases***), *n.* ● AL. ● **Ety**: G: ὄνομα (*onoma*), 'name'; στάσις (*stasis*), 'standing, position, station'. ● Objective standard of reference of ***exclusive ostension*** determining the taxonomic allocation of a class-series nomen: within a given taxonomic frame, the nomen applies to the taxon that includes its ***onomatophore*** and excludes its ***onomatostasis***. Onomatostases are ***taxomina***. ● Dubois 2005*a*: 79, 2005*b*: 203, 2006*a*: 189, 2011*a*: 39. ● *Code*: no term.

**ONS**, *ab.* ● See ***Ostensional Nomenclatural System***.

**Onymophoront**, *n.* ● AL. ● **Ety**: G: ὄνομα (*onoma*), 'name'; φέρω (*phero*), 'I bear'; ὄν, ὄντος (*on*, *ontos*), 'being, individual'. ● Specimen(s) serving as onomatophore of a nomen of the species-series, which may be either single (***holophoront***, ***lectophoront*** or ***neophoront***) or multiple (***symphoronts***). ● Dubois 2005*a*: 77, 2005*b*: 403. ● *Code*: type specimen.

**Onymorph**, *n.* ● NO, TA. ● **Ety**: G: ὄνομα (*onoma*), 'name'; μορφή (*morphe*), 'form, shape'. ● Any particular association between genus-series ***substantive(s)*** and species-series ***epithet(s)***, used to designate a species-series taxon. A ***combination*** is a particular case of onymorph. ● Smith & Pérez-Higareda 1986: 422. ● *Code*: no term.

**Onymotope**, *n.* ● AL. ● **Ety**: G: ὄνομα (*onoma*), 'name'; τόπος (*topos*), 'place'. ● Place of collection of the ***onymophoront(s)*** of a species-series taxomen. ● Dubois 2005*b*: 404. ● *Code*: type locality.

**OONS**, *ab.* ● See ***Orostensional Nomenclatural System***.

**Order**, *n.* ● NO, TA. ● **Ety**: L: *ordo*, 'series, line, row, order'. ● In zoological taxonomy and nomenclature, a key rank of the class-series, between class and phalanx. ● Term in traditional use in taxonomy. ● **Syn**: ***ordo***. ● *Code*: order.

**Ordination**, *n.* ● NO, TA. ● **Ety**: L: *ordo*, 'series, line, row, order'. ● The relation between two taxa in a given hierarchy and ergotaxonomy: ***alienordination***, ***parordination***, ***subordination*** or ***superordination***. See also ***Topotaxy***. ● Dubois & Berkani 2013: 53. ● *Code*: no term.

**Ordo**, *n.* ● NO, TA. ● **Ety**: L: *ordo*, 'series, line, row, order'. ● In zoological taxonomy and nomenclature, a key rank of the class-series, between class and phalanx. ● Term in traditional use in taxonomy. ● **Syn**: ***order***. ● *Code*: order.

**Orixonym**, *n.* ● NO. ● **Ety**: G: ὁρίξω (*orixo*), 'define, assign, determine'; ὄνομα (*onoma*), 'name'. ● Under DONS Criteria, class-series nomen/nomina allowing the taxonomic allocation of another class-series taxon either through inclusion only (***getendonym***) or through both inclusion and exclusion (***getexonym***). ● *Hoc loco*. ● *Code*: no term.

**Oronym**, *n.* ● AL. ● **Ety**: G: ὄρος (*oros*), 'mountain'; ὄνομα (*onoma*), 'name'. ● Class-series nomen applying to an ***orotaxon*** within the frame of a given ***ergotaxonomy***, i.e. to the most inclusive (highest ranked) class-series taxon including all its ***conucleogenera*** and excluding all its ***coalienogenera***. ● Dubois 2011*a*: 88; redefined in Dubois 2015*c*: 77. ● *Code*: no term.

**Orostensional**, *n.* ● AL ● **Ety**: G: ὅρος (*oros*), 'limit, frontier'; L: *ostensio*, 'action of showing'. ● Qualification of a nomenclatural system, the ***Orostensional Nomenclatural System*** (***OONS***), that relies on ***bidirectional ostension*** for the taxonomic allocation of nomina. ● Dubois 2015*c*: 13. ● *Code*: no term.

**Orostensional Nomenclatural System (OONS)**, *e.* ● NO. ● A class-series nomenclatural system which relies both on ***onomatophores*** (***nucleogenera***) and ***onomatostases*** (***alienogenera***) for the taxonomic allocation of class-series nomina (***bidirectional ostension***): within a given taxonomic frame, a nomen [1] either applies to the most inclusive taxon that includes all its conucleogenera and excludes all its alienogenera (***orotaxon***) if it exists, or [2] is an ***anaptonym*** if such a taxon does not exist because of overlapping between the onomatophore and the onomatostasis (***gephyronym***) (see Dubois 2006*a*: 188). ● Dubois 2015*c*: 13. ● *Code*: no term.

**Orotaxa**, *n.* ● Plural of ***orotaxon***.

**Orotaxon** (pl. ***orotaxa***), *n.* ● AL. ● **Ety**: G: ὄρος (*oros*), 'mountain'; τάξις (*taxis*), 'order, arrangement'. ● Within the frame of a given ***ergotaxonomy***, the most inclusive class-series taxon including all the ***conucleogenera*** of a class-series taxon and excluding all its ***coalienogenera***. ● Dubois 2006*a*: 188. ● *Code*: no term.

**Orthochresonym**, *n*. ● TA. ● **Ety**: G: ὀρθός (*orthos*), 'right, correct'; χρησις (*chresis*), 'use'; ὄνομα (*onoma*), 'name'. ● Chresonym appropriately used to designate a taxon. ● **Ant**: ***heterochresonym***. ● Dubois 2000*b*: 59. ● *Code*: no term._

**Ostension**, *n*. ● AL. ● System of allocation of a nomen to a concept or class (such as a taxon) through pointing to an object being an example or member of the class (***inclusive ostension***), or a non-example or non-member of the class (***exclusive ostension***), or both (***bidirectional ostension***), without providing an intensional or closed extensional definition, or information on the boundaries the class. ● Traditional term in philosophy, logics and didactics (see Keller *et al.* 2003: 99; Dubois 2005*b*: 380, 2011*a*: 89). ● *Code*: no term.

**Ostensional**, *a*. ● AL. ● See ***Ostension***.

**Ostensional Nomenclatural System (ONS)**, *e*. ● NO. ● A nomenclatural system that relies on ***ostension*** for the taxonomic allocation of nomina. ● Dubois 2015*a*. ● *Code*: no term.

**Paneurydiaphonym**, *n*. ● VA. ● **Ety**: G: πᾶς (*pas*), 'all, every, each'; εὐρύς (*eurus*), 'broad, wide'; διάφωνος (*diaphonos*), 'discordant'; ὄνομα (*onoma*), 'name'. ● ***Eurydiaphonym*** that is the only one to have been used as valid for a given taxon, or for taxa having totally or partially identical extensions, in the titles of 100 scientific works. ● **Ety**: G: πᾶς (*pas*), "all, every, each"; σῴζω (*sozo*), 'I keep, I protect'; ὄνομα (*onoma*), 'name'. ● Any ***sozonymorph*** that has been used as valid in the title of at least one scientific publication after 1899. ● **End**: ***sozonym*** and ***sozodiaphonym***. ● Dubois 2020*a*: 41. ● *Code*: no term.

**Panrhizonym**, *n*. ● NO. ● **Ety**: G: πᾶς (*pas*), 'all, every, each'; ῥίζα (*rhiza*), 'root, stem'; ὄνομα (*onoma*), 'name'. ● Suprageneric nomen the stem of which is a nomen of the genus-series or of another nominal-series, or a vernacular name of animal. ● **End**: ***rhizonyms***, ***pseudorhizonyms***, ***auxorhizonyms***, ***cenorhizonyms***, ***xenorhizonyms*** and ***quasirhizonyms***. ● *Code*: no term.

**Parallelonym,** *n*. ● AV. ● **Ety:** G: παρά (*para*), 'near, beside, along'; ἀλλήλων (*allelon*), 'the one… the other…'; ὄνομα (*onoma*), 'name'. ● One of two (or several) ***allelonyms*** which are all new nomina. ● Dubois 2015*c*: 43, 78. ● **End**: ***agoallelonym*** and ***epomallelonym***. ● *Code*: no term.

**Paraphyletic**, *a*. ● PH, TA. ● Concept applying to ***taxa***: qualification of a ***homophyletic*** group that includes its most recent common ancestor but not all of the descendants of the latter. ● Hennig 1950; Ashlock 1971; Dubois 1986*b*. ● *Code*: no term.

**Paraphyly**, *n*. ● See ***Paraphyletic***.

**Parograph**, *n*. ● AV, CO. ● **Ety**: G: παρά (*para*), 'near, beside, along'; γράφω (*grapho*), 'I write'. ● A category of ***paronym***: any spelling, either original (***protograph***) or subsequent (***apograph***), ever used in the literature for a nomen. ● Dubois 2010*a*: 6. ● *Code*: no term.

**Parohypse**, *n*. ● AV, CO. ● **Ety**: G: παρά (*para*), 'near, beside, along'; υψος (*hupsos*), 'height'. ● A category of ***paronym***: any of the avatars, either original (***protohypse***) or subsequent (***apohypse***), of the rank of a nomen. ● Dubois 2010*a*: 6. ● *Code*: no term.

**Paromograph**, *n*. ● AV, VA. ● **Ety**: G: παρά (*para*), 'near, beside, along'; ὁμός (*homos*), 'the same'; γράφω (*grapho*), 'to write'. ● Any of two or more distinct ***hoplonyms*** (having different auctors, dates and onomatophores) of the same ***nominal-series*** having the same etymology and meaning, and spellings deemed to be identical under Article 58 of the *Code*. ● Dubois 2012*a*: 64. ● *Code*: variant spelling.

**Paromography**, *n*. ● See ***Paromograph***.

**Paronym**, *n*. ● AV, CO. ● **Ety**: G: παρά (*para*), 'near, beside, along'; ὄνομα (*onoma*), 'name'. ● Any of the ***avatars*** of a nomen, either original (***protonym***) or subsequent (***aponym***), and concerning its spelling (***parograph***), rank (***parohypse***) and/or, if relevant, ***onymorph*** (***paronymorph***). ● Dubois 2000*b*: 53. ● *Code*: no term.

**Paronymorph***, n*. ● AV, CO. ● **Ety**: G: παρά (*para*), 'near, beside, along'; ονομα (*onoma*), 'name'; μορφή (*morphe*), 'form, shape'. ● A category of ***paronym***: any of the avatars, either original (***protonymorph***) or subsequent (***aponymorph***), of the ***onymorph*** of a nomen. ● Dubois 2010*a*: 6. ● *Code*: no term.

**Parordinate**, *a*. ● NO, TA. ● **Ety**: L: *par*, 'equal, same'; *ordo*, 'series, line, row, order'. ● Qualification of any of two or more taxa that have the same hierarchical rank and are ***immediately subordinate*** to the same ***superordinate*** taxon in a given ***ergotaxonomy***. ● Dubois 2006*a*: 827, 2007*a*: 33, 2008*a*: 60 ● *Code*: no term._

**Parordination**, *n*. ● NO, TA. ● **Ety**: L: *par*, 'equal, same'; *ordo*, 'series, line, row, order'. ● The relation of ***ordination*** between two ***parordinate*** taxa in a given ***ergotaxonomy***. ● Dubois 2007*a*, 2008*a*. ● *Code*: no term.

**Partially regulated family-series ranks (PRR)**, *e*. ● NO. ● Ranks of the family-series for which the *Code* does not prescribe ***mandatory endings*** but only that their ending nominative indicates plural. ● Dubois & Aescht 2019*o*: 128. ● *Code*: no term.

**P-availability**, *e*. ● AV. ● Availability of ***publication***. ● Dubois 2015*c*: 24. ● *Code*: no term.

**Pentatomy**, *n*. ● PH, TA. ● **Ety**: G: πέντε (*pente*), 'five'; τομή (*tome*), 'cutting, incision'. ● Partition of a set into five subsets. ● Common language term. ● *Code*: no term.

**Perissonym**, *n*. ● VA. ● **Ety**: G: περισσός (*perissos*), 'superfluous'; ὄνομα (*onoma*), 'name'. ● FS nomen being redundant to a superordinate CS nomen in a given ergotaxonomy, that should therefore preferably not be used under the nomenclatural Criteria used in the present work as its purpose is only to comply with tradition but it carries no cladistic information. ● *Hoc loco*. ● *Code*: no term.

**Peritaxa**, *n*. ● One of the two plurals of ***peritaxon***. ● *Hoc loco*.

**Peritaxic**, *a*. ● NO, TA. ● **Ety**: see ***Peritaxy***. ● Qualification of two distinct taxa (an ***angiotaxon*** and an ***endotaxon***) being in a relation of inclusion, and whose nomina are assigned to the same or different nominal-series. ● Dubois 2005*b*: 407. ● *Code*: no term.

**Peritaxon** (pl. ***peritaxa***, ***peritaxons***), *n*. ● NO, TA. ● **Ety**: see ***Peritaxy***. ● One of two distinct taxa (an ***angiotaxon*** and an ***endotaxon***) being in a relation of inclusion, and whose nomina are assigned to the same or different nominal-series. ● Dubois 2006*a*: 255. ● *Code*: no term.

**Peritaxons**, *n*. ● One of the two plurals of ***peritaxon***. ● *Hoc loco*.

**Peritaxy**, *n*. ● NO, TA. ● **Ety**: G: περί (*peri*), 'around'; τάξις (*taxis*), 'order, arrangement'. ● Relation of inclusion, in a given ergotaxonomy, between two taxa (an ***angiotaxon*** and an ***endotaxon***) whose nomina are assigned to the same or different nominal-series. ● Dubois 2005*b*: 406. ● *Code*: no term.

**Phalanx**, *n*. ● NO, TA. ● **Ety**: L: *phalanx*, 'phalanx, body of soldiers'. ● In zoological taxonomy and nomenclature, a key rank of the class-series, between order and family. ● Term in traditional use in taxonomy; Dubois 2006*a*. ● *Code*: no term.

**Phenetic**, *n*. ● TA. ● Concerning overall similarity and difference between organisms without regard to phylogeny. ● Term in traditional use in evolutionary biology. ● *Code*: no term.

**Phenogenus**, *n*. ● TA. ● **Ety**: G: φαίνω (*phaino*), 'I show, I reveal'; γένος (*genis*), 'race, genus'. ● Genus concept relying on the presence of phenetic characters shared by species. ● *Hoc loco*. ● *Code*: no term.

**Phenogram**, *n*. ● PH. ● **Ety**: G: φαίνω (*phaino*), 'I show, I reveal'; γράμμα (*gramma*), 'writing'. ● A dendrogram indicating degree of overall similarity or distance. ● Mayr 1965: 81 (see Brower 2016). ● *Code*: no term.

**Phenon** (pl. ***phenons***), *n*. ● TA. **Ety**: G: φαίνω (*phaino*), 'I show, I reveal'. ● Phenotypically homogeneous sample of organisms. ● Camp & Gilly (1943: 335). ● *Code*: no term.

**Phenospecies**, *n*. ● TA. ● **Ety**: G: φαίνω (*phaino*), 'I show, I reveal'; L: *species*, 'view, sight, shape, form, kind, species'. ● Species concept defined as a phenotypically homogeneous group of organisms. ● Term in common use in taxonomy. ● *Code*: no term.

**Photonym**, *n*. ● AL. ● **Ety**: G: φως, φωτός (*phos, photos*), 'light, day'; ὄνομα (*onoma*), 'name'. ● ***Monaptonym*** whose ***monophoric*** onomatophore (***lectophoront***, ***neophoront***, ***nucleospecies*** or ***nucleogenus***) is referred to a known ***ergotaxon***. ● **Ant**: ***nyctonym***. ● Dubois 2011*a*: 54, 89. ● *Code*: no term.

**Phylogenesis**, *n*. ● PH. ● **Ety**: G: φῦλον (*phylon*), 'race, family'; γένεσις (*genesis*), 'origin, birth, creation, production'. ● Biological process of differentiation and diversification of organisms during evolution, including speciation. ● **Syn**: ***phylogeny***. ● Haeckel 1866*a*: 60. ● *Code*: no term.

**Phylogenetic**, *n*. ● PH. ● See ***Phylogenesis***.

**Phylogeny**, *n*. ● PH. ● **Ety**: G: φῦλον (*phylon*), 'race, family'; γένεσις (*genesis*), 'origin, birth, creation, production'. ● Biological process of differentiation and diversification of organisms during evolution, including speciation. ● **Syn**: ***phylogenesis***. ● Haeckel 1866*a*: 60. ● *Code*: no term.

**Phylogram**, *n*. ● PH. ● **Ety**: G: φῦλον (*phylon*), 'race, family'; γράμμα (*gramma*), 'writing'. ● A dendrogram indicating both cladistic branching and the relative amount of anagenetic change that has occurred between nodes. ● Mayr 1969: 256 (see Brower 2016). ● *Code*: no term.

**Phylon**, *n*. ● PH. ● **Ety**: φῦλον (*phylon*), 'race, family'. ● A term of ambiguous meaning: [1] In zoological taxonomy and nomenclature, a rank of the class-series, between kingdom and class (Haeckel 1866*a*: 61) (see ***phylum***); [2] in evolutionary biology, a holophyletic evolutionary group (Dubois 1991: 65) (see ***lineage***). ● *Code*: no term.

**Phylonomy**, *n*. ● TA. ● Taxonomy based on a phylogram. ● *Hoc loco*. ● *Code*: no term.

**Phylum**, *n*. ● NO, PH, TA, XE. ● **Ety**: φῦλον (*phylon*), 'race, family'. ● In zoological taxonomy and nomenclature, a term of ambiguous meaning: [1] a key rank of the class-series, between kingdom and class (Haeckel 1866*b*); [2] any rank of the family- or class-series (see e.g. Zhang 2011*a*–*b*). ● *Code*: no term.

**Plenary Power**, *e*. ● NO. ● The power of the Commission to suspend or modify the application of Art. 1 to 76 of the *Code* in the way that it considers necessary to serve the interests of stability and universality of nomenclature in certains cases. ● *Code*: plenary power.

**Plesiomorphic**, *n*. ● See ***Plesiomorphy***.

**Plesiomorphy**, *n*. ● PH, TA. ● **Ety**: G: πλησιός (*plesios*), 'neighbour'; μορφή (*morphe*), 'form, shape'. ● Character state observed in a taxon which is considered derived primitive to the apomorphic state of this character in a taxon considered as descendant. ● Hennig 1950. ● *Code*: no term.

**Plurinomen**. (pl. ***plurinomina***), *n*. ● AV, CO. ● L: *plures*, 'more numerous'; *nomen*, 'name'. ● Nomen composed of two or more terms, including at least a generic ***substantive*** and a specific ***epithet***. ● Traditional term in zoological nomenclature. ● *Code*: binomen.

**Plurinomina**, *n*. ● Plural of ***plurinomen***.

**Poieonym**, *n*. ● AV. ● **Ety**: ποιέω (*poieo*), 'to create' and ὄνομα (*onoma*), 'name'. ● Brand new nomen, not proposed to replace an existing one. ● **Ant**: ***neonym***. ● Dubois 2017*a*: 12. ● *Code*: no term.

**Polychotomy**, *n*. ● See ***Polytomy***.

**Polyhypotaxy**, *n*. ● TA. ● **Ety**: G: πολύς (*polys*), 'numerous'; ὑπό (*hupo*), 'below'; τάξις (*taxis*), 'order, arrangement'. ● Mode of ***hypotaxy*** of a taxon that includes more than two ***parordinate*** taxa of just lower rank. In a phylogenetic taxonomic frame, the meaning of this situation is unclear, as two different situations may account for it: [1] these parordinate taxa are the members of a still unresolved polytomy, which subsequent work can possibly resolve; [2] a hypothesis already exists regarding the relationships between the members of the polytomy, but it was not implemented into the ergotaxonomy in order to limit the number of ranks of this taxonomy. ● Dubois & Raffaëlli 2009: 12. ● *Code*: no term.

**Polyphyletic**, *a*. ● PH, TA. ● Concept applying to ***taxa***: qualification of a non-homophyletic group, i.e. that does not include its most recent common ancestor. ● Haeckel 1874; Hennig 1950; Ashlock 1971; Dubois 1986*b*. ● *Code*: no term.

**Polyphyly**, *a*. ● See ***Polyphyletic***.

**Polysemic**, *a*. ● NO. ● **Ety**: see ***Polysemy***. ● In the context of zoological nomenclature, the qualification of either [1] a nomenclatural system that allows the same nomen to designate distinct taxa, or [2] any nomen being in this situation (see Dubois 2007*a*: 41). ● **Ant**: ***monosemic***. ● Term in traditional use in linguistics and grammar. ● *Code*: no term.

**Polysemy**, *a*. ● NO. ● **Ety**: G: πολύς (*polys*), 'numerous'; σῆμα (*sema*), 'sign, mark'. ● In the context of zoological nomenclature, the fact that a nomenclatural system allows the same nomen to designate distinct taxa. ● **Ant**: ***monosemy***. ● Term in traditional use in linguistics and grammar. ● *Code*: no term.

**Polythetic**, *a*. ● AL. ● **Ety**: G: πολύς (*polys*), 'numerous'; τίθημι (*titemi*), 'I put, I place'. ● In taxonomy, qualification of a diagnosis of taxon involving a variable, but unique to the taxon, combination of alternative character states, none of which is necessarily present in every member of the taxon. ● **Ant**: ***Monothetic***. ● Sneath 1962; Van Regenmortel 2016; Dubois 2017*d*. ● *Code*: no term.

**Polythetic diagnosis**, *e*. ● AL. ● In taxonomy, a diagnosis of taxon involving a variable, but unique to the taxon, combination of alternative character states, none of which is necessarily present in every member of the taxon. ● **Ant**: ***Monothetic diagnosis***. ● Sneath 1962; Van Regenmortel 2016; Dubois 2017*d*. ● *Code*: no term.

**Polytomy**, *n*. ● PH, TA. ● **Ety**: G: πολύς (*polys*), 'numerous'; τομή (*tome*), 'cutting, incision'. ● Partition of a set into more than two subsets. ● **Syn**: ***polychotomy***. ● **End**: ***trichotomy***, ***tetratomy***, ***pentatomy***, ***hexatomy***, ***heptatomy***, ***octotomy***, ***enneatomy***. ● Common language term. ● *Code*: no term.

**Potentially valid**, *e*. ● AV, VA. ● An ***available*** and ***allocated*** nomen which is not invalid but which may become so for reason of ***synonymy***, ***homonymy***, ***proedry***, ***airesy*** or ***archoidy***. ● Traditional term in zoological and botanical nomenclature. ● **Syn**: ***available***. ● *Code*: potentially valid.

**P-publication**, *n*. ● AV. ● Publication printed on paper. ● Dubois *et al.* 2013: 5. ● *Code*: work printed on paper.

**Precedence**, *n*. ● VA. ● In zoological nomenclature, the fact that a nomen must be used as valid against its potential synonyms and homonyms, as a result of one of the Principles of Validity of the *Code*. ● **Ant**: ***Subservience.*** ● Traditional term in zoological nomenclature. ● *Code*: precedence.

**Prefix**, *n*. ● NO. ● A letter or group of letters preceding a word having its independent existence in order to modify its meaning. ● Common language term. ● *Code*: prefix.

**Prenucleogenera**, *n*. ● Plural of ***prenucleogenus***.

**Prenucleogenus** (pl. ***prenucleogenera***). ● AL. ● **Ety**: L: *prae*, in the sense of 'before'; *nucleus*, 'nucleus, core, stone' (from *nux*, 'nut'); *genus*, 'birth, origin, class, kind'. ● One of several nominal genera originally included in a new nominal family-series at its first publication (generic ***symphory***), before subsequent designation among them of a single ***elitonucleogenus***. ● *Hoc loco*. ● *Code*: no term.

**Prenucleospecies**, *n*. ● AL. ● **Ety**: L: *prae*, in the sense of 'before'; *nucleus*, 'nucleus, core, stone' (from *nux*, 'nut'); *species*, 'species'. ● One of several nominal species originally included in a new nominal genus or subgenus at its first publication (specific ***symphory***), before subsequent designation among them of a single nucleospecies. ● Dubois 2005*b*: 404. ● *Code*: originally included nominal species.

**Pre-registration**, *n*. ● AV, VA. ● A category of ***registration*** of a nomen or an ***onomatergy*** that occurred **before** the publication of the latter, e.g. registration in *Zoobank* before an electronic publication. ● Dubois & Aescht 2019*a*: 12. ● *Code*: no term.

**Prevailing usage**, *e*. ● VA. ● An ambiguous formula, used in different parts of the *Code* under different meanings: see details in Dubois (2010*a*: 13−14, 2017*b*: 24) and Löbl (2015). This formula is not used in the present work, which relies on well-defined ***categories of usage*** (Dubois 2006*a*, 2010*a*, 2015*c*). ● *Code*: prevailing usage.

**Preventive archaeology**, *e*. ● XE. ● The domain of archaeology devoted to the protection of threatened archaeological sites (see e.g. Bozóki-Ernycy 2007).

**Preventive taxonomy**, *e*. ● TA, XE. ● The organisation of special field work parties for the collection of specimens of animal species threatened with extinction by predictable destruction or major alteration of habitats or ecosystems. ● Dubois 2008*e*. ● *Code*: no term.

**Primary auctorship**, *e*. ● VA. ● In case of ***double auctorship*** of a family-series junior synonym validated before 1961 through Article 40.2 (see Dubois 2015*a*: 31–34), the auctorship (and date) of the junior nomen which are validated against those of its senior synonym. In the present work, this primary auctorship is presented between double vertical bars: e.g. *Dendrobatidae* ||Bonaparte, 1850||-Cope, 1865. ● *Hoc loco*. ● *Code*: no term.

**Primary key rank**, *e*. ● NO, TA. ● Any of the seven ***mandatory*** taxonominal key ranks (kingdom, phylum, class, order, family, genus, species) of zoological taxonomy and nomenclature. ● **Ant**: ***secondary key rank***. ● Common language terms; Dubois 2006*a*: 217. ● *Code*: no term.

**Primary homonym**, *e*. ● VA. ● See ***Hadromonym***.

**Primogenera**, *n*. ● Plural of ***primogenus***.

**Primogenus** (pl. ***primogenera***), *n*. ● NO. ● **Ety**: L: *primus*, 'original, primary'; *genus*, 'birth, origin, class, kind'. ● Genus-series nomen expressly mentioned as valid and included in (***conucleogenus*** or ***uninucleogenus***) or excluded from (***alienogenus***) a new class-series nomen in the original publication of the latter. ● Dubois 2015*c*: 78. ● *Code*: no term.

**Primoscriptor**, *n*. ● AV, CO. ● **Ety**: L: *primus*, 'first'; and *scriptor*, 'writer, author'. ● See ***Scriptor***. ● Dubois 2000*b* (as ***first-user***), 2013. ● *Code*: no term.

**Principle**, *n*. ● NO. ● Within the frame of the *Code*, a general statement of general value which applies to all relevant nomenclatural acts and which is the basis for all particular and specific Rules of the *Code*. ● Traditional term in zoological nomenclature; Dubois 2011*a*: 90. ● *Code*: no definition.

**Principle of Airesy**, *e*. ● VA. ● In any situation of synchronous zygoidy between nomina of the same nominal-series, precedence among zygonyms (homonyms or synonyms), zygographs (competing parographs of a nomen) or zygophories (competing airetophories for a nomen) is fixed by the action of an arbiter publishing an explicit act of airesy, i.e. seniorisation of one item and juniorisation of the other(s), removing this ambiguity. This airesy is definitive and irreversible by subsequent actions of individual authors. It may however be superseded by other Principles of Validity. ● Dubois 2011*a* (as 'Principle of First-Reviser'), 2013; Dubois & Aescht 2019*m*. ● *Code*: no term.

**Principle of Archoidy**, *e*. ● NO. ● In case of nomenclatural ambiguity, uncertainty or conflict, liable to disturb the universality of zoological nomenclature and to cause confusion, the Commission may be conferred Plenary Power to take a specific action aiming at solving the problem. In order to do so, it is entitled to set aside, as needed, any existing Rule of the *Code* (except those concerning the powers and duties of the respective internationally accepted regulatory body). ● Dubois & Aescht 2019*q*. ● *Code*: no term.

**Principle of Binomina**, *e*. ● AV, CO. ● The nomen of a taxon of rank species is a binomen. The nomen of a taxon of rank subspecies is a trinomen. The nomina of all taxa above the species-series are uninomina. Nomina of subgenera, aggregates of species and aggregates of subspecies are uninomina that, when used in a binomen or trinomen, must be interpolated in parentheses between those of their superordinate and subordinate taxa; such nomina are not counted in the number of words of a binomen or trinomen. ● Dubois 2011*a*, 2013; Dubois & Aescht 2019*b*. ● *Code*: Principle of Binominal Nomenclature (Articles 4–6, 11.4; pages 4–6, 10–11).

**Principle of Coordination**, *e*. ● AV, VA. ● In the family-, genus- and species-series, a nomen introduced for a taxon at any rank of the nominal-series is deemed to be simultaneously introduced for any other taxon at any other rank of the same nominal-series (e.g., genus *Rana*, subgenus *Rana*, or superfamily *Ranoidea*, family *Ranidae*, subfamily *Raninae*, tribe *Ranini*, subtribe *Ranina*). These different paronyms of the same nomen may be used in parallel at different ranks in a given ergotaxonomy. Whenever indeed used for such other taxa, these are not different nomina (synonyms) but they are all avatars of the same nomen, having the same onomatophore, author and date. ● Dubois 2011*a*, 2013; Dubois & Aescht 2019*d*. ● *Code*: Principle of Coordination (Article 36, p. 45; Article 43, p. 48; Article 46, p. 50).

**Principle of Homonymy**, *e*. ● VA. ● Whenever two nomina of the same nominal-series are strictly identical (homographs) or deemed to be identical under the Rules of the Code (rhizomographs or paromographs), only one can be potentially valid (if not invalid for another reason). In the genus- and family-series, homonymy is absolute and irreversible (hadromonymy), but in the species-series it can be either absolute and irreversible (hadromonymy) or relative and reversible (asthenomonymy). The potentially valid nomen among homonyms is determined, according to the situation, by one of the Principles regulating nomenclatural precedence among nomina involved in a relation of zygoidy. The Principle of Homonymy does not apply between homonymous epithets combined with homonymous but distinct generic substantives (pseudomographs). ● Dubois 2011*a*, 2013; Dubois & Aescht 2019*i*. ● *Code*: Principle of Homonymy (Article 52, p. 56).

**Principle of Neonymy**, *e*. ● AV. ● The publication of the clearly intentional replacement of an available nomen by a different nomen results in the introduction in zoological nomenclature of a neonym, which has the same onomatophore as the replaced nomen (archaeonym) but a different author and a different date. A neonym having the same etymology as its archaeonym is an autoneonym, whereas a neonym having a partially or completely different etymology is an alloneonym. Allelonyms are alternative nomina published in the same work for the same taxon. They have the same onomatophore, author and date. ● Dubois 2011*a*, 2013; Dubois & Aescht 2019*f*. ● *Code*: no term.

**Principle of Nomenclatural Foundation**, *e*. ● NO. ● The nomenclatural status of a nomen is fixed once and for all in the original publication where this nomen is introduced, or if relevant by the Principle of Airesy, and cannot be modified by subsequent actions of individual zoologists. ● Dubois 2011*a*, 2013; Dubois & Aescht 2017*b*. ● *Code*: no term.

**Principle of Nominal-Series**, *e*. ● AS, AV. ● The *Code*'s nomenclatural hierarchy covers all taxa recognised by taxonomists in the animal kingdom. This hierarchy is divided in four nominal-series: the species-, genus-, family- and class-series. Each nominal-series accommodates several ranks (four in the species-series, two in the genus-series, an unlimited number in the family- and class-series). To become available, a new nomen must be introduced as unambiguously referred, either implicitly or explicitly to one of these nominal-series, and it must follow the Principle of Binomina. ● Dubois 2011*a*, 2013; Dubois & Aescht 2017*d*. ● *Code*: no term.

**Principle of Nomography**, *e*. ● CO. ● In a given ergotaxonomy, any kyronym at a given rank can have a single correct spelling (eugraph), which can be either its protograph or one of its apographs, particularly in cases of mandatory spelling or ending correction. ● Dubois 2013; Dubois & Aescht 2019*o*. ● *Code*: not stated as a Principle, but implemented as Rules in Articles 19 (p. 21), 27 (p. 32), 28 (p. 32), 32.2 (p. 39), 32.5 (p. 39–42), 33.2 (p. 42), 34 (p. 43–44) and 58.

**Principle of Onomatophores**, *e*. ● AL. ● Each nomen has, actually or potentially, an ***onomatophore***, i.e., an objective standard of reference of ***inclusive ostension*** whereby the taxonomic allocation of the nomen can be determined. In any given ergotaxonomy, the nomen can be potentially applied to any taxon that includes its onomatophore. In the species-series, onomatophores are specimens, whereas in the genus-, family- and class-series they are taxomina. ● Dubois 2011*a*, 2013; Dubois & Aescht 2019*f*. ● *Code*: Principle of Typification (Article 61, p. 63–64).

**Principle of Priority**, *e*. ● VA. ● In a given nominal-series, in any situation of allochronous zygoidy, the first published zygonym (homonym or synonym), zygograph (competing parograph) or zygophory (competing airetophory) has precedence, except if the Principles of Nomography or Sozoidy apply. ● Dubois 2011*a*, 2013; Dubois & Aescht 2019*l*. ● *Code*: part of the Principle of Priority (Article 23, p. 24).

**Principle of Proedry**, *e*. ● VA. ● In a given nominal-series, whenever zygonyms (homonyms or synonyms) are introduced simultaneously, but proposed at different ranks within their nominal-series, the nomen proposed at higher rank has precedence. The same applies between synchronous zygophories (competing airetophories) if they concern taxa at different ranks: the designation made for the taxon at higher rank has precedence. ● Dubois 2013; Dubois & Aescht 2019*n*. ● *Code*: not stated as a Principle, but implemented as a Rule in Articles 24.1 (p. 30), 55.5 (p. 58), 56.3 (p. 58), 57.7 (p. 60) and 61.2.1 (p. 64).

**Principle of Registration**, *e*. ● RE. ● The nomenclatural status of publications, nomina, spellings and onomatergies may be fixed and registered online, and therefore protected from oblivion and rejection, in an international open database recognised by the Commission or its successor body as appropriate for this purpose. Three kinds or categories of registrations exist: [1] post-registration of decisions of the Commission under the Plenary Power regarding nomenclatural availability (of works, nomina and/or onomatergies), taxonomic allocation (of nomina) and validity and correctness (validity of nomina and/or onomatergies; correctness of spellings of nomina); [2] post-registration of availability/unavailability of nomina duly listed in Lists of Available Names; [3] pre-registration on *Zoobank*, respecting all the *Code*'s requirements in this respect, of new works, nomina and onomatergies before online publication of the work. ● Dubois 2011*a*, 2013; Dubois & Aescht 2019*r*. ● *Code*: no term.

**Principle of Sozoidy**, *e*. ● NO. ● In the class-series, among two or more synonyms or homonyms, whenever one qualifies as sozonym or sozodiaphonym, it must be given precedence for validity (if not invalid for another reason) over its synonym(s) or homonym(s) that would have precedence over it according to the usual criteria of Priority, Airesy or Proedry; however these usual criteria apply among sozodiaphonyms. The same Principle applies to two or more spellings, the sozograph being the correct spelling, or to two or more zygophories, if one of them qualifies as a sozairetophory. ● Dubois 2011*a* (as 'Principle of Sozonymy'), 2013; Dubois & Aescht 2019*p*. ● *Code*: not stated as a Principle, but some of the conditions listed here appear in Article 23.9 on Reversal of precedence (p. 27–29).

**Principle of Synonymy**, *e*. ● VA. ● Whenever two nomina of the same nominal-series are based on the same onomatophore (isonyms, which include allelonyms) or considered as synonyms in a given ergotaxonomy despite being based on different onomatophores (doxisonyms), only one can be potentially valid (if not invalid for another reason). ● Dubois 2011*a*, 2013; Dubois & Aescht 2019*k*. ● *Code*: part of the Principle of Priority (Article 23, p. 24).

**Principle of Zoological Nomenclature Independence**, *e*. ● NO. ● Zoological nomenclature as regulated by the *Code* and by DONS is independent from [1] taxonomy (i.e. it does not interfere with taxonomic thought and action), and [2] all other codes of nomenclature, whether in force for non-animal living beings or based on other basic premices incompatible with those of the *Code*. ● Dubois 2011*a*, 2013 (both as 'Principle of Nomenclatural Independence'); Dubois & Aescht 2017*a*. ● *Code*: no term.

**Principle of Zygoidy**, *e*. ● AL, VA, CO. ● In the frame of a given ergotaxonomy, a taxon at a given rank must bear a single nomen with a single spelling. Different situations of conflict of zygoidy may be distinguished: [1] zygonymy: conflict between homonymous or synonymous nomina competing for validity; [2] zygography: conflict between spellings competing for correctness; and [3] zygophory: conflict between onomatophore restrictions or designations competing for validity. These conflicts must be resolved, according to the situation, through use of the appropriate one among the following five Principles: Priority, Airesy, Proedry, Nomography and Sozoidy. ● Dubois 2013; Dubois & Aescht 2019*g*. ● *Code*: no term.

**Priority**, *n*. ● VA. ● In the context of zoological nomenclature, a qualification of a nomen, an onomatergy or a spelling published previously to another one and having therefore nomenclatural precedence on the latter. ● Traditional term in zoological nomenclature. ● *Code*: priority.

**Priscogenus**, *n*. ● AV, VA. ● Ety: L: *prisco*, 'primitive'; *genus*, 'race, kind, genus'. ● The generic substantive with which a new species-series epithet was combined in the publication where it was made available. ● Dubois & Aescht 2019*h*: 77. ● *Code*: no term.

**Proedry**, *n*. ● VA. ● Ety: G: προεδρία (*proedria*), 'precedence, first place'. ● Rule of nomenclatural rank precedence between synchronous synonyms or homonyms under the *Code* (Articles 24, 55.5, 56.3 and 57.7) which states that if one of these nomina was proposed at a higher rank than the other(s), it takes precedence over it/them whenever they are considered synonyms. ● Dubois 2013: 7. ● *Code*: no term.

**Promulgate**, *v*. ● AV. ● Publish a new work, a new nomen or a new ***onomatergy*** complying with the Rules of the *Code* for nomenclatural availability. ● Dubois 2020*b*: 51. ● *Code*: one of the meanings of the verb 'establish'.

**Promulgation**, *n*. ● AV. ● Publication of a new work, a new nomen or a new ***onomatergy*** complying with the Rules of the *Code* for nomenclatural availability (Articles 8–9). ● Dubois 2020*b*: 51. ● *Code*: one of the meanings of the term ***establishment***.

**Pro-system**, *e*. ● NO, TA. ● Ety: G: προ- (*pro-*) 'before'; σύστημα (*systema*), 'organised whole'. ● An incomplete taxonomic or nomenclatural system for a given group of organisms, i.e., allowing unambiguous, objective, repeatable and universal decisions only in some cases and situations. ● End: ***mero-systems*** and ***pseudo-systems***. ● Dubois 2015*c*: 8, 79. ● *Code*: system._

**Protaxa**, *n*. ● One of the two plurals of ***protaxon***.

**Protaxon** (pl. ***protaxa***, ***protaxon***), *n*. ● AL. ● Ety: G: προ- (*pro-*), in the sense of 'first, primitive, original'; τάξις (*taxis*), 'order, arrangement'. ● Taxon with its complete original ***extension*** (i.e., members, ***circumscription***) in the publication where it was first proposed. ● Dubois 2005*b*: 405. ● *Code*: no term.

**Protaxons**, *n*. ● One of the two plurals of ***protaxon***.

**Protograph**, *n*. ● AV. ● Ety: G: πρωτος (*protos*), 'first, earliest'; γράφω (*grapho*), 'I write'. ● Original ***parograph*** of a nomen in the publication where it was originally introduced. ● Ang: ***protonym***. ● End: ***holoprotograph***, ***symprotograph***, ***lectoprotograph***, ***leipoprotograph***. ● Ant: ***apograph***. ● Dubois 2010*a*: 6. ● *Code*: original spelling.

**Protohypse**, *n*. ● AV. ● Ety: G: πρωτος (*protos*), 'first, earliest'; υψος (*hypsos*), 'height'. ● A category of ***protonym***: original rank of a nomen. ● Ant: ***apohypse***. ● Dubois 2010*a*: 6. ● *Code*: no term.

**Protonym**, *n*. ● AV, CO. ● Ety: G: πρῶτος (*protos*), 'first, earliest'; ὄνομα (*onoma*), 'name'. ● Original spelling (***protograph***), rank (***protohypse***) and/or, if relevant, onymorph (***protonymorph***) of a nomen. ● Ant: ***aponym***. ● Dubois 2000*b*: 51. ● *Code*: no term.

**Protonymorph**, *n*. ● AV. ● Ety: G: πρωτος (*protos*), 'first, earliest'; ὄνομα (*onoma*), 'name'; μορφή (*morphe*), 'form, shape'. ● A category of ***protonym***: original onymorph of a nomen. ● Ant: ***aponymorph***. ● Dubois 2010*a*: 6. ● *Code*: no term.

**PRR**, *ab*. ● See ***Partially regulated family-series ranks***.

**Pseudomograph**, *n*. ● AV, VA. ● Ety: G: ψευδς (*pseudes*) 'lying, false'; ὁμός (*homos*), 'the same'; γράφω (*grapho*), 'to write'. ● Any of two or more distinct identical or 'deemed to be identical' (under Article 58 of the *Code*) epithets originally referred to genera designated by homonymous but distinct generic substantives. ● Dubois & Aescht 2019*h*: 69, 77. ● *Code*: no term.

**Pseudorank**, *n*. ● NO. ● Ety: see ***Pseudoranked***. ● So-called ranks used by some authors in pseudoranked nomenclatural system, in which the attribution of nomina to 'ranks' does not provide information on their place in the taxonominal hierarchy. ● *Hoc loco*. ● *Code*: no term.

**Pseudoranked**, *p*. ● NO. ● Ety: G: ψευδς (*pseudes*) 'lying, false'; Frankish: *hring*, 'circle, ring', from Proto-Germanic *hringaz*, 'circle, ring, something curved'. ● Qualification of a nomenclatural system in which ranks of nomina are mentioned but used in an inconsistent manner, for example assigning different ranks to ***parordinate*** taxa, or having different hierarchies between the same ranks in different parts of the classification, or using ranks for some taxa but no rank for others, simply referred to as 'taxa' or 'clades'. Ranks used in such a system provide no information on the hierarchical relationships between nomina, and by way of consequence on the structure of the tree adopted as a basis for the taxonomy. ● Dubois 2007*a*: 34. ● *Code*: no term.

**Pseudorhizonym**, *n.* ● NO. ● Ety: G: ψευδς (*pseudes*) 'lying, false'; ρίζα (*rhiza*), 'root, stem'; ὄνομα (*onoma*), 'name'. ● Suprageneric nomen **HN** (designating a taxon **HT**) based on the stem of a genus-series nomen but the latter not complying with the conditions of the *Code* for the availability of FS nomina (***available*** GS nomen included as *valid* in **HT**). If proposed as a family-series nomen, it is incorrectly formed according to Article 13.2 of the *Code*, and is therefore a family-series ***anoplonym*** (nomenclaturally unavailable). If proposed as a class-series nomen, it may be available under DONS Criteria (if the other conditions of nomenclatural availability are complied with). ● End: ***auxorhizonym***, ***cenorhizonym*** and ***xenorhizonym***. ● Dubois 2015*c*: 22, 79. ● *Code*: no term.

**Pseudorhizonymy**, *n.* ● NO. ● Ety: see ***Pseudorhizonym***. ● The fact that a nomen is a pseudorhizonym. ● *Hoc loco*. ● *Code*: no term.

**Pseudospecies**, *n.* ● See ***Kyon***.

**Pseudo-system**, *e.* ● NO, TA, VA. ● Ety: G: ψευδής (*pseudes*) 'lying, false'; σύστημα (*systema*), 'organised whole'. ● A taxonomic or nomenclatural ***pro-system*** which leaves some decisions unsettled and therefore requires recourse to subjectivity and personal opinions. ● Dubois 2015*c*: 8, 79. ● *Code*: no term.

**Publication**, *n.* ● NO, TA. ● [1] General meaning: [1a] the act of ***distribution*** of a work; [1b] the result of this act: a work ***distributed.*** [2] In the context of zoological nomenclature: [2a] the act of ***promulgation*** of a work conforming to the provisions of Articles 8–9 of the *Code* (i.e., mostly, printed with ink on paper and distributed as several identical copies, or released electronically after 2011) (see ***promulgation***); [2b] the result of this act: a work promulgated. ● Traditional term in zoological nomenclature. ● *Code*: publication.

**Publication date**, *e.* ● NO. ● In the context of zoological nomenclature, the actual date of public ***distribution*** of a publication—not its date of writing, submission, acceptance, printing or any other date that may appear in the document itself. ● Term in traditional use in nomenclature. ● *Code*: date.

**Published**, *p.* ● NO. ● In the context of zoological nomenclature, work issued conforming to the provisions of Articles 8–9 of the *Code*. ● See ***Publication***.

**Quantile**, *n.* ● NO, XE. ● A cut point dividing the range of a probability distribution or of observations in a sample into continuous intervals with equal probabilities. There is one fewer quantile than the number of groups thus created. ● Term in traditional use in statistics and probability. ● *Code*: no term.

**Quartile**, *n.* ● NO, XE. ● A ***quantile*** dividing the number of data points into four more or less equal parts, or quarters. ● Term in traditional use in statistics and probability. ● *Code*: no term.

**Quasirhizonym**, *n.* ● NO. ● Ety: L: *quasi*, 'as if, just as'; G: ρίζα (*rhiza*), 'root, stem'; ὄνομα (*onoma*), 'name'. ● Suprageneric ***nomen*** **HN** based on the stem of either a nomen of the SS, FS or CS or of a non-scientific name of animal, this stem being combined with an ending derived from another or several other terms (e.g., -formes, -morpha, -phora, etc.). If proposed as a family-series nomen, it is incorrectly formed according to Article 13.2 of the *Code*, and is therefore a family-series ***anoplonym*** (nomenclaturally unavailable). If proposed as a class-series nomen and available, common particular cases are those of such nomina the original endings of which were derived from the roots *forma* (Latin) or μορφή, *morphe* (Greek) meaning 'form, shape': under DONS as emended by Dubois & Frétey (2020*a*), it should be used under the respective standard endings **-iformes** or **-omorphes**, which are not in a relation of hierarchy but may be both used at whatever rank ● Dubois & Frétey 2020*a*. ● *Code*: no term.

**Quasirhizonymy**, *n.* ● NO. ● Ety: see ***Quasirhizonym***. ● The fact that a nomen is a quasirhizonym. ● *Hoc loco*. ● *Code*: no term.

**Radicogenera**, *n.* ● Plural of ***radicogenus***.

**Radicogenus** (pl. ***radicogenera***), *n.* ● NO. ● Ety: L: *radix*, 'root'; *genus*, 'birth, origin, class, kind'. ● Genus-series nomen playing the function of ***radiconomen*** of a suprageneric nomen. ● *Hoc loco*. ● *Code*: no term.

**Radiconomen** (pl. ***radiconomina***), *n.* ● NO. ● Ety: L: *radix*, 'root'; *nomen*, 'name'. ● Nomen or non-scientific name on which a ***rhizonym***, a ***pseudorhizonym*** or a ***quasirhizonym*** is based. ● Dubois 2015*c*: 23, 79. ● *Code*: no term.

**Radiconomina**, *n.* ● Plural of ***radiconomen***.

**Rank**, *n.* ● AV, VA. ● Ety: Frankish: *hring*, 'circle, ring', from Proto-Germanic *hringaz*, 'circle, ring, something curved'. ● The place of a nomen in a nomenclatural hierarchy or of a taxon in a taxonominal hierarchy. See ***Nomenclatural rank***, ***Absolute rank***, ***Relative rank*** and ***Taxonominal level***. ● Traditional term in nomenclature and taxonomy, precisely defined by Dubois & Malécot (2005: 101) and Dubois (2005*b*: 412). ● *Code*: rank.

**Ranked**, *p.* ● NO. ● Ety: see ***Rank***. ● Qualification of a nomenclatural system in which ranks are assigned to all nomina of supraspecific and infraspecific taxa. In a consistent such system, ***parordinate*** taxa are always assigned to the same rank, the hierarchy of ***primary key ranks*** used in different parts of the classification is the same, and all taxa are referred to ranks, but some of these qualifications at least are missing in ***pseudoranked*** and ***unranked nomenclatural systems***.

● Traditional term in zoological nomenclature. ● *Code*: no term.

**Rapid Ecological Assessment**, *e.* ● XE. ● A methodology devised to provide multiple scale information required to guide actions of ecological conservation (see e.g. Muchoney *et al.* 1991).

**Recent**, *n.* ● XE. ● For a taxon of **Amphibia**: that is referred to the **Lissamphibia**.

**Recommendation**, *n.* ● NO. ● A suggestion of 'good practice' which zootaxonomists are encouraged to follow, but failure to do so has no bearing on the availability or validity of onomatergies. A Recommendation has no juridical function and is therefore not part of the effective regulations of the *Code*. ● *Code*: recommendation.

**Redundant taxon**, *e.* ● VA. ● A taxon whose formal recognition in an ***ergotaxonomy*** does not bring any supplementary phylogenetic information additional to that alreadty provided by an immediately subordinate or superordinate taxon. ● Term in traditional use in nomenclature. ● *Code*: no term.

**Referred to**, *e.* ● TA. ● General language term, used sometimes in taxonomy with two precise technical meanings: [1] in the species-series, the statement that a species-series epithet is referred to a nominal genus may be made through ***actual combination*** with the generic substantive or through ***virtual combination***, by simple mention that it belongs to this genus, whether considered as valid or as an invalid synonym; [2] the statement that a specimen or a taxon belongs to a taxon recognised in a given ergotaxonomy. ● Dubois & Aescht 2019*h*: 77. ● *Code*: no term.

**Registered**, *p.* ● RE. ● Qualification of a nomen (***delonym***) that conforms to the conditions of nomenclatural registration of the *Code*. ● **Ant**: ***unregistered***. ● Traditional term in many domains. ● *Code*: no term.

**Registration**, *n.* ● RE. ● ***Onomatergy*** by which a nomen ***registered*** in an international nomenclatural database recognised by the *Code* becomes permanently available in zoological nomenclature (***delonym***). ● Traditional term in many domains. ● *Code*: registration.

**Regnum**, *n.* ● NO, TA. ● **Ety**: L: *regnum*, 'kingdom'. ● A class-series key rank in biological taxonomy and nomenclature, between imperium and phylum. ● Term in traditional use in taxonomy. ● **Syn**: ***kingdom***. ● *Code*: no term.

**Relacter**, *n.* ● TA. ● A taxonomic criterion relying on the relations that may exist, in natural or artificial conditions, between two entities composed of organisms, such as crossability, sympatry-parapatry-allopatry, parasitic specificity, ecological competitive exclusion, or presence-absence of a hybrid zone and of a gene flow in their contact zone. ● Dubois 1988*c*: 57 (as 'relational taxinomic criterion'), 2004*d*: 45. ● *Code*: no term.

**Relational**, *n.* ● TA. ● In taxonomy, qualification of a Criterion relying on the relations that may exist, in natural or artificial conditions, between two entities composed of organisms. ● Dubois 1988*c*: 57. ● *Code*: no term.

**Relative rank**, *e.* ● AV, VA. ● Nomenclatural rank conceived and used as provisionally attached to taxa, the same taxon being liable to shift from one rank to another in order to express the hierarchical relationships between taxa, according to the phylogenetic hypothesis adopted. ● Dubois 2007*a*: 34. ● *Code*: no term.

**Rescue archaeology**, *e.* ● XE. ● The domain of archaeology devoted to the rescue or salvage by excavation of threatened archaeological sites (see e.g. Demoule 2002).

**Resurrection**, *n.* ● See ***Revalidation***.

**Reversal of precedence**, *e.* ● VA. ● In the context of the *Code*, the suspension of the Principle of Priority in cases covered by Article 23.9. ● See ***Lethakyronym*** and ***Sozoidy***.

**Revalidation**, *n.* ● VA. ● Process opposite to that of ***synonymisation***, by which a nomen once considered an invalid ***doxisonym*** is reinstated as valid. ● Common language term, here used with a precise technical meaning proper to nomenclature; equivalent to the term 'resurrection' often used in the taxonomic literature to designate this process. ● *Code*: no term.

**Rhizomograph**, *n.* ● AV, VA. ● **Ety**: G: ῥίζα (*rhiza*), 'root, stem'; ὁμός (*homos*), 'the same'; γράφω (*grapho*), 'to write'. ● Any of two or more distinct ***protographs*** of the family or class-series having different spellings but derived from the same stem or from homographic terms. ● Dubois 2012*a*: 64. ● *Code*: no term.

**Rhizomography**, *n.* ● AV, VA. ● **Ety**: see ***Rhizomograph***. ● The fact that two distinct nomina are ***rhizomographs***. ● Dubois 2012*a*: 65. ● *Code*: no term.

**Rhizomonym**, *n.* ● AV. ● **Ety**: G: ῥίζα (*rhiza*), 'root, stem'; ὁμός (*homos*), 'the same'; ὄνομα (*onoma*), 'name'. ● Any of two or several family-series or class-series nomina derived from identical or homonymous stems, which according to the Rules of the *Code* or the Criteria of DONS must be considered homonyms, even if they have different endings. ● Dubois 2012*a*: 65, 79. ● *Code*: no term.

**Rhizonym**, *n.* ● NO. ● **Ety**: G: ῥίζα (*rhiza*), 'root, stem'; ὄνομα (*onoma*), 'name'. ● Suprageneric nomen **HN** (designating a taxon **HT**) based on the stem of a then ***available*** genus-series nomen **GN** referred as ***valid*** to **HT**, followed by a simple ending denoting plural (e.g., *-ae*, *-idae*, *-inae*, *-idi*, *-oidea*, *-acea*, etc). If proposed as a family-series nomen, it may be available under Article 13.2 of the *Code* (if all other criteria of nomenclatural availability are complied with), but then, according to the rank where it is used, it should be so with a correct ending according to the *Code*'s Rules or to DONS' proposals (**T.HIE**). If proposed as a class-series nomen, it may be available under DONS Criteria (if all other criteria of nomenclatural availability are complied with), but then, it should be so with the standard ending **-acea**, which is not in a relation of hierarchy and may be used at whatever rank. ● Dubois 2006*c*: 8, 2015*c*: 80. ● *Code*: no term.

**Rhizonymy**, *n*. ● NO. ● Ety: see ***Rhizonym***. ● The fact that a nomen is a rhizonym. ● Dubois & Frétey 2020*a*. ● *Code*: no term.

**Robustness**, *n*. ● TA. ● In taxonomy and nomenclature, a combination of stability and flexibility, according to which an ergotaxonomy and its associated nomenclature should be flexible enough to be able to change, in order to take new information or ideas into account, but that it cannot do so 'easily'. ● Dubois 2005*b*: 373. ● *Code*: no term.

**Rule**, *n*. ● NO. ● Within the frame of the *Code*, a mandatory prescription, compatible with its Principles, which applies in particular nomenclatural situations and cases, and regulates the availability, allocation and validity of nomina and onomatergies. ● Term in traditional use in nomenclature and in common language. ● *Code*: rule.

**Schizeurydiaphonym**, *n*. ● VA. ● Ety: G: σχίζω (*skhizo*), 'to split, to cleave, to separate'; εὐρύς (*eurus*), 'broad, wide'; διάφωνος (*diaphonos*), 'discordant'; ὄνομα (*onoma*), 'name'. ● In the class-series, ***eurydiaphonym*** that has been used as valid for a given taxon, or for taxa having totally or partially identical extensions, in the titles of at least 100 works in the scientific literature after 31 December 1899, but alternatively to another eurydiaphonym that has also been used significantly for the same taxon or for taxa having totally or partially identical extensions. ● Dubois 2005*a*: 85, 2005*b*: 412. ● *Code*: no term.

**Scientific name**, *e*. ● NO, TA. ● See **Nomen**.

**Scriptor** (pl. ***Scriptores***), *n*. ● AV, CO. ● Ety: L: *scriptor*, 'writer, author'. ● In the context of zoological nomenclature, name(s) of the person(s) to whom the first use of an ***aponym*** is credited, i.e., whose name(s) appear(s) as ***signatory*** of the work where this aponym first appeared itself—not established through subsequent investigation. ● Dubois 2000*b*: 42 (as ***first-user***), 2013: 3 (as ***primoscriptor***), 2015*a*: 15. ● *Code*: no term.

**Scriptores**, *n*.● Plural of ***scriptor***.

**Scriptorship**, *n*. ● NO, TA. ● Ety: see ***Scriptor***. ● In the context of zoological nomenclature, statement of the scriptor of an aponym. ● Dubois *et al.* 2019: 15. ● *Code*: no term.

**Secondary auctorship**, *e*. ● VA. ● In case of ***double auctorship*** of a family-series junior synonym validated before 1961 through Article 35.4.1 (see Dubois 2015*a*: 31, 33–34), the auctorship (and date) of the senior nomen which are transferred to its junior synonym. In the present work, this secondary auctorship is presented between simple vertical bars: e.g. *Megophryidae* Bonaparte, 1850-|Noble, 1931|. ● *Hoc loco*. ● *Code*: no term.

**Secondary homonym**, *e*. ● VA. ● See ***Asthenomonym*** and ***Hadromonym***.

**Secondary key rank**, *e*. ● NO, TA. ● Any taxonominal key rank that is not part of the seven ***mandatory*** ranks of zoological taxonomy and nomenclature:e.g., province, circle, legion, phalanx, stirps, tribe, clan, caste. ● Ant: ***primary key rank***. ● Common language terms; Dubois 2006*a*: 217. ● *Code*: no term.

**Senior**, *a*. ● NO. ● In the context of zoological nomenclature, and concerning a nomen, an onomatergy or a spelling: published at a date prior to that of publication of another nomen, onomatergy or spelling, qualified as ***junior***. ● Traditional term in nomenclature. ● *Code*: senior.

**Seniorisation**, *n*. ● NO. ● In the context of zoological nomenclature, and concerning a conflict of zygoidy between synchronous nomina, spellings or airetophories, ***airesy*** by which a nomen, spelling or airetophory is granted precedence over another one, which is then ***juniorised*** relative to it. ● Dubois 2000*b*: 47. ● *Code*: junior.

**Seniorise**, *v*. ● See ***Seniorisation***.

**Sigoneonym**, *n*. ● AV. ● Ety: G: σιγή (*sige*), 'silence'; νέος (*neos*), 'new'; ὄνομα (*onoma*), 'name'. ● Subsequent spelling which, being clearly a ***meletograph***, must be considered a ***neonym*** although it does not meet the restrictive criteria of Article 33.2.1 (see NS1–NS5 in column 3 of Table **T8.NS-2**). ● *Hoc loco*. ● *Code*: no term.

**Signatory**, *n*. ● NO, TA. ● Name(s) of the person(s) which appear(s) as the 'author' on the cover or at the beginning or end of a published work. ● Dubois & Aescht 2019*o*: 131. ● *Code*: author.

**Simpson**, *n*. ● TA. ● Species concept relying on the result of a cladistic analysis: set of organisms that can be defined by an ***apognosis*** and are considered to represent a separate lineage. ● Dubois 2007*a*: 48. ● *Code*: no term.

**Sister-taxon** (pl. ***sister-taxa***), *e*. ● PH, TA. ● One of two or several taxa that correspond to two or several branches resulting from the splitting in two (***dichotomy***) or more (***polytomy***) of a branch in a cladistic tree. ● Term in traditional use in phylogeny and taxonomy. ● *Code*: no term.

**SLI**, *ab*. ● See ***Synonymy Load Index***.

**Sozairetophory**, *n*. ● AL. ● Ety: G: σῴζω (*sozo*), 'I keep, I protect'; αιρετός, *airetos*, 'chosen, elected'; φέρω, *phero*, 'I bear, I carry'. ● ***Airetophory*** that is the only one that has been treated as valid in at least 100 titles of publications since then, and which for this reason must be treated as valid. ● Dubois & Aescht 2019*p*: 139–140. ● *Code*: no term.

**Sozodiaphograph**, *n*. ● CO. ● Ety: G: σῴζω (*sozo*), 'I keep, I protect'; διάφωνος (*diaphonos*), 'discordant'; γράφω (*grapho*), 'I write'. ● Spelling of a class-series nomen that has been used as correct in at least 100 titles of scientific publications after 31 December 1899, but alternatively to (an)other sozodiaphograph(s) for the same taxon or for taxa having totally or partially identical extensions. ● *Hoc loco*. ● *Code*: no term.

**Sozodiaphonym**, *n*. ● AV, VA. ● **Ety**: G: σῴζω (*sozo*), 'I keep, I protect'; διάφωνος (*diaphonos*), 'discordant'; ὄνομα (*onoma*), 'name'. ● Class-series nomen that has been used as valid in at least 100 titles of scientific publications after 31 December 1899, but alternatively to (an)other sozodiaphonym(s) for the same taxon or for taxa having totally or partially identical extensions. ● Dubois & Raffaëlli 2012: 90; Dubois 2016: 11. ● *Code*: no term.

**Sozograph**, *n*. ● CO. ● **Ety**: G: σῴζω (*sozo*), 'I keep, I protect'; γράφω (*grapho*), 'I write'. ● Spelling of a class-series nomen that has been used as valid in at least 100 titles of scientific publications after 31 December 1899, whereas no other spelling has been used so for the same nomen, and which for this reason must be treated as the correct spelling of this nomen. ● **Ant**: ***distagmograph***. ● Dubois 2013: 12. ● *Code*: no term.

**Sozoidy**, *n*. ● AL, VA. ● **Ety**: G: σῴζω (*sozo*), 'I keep, I protect'; εἶδος (*eidos*), 'aspect, shape'. ● Qualification of a nomen, spelling or onomatergy that has had a really important usage in the literature, having been mentioned as valid or correct in at least 100 titles of scientific publications after 31 December 1899, and which therefore under DONS Criteria should be given precedence over a senior nomen, spelling or onomatergy. ● Dubois 2013: 8. ● *Code*: no general term, but 'reversal of precedence' applies to some cases of sozoidy.

**Sozomorph**, *n*. ● VA. ● **Ety**: G: σῴζω (*sozo*), 'I keep, I protect'; μορφή (*morphe*), 'form, shape'. ● Collective designation for all the ***sozonymorphs*** based on the same stem. ● Dubois 2015c: 19, 80. ● *Code*: no term.

**Sozonym**, *n*. ● AV, VA. ● **Ety**: G: σῴζω (*sozo*), 'I keep, I protect'; ὄνομα (*onoma*), 'name'. ● Class-series nomen that has been used as valid in at least 100 titles of scientific publications after 31 December 1899, whereas none of its synonyms has been used so for the same taxon or for taxa having totally or partially identical extensions. Such a nomen must be validated even if this requires to make an exception to the DONS Criteria, e.g., against a senior synonym or homonym. ● Dubois 2005*a*: 86, 2005*b*: 412, 2016: 11. ● **Ant**: ***distagmonym***. ● *Code*: no term.

**Sozonymorph**, *n*. ● AV, VA. ● **Ety**: G: σῴζω (*sozo*), 'I keep, I protect'; ὄνομα (*onoma*), 'name'; μορφή (*morphe*), 'form, shape'. ● Any nomen being member of a set of CS ***homonymorphs***, which **collectively** have been used as valid in at least 100 titles of scientific publications after 31 December 1899. ● **End**: ***pansozonym***, ***sozodiaphonym*** and ***nothosozonym***. ● Dubois 2015*c*: 19, 2016: 11, 16. ● *Code*: no term for this precise concept, but the concept of *nomen protectum* corresponds partially to it.

**Sozonymy**, *n*. ● VA. ● **Ety**: see ***Sozonym***. ● Situation in zoological nomenclature where, among two or more synonyms or homonyms, one or several qualify as ***sozonymorph(s)***. In such cases, the ***sozonym*** or one of the ***sozodiaphonyms*** must be given precedence for validity (if not invalid for another reason) over its senior synonym(s) or homonym(s). ● Dubois 2011*a*: 92. ● *Code*: prevailing usage.

**Speciation**, *n*. ● PH, TA. ● **Ety**: L: *species*, 'species'. ● Phenomenon of emergence of a new species (see Barigozzi 1982). ● Cook 1906, 1908. ●. *Code*: no term.

**Species**, *n*. ● NO, TA. ● **Ety**: L: *species*, 'species'. ● Ambiguous term used with several meanings in biology, including: [1] a basic unit of evolution, resulting either from cladogenesis or from anagenesis; [2] a taxonomic category, defined e.g. as a panmictic bisexual entity or as a holophyletic group of organisms (see ***specion***, ***mayron***, ***simpson***, ***kyon***, etc.); [3] a primary key rank in the nomenclatural hierarchy, below genus. ● Traditional term in biology (see Mayden 1997; Dubois 2008*d*, 2009*c*, 2011*b*). ●. *Code*: species.

**Species-series (SS)**, *e*. ● NO. ● In the nomenclatural hierarchy, the lowest ***nominal-series*** which is fully regulated by the *Code*, ranked below the genus-series. It includes nomina of taxa at the ranks of species, subspecies, species aggregate and subspecies aggregate. ● Dubois 2000*b*: 40. ● *Code*: species group [English text]; niveau espèce [French text].

**Specific epithet**, *e*. ● NO. ● Epithet designating a taxon of specific rank. ● Traditional term in zoological nomenclature. ● *Code*: no term.

**Specion**, *n*. ● TA. ● A taxonomic category of nomenclatural rank genus. ● Dubois 2009*c*: 10, 16, 47. ● *Code*: no term.

**Spelling**, *n*. ● AV, CO. ● The arrangement of letters that form a word. In nomenclature, the same nomen can take different spellings, its ***parographs***. ● Term in traditional use in common language and in nomenclature. ● *Code*: spelling.

**SS**, *ab*. ● See ***Species-series***.

**Stage**, *n*. ● NO. ● One of the three or four stages, steps or 'floors' of the ***Nomenclatural Process*** leading to the valid nomen of any given taxon (Dubois 2005*a–b,d*): ***assignment-availability***, ***allocation***, ***validity-correctness*** and in some cases ***registration***. ● Dubois 2005*b*: 381, 2010*a*: 11. ● *Code*: no term.

**Stasigenesis**, *n*. ● PH. ● **Ety**: G: στάσις (*stasis*), 'stop'; ένεσις (*genesis*), 'creation, production'. ● Stabilisation and persistence of characters in an evolutionary lineage. ● Huxley 1957. ● *Code*: no term.

**Status of nomen**, *e*. ● NO, TA. ● The status of a nomen regarding nominal-series assignment, nomenclatural availability, taxonomic allocation, taxonomic validity and nomenclatural correctness. ● **End**: ***nomenclatural status of nomen***, ***taxonomic status of nomen***. ● **Syn**: ***taxonominal status of nomen***. ● Term in traditional use in zootaxonomy, precisely defined by Dubois (2017*b*: 35–37). ● *Code*: no term.

**Stem**, *n*. ● NO. ● For the purpose of zoological nomenclature, the first part of a nomen, which is invariable and which is followed by a ***fixed*** or ***variable ending***. In the family-series, the stem is usually the part of a genus-series nomen, derived from its Latin or Latinised genitive, to which is added a family-series ending; after 1999, it may also be the whole of this genus-series nomen, which is then treated as being an arbitrary combination of letters. In the species-series, epithets that are adjectives or past participles consist of an invariable stem, to which a variable ending indicating grammatical gender and number is added. For other species-series epithets, the whole nomen (stem and ending) is indeclinable. ● Term of grammar, in traditional use in biological nomenclature; Dubois & Aescht 2019*j*. ● *Code*: stem.

**Stenodiaphonym**, *n.* ● VA. ● **Ety**: G: στενός (*stenos*), 'narrow'; διάφωνος (*diaphonos*), 'discordant'; ὄνομα (*onoma*), 'name'. ● Nomen that has not been used as valid in the titles of at least 100 works in the scientific literature after 31 December 1899. ● Dubois 2005*a*: 85, 2005*b*: 411. ● *Code*: no term.

**Subfamilia**, *n.* ● NO, TA. ● **Ety**: L: *sub*, 'below'; *familia*, 'family'. ● Subsidiary family-series taxonominal rank, just below family. ● Term in traditional use in taxonomy. ● **Syn**: ***subfamily***. ● *Code*: subfamily.

**Subfamily**, *n.* ● NO, TA. ● **Ety**: L: *sub*, 'below'; *familia*, 'family'. ● Subsidiary family-series taxonominal rank, just below family. ● Term in traditional use in taxonomy. ● **Syn**: ***subfamilia***. ● *Code*: subfamily.

**Subjective**, *a.* ● NO. ● Based on or influenced by personal feelings, tastes or opinions. ● Common language term. ● *Code*: subjective.

**Subordinate**, *a.* ● NO, TA. ● **Ety**: L: *sub*, 'below'; *ordo*, 'series, line, row, order'. ● Qualification of a taxon that is at a lower hierarchical rank than another taxon, which is ***superordinate*** to it. ● Traditional term in zoological taxonomy and nomenclature. ● *Code*: subordinate.

**Subordination**, *n.* ● NO, TA. ● **Ety**: L: *sub*, 'below'; *ordo*, 'series, line, row, order'. ● The relation of ***ordination*** of a ***subordinate*** taxon to its ***superordinate*** taxon in a given ergotaxonomy. ● Dubois 2007*a*, 2008*f*. ● *Code*: no term.

**Subservience**. ● VA. ● In zoological nomenclature, the fact that a nomen must be rejected as invalid for being a junior synonym or homonym, as a result either of one of the Principles of Validity of the *Code*. ● Common language term, hereby introduced as a technical term in zoological nomenclature. ● **Ant**: ***Precedence.*** ● *Hoc loco*. ● *Code*: no term.

**Subsidiary rank**, *e.* ● NO, TA. ● Nomenclatural rank related to a ***key rank*** (e.g., classis, ordo, familia, tribus, genus, species) by the adjunction of a ***prefix*** (e.g., super-, sub-, infra-). ● **Ant**: ***key rank.*** ● Common language terms; Dubois 2006*a*: 220. ● *Code*: no term.

**Subspecific epithet**, *e.* ● NO. ● Epithet designating a taxon of subspecific rank. ● Traditional term in zoological nomenclature. ● *Code*: no term.

**Substantive**, *n.* ● NO. ● Generic or subgeneric ***nomen***, always bearing a capital, being part of a ***binomen*** or ***trinomen***. ● Term of grammar, introduced in zoological nomenclature by Dubois (2000*b*: 40). ● *Code*: genus-group name [English text]; nom du niveau genre [French text].

**Subtribe**, *n.* ● NO, TA. ● **Ety**: L: *sub*, 'below'; *tribus*, 'tribe'. ● Subsidiary family-series taxonominal rank, just below tribe. ● Term in traditional use in taxonomy. ● **Syn**: ***subtribus***. ● *Code*: subtribe.

**Subtribus**, *n.* ● NO, TA. ● **Ety**: L: *sub*, 'below'; *tribus*, 'tribe'. ● Subsidiary family-series taxonominal rank, just below tribe. ● Term in traditional use in taxonomy. ● **Syn**: ***subtribe***. ● *Code*: subtribe.

**Suffix**, *n.* ● NO. ● For the purpose of zoological nomenclature, a letter or group of letters at the end of a nomen which may carry a standard, identified meaning or usage, such as indicating Latin cases (e.g. -ae or -i), or small size (e.g. -ella or -ita), or resemblance (e.g. -oides or -ops). In the species- and genus-series, the suffix when it exists is identical with the ending. In the family-series, the suffix is the letter or group of letters (e.g., *-AE*, *-I*, *-A*, *-EA*, *-IA*) indicating nominative plural in Latin and pointing to the rank of the taxon, following either directly the ***stem*** of a family-series nomen based on a genus-series nomen, or the ***connector*** which follows it, if present. ● Common language term; Alonso-Zarazaga 2005: 191 (as 'ending proper'); Dubois & Aescht 2019*j*: 103. ● *Code*: suffix.

**Superfamilia**, *n.* ● NO, TA. ● **Ety**: L: *sub*, 'below'; *familia*, 'family'. ● Subsidiary family-series taxonominal rank, above family. ● Term in traditional use in taxonomy. ● **Syn**: ***superfamily***. ● *Code*: superfamily.

**Superfamily**, *n.* ● NO, TA. ● **Ety**: L: *sub*, 'below'; *familia*, 'family'. ● Subsidiary family-series taxonominal rank, just below family. ● Term in traditional use in taxonomy. ● **Syn**: ***superfamilia***. ● *Code*: superfamily.

**Superordinate**, *a.* ● NO, TA. ● **Ety**: L: *super*, 'above'; *ordo*, 'series, line, row, order'. ● Qualification of a taxon that is at a higher hierarchical rank than another taxon, which is ***subordinate*** to it in a given ***ergotaxonomy***. **Immediately superordinate** taxon: see ***getangiotaxon***. ● Traditional term in zoological taxonomy and nomenclature. ● *Code*: no term.

**Superordination**, *n.* ● NO, TA. ● **Ety**: L: *sub*, 'below'; *ordo*, 'series, line, row, order'. ● The relation of ***ordination*** of a ***superordinate*** taxon to its ***subordinate*** taxa in a given ***ergotaxonomy***. ● Dubois 2007*a*, 2008*f*. ● *Code*: no term.

**Supraspecies**, *n.* ● NO, TA. ● **Ety**: L: *supra*, 'above, beyond'; *species*, 'species'. ● Subsidiary species-series taxonominal rank, above species. ● Génermont & Lamotte 1980; Dubois & Raffaëlli 2009. ● *Code*: aggregate of species.

**Sympatry**, *n.* ● XE. ● **Ety**: G: σύν (*syn*), 'together'; πατρία (*patria*), 'lineage, family'. ● Occurring in the same place. ● **Ant**: ***Allopatry***. ● Common term in evolutionary biology. ● *Code*: no term.

**Symphonym**, *n.* ● VA. ● **Ety**: G: σύμφωνος (*symphonos*), 'harmonious'; ὄνομα (*onoma*), 'name'. ● Nomen used as valid for the taxon it denotes, or for taxa having totally or partially identical extensions, by all authors and in all publications after 31 December 1899. ● Dubois 2005*a*: 85, 2005*b*: 411. ● *Code*: no term.

**Symphoric**, *a*. ● See ***Symphory***.

**Symphoront**, *n*. ● AL. ● **Ety**: G: σύν (*syn*), 'together'; φέρω (*phero*), 'I bear'; ὄν, ὄντος (*on*, *ontos*), 'being, individual'. ● One of several specimens originally used collectively as ***onomatophore*** of a species-series nomen. ● Dubois 2005*b*: 403. ● *Code*: syntype.

**Symphory**, *n*. ● AL. ● **Ety**: G: σύν (*syn*), 'together'; φέρω (*phero*), 'I bear'. ● Qualification of a nomen created with or supported by an onomatophore composed of a series of specimens (in the species-series) or of taxomina (in the other three nominal-series). ● Dubois 2005*b*: 404.

**Symprotograph**, *n*. ● AV. ● **Ety**: G: σύν (*syn*), 'together'; πρῶτος (*protos*), 'first, earliest'; γράφω (*grapho*), 'I write'. ● A category of ***protograph***: one of two or more alternative original spellings of a nomen. ● **Ety**: ***holoprotograph***. ● Dubois 2010*a*: 8, 42. ● *Code*: one of multiple original spellings.

**Synapomorphic***, n*. ● See ***Synapomorphy***.

**Synapomorphy***, n*. ● PH, TA. ● **Ety**: G: σύν (*syn*), 'together'; ἀπό (*apo*), 'away from, far from'; μορφή (*morphe*), 'form, shape'. ● Apomorphy shared by two or more taxa. ● Hennig 1950. ● *Code*: no term.

**Synaptonym**, *n*. ● AL. ● **Ety**: G: σύν (*syn*), 'together'; ἅπτω (*apto*), 'fasten, attach, fix'; ὄνομα (*onoma*), 'name'. ● ***Aptonym*** whose onomatophore is ***symphoric***, being composed of more than one specimen (in the species-series: ***symphoronts***) or ***taxomen*** (in the genus-series: ***prenucleospecies***; in the class-series: ***conucleogenera***). Synaptonyms may be original (***symphory*** fixed in the original publication) or subsequent (***symphory*** being subsequent to ***aphory*** in the original publication). They may also be indissoluble or considered taxonomically homogeneous (***homosynaptonyms***) or considered taxonomically heterogeneous (***heterosynaptonyms***). ● **Ant**: ***monaptonym***. ● Dubois 2011*a*: 25, 94. ● *Code*: one among several meanings of the unclear term *nomen dubium.*

**Synchronous**, *a*. ● AV, VA. ● **Ety**: see ***Synchrony***. ● Qualification of distinct events that occurred at the same date. In the context of zoological nomenclature, the fact that two publications were distributed at the same date. ● **Ant**: ***allochronous***. ● Common language term; Dubois 2013: 5. ● *Code*: no term.

**Synchrony**, *n*. ● AV, VA. ● **Ety**: G: σύν (*syn*), 'together'; χρόνος (*chronos*), 'time'. ● Distinct events that occurred at the same date. ● **Ant**: ***allochrony***. ● Common language term; Dubois & Aescht 2019*f*: 50, 52. ● *Code*: no term.

**Syngameon**, *n*. ● EX, NO. ● **Ety**: G: σύν (*syn*), 'together'; γαμέω (gameo), 'I marry'. ● [1] In taxonomy and nomenclature: taxon of taxonominal rank ***supraspecies*** composed of two or more species liable to produce rare hybrids in their contact zone (Lotsy 1918); [2] in evolutionary biology, the set of organisms liable to produce viable hybrids, in natural or artificial conditions (Cuénot & Tétry 1951). ● *Code*: no term.

**Synonym**, *n*. ● TA, VA. ● **Ety**: G: σύν (*syn*), 'together'; ὄνομα (*onoma*), 'name'. ● Any of two or more distinct ***nomina*** of the same nominal-series considered, either for objective (***isonyms***) or for subjective (***doxisonyms***) reasons, to denote the same taxon in a given ergotaxonomic frame. ● Traditional term in zootaxonomy. ● **Ant**: ***xenonym***. ● *Code*: synonym.

**Synonymic list**, *e*. ● TA, VA. ● **Ety**: see ***Synonym***. ● List of synonyms. ● Traditional term in zootaxonomy. ● *Code*: no term.

**Synonymisation**, *n*. ● TA, VA. ● **Ety**: see ***Synonym***. ● Process by which a nomen is invalidated for being considered an invalid ***synonym*** or ***homonym***. ● Traditional term in zootaxonomy. ● *Code*: no term.

**Synonymous**, *a*. ● TA, VA. ● **Ety**: see ***Synonym***. ● In zoological nomenclature, the qualification of two distinct nomina of the same nominal-series that are ***synonyms*** under the *Code*. ● Term in traditional use in common language and in zootaxonomy. ● *Code*: synonymous.

**Synonymy**, *n*. ● TA, VA. ● **Ety**: see ***Synonym***. ● The fact that two distinct nomina of the same nominal-series are considered to denote the same taxon in a given ergotaxonomy, either for objective (***isonymy***) or for subjective (***doxisonymy***) reasons. ● Traditional term in zootaxonomy. ● *Code*: synonymy.

**Synonymy load**, *e*. ● NO, TA. ● **Ety**: see ***Synonym***. ● The quantitative importance of synonyms (mainly doxisonyms) in a given ergotaxonomy. ● Dubois 2008*a*: 857. ● *Code*: no term.

**Synonymy Load Index (SLI)**, *e*. ● AV, VA. ● The ratio, expressed in percent, of the number of nomina treated as invalid (akyronyms) in a given ergotaxonomy to the number of available nomina in the taxonomic group covered by the study (hoplonyms). ● *Hoc loco*. ● *Code*: no term.

**Synotaxa**, *n*. ● One of the two plurals of ***synotaxon***. ● Dubois 2005*b*: 406.

**Synotaxic**, *a*. ● NO, TA. ● **Ety**: see ***Synotaxy***. ● Qualification of two distinct taxa, being either ***isotaxic***, ***peritaxic*** or ***gephyrotaxic***, whose nomina, of the same or different nominal-series, are considered to denote (are allocated to) the same taxon in a given ergotaxonomy. ● Dubois 2005*b*: 411. ● *Code*: no term.

**Synotaxic list**, *e*. ● NO, TA. ● **Ety**: see ***Synotaxy***. ● List of ***synotaxa***. ● *Hoc loco*. ● *Code*: no term.

**Synotaxon** (pl. ***synotaxa***, ***synotaxons***), *n*. ● NO, TA. ● **Ety**: see ***Synotaxy***. ● One of two distinct taxa, being either ***isotaxic***, ***peritaxic*** or ***gephyrotaxic***, whose nomina, of the same or different nominal-series, are considered to denote (are allocated to) the same taxon in a given ergotaxonomy. ● Dubois 2005*b*: 406. ● *Code*: no term.

**Synotaxons**, *n.* ● One of the two plurals of ***synotaxon***. ● *Hoc loco*.

**Synotaxy**, *n.* ● NO, TA. ● **Ety**: G: σύν (*syn*), 'together'; τάξις (*taxis*), 'order, arrangement'. ● Relation of ***isotaxy***, ***peritaxy*** or ***gephyrotaxy*** between two distinct taxa, whose nomina, of the same or different nominal-series, are considered to denote (are allocated to) the same taxon in a given ergotaxonomy . ● Dubois 2005*b*: 405. ● *Code*: no term.

**Synotaxic**, *a.* ● NO, TA. ● **Ety**: see ***Synotaxy***. ● The fact that two distinct nomina of the same or different nominal-series are considered to denote the same taxon in a given ergotaxonomy. ● *Hoc loco*. ● *Code*: no term.

**Synotaxic list**, *e.* ● NO, TA. ● **Ety**: see ***Synotaxy***. ● List of synotaxa. ● *Hoc loco*. ● *Code*: no term.

**Synotaxon** (pl. ***synotaxa***, **synotaxons**), *n.* ● NO, TA. ● **Ety**: see ***Synotaxy***. ● One of two distinct taxa of the same or different nominal-series that are considered to correspond to the same taxon (same ***extension***) in a given ergotaxonomy. ● *Hoc loco*. ● *Code*: no term.

**Synotaxons**, *n.* ● One of the two plurals of ***synotaxon***.

**Synotaxy**, *n.* ● NO, TA. ● **Ety**: G: σύν (*syn*), 'together'; τάξις (*taxis*), 'order, arrangement'. ● The fact that two distinct taxa of the same or different nominal-series are considered to correspond to the same taxon (same ***extension***) in a given ergotaxonomy. ● Dubois & Ohler 2019: 19. ● *Code*: no term.

**System**, *n.* ● NO, TA. ● **Ety**: G: σύστημα (*systema*), 'organised whole'. ● A set of explicit correlated Principles, Rules or Criteria allowing to establish a classification of organisms (in taxonomy) or the nomina of the taxa recognised by this classification (in nomenclature). ● **End**: ***holo-systems***, ***pro-systems***. ● Term in traditional use in common language. ● *Code*: system.

**Systematics**, *n.* ● NO, TA. ● **Ety**: G: σύστημα (*systema*), 'group, troup, system of doctrines, institutions, political constitution, philosophical system'. ● The domain of biology devoted to the study of the diversity of living organisms (biodiversity), of their evolution (evolutionary biology), their relationships (***phylogeny***), their classification (***taxonomy***) and their nomination (***nomenclature***). ● Term in traditional use in biology. ● *Code*: no term.

**Tautonymy**, *n.* ● AV, AL. ● The use of the same word for the substantive of the nomen of a genus-series taxon and the final epithet of the nomen of one of its included species-series taxa. Tautonymy is qualified as absolute when the substantive and the epithet were both published within the frame of binominal nomenclature. Tautonymy is qualified as Linnaean when the substantive was introduced before 1931 and the epithet was a pre-1758 nomen cited as a synonym of only one of the species-series taxon originally included in that genus-series taxon. Both kinds of tautonymy may result in the election of the nucleospecies of a genus-series nomen, if it has not been effected previously by original designation or ***monophory***. ● *Code*: tautonymy.

**Taxa**, *n.* ● One of the two plurals of ***taxon***.

**Taxinomy**, *n.* ● NO, TA, XE. ● **Ety**: G: τάξις (*taxis*), 'order, arrangement'; νόμος (*nomos*), 'law, rule'. ● Correct spelling of the term ***taxonomy*** (see Tardieu 2011), often used in French scientific publications (e.g. Dubois 1987*b*, 1987*d*) but not in publications in other languages. ● *Code*: no term.

**Taxognoses**, *n.* ● Plural of ***taxognosis***.

**Taxognosis**, *n.* ● TA. ● **Ety**: G: τάξις (*taxis*), 'order, arrangement'; γιγνώσκω (*gignosko*), 'to know'. ● Any definition of a taxon, whether based on characters or on hypothesised cladistic relationships between taxa. ● Dubois & Raffaëlli 2009: 15. ● *Code*: no term.

**Taxomen** (pl. ***taxomina***), *n.* ● NO. ● **Ety**: G: τάξις (*taxis*), 'order, arrangement'; L: *nomen*, 'name'. ● The permanent association between a ***nomen*** and an ***onomatophore***, allowing objective, non-ambiguous and stable allocation of nomina to taxa. ● Dubois 2000*a*: 21, 2000*b*: 40. ● *Code*: nominal taxon.

**Taxomina**, *n.* ● Plural of ***taxomen***.

**Taxon** (pl. ***taxons***, ***taxa***), *n.* ● NO, TA, XE. ● G: τάξις (*taxis*), 'order, arrangement'. ● Ambiguous term used with two main meanings in zoological taxonomy and nomenclature: [1] any taxonomic unit recognised in an ergotaxonomy, whether named or not (Meyer 1926); [2], any rank of the family- or class-series (incorrect but usual practice in many recent taxonomic publications nowadays; see e.g. Frost *et al.* 2006) (see ***cladon***). ● *Code*: [1] taxon, 'taxonomic taxon' (!); nominal taxon; [2] no term.

**Taxonomic category**, *e.* ● TA. ● A group of taxa that share certain biological (e.g., crossability) or historical-chronological (e.g., geological age) characteristics (see Dubois & Malécot 2005: 98; Dubois 2005*b*: 412–413, 2006*a*: 219–220, 2007*a*, 2008*f*). Taxonomic categories may be ***ranked*** (corresponding to nomenclatural ranks of the nomenclatural hierarchy: e.g., species, genus, tribe) or ***unranked*** (categories that do not correspond to nomenclatural ranks: e.g., kyon, klepton, klonon). ● Traditional term in nomenclature and taxonomy. ● *Code*: no term.

**Taxonomic consistency**, *e.* ● NO, TA. ● In class-series zoological nomenclature, the requirement that all suprageneric nomina introduced in the same publication for taxa that were originally assigned to the same taxonomic rank must be referred to the same ***nominal-series***. This requires to give pre-eminence to the family-series for this assignment in case of incorrect formation (as ***arhizonyms***) of some suprageneric nomina referred to parordinate taxa in a publication. ●

Common language terms; Dubois 2006*a*: 178. ● *Code*: no term.

**Taxonomic crisis**, *e.* ● TA, XE. ● The fact that the scientific discipline of taxonomy is facing a major crisis since the last decades of the 20th century, showing at best an 'inertia' (see Tancoigne & Dubois 2013) but not the drastic development that would be required by the biodiversity crisis. ● Dubois 2003, 2010*c*. ● *Code*: no term.

**Taxonomic gap**, *e.* ● TA, XE. ● The fact that our taxonomic inventory of the living species of our planet is highly incomplete. ● Dubois 2010*c*: 260. ● *Code*: no term.

**Taxonomic hierarchy**, *e.* ● NO, PH, TA. ● The hierarchical structure of a biological classification, which reflects both the phylogenetic relationships between taxa and the ***nomenclatural hierarchy*** of ***nominal-series*** and ***nomenclatural ranks*** used to designate the taxa. ● Traditional term in nomenclature and taxonomy. ● *Code*: taxonomic hierarchy.

**Taxonomic impediment**, *e.* ● TA, XE. ● The fact that, both quantitatively andqualitatively, our knowledge of the species and other taxa of our planet is very unsatisfying, in fact much below the standard required today by our society for all other scientific disciplines. ● Anonymous 1994. ● *Code*: no term.

**Taxonomic parsimony**, *e.* ● NO. ● The fact that the *Code*, through the Principle of Coordination, requires to have fewer nomina than taxa to name the latter unambiguously. ● Dubois 2006*b–d*, 2007*b*, 2008*f*. ● *Code*: no term.

**Taxonomic status of nomen**, *e.* ● NO, TA. ● The dimensions of the ***status of a nomen*** which depend both on nomenclatural Rules and on the ***ergotaxonomy*** adopted: taxonomic allocation, taxonomic validity and nomenclatural correctness. ● Term in traditional use in zootaxonomy, precisely defined by Dubois (2017*b*: 36–37). ● *Code*: no term.

**Taxonomic urgency**, *e.* ● TA, XE. ● The need, resulting from the combination of the ***biodiversity crisis*** and of the ***taxonomic gap***, to accelerate considerably the inventory of the species of the Earth before many of them are extinct. ● Dubois 2010*c*: 260. ● *Code*: no term.

**Taxonominal**, *a.* ● NO, TA. ● **Ety**: G: τάξις (*taxis*), 'order, arrangement'; L: *nomen*, 'name'. ● Both nomenclatural and taxonomic. ● Dubois 2011*c*: 51. ● *Code*: no term.

**Taxonominal level**, *e.* ● NO, TA. ● The place of a nomen in a nomenclatural hierarchy of ***nominal-series*** and ***nomenclatural ranks*** and of the taxon it designates in the ***taxonomic hierarchy*** that the latter reflects. ● Traditional term in nomenclature and taxonomy. ● *Hoc loco*. ● *Code*: rank.

**Taxonominal status of nomen**, *e.* ● See ***Status of nomen***.

**Taxonomy**, *n.* ● NO, TA, XE. ● **Ety**: G: τάξις (*taxis*), 'order, arrangement'; νόμος (*nomos*), 'law, rule'. ● [1] The discipline of systematics that deals with the theory and practice of the classification of living organisms. [2] Any system of ***taxa*** recognised as valid by an author (see ***ergotaxonomy***). ● Candolle 1813: 19 (as 'taxonomie'). Although this original spelling was erroneous (see Tardieu 2011), it has been adopted as valid in most scientific publications except in French language. ● **Syn**: ***taxinomy***. ● *Code*: no term.

**Taxons**, *n.* ● One of the two plurals of ***taxon***.

**Teokyronym**, *n.* ● VA. ● **Ety**: G: τέως (*teos*), 'till now, for a time', κύριος (*kyrios*), 'proper, correct'; ὄνομα (*onoma*), 'name'. ● Nomen used as valid under DONS Criteria during a 25-year period subsequent to 31 December 2015 for a single taxon at a given rank but not, even in a single work, for a taxon or taxa at lower ranks to which it could potentially apply (e.g., following the resolution of a polytomy). ● Dubois 2016: 16. ● *Code*: no term.

**Tetratomy**, *n.* ● PH, TA. ● **Ety**: G: τέτταρες (*tettares*), 'four'; τομή (*tome*), 'cutting, incision'. ● Partition of a set into four subsets. ● Common language term. ● *Code*: no term.

**The Commission or its successor body**, *e.* ● NO. ● The International Commission on Zoological Nomenclature (see ***Commission***) or its successor internationally accepted regulatory body that will be in charge of implementing the Plenary Power whenever necessary under the next edition of the *Code* or under the *Zoocode*. ● Dubois & Aescht 2019*q*: 144. ● *Code*: no term.

**Theory-bound**, *e.* ● AL. ● Concerning a nomenclatural system, the fact that it is linked to a taxonomic paradigm. In such a system, the allocation of nomina to taxa relies on ***intension***, not on ***ostension*** or ***extension*** (see Dubois 2006a,*d*, 2007*a*, 2008*f*). ● Dubois 2010*d*: 5. ● *Code*: no term.

**Theory-free**, *e.* ● AL. ● Concerning a nomenclatural system, the fact that it is independent from all taxonomic paradigms. In such a system, the allocation of nomina to taxa relies exclusively on ***ostension*** or ***extension***, never on intension (see Dubois 2006a,*d*, 2007*a*, 2008*f*). ● Dubois 2007*a*: 37, 43, 2007*b*: 396. – *Code*: no term.

**Tomoidy**, *n.* ● PH. ● **Ety**: G: τομή (*tome*), 'cutting, incision, division'; εἶδος (*eidos*), 'aspect, shape'. ● In a phylogenetic tree, the pattern of subdivision of a branch or of absence of subdivision. ● **End**: ***dichotomy***, ***polytomy***, ***achotomy***. ● *Hoc loco*.● *Code*: no term.

**Topotaxy**, *n.* ● NO, TA. ● **Ety**: G: τόπος (*topos*), 'place'; τάξις (*taxis*), 'order, arrangement'. ● The relation of inclusion, overlapping or exclusion between two taxa regarding their contents in a given ***ergotaxonomy***. See also ***ordination***. ● Dubois 2005*b*: 405; Dubois & Berkani 2013: 53. ● *Code*: no term.

**Tree**, *n.* ● PH, XE. ● Common language term used in evolutionary biology to designate a tree-like, branching diagram used to indicate 'degrees of relationships' between organisms. ● *Code*: no term.

**Tribe**, *n.* ● NO, TA. ● **Ety**: L: *tribus*, 'tribe'. ● Secondary family-series key rank in zoological taxonomy and nomenclature, below family. ● Term in traditional use in taxonomy. ● **Syn**: ***tribus***. ● *Code*: no term.

**Tribus**, *n.* ● NO, TA. ● **Ety**: L: *tribus*, 'tribe'. ● Secondary family-series key rank in zoological taxonomy and nomenclature, below family. ● Term in traditional use in taxonomy. ● **Syn**: ***tribe***. ● *Code*: no term.

**Trichotomy**, *n.* ● PH, TA. ● **Ety**: G: τρίχα (*trikha*), 'in three'; τομή (*tome*), 'cutting, incision'. ● Partition of a set into three subsets. ● Common language term. ● *Code*: no term.

**Trinomen** (pl. ***trinomina***), *n.* ● AV, CO. ● **Ety**: L: *tres*, 'three'; *nomen*, 'name'. ● Nomen of rank subspecies, composed of three terms, the ***generic substantive*** and the specific and subspecific ***epithets***. ● Traditional term in zoological nomenclature. ● *Code*: trinomen.

**Trinomina**, *n.* ● Plural of ***trinomen***.

**Type**, *n.* ● NO, TA. ● **Ety**: G: τύπος (*typos*), 'image, figure'. ● A highly confusing term, used with many distinct meanings in common language as well as in biology, and in systematics with two distinct meanings, a taxonomic one (see ***hypodigm***) and a nomenclatural one (see ***onomatophore***). The use of this term in nomenclature is here discouraged (see Dubois 2005*b*: 401–405; Dubois & Aescht 2019*c*, Dubois *et al.* 2019). ● Traditional term in various domains of biology, including nomenclature. ● *Code*: name-bearing type.

**Unallocated**, *p.* ● AL. ● Qualification of a nomen (***anaptonym***) that does not conform to the conditions of taxonomic allocation as regulated by the *Code*. ● **Ant**: ***allocated***. ● Dubois 2005*b*: 396. ● *Code*: no term.

**Unassigned**, *p.* ● AS. ● Qualification of a nomen (***anemonym***) that does not conform to the conditions of nomenclatural ***assignment*** as regulated by the *Code*, and is therefore ***unavailable***. ● **Ant**: ***assigned***. ● Common language term, introduced in zoological nomenclature by Dubois (2015*a*). ● *Code*: no term.

**Unavailability**, *n.* ● AV. ● Absence of a statement regulated by the *Code* according to which a nomen is ***promulgated*** in zoological nomenclature complying with the conditions of this code (***hoplonym***) or by which an ***airesy*** is made ***effective***. ● **Ant**: ***availability***. ● Term in traditional use in zoological nomenclature. ● *Code*: no term.

**Unavailable**, *a.* ● AV. ● Qualification of a nomen (***anoplonym***) that does not conform to the conditions of nomenclatural availability as regulated by a code. ● **Ant**: ***available***. ● Traditional term in zoological nomenclature. ● *Code*: unavailable.

**Unialienogenus** (pl. ***unialienogenera***), *n.* ● AL. ● **Ety**: L: *unus*, 'one'; *alienus*, 'foreign, unrelated'; *genus*, 'birth, origin, class, kind'. ● The single genus-series taxomen originally excluded from the ***protaxon*** for which a new class-series nomen was ***promulgated***. ● *Hoc loco*. ● *Code*: no term.

**Uninomen** (pl. ***uninomina***), *n.* ● AL, CO. ● **Ety**: L: *unus*, 'one'; *nomen*, 'name'. ● Nomen of any rank composed of a single term. ● Traditional term in zoological nomenclature. ● *Code*: no term.

**Uninomina**, *n.* ● Plural of ***uninomen***.

**Uninucleogenera**, *n.* ● Plural of ***uninucleogenus***.

**Uninucleogenus** (pl. ***uninucleogenera***), *n.* ● AL. ● **Ety**: L: *unus*, 'one'; *nucleus*, 'kernel, nut'; *genus*, 'birth, origin, class, kind'. ● [1] In the family-series: the genus-series taxomen originally explicitly or implicitly (before 2000) designated as ***onomatophore*** of a new family-series nomen; [2] in the class-series: the single genus-series taxomen originally referred to the ***protaxon*** for which a new class-series nomen was ***promulgated***. ● Dubois 2015*c*: 23, 81. ● *Code*: [1] type genus; [2] no term.

**Unjustified emendation**, *e.* ● See ***Autoneonym***.

**Unpublished**, *p.* ● AV. ● In zoological nomenclature, work issued not conforming to the provisions of Articles 8–9 of the *Code*. See ***Publication***. ● Traditional term in many domains. ● Code: no term.

**Unranked**, *p.* ● NO. ● **Ety**: see ***Rank***. ● Qualification of a nomenclatural system in which no ranks are assigned to the nomina of supraspecific and infraspecific taxa. ● Traditional term in zoological nomenclature. ● *Code*: no term.

**Unregistered**, *p.* ● RE. ● Qualification of a nomen (***adelonym***) that does not conform to the conditions of nomenclatural registration of the *Code*. ● **Ant**: ***registered***. ● Traditional term in many domains. ● *Code*: no term.

**Upper Quarter of nomina (UQN)**, *e.* NO, XE. ● Upper quarter of usage of nomina of a data set, i.e. above the ***upper*** (third) ***quartile*** of this data set. ● *Hoc loco*. ● *Code*: no term.

**Upper Quartile**, *e.* ● NO, XE. ● Third ***quartile*** of a data set, i.e. the middle value between its ***median*** and its highest value: 75 % of the data lie below this point, and 25 % lie above. ● Term in traditional use in statistics and probability. ● *Code*: no term.

**UQ-nomen**, *e.* ● NO, TA. ● In family-series nomenclature, nomen designating a taxon considered valid and having a number of usages above the ***upper quartile*** of ***usages*** since 1758. ● *Hoc loco*. ● *Code*: no term.

**UQN**, *e.* ● See ***Upper Quarter of nomina***.

**Usage**, *n.* ● VA. ● In the context of zoological nomenclature, the fact that a nomen has been mentioned in some publications and during a given period. ● Traditional term in nomenclature. ● *Code*: usage.

**Valid**, *a.* ● VA. ● In the context of zoological nomenclature, qualification of a nomen (***kyronym***) that conforms to the conditions of nomenclatural validity as regulated by the *Code*. ● Ant: ***invalid***. ● Traditional term in zoological nomenclature. ● *Code*: valid.

**Validate**, *v*. ● VA. ● Common language term, proposed by Dubois (2000*b*: 47) to designate the action of determining the validity of a hoplonym either by an author following the Rules of the *Code* or by the Commission under the Plenary Power. ● *Code*: validate.

**Validation**, *n*. ● VA. ● Common language term, proposed by Dubois (2000*b*: 48) to designate the result of the action of determining the validity of a hoplonym either by an author following the Rules of the *Code* or by the Commission under the Plenary Power. ● *Code*: no term.

**Validity**, *n*. ● VA. ● In zoological nomenclature: [1] statement regulated by the *Code* by which a nomen is determined to be the one that must be used for a taxon or several taxa in zoological nomenclature. [2] qualification of a valid nomen. ● Ant: ***invalidity***. ● Traditional term in zoological nomenclature. ● *Code*: validity.

**Variable ending**, *e*. ● NO. ● Ending of a nomen that is liable to change according to the ergotaxonomy adopted. Two situations: [1] species-series epithet being an adjective or a past participle: ***suffix*** indicating the grammatical gender of the epithet; [2] family-series nomen: ending indicating the rank, composed of two parts: the ***connector*** and the ***suffix*** proper. ● Dubois & Aescht 2019*j*: 103. ● *Code*: no term.

**Variety-series (VS)**, *e*. ● NO. ● In the nomenclatural hierarchy, the ***nominal-series*** ranked below the ***species-series***, which is not fully regulated by the *Code*. It includes nomina of taxa at the ranks of variety, form and any additional ranks that may be required. ● Dubois & Malécot 2005: 102, Dubois 2005*b*: 408. ● *Code*: no term.

**Virtual combination**, *e*. ● NO, TA. ● A combination that does not appear in a publication but that is implied by the explicit statement that a species-series epithet (whether considered as valid or as an invalid synonym) is referred to a nominal genus. ● Dubois 1995*b*: 65; Dubois & Aescht 2019*h*: 77. ● *Code*: no term.

**Voucher**, *n*. ● NO, TA. ● Any reference specimen kept in a (preferably permanent and curated) collection, whether an ***onymophoront*** or not. ● Traditional term used in biology. ● *Code*: no term.

**VS**, *ab*. ● See ***Variety-series***.

**Work**, *n*. ● NO, TA. ● In the context of zoological taxonomy and nomenclature, a ***publication***. ● Traditional term in zoological nomenclature. ● *Code*: work, published work.

**Xenonym**, *n*. ● VA. ● Ety: G: ξένος (*xenos*), 'foreign'; ὄνομα (*onoma*), 'name'. ● Nomen which is neither an ***isonym*** nor a ***doxisonym*** of another nomen within a given ***ergotaxonomic*** frame. ● Ant: ***synonym***. ● *Hoc loco*. ● *Code*: no term._

**Xenordinate**, *a*. ● NO, TA. ● Ety: G: ξένος (*xenos*), 'foreign'; L: *ordo*, 'series, line, row, order'. ● See ***alienordinate***. ● Dubois 2006*b*: 827. ● *Code*: no term._

**Xenorhizonym**, *n*. ● NO. ● Ety: G: ξένος (*xenos*), 'foreign'; ρίζα (*rhiza*), 'root, stem'; ὄνομα (*onoma*), 'name'. ● A category of ***pseudorhizonym***: suprageneric nomen **HN** (designating a taxon **HT**) [1] based on the stem of an ***available*** or ***unavailable*** genus-series nomen **GN**, but [2] this nomen not being referred as ***valid*** to the taxon **HT** in the ***ergotaxonomy*** adopted in the publication where **HN** was created and [3] its stem being combined with an ending derived from another or several other terms (e.g., **-**formes, **-**morpha, **-**phora, etc.). If proposed as a family-series nomen, it is incorrectly formed according to the *Code*, and is therefore a FS ***anoplonym***. If proposed as a class-series nomen, common particular cases are those of such nomina the original endings of which were derived from the roots *forma* (Latin) or μορφή, *morphe* (Greek) meaning 'form, shape': under DONS as emended by Dubois & Frétey (2020*a*), it should be used under the respective standard endings **-IFORMI** or **-OMORPHI**, which are not in a relation of hierarchy but may be both used at whatever rank. ● Dubois 2015*c*: 22, 82, 90. ● *Code*: no term.

**Zootaxonomy**, *n*. ● NO, TA. ● Ety: G: ζωον (*zoon*), 'animal', τάξις (*taxis*), 'order, arrangement'; νόμος (*nomos*), 'law, rule'. ● Zoological taxonomy. ● Term in use in recent publications dealing with zoological taxonomy. ● *Code*: no term.

**Zygograph**, *n*. ● VA, CO. ● Ety: G: ζυγός, *zugos*, 'yoke'; γράφω, *grapho*, 'to write'. ● One of several spellings being potentially the correct one for the same nomen. ● Dubois 2013: 24. ● *Code*: no term.

**Zygography**, *n*. ● VA, CO. ● Ety: see ***Zygograph***. ● Qualification of all situations of nomenclatural conflict between several spellings being potentially the correct one for the same nomen. ● Dubois 2013: 5. ● *Code*: no term.

**Zygoid**, *n*. ● VA. ● Ety: see ***Zygoidy***. ● Any item (zygonym, zygograph or zygonomatergy) involved in a situation of zygoidy. ● *Hoc loco*. ● *Code*: no term.

**Zygoidy**, *n*. ● VA. ● Ety: G: ζυγός (*zugos*), 'yoke'; εἶδος (*eidos*), 'aspect, shape'. ● Qualification of all situations of nomenclatural conflict between several nomina, spellings or onomatophore designations being potentially the valid one for the same taxon or nomen. ● Dubois 2013: 5. ● *Code*: no term.

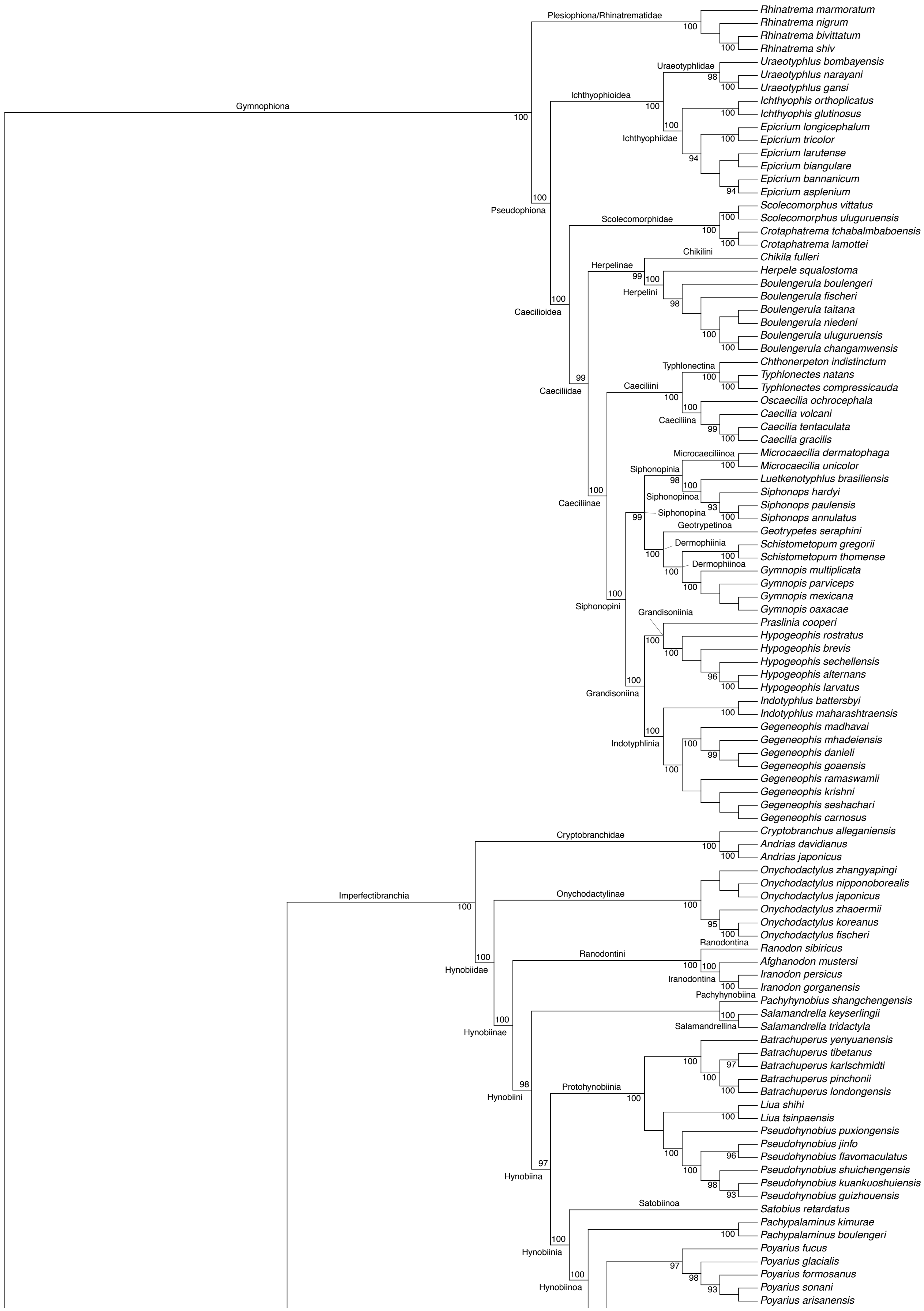
**Zygonomatergy**, *n*. ● VA. ● Ety: G: G: ζυγός (*zugos*), 'yoke'; ὄνομα (*onoma*), 'name'; εργον, *ergos*, 'work'. ● Qualification of all situations of nomenclatural conflict between several distinct ***onomatergies*** concerning an available nomen. ● *Hoc loco*. ● *Code*: no term.

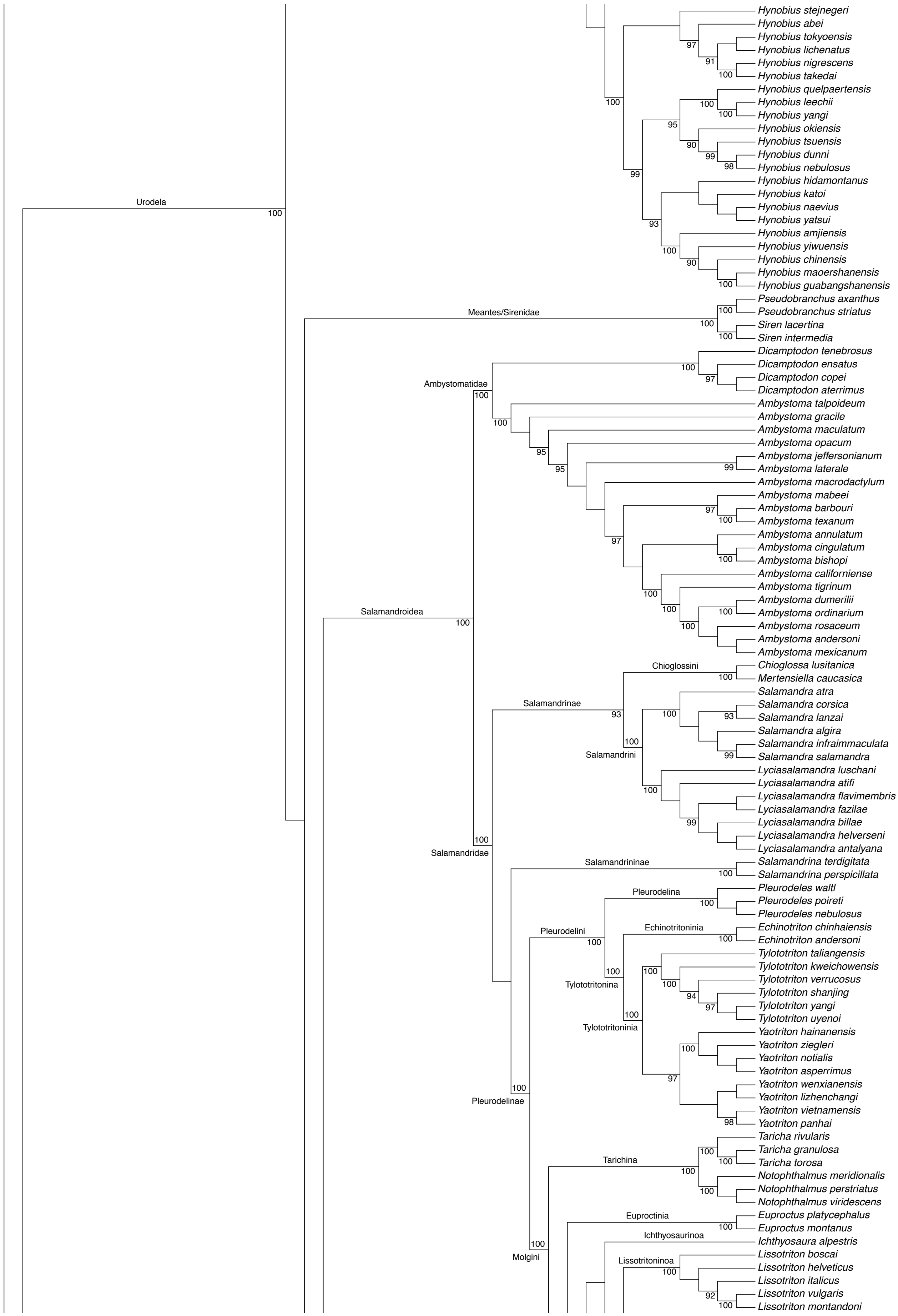
**Zygonym**, *n*. ● VA. ● Ety: G: ζυγός, *zugos*, 'yoke'; ὄνομα, *onoma*, 'name'. ● Any nomen in a relation of ***zygonymy*** with another nomen. ● Dubois 2013: 24. ● *Code*: no term.

**Zygonymy**, *n*. ● VA. ● **Ety**: see ***Zygonym***. ● Qualification of all situations of nomenclatural conflict between several nomina being potentially the valid one for the same taxon or set of related coordinated taxa. ● Dubois 2013: 5. ● *Code*: no term.

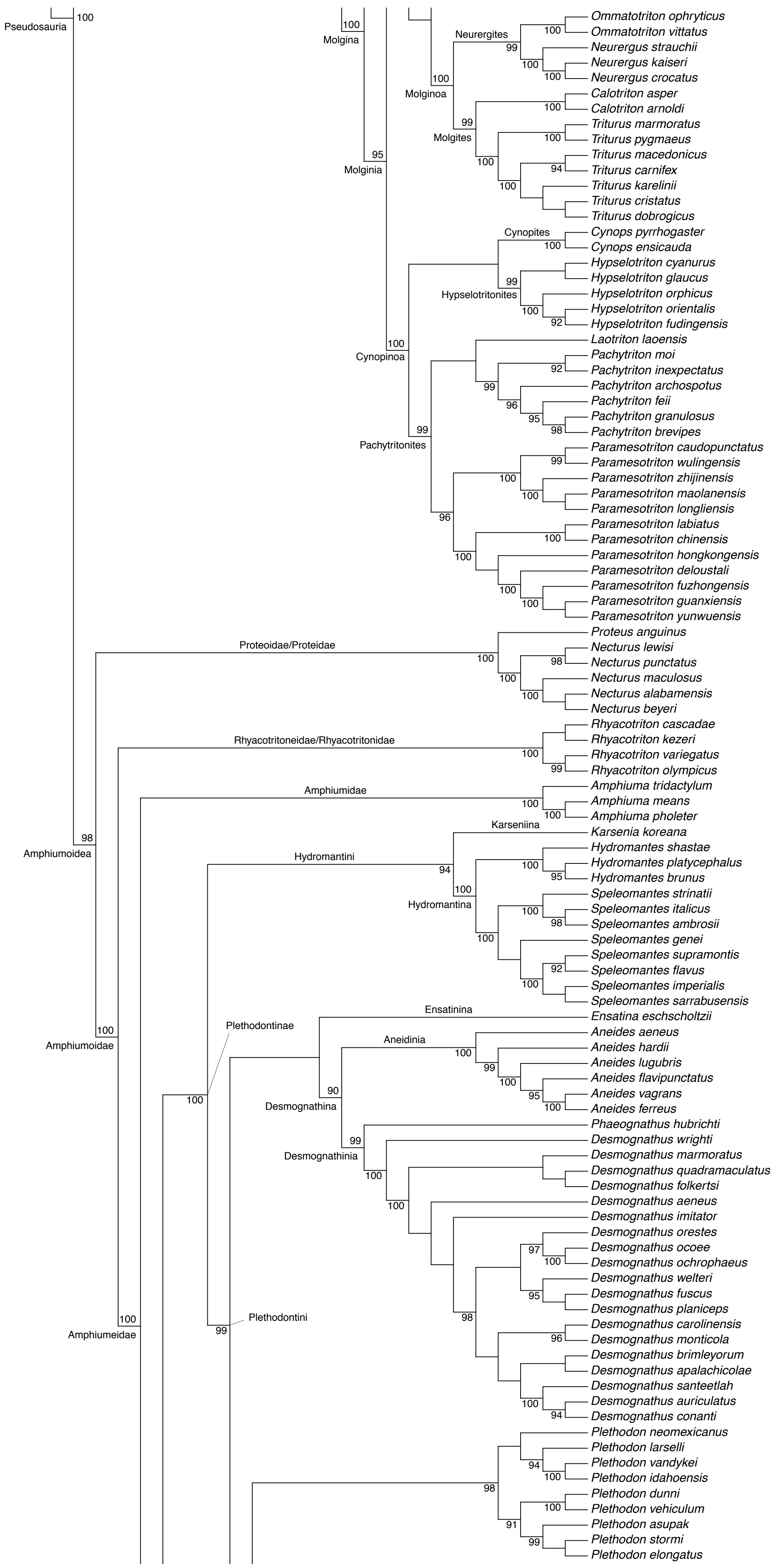
**Zygophory**, *n*. ● VA. ● **Ety**: G: ζυγός, *zugos*, 'yoke' and φέρω, *phero*, 'I bear, I carry'. ● Qualification of all situations of nomenclatural conflict between several distinct onomatophore restrictions or designations being potentially the valid one for the same nomen. ● Dubois 2013: 5. ● *Code*: no term.

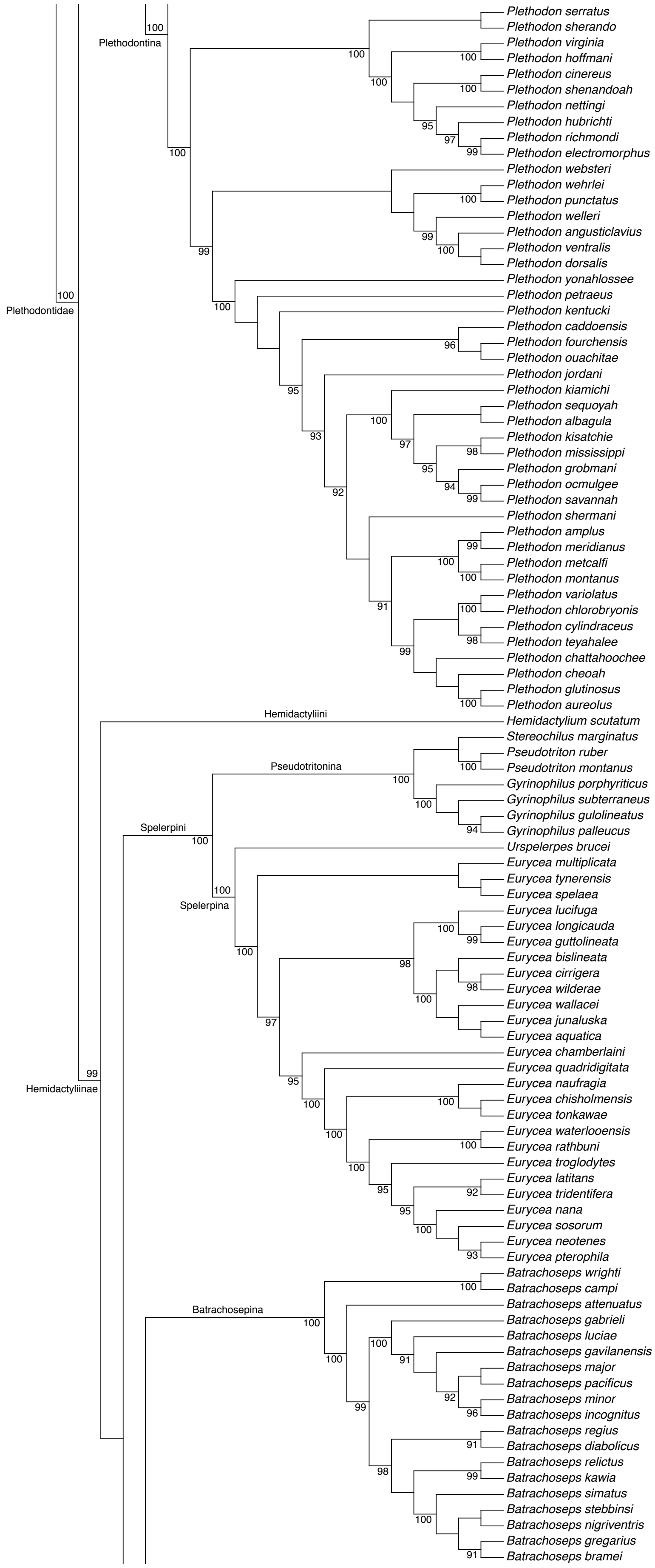
**APPENDIX A2.TREE-1.** Detailed phylogenetic tree of **Lissamphibia**, showing all species and higher supraspecific taxa recognised here as valid.

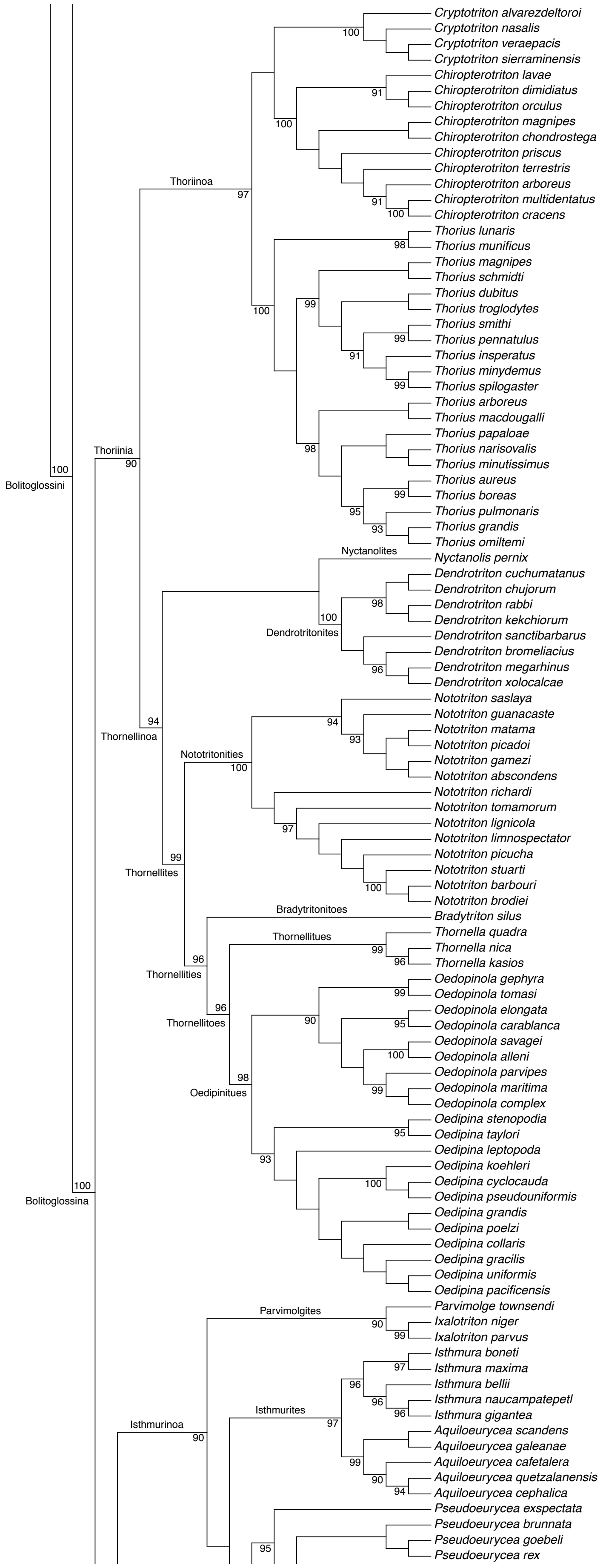




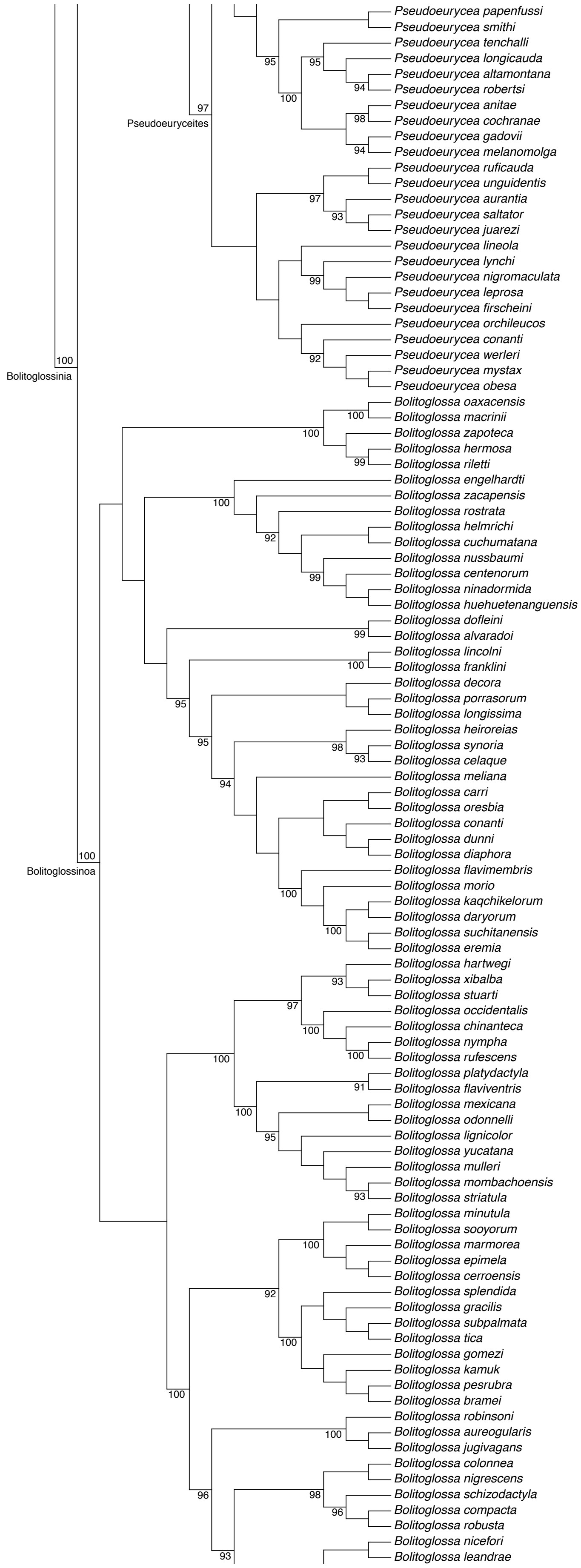
Hynobius stejnegeri
Hynobius abei
Hynobius tokyoensis
Hynobius lichenatus
Hynobius nigrescens
Hynobius takedai
Hynobius quelpaertensis
Hynobius leechii
Hynobius yangi
Hynobius okiensis
Hynobius tsuensis
Hynobius dunni
Hynobius nebulosus
Hynobius hidamontanus
Hynobius katoi
Hynobius naevius
Hynobius yatsui
Hynobius amjiensis
Hynobius yiwuensis
Hynobius chinensis
Hynobius maoershanensis
Hynobius guabangshanensis
Urodela
Meantes/Sirenidae
Pseudobranchus axanthus
Pseudobranchus striatus
Siren lacertina
Siren intermedia
Ambystomatidae
Dicamptodon tenebrosus
Dicamptodon ensatus
Dicamptodon copei
Dicamptodon aterrimus
Ambystoma talpoideum
Ambystoma gracile
Ambystoma maculatum
Ambystoma opacum
Ambystoma jeffersonianum
Ambystoma laterale
Ambystoma macrodactylum
Ambystoma mabeei
Ambystoma barbouri
Ambystoma texanum
Ambystoma annulatum
Ambystoma cingulatum
Ambystoma bishopi
Ambystoma californiense
Ambystoma tigrinum
Ambystoma dumerilii
Ambystoma ordinarium
Ambystoma rosaceum
Ambystoma andersoni
Ambystoma mexicanum
Salamandroidea
Chioglossini
Chioglossa lusitanica
Mertensiella caucasica
Salamandrinae
Salamandrini
Salamandra atra
Salamandra corsica
Salamandra lanzai
Salamandra algira
Salamandra infraimmaculata
Salamandra salamandra
Lyciasalamandra luschani
Lyciasalamandra atifi
Lyciasalamandra flavimembris
Lyciasalamandra fazilae
Lyciasalamandra billae
Lyciasalamandra helverseni
Lyciasalamandra antalyana
Salamandridae
Salamandrininae
Salamandrina terdigitata
Salamandrina perspicillata
Pleurodelina
Pleurodeles waltl
Pleurodeles poireti
Pleurodeles nebulosus
Pleurodelini
Echinotritoninia
Echinotriton chinhaiensis
Echinotriton andersoni
Tylototritonina
Tylototritoninia
Tylototriton taliangensis
Tylototriton kweichowensis
Tylototriton verrucosus
Tylototriton shanjing
Tylototriton yangi
Tylototriton uyenoi
Yaotriton hainanensis
Yaotriton ziegleri
Yaotriton notialis
Yaotriton asperrimus
Yaotriton wenxianensis
Yaotriton lizhenchangi
Yaotriton vietnamensis
Yaotriton panhai
Pleurodelinae
Tarichina
Taricha rivularis
Taricha granulosa
Taricha torosa
Notophthalmus meridionalis
Notophthalmus perstriatus
Notophthalmus viridescens
Euproctinia
Euproctus platycephalus
Euproctus montanus
Molgini
Ichthyosaurinoa
Ichthyosaura alpestris
Lissotritoninoa
Lissotriton boscai
Lissotriton helveticus
Lissotriton italicus
Lissotriton vulgaris
Lissotriton montandoni


Pseudosauria
Molgina
Neurergites
Molginoa
Molgites
Molginia
Ommatotriton ophryticus
Ommatotriton vittatus
Neurergus strauchii
Neurergus kaiseri
Neurergus crocatus
Calotriton asper
Calotriton arnoldi
Triturus marmoratus
Triturus pygmaeus
Triturus macedonicus
Triturus carnifex
Triturus karelinii
Triturus cristatus
Triturus dobrogicus
Cynopites
Cynops pyrrhogaster
Cynops ensicauda
Hypselotritonites
Hypselotriton cyanurus
Hypselotriton glaucus
Hypselotriton orphicus
Hypselotriton orientalis
Hypselotriton fudingensis
Cynopinoa
Laotriton laoensis
Pachytriton moi
Pachytriton inexpectatus
Pachytriton archospotus
Pachytriton feii
Pachytriton granulosus
Pachytriton brevipes
Pachytritonites
Paramesotriton caudopunctatus
Paramesotriton wulingensis
Paramesotriton zhijinensis
Paramesotriton maolanensis
Paramesotriton longliensis
Paramesotriton labiatus
Paramesotriton chinensis
Paramesotriton hongkongensis
Paramesotriton deloustali
Paramesotriton fuzhongensis
Paramesotriton guanxiensis
Paramesotriton yunwuensis
Proteoidae/Proteidae
Proteus anguinus
Necturus lewisi
Necturus punctatus
Necturus maculosus
Necturus alabamensis
Necturus beyeri
Rhyacotritoneidae/Rhyacotritonidae
Rhyacotriton cascadae
Rhyacotriton kezeri
Rhyacotriton variegatus
Rhyacotriton olympicus
Amphiumidae
Amphiuma tridactylum
Amphiuma means
Amphiuma pholeter
Amphiumoidea
Karseniina
Karsenia koreana
Hydromantini
Hydromantina
Hydromantes shastae
Hydromantes platycephalus
Hydromantes brunus
Speleomantes strinatii
Speleomantes italicus
Speleomantes ambrosii
Speleomantes genei
Speleomantes supramontis
Speleomantes flavus
Speleomantes imperialis
Speleomantes sarrabusensis
Amphiumoidae
Plethodontinae
Ensatinina
Ensatina eschscholtzii
Aneidinia
Aneides aeneus
Aneides hardii
Aneides lugubris
Aneides flavipunctatus
Aneides vagrans
Aneides ferreus
Desmognathina
Desmognathinia
Phaeognathus hubrichti
Desmognathus wrighti
Desmognathus marmoratus
Desmognathus quadramaculatus
Desmognathus folkertsi
Desmognathus aeneus
Desmognathus imitator
Desmognathus orestes
Desmognathus ocoee
Desmognathus ochrophaeus
Desmognathus welteri
Desmognathus fuscus
Desmognathus planiceps
Amphiumeidae
Plethodontini
Desmognathus carolinensis
Desmognathus monticola
Desmognathus brimleyorum
Desmognathus apalachicolae
Desmognathus santeetlah
Desmognathus auriculatus
Desmognathus conanti
Plethodon neomexicanus
Plethodon larselli
Plethodon vandykei
Plethodon idahoensis
Plethodon dunni
Plethodon vehiculum
Plethodon asupak
Plethodon stormi
Plethodon elongatus


Plethodontina
Plethodon serratus
Plethodon sherando
Plethodon virginia
Plethodon hoffmani
Plethodon cinereus
Plethodon shenandoah
Plethodon nettingi
Plethodon hubrichti
Plethodon richmondi
Plethodon electromorphus
Plethodon websteri
Plethodon wehrlei
Plethodon punctatus
Plethodon welleri
Plethodon angusticlavius
Plethodon ventralis
Plethodon dorsalis
Plethodon yonahlossee
Plethodontidae
Plethodon petraeus
Plethodon kentucki
Plethodon caddoensis
Plethodon fourchensis
Plethodon ouachitae
Plethodon jordani
Plethodon kiamichi
Plethodon sequoyah
Plethodon albagula
Plethodon kisatchie
Plethodon mississippi
Plethodon grobmani
Plethodon ocmulgee
Plethodon savannah
Plethodon shermani
Plethodon amplus
Plethodon meridianus
Plethodon metcalfi
Plethodon montanus
Plethodon variolatus
Plethodon chlorobryonis
Plethodon cylindraceus
Plethodon teyahalee
Plethodon chattahoochee
Plethodon cheoah
Plethodon glutinosus
Plethodon aureolus
Hemidactyliini
Hemidactylium scutatum
Stereochilus marginatus
Pseudotritonina
Pseudotriton ruber
Pseudotriton montanus
Gyrinophilus porphyriticus
Gyrinophilus subterraneus
Gyrinophilus gulolineatus
Spelerpini
Gyrinophilus palleucus
Urspelerpes brucei
Eurycea multiplicata
Eurycea tynerensis
Spelerpina
Eurycea spelaea
Eurycea lucifuga
Eurycea longicauda
Eurycea guttolineata
Eurycea bislineata
Eurycea cirrigera
Eurycea wilderae
Eurycea wallacei
Eurycea junaluska
Eurycea aquatica
Eurycea chamberlaini
Hemidactyliinae
Eurycea quadridigitata
Eurycea naufragia
Eurycea chisholmensis
Eurycea tonkawae
Eurycea waterlooensis
Eurycea rathbuni
Eurycea troglodytes
Eurycea latitans
Eurycea tridentifera
Eurycea nana
Eurycea sosorum
Eurycea neotenes
Eurycea pterophila
Batrachoseps wrighti
Batrachoseps campi
Batrachosepina
Batrachoseps attenuatus
Batrachoseps gabrieli
Batrachoseps luciae
Batrachoseps gavilanensis
Batrachoseps major
Batrachoseps pacificus
Batrachoseps minor
Batrachoseps incognitus
Batrachoseps regius
Batrachoseps diabolicus
Batrachoseps relictus
Batrachoseps kawia
Batrachoseps simatus
Batrachoseps stebbinsi
Batrachoseps nigriventris
Batrachoseps gregarius
Batrachoseps bramei



Cryptotriton alvarezdeltoroi
Cryptotriton nasalis
Cryptotriton veraepacis
Cryptotriton sierraminensis
Chiropterotriton lavae
Chiropterotriton dimidiatus
Chiropterotriton orculus
Chiropterotriton magnipes
Chiropterotriton chondrostega
Chiropterotriton priscus
Chiropterotriton terrestris
Chiropterotriton arboreus
Chiropterotriton multidentatus
Chiropterotriton cracens
Thorius lunaris
Thorius munificus
Thorius magnipes
Thorius schmidti
Thorius dubitus
Thorius troglodytes
Thorius smithi
Thorius pennatulus
Thorius insperatus
Thorius minydemus
Thorius spilogaster
Thorius arboreus
Thorius macdougalli
Thorius papaloae
Thorius narisovalis
Thorius minutissimus
Thorius aureus
Thorius boreas
Thorius pulmonaris
Thorius grandis
Thorius omiltemi
Nyctanolis pernix
Dendrotriton cuchumatanus
Dendrotriton chujorum
Dendrotriton rabbi
Dendrotriton kekchiorum
Dendrotriton sanctibarbarus
Dendrotriton bromeliacius
Dendrotriton megarhinus
Dendrotriton xolocalcae
Nototriton saslaya
Nototriton guanacaste
Nototriton matama
Nototriton picadoi
Nototriton gamezi
Nototriton abscondens
Nototriton richardi
Nototriton tomamorum
Nototriton lignicola
Nototriton limnospectator
Nototriton picucha
Nototriton stuarti
Nototriton barbouri
Nototriton brodiei
Bradytriton silus
Thornella quadra
Thornella nica
Thornella kasios
Oedopinola gephyra
Oedopinola tomasi
Oedopinola elongata
Oedopinola carablanca
Oedopinola savagei
Oedopinola alleni
Oedopinola parvipes
Oedopinola maritima
Oedopinola complex
Oedipina stenopodia
Oedipina taylori
Oedipina leptopoda
Oedipina koehleri
Oedipina cyclocauda
Oedipina pseudouniformis
Oedipina grandis
Oedipina poelzi
Oedipina collaris
Oedipina gracilis
Oedipina uniformis
Oedipina pacificensis
Parvimolge townsendi
Ixalotriton niger
Ixalotriton parvus
Isthmura boneti
Isthmura maxima
Isthmura bellii
Isthmura naucampatepetl
Isthmura gigantea
Aquiloeurycea scandens
Aquiloeurycea galeanae
Aquiloeurycea cafetalera
Aquiloeurycea quetzalanensis
Aquiloeurycea cephalica
Pseudoeurycea exspectata
Pseudoeurycea brunnata
Pseudoeurycea goebeli
Pseudoeurycea rex
Bolitoglossini
Bolitoglossina
Thoriinia
Thoriinoa
Nyctanolites
Dendrotritonites
Thornellinoa
Nototritonities
Thornellites
Bradytritonitoes
Thornellitues
Thornellities
Thornellitoes
Oedipinitues
Parvimolgites
Isthmurites
Isthmurinoa


Pseudoeurycea papenfussi
Pseudoeurycea smithi
Pseudoeurycea tenchalli
95
95
Pseudoeurycea longicauda
Pseudoeurycea altamontana
94
Pseudoeurycea robertsi
100
Pseudoeurycea anitae
97
Pseudoeuryceites
98
Pseudoeurycea cochranae
Pseudoeurycea gadovii
94
Pseudoeurycea melanomolga
Pseudoeurycea ruficauda
Pseudoeurycea unguidentis
97
Pseudoeurycea aurantia
93
Pseudoeurycea saltator
Pseudoeurycea juarezi
Pseudoeurycea lineola
Pseudoeurycea lynchi
99
Pseudoeurycea nigromaculata
Pseudoeurycea leprosa
Pseudoeurycea firscheini
Pseudoeurycea orchileucos
Pseudoeurycea conanti
92
Pseudoeurycea werleri
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Bolitoglossinia
Pseudoeurycea mystax
Pseudoeurycea obesa
Bolitoglossa oaxacensis
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Bolitoglossa macrinii
100
Bolitoglossa zapoteca
Bolitoglossa hermosa
99
Bolitoglossa riletti
Bolitoglossa engelhardti
Bolitoglossa zacapensis
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Bolitoglossa rostrata
Bolitoglossa helmrichi
92
Bolitoglossa cuchumatana
Bolitoglossa nussbaumi
Bolitoglossa centenorum
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Bolitoglossa ninadormida
Bolitoglossa huehuetenanguensis
Bolitoglossa dofleini
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Bolitoglossa alvaradoi
Bolitoglossa lincolni
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Bolitoglossa franklini
Bolitoglossa decora
Bolitoglossa porrasorum
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Bolitoglossa longissima
Bolitoglossa heiroreias
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Bolitoglossa synoria
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Bolitoglossa celaque
Bolitoglossa meliana
94
Bolitoglossa carri
Bolitoglossa oresbia
Bolitoglossa conanti
Bolitoglossa dunni
Bolitoglossa diaphora
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Bolitoglossinoa
Bolitoglossa flavimembris
Bolitoglossa morio
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Bolitoglossa kaqchikelorum
Bolitoglossa daryorum
100
Bolitoglossa suchitanensis
Bolitoglossa eremia
Bolitoglossa hartwegi
Bolitoglossa xibalba
93
Bolitoglossa stuarti
97
Bolitoglossa occidentalis
Bolitoglossa chinanteca
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Bolitoglossa nympha
100
Bolitoglossa rufescens
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Bolitoglossa platydactyla
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Bolitoglossa flaviventris
Bolitoglossa mexicana
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Bolitoglossa odonnelli
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Bolitoglossa lignicolor
Bolitoglossa yucatana
Bolitoglossa mulleri
Bolitoglossa mombachoensis
93
Bolitoglossa striatula
Bolitoglossa minutula
Bolitoglossa sooyorum
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Bolitoglossa marmorea
Bolitoglossa epimela
Bolitoglossa cerroensis
Bolitoglossa splendida
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Bolitoglossa gracilis
Bolitoglossa subpalmata
Bolitoglossa tica
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Bolitoglossa gomezi
Bolitoglossa kamuk
Bolitoglossa pesrubra
100
Bolitoglossa bramei
Bolitoglossa robinsoni
100
Bolitoglossa aureogularis
Bolitoglossa jugivagans
Bolitoglossa colonnea
Bolitoglossa nigrescens
Bolitoglossa schizodactyla
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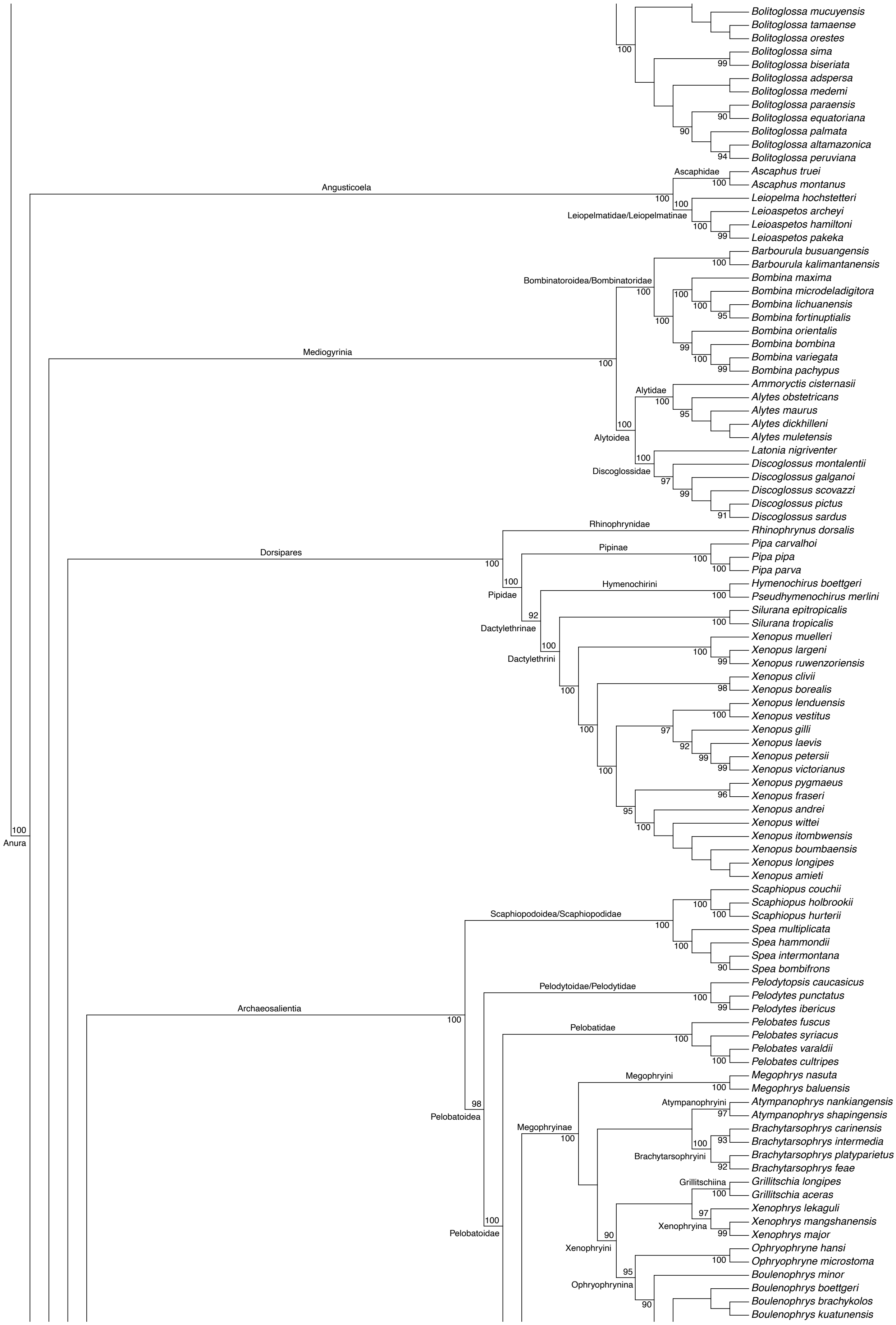
Bolitoglossa compacta
96
Bolitoglossa robusta
Bolitoglossa nicefori
Bolitoglossa leandrae
93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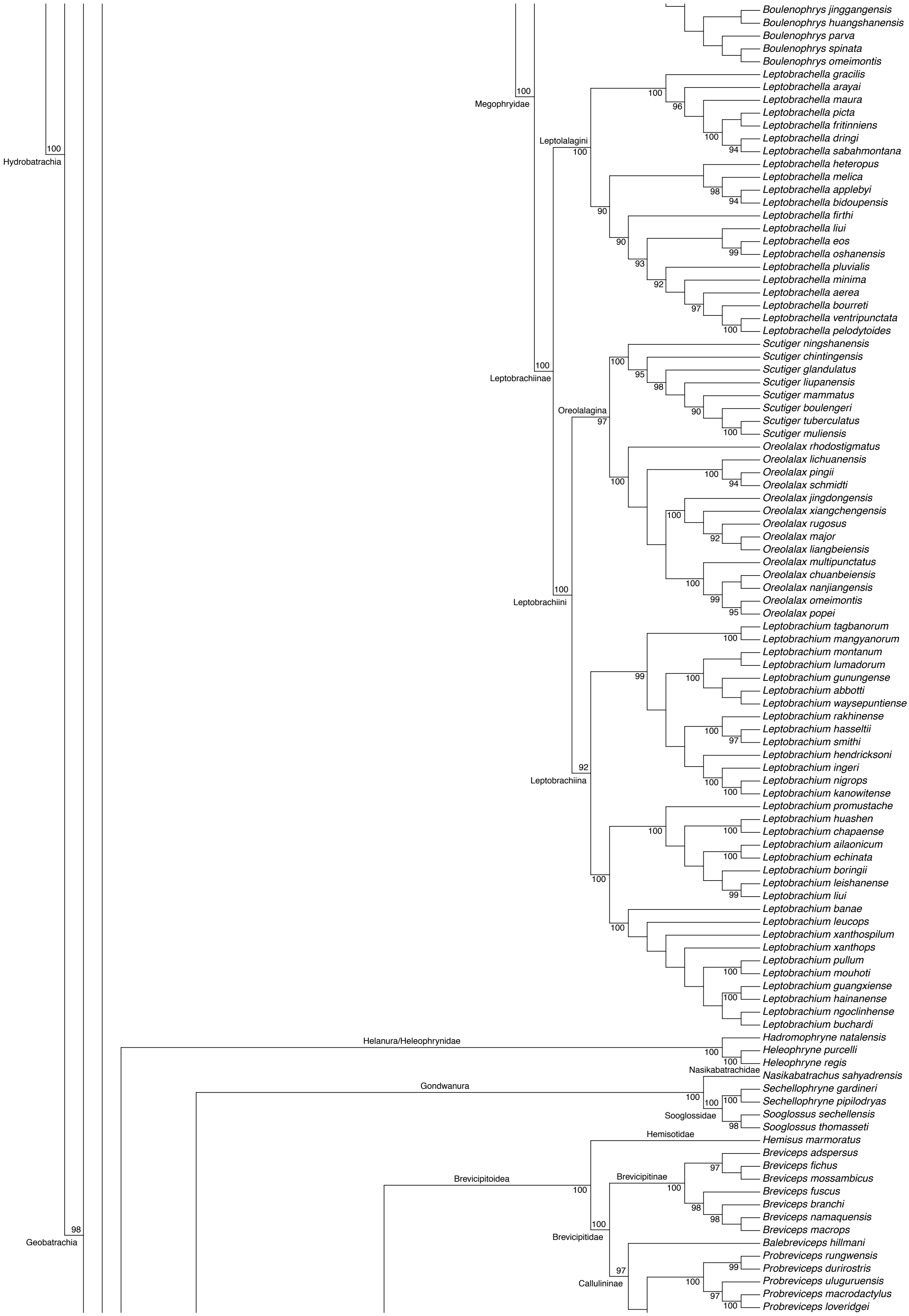
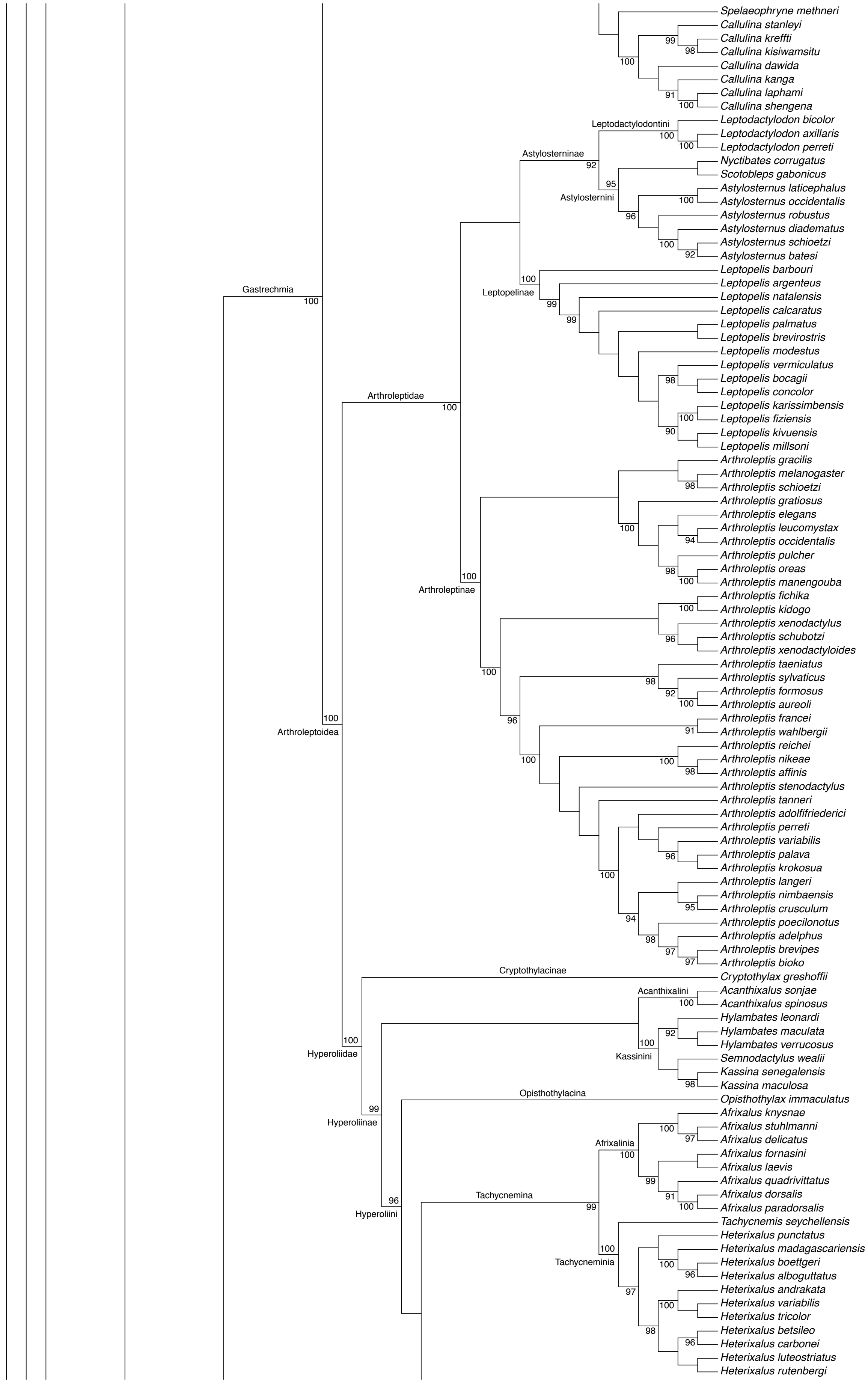
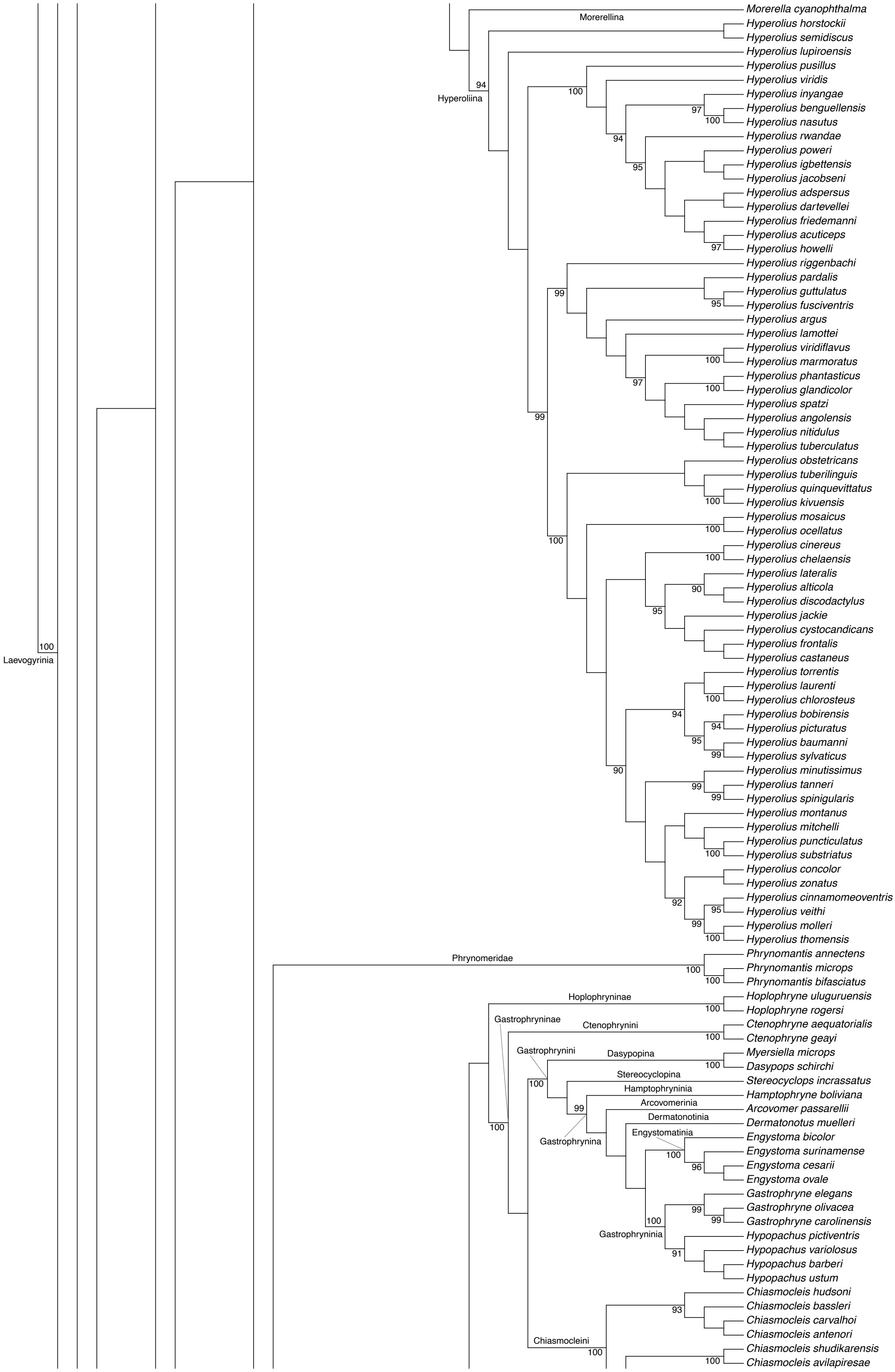
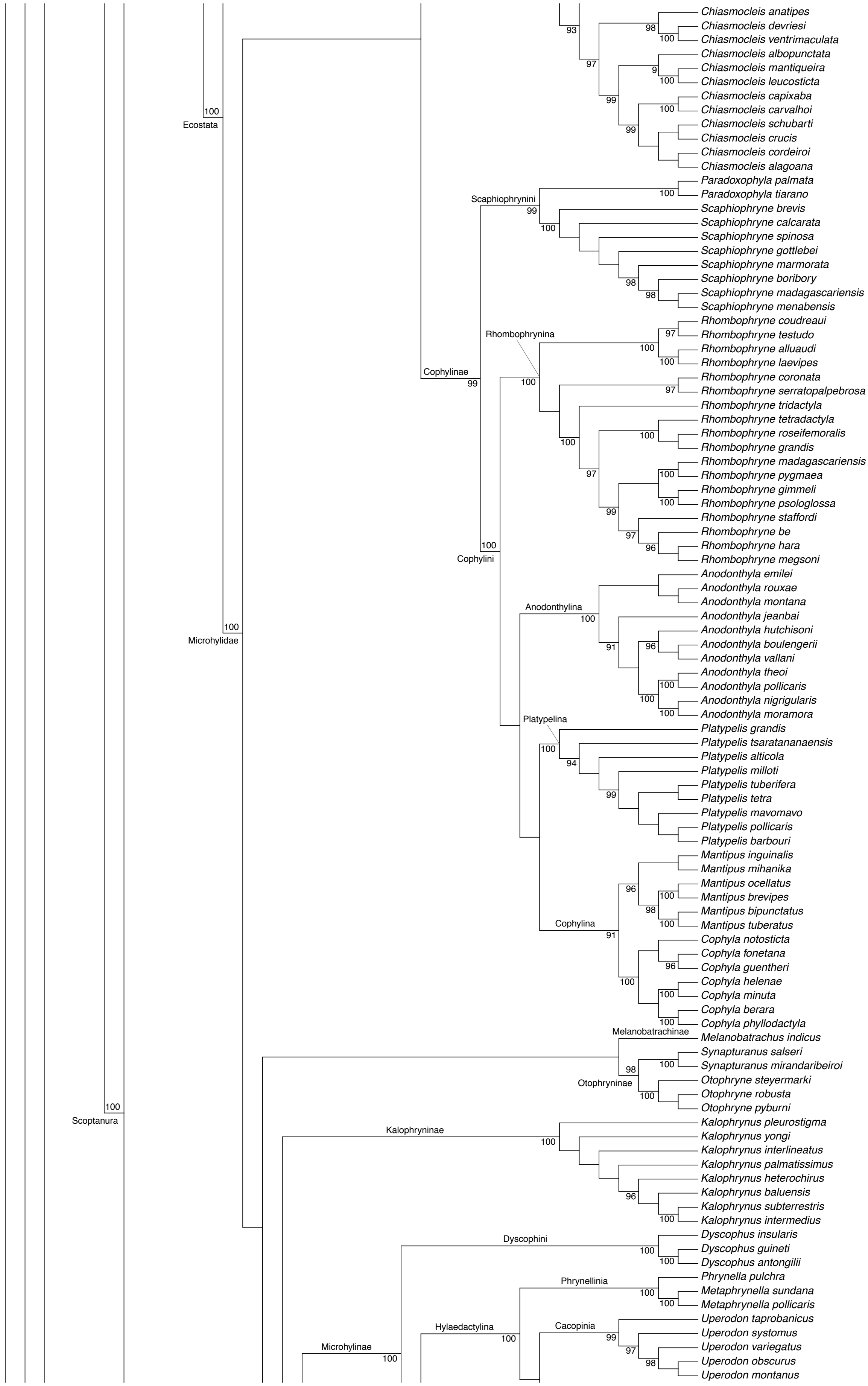
Bolitoglossa tamaense
Bolitoglossa orestes
Bolitoglossa sima
Bolitoglossa biseriata
Bolitoglossa adspersa
Bolitoglossa medemi
Bolitoglossa paraensis
Bolitoglossa equatoriana
Bolitoglossa palmata
Bolitoglossa altamazonica
Bolitoglossa peruviana
Angusticoela
Ascaphidae
Ascaphus truei
Ascaphus montanus
Leiopelmatidae/Leiopelmatinae
Leiopelma hochstetteri
Leioaspetos archeyi
Leioaspetos hamiltoni
Leioaspetos pakeka
Mediogyrinia
Bombinatoroidea/Bombinatoridae
Barbourula busuangensis
Barbourula kalimantanensis
Bombina maxima
Bombina microdeladigitora
Bombina lichuanensis
Bombina fortinuptialis
Bombina orientalis
Bombina bombina
Bombina variegata
Bombina pachypus
Alytoidea
Alytidae
Ammoryctis cisternasii
Alytes obstetricans
Alytes maurus
Alytes dickhilleni
Alytes muletensis
Discoglossidae
Latonia nigriventer
Discoglossus montalentii
Discoglossus galganoi
Discoglossus scovazzi
Discoglossus pictus
Discoglossus sardus
Anura
Dorsipares
Rhinophrynidae
Rhinophrynus dorsalis
Pipidae
Pipinae
Pipa carvalhoi
Pipa pipa
Pipa parva
Dactylethrinae
Hymenochirini
Hymenochirus boettgeri
Pseudhymenochirus merlini
Dactylethrini
Silurana epitropicalis
Silurana tropicalis
Xenopus muelleri
Xenopus largeni
Xenopus ruwenzoriensis
Xenopus clivii
Xenopus borealis
Xenopus lenduensis
Xenopus vestitus
Xenopus gilli
Xenopus laevis
Xenopus petersii
Xenopus victorianus
Xenopus pygmaeus
Xenopus fraseri
Xenopus andrei
Xenopus wittei
Xenopus itombwensis
Xenopus boumbaensis
Xenopus longipes
Xenopus amieti
Archaeosalientia
Scaphiopodoidea/Scaphiopodidae
Scaphiopus couchii
Scaphiopus holbrookii
Scaphiopus hurterii
Spea multiplicata
Spea hammondii
Spea intermontana
Spea bombifrons
Pelobatoidea
Pelodytoidae/Pelodytidae
Pelodytopsis caucasicus
Pelodytes punctatus
Pelodytes ibericus
Pelobatoidae
Pelobatidae
Pelobates fuscus
Pelobates syriacus
Pelobates varaldii
Pelobates cultripes
Megophryinae
Megophryini
Megophrys nasuta
Megophrys baluensis
Atympanophryini
Atympanophrys nankiangensis
Atympanophrys shapingensis
Brachytarsophryini
Brachytarsophrys carinensis
Brachytarsophrys intermedia
Brachytarsophrys platyparietus
Brachytarsophrys feae
Xenophryini
Grillitschiina
Grillitschia longipes
Grillitschia aceras
Xenophryina
Xenophrys lekaguli
Xenophrys mangshanensis
Xenophrys major
Ophryophrynina
Ophryophryne hansi
Ophryophryne microstoma
Boulenophrys minor
Boulenophrys boettgeri
Boulenophrys brachykolos
Boulenophrys kuatunensis

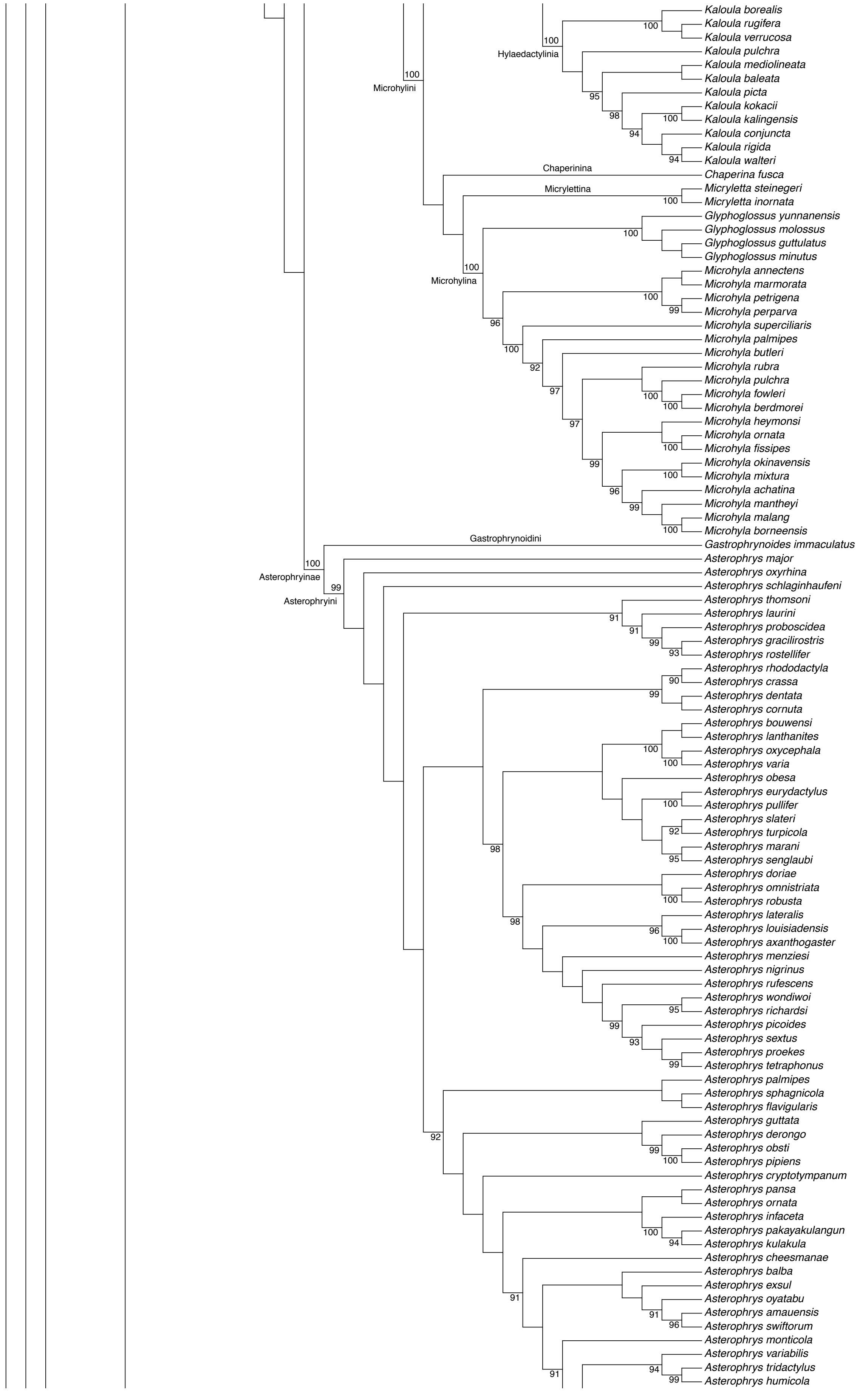

Boulenophrys jinggangensis
Boulenophrys huangshanensis
Boulenophrys parva
Boulenophrys spinata
Boulenophrys omeimontis
Leptobrachella gracilis
Leptobrachella arayai
Leptobrachella maura
Leptobrachella picta
Leptobrachella fritinniens
Leptobrachella dringi
Leptobrachella sabahmontana
Leptobrachella heteropus
Leptobrachella melica
Leptobrachella applebyi
Leptobrachella bidoupensis
Leptobrachella firthi
Leptobrachella liui
Leptobrachella eos
Leptobrachella oshanensis
Leptobrachella pluvialis
Leptobrachella minima
Leptobrachella aerea
Leptobrachella bourreti
Leptobrachella ventripunctata
Leptobrachella pelodytoides
Scutiger ningshanensis
Scutiger chintingensis
Scutiger glandulatus
Scutiger liupanensis
Scutiger mammatus
Scutiger boulengeri
Scutiger tuberculatus
Scutiger muliensis
Oreolalax rhodostigmatus
Oreolalax lichuanensis
Oreolalax pingii
Oreolalax schmidti
Oreolalax jingdongensis
Oreolalax xiangchengensis
Oreolalax rugosus
Oreolalax major
Oreolalax liangbeiensis
Oreolalax multipunctatus
Oreolalax chuanbeiensis
Oreolalax nanjiangensis
Oreolalax omeimontis
Oreolalax popei
Leptobrachium tagbanorum
Leptobrachium mangyanorum
Leptobrachium montanum
Leptobrachium lumadorum
Leptobrachium gunungense
Leptobrachium abbotti
Leptobrachium waysepuntiense
Leptobrachium rakhinense
Leptobrachium hasseltii
Leptobrachium smithi
Leptobrachium hendricksoni
Leptobrachium ingeri
Leptobrachium nigrops
Leptobrachium kanowitense
Leptobrachium promustache
Leptobrachium huashen
Leptobrachium chapaense
Leptobrachium ailaonicum
Leptobrachium echinata
Leptobrachium boringii
Leptobrachium leishanense
Leptobrachium liui
Leptobrachium banae
Leptobrachium leucops
Leptobrachium xanthospilum
Leptobrachium xanthops
Leptobrachium pullum
Leptobrachium mouhoti
Leptobrachium guangxiense
Leptobrachium hainanense
Leptobrachium ngoclinhense
Leptobrachium buchardi
Hadromophryne natalensis
Heleophryne purcelli
Heleophryne regis
Nasikabatrachus sahyadrensis
Sechellophryne gardineri
Sechellophryne pipilodryas
Sooglossus sechellensis
Sooglossus thomasseti
Hemisus marmoratus
Breviceps adspersus
Breviceps fichus
Breviceps mossambicus
Breviceps fuscus
Breviceps branchi
Breviceps namaquensis
Breviceps macrops
Balebreviceps hillmani
Probreviceps rungwensis
Probreviceps durirostris
Probreviceps uluguruensis
Probreviceps macrodactylus
Probreviceps loveridgei
Hydrobatrachia
Megophryidae
Leptolalagini
Leptobrachiinae
Oreolalagina
Leptobrachiini
Leptobrachiina
Geobatrachia
Helanura/Heleophrynidae
Gondwanura
Nasikabatrachidae
Sooglossidae
Hemisotidae
Brevicipitoidea
Brevicipitinae
Brevicipitidae
Callulininae


Spelaeophryne methneri
Callulina stanleyi
Callulina kreffti
Callulina kisiwamsitu
Callulina dawida
Callulina kanga
Callulina laphami
Callulina shengena
Leptodactylodontini
Leptodactylodon bicolor
Leptodactylodon axillaris
Leptodactylodon perreti
Astylosterninae
Nyctibates corrugatus
Scotobleps gabonicus
Astylosternini
Astylosternus laticephalus
Astylosternus occidentalis
Astylosternus robustus
Astylosternus diadematus
Astylosternus schioetzi
Astylosternus batesi
Leptopelis barbouri
Gastrechmia
Leptopelinae
Leptopelis argenteus
Leptopelis natalensis
Leptopelis calcaratus
Leptopelis palmatus
Leptopelis brevirostris
Leptopelis modestus
Leptopelis vermiculatus
Leptopelis bocagii
Leptopelis concolor
Arthroleptidae
Leptopelis karissimbensis
Leptopelis fiziensis
Leptopelis kivuensis
Leptopelis millsoni
Arthroleptis gracilis
Arthroleptis melanogaster
Arthroleptis schioetzi
Arthroleptis gratiosus
Arthroleptis elegans
Arthroleptis leucomystax
Arthroleptis occidentalis
Arthroleptis pulcher
Arthroleptis oreas
Arthroleptis manengouba
Arthroleptinae
Arthroleptis fichika
Arthroleptis kidogo
Arthroleptis xenodactylus
Arthroleptis schubotzi
Arthroleptis xenodactyloides
Arthroleptis taeniatus
Arthroleptis sylvaticus
Arthroleptis formosus
Arthroleptis aureoli
Arthroleptis francei
Arthroleptoidea
Arthroleptis wahlbergii
Arthroleptis reichei
Arthroleptis nikeae
Arthroleptis affinis
Arthroleptis stenodactylus
Arthroleptis tanneri
Arthroleptis adolfifriederici
Arthroleptis perreti
Arthroleptis variabilis
Arthroleptis palava
Arthroleptis krokosua
Arthroleptis langeri
Arthroleptis nimbaensis
Arthroleptis crusculum
Arthroleptis poecilonotus
Arthroleptis adelphus
Arthroleptis brevipes
Arthroleptis bioko
Cryptothylacinae
Cryptothylax greshoffii
Acanthixalini
Acanthixalus sonjae
Acanthixalus spinosus
Hylambates leonardi
Hylambates maculata
Hylambates verrucosus
Hyperoliidae
Kassinini
Semnodactylus wealii
Kassina senegalensis
Kassina maculosa
Opisthothylacina
Opisthothylax immaculatus
Hyperoliinae
Afrixalus knysnae
Afrixalus stuhlmanni
Afrixalus delicatus
Afrixalinia
Afrixalus fornasini
Afrixalus laevis
Afrixalus quadrivittatus
Afrixalus dorsalis
Tachycnemina
Afrixalus paradorsalis
Hyperoliini
Tachycnemis seychellensis
Heterixalus punctatus
Heterixalus madagascariensis
Tachycneminia
Heterixalus boettgeri
Heterixalus alboguttatus
Heterixalus andrakata
Heterixalus variabilis
Heterixalus tricolor
Heterixalus betsileo
Heterixalus carbonei
Heterixalus luteostriatus
Heterixalus rutenbergi


Morerella cyanophthalma
Morerellina
Hyperolius horstockii
Hyperolius semidiscus
Hyperolius lupiroensis
Hyperolius pusillus
Hyperolius viridis
Hyperoliina
Hyperolius inyangae
Hyperolius benguellensis
Hyperolius nasutus
Hyperolius rwandae
Hyperolius poweri
Hyperolius igbettensis
Hyperolius jacobseni
Hyperolius adspersus
Hyperolius dartevellei
Hyperolius friedemanni
Hyperolius acuticeps
Hyperolius howelli
Hyperolius riggenbachi
Hyperolius pardalis
Hyperolius guttulatus
Hyperolius fusciventris
Hyperolius argus
Hyperolius lamottei
Hyperolius viridiflavus
Hyperolius marmoratus
Hyperolius phantasticus
Hyperolius glandicolor
Hyperolius spatzi
Hyperolius angolensis
Hyperolius nitidulus
Hyperolius tuberculatus
Hyperolius obstetricans
Hyperolius tuberilinguis
Hyperolius quinquevittatus
Hyperolius kivuensis
Hyperolius mosaicus
Hyperolius ocellatus
Hyperolius cinereus
Hyperolius chelaensis
Hyperolius lateralis
Hyperolius alticola
Hyperolius discodactylus
Hyperolius jackie
Hyperolius cystocandicans
Hyperolius frontalis
Hyperolius castaneus
Laevogyrinia
Hyperolius torrentis
Hyperolius laurenti
Hyperolius chlorosteus
Hyperolius bobirensis
Hyperolius picturatus
Hyperolius baumanni
Hyperolius sylvaticus
Hyperolius minutissimus
Hyperolius tanneri
Hyperolius spinigularis
Hyperolius montanus
Hyperolius mitchelli
Hyperolius puncticulatus
Hyperolius substriatus
Hyperolius concolor
Hyperolius zonatus
Hyperolius cinnamomeoventris
Hyperolius veithi
Hyperolius molleri
Hyperolius thomensis
Phrynomeridae
Phrynomantis annectens
Phrynomantis microps
Phrynomantis bifasciatus
Hoplophryninae
Hoplophryne uluguruensis
Hoplophryne rogersi
Gastrophryninae
Ctenophrynini
Ctenophryne aequatorialis
Ctenophryne geayi
Gastrophrynini
Dasypopina
Myersiella microps
Dasypops schirchi
Stereocyclopina
Stereocyclops incrassatus
Hamptophryninia
Hamptophryne boliviana
Arcovomerinia
Arcovomer passarellii
Dermatonotinia
Dermatonotus muelleri
Engystomatinia
Gastrophrynina
Engystoma bicolor
Engystoma surinamense
Engystoma cesarii
Engystoma ovale
Gastrophryne elegans
Gastrophryne olivacea
Gastrophryne carolinensis
Gastrophryninia
Hypopachus pictiventris
Hypopachus variolosus
Hypopachus barberi
Hypopachus ustum
Chiasmocleis hudsoni
Chiasmocleis bassleri
Chiasmocleis carvalhoi
Chiasmocleis antenori
Chiasmocleini
Chiasmocleis shudikarensis
Chiasmocleis avilapiresae



Chiasmocleis anatipes
Chiasmocleis devriesi
Chiasmocleis ventrimaculata
Chiasmocleis albopunctata
Chiasmocleis mantiqueira
Chiasmocleis leucosticta
Chiasmocleis capixaba
Chiasmocleis carvalhoi
Chiasmocleis schubarti
Chiasmocleis crucis
Chiasmocleis cordeiroi
Chiasmocleis alagoana
Ecostata
Scaphiophrynini
Paradoxophyla palmata
Paradoxophyla tiarano
Scaphiophryne brevis
Scaphiophryne calcarata
Scaphiophryne spinosa
Scaphiophryne gottlebei
Scaphiophryne marmorata
Scaphiophryne boribory
Scaphiophryne madagascariensis
Scaphiophryne menabensis
Rhombophrynina
Rhombophryne coudreaui
Rhombophryne testudo
Rhombophryne alluaudi
Rhombophryne laevipes
Cophylinae
Rhombophryne coronata
Rhombophryne serratopalpebrosa
Rhombophryne tridactyla
Rhombophryne tetradactyla
Rhombophryne roseifemoralis
Rhombophryne grandis
Rhombophryne madagascariensis
Rhombophryne pygmaea
Rhombophryne gimmeli
Rhombophryne psologlossa
Rhombophryne staffordi
Rhombophryne be
Rhombophryne hara
Rhombophryne megsoni
Cophylini
Anodonthylina
Anodonthyla emilei
Anodonthyla rouxae
Anodonthyla montana
Anodonthyla jeanbai
Anodonthyla hutchisoni
Anodonthyla boulengerii
Anodonthyla vallani
Anodonthyla theoi
Anodonthyla pollicaris
Anodonthyla nigrigularis
Anodonthyla moramora
Microhylidae
Platypelina
Platypelis grandis
Platypelis tsaratananaensis
Platypelis alticola
Platypelis milloti
Platypelis tuberifera
Platypelis tetra
Platypelis mavomavo
Platypelis pollicaris
Platypelis barbouri
Cophylina
Mantipus inguinalis
Mantipus mihanika
Mantipus ocellatus
Mantipus brevipes
Mantipus bipunctatus
Mantipus tuberatus
Cophyla notosticta
Cophyla fonetana
Cophyla guentheri
Cophyla helenae
Cophyla minuta
Cophyla berara
Cophyla phyllodactyla
Melanobatrachinae
Melanobatrachus indicus
Synapturanus salseri
Synapturanus mirandaribeiroi
Otophryninae
Otophryne steyermarki
Otophryne robusta
Otophryne pyburni
Scoptanura
Kalophryninae
Kalophrynus pleurostigma
Kalophrynus yongi
Kalophrynus interlineatus
Kalophrynus palmatissimus
Kalophrynus heterochirus
Kalophrynus baluensis
Kalophrynus subterrestris
Kalophrynus intermedius
Dyscophini
Dyscophus insularis
Dyscophus guineti
Dyscophus antongilii
Phrynellinia
Phrynella pulchra
Metaphrynella sundana
Metaphrynella pollicaris
Hylaedactylina
Cacopinia
Uperodon taprobanicus
Uperodon systomus
Uperodon variegatus
Uperodon obscurus
Uperodon montanus
Microhylinae


Kaloula borealis
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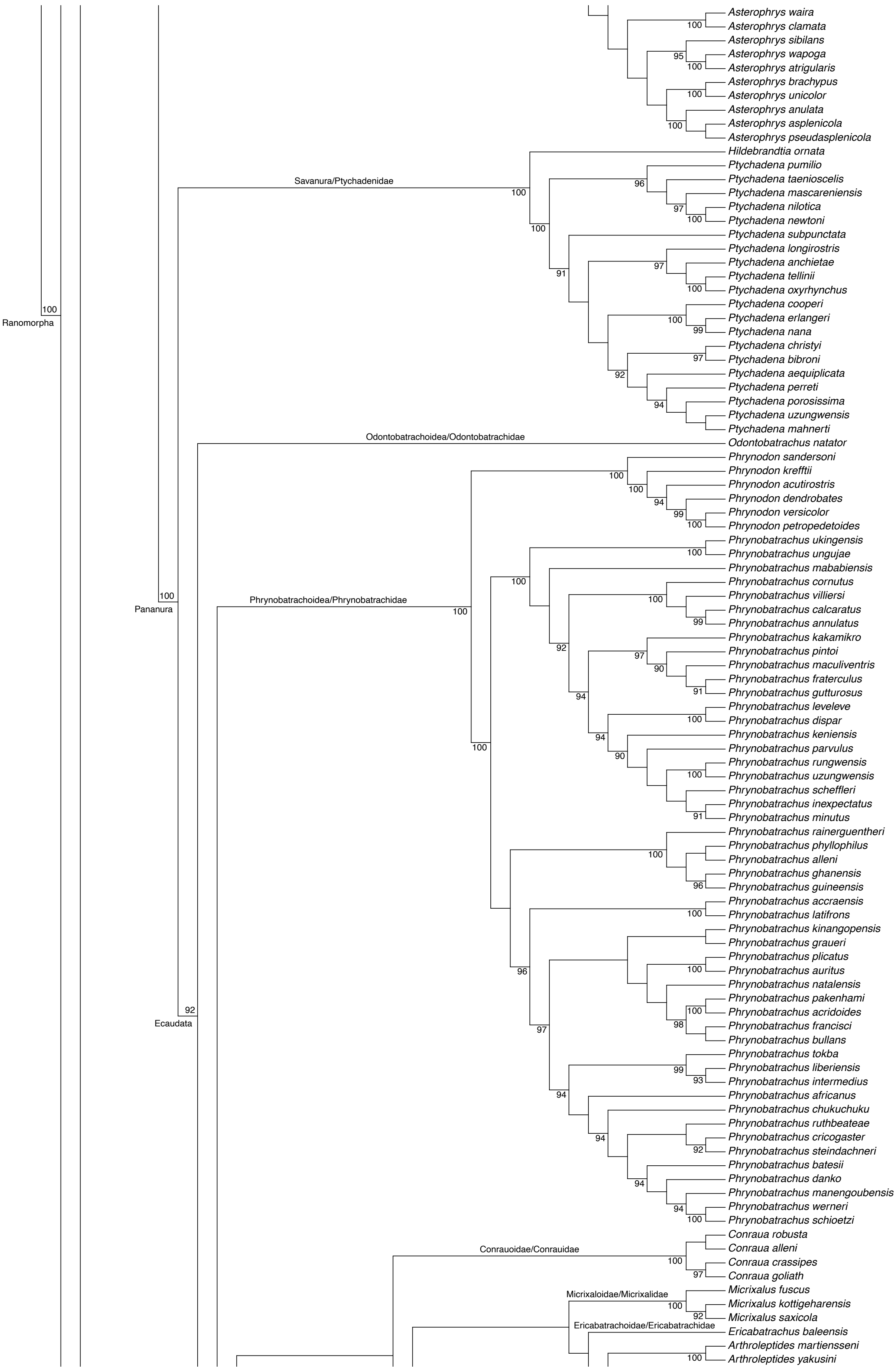
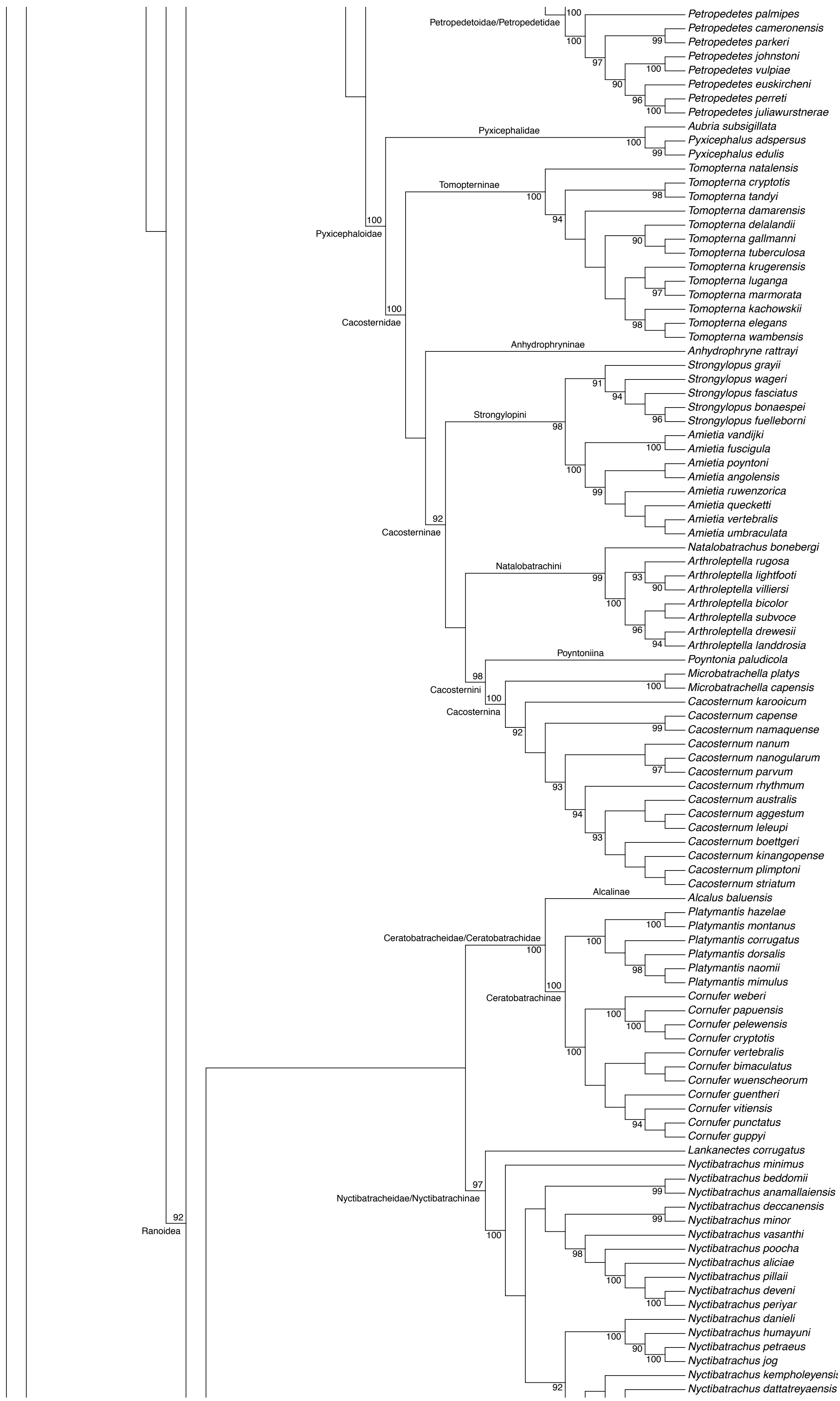
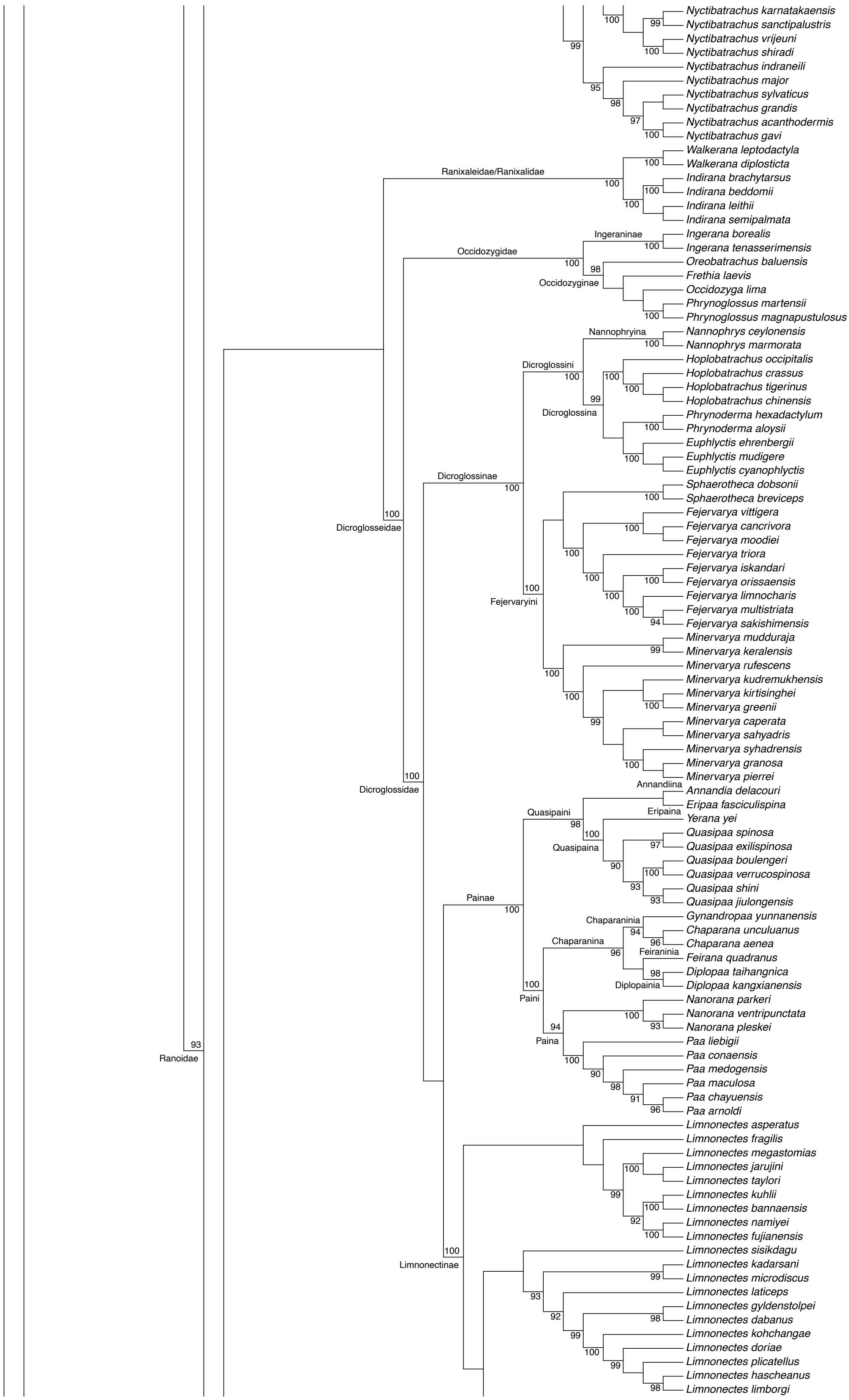
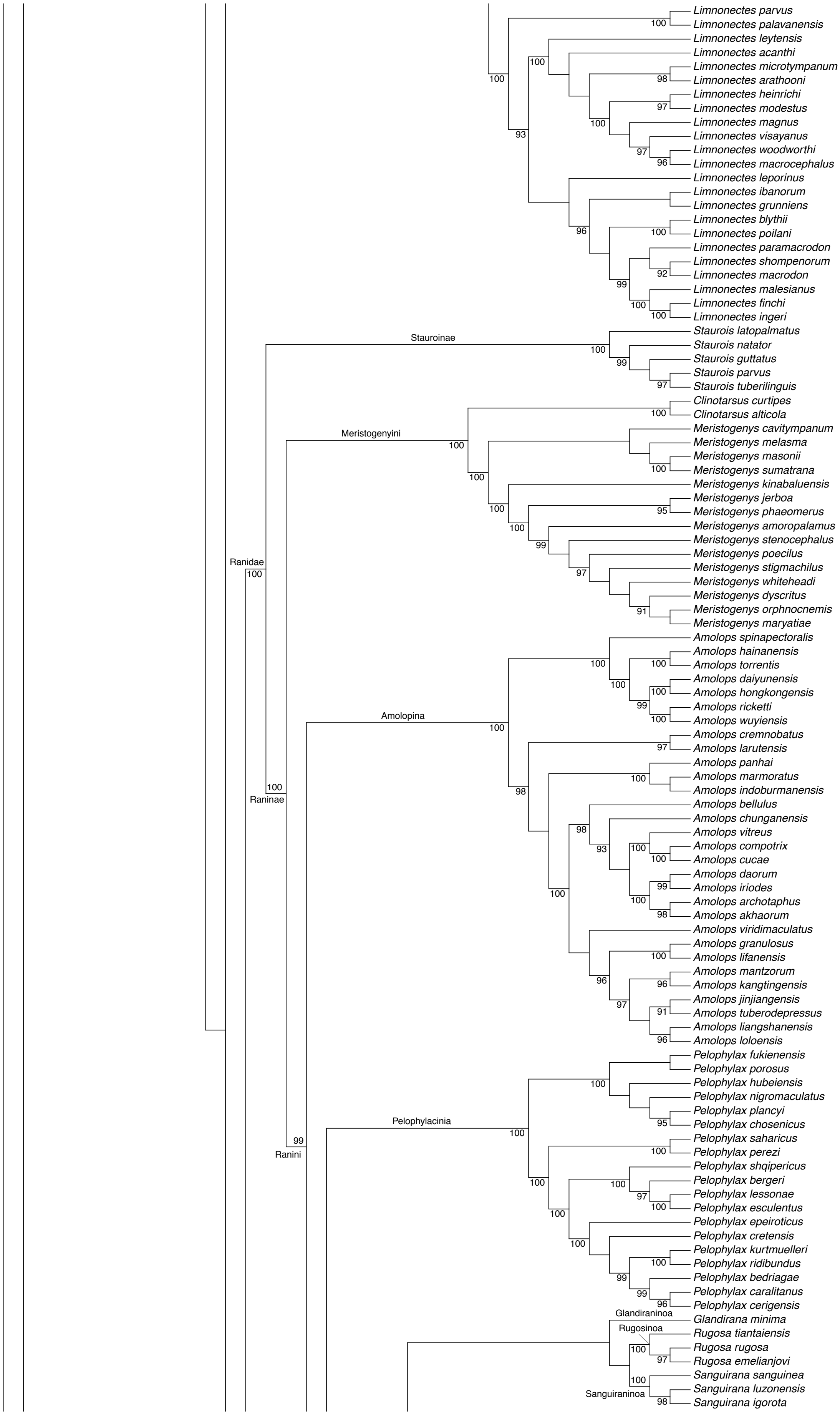
Kaloula rugifera
Kaloula verrucosa
100
Hylaedactylinia
Kaloula pulchra
100
Microhylini
Kaloula mediolineata
Kaloula baleata
95
Kaloula picta
98
Kaloula kokacii
100
Kaloula kalingensis
94
Kaloula conjuncta
Kaloula rigida
94
Kaloula walteri
Chaperinina
Chaperina fusca
Micrylettina
Micryletta steinegeri
100
Micryletta inornata
Glyphoglossus yunnanensis
100
Glyphoglossus molossus
Glyphoglossus guttulatus
Glyphoglossus minutus
100
Microhylina
Microhyla annectens
Microhyla marmorata
100
Microhyla petrigena
99
Microhyla perparva
96
Microhyla superciliaris
100
Microhyla palmipes
92
Microhyla butleri
Microhyla rubra
97
Microhyla pulchra
100
Microhyla fowleri
100
Microhyla berdmorei
97
Microhyla heymonsi
Microhyla ornata
100
Microhyla fissipes
99
Microhyla okinavensis
100
Microhyla mixtura
96
Microhyla achatina
99
Microhyla mantheyi
Microhyla malang
100
Microhyla borneensis
Gastrophrynoidini
Gastrophrynoides immaculatus
100
Asterophryinae
Asterophrys major
99
Asterophryini
Asterophrys oxyrhina
Asterophrys schlaginhaufeni
Asterophrys thomsoni
91
Asterophrys laurini
91
Asterophrys proboscidea
99
Asterophrys gracilirostris
93
Asterophrys rostellifer
Asterophrys rhododactyla
90
Asterophrys crassa
99
Asterophrys dentata
Asterophrys cornuta
Asterophrys bouwensi
Asterophrys lanthanites
100
Asterophrys oxycephala
100
Asterophrys varia
Asterophrys obesa
Asterophrys eurydactylus
100
Asterophrys pullifer
Asterophrys slateri
92
Asterophrys turpicola
98
Asterophrys marani
95
Asterophrys senglaubi
Asterophrys doriae
Asterophrys omnistriata
100
Asterophrys robusta
98
Asterophrys lateralis
96
Asterophrys louisiadensis
100
Asterophrys axanthogaster
Asterophrys menziesi
Asterophrys nigrinus
Asterophrys rufescens
Asterophrys wondiwoi
95
Asterophrys richardsi
99
Asterophrys picoides
93
Asterophrys sextus
Asterophrys proekes
99
Asterophrys tetraphonus
Asterophrys palmipes
Asterophrys sphagnicola
Asterophrys flavigularis
Asterophrys guttata
92
Asterophrys derongo
99
Asterophrys obsti
100
Asterophrys pipiens
Asterophrys cryptotympanum
Asterophrys pansa
Asterophrys ornata
Asterophrys infaceta
100
Asterophrys pakayakulangun
94
Asterophrys kulakula
Asterophrys cheesmanae
Asterophrys balba
91
Asterophrys exsul
Asterophrys oyatabu
91
Asterophrys amauensis
96
Asterophrys swiftorum
Asterophrys monticola
Asterophrys variabilis
94
Asterophrys tridactylus
91
99
Asterophrys humicola


Asterophrys waira
Asterophrys clamata
Asterophrys sibilans
Asterophrys wapoga
Asterophrys atrigularis
Asterophrys brachypus
Asterophrys unicolor
Asterophrys anulata
Asterophrys asplenicola
Asterophrys pseudasplenicola
Hildebrandtia ornata
Ptychadena pumilio
Ptychadena taenioscelis
Ptychadena mascareniensis
Ptychadena nilotica
Ptychadena newtoni
Ptychadena subpunctata
Ptychadena longirostris
Ptychadena anchietae
Ptychadena tellinii
Ptychadena oxyrhynchus
Ptychadena cooperi
Ptychadena erlangeri
Ptychadena nana
Ptychadena christyi
Ptychadena bibroni
Ptychadena aequiplicata
Ptychadena perreti
Ptychadena porosissima
Ptychadena uzungwensis
Ptychadena mahnerti
Odontobatrachus natator
Phrynodon sandersoni
Phrynodon krefftii
Phrynodon acutirostris
Phrynodon dendrobates
Phrynodon versicolor
Phrynodon petropedetoides
Phrynobatrachus ukingensis
Phrynobatrachus ungujae
Phrynobatrachus mababiensis
Phrynobatrachus cornutus
Phrynobatrachus villiersi
Phrynobatrachus calcaratus
Phrynobatrachus annulatus
Phrynobatrachus kakamikro
Phrynobatrachus pintoi
Phrynobatrachus maculiventris
Phrynobatrachus fraterculus
Phrynobatrachus gutturosus
Phrynobatrachus leveleve
Phrynobatrachus dispar
Phrynobatrachus keniensis
Phrynobatrachus parvulus
Phrynobatrachus rungwensis
Phrynobatrachus uzungwensis
Phrynobatrachus scheffleri
Phrynobatrachus inexpectatus
Phrynobatrachus minutus
Phrynobatrachus rainerguentheri
Phrynobatrachus phyllophilus
Phrynobatrachus alleni
Phrynobatrachus ghanensis
Phrynobatrachus guineensis
Phrynobatrachus accraensis
Phrynobatrachus latifrons
Phrynobatrachus kinangopensis
Phrynobatrachus graueri
Phrynobatrachus plicatus
Phrynobatrachus auritus
Phrynobatrachus natalensis
Phrynobatrachus pakenhami
Phrynobatrachus acridoides
Phrynobatrachus francisci
Phrynobatrachus bullans
Phrynobatrachus tokba
Phrynobatrachus liberiensis
Phrynobatrachus intermedius
Phrynobatrachus africanus
Phrynobatrachus chukuchuku
Phrynobatrachus ruthbeateae
Phrynobatrachus cricogaster
Phrynobatrachus steindachneri
Phrynobatrachus batesii
Phrynobatrachus danko
Phrynobatrachus manengoubensis
Phrynobatrachus werneri
Phrynobatrachus schioetzi
Conraua robusta
Conraua alleni
Conraua crassipes
Conraua goliath
Micrixalus fuscus
Micrixalus kottigeharensis
Micrixalus saxicola
Ericabatrachus baleensis
Arthroleptides martiensseni
Arthroleptides yakusini
Ranomorpha
Savanura/Ptychadenidae
Odontobatrachoidea/Odontobatrachidae
Phrynobatrachoidea/Phrynobatrachidae
Pananura
Ecaudata
Conrauoidae/Conrauidae
Micrixaloidae/Micrixalidae
Ericabatrachoidae/Ericabatrachidae


Petropedetoidae/Petropedetidae
Petropedetes palmipes
Petropedetes cameronensis
Petropedetes parkeri
Petropedetes johnstoni
Petropedetes vulpiae
Petropedetes euskircheni
Petropedetes perreti
Petropedetes juliawurstnerae
Pyxicephalidae
Aubria subsigillata
Pyxicephalus adspersus
Pyxicephalus edulis
Tomopterninae
Tomopterna natalensis
Tomopterna cryptotis
Tomopterna tandyi
Tomopterna damarensis
Tomopterna delalandii
Tomopterna gallmanni
Tomopterna tuberculosa
Tomopterna krugerensis
Tomopterna luganga
Tomopterna marmorata
Tomopterna kachowskii
Tomopterna elegans
Tomopterna wambensis
Pyxicephaloidae
Cacosternidae
Anhydrophryninae
Anhydrophryne rattrayi
Strongylopini
Strongylopus grayii
Strongylopus wageri
Strongylopus fasciatus
Strongylopus bonaespei
Strongylopus fuelleborni
Amietia vandijki
Amietia fuscigula
Amietia poyntoni
Amietia angolensis
Amietia ruwenzorica
Amietia quecketti
Amietia vertebralis
Amietia umbraculata
Cacosterninae
Natalobatrachini
Natalobatrachus bonebergi
Arthroleptella rugosa
Arthroleptella lightfooti
Arthroleptella villiersi
Arthroleptella bicolor
Arthroleptella subvoce
Arthroleptella drewesii
Arthroleptella landdrosia
Poyntoniina
Poyntonia paludicola
Cacosternini
Cacosternina
Microbatrachella platys
Microbatrachella capensis
Cacosternum karooicum
Cacosternum capense
Cacosternum namaquense
Cacosternum nanum
Cacosternum nanogularum
Cacosternum parvum
Cacosternum rhythmum
Cacosternum australis
Cacosternum aggestum
Cacosternum leleupi
Cacosternum boettgeri
Cacosternum kinangopense
Cacosternum plimptoni
Cacosternum striatum
Alcalinae
Alcalus baluensis
Ceratobatracheidae/Ceratobatrachidae
Ceratobatrachinae
Platymantis hazelae
Platymantis montanus
Platymantis corrugatus
Platymantis dorsalis
Platymantis naomii
Platymantis mimulus
Cornufer weberi
Cornufer papuensis
Cornufer pelewensis
Cornufer cryptotis
Cornufer vertebralis
Cornufer bimaculatus
Cornufer wuenscheorum
Cornufer guentheri
Cornufer vitiensis
Cornufer punctatus
Cornufer guppyi
Nyctibatracheidae/Nyctibatrachinae
Lankanectes corrugatus
Nyctibatrachus minimus
Nyctibatrachus beddomii
Nyctibatrachus anamallaiensis
Nyctibatrachus deccanensis
Nyctibatrachus minor
Nyctibatrachus vasanthi
Nyctibatrachus poocha
Nyctibatrachus aliciae
Nyctibatrachus pillaii
Nyctibatrachus deveni
Nyctibatrachus periyar
Nyctibatrachus danieli
Nyctibatrachus humayuni
Nyctibatrachus petraeus
Nyctibatrachus jog
Nyctibatrachus kempholeyensis
Nyctibatrachus dattatreyaensis
Ranoidea



Nyctibatrachus karnatakaensis
Nyctibatrachus sanctipalustris
Nyctibatrachus vrijeuni
Nyctibatrachus shiradi
Nyctibatrachus indraneili
Nyctibatrachus major
Nyctibatrachus sylvaticus
Nyctibatrachus grandis
Nyctibatrachus acanthodermis
Nyctibatrachus gavi
Ranixaleidae/Ranixalidae
Walkerana leptodactyla
Walkerana diplosticta
Indirana brachytarsus
Indirana beddomii
Indirana leithii
Indirana semipalmata
Occidozygidae
Ingeraninae
Ingerana borealis
Ingerana tenasserimensis
Occidozyginae
Oreobatrachus baluensis
Frethia laevis
Occidozyga lima
Phrynoglossus martensii
Phrynoglossus magnapustulosus
Dicroglosseidae
Dicroglossinae
Dicroglossini
Nannophryina
Nannophrys ceylonensis
Nannophrys marmorata
Dicroglossina
Hoplobatrachus occipitalis
Hoplobatrachus crassus
Hoplobatrachus tigerinus
Hoplobatrachus chinensis
Phrynoderma hexadactylum
Phrynoderma aloysii
Euphlyctis ehrenbergii
Euphlyctis mudigere
Euphlyctis cyanophlyctis
Fejervaryini
Sphaerotheca dobsonii
Sphaerotheca breviceps
Fejervarya vittigera
Fejervarya cancrivora
Fejervarya moodiei
Fejervarya triora
Fejervarya iskandari
Fejervarya orissaensis
Fejervarya limnocharis
Fejervarya multistriata
Fejervarya sakishimensis
Minervarya mudduraja
Minervarya keralensis
Minervarya rufescens
Minervarya kudremukhensis
Minervarya kirtisinghei
Minervarya greenii
Minervarya caperata
Minervarya sahyadris
Minervarya syhadrensis
Minervarya granosa
Minervarya pierrei
Dicroglossidae
Painae
Quasipaini
Annandiina
Annandia delacouri
Eripaina
Eripaa fasciculispina
Yerana yei
Quasipaina
Quasipaa spinosa
Quasipaa exilispinosa
Quasipaa boulengeri
Quasipaa verrucospinosa
Quasipaa shini
Quasipaa jiulongensis
Paini
Chaparanina
Chaparaninia
Gynandropaa yunnanensis
Chaparana unculuanus
Chaparana aenea
Feiraninia
Feirana quadranus
Diplopainia
Diplopaa taihangnica
Diplopaa kangxianensis
Paina
Nanorana parkeri
Nanorana ventripunctata
Nanorana pleskei
Paa liebigii
Paa conaensis
Paa medogensis
Paa maculosa
Paa chayuensis
Paa arnoldi
Ranoidae
Limnonectinae
Limnonectes asperatus
Limnonectes fragilis
Limnonectes megastomias
Limnonectes jarujini
Limnonectes taylori
Limnonectes kuhlii
Limnonectes bannaensis
Limnonectes namiyei
Limnonectes fujianensis
Limnonectes sisikdagu
Limnonectes kadarsani
Limnonectes microdiscus
Limnonectes laticeps
Limnonectes gyldenstolpei
Limnonectes dabanus
Limnonectes kohchangae
Limnonectes doriae
Limnonectes plicatellus
Limnonectes hascheanus
Limnonectes limborgi


Limnonectes parvus
Limnonectes palavanensis
Limnonectes leytensis
Limnonectes acanthi
Limnonectes microtympanum
Limnonectes arathooni
Limnonectes heinrichi
Limnonectes modestus
Limnonectes magnus
Limnonectes visayanus
Limnonectes woodworthi
Limnonectes macrocephalus
Limnonectes leporinus
Limnonectes ibanorum
Limnonectes grunniens
Limnonectes blythii
Limnonectes poilani
Limnonectes paramacrodon
Limnonectes shompenorum
Limnonectes macrodon
Limnonectes malesianus
Limnonectes finchi
Limnonectes ingeri
Stauroinae
Staurois latopalmatus
Staurois natator
Staurois guttatus
Staurois parvus
Staurois tuberilinguis
Clinotarsus curtipes
Clinotarsus alticola
Meristogenyini
Meristogenys cavitympanum
Meristogenys melasma
Meristogenys masonii
Meristogenys sumatrana
Meristogenys kinabaluensis
Meristogenys jerboa
Meristogenys phaeomerus
Meristogenys amoropalamus
Meristogenys stenocephalus
Meristogenys poecilus
Meristogenys stigmachilus
Meristogenys whiteheadi
Meristogenys dyscritus
Meristogenys orphnocnemis
Meristogenys maryatiae
Ranidae
Amolops spinapectoralis
Amolops hainanensis
Amolops torrentis
Amolops daiyunensis
Amolops hongkongensis
Amolops ricketti
Amolops wuyiensis
Amolopina
Amolops cremnobatus
Amolops larutensis
Amolops panhai
Amolops marmoratus
Amolops indoburmanensis
Raninae
Amolops bellulus
Amolops chunganensis
Amolops vitreus
Amolops compotrix
Amolops cucae
Amolops daorum
Amolops iriodes
Amolops archotaphus
Amolops akhaorum
Amolops viridimaculatus
Amolops granulosus
Amolops lifanensis
Amolops mantzorum
Amolops kangtingensis
Amolops jinjiangensis
Amolops tuberodepressus
Amolops liangshanensis
Amolops loloensis
Pelophylax fukienensis
Pelophylax porosus
Pelophylax hubeiensis
Pelophylax nigromaculatus
Pelophylax plancyi
Pelophylax chosenicus
Pelophylacinia
Ranini
Pelophylax saharicus
Pelophylax perezi
Pelophylax shqipericus
Pelophylax bergeri
Pelophylax lessonae
Pelophylax esculentus
Pelophylax epeiroticus
Pelophylax cretensis
Pelophylax kurtmuelleri
Pelophylax ridibundus
Pelophylax bedriagae
Pelophylax caralitanus
Pelophylax cerigensis
Glandiraninoa
Glandirana minima
Rugosinoa
Rugosa tiantaiensis
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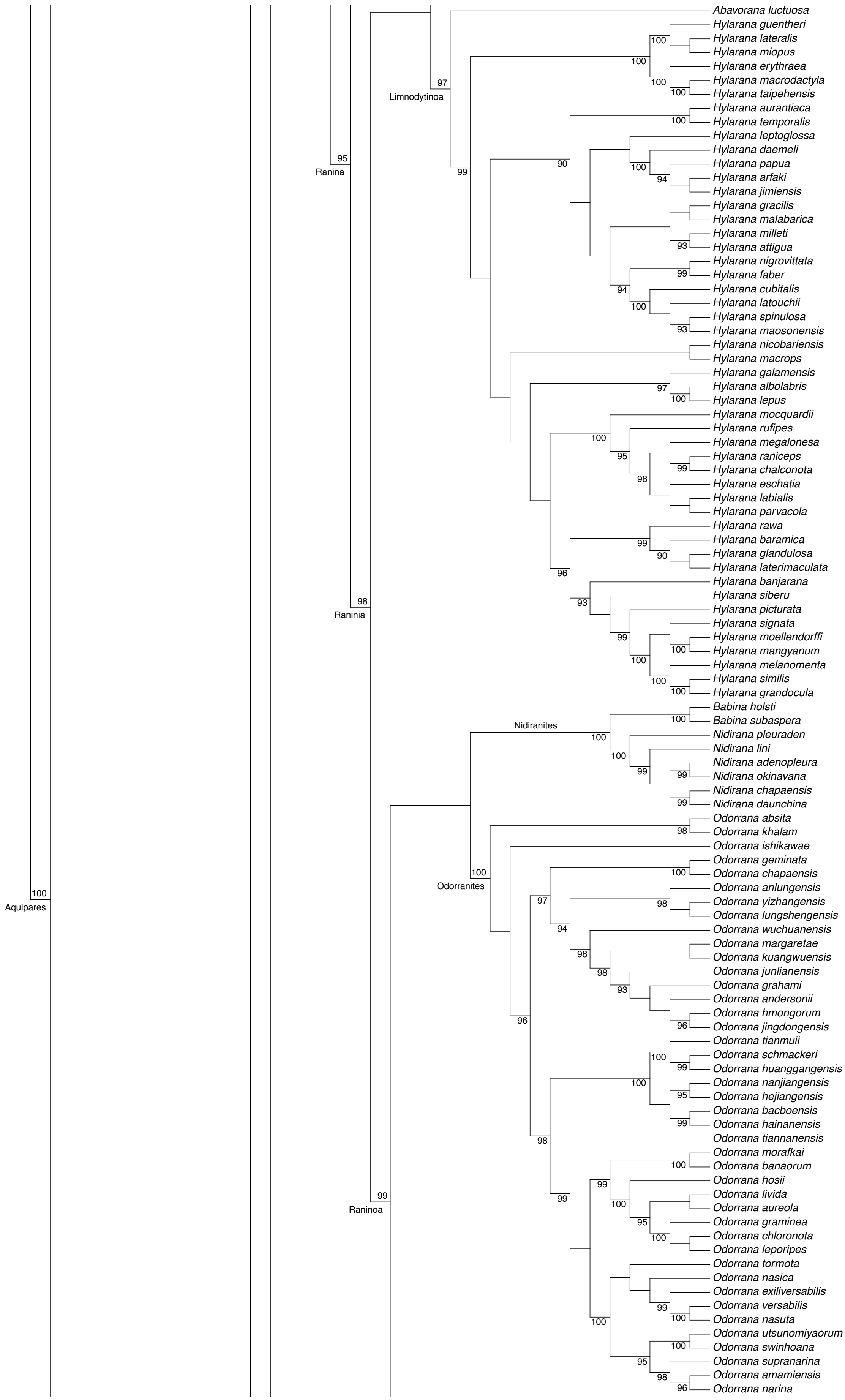
Sanguirana sanguinea
Sanguiraninoa
Sanguirana luzonensis
Sanguirana igorota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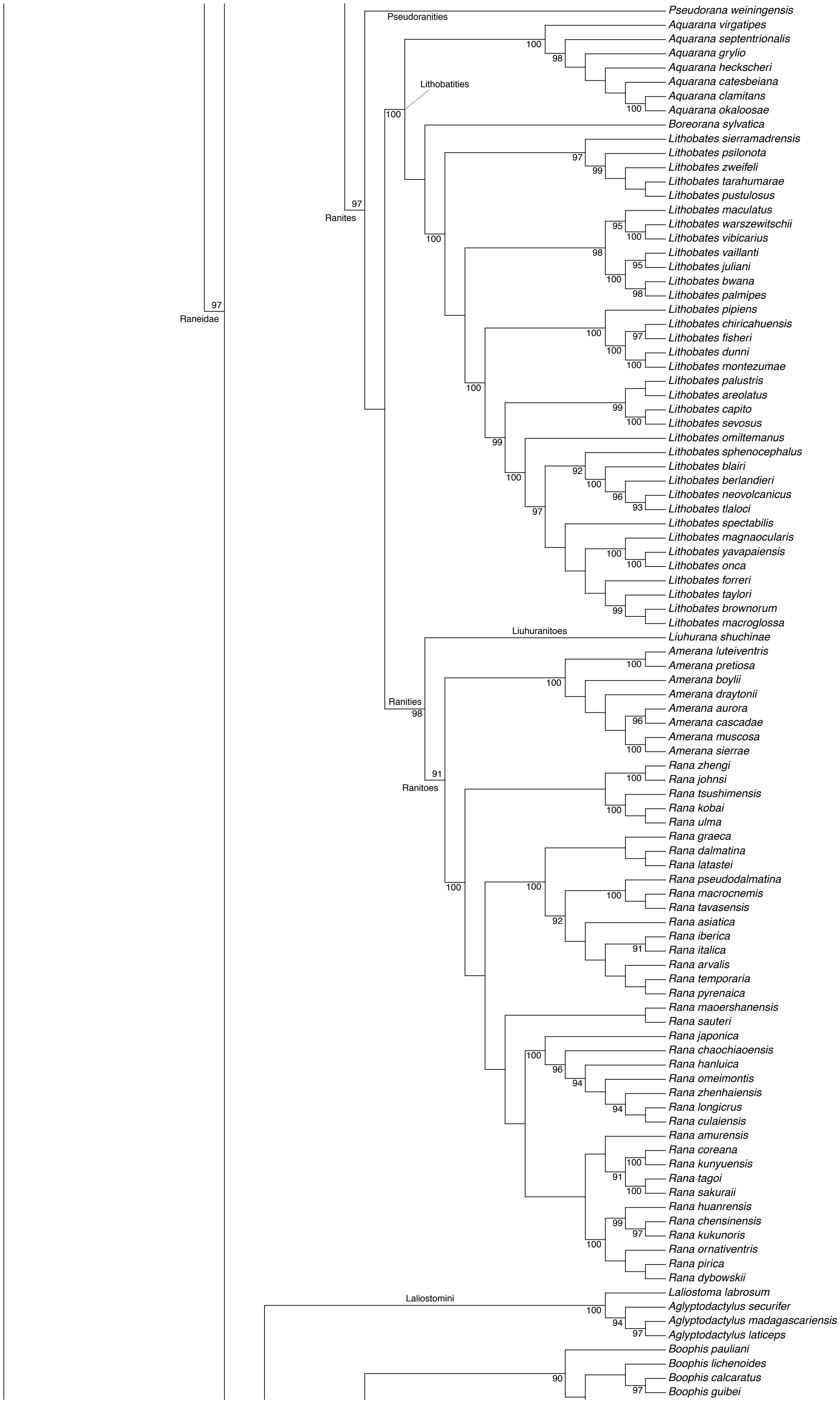
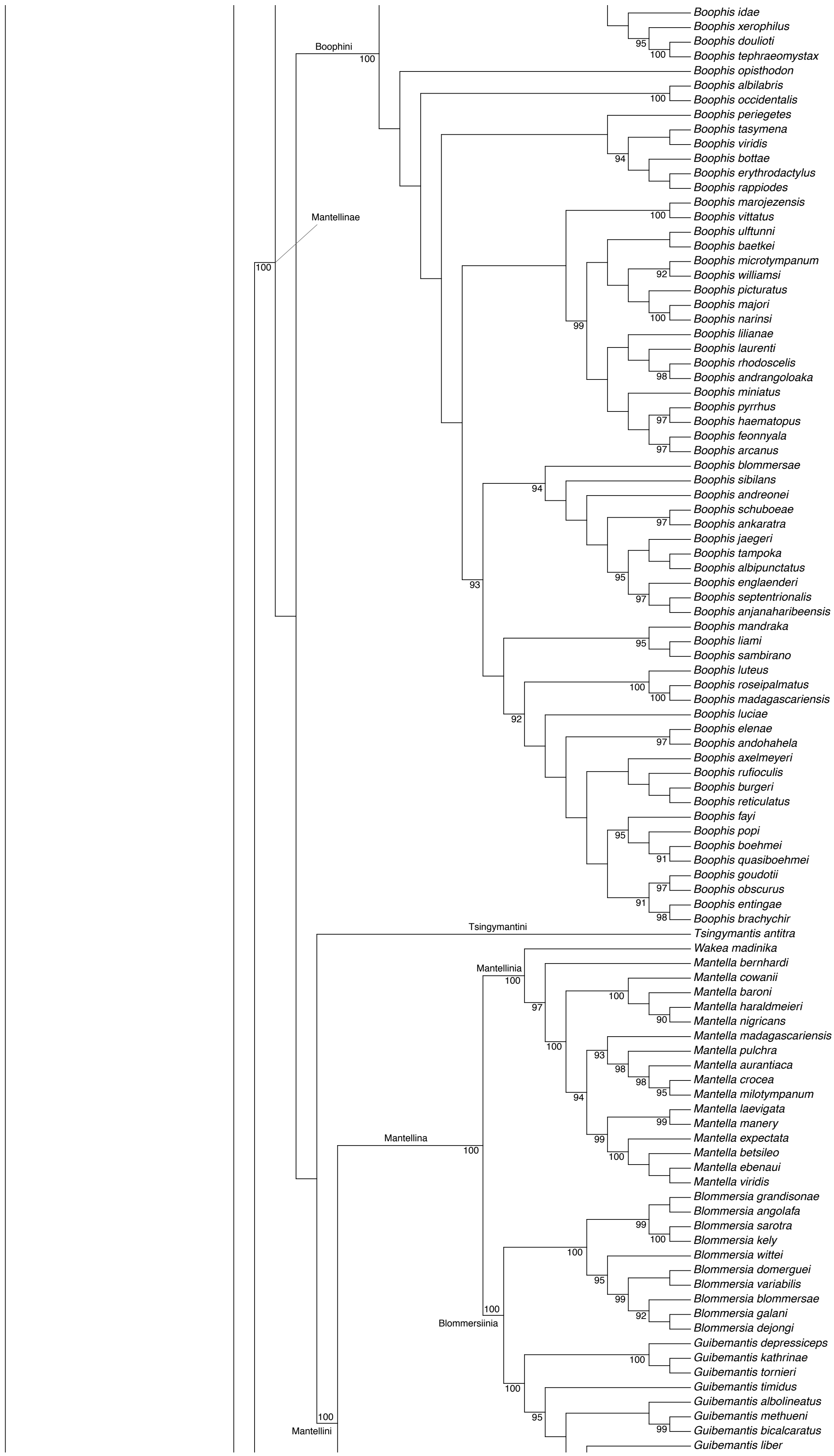
Hylarana miopus
Hylarana erythraea
Hylarana macrodactyla
Hylarana taipehensis
Limnodytinoa
Hylarana aurantiaca
Hylarana temporalis
Hylarana leptoglossa
Hylarana daemeli
Ranina
Hylarana papua
Hylarana arfaki
Hylarana jimiensis
Hylarana gracilis
Hylarana malabarica
Hylarana milleti
Hylarana attigua
Hylarana nigrovittata
Hylarana faber
Hylarana cubitalis
Hylarana latouchii
Hylarana spinulosa
Hylarana maosonensis
Hylarana nicobariensis
Hylarana macrops
Hylarana galamensis
Hylarana albolabris
Hylarana lepus
Hylarana mocquardii
Hylarana rufipes
Hylarana megalonesa
Hylarana raniceps
Hylarana chalconota
Hylarana eschatia
Hylarana labialis
Hylarana parvacola
Hylarana rawa
Hylarana baramica
Hylarana glandulosa
Hylarana laterimaculata
Hylarana banjarana
Hylarana siberu
Ranínia
Hylarana picturata
Hylarana signata
Hylarana moellendorffi
Hylarana mangyanum
Hylarana melanomenta
Hylarana similis
Hylarana grandocula
Babina holsti
Nidiranites
Babina subaspera
Nidirana pleuraden
Nidirana lini
Nidirana adenopleura
Nidirana okinavana
Nidirana chapaensis
Nidirana daunchina
Odorrana absita
Odorrana khalam
Odorrana ishikawae
Odorrana geminata
Odorrana chapaensis
Odorrana anlungensis
Aquipares
Odorranites
Odorrana yizhangensis
Odorrana lungshengensis
Odorrana wuchuanensis
Odorrana margaretae
Odorrana kuangwuensis
Odorrana junlianensis
Odorrana grahami
Odorrana andersonii
Odorrana hmongorum
Odorrana jingdongensis
Odorrana tianmuii
Odorrana schmackeri
Odorrana huanggangensis
Odorrana nanjiangensis
Odorrana hejiangensis
Odorrana bacboensis
Odorrana hainanensis
Odorrana tiannanensis
Odorrana morafkai
Odorrana banaorum
Odorrana hosii
Raninoa
Odorrana livida
Odorrana aureola
Odorrana graminea
Odorrana chloronota
Odorrana leporipes
Odorrana tormota
Odorrana nasica
Odorrana exiliversabilis
Odorrana versabilis
Odorrana nasuta
Odorrana utsunomiyaorum
Odorrana swinhoana
Odorrana supranarina
Odorrana amamiensis
Odorrana narina


Pseudoranities
Lithobatities
Ranites
Raneidae
Liuhuranitoes
Ranities
Ranitoes
Laliostomini
Pseudorana weiningensis
Aquarana virgatipes
Aquarana septentrionalis
Aquarana grylio
Aquarana heckscheri
Aquarana catesbeiana
Aquarana clamitans
Aquarana okaloosae
Boreorana sylvatica
Lithobates sierramadrensis
Lithobates psilonota
Lithobates zweifeli
Lithobates tarahumarae
Lithobates pustulosus
Lithobates maculatus
Lithobates warszewitschii
Lithobates vibicarius
Lithobates vaillanti
Lithobates juliani
Lithobates bwana
Lithobates palmipes
Lithobates pipiens
Lithobates chiricahuensis
Lithobates fisheri
Lithobates dunni
Lithobates montezumae
Lithobates palustris
Lithobates areolatus
Lithobates capito
Lithobates sevosus
Lithobates omiltemanus
Lithobates sphenocephalus
Lithobates blairi
Lithobates berlandieri
Lithobates neovolcanicus
Lithobates tlaloci
Lithobates spectabilis
Lithobates magnaocularis
Lithobates yavapaiensis
Lithobates onca
Lithobates forreri
Lithobates taylori
Lithobates brownorum
Lithobates macroglossa
Liuhurana shuchinae
Amerana luteiventris
Amerana pretiosa
Amerana boylii
Amerana draytonii
Amerana aurora
Amerana cascadae
Amerana muscosa
Amerana sierrae
Rana zhengi
Rana johnsi
Rana tsushimensis
Rana kobai
Rana ulma
Rana graeca
Rana dalmatina
Rana latastei
Rana pseudodalmatina
Rana macrocnemis
Rana tavasensis
Rana asiatica
Rana iberica
Rana italica
Rana arvalis
Rana temporaria
Rana pyrenaica
Rana maoershanensis
Rana sauteri
Rana japonica
Rana chaochiaoensis
Rana hanluica
Rana omeimontis
Rana zhenhaiensis
Rana longicrus
Rana culaiensis
Rana amurensis
Rana coreana
Rana kunyuensis
Rana tagoi
Rana sakuraii
Rana huanrensis
Rana chensinensis
Rana kukunoris
Rana ornativentris
Rana pirica
Rana dybowskii
Laliostoma labrosum
Aglyptodactylus securifer
Aglyptodactylus madagascariensis
Aglyptodactylus laticeps
Boophis pauliani
Boophis lichenoides
Boophis calcaratus
Boophis guibei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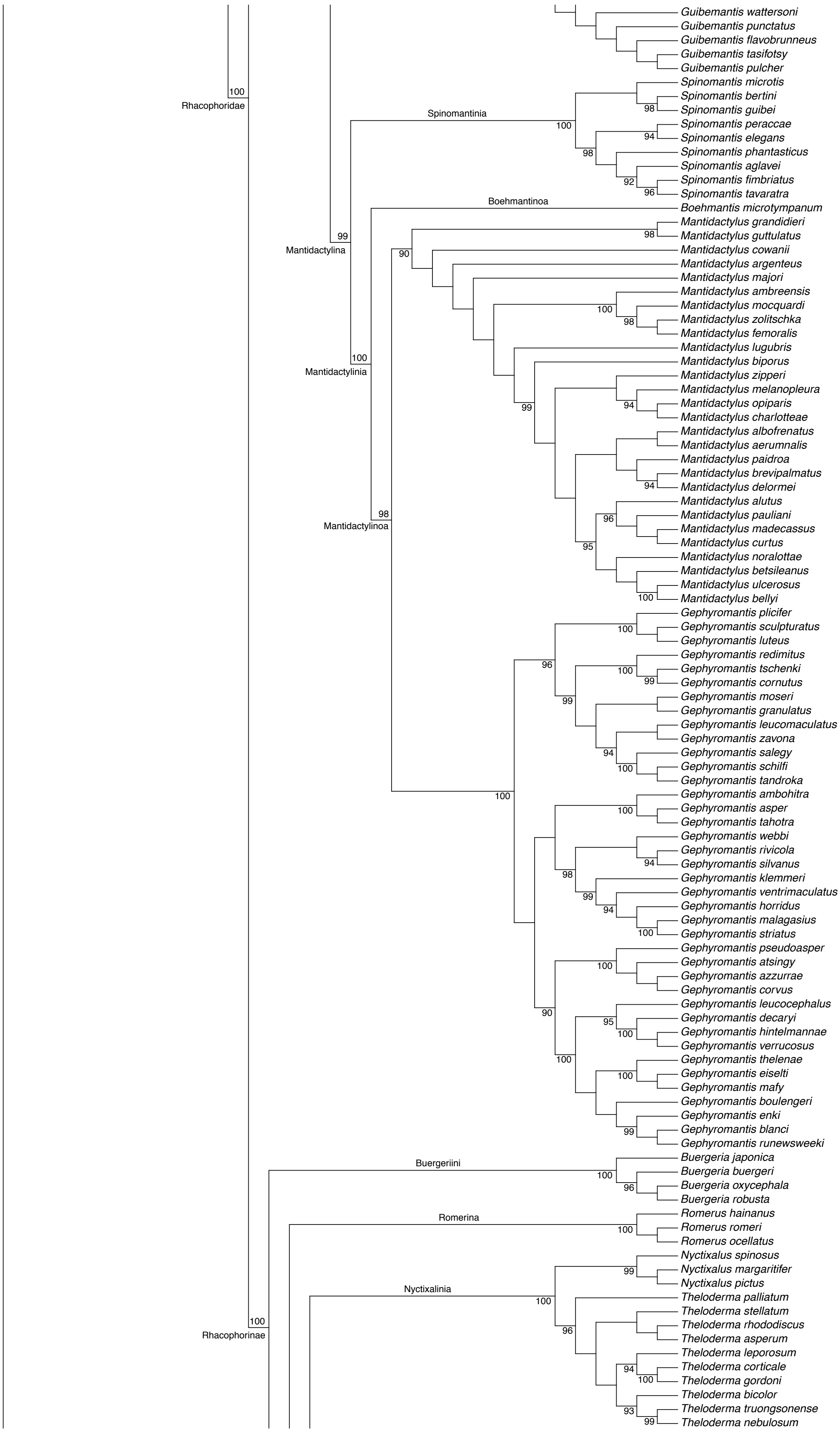
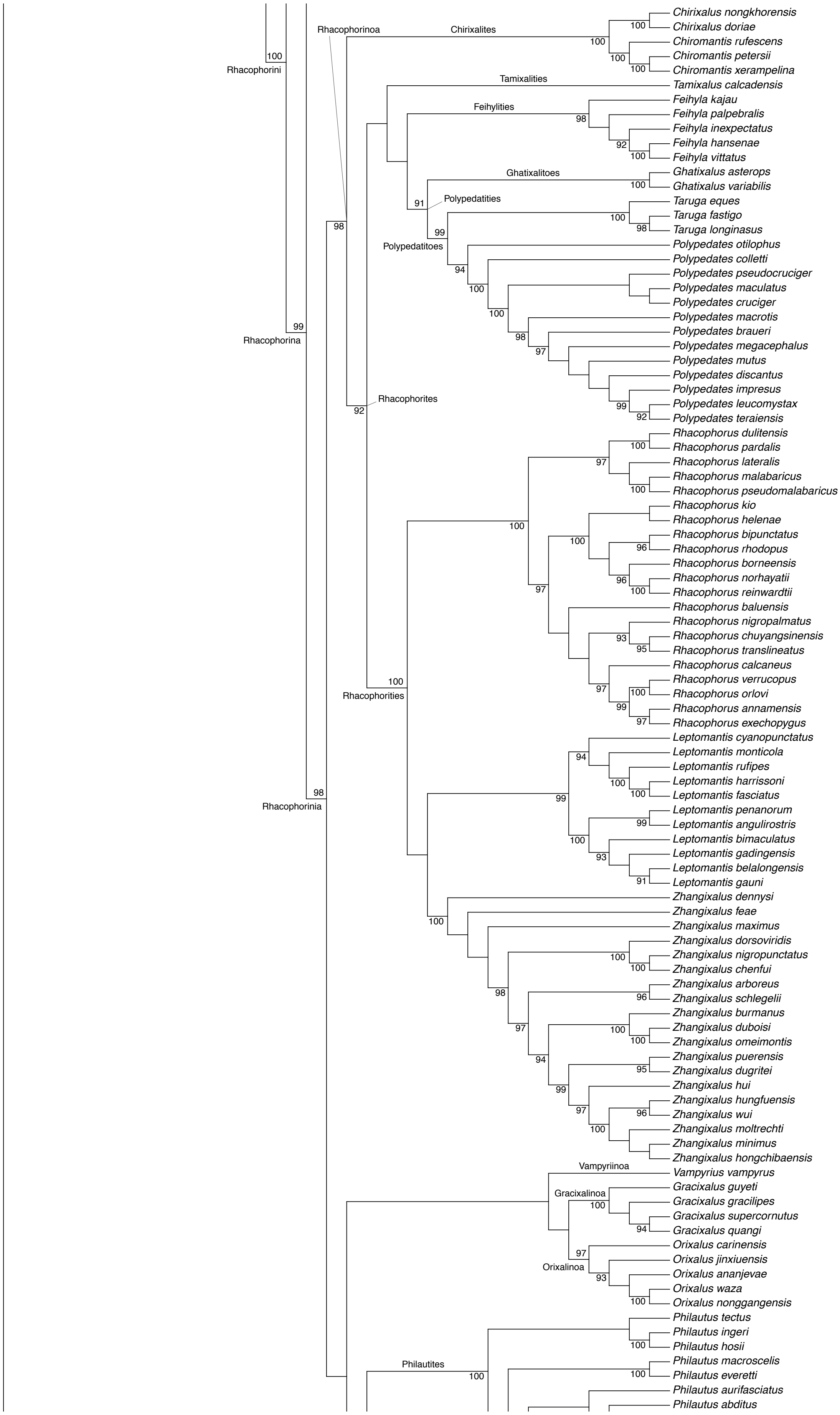
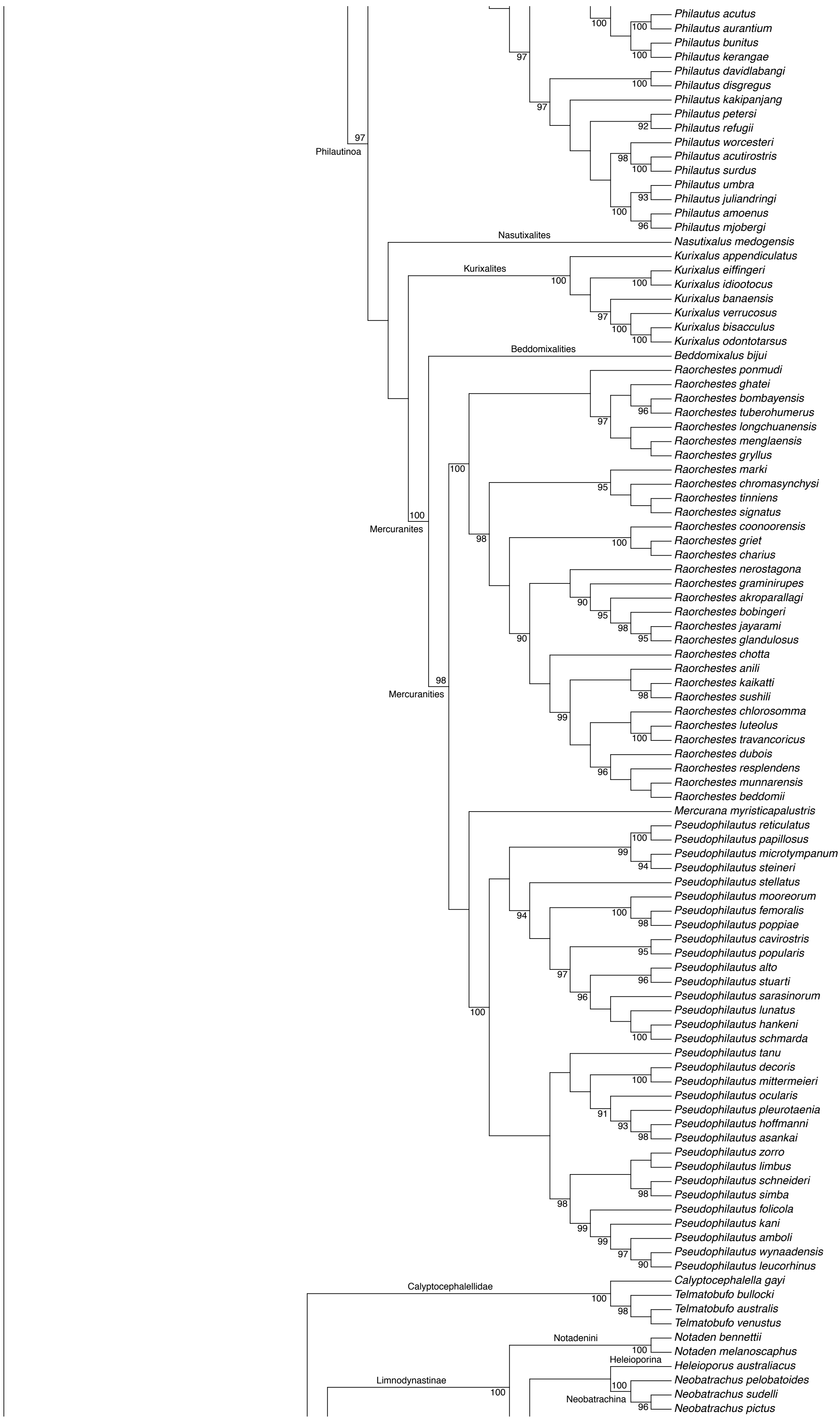
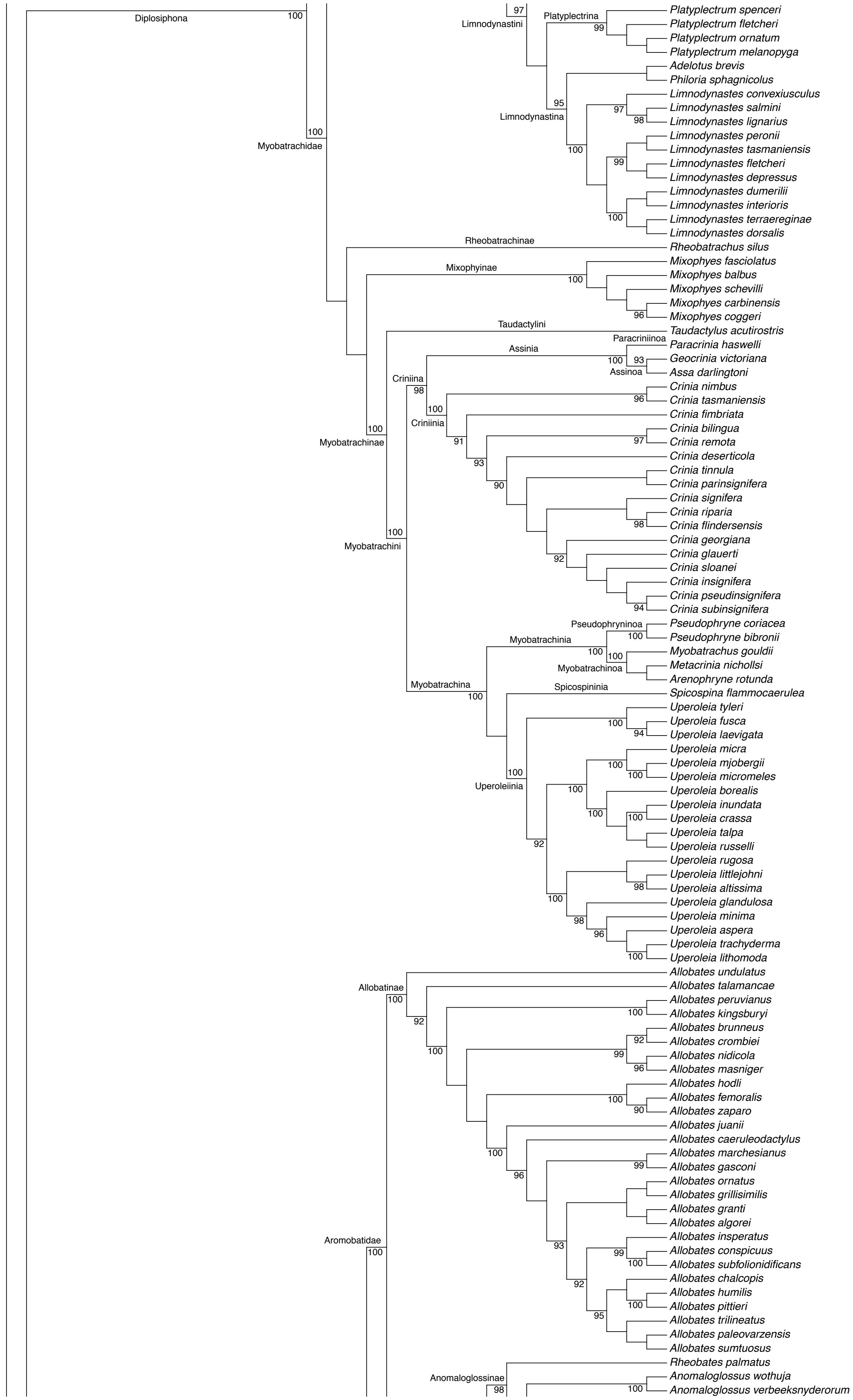
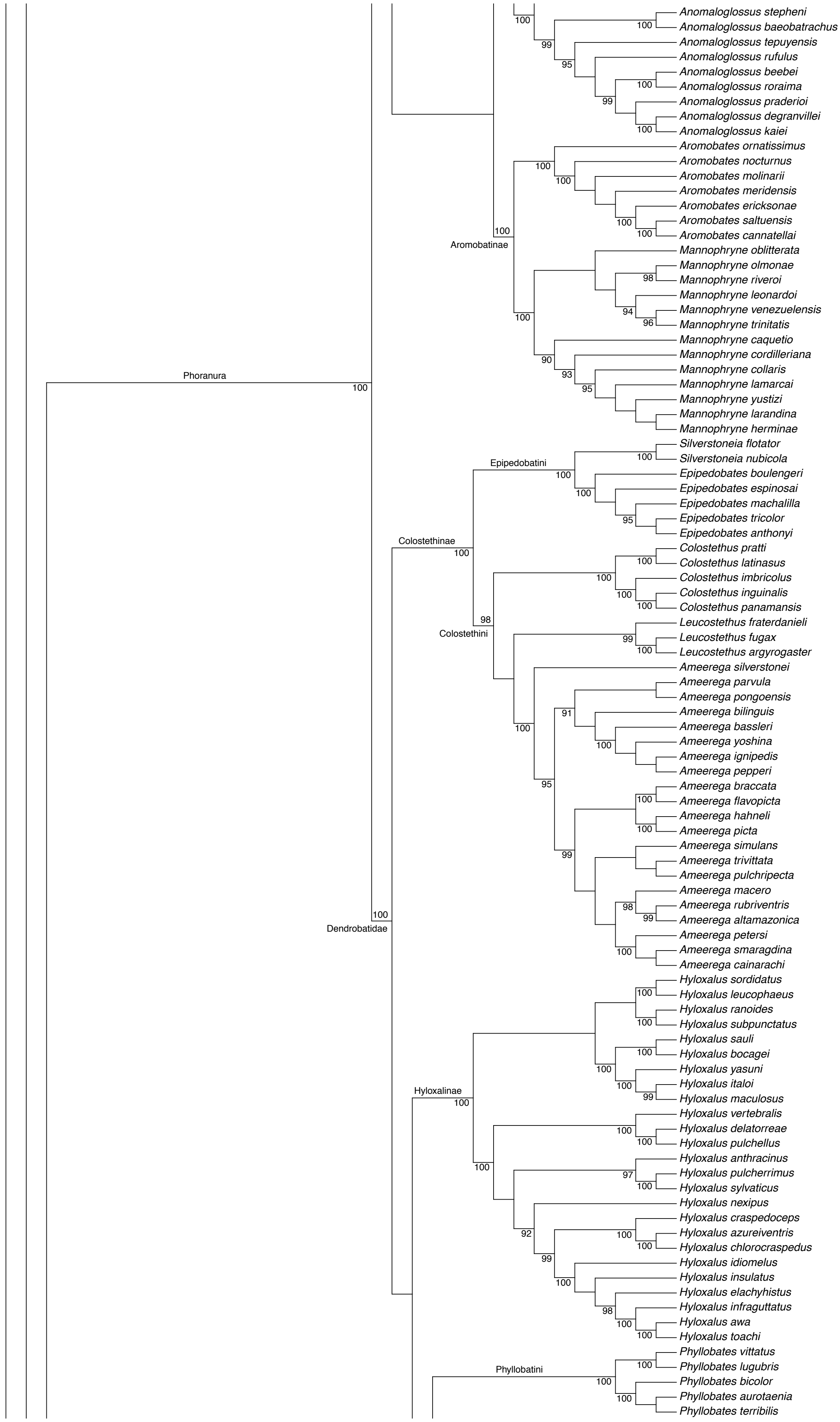
Boophis xerophilus
Boophis doulioti
Boophis tephraeomystax
Boophini
Boophis opisthodon
Boophis albilabris
Boophis occidentalis
Boophis periegetes
Boophis tasymena
Boophis viridis
Boophis bottae
Boophis erythrodactylus
Boophis rappiodes
Boophis marojezensis
Boophis vittatus
Mantellinae
Boophis ulftunni
Boophis baetkei
Boophis microtympanum
Boophis williamsi
Boophis picturatus
Boophis majori
Boophis narinsi
Boophis lilianae
Boophis laurenti
Boophis rhodoscelis
Boophis andrangoloaka
Boophis miniatus
Boophis pyrrhus
Boophis haematopus
Boophis feonnyala
Boophis arcanus
Boophis blommersae
Boophis sibilans
Boophis andreonei
Boophis schuboeae
Boophis ankaratra
Boophis jaegeri
Boophis tampoka
Boophis albipunctatus
Boophis englaenderi
Boophis septentrionalis
Boophis anjanaharibeensis
Boophis mandraka
Boophis liami
Boophis sambirano
Boophis luteus
Boophis roseipalmatus
Boophis madagascariensis
Boophis luciae
Boophis elenae
Boophis andohahela
Boophis axelmeyeri
Boophis rufioculis
Boophis burgeri
Boophis reticulatus
Boophis fayi
Boophis popi
Boophis boehmei
Boophis quasiboehmei
Boophis goudotii
Boophis obscurus
Boophis entingae
Boophis brachychir
Tsingymantini
Tsingymantis antitra
Mantellinia
Wakea madinika
Mantella bernhardi
Mantella cowanii
Mantella baroni
Mantella haraldmeieri
Mantella nigricans
Mantella madagascariensis
Mantella pulchra
Mantella aurantiaca
Mantella crocea
Mantella milotympanum
Mantella laevigata
Mantella manery
Mantellina
Mantella expectata
Mantella betsileo
Mantella ebenaui
Mantella viridis
Blommersia grandisonae
Blommersia angolafa
Blommersia sarotra
Blommersia kely
Blommersia wittei
Blommersia domerguei
Blommersia variabilis
Blommersia blommersae
Blommersiinia
Blommersia galani
Blommersia dejongi
Guibemantis depressiceps
Guibemantis kathrinae
Guibemantis tornieri
Guibemantis timidus
Guibemantis albolineatus
Guibemantis methueni
Mantellini
Guibemantis bicalcaratus
Guibemantis liber


Guibemantis wattersoni
Guibemantis punctatus
Guibemantis flavobrunneus
Guibemantis tasifotsy
Guibemantis pulcher
Rhacophoridae
Spinomantinia
Spinomantis microtis
Spinomantis bertini
Spinomantis guibei
Spinomantis peraccae
Spinomantis elegans
Spinomantis phantasticus
Spinomantis aglavei
Spinomantis fimbriatus
Spinomantis tavaratra
Boehmantinoa
Boehmantis microtympanum
Mantidactylina
Mantidactylus grandidieri
Mantidactylus guttulatus
Mantidactylus cowanii
Mantidactylus argenteus
Mantidactylus majori
Mantidactylus ambreensis
Mantidactylus mocquardi
Mantidactylus zolitschka
Mantidactylus femoralis
Mantidactylinia
Mantidactylus lugubris
Mantidactylus biporus
Mantidactylus zipperi
Mantidactylus melanopleura
Mantidactylus opiparis
Mantidactylus charlotteae
Mantidactylus albofrenatus
Mantidactylus aerumnalis
Mantidactylus paidroa
Mantidactylus brevipalmatus
Mantidactylus delormei
Mantidactylinoa
Mantidactylus alutus
Mantidactylus pauliani
Mantidactylus madecassus
Mantidactylus curtus
Mantidactylus noralottae
Mantidactylus betsileanus
Mantidactylus ulcerosus
Mantidactylus bellyi
Gephyromantis plicifer
Gephyromantis sculpturatus
Gephyromantis luteus
Gephyromantis redimitus
Gephyromantis tschenki
Gephyromantis cornutus
Gephyromantis moseri
Gephyromantis granulatus
Gephyromantis leucomaculatus
Gephyromantis zavona
Gephyromantis salegy
Gephyromantis schilfi
Gephyromantis tandroka
Gephyromantis ambohitra
Gephyromantis asper
Gephyromantis tahotra
Gephyromantis webbi
Gephyromantis rivicola
Gephyromantis silvanus
Gephyromantis klemmeri
Gephyromantis ventrimaculatus
Gephyromantis horridus
Gephyromantis malagasius
Gephyromantis striatus
Gephyromantis pseudoasper
Gephyromantis atsingy
Gephyromantis azzurrae
Gephyromantis corvus
Gephyromantis leucocephalus
Gephyromantis decaryi
Gephyromantis hintelmannae
Gephyromantis verrucosus
Gephyromantis thelenae
Gephyromantis eiselti
Gephyromantis mafy
Gephyromantis boulengeri
Gephyromantis enki
Gephyromantis blanci
Gephyromantis runewsweeki
Buergeriini
Buergeria japonica
Buergeria buergeri
Buergeria oxycephala
Buergeria robusta
Romerina
Romerus hainanus
Romerus romeri
Romerus ocellatus
Nyctixalinia
Nyctixalus spinosus
Nyctixalus margaritifer
Nyctixalus pictus
Rhacophorinae
Theloderma palliatum
Theloderma stellatum
Theloderma rhododiscus
Theloderma asperum
Theloderma leporosum
Theloderma corticale
Theloderma gordoni
Theloderma bicolor
Theloderma truongsonense
Theloderma nebulosum

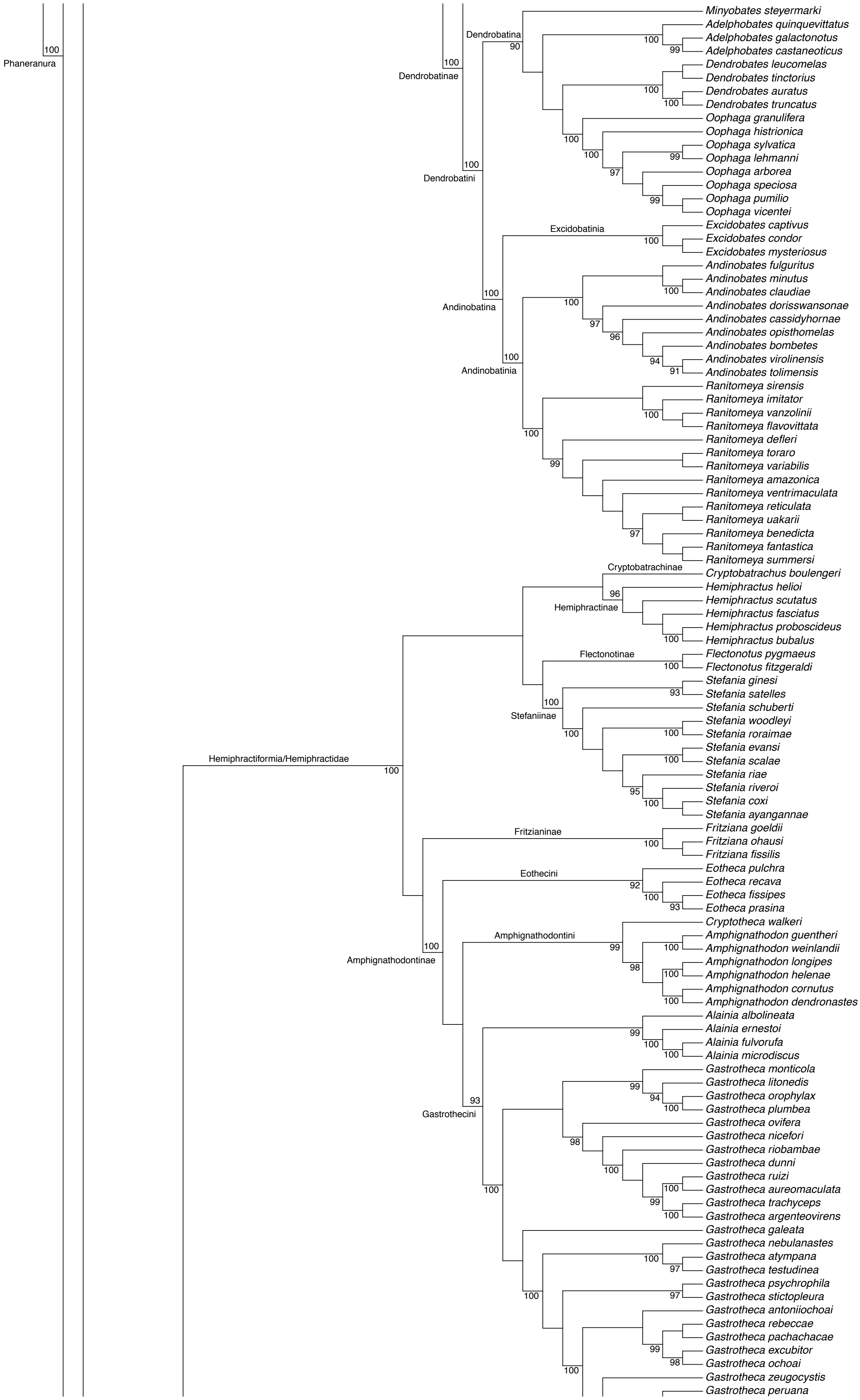

Rhacophorini
Rhacophorina
Rhacophorinia
Rhacophorinoa
Chirixalites
Chirixalus nongkhorensis
Chirixalus doriae
Chiromantis rufescens
Chiromantis petersii
Chiromantis xerampelina
Tamixalities
Tamixalus calcadensis
Feihylities
Feihyla kajau
Feihyla palpebralis
Feihyla inexpectatus
Feihyla hansenae
Feihyla vittatus
Ghatixalitoes
Ghatixalus asterops
Ghatixalus variabilis
Polypedatities
Taruga eques
Taruga fastigo
Taruga longinasus
Polypedatitoes
Polypedates otilophus
Polypedates colletti
Polypedates pseudocruciger
Polypedates maculatus
Polypedates cruciger
Polypedates macrotis
Polypedates braueri
Polypedates megacephalus
Polypedates mutus
Polypedates discantus
Polypedates impresus
Polypedates leucomystax
Polypedates teraiensis
Rhacophorites
Rhacophorus dulitensis
Rhacophorus pardalis
Rhacophorus lateralis
Rhacophorus malabaricus
Rhacophorus pseudomalabaricus
Rhacophorus kio
Rhacophorus helenae
Rhacophorus bipunctatus
Rhacophorus rhodopus
Rhacophorus borneensis
Rhacophorus norhayatii
Rhacophorus reinwardtii
Rhacophorus baluensis
Rhacophorus nigropalmatus
Rhacophorus chuyangsinensis
Rhacophorus translineatus
Rhacophorus calcaneus
Rhacophorus verrucopus
Rhacophorus orlovi
Rhacophorus annamensis
Rhacophorus exechopygus
Rhacophorities
Leptomantis cyanopunctatus
Leptomantis monticola
Leptomantis rufipes
Leptomantis harrissoni
Leptomantis fasciatus
Leptomantis penanorum
Leptomantis angulirostris
Leptomantis bimaculatus
Leptomantis gadingensis
Leptomantis belalongensis
Leptomantis gauni
Zhangixalus dennysi
Zhangixalus feae
Zhangixalus maximus
Zhangixalus dorsoviridis
Zhangixalus nigropunctatus
Zhangixalus chenfui
Zhangixalus arboreus
Zhangixalus schlegelii
Zhangixalus burmanus
Zhangixalus duboisi
Zhangixalus omeimontis
Zhangixalus puerensis
Zhangixalus dugritei
Zhangixalus hui
Zhangixalus hungfuensis
Zhangixalus wui
Zhangixalus moltrechti
Zhangixalus minimus
Zhangixalus hongchibaensis
Vampyriinoa
Vampyrius vampyrus
Gracixalinoa
Gracixalus guyeti
Gracixalus gracilipes
Gracixalus supercornutus
Gracixalus quangi
Orixalinoa
Orixalus carinensis
Orixalus jinxiuensis
Orixalus ananjevae
Orixalus waza
Orixalus nonggangensis
Philautites
Philautus tectus
Philautus ingeri
Philautus hosii
Philautus macroscelis
Philautus everetti
Philautus aurifasciatus
Philautus abditus

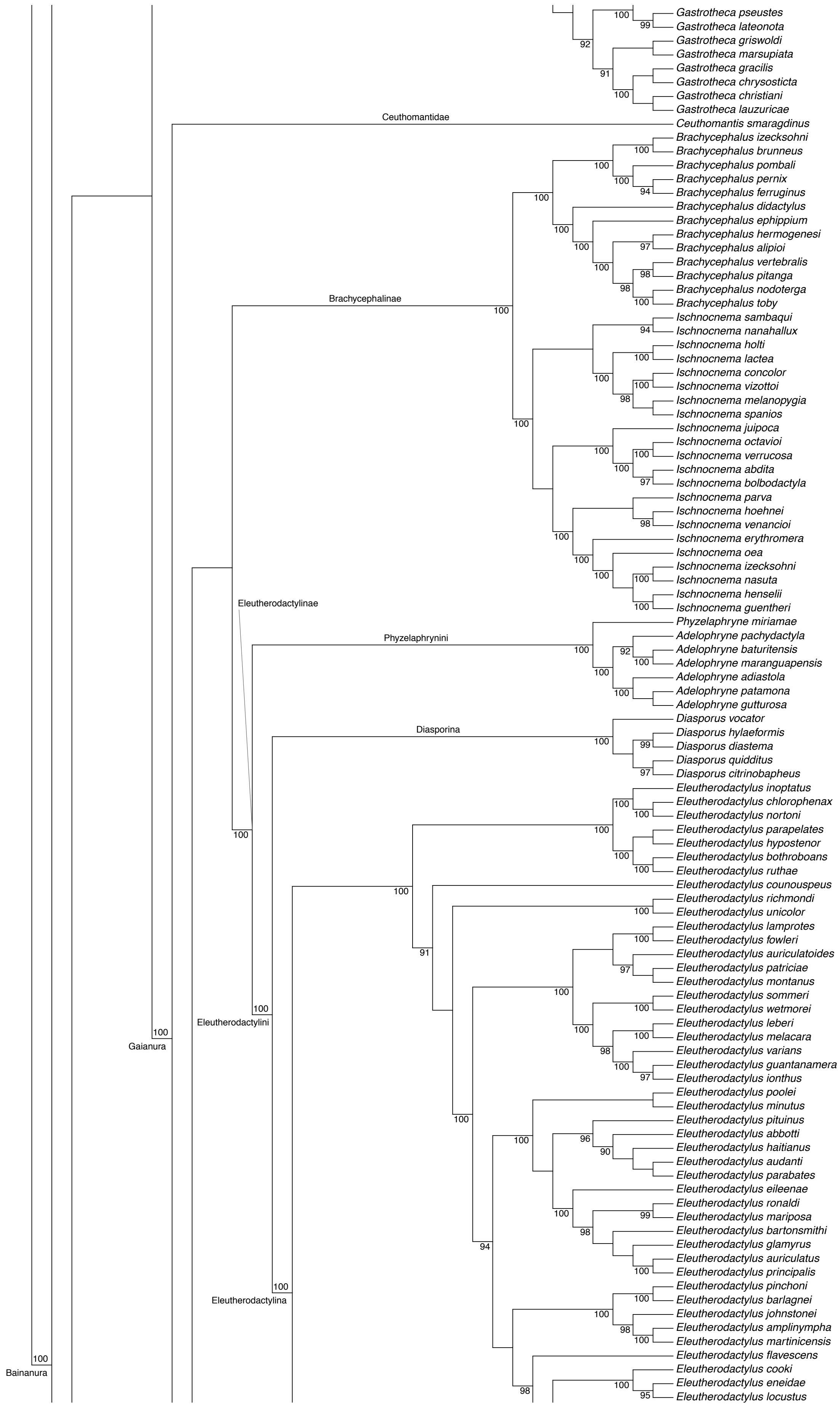

Philautus acutus
Philautus aurantium
Philautus bunitus
Philautus kerangae
Philautus davidlabangi
Philautus disgregus
Philautus kakipanjang
Philautus petersi
Philautus refugii
Philautus worcesteri
Philautus acutirostris
Philautus surdus
Philautus umbra
Philautus juliandringi
Philautus amoenus
Philautus mjobergi
Philautinoa
Nasutixalites
Nasutixalus medogensis
Kurixalites
Kurixalus appendiculatus
Kurixalus eiffingeri
Kurixalus idiootocus
Kurixalus banaensis
Kurixalus verrucosus
Kurixalus bisacculus
Kurixalus odontotarsus
Beddomixalities
Beddomixalus bijui
Raorchestes ponmudi
Raorchestes ghatei
Raorchestes bombayensis
Raorchestes tuberohumerus
Raorchestes longchuanensis
Raorchestes menglaensis
Raorchestes gryllus
Raorchestes marki
Raorchestes chromasynchysi
Raorchestes tinniens
Raorchestes signatus
Mercuranites
Raorchestes coonoorensis
Raorchestes griet
Raorchestes charius
Raorchestes nerostagona
Raorchestes graminirupes
Raorchestes akroparallagi
Raorchestes bobingeri
Raorchestes jayarami
Raorchestes glandulosus
Raorchestes chotta
Raorchestes anili
Raorchestes kaikatti
Raorchestes sushili
Mercuranities
Raorchestes chlorosomma
Raorchestes luteolus
Raorchestes travancoricus
Raorchestes dubois
Raorchestes resplendens
Raorchestes munnarensis
Raorchestes beddomii
Mercurana myristicapalustris
Pseudophilautus reticulatus
Pseudophilautus papillosus
Pseudophilautus microtympanum
Pseudophilautus steineri
Pseudophilautus stellatus
Pseudophilautus mooreorum
Pseudophilautus femoralis
Pseudophilautus poppiae
Pseudophilautus cavirostris
Pseudophilautus popularis
Pseudophilautus alto
Pseudophilautus stuarti
Pseudophilautus sarasinorum
Pseudophilautus lunatus
Pseudophilautus hankeni
Pseudophilautus schmarda
Pseudophilautus tanu
Pseudophilautus decoris
Pseudophilautus mittermeieri
Pseudophilautus ocularis
Pseudophilautus pleurotaenia
Pseudophilautus hoffmanni
Pseudophilautus asankai
Pseudophilautus zorro
Pseudophilautus limbus
Pseudophilautus schneideri
Pseudophilautus simba
Pseudophilautus folicola
Pseudophilautus kani
Pseudophilautus amboli
Pseudophilautus wynaadensis
Pseudophilautus leucorhinus
Calyptocephalellidae
Calyptocephalella gayi
Telmatobufo bullocki
Telmatobufo australis
Telmatobufo venustus
Notadenini
Notaden bennettii
Notaden melanoscaphus
Heleioporina
Heleioporus australiacus
Limnodynastinae
Neobatrachus pelobatoides
Neobatrachina
Neobatrachus sudelli
Neobatrachus pictus


Diplosiphona
Myobatrachidae
Limnodynastini
Platyplectrina
Limnodynastina
Platyplectrum spenceri
Platyplectrum fletcheri
Platyplectrum ornatum
Platyplectrum melanopyga
Adelotus brevis
Philoria sphagnicolus
Limnodynastes convexiusculus
Limnodynastes salmini
Limnodynastes lignarius
Limnodynastes peronii
Limnodynastes tasmaniensis
Limnodynastes fletcheri
Limnodynastes depressus
Limnodynastes dumerilii
Limnodynastes interioris
Limnodynastes terraereginae
Limnodynastes dorsalis
Rheobatrachinae
Rheobatrachus silus
Mixophyinae
Mixophyes fasciolatus
Mixophyes balbus
Mixophyes schevilli
Mixophyes carbinensis
Mixophyes coggeri
Taudactylini
Taudactylus acutirostris
Paracriniinoa
Paracrinia haswelli
Assinia
Geocrinia victoriana
Assinoa
Assa darlingtoni
Criniina
Criniinia
Myobatrachinae
Myobatrachini
Crinia nimbus
Crinia tasmaniensis
Crinia fimbriata
Crinia bilingua
Crinia remota
Crinia deserticola
Crinia tinnula
Crinia parinsignifera
Crinia signifera
Crinia riparia
Crinia flindersensis
Crinia georgiana
Crinia glauerti
Crinia sloanei
Crinia insignifera
Crinia pseudinsignifera
Crinia subinsignifera
Pseudophryninoa
Myobatrachinia
Pseudophryne coriacea
Pseudophryne bibronii
Myobatrachinoa
Myobatrachus gouldii
Metacrinia nichollsi
Arenophryne rotunda
Myobatrachina
Spicospininia
Spicospina flammocaerulea
Uperoleiinia
Uperoleia tyleri
Uperoleia fusca
Uperoleia laevigata
Uperoleia micra
Uperoleia mjobergii
Uperoleia micromeles
Uperoleia borealis
Uperoleia inundata
Uperoleia crassa
Uperoleia talpa
Uperoleia russelli
Uperoleia rugosa
Uperoleia littlejohni
Uperoleia altissima
Uperoleia glandulosa
Uperoleia minima
Uperoleia aspera
Uperoleia trachyderma
Uperoleia lithomoda
Allobatinae
Aromobatidae
Allobates undulatus
Allobates talamancae
Allobates peruvianus
Allobates kingsburyi
Allobates brunneus
Allobates crombiei
Allobates nidicola
Allobates masniger
Allobates hodli
Allobates femoralis
Allobates zaparo
Allobates juanii
Allobates caeruleodactylus
Allobates marchesianus
Allobates gasconi
Allobates ornatus
Allobates grillisimilis
Allobates granti
Allobates algorei
Allobates insperatus
Allobates conspicuus
Allobates subfolionidificans
Allobates chalcopis
Allobates humilis
Allobates pittieri
Allobates trilineatus
Allobates paleovarzensis
Allobates sumtuosus
Anomaloglossinae
Rheobates palmatus
Anomaloglossus wothuja
Anomaloglossus verbeeksnyderorum

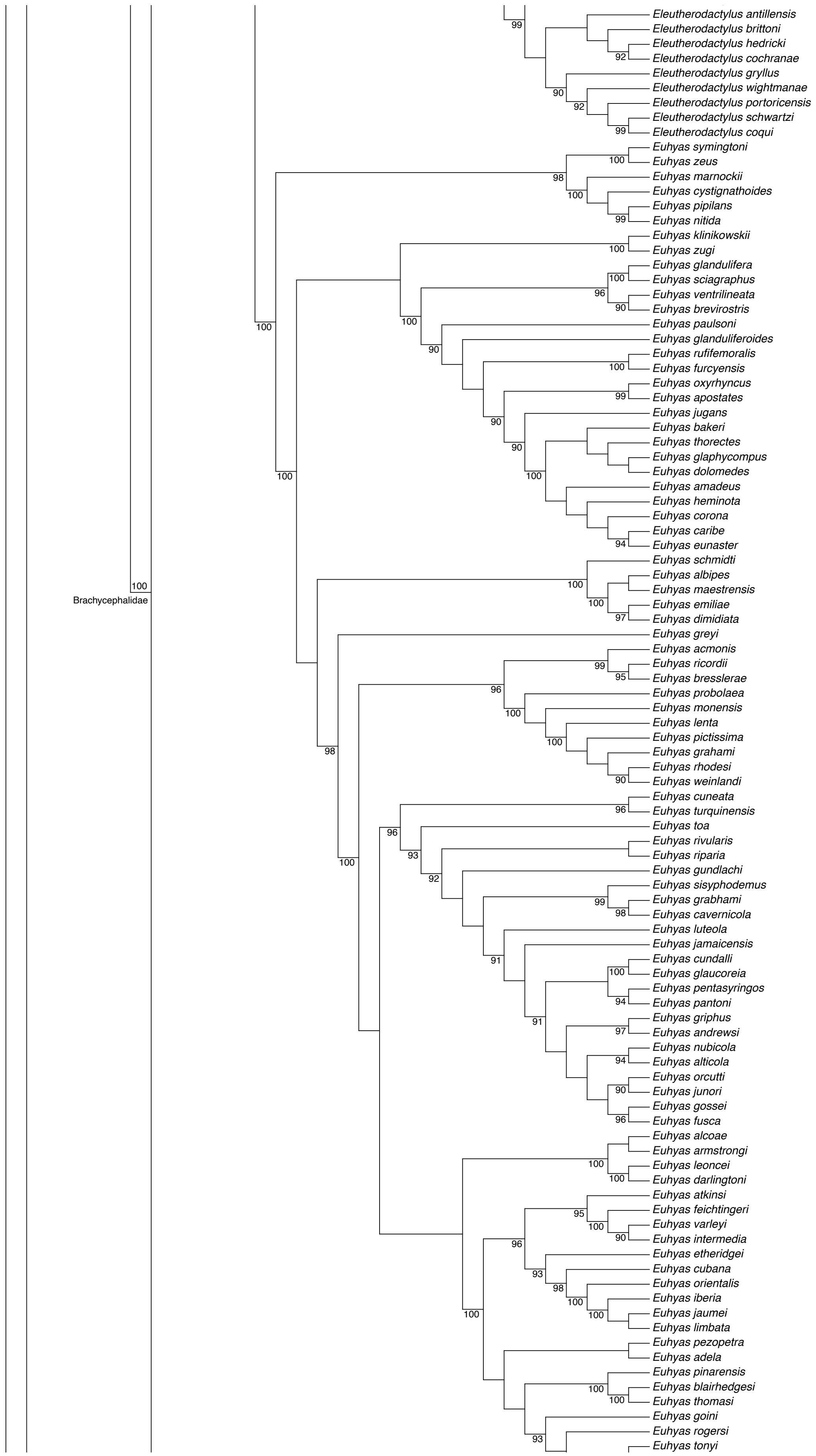


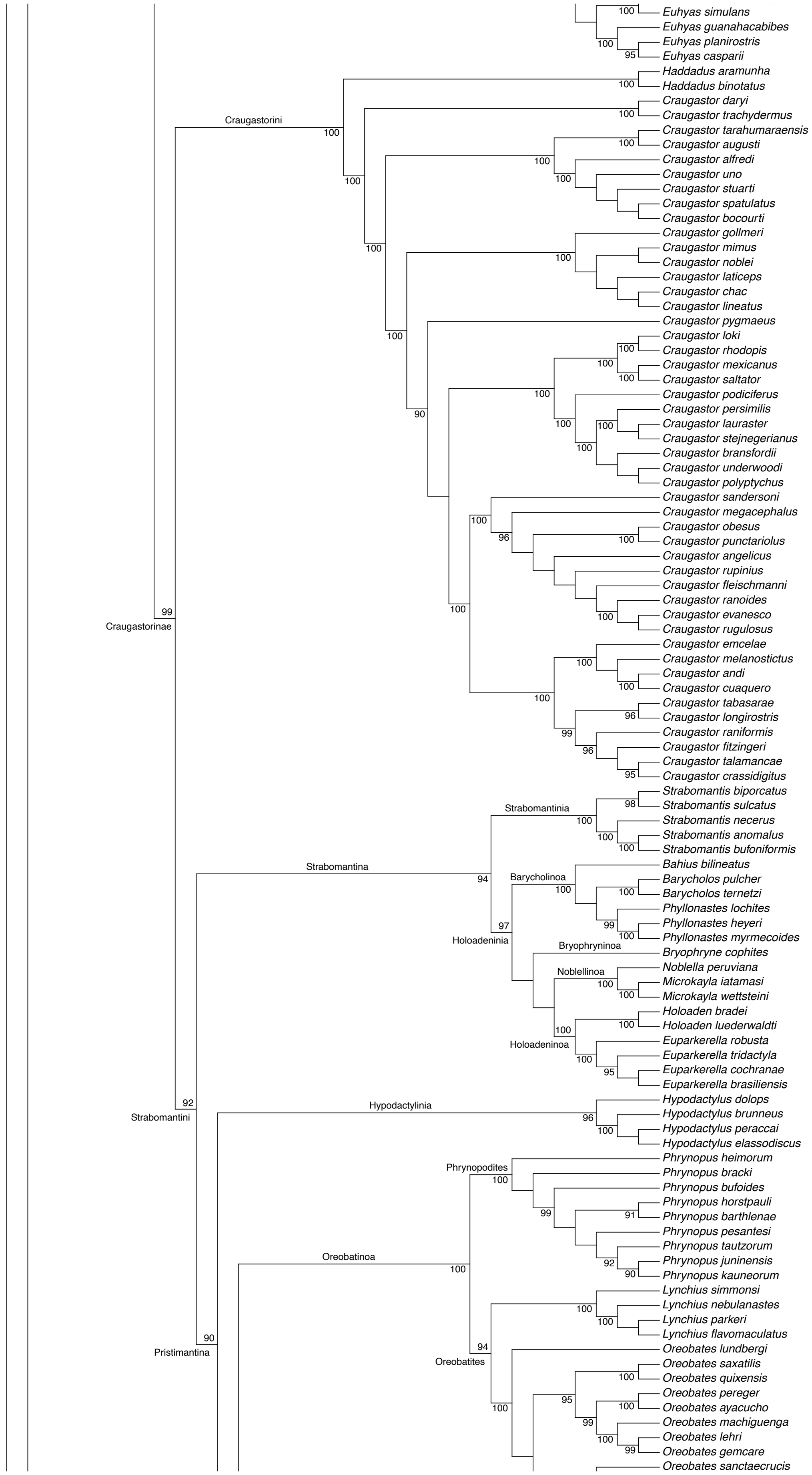
Anomaloglossus stepheni
Anomaloglossus baeobatrachus
Anomaloglossus tepuyensis
Anomaloglossus rufulus
Anomaloglossus beebei
Anomaloglossus roraima
Anomaloglossus praderioi
Anomaloglossus degranvillei
Anomaloglossus kaiei
Aromobates ornatissimus
Aromobates nocturnus
Aromobates molinarii
Aromobates meridensis
Aromobates ericksonae
Aromobates saltuensis
Aromobates cannatellai
Aromobatinae
Mannophryne oblitterata
Mannophryne olmonae
Mannophryne riveroi
Mannophryne leonardoi
Mannophryne venezuelensis
Mannophryne trinitatis
Mannophryne caquetio
Mannophryne cordilleriana
Mannophryne collaris
Mannophryne lamarcai
Mannophryne yustizi
Mannophryne larandina
Mannophryne herminae
Phoranura
Silverstoneia flotator
Silverstoneia nubicola
Epipedobatini
Epipedobates boulengeri
Epipedobates espinosai
Epipedobates machalilla
Epipedobates tricolor
Epipedobates anthonyi
Colostethinae
Colostethus pratti
Colostethus latinasus
Colostethus imbricolus
Colostethus inguinalis
Colostethus panamansis
Colostethini
Leucostethus fraterdanieli
Leucostethus fugax
Leucostethus argyrogaster
Ameerega silverstonei
Ameerega parvula
Ameerega pongoensis
Ameerega bilinguis
Ameerega bassleri
Ameerega yoshina
Ameerega ignipedis
Ameerega pepperi
Ameerega braccata
Ameerega flavopicta
Ameerega hahneli
Ameerega picta
Ameerega simulans
Ameerega trivittata
Ameerega pulchripecta
Ameerega macero
Ameerega rubriventris
Ameerega altamazonica
Ameerega petersi
Ameerega smaragdina
Ameerega cainarachi
Dendrobatidae
Hyloxalus sordidatus
Hyloxalus leucophaeus
Hyloxalus ranoides
Hyloxalus subpunctatus
Hyloxalus sauli
Hyloxalus bocagei
Hyloxalus yasuni
Hyloxalus italoi
Hyloxalus maculosus
Hyloxalinae
Hyloxalus vertebralis
Hyloxalus delatorreae
Hyloxalus pulchellus
Hyloxalus anthracinus
Hyloxalus pulcherrimus
Hyloxalus sylvaticus
Hyloxalus nexipus
Hyloxalus craspedoceps
Hyloxalus azureiventris
Hyloxalus chlorocraspedus
Hyloxalus idiomelus
Hyloxalus insulatus
Hyloxalus elachyhistus
Hyloxalus infraguttatus
Hyloxalus awa
Hyloxalus toachi
Phyllobatini
Phyllobates vittatus
Phyllobates lugubris
Phyllobates bicolor
Phyllobates aurotaenia
Phyllobates terribilis


Phaneranura
Dendrobatinae
Dendrobatina
Dendrobatini
Excidobatinia
Andinobatina
Andinobatinia
Minyobates steyermarki
Adelphobates quinquevittatus
Adelphobates galactonotus
Adelphobates castaneoticus
Dendrobates leucomelas
Dendrobates tinctorius
Dendrobates auratus
Dendrobates truncatus
Oophaga granulifera
Oophaga histrionica
Oophaga sylvatica
Oophaga lehmanni
Oophaga arborea
Oophaga speciosa
Oophaga pumilio
Oophaga vicentei
Excidobates captivus
Excidobates condor
Excidobates mysteriosus
Andinobates fulguritus
Andinobates minutus
Andinobates claudiae
Andinobates dorisswansonae
Andinobates cassidyhornae
Andinobates opisthomelas
Andinobates bombetes
Andinobates virolinensis
Andinobates tolimensis
Ranitomeya sirensis
Ranitomeya imitator
Ranitomeya vanzolinii
Ranitomeya flavovittata
Ranitomeya defleri
Ranitomeya toraro
Ranitomeya variabilis
Ranitomeya amazonica
Ranitomeya ventrimaculata
Ranitomeya reticulata
Ranitomeya uakarii
Ranitomeya benedicta
Ranitomeya fantastica
Ranitomeya summersi
Cryptobatrachinae
Hemiphractinae
Flectonotinae
Stefaniinae
Hemiphractiformia/Hemiphractidae
Cryptobatrachus boulengeri
Hemiphractus helioi
Hemiphractus scutatus
Hemiphractus fasciatus
Hemiphractus proboscideus
Hemiphractus bubalus
Flectonotus pygmaeus
Flectonotus fitzgeraldi
Stefania ginesi
Stefania satelles
Stefania schuberti
Stefania woodleyi
Stefania roraimae
Stefania evansi
Stefania scalae
Stefania riae
Stefania riveroi
Stefania coxi
Stefania ayangannae
Fritzianinae
Eothecini
Amphignathodontini
Amphignathodontinae
Gastrothecini
Fritziana goeldii
Fritziana ohausi
Fritziana fissilis
Eotheca pulchra
Eotheca recava
Eotheca fissipes
Eotheca prasina
Cryptotheca walkeri
Amphignathodon guentheri
Amphignathodon weinlandii
Amphignathodon longipes
Amphignathodon helenae
Amphignathodon cornutus
Amphignathodon dendronastes
Alainia albolineata
Alainia ernestoi
Alainia fulvorufa
Alainia microdiscus
Gastrotheca monticola
Gastrotheca litonedis
Gastrotheca orophylax
Gastrotheca plumbea
Gastrotheca ovifera
Gastrotheca nicefori
Gastrotheca riobambae
Gastrotheca dunni
Gastrotheca ruizi
Gastrotheca aureomaculata
Gastrotheca trachyceps
Gastrotheca argenteovirens
Gastrotheca galeata
Gastrotheca nebulanastes
Gastrotheca atympana
Gastrotheca testudinea
Gastrotheca psychrophila
Gastrotheca stictopleura
Gastrotheca antoniiochoai
Gastrotheca rebeccae
Gastrotheca pachachacae
Gastrotheca excubitor
Gastrotheca ochoai
Gastrotheca zeugocystis
Gastrotheca peruana

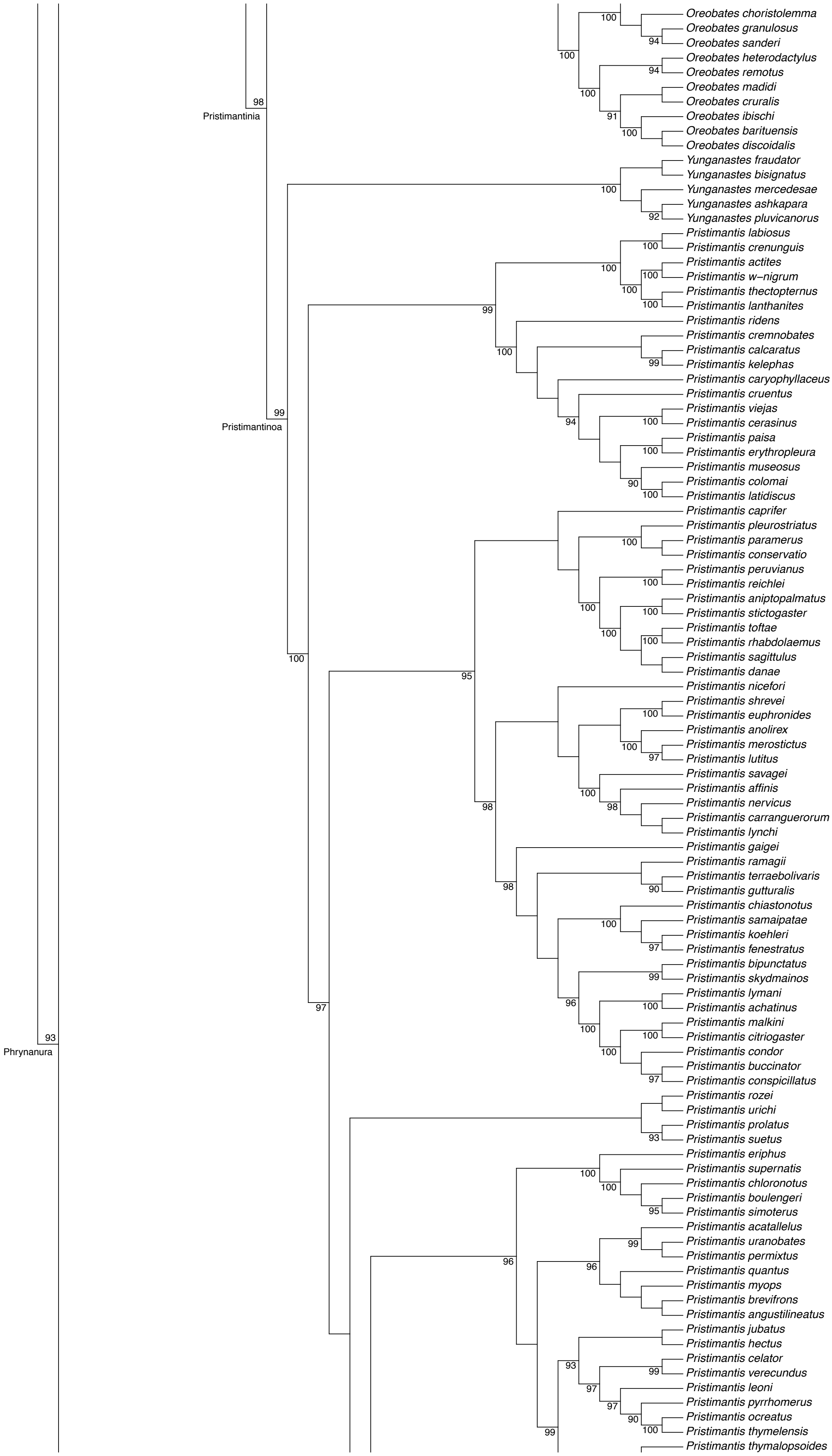


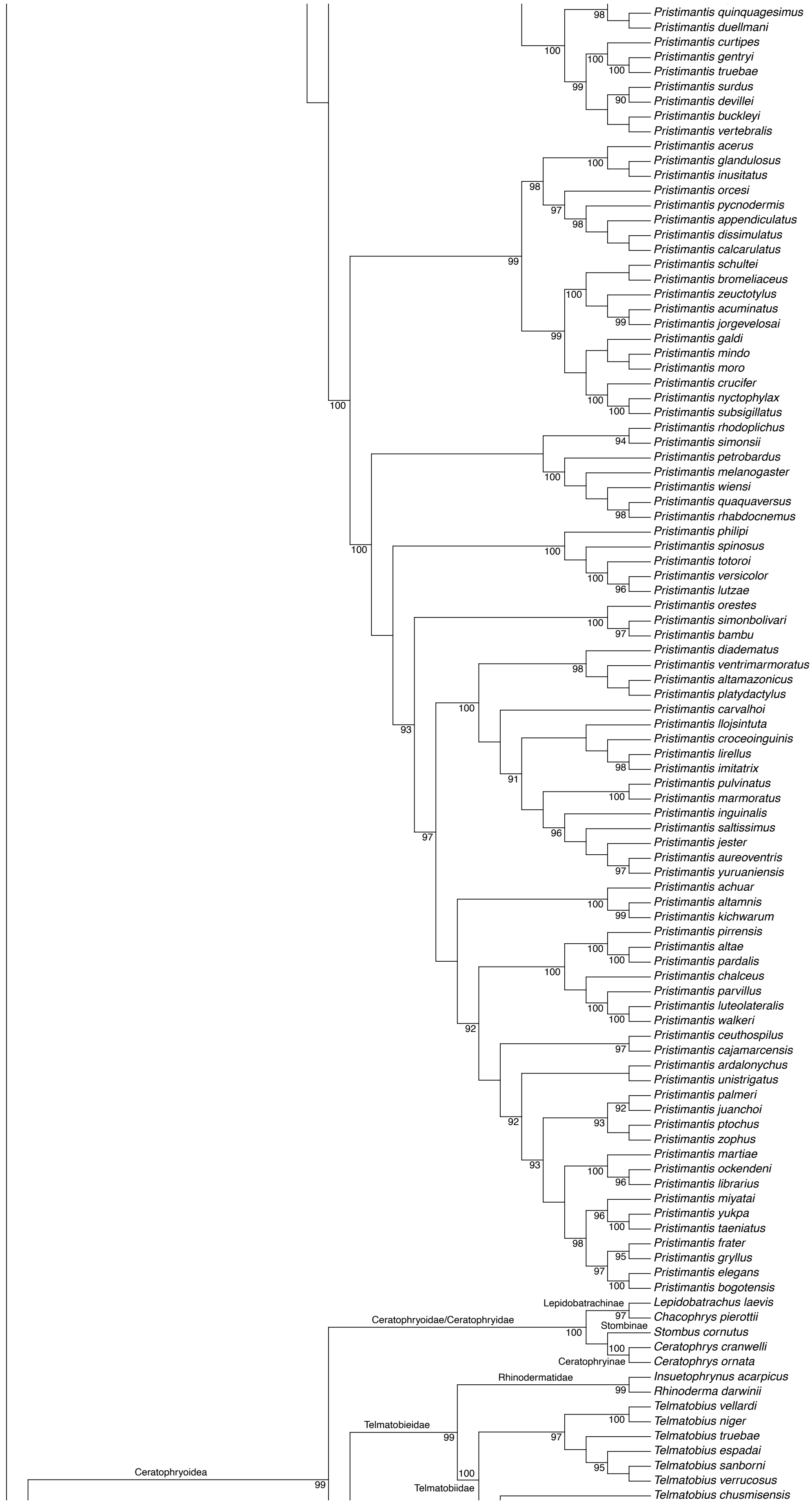
Gastrotheca pseustes
Gastrotheca lateonota
Gastrotheca griswoldi
Gastrotheca marsupiata
Gastrotheca gracilis
Gastrotheca chrysosticta
Gastrotheca christiani
Gastrotheca lauzuricae
Ceuthomantidae
Ceuthomantis smaragdinus
Brachycephalus izecksohni
Brachycephalus brunneus
Brachycephalus pombali
Brachycephalus pernix
Brachycephalus ferruginus
Brachycephalus didactylus
Brachycephalus ephippium
Brachycephalus hermogenesi
Brachycephalus alipioi
Brachycephalus vertebralis
Brachycephalus pitanga
Brachycephalus nodoterga
Brachycephalus toby
Brachycephalinae
Ischnocnema sambaqui
Ischnocnema nanahallux
Ischnocnema holti
Ischnocnema lactea
Ischnocnema concolor
Ischnocnema vizottoi
Ischnocnema melanopygia
Ischnocnema spanios
Ischnocnema juipoca
Ischnocnema octavioi
Ischnocnema verrucosa
Ischnocnema abdita
Ischnocnema bolbodactyla
Ischnocnema parva
Ischnocnema hoehnei
Ischnocnema venancioi
Ischnocnema erythromera
Ischnocnema oea
Ischnocnema izecksohni
Ischnocnema nasuta
Ischnocnema henselii
Ischnocnema guentheri
Eleutherodactylinae
Phyzelaphrynini
Phyzelaphryne miriamae
Adelophryne pachydactyla
Adelophryne baturitensis
Adelophryne maranguapensis
Adelophryne adiastola
Adelophryne patamona
Adelophryne gutturosa
Diasporina
Diasporus vocator
Diasporus hylaeformis
Diasporus diastema
Diasporus quidditus
Diasporus citrinobapheus
Eleutherodactylus inoptatus
Eleutherodactylus chlorophenax
Eleutherodactylus nortoni
Eleutherodactylus parapelates
Eleutherodactylus hypostenor
Eleutherodactylus bothroboans
Eleutherodactylus ruthae
Eleutherodactylus counouspeus
Eleutherodactylus richmondi
Eleutherodactylus unicolor
Eleutherodactylus lamprotes
Eleutherodactylus fowleri
Eleutherodactylus auriculatoides
Eleutherodactylus patriciae
Eleutherodactylus montanus
Eleutherodactylus sommeri
Eleutherodactylus wetmorei
Eleutherodactylus leberi
Eleutherodactylus melacara
Eleutherodactylus varians
Eleutherodactylus guantanamera
Eleutherodactylus ionthus
Eleutherodactylini
Gaianura
Eleutherodactylus poolei
Eleutherodactylus minutus
Eleutherodactylus pituinus
Eleutherodactylus abbotti
Eleutherodactylus haitianus
Eleutherodactylus audanti
Eleutherodactylus parabates
Eleutherodactylus eileenae
Eleutherodactylus ronaldi
Eleutherodactylus mariposa
Eleutherodactylus bartonsmithi
Eleutherodactylus glamyrus
Eleutherodactylus auriculatus
Eleutherodactylus principalis
Eleutherodactylina
Eleutherodactylus pinchoni
Eleutherodactylus barlagnei
Eleutherodactylus johnstonei
Eleutherodactylus amplinympha
Eleutherodactylus martinicensis
Eleutherodactylus flavescens
Bainanura
Eleutherodactylus cooki
Eleutherodactylus eneidae
Eleutherodactylus locustus

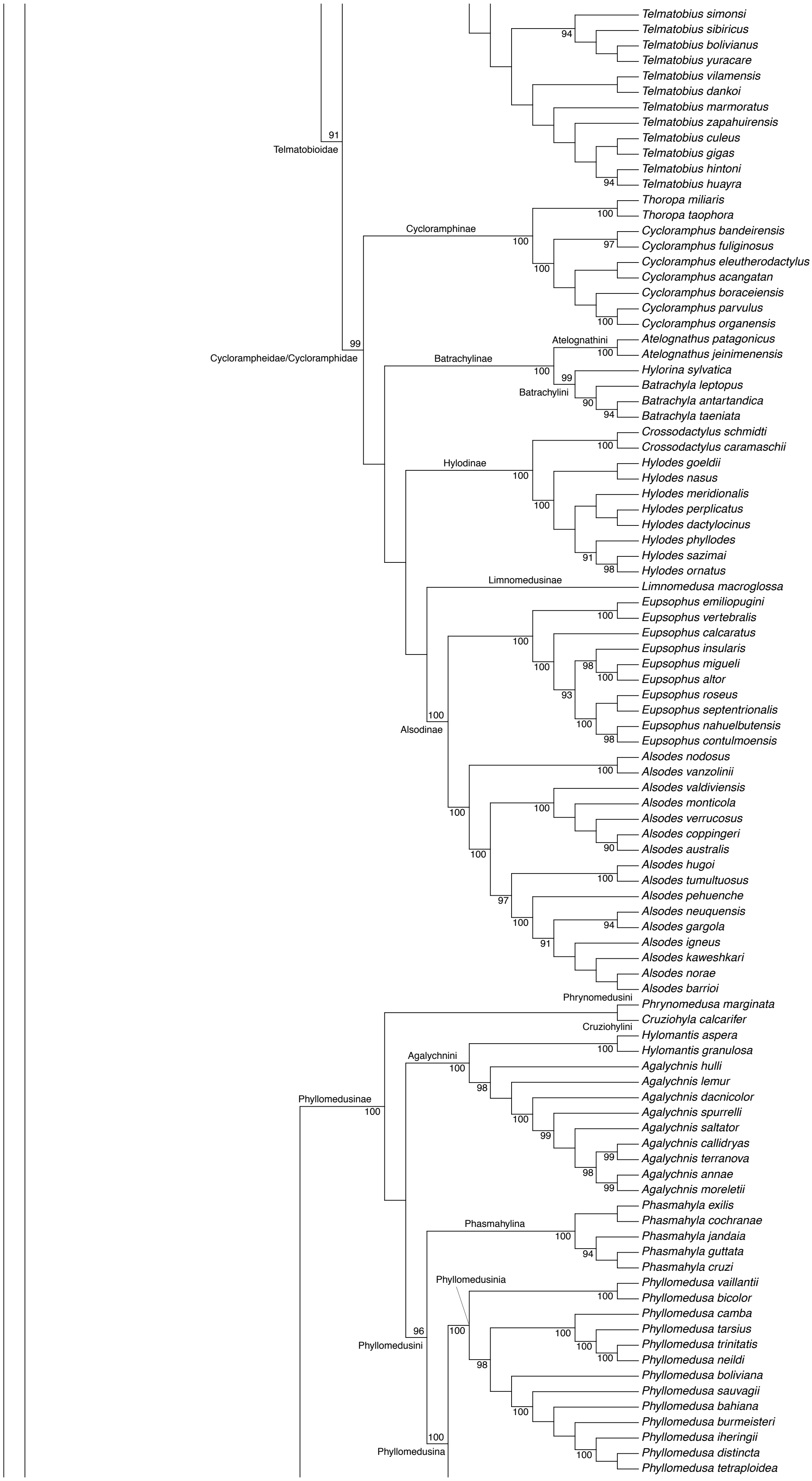

Eleutherodactylus antillensis
Eleutherodactylus brittoni
Eleutherodactylus hedricki
Eleutherodactylus cochranae
Eleutherodactylus gryllus
Eleutherodactylus wightmanae
Eleutherodactylus portoricensis
Eleutherodactylus schwartzi
Eleutherodactylus coqui
Euhyas symingtoni
Euhyas zeus
Euhyas marnockii
Euhyas cystignathoides
Euhyas pipilans
Euhyas nitida
Euhyas klinikowskii
Euhyas zugi
Euhyas glandulifera
Euhyas sciagraphus
Euhyas ventrilineata
Euhyas brevirostris
Euhyas paulsoni
Euhyas glanduliferoides
Euhyas rufifemoralis
Euhyas furcyensis
Euhyas oxyrhyncus
Euhyas apostates
Euhyas jugans
Euhyas bakeri
Euhyas thorectes
Euhyas glaphycompus
Euhyas dolomedes
Euhyas amadeus
Euhyas heminota
Euhyas corona
Euhyas caribe
Euhyas eunaster
Euhyas schmidti
Euhyas albipes
Euhyas maestrensis
Euhyas emiliae
Euhyas dimidiata
Euhyas greyi
Euhyas acmonis
Euhyas ricordii
Euhyas bresslerae
Euhyas probolaea
Euhyas monensis
Euhyas lenta
Euhyas pictissima
Euhyas grahami
Euhyas rhodesi
Euhyas weinlandi
Euhyas cuneata
Euhyas turquinensis
Euhyas toa
Euhyas rivularis
Euhyas riparia
Euhyas gundlachi
Euhyas sisyphodemus
Euhyas grabhami
Euhyas cavernicola
Euhyas luteola
Euhyas jamaicensis
Euhyas cundalli
Euhyas glaucoreia
Euhyas pentasyringos
Euhyas pantoni
Euhyas griphus
Euhyas andrewsi
Euhyas nubicola
Euhyas alticola
Euhyas orcutti
Euhyas junori
Euhyas gossei
Euhyas fusca
Euhyas alcoae
Euhyas armstrongi
Euhyas leoncei
Euhyas darlingtoni
Euhyas atkinsi
Euhyas feichtingeri
Euhyas varleyi
Euhyas intermedia
Euhyas etheridgei
Euhyas cubana
Euhyas orientalis
Euhyas iberia
Euhyas jaumei
Euhyas limbata
Euhyas pezopetra
Euhyas adela
Euhyas pinarensis
Euhyas blairhedgesi
Euhyas thomasi
Euhyas goini
Euhyas rogersi
Euhyas tonyi
Brachycephalidae



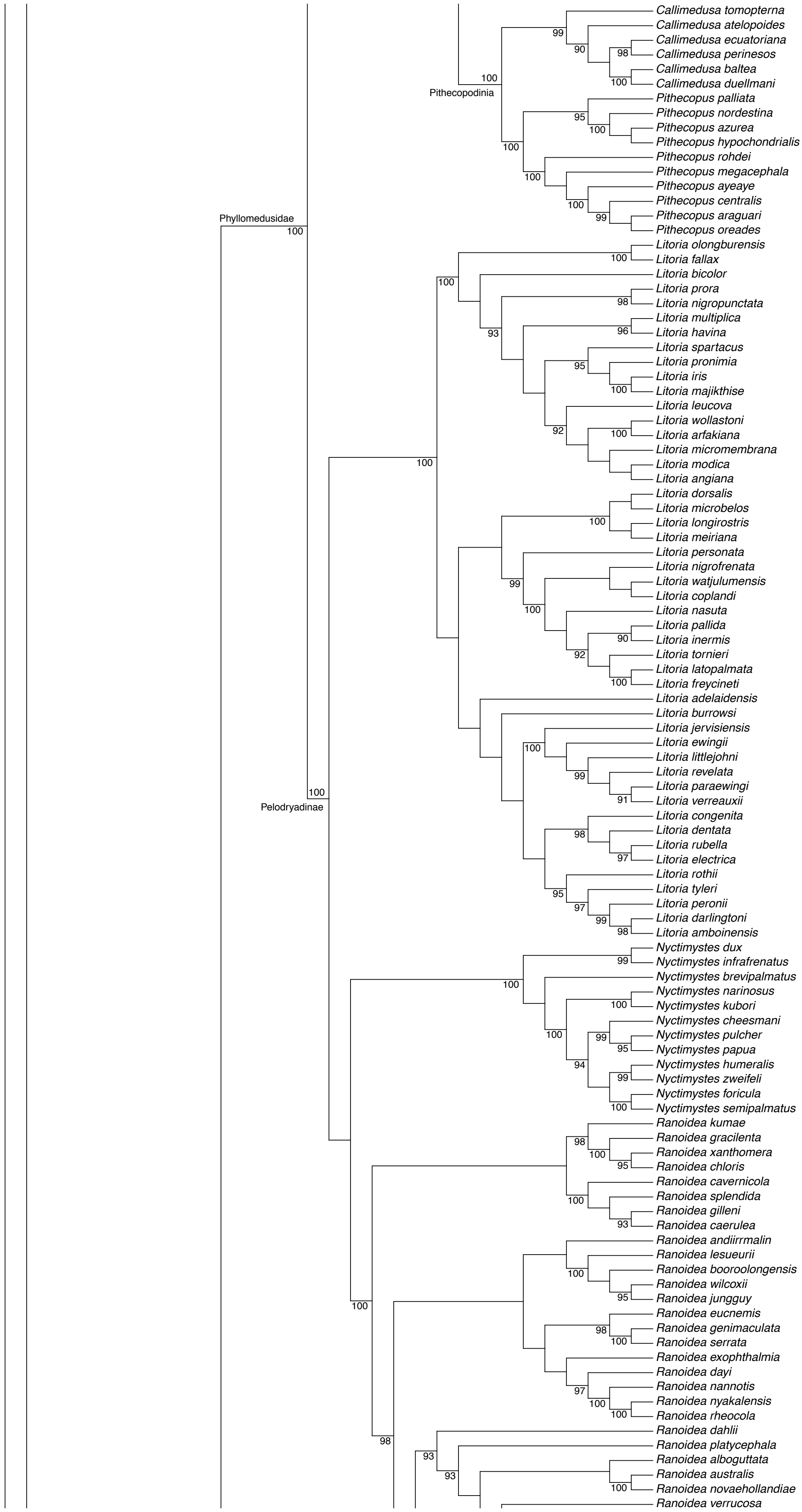
Euhyas simulans
Euhyas guanahacabibes
Euhyas planirostris
Euhyas casparii
Haddadus aramunha
Haddadus binotatus
Craugastorini
Craugastor daryi
Craugastor trachydermus
Craugastor tarahumaraensis
Craugastor augusti
Craugastor alfredi
Craugastor uno
Craugastor stuarti
Craugastor spatulatus
Craugastor bocourti
Craugastor gollmeri
Craugastor mimus
Craugastor noblei
Craugastor laticeps
Craugastor chac
Craugastor lineatus
Craugastor pygmaeus
Craugastor loki
Craugastor rhodopis
Craugastor mexicanus
Craugastor saltator
Craugastor podiciferus
Craugastor persimilis
Craugastor lauraster
Craugastor stejnegerianus
Craugastor bransfordii
Craugastor underwoodi
Craugastor polyptychus
Craugastor sandersoni
Craugastor megacephalus
Craugastor obesus
Craugastor punctariolus
Craugastor angelicus
Craugastor rupinius
Craugastor fleischmanni
Craugastor ranoides
Craugastor evanesco
Craugastor rugulosus
Craugastorinae
Craugastor emcelae
Craugastor melanostictus
Craugastor andi
Craugastor cuaquero
Craugastor tabasarae
Craugastor longirostris
Craugastor raniformis
Craugastor fitzingeri
Craugastor talamancae
Craugastor crassidigitus
Strabomantinia
Strabomantis biporcatus
Strabomantis sulcatus
Strabomantis necerus
Strabomantis anomalus
Strabomantis bufoniformis
Strabomantina
Bahius bilineatus
Barycholinoa
Barycholos pulcher
Barycholos ternetzi
Phyllonastes lochites
Phyllonastes heyeri
Holoadeninia
Phyllonastes myrmecoides
Bryophryninoa
Bryophryne cophites
Noblellinoa
Noblella peruviana
Microkayla iatamasi
Microkayla wettsteini
Holoaden bradei
Holoaden luederwaldti
Holoadeninoa
Euparkerella robusta
Euparkerella tridactyla
Euparkerella cochranae
Euparkerella brasiliensis
Strabomantini
Hypodactylinia
Hypodactylus dolops
Hypodactylus brunneus
Hypodactylus peraccai
Hypodactylus elassodiscus
Phrynopodites
Phrynopus heimorum
Phrynopus bracki
Phrynopus bufoides
Phrynopus horstpauli
Phrynopus barthlenae
Phrynopus pesantesi
Phrynopus tautzorum
Oreobatinoa
Phrynopus juninensis
Phrynopus kauneorum
Lynchius simmonsi
Lynchius nebulanastes
Lynchius parkeri
Lynchius flavomaculatus
Pristimantina
Oreobatites
Oreobates lundbergi
Oreobates saxatilis
Oreobates quixensis
Oreobates pereger
Oreobates ayacucho
Oreobates machiguenga
Oreobates lehri
Oreobates gemcare
Oreobates sanctaecrucis

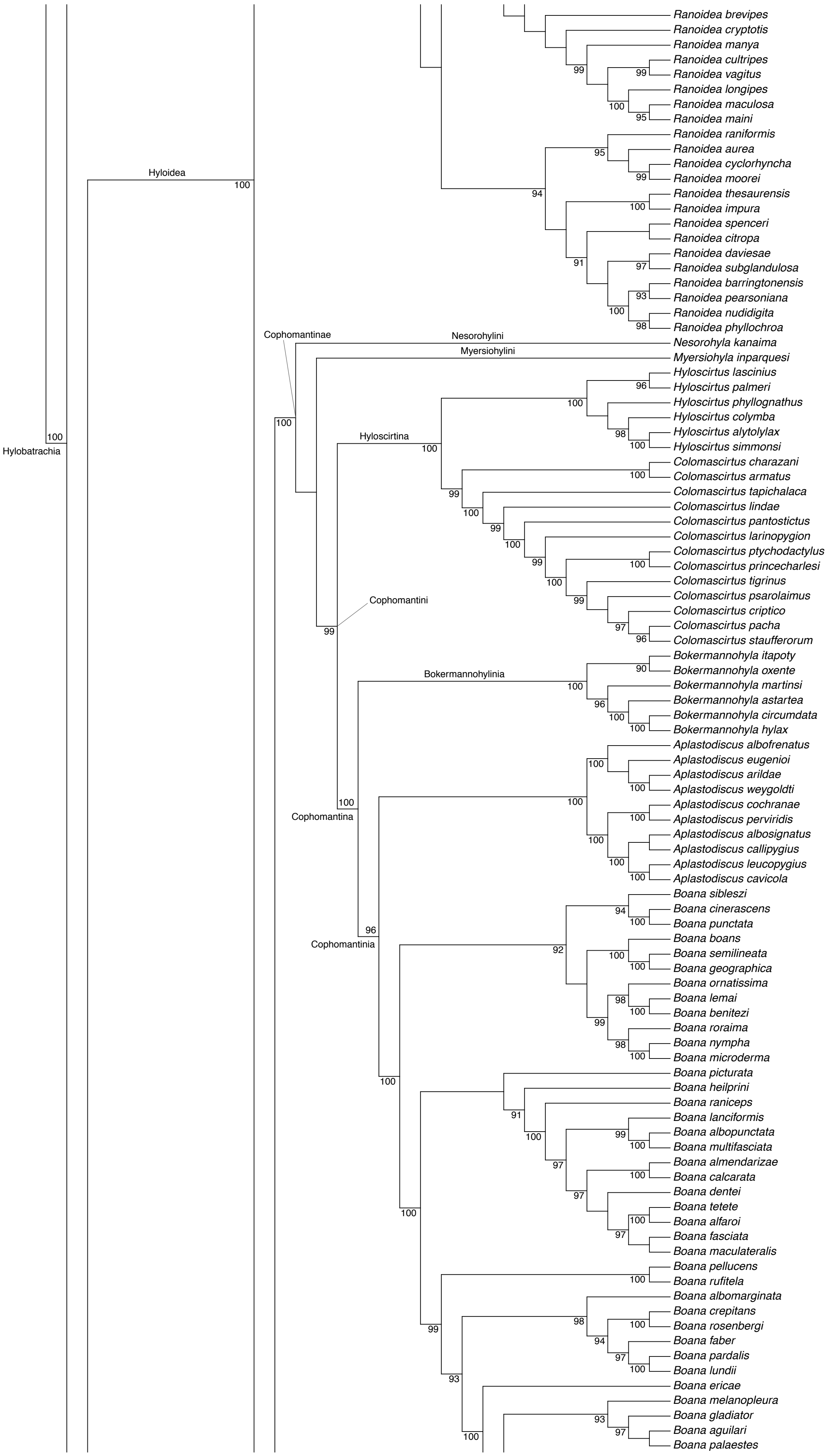

Oreobates choristolemma
Oreobates granulosus
Oreobates sanderi
Oreobates heterodactylus
Oreobates remotus
Oreobates madidi
Oreobates cruralis
Oreobates ibischi
Oreobates barituensis
Oreobates discoidalis
Pristimantinia
Yunganastes fraudator
Yunganastes bisignatus
Yunganastes mercedesae
Yunganastes ashkapara
Yunganastes pluvicanorus
Pristimantis labiosus
Pristimantis crenunguis
Pristimantis actites
Pristimantis w−nigrum
Pristimantis thectopternus
Pristimantis lanthanites
Pristimantis ridens
Pristimantis cremnobates
Pristimantis calcaratus
Pristimantis kelephas
Pristimantis caryophyllaceus
Pristimantis cruentus
Pristimantis viejas
Pristimantis cerasinus
Pristimantis paisa
Pristimantis erythropleura
Pristimantis museosus
Pristimantis colomai
Pristimantis latidiscus
Pristimantinoa
Pristimantis caprifer
Pristimantis pleurostriatus
Pristimantis paramerus
Pristimantis conservatio
Pristimantis peruvianus
Pristimantis reichlei
Pristimantis aniptopalmatus
Pristimantis stictogaster
Pristimantis toftae
Pristimantis rhabdolaemus
Pristimantis sagittulus
Pristimantis danae
Pristimantis nicefori
Pristimantis shrevei
Pristimantis euphronides
Pristimantis anolirex
Pristimantis merostictus
Pristimantis lutitus
Pristimantis savagei
Pristimantis affinis
Pristimantis nervicus
Pristimantis carranguerorum
Pristimantis lynchi
Pristimantis gaigei
Pristimantis ramagii
Pristimantis terraebolivaris
Pristimantis gutturalis
Pristimantis chiastonotus
Pristimantis samaipatae
Pristimantis koehleri
Pristimantis fenestratus
Pristimantis bipunctatus
Pristimantis skydmainos
Pristimantis lymani
Pristimantis achatinus
Pristimantis malkini
Pristimantis citriogaster
Pristimantis condor
Pristimantis buccinator
Pristimantis conspicillatus
Phrynanura
Pristimantis rozei
Pristimantis urichi
Pristimantis prolatus
Pristimantis suetus
Pristimantis eriphus
Pristimantis supernatis
Pristimantis chloronotus
Pristimantis boulengeri
Pristimantis simoterus
Pristimantis acatallelus
Pristimantis uranobates
Pristimantis permixtus
Pristimantis quantus
Pristimantis myops
Pristimantis brevifrons
Pristimantis angustilineatus
Pristimantis jubatus
Pristimantis hectus
Pristimantis celator
Pristimantis verecundus
Pristimantis leoni
Pristimantis pyrrhomerus
Pristimantis ocreatus
Pristimantis thymelensis
Pristimantis thymalopsoides

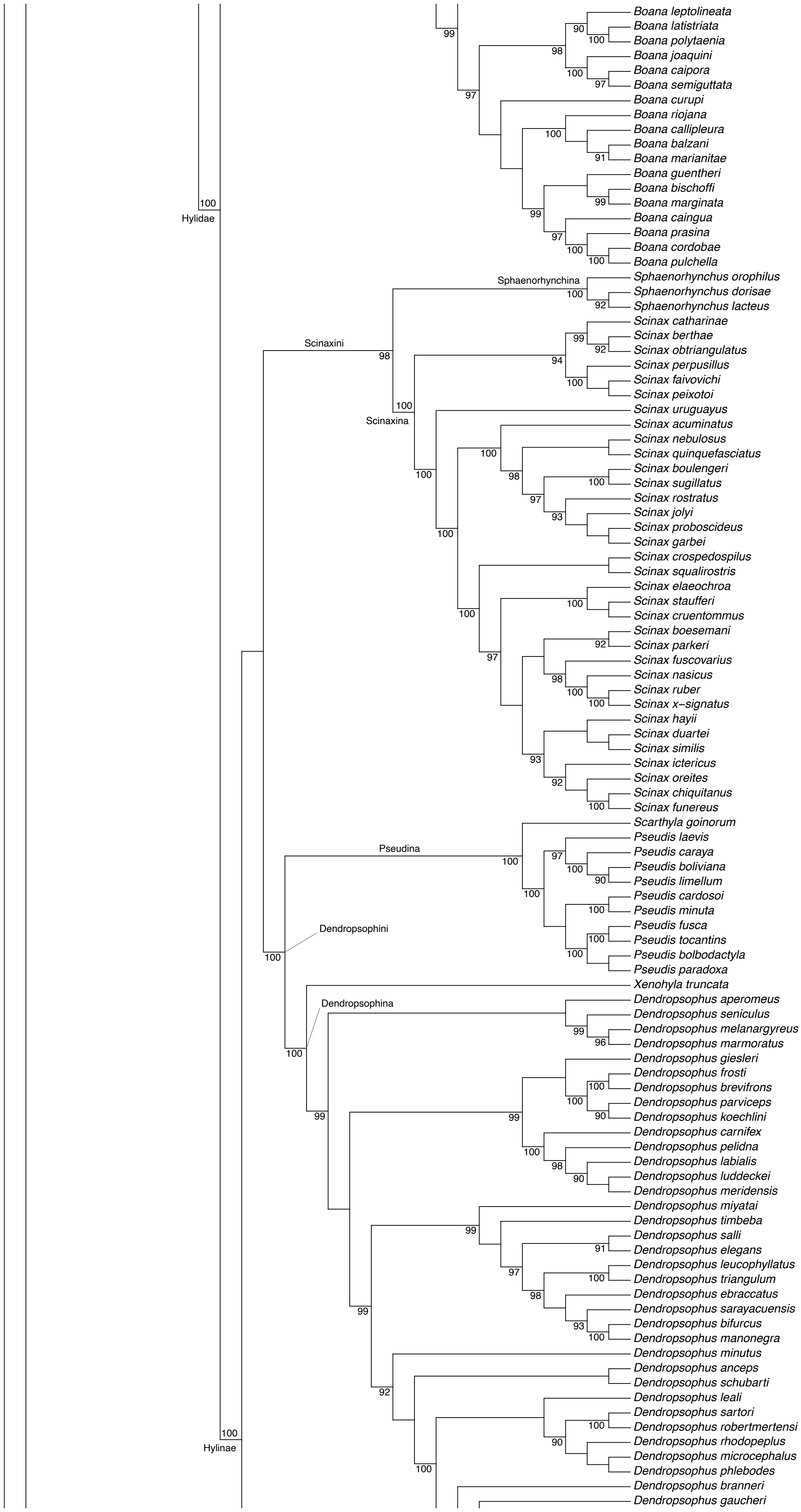

Pristimantis quinquagesimus
Pristimantis duellmani
Pristimantis curtipes
Pristimantis gentryi
Pristimantis truebae
Pristimantis surdus
Pristimantis devillei
Pristimantis buckleyi
Pristimantis vertebralis
Pristimantis acerus
Pristimantis glandulosus
Pristimantis inusitatus
Pristimantis orcesi
Pristimantis pycnodermis
Pristimantis appendiculatus
Pristimantis dissimulatus
Pristimantis calcarulatus
Pristimantis schultei
Pristimantis bromeliaceus
Pristimantis zeuctotylus
Pristimantis acuminatus
Pristimantis jorgevelosai
Pristimantis galdi
Pristimantis mindo
Pristimantis moro
Pristimantis crucifer
Pristimantis nyctophylax
Pristimantis subsigillatus
Pristimantis rhodoplichus
Pristimantis simonsii
Pristimantis petrobardus
Pristimantis melanogaster
Pristimantis wiensi
Pristimantis quaquaversus
Pristimantis rhabdocnemus
Pristimantis philipi
Pristimantis spinosus
Pristimantis totoroi
Pristimantis versicolor
Pristimantis lutzae
Pristimantis orestes
Pristimantis simonbolivari
Pristimantis bambu
Pristimantis diadematus
Pristimantis ventrimarmoratus
Pristimantis altamazonicus
Pristimantis platydactylus
Pristimantis carvalhoi
Pristimantis llojsintuta
Pristimantis croceoinguinis
Pristimantis lirellus
Pristimantis imitatrix
Pristimantis pulvinatus
Pristimantis marmoratus
Pristimantis inguinalis
Pristimantis saltissimus
Pristimantis jester
Pristimantis aureoventris
Pristimantis yuruaniensis
Pristimantis achuar
Pristimantis altamnis
Pristimantis kichwarum
Pristimantis pirrensis
Pristimantis altae
Pristimantis pardalis
Pristimantis chalceus
Pristimantis parvillus
Pristimantis luteolateralis
Pristimantis walkeri
Pristimantis ceuthospilus
Pristimantis cajamarcensis
Pristimantis ardalonychus
Pristimantis unistrigatus
Pristimantis palmeri
Pristimantis juanchoi
Pristimantis ptochus
Pristimantis zophus
Pristimantis martiae
Pristimantis ockendeni
Pristimantis librarius
Pristimantis miyatai
Pristimantis yukpa
Pristimantis taeniatus
Pristimantis frater
Pristimantis gryllus
Pristimantis elegans
Pristimantis bogotensis
Lepidobatrachinae
Lepidobatrachus laevis
Chacophrys pierottii
Stombinae
Stombus cornutus
Ceratophrys cranwelli
Ceratophryinae
Ceratophrys ornata
Ceratophryoidae/Ceratophryidae
Rhinodermatidae
Insuetophrynus acarpicus
Rhinoderma darwinii
Telmatobius vellardi
Telmatobius niger
Telmatobiidae
Telmatobius truebae
Telmatobius espadai
Telmatobius sanborni
Telmatobius verrucosus
Telmatobiidae
Telmatobius chusmisensis
Ceratophryoidea



Telmatobius simonsi
Telmatobius sibiricus
Telmatobius bolivianus
Telmatobius yuracare
Telmatobius vilamensis
Telmatobius dankoi
Telmatobius marmoratus
Telmatobius zapahuirensis
Telmatobius culeus
Telmatobius gigas
Telmatobius hintoni
Telmatobius huayra
Telmatobioidae
Thoropa miliaris
Thoropa taophora
Cycloramphinae
Cycloramphus bandeirensis
Cycloramphus fuliginosus
Cycloramphus eleutherodactylus
Cycloramphus acangatan
Cycloramphus boraceiensis
Cycloramphus parvulus
Cycloramphus organensis
Cyclorampheidae/Cycloramphidae
Atelognathini
Atelognathus patagonicus
Atelognathus jeinimenensis
Batrachylinae
Batrachylini
Hylorina sylvatica
Batrachyla leptopus
Batrachyla antartandica
Batrachyla taeniata
Crossodactylus schmidti
Crossodactylus caramaschii
Hylodinae
Hylodes goeldii
Hylodes nasus
Hylodes meridionalis
Hylodes perplicatus
Hylodes dactylocinus
Hylodes phyllodes
Hylodes sazimai
Hylodes ornatus
Limnomedusinae
Limnomedusa macroglossa
Eupsophus emiliopugini
Eupsophus vertebralis
Eupsophus calcaratus
Eupsophus insularis
Eupsophus migueli
Eupsophus altor
Eupsophus roseus
Eupsophus septentrionalis
Eupsophus nahuelbutensis
Eupsophus contulmoensis
Alsodinae
Alsodes nodosus
Alsodes vanzolinii
Alsodes valdiviensis
Alsodes monticola
Alsodes verrucosus
Alsodes coppingeri
Alsodes australis
Alsodes hugoi
Alsodes tumultuosus
Alsodes pehuenche
Alsodes neuquensis
Alsodes gargola
Alsodes igneus
Alsodes kaweshkari
Alsodes norae
Alsodes barrioi
Phrynomedusini
Phrynomedusa marginata
Cruziohyla calcarifer
Cruziohylini
Hylomantis aspera
Hylomantis granulosa
Agalychnini
Agalychnis hulli
Agalychnis lemur
Agalychnis dacnicolor
Agalychnis spurrelli
Agalychnis saltator
Agalychnis callidryas
Agalychnis terranova
Agalychnis annae
Agalychnis moreletii
Phyllomedusinae
Phasmahylina
Phasmahyla exilis
Phasmahyla cochranae
Phasmahyla jandaia
Phasmahyla guttata
Phasmahyla cruzi
Phyllomedusinia
Phyllomedusa vaillantii
Phyllomedusa bicolor
Phyllomedusa camba
Phyllomedusa tarsius
Phyllomedusa trinitatis
Phyllomedusa neildi
Phyllomedusini
Phyllomedusa boliviana
Phyllomedusa sauvagii
Phyllomedusa bahiana
Phyllomedusa burmeisteri
Phyllomedusa iheringii
Phyllomedusa distincta
Phyllomedusina
Phyllomedusa tetraploidea


Callimedusa tomopterna
Callimedusa atelopoides
Callimedusa ecuatoriana
Callimedusa perinesos
Callimedusa baltea
Callimedusa duellmani
Pithecopodinia
Pithecopus palliata
Pithecopus nordestina
Pithecopus azurea
Pithecopus hypochondrialis
Pithecopus rohdei
Pithecopus megacephala
Pithecopus ayeaye
Pithecopus centralis
Pithecopus araguari
Pithecopus oreades
Phyllomedusidae
Litoria olongburensis
Litoria fallax
Litoria bicolor
Litoria prora
Litoria nigropunctata
Litoria multiplica
Litoria havina
Litoria spartacus
Litoria pronimia
Litoria iris
Litoria majikthise
Litoria leucova
Litoria wollastoni
Litoria arfakiana
Litoria micromembrana
Litoria modica
Litoria angiana
Litoria dorsalis
Litoria microbelos
Litoria longirostris
Litoria meiriana
Litoria personata
Litoria nigrofrenata
Litoria watjulumensis
Litoria coplandi
Litoria nasuta
Litoria pallida
Litoria inermis
Litoria tornieri
Litoria latopalmata
Litoria freycineti
Litoria adelaidensis
Litoria burrowsi
Litoria jervisiensis
Litoria ewingii
Litoria littlejohni
Litoria revelata
Litoria paraewingi
Litoria verreauxii
Pelodryadinae
Litoria congenita
Litoria dentata
Litoria rubella
Litoria electrica
Litoria rothii
Litoria tyleri
Litoria peronii
Litoria darlingtoni
Litoria amboinensis
Nyctimystes dux
Nyctimystes infrafrenatus
Nyctimystes brevipalmatus
Nyctimystes narinosus
Nyctimystes kubori
Nyctimystes cheesmani
Nyctimystes pulcher
Nyctimystes papua
Nyctimystes humeralis
Nyctimystes zweifeli
Nyctimystes foricula
Nyctimystes semipalmatus
Ranoidea kumae
Ranoidea gracilenta
Ranoidea xanthomera
Ranoidea chloris
Ranoidea cavernicola
Ranoidea splendida
Ranoidea gilleni
Ranoidea caerulea
Ranoidea andiirrmalin
Ranoidea lesueurii
Ranoidea booroolongensis
Ranoidea wilcoxii
Ranoidea jungguy
Ranoidea eucnemis
Ranoidea genimaculata
Ranoidea serrata
Ranoidea exophthalmia
Ranoidea dayi
Ranoidea nannotis
Ranoidea nyakalensis
Ranoidea rheocola
Ranoidea dahlii
Ranoidea platycephala
Ranoidea alboguttata
Ranoidea australis
Ranoidea novaehollandiae
Ranoidea verrucosa


Hyloidea
Hylobatrachia
Ranoidea brevipes
Ranoidea cryptotis
Ranoidea manya
Ranoidea cultripes
Ranoidea vagitus
Ranoidea longipes
Ranoidea maculosa
Ranoidea maini
Ranoidea raniformis
Ranoidea aurea
Ranoidea cyclorhyncha
Ranoidea moorei
Ranoidea thesaurensis
Ranoidea impura
Ranoidea spenceri
Ranoidea citropa
Ranoidea daviesae
Ranoidea subglandulosa
Ranoidea barringtonensis
Ranoidea pearsoniana
Ranoidea nudidigita
Ranoidea phyllochroa
Cophomantinae
Nesorohylini
Nesorohyla kanaima
Myersiohylini
Myersiohyla inparquesi
Hyloscirtus lascinius
Hyloscirtus palmeri
Hyloscirtina
Hyloscirtus phyllognathus
Hyloscirtus colymba
Hyloscirtus alytolylax
Hyloscirtus simmonsi
Colomascirtus charazani
Colomascirtus armatus
Colomascirtus tapichalaca
Colomascirtus lindae
Colomascirtus pantostictus
Colomascirtus larinopygion
Colomascirtus ptychodactylus
Colomascirtus princecharlesi
Colomascirtus tigrinus
Cophomantini
Colomascirtus psarolaimus
Colomascirtus criptico
Colomascirtus pacha
Colomascirtus staufferorum
Bokermannohylinia
Bokermannohyla itapoty
Bokermannohyla oxente
Bokermannohyla martinsi
Bokermannohyla astartea
Bokermannohyla circumdata
Bokermannohyla hylax
Aplastodiscus albofrenatus
Aplastodiscus eugenioi
Aplastodiscus arildae
Aplastodiscus weygoldti
Cophomantina
Aplastodiscus cochranae
Aplastodiscus perviridis
Aplastodiscus albosignatus
Aplastodiscus callipygius
Aplastodiscus leucopygius
Aplastodiscus cavicola
Boana sibleszi
Boana cinerascens
Boana punctata
Cophomantinia
Boana boans
Boana semilineata
Boana geographica
Boana ornatissima
Boana lemai
Boana benitezi
Boana roraima
Boana nympha
Boana microderma
Boana picturata
Boana heilprini
Boana raniceps
Boana lanciformis
Boana albopunctata
Boana multifasciata
Boana almendarizae
Boana calcarata
Boana dentei
Boana tetete
Boana alfaroi
Boana fasciata
Boana maculateralis
Boana pellucens
Boana rufitela
Boana albomarginata
Boana crepitans
Boana rosenbergi
Boana faber
Boana pardalis
Boana lundii
Boana ericae
Boana melanopleura
Boana gladiator
Boana aguilari
Boana palaestes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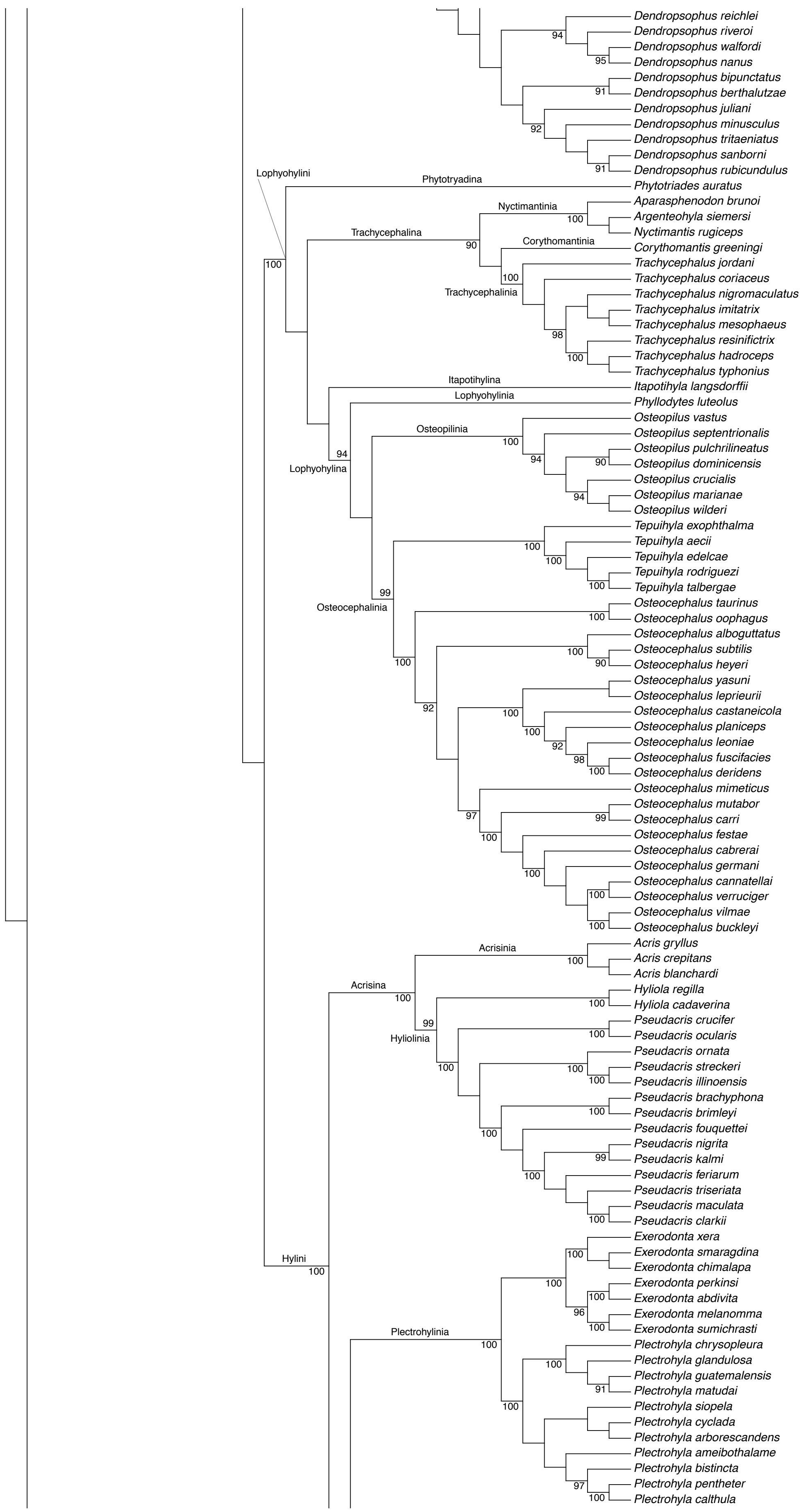
Boana latistriata
Boana polytaenia
Boana joaquini
Boana caipora
Boana semiguttata
Boana curupi
Boana riojana
Boana callipleura
Boana balzani
Boana marianitae
Boana guentheri
Boana bischoffi
Boana marginata
Boana caingua
Boana prasina
Boana cordobae
Boana pulchella
Hylidae
Sphaenorhynchina
Sphaenorhynchus orophilus
Sphaenorhynchus dorisae
Sphaenorhynchus lacteus
Scinaxini
Scinax catharinae
Scinax berthae
Scinax obtriangulatus
Scinax perpusillus
Scinax faivovichi
Scinax peixotoi
Scinaxina
Scinax uruguayus
Scinax acuminatus
Scinax nebulosus
Scinax quinquefasciatus
Scinax boulengeri
Scinax sugillatus
Scinax rostratus
Scinax jolyi
Scinax proboscideus
Scinax garbei
Scinax crospedospilus
Scinax squalirostris
Scinax elaeochroa
Scinax staufferi
Scinax cruentommus
Scinax boesemani
Scinax parkeri
Scinax fuscovarius
Scinax nasicus
Scinax ruber
Scinax x–signatus
Scinax hayii
Scinax duartei
Scinax similis
Scinax ictericus
Scinax oreites
Scinax chiquitanus
Scinax funereus
Pseudina
Scarthyla goinorum
Pseudis laevis
Pseudis caraya
Pseudis boliviana
Pseudis limellum
Pseudis cardosoi
Pseudis minuta
Dendropsophini
Pseudis fusca
Pseudis tocantins
Pseudis bolbodactyla
Pseudis paradoxa
Xenohyla truncata
Dendropsophina
Dendropsophus aperomeus
Dendropsophus seniculus
Dendropsophus melanargyreus
Dendropsophus marmoratus
Dendropsophus giesleri
Dendropsophus frosti
Dendropsophus brevifrons
Dendropsophus parviceps
Dendropsophus koechlini
Dendropsophus carnifex
Dendropsophus pelidna
Dendropsophus labialis
Dendropsophus luddeckei
Dendropsophus meridensis
Dendropsophus miyatai
Dendropsophus timbeba
Dendropsophus salli
Dendropsophus elegans
Dendropsophus leucophyllatus
Dendropsophus triangulum
Dendropsophus ebraccatus
Dendropsophus sarayacuensis
Dendropsophus bifurcus
Dendropsophus manonegra
Dendropsophus minutus
Dendropsophus anceps
Dendropsophus schubarti
Dendropsophus leali
Dendropsophus sartori
Dendropsophus robertmertensi
Dendropsophus rhodopeplus
Dendropsophus microcephalus
Dendropsophus phlebodes
Hylinae
Dendropsophus branneri
Dendropsophus gaucheri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Dendropsophus juliani
Dendropsophus minusculus
Dendropsophus tritaeniatus
Dendropsophus sanborni
Dendropsophus rubicundulus
Lophyohylini
Phytotryadina
Phytotriades auratus
Nyctimantinia
Aparasphenodon brunoi
Argenteohyla siemersi
Nyctimantis rugiceps
Trachycephalina
Corythomantinia
Corythomantis greeningi
Trachycephalus jordani
Trachycephalinia
Trachycephalus coriaceus
Trachycephalus nigromaculatus
Trachycephalus imitatrix
Trachycephalus mesophaeus
Trachycephalus resinifictrix
Trachycephalus hadroceps
Trachycephalus typhonius
Itapotihylina
Itapotihyla langsdorffii
Lophyohylinia
Phyllodytes luteolus
Osteopilinia
Osteopilus vastus
Osteopilus septentrionalis
Osteopilus pulchrilineatus
Osteopilus dominicensis
Osteopilus crucialis
Osteopilus marianae
Osteopilus wilderi
Lophyohylina
Tepuihyla exophthalma
Tepuihyla aecii
Tepuihyla edelcae
Tepuihyla rodriguezi
Tepuihyla talbergae
Osteocephalinia
Osteocephalus taurinus
Osteocephalus oophagus
Osteocephalus alboguttatus
Osteocephalus subtilis
Osteocephalus heyeri
Osteocephalus yasuni
Osteocephalus leprieurii
Osteocephalus castaneicola
Osteocephalus planiceps
Osteocephalus leoniae
Osteocephalus fuscifacies
Osteocephalus deridens
Osteocephalus mimeticus
Osteocephalus mutabor
Osteocephalus carri
Osteocephalus festae
Osteocephalus cabrerai
Osteocephalus germani
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Osteocephalus verruciger
Osteocephalus vilmae
Osteocephalus buckleyi
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Acris gryllus
Acris crepitans
Acris blanchardi
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Hyliolinia
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Pseudacris ocularis
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Exerodonta melanomma
Exerodonta sumichrasti
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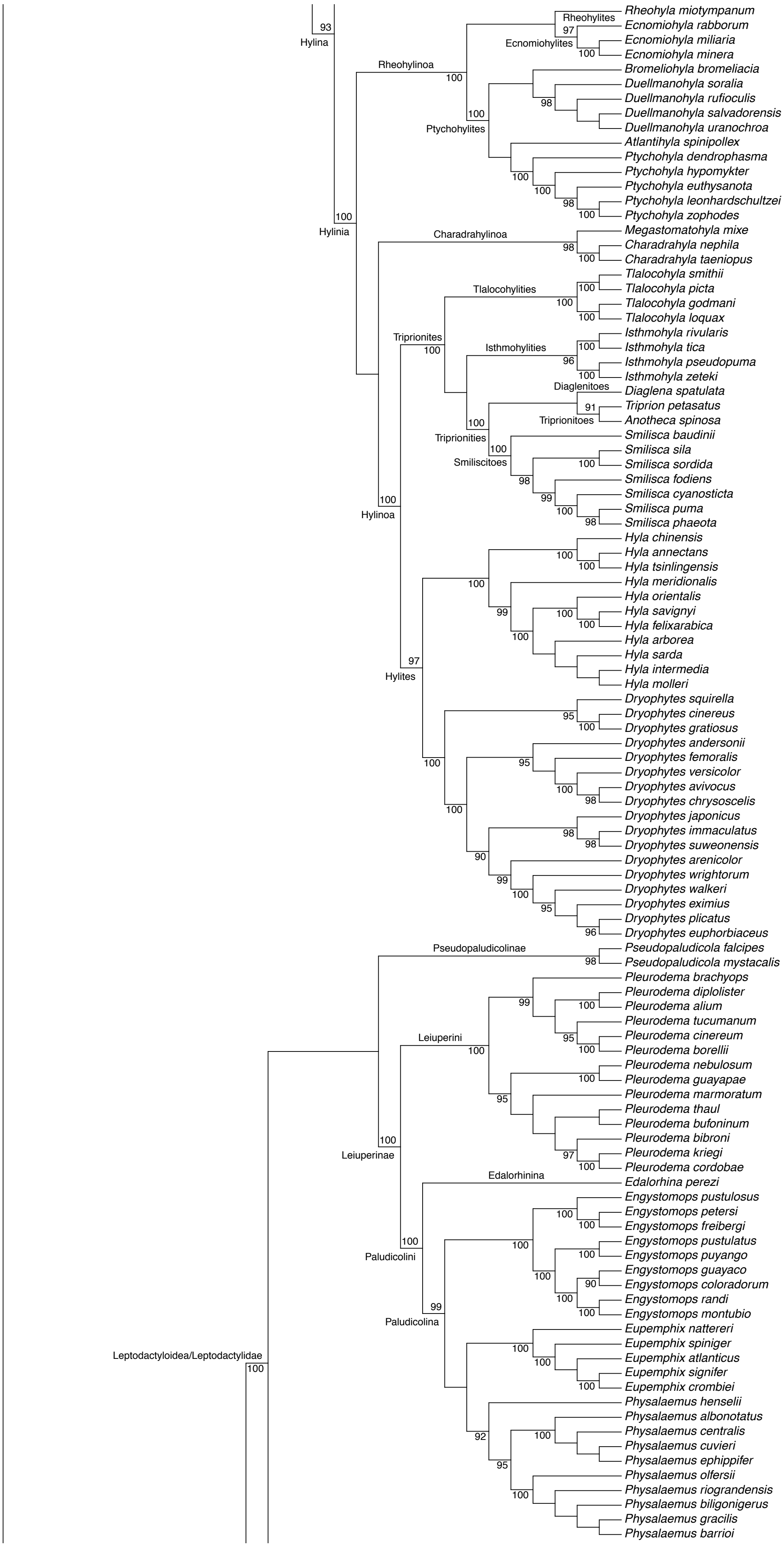
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Bromeliohyla bromeliacia
Duellmanohyla soralia
Duellmanohyla rufioculis
Duellmanohyla salvadorensis
Duellmanohyla uranochroa
Ptychohylites
Atlantihyla spinipollex
Ptychohyla dendrophasma
Ptychohyla hypomykter
Ptychohyla euthysanota
Ptychohyla leonhardschultzei
Ptychohyla zophodes
Hylinia
Charadrahylinoa
Megastomatohyla mixe
Charadrahyla nephila
Charadrahyla taeniopus
Tlalocohylities
Tlalocohyla smithii
Tlalocohyla picta
Tlalocohyla godmani
Tlalocohyla loquax
Triprionites
Isthmohylities
Isthmohyla rivularis
Isthmohyla tica
Isthmohyla pseudopuma
Isthmohyla zeteki
Diaglenitoes
Diaglena spatulata
Triprion petasatus
Triprionitoes
Anotheca spinosa
Triprionities
Smiliscitoes
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Smilisca sila
Smilisca sordida
Smilisca fodiens
Smilisca cyanosticta
Smilisca puma
Smilisca phaeota
Hylinoa
Hyla chinensis
Hyla annectans
Hyla tsinlingensis
Hyla meridionalis
Hyla orientalis
Hyla savignyi
Hyla felixarabica
Hyla arborea
Hyla sarda
Hyla intermedia
Hyla molleri
Hylites
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Dryophytes cinereus
Dryophytes gratiosus
Dryophytes andersonii
Dryophytes femoralis
Dryophytes versicolor
Dryophytes avivocus
Dryophytes chrysoscelis
Dryophytes japonicus
Dryophytes immaculatus
Dryophytes suweonensis
Dryophytes arenicolor
Dryophytes wrightorum
Dryophytes walkeri
Dryophytes eximius
Dryophytes plicatus
Dryophytes euphorbiaceus
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Pseudopaludicola falcipes
Pseudopaludicola mystacalis
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Pleurodema diplolister
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Pleurodema cinereum
Pleurodema borellii
Leiuperini
Pleurodema nebulosum
Pleurodema guayapae
Pleurodema marmoratum
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Pleurodema bufoninum
Pleurodema bibroni
Pleurodema kriegi
Pleurodema cordobae
Leiuperinae
Edalorhinina
Edalorhina perezi
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Engystomops pustulatus
Engystomops puyango
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Engystomops guayaco
Engystomops coloradorum
Engystomops randi
Engystomops montubio
Paludicolina
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Eupemphix spiniger
Leptodactyloidea/Leptodactylidae
Eupemphix atlanticus
Eupemphix signifer
Eupemphix crombiei
Physalaemus henselii
Physalaemus albonotatus
Physalaemus centralis
Physalaemus cuvieri
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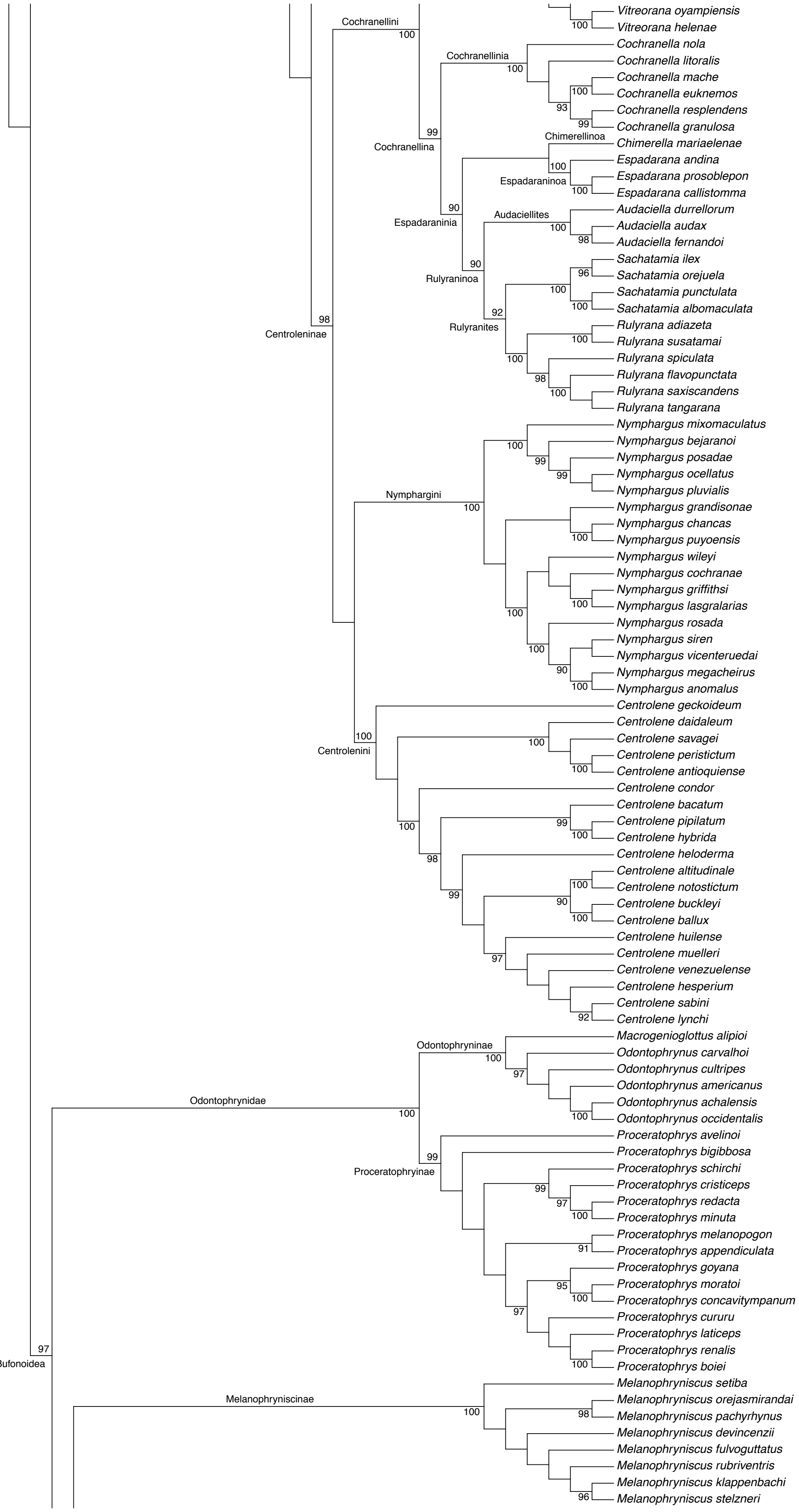
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Cochranellina
Chimerellinoa
Chimerella mariaelenae
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Espadaraninoa
Espadarana prosoblepon
Espadarana callistomma
Espadaraninia
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Audaciella audax
Audaciella fernandoi
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Sachatamia orejuela
Sachatamia punctulata
Sachatamia albomaculata
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Rulyranites
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Rulyrana spiculata
Rulyrana flavopunctata
Rulyrana saxiscandens
Rulyrana tangarana
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Nymphargus bejaranoi
Nymphargus posadae
Nymphargus ocellatus
Nymphargus pluvialis
Nymphargini
Nymphargus grandisonae
Nymphargus chancas
Nymphargus puyoensis
Nymphargus wileyi
Nymphargus cochranae
Nymphargus griffithsi
Nymphargus lasgralarias
Nymphargus rosada
Nymphargus siren
Nymphargus vicenteruedai
Nymphargus megacheirus
Nymphargus anomalus
Centrolene geckoideum
Centrolenini
Centrolene daidaleum
Centrolene savagei
Centrolene peristictum
Centrolene antioquiense
Centrolene condor
Centrolene bacatum
Centrolene pipilatum
Centrolene hybrida
Centrolene heloderma
Centrolene altitudinale
Centrolene notostictum
Centrolene buckleyi
Centrolene ballux
Centrolene huilense
Centrolene muelleri
Centrolene venezuelense
Centrolene hesperium
Centrolene sabini
Centrolene lynchi
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Macrogenioglottus alipioi
Odontophrynus carvalhoi
Odontophrynus cultripes
Odontophrynidae
Odontophrynus americanus
Odontophrynus achalensis
Odontophrynus occidentalis
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Proceratophryinae
Proceratophrys bigibbosa
Proceratophrys schirchi
Proceratophrys cristiceps
Proceratophrys redacta
Proceratophrys minuta
Proceratophrys melanopogon
Proceratophrys appendiculata
Proceratophrys goyana
Proceratophrys moratoi
Proceratophrys concavitympanum
Proceratophrys cururu
Proceratophrys laticeps
Bufonoidea
Proceratophrys renalis
Proceratophrys boiei
Melanophryniscinae
Melanophryniscus setiba
Melanophryniscus orejasmirandai
Melanophryniscus pachyrhynus
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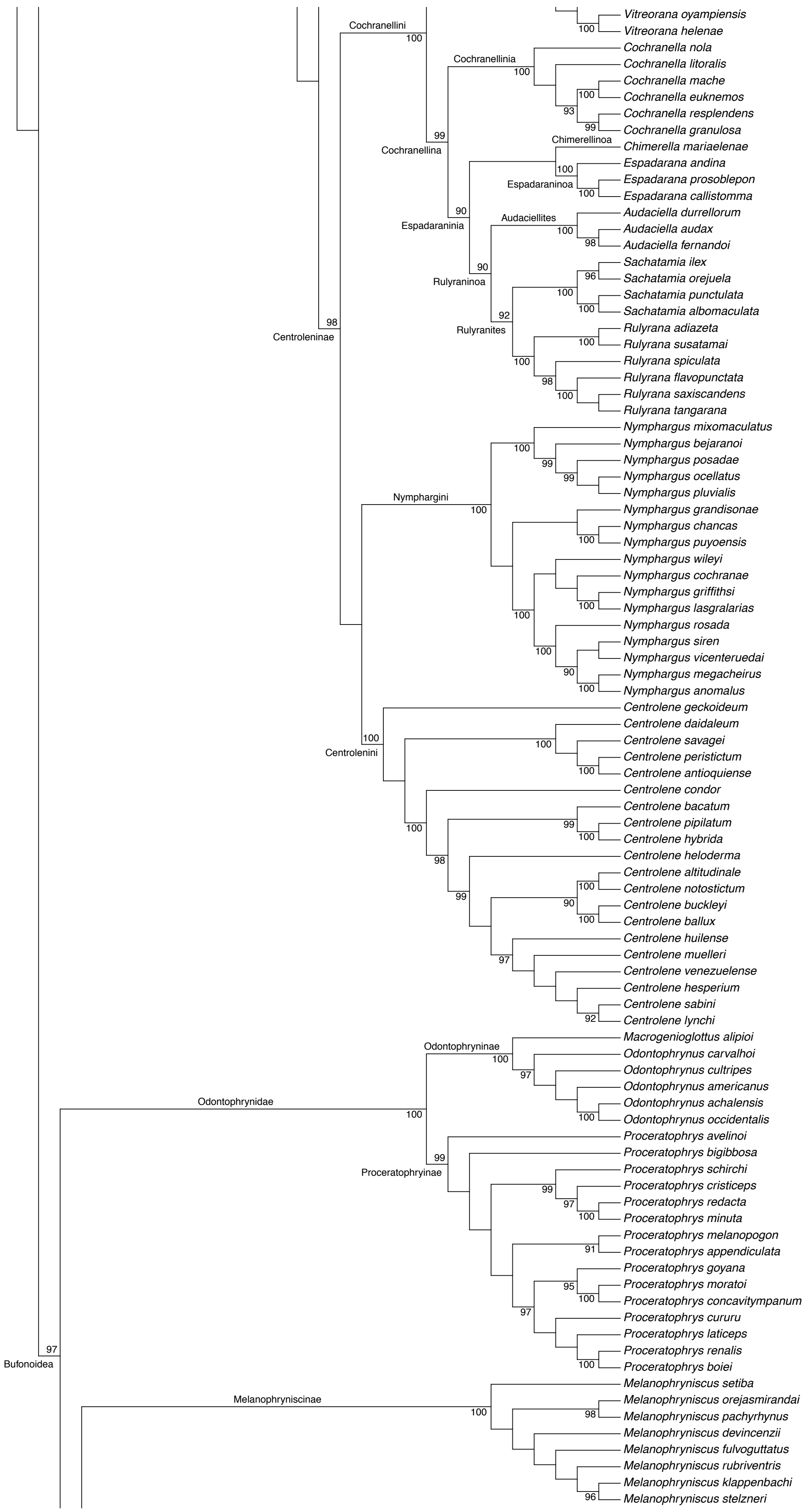
Melanophryniscus fulvoguttatus
Melanophryniscus rubriventris
Melanophryniscus klappenbachi
Melanophryniscus stelzneri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Rulyrana saxiscandens
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Odontophrynus cultripes
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Proceratophrys minuta
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Bufonoidea
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Proceratophrys boiei
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Melanophryniscinae
Melanophryniscus orejasmirandai
100
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Melanophryniscus pachyrhynus
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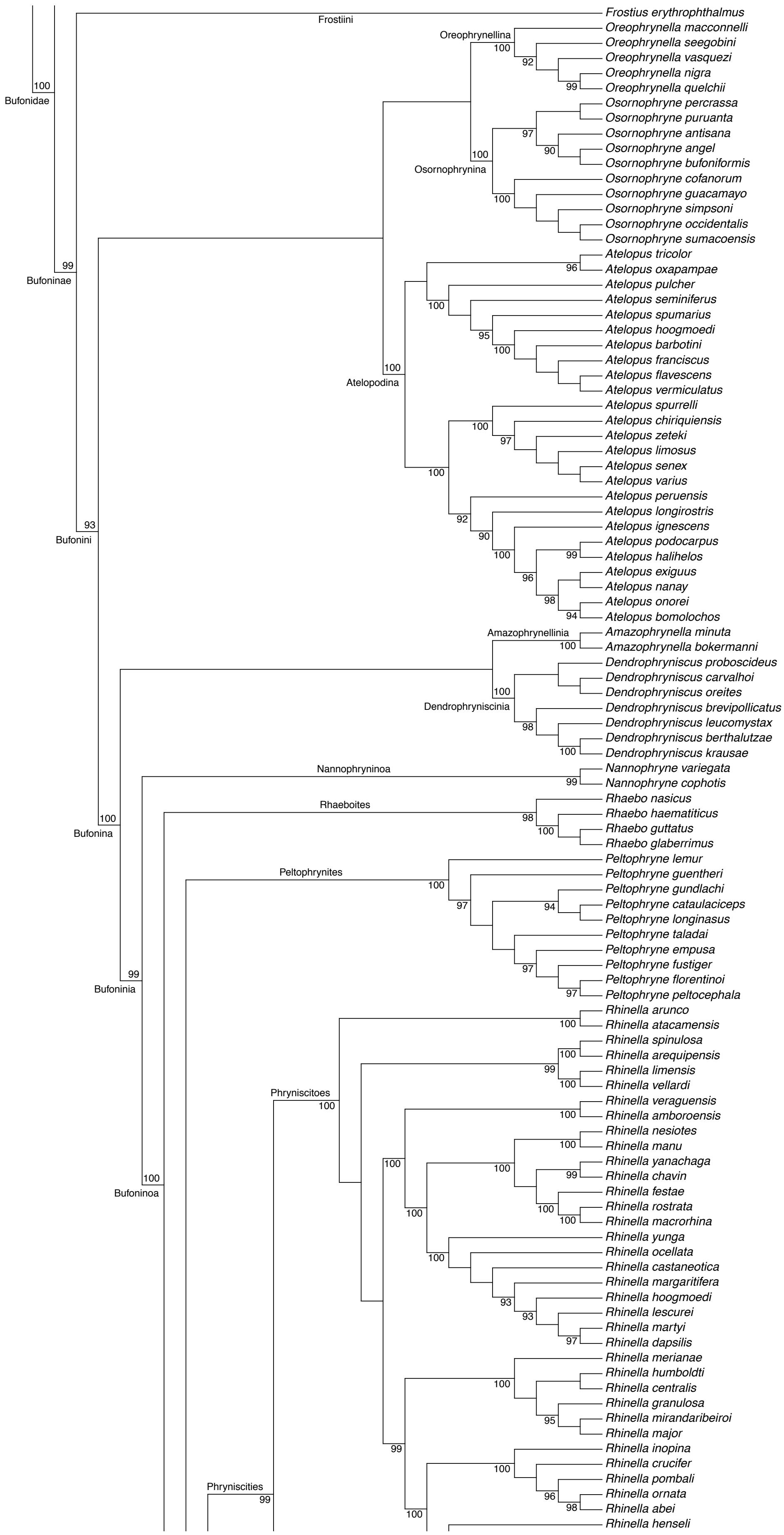
Melanophryniscus stelzneri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Bufonini
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Oreophrynella seegobini
Oreophrynella vasquezi
Oreophrynella nigra
Oreophrynella quelchii
Osornophrynina
Osornophryne percrassa
Osornophryne puruanta
Osornophryne antisana
Osornophryne angel
Osornophryne bufoniformis
Osornophryne cofanorum
Osornophryne guacamayo
Osornophryne simpsoni
Osornophryne occidentalis
Osornophryne sumacoensis
Atelopodina
Atelopus tricolor
Atelopus oxapampae
Atelopus pulcher
Atelopus seminiferus
Atelopus spumarius
Atelopus hoogmoedi
Atelopus barbotini
Atelopus franciscus
Atelopus flavescens
Atelopus vermiculatus
Atelopus spurrelli
Atelopus chiriquiensis
Atelopus zeteki
Atelopus limosus
Atelopus senex
Atelopus varius
Atelopus peruensis
Atelopus longirostris
Atelopus ignescens
Atelopus podocarpus
Atelopus halihelos
Atelopus exiguus
Atelopus nanay
Atelopus onorei
Atelopus bomolochos
Bufonina
Bufoninia
Amazophrynellinia
Amazophrynella minuta
Amazophrynella bokermanni
Dendrophryniscinia
Dendrophryniscus proboscideus
Dendrophryniscus carvalhoi
Dendrophryniscus oreites
Dendrophryniscus brevipollicatus
Dendrophryniscus leucomystax
Dendrophryniscus berthalutzae
Dendrophryniscus krausae
Bufoninoa
Nannophryninoa
Nannophryne variegata
Nannophryne cophotis
Rhaeboites
Rhaebo nasicus
Rhaebo haematiticus
Rhaebo guttatus
Rhaebo glaberrimus
Peltophrynites
Peltophryne lemur
Peltophryne guentheri
Peltophryne gundlachi
Peltophryne cataulaciceps
Peltophryne longinasus
Peltophryne taladai
Peltophryne empusa
Peltophryne fustiger
Peltophryne florentinoi
Peltophryne peltocephala
Phryniscities
Phryniscitoes
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Rhinella atacamensis
Rhinella spinulosa
Rhinella arequipensis
Rhinella limensis
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Rhinella veraguensis
Rhinella amboroensis
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Rhinella manu
Rhinella yanachaga
Rhinella chavin
Rhinella festae
Rhinella rostrata
Rhinella macrorhina
Rhinella yunga
Rhinella ocellata
Rhinella castaneotica
Rhinella margaritifera
Rhinella hoogmoedi
Rhinella lescurei
Rhinella martyi
Rhinella dapsilis
Rhinella merianae
Rhinella humboldti
Rhinella centralis
Rhinella granulosa
Rhinella mirandaribeiroi
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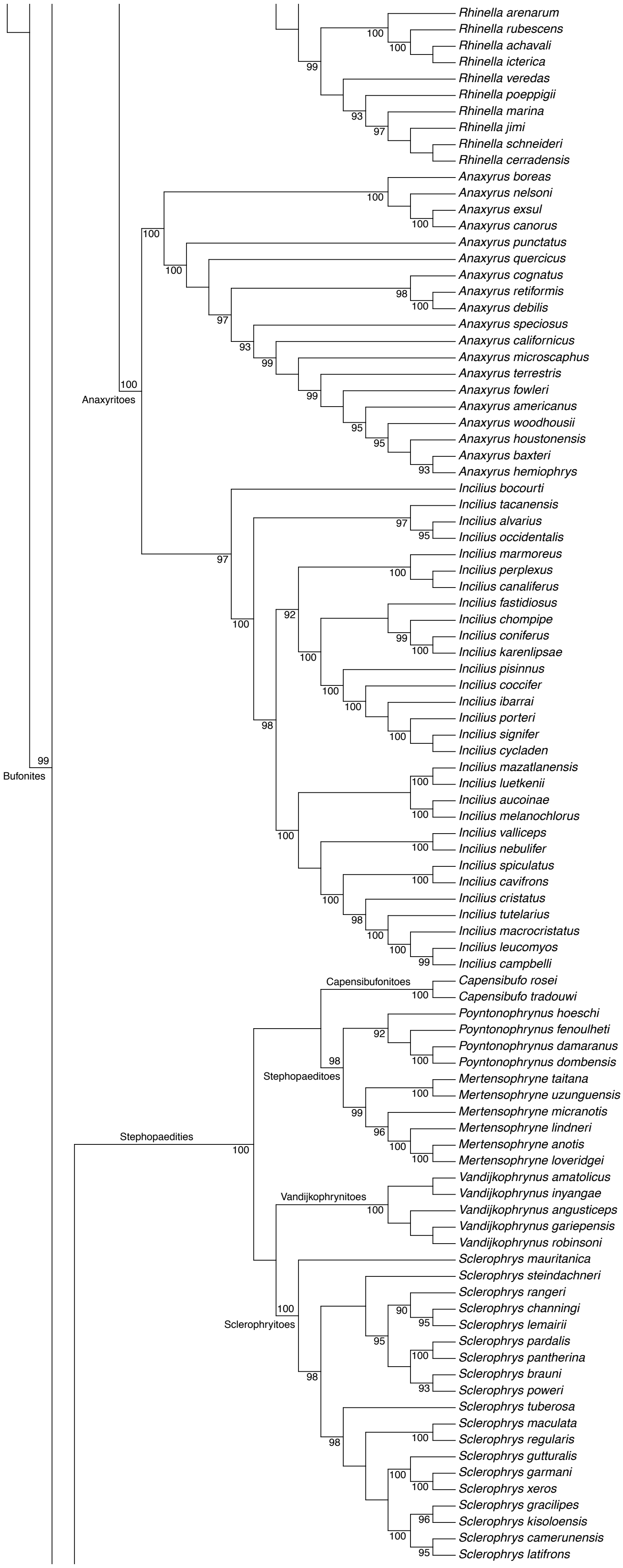
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Rhinella schneideri
Rhinella cerradensis
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Anaxyrus nelsoni
Anaxyrus exsul
Anaxyrus canorus
Anaxyrus punctatus
Anaxyrus quercicus
Anaxyrus cognatus
Anaxyrus retiformis
Anaxyrus debilis
Anaxyrus speciosus
Anaxyrus californicus
Anaxyrus microscaphus
Anaxyrus terrestris
Anaxyrus fowleri
Anaxyrus americanus
Anaxyrus woodhousii
Anaxyrus houstonensis
Anaxyrus baxteri
Anaxyrus hemiophrys
Anaxyritoes
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Incilius tacanensis
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Incilius occidentalis
Incilius marmoreus
Incilius perplexus
Incilius canaliferus
Incilius fastidiosus
Incilius chompipe
Incilius coniferus
Incilius karenlipsae
Incilius pisinnus
Incilius coccifer
Incilius ibarrai
Incilius porteri
Incilius signifer
Incilius cycladen
Incilius mazatlanensis
Incilius luetkenii
Incilius aucoinae
Incilius melanochlorus
Incilius valliceps
Incilius nebulifer
Incilius spiculatus
Incilius cavifrons
Incilius cristatus
Incilius tutelarius
Incilius macrocristatus
Incilius leucomyos
Incilius campbelli
Bufonites
Capensibufonitoes
Capensibufo rosei
Capensibufo tradouwi
Poyntonophrynus hoeschi
Poyntonophrynus fenoulheti
Poyntonophrynus damaranus
Poyntonophrynus dombensis
Stephopaeditoes
Mertensophryne taitana
Mertensophryne uzunguensis
Mertensophryne micranotis
Mertensophryne lindneri
Mertensophryne anotis
Mertensophryne loveridgei
Stephopaedities
Vandijkophrynitoes
Vandijkophrynus amatolicus
Vandijkophrynus inyangae
Vandijkophrynus angusticeps
Vandijkophrynus gariepensis
Vandijkophrynus robinsoni
Sclerophrys mauritanica
Sclerophrys steindachneri
Sclerophrys rangeri
Sclerophrys channingi
Sclerophrys lemairii
Sclerophrys pardalis
Sclerophrys pantherina
Sclerophrys brauni
Sclerophrys poweri
Sclerophryitoes
Sclerophrys tuberosa
Sclerophrys maculata
Sclerophrys regularis
Sclerophrys gutturalis
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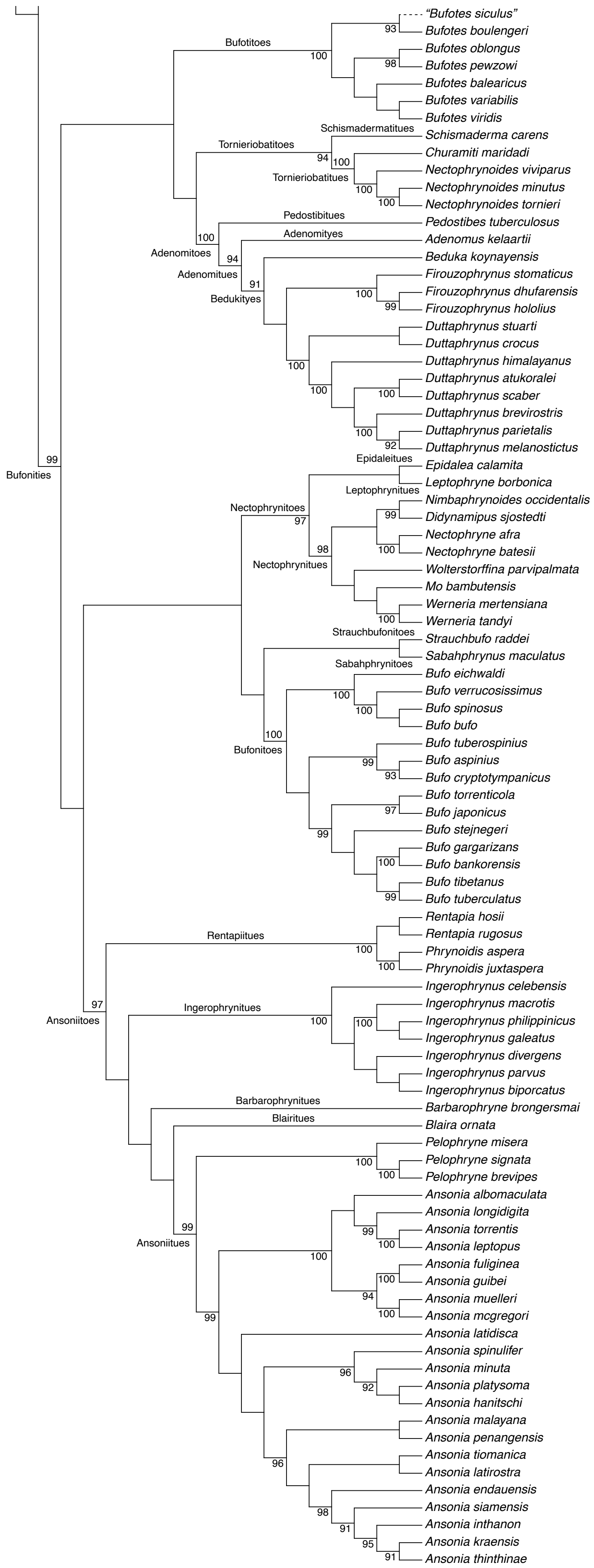
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Bufotes viridis
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Churamiti maridadi
Nectophrynoides viviparus
Nectophrynoides minutus
Nectophrynoides tornieri
Pedostibes tuberculosus
Adenomus kelaartii
Beduka koynayensis
Firouzophrynus stomaticus
Firouzophrynus dhufarensis
Firouzophrynus hololius
Duttaphrynus stuarti
Duttaphrynus crocus
Duttaphrynus himalayanus
Duttaphrynus atukoralei
Duttaphrynus scaber
Duttaphrynus brevirostris
Duttaphrynus parietalis
Duttaphrynus melanostictus
Epidalea calamita
Leptophryne borbonica
Nimbaphrynoides occidentalis
Didynamipus sjostedti
Nectophryne afra
Nectophryne batesii
Wolterstorffina parvipalmata
Mo bambutensis
Werneria mertensiana
Werneria tandyi
Strauchbufo raddei
Sabahphrynus maculatus
Bufo eichwaldi
Bufo verrucosissimus
Bufo spinosus
Bufo bufo
Bufo tuberospinius
Bufo aspinius
Bufo cryptotympanicus
Bufo torrenticola
Bufo japonicus
Bufo stejnegeri
Bufo gargarizans
Bufo bankorensis
Bufo tibetanus
Bufo tuberculatus
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Rentapia rugosus
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Phrynoidis juxtaspera
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Ingerophrynus macrotis
Ingerophrynus philippinicus
Ingerophrynus galeatus
Ingerophrynus divergens
Ingerophrynus parvus
Ingerophrynus biporcatus
Barbarophryne brongersmai
Blaira ornata
Pelophryne misera
Pelophryne signata
Pelophryne brevipes
Ansonia albomaculata
Ansonia longidigita
Ansonia torrentis
Ansonia leptopus
Ansonia fuliginea
Ansonia guibei
Ansonia muelleri
Ansonia mcgregori
Ansonia latidisca
Ansonia spinulifer
Ansonia minuta
Ansonia platysoma
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Ansonia inthanon
Ansonia kraensis
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Adenomitues
Bedukityes
Bufonities
Epidaleitues
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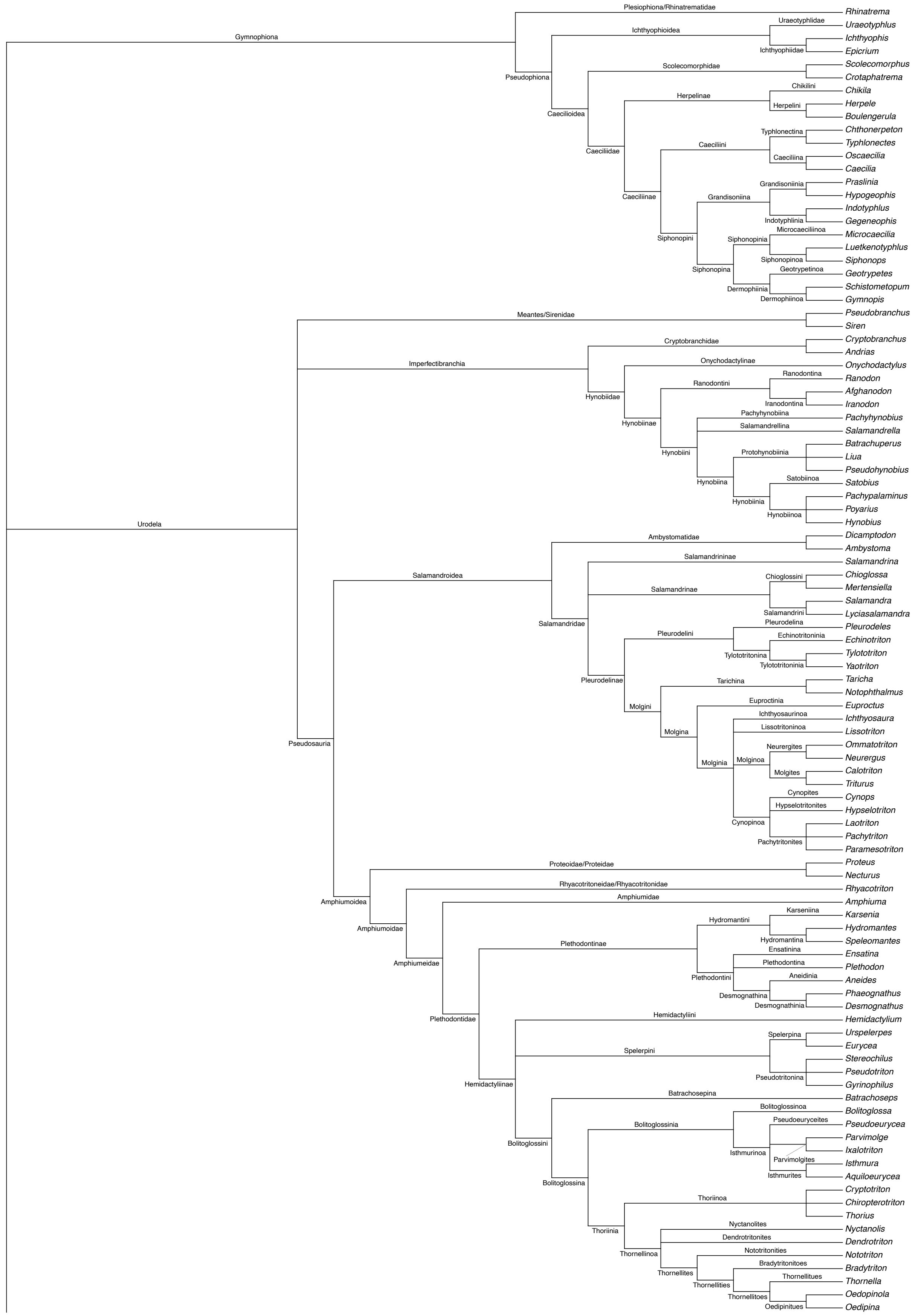
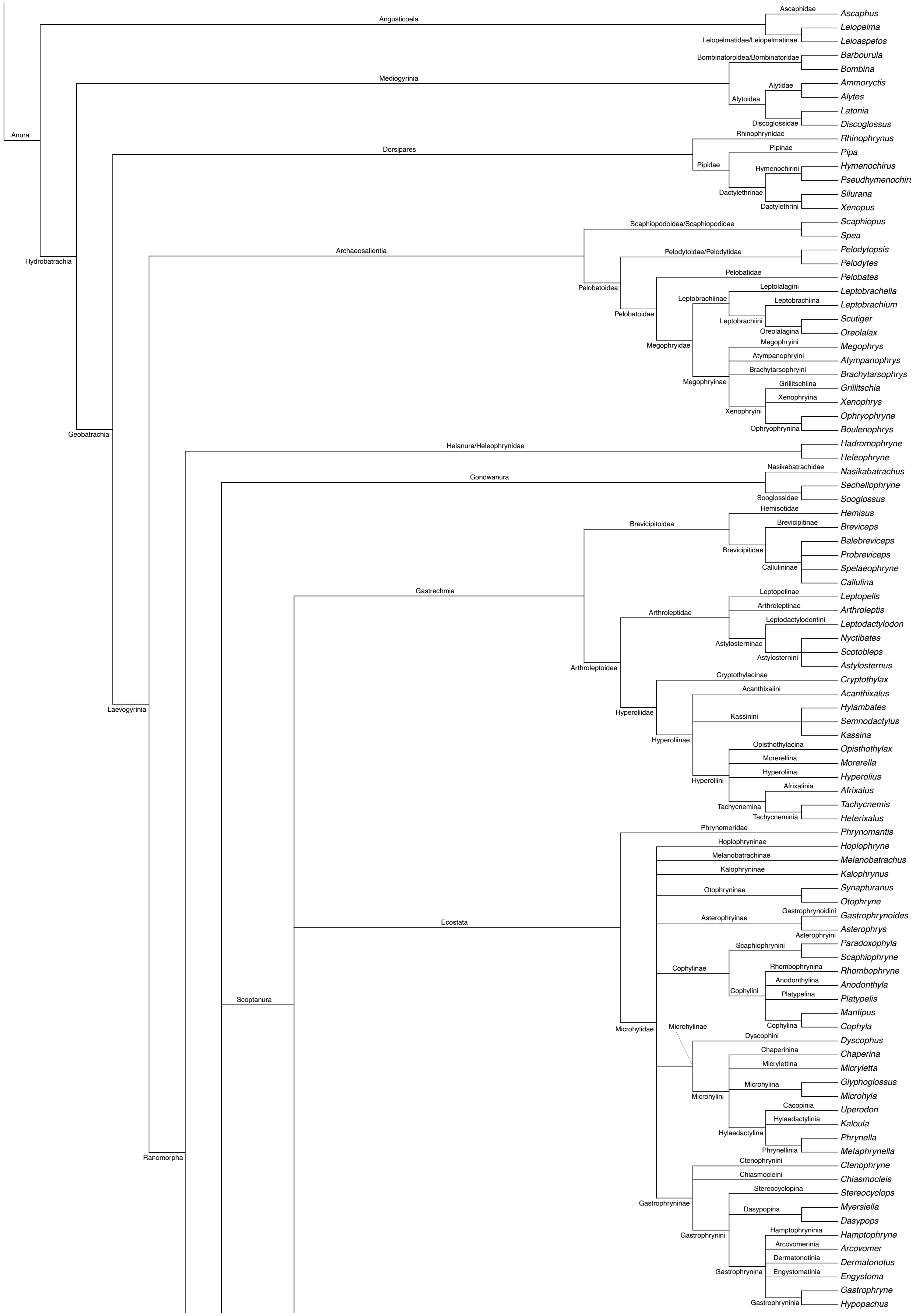
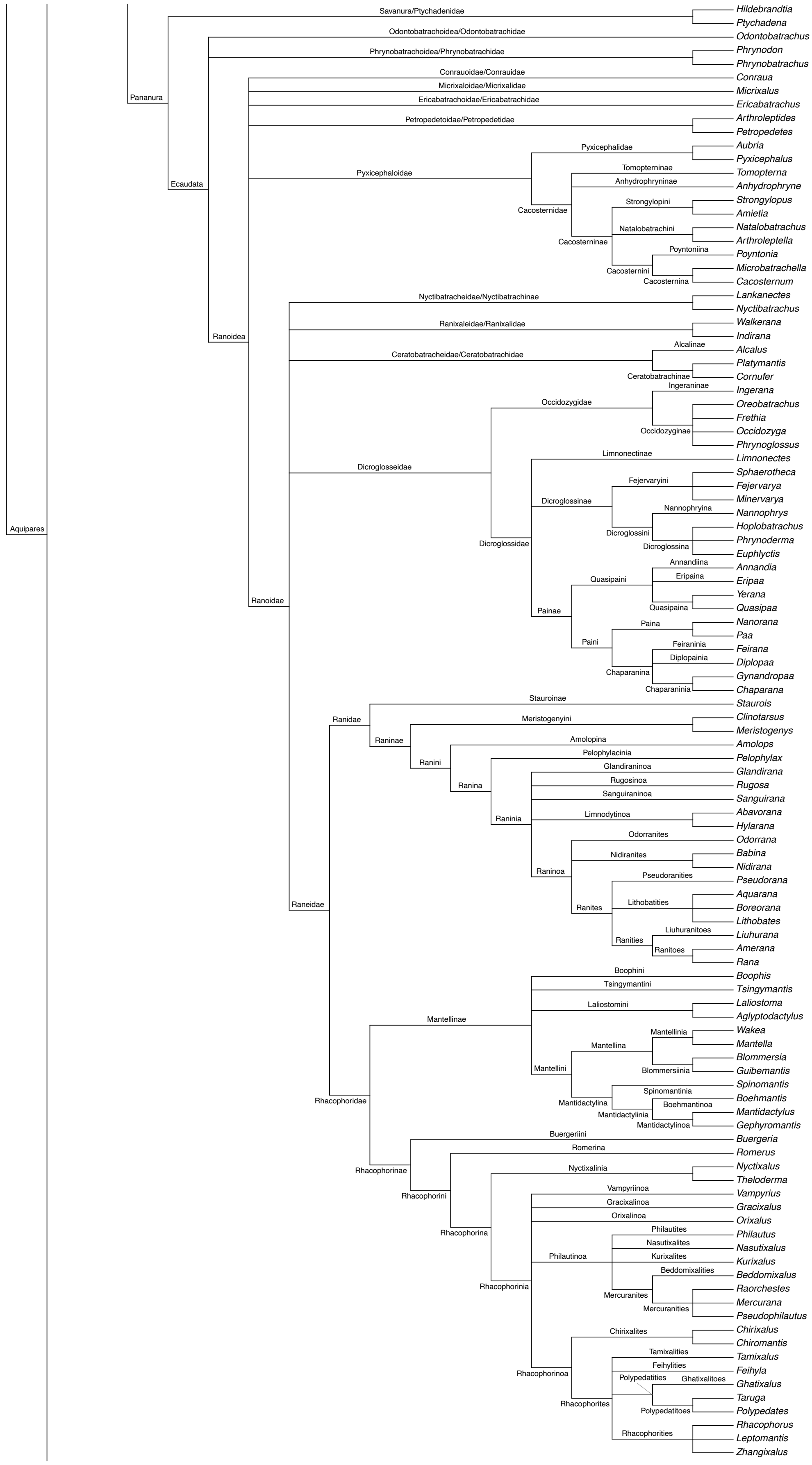
Nectophrynitues
Strauchbufonitoes
Sabahphrynitoes
Bufonitoes
Rentapiitues
Ingerophrynitues
Ansoniitoes
Barbarophrynitues
Blairitues
Ansoniitues

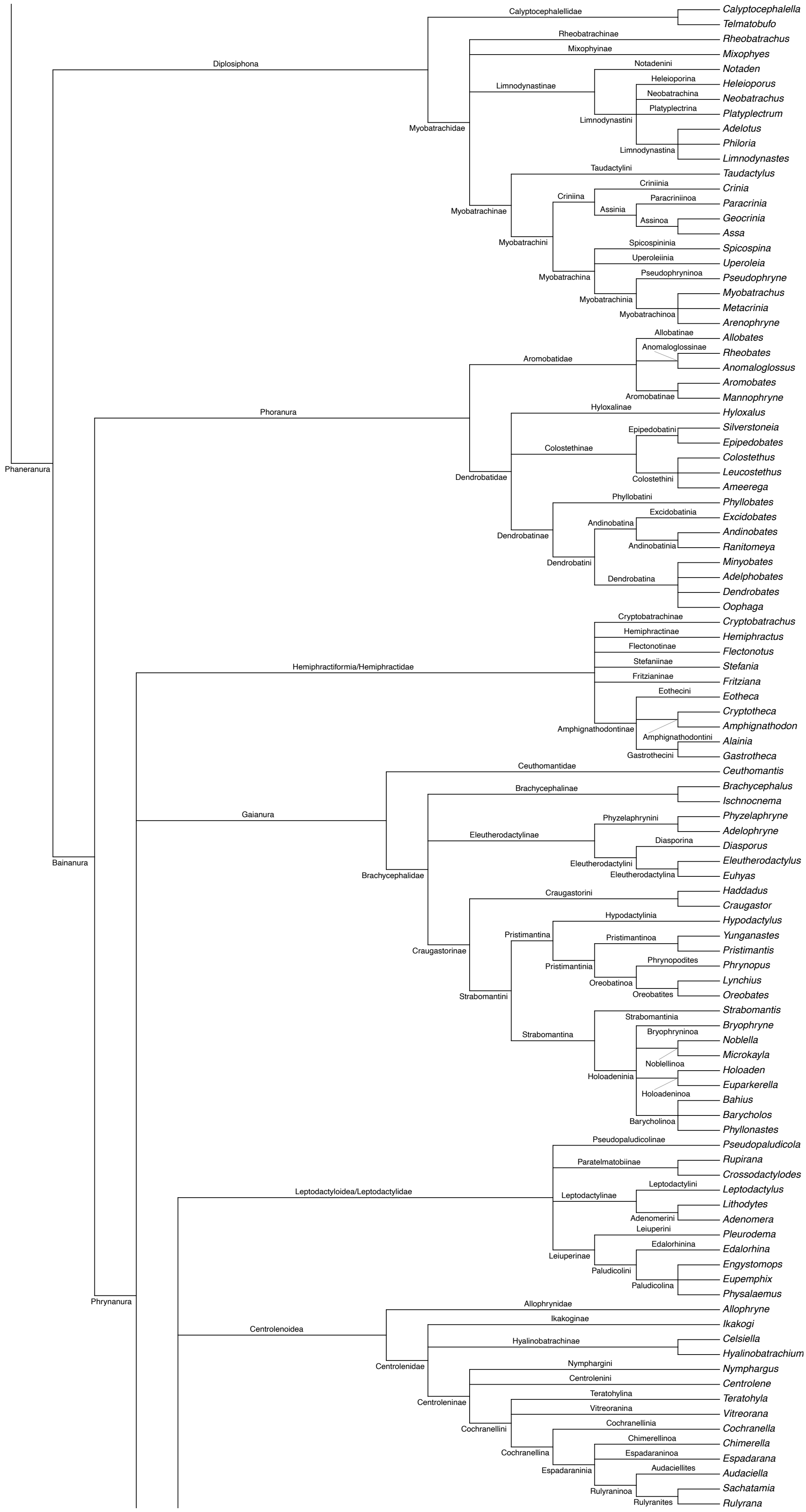
**Appendix A3.TREE-2.** Simplified phylogenetic tree of **Lissamphibia**, showing all genera and higher supraspecific taxa recognised here as valid.



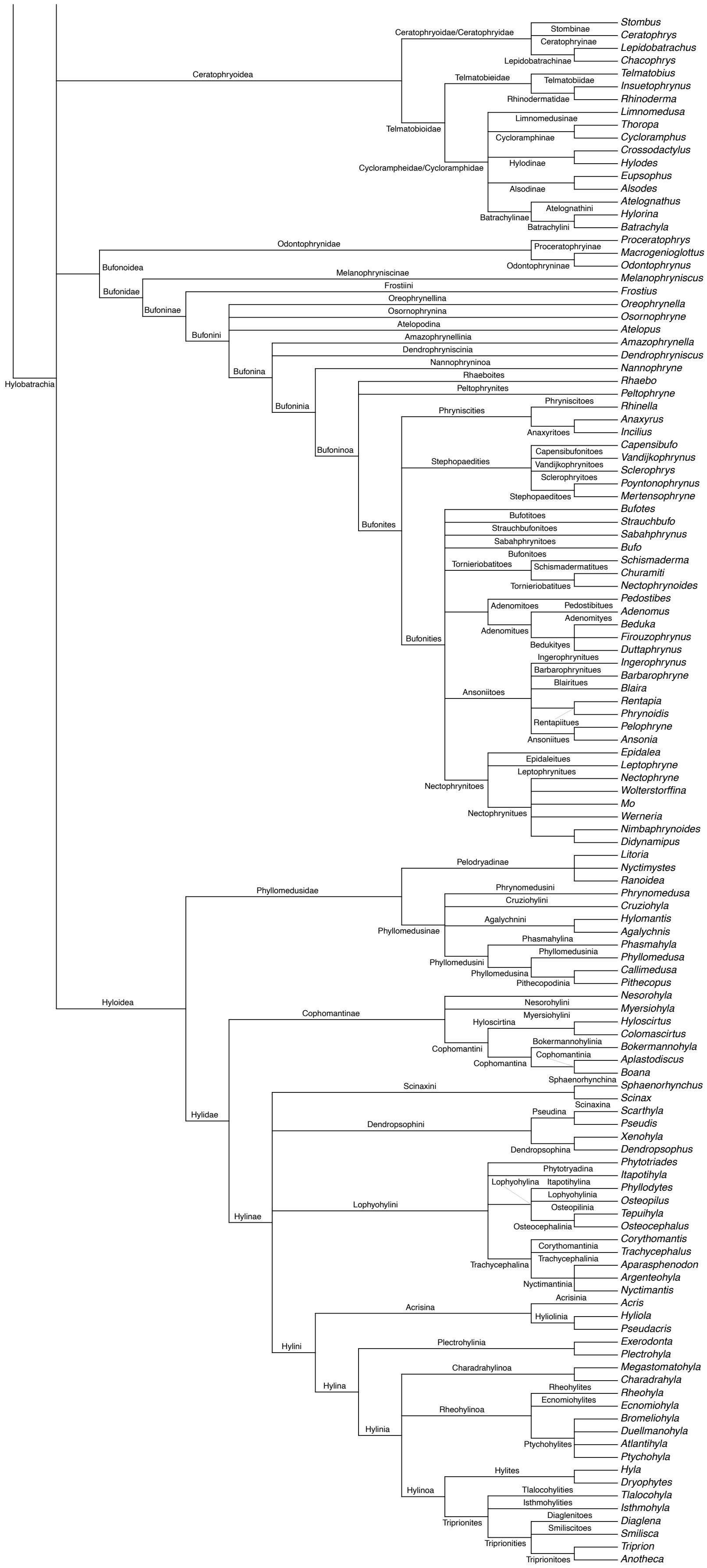


Anura
Angusticoela
Ascaphidae
Ascaphus
Leiopelmatidae/Leiopelmatinae
Leiopelma
Leioaspetos
Mediogyrinia
Bombinatoroidea/Bombinatoridae
Barbourula
Bombina
Alytoidea
Alytidae
Ammoryctis
Alytes
Discoglossidae
Latonia
Discoglossus
Dorsipares
Rhinophrynidae
Rhinophrynus
Pipidae
Pipinae
Pipa
Dactylethrinae
Hymenochirini
Hymenochirus
Pseudhymenochiru
Dactylethrini
Silurana
Xenopus
Hydrobatrachia
Archaeosalientia
Scaphiopodoidea/Scaphiopodidae
Scaphiopus
Spea
Pelobatoidea
Pelodytoidae/Pelodytidae
Pelodytopsis
Pelodytes
Pelobatoidae
Pelobatidae
Pelobates
Megophryidae
Leptobrachiinae
Leptolalagini
Leptobrachella
Leptobrachiini
Leptobrachiina
Leptobrachium
Oreolalagina
Scutiger
Oreolalax
Megophryinae
Megophryini
Megophrys
Atympanophryini
Atympanophrys
Brachytarsophryini
Brachytarsophrys
Xenophryini
Grillitschiina
Grillitschia
Xenophryina
Xenophrys
Ophryophrynina
Ophryophryne
Boulenophrys
Geobatrachia
Helanura/Heleophrynidae
Hadromophryne
Heleophryne
Gondwanura
Nasikabatrachidae
Nasikabatrachus
Sooglossidae
Sechellophryne
Sooglossus
Laevogyrinia
Gastrechmia
Brevicipitoidea
Hemisotidae
Hemisus
Brevicipitidae
Brevicipitinae
Breviceps
Callulininae
Balebreviceps
Probreviceps
Spelaeophryne
Callulina
Arthroleptoidea
Arthroleptidae
Leptopelinae
Leptopelis
Arthroleptinae
Arthroleptis
Astylosterninae
Leptodactylodontini
Leptodactylodon
Astylosternini
Nyctibates
Scotobleps
Astylosternus
Hyperoliidae
Cryptothylacinae
Cryptothylax
Hyperoliinae
Acanthixalini
Acanthixalus
Kassinini
Hylambates
Semnodactylus
Kassina
Hyperoliini
Opisthothylacina
Opisthothylax
Morerellina
Morerella
Hyperoliina
Hyperolius
Tachycnemina
Afrixalinia
Afrixalus
Tachycnemis
Tachycneminia
Heterixalus
Ranomorpha
Scoptanura
Ecostata
Phrynomeridae
Phrynomantis
Microhylidae
Hoplophryninae
Hoplophryne
Melanobatrachinae
Melanobatrachus
Kalophryninae
Kalophrynus
Otophryninae
Synapturanus
Otophryne
Asterophryinae
Gastrophrynoidini
Gastrophrynoides
Asterophryini
Asterophrys
Paradoxophyla
Cophylinae
Scaphiophrynini
Scaphiophryne
Cophylini
Rhombophrynina
Rhombophryne
Anodonthylina
Anodonthyla
Platypelina
Platypelis
Cophylina
Mantipus
Cophyla
Microhylinae
Dyscophini
Dyscophus
Microhylini
Chaperinina
Chaperina
Micrylettina
Micryletta
Microhylina
Glyphoglossus
Microhyla
Hylaedactylina
Cacopinia
Uperodon
Hylaedactylinia
Kaloula
Phrynellinia
Phrynella
Metaphrynella
Gastrophryninae
Ctenophrynini
Ctenophryne
Chiasmocleini
Chiasmocleis
Gastrophrynini
Stereocyclopina
Stereocyclops
Dasypopina
Myersiella
Dasypops
Gastrophrynina
Hamptophryninia
Hamptophryne
Arcovomerinia
Arcovomer
Dermatonotinia
Dermatonotus
Engystomatinia
Engystoma
Gastrophryninia
Gastrophryne
Hypopachus


Savanura/Ptychadenidae
Hildebrandtia
Ptychadena
Odontobatrachoidea/Odontobatrachidae
Odontobatrachus
Phrynobatrachoidea/Phrynobatrachidae
Phrynodon
Phrynobatrachus
Conrauoidae/Conrauidae
Conraua
Micrixaloidae/Micrixalidae
Micrixalus
Ericabatrachoidae/Ericabatrachidae
Ericabatrachus
Pananura
Petropedetoidae/Petropedetidae
Arthroleptides
Petropedetes
Pyxicephalidae
Aubria
Pyxicephalus
Tomopterninae
Tomopterna
Pyxicephaloidae
Anhydrophryninae
Anhydrophryne
Ecaudata
Strongylopini
Strongylopus
Amietia
Cacosternidae
Natalobatrachini
Natalobatrachus
Arthroleptella
Cacosterninae
Poyntoniina
Poyntonia
Cacosternini
Microbatrachella
Cacosternina
Cacosternum
Nyctibatracheidae/Nyctibatrachinae
Lankanectes
Nyctibatrachus
Ranixaleidae/Ranixalidae
Walkerana
Indirana
Ranoidea
Alcalinae
Alcalus
Ceratobatracheidae/Ceratobatrachidae
Platymantis
Ceratobatrachinae
Cornufer
Ingeraninae
Ingerana
Occidozygidae
Oreobatrachus
Frethia
Occidozyginae
Occidozyga
Phrynoglossus
Limnonectinae
Limnonectes
Dicroglosseidae
Sphaerotheca
Fejervaryini
Fejervarya
Minervarya
Dicroglossinae
Nannophryina
Nannophrys
Dicroglossini
Hoplobatrachus
Dicroglossidae
Phrynoderma
Dicroglossina
Euphlyctis
Annandiina
Annandia
Quasipaini
Eripaina
Eripaa
Yerana
Quasipaina
Quasipaa
Ranoidae
Painae
Paina
Nanorana
Paa
Paini
Feiraninia
Feirana
Diplopainia
Diplopaa
Chaparanina
Gynandropaa
Chaparaninia
Chaparana
Stauroinae
Staurois
Ranidae
Meristogenyini
Clinotarsus
Raninae
Meristogenys
Amolopina
Amolops
Ranini
Pelophylacinia
Pelophylax
Glandiraninoa
Glandirana
Ranina
Rugosinoa
Rugosa
Sanguiraninoa
Sanguirana
Raninia
Limnodytinoa
Abavorana
Hylarana
Odorranites
Odorrana
Nidiranites
Babina
Raninoa
Nidirana
Pseudoranities
Pseudorana
Lithobatities
Aquarana
Raneidae
Ranites
Boreorana
Lithobates
Liuhuranitoes
Liuhurana
Ranities
Ranitoes
Amerana
Rana
Boophini
Boophis
Tsingymantini
Tsingymantis
Laliostomini
Laliostoma
Aglyptodactylus
Mantellinae
Mantellinia
Wakea
Mantellina
Mantella
Blommersia
Mantellini
Blommersiinia
Guibemantis
Spinomantis
Spinomantinia
Boehmantis
Rhacophoridae
Mantidactylina
Boehmantinoa
Mantidactylinia
Mantidactylus
Mantidactylinoa
Gephyromantis
Buergeriini
Buergeria
Romerina
Romerus
Rhacophorinae
Nyctixalinia
Nyctixalus
Theloderma
Rhacophorini
Vampyriinoa
Vampyrius
Gracixalinoa
Gracixalus
Rhacophorina
Orixalinoa
Orixalus
Philautites
Philautus
Nasutixalites
Nasutixalus
Philautinoa
Kurixalites
Kurixalus
Beddomixalities
Beddomixalus
Rhacophorinia
Raorchestes
Mercuranites
Mercurana
Mercuranities
Pseudophilautus
Chirixalites
Chirixalus
Chiromantis
Tamixalities
Tamixalus
Rhacophorinoa
Feihylities
Feihyla
Polypedatities
Ghatixalitoes
Ghatixalus
Taruga
Rhacophorites
Polypedatitoes
Polypedates
Rhacophorus
Rhacophorities
Leptomantis
Zhangixalus
Aquipares



Calyptocephalellidae
Calyptocephalella
Telmatobufo
Rheobatrachinae
Rheobatrachus
Mixophyinae
Mixophyes
Diplosiphona
Notadenini
Notaden
Limnodynastinae
Heleioporina
Heleioporus
Neobatrachina
Neobatrachus
Platyplectrina
Platyplectrum
Myobatrachidae
Limnodynastini
Adelotus
Philoria
Limnodynastina
Limnodynastes
Taudactylini
Taudactylus
Criniinia
Crinia
Criniina
Paracriniinoa
Paracrinia
Myobatrachinae
Assinia
Assinoa
Geocrinia
Assa
Myobatrachini
Spicospininia
Spicospina
Uperoleiinia
Uperoleia
Myobatrachina
Pseudophryninoa
Pseudophryne
Myobatrachinia
Myobatrachus
Metacrinia
Myobatrachinoa
Arenophryne
Allobatinae
Allobates
Anomaloglossinae
Rheobates
Aromobatidae
Anomaloglossus
Aromobates
Aromobatinae
Mannophryne
Phoranura
Hyloxalinae
Hyloxalus
Epipedobatini
Silverstoneia
Epipedobates
Colostethinae
Colostethus
Phaneranura
Leucostethus
Dendrobatidae
Colostethini
Ameerega
Phyllobatini
Phyllobates
Excidobatinia
Excidobates
Andinobatina
Andinobates
Dendrobatinae
Andinobatinia
Ranitomeya
Dendrobatini
Minyobates
Adelphobates
Dendrobatina
Dendrobates
Oophaga
Cryptobatrachinae
Cryptobatrachus
Hemiphractinae
Hemiphractus
Flectonotinae
Flectonotus
Stefaniinae
Hemiphractiformia/Hemiphractidae
Stefania
Fritzianinae
Fritziana
Eothecini
Eotheca
Cryptotheca
Amphignathodontinae
Amphignathodon
Amphignathodontini
Alainia
Gastrothecini
Gastrotheca
Ceuthomantidae
Ceuthomantis
Brachycephalinae
Brachycephalus
Ischnocnema
Phyzelaphrynini
Phyzelaphryne
Gaianura
Adelophryne
Eleutherodactylinae
Diasporina
Diasporus
Eleutherodactylini
Eleutherodactylus
Bainanura
Eleutherodactylina
Euhyas
Brachycephalidae
Craugastorini
Haddadus
Craugastor
Hypodactylinia
Hypodactylus
Pristimantina
Pristimantinoa
Yunganastes
Pristimantis
Craugastorinae
Pristimantinia
Phrynopodites
Phrynopus
Oreobatinoa
Lynchius
Oreobatites
Oreobates
Strabomantini
Strabomantinia
Strabomantis
Bryophryninoa
Bryophryne
Strabomantina
Noblella
Noblellinoa
Microkayla
Holoaden
Holoadeninia
Euparkerella
Holoadeninoa
Bahius
Barycholos
Barycholinoa
Phyllonastes
Pseudopaludicolinae
Pseudopaludicola
Paratelmatobiinae
Rupirana
Crossodactylodes
Leptodactyloidea/Leptodactylidae
Leptodactylini
Leptodactylus
Leptodactylinae
Lithodytes
Adenomerini
Adenomera
Leiuperini
Pleurodema
Edalorhinina
Edalorhina
Leiuperinae
Paludicolini
Engystomops
Eupemphix
Paludicolina
Physalaemus
Phrynanura
Allophrynidae
Allophryne
Ikakoginae
Ikakogi
Centrolenoidea
Hyalinobatrachinae
Celsiella
Hyalinobatrachium
Centrolenidae
Nymphargini
Nymphargus
Centrolenini
Centrolene
Centroleninae
Teratohylina
Teratohyla
Vitreoranina
Vitreorana
Cochranellini
Cochranellinia
Cochranella
Cochranellina
Chimerellinoa
Chimerella
Espadaraninoa
Espadarana
Espadaraninia
Audaciellites
Audaciella
Rulyraninoa
Sachatamia
Rulyranites
Rulyrana


Ceratophryoidae/Ceratophryidae
Stombinae
Stombus
Ceratophryinae
Ceratophrys
Lepidobatrachus
Lepidobatrachinae
Chacophrys
Ceratophryoidea
Telmatobieidae
Telmatobiidae
Telmatobius
Insuetophrynus
Rhinodermatidae
Rhinoderma
Limnomedusinae
Limnomedusa
Telmatobioidae
Cycloramphinae
Thoropa
Cycloramphus
Crossodactylus
Cyclorampheidae/Cycloramphidae
Hylodinae
Hylodes
Eupsophus
Alsodinae
Alsodes
Atelognathus
Atelognathini
Hylorina
Batrachylinae
Batrachylini
Batrachyla
Odontophrynidae
Proceratophryinae
Proceratophrys
Macrogenioglottus
Bufonoidea
Odontophryninae
Odontophrynus
Melanophryniscinae
Melanophryniscus
Bufonidae
Frostiini
Frostius
Oreophrynellina
Oreophrynella
Bufoninae
Osornophrynina
Osornophryne
Atelopodina
Atelopus
Bufonini
Amazophrynellinia
Amazophrynella
Dendrophryniscinia
Dendrophryniscus
Nannophryninoa
Nannophryne
Bufonina
Rhaeboites
Rhaebo
Hylobatrachia
Peltophrynites
Peltophryne
Phryniscitoes
Rhinella
Bufoninia
Phryniscities
Anaxyrus
Anaxyritoes
Incilius
Capensibufo
Bufoninoa
Capensibufonitoes
Vandijkophrynus
Vandijkophrynitoes
Sclerophrys
Stephopaedities
Sclerophryitoes
Poyntonophrynus
Stephopaeditoes
Mertensophryne
Bufotes
Bufotitoes
Strauchbufo
Strauchbufonitoes
Sabahphrynus
Bufonites
Sabahphrynitoes
Bufo
Bufonitoes
Schismaderma
Tornieriobatitoes
Schismadermatitues
Churamiti
Tornieriobatitues
Nectophrynoides
Pedostibes
Adenomitoes
Pedostibitues
Adenomus
Adenomityes
Beduka
Adenomitues
Firouzophrynus
Bufonities
Bedukityes
Duttaphrynus
Ingerophrynitues
Ingerophrynus
Barbarophrynitues
Barbarophryne
Blairitues
Blaira
Ansoniitoes
Rentapia
Phrynoidis
Rentapiitues
Pelophryne
Ansoniitues
Ansonia
Epidaleitues
Epidalea
Leptophrynitues
Leptophryne
Nectophrynitoes
Nectophryne
Wolterstorffina
Mo
Nectophrynitues
Werneria
Nimbaphrynoides
Didynamipus
Pelodryadinae
Litoria
Nyctimystes
Ranoidea
Phyllomedusidae
Phrynomedusini
Phrynomedusa
Cruziohylini
Cruziohyla
Agalychnini
Hylomantis
Phyllomedusinae
Agalychnis
Phasmahylina
Phasmahyla
Phyllomedusinia
Phyllomedusa
Phyllomedusini
Phyllomedusina
Callimedusa
Pithecopodinia
Pithecopus
Hyloidea
Nesorohylini
Nesorohyla
Cophomantinae
Myersiohylini
Myersiohyla
Hyloscirtina
Hyloscirtus
Colomascirtus
Bokermannohylinia
Bokermannohyla
Cophomantini
Cophomantinia
Aplastodiscus
Cophomantina
Boana
Sphaenorhynchina
Sphaenorhynchus
Scinaxini
Scinax
Scinaxina
Scarthyla
Pseudina
Pseudis
Hylidae
Dendropsophini
Xenohyla
Dendropsophina
Dendropsophus
Phytotriades
Phytotryadina
Itapotihyla
Lophyohylina
Itapotihylina
Phyllodytes
Lophyohylinia
Osteopilus
Osteopilinia
Tepuihyla
Lophyohylini
Osteocephalinia
Osteocephalus
Hylinae
Corythomantis
Corythomantinia
Trachycephalus
Trachycephalinia
Aparasphenodon
Trachycephalina
Argenteohyla
Nyctimantinia
Nyctimantis
Acrisinia
Acris
Acrisina
Hyliolinia
Hyliola
Pseudacris
Plectrohylinia
Exerodonta
Hylini
Plectrohyla
Charadrahylinoa
Megastomatohyla
Charadrahyla
Rheohylites
Rheohyla
Hylina
Ecnomiohylites
Ecnomiohyla
Rheohylinoa
Bromeliohyla
Duellmanohyla
Hylinia
Ptychohylites
Atlantihyla
Ptychohyla
Hylites
Hyla
Dryophytes
Hylinoa
Tlalocohylities
Tlalocohyla
Isthmohylities
Isthmohyla
Diaglenitoes
Diaglena
Triprionites
Smiliscitoes
Smilisca
Triprionities
Triprion
Triprionitoes
Anotheca

**APPENDIX A4.RNK.** Abbreviations for ranks of taxa cited in Appendices A6.NFS, A7.NCS and A8.ECT

**aF** • Apofamilia
**bAb** • 'Unterabtheilung'
**bC** • Subclassis
**bCn** • Subclanus
**bD** • 'Subdivision'
**bF** • Subfamilia
**'bF'** • Rank stated as 'subfamilia', but above family-series
**bG** • Subgenus
**bO** • Subordo
**bP** • Subphalanx
**bPm** • Subphylum
**bR** • Subregnum
**bS** • Subspecies
**bSr** • Subseries
**bT** • Subtribus
**btC** • Subterclassis
**bTy** • 'Subtype'
**C** • Classis
**cCn** • Catoclanus
**Cd** • 'Clade'
**cD** • 'Crowndivision'
**Cn** • Clanus
**cO** • 'Crownorder'
**D** • 'Division'
**EA** • Aponym with standard ending (in –IFORMIA or –OMORPHA) introduced here for an auxorhizonym
**EC** • Aponym with standard ending (in –ACEI) introduced here for a cenorhizonym in order to avoid confusion with FS nomina with standard FS endings (in *–IDAE*, *–INAE*, *–INA*, *–INI* and *–OIDEA*)
**eF** • Epifamilia
**eP** • Epiphalanx
**EQ** • Aponym with standard ending (in –IFORMES or –OMORPHES) introduced here for a quasirhizonym
**ER** • Aponym with standard ending (in –ACEA) introduced here for a rhizonym in order to avoid confusion with FS nomina with standard FS endings (in *–IDAE*, *–INAE*, *–INA*, *–INI* and *–OIDEA*)
**EU** • Aponym with modified spelling consistent with usage in other CS arhizonyms based on the same etymology, introduced here for sake of homogeneity
**EX** • Aponym with standard ending (in –IFORMI or –OMORPHI) introduced here for a xenorhizonym
**F** • Familia
**'F'** • Rank stated as 'familia', but above family-series
**Fo** • 'Formation'
**G** • Genus
**Ga** • 'Ancestral-group'
**Gr** • 'Group'
**Gs** • 'Gens'
**hCn** • Hypoclanus
**He** • 'Heerde'
**hO** • Hypoordo
**hP** • Hypophalanx
**hT** • Hypotribus
**iC** • Infraclassis
**iCn** • Infraclanus
**iO** • Infraordo
**iP** • Infraphalanx
**iT** • Infratribus
**Kl** • 'Klan'
**Kr** • 'Kreis'
**L** • Legio
**Li** • 'Linie'
**O** • Ordo
**P** • Phalanx
**pC** • Superclassis
**pF** • Superfamilia
**'pF'** • Rank stated as 'superfamilia', but above family-series
**Pm** • Phylum
**'Pm'** • Pseudo-rank stated as 'phylum', but this term is used at various hierarchical levels in the ergotaxonomy at stake, which is therefore pseudo-ranked, not really ranked
**pO** • Superordo
**pP** • Superphalanx
**pvO** • Parvordo
**R** • Regnum
**Rh** • 'Reihe'
**RNS** • Rank not stated
**S** • Species
**Sc** • Sectio
**Sr** • Series
**St** • Stirps
**T** • Tribus
**'T'** • Rank stated as 'tribus', but above family-series
**tAb** • 'Hauptabtheilung'
**tRh** • 'Hauptreihe'
**Tx** • 'Taxon'
**Ty** • 'Type'
**UC** • Unspecified (or discussed) rank in class-series
**UF** • Unspecified (or discussed) rank in family-series
**UU** • Unspecified (or discussed) rank in unspecified (or discussed) nominal-series
**X** • 'Taxon'
**Zg** • 'Zug'
**Zt** • 'Zunft'

## APPENDIX A5.NGS. Genus-series nomina and taxa of LISSAMPHIBIA.

**Structure of accounts**

First line • Genus nomen or parograph.

Second line • **ST** (Taxonomic and nomenclatural status of nomen); and **ID** (Identifier of kyronym of genus-series taxon in Appendix **A9.CLAD-1)** (only for lissamphibian genus-series nomina).

Third line • **PN** (Protonym of nucleospecies).

Fourth line • **PK** (Protonym of kyronym of nucleospecies).

Fifth line • **KG** (Kyronym of genus).

Sixth line • **PF** (Kyronym of family).

**Genus-series nomen or apograph** • Genus-series nomen (given as its protograph) or apograph mentioned in one of the Tables of this work, followed by its shortened authorship (auctorship or scriptorship) and date (year), by information whether its nucleospecies is based on extant or fossil (‡) onymophoront(s), and by an abbreviation giving the main characteristic of its taxonominal status.

Whenever the authorship consists in more than one author or scriptor, only the name of the first of them is given, followed by the number of other authors or scriptors, as follows: Duméril$^{+1}$, Frost$^{+18}$. The complete authorship is given in our list of references of publications only if the work at stake is also cited in the text.

In this Table, we tried to include all hoplonyms (including neonyms and lectoprotographs) and anoplonyms (mostly gymnonyms) of lissamphibian GS nomina published after 1757, as well as non-lissamphibian senior homonyms of lissamphibian GS nomina. However, not all GS apographs (mostly ameletographs) appear in this Table (they play no role regarding zoological nomenclature, as an apograph is just a subsequent avatar of a nomen and does not have its own availability), but some are mentioned, when they have been cited in several publications and/or when they appear in another Table of this work (e.g., as a primogenus of a class-series nomen), and, if so, followed by their scriptorship and first known date of use.

In all cases where a lissamphibian GS nomen must be rejected as invalid for being a junior homonym, only the earliest senior homonym is given in this table, as its existence is sufficient to preoccupy the spelling of the generic nomen at stake over the whole zoology. No further information on these senior non-lissamphibian homonyms (such as their current allocation or validity) is provided here and these nomina do not appear in Appendices **A9.CLAD-1** and **A10.CLAD-2**.

In the titles of accounts, lissamphibian GS nomina considered valid in this work are in ***bold italics*** and those considered invalid, unavailable or unallocated, as well as non-lissamphibian GS nomina, are in simple *italics*. Auctorship is indicated by the presence of a comma between the name of (first) auctor and date, and scriptorship by presence of a colon between the nomen and the name of its scriptor(s), which is not followed by a comma.

**Meanings of abbreviations used for the main categories of taxonominal status of nomina and apographs in titles of accounts**

- AK • Lissamphibian akyronym: available lissamphibian GS nomen (hoplonym) considered invalid in the present work (*n* = 871). • **Example**: *Abrana* Parker, 1931.
- AN • Lissamphibian anoplonym: unavailable lissamphibian GS nomen (*n* = 171). • **Example**: *Adenomera*: Fitzinger 1861.
- EX • Lissamphibian exoplonym: lissamphibian GS nomen made unavailable by the Commission under its Plenary Power (*n* = 14). • **Example**: *Acrodytes* Fitzinger, 1843.
- KY • Lissamphibian kyronym: available lissamphibian GS nomen (hoplonym) considered valid in the present work (*n* = 771). • **Example**: ***Acanthixalus*** Laurent, 1944.
- ZA • Non-lissamphibian anoplonym: unavailable non-lissamphibian GS nomen being senior homograph of a lissamphibian available nomen (hoplonym) (*n* = 11). • **Example**: *Assa*: Gray 1951.
- ZH • Non-lissamphibian hoplonym: available non-lissamphibian GS nomen being homonym of a lissamphibian available nomen (hoplonym) (*n* = 102). • **Example**: *Abrana* Strand, 1928.

**ST • Detailed taxonominal status of genus-series nomen or apograph regarding: nomenclatural availability and taxonominal validity in the present work**.

**Meanings of abbreviations used for ST categories defined below**

- AL • Anoplonym: lissamphibian GS nomen unavailable for failing to comply with the Criteria of availability of publications or of nomina of the *Code* (*n* = 113). • **Example**: *Adenomera*: Fitzinger 1861.
- AM • Ameletograph (incorrect subsequent spelling): spelling of a lissamphibian GS nomen resulting from inadvertent change of original protograph, devoid of independent nomenclatural availability (anoplonym) (*n* = 41). • **Example**: *Aubrya*: Schiøtz 1964.
- CA • Archakyronym: lissamphibian GS nomen considered invalid in *CLAD* as a result of its rejection through the Plenary Power of the Commission (*n* = 9). • **Example**: *Autodax* Boulenger, 1887.
- CE • Archexoplonym: lissamphibian GS nomen made unavailable by the Commission under the Plenary Power, through removal of availability of nomen itself (*n* = 10). • **Example**: *Acrodytes* Fitzinger, 1843.

**CW** • Archanecdidonym: lissamphibian GS nomen considered invalid in *CLAD* as a result of the rejection through the Plenary Power of the Commission of the work where it had been published. (*n* = 4). • **Example**: *Buffo* La Cepède, 1788.

**JD** • Junior doxisonym: lissamphibian GS nomen considered invalid (nomakyronym) in *CLAD* as a result of our taxonomic analysis and for being considered a junior doxisonym (subjective synonym) of an available nomen considered as valid (*n* = 604). • **Example**: *Abroscaphus* Laurent, 1944.

**JH** • Junior homonym: invalid lissamphibian GS nomen (nomakyronym) for being a junior homonym of an available nomen, whether considered valid or not (*n* = 113). • **Example**: *Abrana* Parker, 1931.

**JI** • Junior isonym: lissamphibian GS nomen (nomakyronym) considered invalid in *CLAD* as a result of our taxonomic analysis and for being a junior isonym (objective synonym) of an available nomen considered as valid (*n* = 142). • **Example**: *Alethotriton* Fatio, 1872.

**KC** • Archokyronym: lissamphibian GS nomen considered valid in *CLAD* as a result of our taxonomic analysis and of its validation through the Plenary Power of the Commission (*n* = 2). • **Example**: *Epicrium* Wagler, 1828.

**KN** • Nomokyronym: lissamphibian GS nomen considered valid in *CLAD* as a result of our taxonomic analysis and of the regular Rules of the *Code* concerning precedence between zygonyms (if relevant) (*n* = 767). • **Example**: ***Acanthixalus*** Laurent, 1944.

**LC** • Lectoprotograph (correct original spelling): correct spelling of an available lissamphibian GS nomen, resulting from an airesy (first reviser action) among symprotographs (multiple original spellings). (*n* = 16). • **Example**: ***Aneides*** Baird, 1851.

**LI** • Leipoprotograph (incorrect original spelling): incorrect spelling of an available lissamphibian GS nomen, resulting from an airesy (first reviser action) among symprotographs (multiple original spellings), devoid of independent nomenclatural availability (*n* = 17). • **Example**: *Anaides*: Baird 1851.

**NC** • Archoneonym: lissamphibian GS nomen given the status of available *nomen novum* by the Commission under the Plenary Power (*n* = 1). • **Example**: *Liopelma* Günther, 1869.

**NL** • Alloneonym (*nomen novum*, new replacement nomen): available lissamphibian GS neonym having a partially or totally different etymology from its archaeonym, i.e., not directly derived from it through unjustified emendation (*n* = 41). • **Example**: *Adelotus* Ogilby, 1907.

**NS** • Sigoneonym (nomen deemed to be a neonym): new meletograph of an available lissamphibian GS nomen considered here as available although it does not meet the restrictive criteria of Article 33.2.1 (see NS1–NS5 in column 3 of Table **T8.NS-2**) (*n* = 48). • **Example**: *Anodontohyla* Gadow, 1901.

**NT** • Autoneonym: available lissamphibian GS neonym having the same etymology as its archaeonym, i.e., directly derived from it through unjustified emendation (*n* = 83). • **Example**: *Amblystoma* Agassiz, 1844.

**PO** • Poieonym: brand new available lissamphibian GS nomen, not proposed to replace an existing one, complying with the Rules of availability of the *Code* for both publications and nomina (hoplonym) (*n* = 1464). • **Examples**: *Abrana* Parker, 1931; ***Acanthixalus*** Laurent, 1944.

**RO** • Lethakyronym: lissamphibian GS nomen considered invalid in *CLAD* as a result of our taxonomic analysis and of its rejection as *nomen oblitum* under Reversal of Precedence as defined in Article 23.9 (*n* = 2). • **Example**: *Atylodes* Gistel, 1868.

**RP** • Mnemokyronym: lissamphibian GS nomen considered valid in *CLAD* as a result of our taxonomic analysis and of its validation as *nomen protectum* under Reversal of Precedence as defined in Article 23.9 (*n* = 2). • **Example**: *Hyla* Laurenti, 1768.

**ZF** • Non-lissamphibian GS radicogenus of a FS nomen: available non-lissamphibian GS nomen the stem of which has provided the stem of a family-series nomen and which is homographic with the stem of an available FS lissamphibian nomen, making both FS nomina homonyms (*n* = 3). • **Example**: *Acrida* Linnaeus, 1758.

**ZN** • Non-lissamphibian GS anoplonym: non-lissamphibian GS nomen unavailable for failing to comply with the Criteria of availability of publications or of nomina of the *Code*, homograph of a lissamphibian GS nomen (*n* = 11). • **Example**: *Assa*: Gray 1851.

**ZO** • Non-lissamphibian GS hoplonym: available non-lissamphibian GS nomen being homonym of a lissamphibian available GS nomen (*n* = 99). • **Example**: *Abrana* Strand, 1928.

**AK • Categories of akyronyms of lissamphibians (*n* = 871)**

**LC.JD** • Lectoprotograph, junior doxisonym (*n* = 3). • **Example**: *Hyladactylus* Tschudi, 1838.

**LC.JH** • Lectoprotograph, junior homonym (*n* = 2). • **Example**: *Hyperoodon* Philippi, 1902.

**LC.JI** • Lectoprotograph, junior isonym (*n* = 1). • **Example**: *Batrachychthis* Pizarro, 1876.

**LC.RO** • Lectoprotograph, lethakyronym (*n* = 1). • **Example**: *Ranetta* Garsault, 1764.

**NC.JI** • Archoneonym, junior isonym (*n* = 1). • **Example**: *Liopelma* Günther, 1869.

**NL.CA** • Alloneonym, archakyronym (*n* = 1). • **Example**: *Autodax* Boulenger, 1887.

**NL.JD** • Alloneonym, junior doxisonym (*n* = 6). • **Example**: *Bradybates* Gistel, 1848.

NL.JH • Alloneonym, junior homonym (*n* = 2). • **Example**: *Cordylus* Wagler, 1828.

NL.JI • Alloneonym, junior isonym (*n* = 29). • **Example**: *Apneumona* Fleming, 1822.

NS.JD • Sigoneonym, junior doxisonym (*n* = 19). • **Example**: *Axoloth* Gray, 1842.

NS.JH • Sigoneonym, junior homonym (*n* = 1). • **Example**: *Trachycephalus* Ferguson, 1875.

NS.JI • Sigoneonym, junior isonym (*n* = 27). • **Example**: *Anodontohyla* Gadow, 1901.

NT.JD • Autoneonym, junior doxisonym (*n* = 21). • **Example**: *Amfignathodon* Palacký, 1898.

NT.JH • Autoneonym, junior homonym (*n* = 3). • **Example**: *Hyperodon* Agassiz, 1847.

NT.JI • Autoneonym, junior isonym (*n* = 55). • **Example**: *Amblystoma* Agassiz, 1844.

PO.CA • Poieonym, archakyronym (*n* = 8). • **Example**: *Axolot* Bonaparte, 1831.

PO.JD • Poieonym, junior doxisonym (*n* = 555). • **Example**: *Abroscaphus* Laurent, 1941.

PO.JH • Poieonym, junior homonym (*n* = 106). • **Example**: *Abrana* Parker, 1931.

PO.JI • Poieonym, junior isonym (*n* = 29). • **Example**: *Abroscaphus* Laurent, 1941.

PO.RO • Poieonym, lethakyronym (*n* = 1). • **Example**: *Atylodes* Gistel, 1868.

AN • **Categories of anoplonyms of lissamphibians (*n* = 171)**

AL • Anoplonym (*n* = 113). • **Example**: *Adenomera*: Fitzinger 1861.

AM • Ameletonym (*n* = 41). • **Example**: *Aubrya*: Schiøtz 1964.

LI • Leipoprotograph (*n* = 17). • **Example**: *Anaides*: Baird 1851.

EX • **Categories of exoplonyms of lissamphibians (*n* = 14)**

NS.CE • Sigoneonym, archexoplonym (*n* = 1). • **Example**: *Phyllhydrus* Gray, 1831.

NT.CE • Autoneonym, archexoplonym (*n* = 1). • **Example**: *Mycetoglossus* Bonaparte, 1839.

NT.CW • Autoneonym, archanecdidonym (*n* = 1). • **Example**: *Buffo* La Cepède, 1788.

PO.CE • Poieonym, archexoplonym (*n* = 8). • **Example**: *Acrodytes* Fitzinger, 1843.

PO.CW • Poieonym, archanecdidonym (*n* = 3). • **Example**: *Calamita* Oken, 1816.

KY • **Categories of kyronyms of lissamphibians (*n* = 771)**

LC.KN • Lectoprotograph, nomokyronym (*n* = 9). • **Example**: ***Aneides*** Baird, 1851.

NL.KN • Alloneonym, nomokyronym (*n* = 3). • **Example**: ***Adelotus*** Ogilby, 1907.

NT.KN • Autoneonym, nomokyronym (*n* = 2). • **Example**: ***Estesiella*** Báez, 1995.

PO.KC • Poieonym, archokyronym (*n* = 2). • **Example**: ***Epicrium*** Wagler, 1828.

PO.KN • Poieonym, nomokyronym (*n* = 753). • **Example**: ***Acanthixalus*** Laurent, 1944.

PO.RP • Poieonym, mnemokyronym (*n* = 2). • **Example**: ***Hyla*** Laurenti, 1768.

ZA • **Categories of non-lissamphibian anoplonyms (*n* = 11)**

ZN • Anoplonym (*n* = 11). • **Example**: *Assa*: Gray 1851.

ZH • **Categories of non-lissamphibian hoplonyms (*n* = 102)**

ZF • Radicogenus (*n* = 3). • **Example**: *Acrida* Linnaeus, 1758.

ZO • Hoplonym (*n* = 99). • **Example**: *Abrana* Strand, 1928.

**CI** • **Category identifier** of genus-series nomen (*n* = 1937).

e0001, e0002, etc. • Numbers of genus-series exoplonyms designating lissamphibian taxa (*n* = 14).

h0001, h0002, etc. • Numbers of genus-series hoplonyms designating lissamphibian taxa (*n* = 1642).

n0001, n0002, etc. • Numbers of genus-series anoplonyms designating lissamphibian taxa (*n* = 171).

zh001, zh002, etc. • Numbers of genus-series hoplonyms designating taxa non including lissamphibians (*n* = 102).

zn001, zn002, etc. • Numbers of genus-series anoplonyms designating taxa non including lissamphibians (*n* = 11).

**ID** • **Identifier** of kyronym of genus-series taxon shown in **KG** (documented only for lissamphibian nomina) (*n* = 779: 579 extant, 200 all-fossil). This number appears preceded by G.28 in **A.CLAD-1**. It is preceded by † for all-fossil genera, and followed by § for genera referred to only by anoplonyms or anecdidonyms but for which no hoplonyms were ever proposed (*n* = 13: 4 extant, 9 all-fossil).

**PN** • **Protonym of nucleospecies** • Protonym (original combination and spelling) of the nominal nucleospecies (type-species) of nomen in **PK**.

AU • SS or GS anoplonym (unavailable nomen) of lissamphibian taxon for failing to comply with the Criteria of availability of publications or of nomina of the *Code*.

**PK** • **Protonym of kyronym of nucleospecies** • Original combination and spelling of the valid nomen in Appendix **A9.CLAD-1** of the species-series taxon designated by the nomen in **PK**.

* The nucleospecies (type species) of the genus is represented in Appendix **A2.TREE-1**: *Rana temporaria**.

° The nucleospecies (type species) of the genus is not represented in Appendix **A2.TREE-1**: *Elosia duidensis*°.

**KG** • **Kyronym of genus** • Valid and correct nomen in Appendix **A9.CLAD-1** of the genus taxon designated by the nomen of column 4, followed by its author and identifier.

* The genus is represented in Appendix **A2.TREE-1** by its nucleospecies or an isonym of the latter: *Rana**.

[1] The genus is represented in Appendix **A2.TREE-1** by a doxisonym of its nucleospecies: *Pipa*[1].

[2] The genus is represented in Appendix **A2.TREE-1** by the nucleospecies of a generic nomen being its doxisonym: *Latonia*[2].

[3] The genus is represented in Appendix **A2.TREE-1** but only by species that include neither its nucleospecies, nor a doxisonym of the latter, nor the nucleospecies of a doxisonym of the generic nomen at stake: *Uraeotyphlus*[3].

° The genus is not represented in Appendix **A2.TREE-1**: *Dischidodactylus*°.

**KF** • **Kyronym of family** • Valid and correct nomen of family to which the kyronyms of **KG** are referred in Appendix **A9.CLAD-1**, followed by its identifier (see Appendix **A6.NFS** for its authorship).

### Other abbreviations and symbols

‡ • Nomen based on a nucleospecies the onymophoront/s (type-specimen/s) of which is/are fossils.

‡¡ • Nomen based on a nucleospecies the onymophoront/s (type-specimen/s) of which is/are fossil footprints.

† • Nomen designating an all-fossil taxon.

● • Nomen designating a taxon containing at least one non-recent lissamphibian species/taxon: detailed information on this nomen was not sought, not being necessary for the present work.

AG • Unavailable genus-series nomen having no available counterpart.

AS • Unavailable species-series nomen.

INR • Information not relevant here.

## Note

The following two words appear sometimes in lists of amphibian genera, but they are not nomina of taxa.

'Hybridus' as used by Peracca (1886: 9, 12), although presented in combination with a specific epithet, does not designate a genus or a taxon, but a taxonomic category like 'species', 'genus' or 'klepton'.

'Tartalina' as used by Duméril *et al.* (1854: 70) is not a nomen but an emendation of the vernacular name 'Tarantolina' mentioned by Savi (1823: 107).

***Abavorana*** Oliver[+3], 2015 • KY
**ST**: PO.KN • **CI**: h0001 • **ID**: 408
**PN**: *Limnodytes luctuosus* Peters, 1871
**PK**: *Limnodytes luctuosus** Peters, 1871
**KG**: *Abavorana** Oliver[+3], 2015
**KF**: *RANIDAE* 1796.ba.f001
*Abrana* Strand, 1928 • ZH
**ST**: ZO • **CI**: zh001
*Abrana* Parker, 1931 • AK
**ST**: PO.JH • **CI**: h0002 • **ID**: 464
**PN**: *Abrana cotti* Parker, 1931
**PK**: *Rana schillukorum*° Werner, 1908
**KG**: *Ptychadena** Boulenger, 1917
**KF**: *PTYCHADENIDAE* 1987.da.f002
*Abranchus* Boie, 1824 • ZH
**ST**: ZO • **CI**: zh002
*Abranchus* Harlan, 1825 • AK
**ST**: PO.JH • **CI**: h0003 • **ID**: 504
**PN**: *Salamandra alleganiensis* Sonnini[+1], 1801
**PK**: *Salamandra alleganiensis** Sonnini[+1], 1801
**KG**: *Cryptobranchus*[1] Leuckart, 1821
**KF**: *CRYPTOBRANCHIDAE* 1826.fb.f003
*Abroscaphus* Laurent, 1941 • AK
**ST**: PO.JD • **CI**: h0004 • **ID**: 320
**PN**: *Arthroleptis adolfifriederici* Nieden, 1911
**PK**: *Arthroleptis adolfifriederici** Nieden, 1911
**KG**: *Arthroleptis** Smith, 1849
**KF**: *ARTHROLEPTIDAE* 1869.mc.f011
***Acanthixalus*** Laurent, 1944 • KY
**ST**: PO.KN • **CI**: h0005 • **ID**: 330
**PN**: *Hyperolius spinosus* Buchholz[+1] *in* Peters, 1875
**PK**: *Hyperolius spinosus** Buchholz[+1] *in* Peters, 1875
**KG**: *Acanthixalus** Laurent, 1944
**KF**: *HYPEROLIIDAE* 1943.lb.f001
*Acrida* Linnaeus, 1758 • ZH
**ST**: ZF • **CI**: zh003
*Acrides* Macleay, 1821 • ZH
**ST**: ZF • **CI**: zh004
***Acris*** Duméril[+1], 1841 • KY
**ST**: PO.KN • **CI**: h0006 • **ID**: 198
**PN**: *Rana gryllus* Le Conte, 1825
**PK**: *Rana gryllus** Le Conte, 1825
**KG**: *Acris** Duméril[+1], 1841
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|
*Acrodytes* Fitzinger, 1843 • EX
**ST**: PO.CE • **CI**: e0001 • **ID**: 231
**PN**: *Rana venulosa* Laurenti, 1768
**PK**: *Rana typhonia** Linnaeus, 1758
**KG**: *Trachycephalus** Tschudi, 1838
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|
***Adelastes*** Zweifel, 1986 • KY
**ST**: PO.KN • **CI**: h0008 • **ID**: 279
**PN**: *Adelastes hylonomos* Zweifel, 1986
**PK**: *Adelastes hylonomos*° Zweifel, 1986
**KG**: *Adelastes*° Zweifel, 1986
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001
***Adelophryne*** Hoogmoed[+1], 1984 • KY
**ST**: PO.KN • **CI**: h0009 • **ID**: 083
**PN**: *Adelophryne adiastola* Hoogmoed[+1], 1984
**PK**: *Adelophryne adiastola** Hoogmoed[+1], 1984
**KG**: *Adelophryne** Hoogmoed[+1], 1984
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002
***Adelotus*** Ogilby, 1907 • KY
**ST**: NL.KN • **CI**: h0010 • **ID**: 260
**PN**: *Cryptotis brevis* Günther, 1863
**PK**: *Cryptotis brevis** Günther, 1863
**KG**: *Adelotus** Ogilby, 1907
**KF**: *MYOBATRACHIDAE* 1850.sa.f001
*Adelphesiren* Goin[+1], 1958 ‡ • AK
**ST**: PO.JD • **CI**: h0011 • **ID**: †176
**PN**: *Adelphesiren olivae* Goin[+1], 1958 ‡
**PK**: *Habrosaurus dilatus*° Gilmore, 1928 †
**KG**: *Habrosaurus*° Gilmore, 1928 †
**KF**: *SIRENIDAE* 1825gb.f005
***Adelphobates*** Grant[+9], 2006 • KY
**ST**: PO.KN • **CI**: h0012 • **ID**: 047
**PN**: *Dendrobates castaneoticus* Caldwell[+1], 1990
**PK**: *Dendrobates castaneoticus** Calwell[+1], 1990
**KG**: *Adelphobates** Grant[+9], 2006
**KF**: *DENDROBATIDAE* ||1850.bb.f006||-1865.ca.f002
*Adenomera*: Fitzinger 1861 • AN
**ST**: AL • **CI**: n0001 • **ID**: 251
**PN**: *Adenomera marmorata* Steindachner, 1867
**PK**: *Adenomera marmorata*° Steindachner, 1867
**KG**: *Adenomera*[3] Steindachner, 1867
**KF**: *LEPTODACTYLIDAE* ||1838.ta.f001||-1896.wa.f001
***Adenomera*** Steindachner, 1867 • KY
**ST**: PO.KN • **CI**: h0013 • **ID**: 251
**PN**: *Adenomera marmorata* Steindachner, 1867
**PK**: *Adenomera marmorata*° Steindachner, 1867
**KG**: *Adenomera*[3] Steindachner, 1867
**KF**: *LEPTODACTYLIDAE* ||1838.ta.f001||-1896.wa.f001
***Adenomus*** Cope, 1861 • KY
**ST**: PO.KN • **CI**: h0014 • **ID**: 104
**PN**: *Adenomus badioflavus* Cope, 1861
**PK**: *Bufo kelaartii** Günther, 1858
**KG**: *Adenomus*[1] Cope, 1861
**KF**: *BUFONIDAE* 1825.gb.f004
*Aelurolalax* Dubois, 1987 • AK
**ST**: PO.JD • **CI**: h0015 • **ID**: 016
**PN**: *Megalophrys weigoldi* Vogt, 1924
**PK**: *Megalophrys weigoldi*° Vogt, 1924
**KG**: *Oreolalax** Myers[+1], 1962
**KF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|
*Aelurophryne* Boulenger, 1919 • AK
**ST**: PO.JD • **CI**: h0016 • **ID**: 017
**PN**: *Bufo mammatus* Günther, 1896
**PK**: *Bufo mammatus** Günther, 1896
**KG**: *Scutiger*[2] Theobald, 1868
**KF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|
*Aenigmanura* Brown[+4], 2015 • AK
**ST**: PO.JD • **CI**: h0017 • **ID**: 369

**PN**: *Platymantis papuensis schmidti* Brown[+1], 1968
**PK**: *Platymantis papuensis schmidti*° Brown[+1], 1968
**KG**: *Cornufer** Tschudi, 1838
**KF**: *Ceratobatrachidae* 1884.ba.f001

***Aerugoamnis*** Henrici[+2], 2013 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0018 • **ID**: †091
**PN**: *Aerugoamnis paulus* Henrici[+2], 2013 ‡
**PK**: *Aerugoamnis paulus*° Henrici[+2], 2013 †
**KG**: *Aerugoamnis*° Henrici[+2], 2013 †
**KF**: *Pelodytidae* 1850.bb.f002

***Afghanodon*** Dubois[+1], 2012 • **KY**
**ST**: **PO.KN** • **CI**: h0019 • **ID**: 514
**PN**: *Batrachuperus mustersi* Smith, 1940
**PK**: *Batrachuperus mustersi** Smith, 1940
**KG**: *Afghanodon** Dubois[+1], 2012
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

*Afrana* Dubois, 1992 • **AK**
**ST**: **PO.JH** • **CI**: h0020 • **ID**: 362
**PN**: *Rana fuscigula* Duméril[+1], 1841
**PK**: *Rana fuscigula** Duméril[+1], 1841
**KG**: *Amietia** Dubois, 1987
**KF**: *Cacosternidae* 1931.na.f008

***Afrixalus*** Laurent, 1944 • **KY**
**ST**: **PO.KN** • **CI**: h0021 • **ID**: 334
**PN**: *Euchnemis fornasinii* Bianconi, 1849
**PK**: *Euchnemis fornasinii** Bianconi, 1849
**KG**: *Afrixalus** Laurent, 1944
**KF**: *Hyperoliidae* 1943.lb.f001

*Afrocaecilia* Taylor, 1968 • **AK**
**ST**: **PO.JD** • **CI**: h0022 • **ID**: 496
**PN**: *Boulengerula taitanus* Loveridge, 1935
**PK**: *Boulengerula taitanus** Loveridge, 1935
**KG**: *Boulengerula** Tornier, 1896
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Agalychnis*** Cope, 1864 • **KY**
**ST**: **PO.KN** • **CI**: h0023 • **ID**: 238
**PN**: *Hyla callidryas* Cope, 1862
**PK**: *Hyla callidryas** Cope, 1862
**KG**: *Agalychnis** Cope, 1864
**KF**: *Phyllomedusidae* 1858.gc.f009

***Aglyptodactylus*** Boulenger, 1919 • **KY**
**ST**: **PO.KN** • **CI**: h0024 • **ID**: 424
**PN**: *Limnodytes madagascariensis* Duméril, 1853
**PK**: *Limnodytes madagascariensis** Duméril, 1853
**KG**: *Aglyptodactylus** Boulenger, 1919
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Alainia*** Duellman[+1], 2018 • **KY**
**ST**: **PO.KN** • **CI**: h0025 • **ID**: 090
**PN**: *Nototrema microdiscus* Andersson, 1910
**PK**: *Nototrema microdiscus** Andersson, 1910
**KG**: *Alainia** Duellman[+1], 2018
**KF**: *Hemiphractidae* 1862.pa.f001

***Albanerpeton*** Estes[+1], 1976 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0026 • **ID**: †002
**PN**: *Albanerpeton inexpectatum* Estes[+1], 1976 ‡
**PK**: *Albanerpeton inexpectatum*° Estes[+1], 1976 †
**KG**: *Albanerpeton*° Estes[+1], 1976 †
**KF**: *Albanerpetidae* 1982.fa.f001 †

*Albericus* Burton[+1], 1995 • **AK**
**ST**: **PO.JD** • **CI**: h0027 • **ID**: 280
**PN**: *Cophixalus darlingtoni* Loveridge, 1948
**PK**: *Cophixalus darlingtoni*° Loveridge, 1948
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Albionbatrachus*** Meszoely[+2], 1984 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0028 • **ID**: †068
**PN**: *Albionbatrachus wightensis* Meszoely[+2], 1984 ‡
**PK**: *Albionbatrachus wightensis*° Meszoely[+2], 1984 †
**KG**: *Albionbatrachus*° Meszoely[+2], 1984 †
**KF**: *Palaeobatrachidae* 1865.ca.f001 †

***Alcalus*** Brown[+4], 2015 • **KY**
**ST**: **PO.KN** • **CI**: h0029 • **ID**: 368
**PN**: *Micrixalus mariae* Inger 1954
**PK**: *Micrixalus mariae*° Inger 1954
**KG**: *Alcalus*[3] Brown[+4], 2015
**KF**: *Alcalidae* 2015.ba.f002

*Alethotriton* Fatio, 1872 • **AK**
**ST**: **PO.JI** • **CI**: h0030 • **ID**: 566
**PN**: *Triton cristatus* Laurenti, 1768
**PK**: *Triton cristatus** Laurenti, 1768
**KG**: *Triturus** Rafinesque, 1815
**KF**: *Salamandridae* 1820.ga.f002

*Alexteroon* Perret, 1988 • **AK**
**ST**: **PO.JD** • **CI**: h0031 • **ID**: 331
**PN**: *Hyperolius obstetricans* Ahl, 1931
**PK**: *Hyperolius obstetricans** Ahl, 1931
**KG**: *Hyperolius** Rapp, 1842
**KF**: *Hyperoliidae* 1943.lb.f001

*Algiandra* Dubois[+1], 2009 • **AK**
**ST**: **PO.JD** • **CI**: h0032 • **ID**: 578
**PN**: *Salamandra maculosa algira* Bedriaga, 1883
**PK**: *Salamandra maculosa algira** Bedriaga, 1883
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *Salamandridae* 1820.ga.f002

***Allobates*** Zimmermann[+1], 1988 • **KY**
**ST**: **PO.KN** • **CI**: h0033 • **ID**: 034
**PN**: *Prostherapis femoralis* Boulenger, 1884
**PK**: *Prostherapis femoralis** Boulenger, 1884
**KG**: *Allobates** Zimmermann[+1], 1988
**KF**: *Aromobatidae* 2006.gc.f004

*Allomesotriton* Freytag, 1983 • **AK**
**ST**: **PO.JD** • **CI**: h0034 • **ID**: 562
**PN**: *Trituroides caudopunctatus* Liu[+1] *in* Hu[+2], 1973
**PK**: *Trituroides caudopunctatus** Liu[+1] *in* Hu[+2], 1973
**KG**: *Paramesotriton** Chang, 1936
**KF**: *Salamandridae* 1820.ga.f002

***Allopaa*** Ohler[+1], 2006 • **KY**
**ST**: **PO.KN** • **CI**: h0035 • **ID**: 381
**PN**: *Rana* (*Paa*) *hazarensis* Dubois[+1], 1979
**PK**: *Rana* (*Paa*) *hazarensis*° Dubois[+1], 1979
**KG**: *Allopaa*° Ohler[+1], 2006
**KF**: *Dicroglossidae* 1987.da.f004

***Allophryne*** Gaige, 1926 • **KY**

**ST**: **PO.KN** • **CI**: h0036 • **ID**: 155
**PN**: *Allophryne ruthveni* Gaige, 1926
**PK**: *Allophryne ruthveni** Gaige, 1926
**KG**: *Allophryne** Gaige, 1926
**KF**: *ALLOPHRYNIDAE* 1978.ga.f001

*Alpandra* Dubois[+1], 2009 • **AK**

**ST**: **PO.JD** • **CI**: h0037 • **ID**: 578
**PN**: *Salamandra atra* Laurenti, 1768
**PK**: *Salamandra atra** Laurenti, 1768
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *SALAMANDRIDAE* 1820.ga.f002

***Alsodes*** Bell, 1843 • **KY**

**ST**: **PO.KN** • **CI**: h0038 • **ID**: 173
**PN**: *Alsodes monticola* Bell, 1843
**PK**: *Alsodes monticola** Bell, 1843
**KG**: *Alsodes** Bell, 1843
**KF**: *ALSODIDAE* 1869.mc.f005

***Altanulia*** Gubin, 1993 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h0039 • **ID**: †008
**PN**: *Altanulia alifanovi* Gubin, 1993 ‡
**PK**: *Altanulia alifanovi°* Gubin, 1993 †
**KG**: *Altanulia°* Gubin, 1993 †
**KF**: **ANURA** Familia *INCERTAE SEDIS*

*Altigius* Wild, 1995 • **AK**

**ST**: **PO.JD** • **CI**: h0040 • **ID**: 301
**PN**: *Altigius alios* Wild, 1995
**PK**: *Altigius alios°* Wild, 1995
**KG**: *Hamptophryne** Carvalho, 1954
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

***Altiphrynoides*** Dubois, 1987 • **KY**

**ST**: **PO.KN** • **CI**: h0041 • **ID**: 102
**PN**: *Nectophrynoides malcolmi* Grandison, 1978
**PK**: *Nectophrynoides malcolmi°* Grandison, 1978
**KG**: *Altiphrynoides°* Dubois, 1987
**KF**: *BUFONIDAE* 1825.gb.f004

*Altirana* Stejneger, 1927 • **AK**

**ST**: **PO.JD** • **CI**: h0042 • **ID**: 387
**PN**: *Altirana parkeri* Stejneger, 1927
**PK**: *Altirana parkeri** Stejneger, 1927
**KG**: *Nanorana** Günther, 1896
**KF**: *DICROGLOSSIDAE* 1987.da.f004

***Alytes*** Wagler, 1829 • **KY**

**ST**: **PO.KN** • **CI**: h0043 • **ID**: 467
**PN**: *Bufo obstetricans* Laurenti, 1768
**PK**: *Bufo obstetricans** Laurenti, 1768
**KG**: *Alytes** Wagler, 1829
**KF**: *ALYTIDAE* 1843.fa.f008

*Amazonella* Lundblad, 1931 • **ZH**

**ST**: **ZO** • **CI**: zh005

*Amazonella* FOUQUET[+9], 2012 • **AK**

**ST**: **PO.JH** • **CI**: h0044 • **ID**: 101
**PN**: *Atelopus minutus* Melin, 1941
**PK**: *Atelopus minutus** Melin, 1941
**KG**: *Amazophrynella** Fouquet[+9], 2012
**KF**: *BUFONIDAE* 1825.gb.f004

***Amazophrynella*** Fouquet[+9], 2012 • **KY**

**ST**: **PO.KN** • **CI**: h0045 • **ID**: 101
**PN**: *Atelopus minutus* Melin, 1941
**PK**: *Atelopus minutus** Melin, 1941
**KG**: *Amazophrynella** Fouquet[+9], 2012
**KF**: *BUFONIDAE* 1825.gb.f004

*Amblyphrynus* Cochran[+1], 1961 • **AK**

**ST**: **PO.JD** • **CI**: h0046 • **ID**: 073
**PN**: *Amblyphrynus ingeri* Cochran[+1], 1961
**PK**: *Amblyphrynus ingeri°* Cochran[+1], 1961
**KG**: *Strabomantis** Peters, 1863
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Amblystoma* Agassiz, 1844 • **AK**

**ST**: **NT.JI** • **CI**: h0047 • **ID**: 555
**PN**: *Lacerta subviolacea* Barton, 1804
**PK**: *Lacerta maculata** Shaw, 1802
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

***Ambystoma*** Tschudi, 1838 • **KY**

**ST**: **PO.KN** • **CI**: h0048 • **ID**: 555
**PN**: *Lacerta subviolacea* Barton, 1804
**PK**: *Lacerta maculata** Shaw, 1802
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

***Ambystomichnus*** Peabody, 1954 ‡¡ • **KY**

**ST**: **PO.KN** • **CI**: h0049 • **ID**: †185
**PN**: *Ammobatrachus montanensis* Gilmore 1928 ‡¡
**PK**: *Ammobatrachus montanensis°* Gilmore 1928 †
**KG**: *Ambystomichnus°* Peabody, 1954 †
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

***Ameerega*** Bauer, 1986 • **KY**

**ST**: **PO.KN** • **CI**: h0050 • **ID**: 039
**PN**: *Hyla trivittata* Spix, 1824
**PK**: *Hyla trivittata** Spix, 1824
**KG**: *Ameerega** Bauer, 1986
**KF**: *DENDROBATIDAE* ||1850.bb.f006||-1865.ca.f002

***Amerana*** Dubois, 1992 • **KY**

**ST**: **PO.KN** • **CI**: h0051 • **ID**: 418
**PN**: *Rana boylii* Baird, 1854
**PK**: *Rana boylii** Baird, 1854
**KG**: *Amerana** Dubois,1992
**KF**: *RANIDAE* 1796.ba.f001

*Amfignathodon* Palacký, 1898 • **AK**

**ST**: **NT.JD** • **CI**: h0052 • **ID**: 087
**PN**: *Amphignathodon guentheri* Boulenger, 1882
**PK**: *Amphignathodon guentheri** Boulenger, 1882
**KG**: *Amphignathodon** Boulenger, 1882
**KF**: *HEMIPHRACTIDAE* 1862.pa.f001

***Amietia*** Dubois, 1987 • **KY**

**ST**: **PO.KN** • **CI**: h0053 • **ID**: 362
**PN**: *Rana vertebralis* Hewitt, 1927
**PK**: *Rana vertebralis** Hewitt, 1927
**KG**: *Amietia** Dubois, 1987
**KF**: *CACOSTERNIDAE* 1931.na.f008

*Amietophrynus* Frost[+18], 2006 • **AK**

**ST**: **PO.JD** • **CI**: h0054 • **ID**: 140

**PN**: *Bufo regularis* Reuss, 1833
**PK**: *Bufo regularis** Reuss, 1833
**KG**: *Sclerophrys** Tschudi, 1838
**KF**: *Bufonidae* 1825.gb.f004

***Ammoryctis*** Lataste, 1879 • **KY**
**ST**: **PO.KN** • **CI**: h0055 • **ID**: 468
**PN**: *Alytes cisternasii* Boscá, 1879
**PK**: *Alytes cisternasii** Boscá, 1879
**KG**: *Ammoryctis** Wagler, 1829
**KF**: *Alytidae* 1843.fa.f008

*Amnirana* Dubois, 1992 • **AK**
**ST**: **PO.JD** • **CI**: h0056 • **ID**: 409
**PN**: *Rana amnicola* Perret, 1977
**PK**: *Rana amnicola*° Perret, 1977
**KG**: *Hylarana** Tschudi, 1838
**KF**: *Ranidae* 1796.ba.f001

*Amo* Dubois, 1992 • **AK**
**ST**: **PO.JD** • **CI**: h0057 • **ID**: 405
**PN**: *Rana larutensis* Boulenger, 1899
**PK**: *Rana larutensis** Boulenger, 1899
**KG**: *Amolops*[2] Cope, 1865
**KF**: *Ranidae* 1796.ba.f001

***Amolops*** Cope, 1865 • **KY**
**ST**: **PO.KN** • **CI**: h0058 • **ID**: 405
**PN**: *Polypedates afghana* Günther, 1859
**PK**: *Polypedates afghana*° Günther, 1859
**KG**: *Amolops*[2] Cope, 1865
**KF**: *Ranidae* 1796.ba.f001

***Amphignathodon*** Boulenger, 1882 • **KY**
**ST**: **PO.KN** • **CI**: h0059 • **ID**: 087
**PN**: *Amphignathodon guentheri* Boulenger, 1882
**PK**: *Amphignathodon guentheri** Boulenger, 1882
**KG**: *Amphignathodon** Boulenger, 1882
**KF**: *Hemiphractidae* 1862.pa.f001

*Amphignathodontoides* Kuhn, 1941 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0060 • **ID**: †090
**PN**: *Amphignathodontoides eocenicus* Kuhn, 1941 ‡
**PK**: *Halleobatrachus hinschei*° Kuhn, 1941 †
**KG**: *Eopelobates*° Parker, 1929 †
**KF**: *Pelobatidae* 1850.bb.f004

*Amphirana*: Aymard 1856 ‡ • **AN**
**ST**: **AL** • **CI**: n0002 • **ID**: †009§
**PN**: *Amphirana palustris* Aymard, 1856 ‡ • **AS**
**PK**: *Amphirana palustris*° Aymard, 1856 † • **AS**
**KG**: *Amphirana*° Aymard, 1856 † • **AG**
**KF**: **Anura** Familia *Incertae sedis*

***Amphitriton*** Rogers, 1976 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0061 • **ID**: †186
**PN**: *Amphitriton brevis* Rogers, 1976 ‡
**PK**: *Amphitriton brevis*° Rogers, 1976 †
**KG**: *Amphitriton*° Rogers, 1976 †
**KF**: *Ambystomatidae* 1850.ga.f004

***Amphiuma*** Garden *in* Smith, 1821 • **KY**
**ST**: **PO.KN** • **CI**: h0062 • **ID**: 520
**PN**: *Amphiuma means* Garden *in* Smith, 1821
**PK**: *Amphiuma means** Garden *in* Smith, 1821
**KG**: *Amphiuma** Garden *in* Smith, 1821
**KF**: *Amphiumidae* 1825.gb.f07

*Amphiumophis* Werner, 1900 • **AK**
**ST**: **PO.JD** • **CI**: h0063 • **ID**: 474
**PN**: *Amphiumophis andicola* Werner, 1900
**PK**: *Caecilia tentaculata** Linnaeus, 1758
**KG**: *Caecilia** Linnaeus, 1758
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Amphodus* Peters, 1873 • **AK**
**ST**: **PO.JD** • **CI**: h0064 • **ID**: 221
**PN**: *Amphodus wuchereri* Peters, 1873
**PK**: *Amphodus wuchereri*° Peters, 1873
**KG**: *Phyllodytes** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Anaides* Westwood, 1842 • **ZH**
**ST**: **ZO** • **CI**: zh006

*Anaides*: Baird 1851 • **AN**
**ST**: **LI** • **CI**: n0003 • **ID**: 547
**PN**: *Salamandra lugubris* Hallowell, 1849
**PK**: *Salamandra lugubris** Hallowell, 1849
**KG**: *Aneides** Baird, 1851
**KF**: *Plethodontidae* 1850.ga.f002

***Anaxyrus*** Tschudi, 1845 • **KY**
**ST**: **PO.KN** • **CI**: h0065 • **ID**: 136
**PN**: *Anaxyrus melancholicus* Tschudi, 1845
**PK**: *Bufo compactilis*° Wiegmann, 1833
**KG**: *Anaxyrus*[3] Tschudi, 1845
**KF**: *Bufonidae* 1825.gb.f004

*Anchylorana* Taylor, 1942 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0066 • **ID**: 415
**PN**: *Anchylorana moorei* Taylor, 1942 ‡
**PK**: *Anchylorana moorei*° Taylor, 1942 †
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001

***Ancudia*** Philippi, 1902 • **KY**
**ST**: **PO.KN** • **CI**: h0067 • **ID**: 097
**PN**: *Ancudia concolor* Philippi, 1902
**PK**: *Ancudia concolor*° Philippi, 1902
**KG**: *Ancudia*° Philippi, 1902
**KF**: **Hylobatrachia** Familia *Incertae sedis*

***Andinobates*** Twomey[+3] *in* Brown[+13], 2011 • **KY**
**ST**: **PO.KN** • **CI**: h0068 • **ID**: 044
**PN**: *Dendrobates bombetes* Myers[+1], 1980
**PK**: *Dendrobates bombetes** Myers[+1], 1980
**KG**: *Andinobates** Twomey[+3] *in* Brown[+13], 2011
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

*Andinophryne* Hoogmoed, 1985 • **AK**
**ST**: **PO.JD** • **CI**: h0069 • **ID**: 145
**PN**: *Andinophryne colomai* Hoogmoed, 1985
**PK**: *Andinophryne colomai*° Hoogmoed, 1985
**KG**: *Rhaebo** Cope, 1862
**KF**: *Bufonidae* 1825.gb.f004

***Andrias*** Tschudi, 1837 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0070 • **ID**: 503
**PN**: *Salamandra scheuchzeri* Holl, 1831 ‡
**PK**: *Salamandra scheuchzeri*° Holl, 1831 †

**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *Cryptobranchidae* 1826.fb.f003
***Aneides*** Baird, 1851 • **KY**
**ST**: **LC.KN** • **CI**: h0071 • **ID**: 547
**PN**: *Salamandra lugubris* Hallowell, 1849
**PK**: *Salamandra lugubris** Hallowell, 1849
**KG**: *Aneides** Baird, 1851
**KF**: *Plethodontidae* 1850.ga.f002
***Anhydrophryne*** Hewitt, 1919 • **KY**
**ST**: **PO.KN** • **CI**: h0072 • **ID**: 356
**PN**: *Anhydrophryne rattrayi* Hewitt, 1919
**PK**: *Anhydrophryne rattrayi** Hewitt, 1919
**KG**: *Anhydrophryne** Hewitt, 1919
**KF**: *Cacosternidae* 1931.na.f008
*Anilany* Scherz[+6], 2016 • **AK**
**ST**: **PO.JD** • **CI**: h0073 • **ID**: 286
**PN**: *Stumpffia helenae* 2000
**PK**: *Stumpffia helenae** 2000
**KG**: *Cophyla** Boettger, 1880
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Annandia*** Dubois, 1992 • **KY**
**ST**: **PO.KN** • **CI**: h0074 • **ID**: 389
**PN**: *Rana delacouri* Angel, 1928
**PK**: *Rana delacouri** Angel, 1928
**KG**: *Annandia** Dubois, 1992
**KF**: *Dicroglossidae* 1987.da.f004
***Anodonthyla*** Müller, 1892 • **KY**
**ST**: **PO.KN** • **CI**: h0075 • **ID**: 285
**PN**: *Anodonthyla boulengerii* Müller, 1892
**PK**: *Anodonthyla boulengerii** Müller, 1892
**KG**: *Anodonthyla** Müller, 1892
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Anodontohyla* Gadow, 1901 • **AK**
**ST**: **NS.JI** • **CI**: h0076 • **ID**: 285
**PN**: *Anodonthyla boulengerii* Müller, 1892
**PK**: *Anodonthyla boulengerii** Müller, 1892
**KG**: *Anodonthyla** Müller, 1892
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Anomaloglossus*** Grant[+9], 2006 • **KY**
**ST**: **PO.KN** • **CI**: h0077 • **ID**: 035
**PN**: *Colostethus beebei* Noble, 1923
**PK**: *Colostethus beebei** Noble, 1923
**KG**: *Anomaloglossus** Grant[+9], 2006
**KF**: *Aromobatidae* 2006.gc.f004
***Anotheca*** Smith, 1939 • **KY**
**ST**: **PO.KN** • **CI**: h0078 • **ID**: 209
**PN**: *Gastrotheca coronata* Stejneger, 1911
**PK**: *Hyla spinosa** Steindachner, 1864
**KG**: *Anotheca*[1] Smith, 1939
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Anoualerpeton*** Gardner[+2], 2003 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0079 • **ID**: †003
**PN**: *Anoualerpeton unicus* Gardner[+2], 2003 ‡
**PK**: *Anoualerpeton unicus*° Gardner[+2], 2003 †
**KG**: *Anoualerpeton*° Gardner[+2], 2003 †
**KF**: *Albanerpetidae* 1982.fa.f001 †
***Ansonia*** Stoliczka, 1870 • **KY**
**ST**: **PO.KN** • **CI**: h0080 • **ID**: 113
**PN**: *Ansonia penangensis* Stoliczka, 1870
**PK**: *Ansonia penangensis** Stoliczka, 1870
**KG**: *Ansonia** Stoliczka, 1870
**KF**: *Bufonidae* 1825.gb.f004
***Aparasphenodon*** Miranda-Ribeiro, 1920 • **KY**
**ST**: **PO.KN** • **CI**: h0081 • **ID**: 228
**PN**: *Aparasphenodon brunoi* Miranda-Ribeiro, 1920
**PK**: *Aparasphenodon brunoi** Miranda-Ribeiro, 1920
**KG**: *Aparasphenodon** Miranda-Ribeiro, 1920
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Aphantophryne* Fry, 1917 • **AK**
**ST**: **PO.JD** • **CI**: h0082 • **ID**: 280
**PN**: *Aphantophryne pansa* Fry, 1917
**PK**: *Aphantophryne pansa** Fry, 1917
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Aplastodiscus*** Lutz, 1950 • **KY**
**ST**: **PO.KN** • **CI**: h0083 • **ID**: 188
**PN**: *Aplastodiscus perviridis* Lutz, 1950
**PK**: *Aplastodiscus perviridis** Lutz, 1950
**KG**: *Aplastodiscus** Lutz, 1950
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Apneumona* Fleming, 1822 • **AK**
**ST**: **NL.JI** • **CI**: h0084 • **ID**: 554
**PN**: *Proteus anguinus* Laurenti, 1768
**PK**: *Proteus anguinus* * Laurenti, 1768
**KG**: *Proteus** Laurenti, 1768
**KF**: *Proteidae* 1831.ba.f002
***Apodops*** Estes[+1], 1972 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0085 • **ID**: †121
**PN**: *Apodops pricei* Estes[+1], 1972 ‡
**PK**: *Apodops pricei*° Estes[+1], 1972 †
**KG**: *Apodops*° Estes[+1], 1972 †
**KF**: **Gymnophiona** Familia *Incertae sedis*
***Apricosiren*** Evans[+1], 2002 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0086 • **ID**: †124
**PN**: *Apricosiren ensomi* Evans[+1], 2002 ‡
**PK**: *Apricosiren ensomi*° Evans[+1], 2002 †
**KG**: *Apricosiren*° Evans[+1], 2002 †
**KF**: **Urodela** Familia *Incertae sedis*
***Aquarana*** Dubois, 1992 • **KY**
**ST**: **PO.KN** • **CI**: h0087 • **ID**: 413
**PN**: *Rana catesbeiana* Shaw, 1802
**PK**: *Rana catesbeiana** Shaw, 1802
**KG**: *Aquarana** Dubois, 1992
**KF**: *Ranidae* 1796.ba.f001
***Aquiloeurycea*** Rovito[+3], 2015 • **KY**
**ST**: **PO.KN** • **CI**: h0088 • **ID**: 523
**PN**: *Spelerpes cephalicus* Cope, 1869
**PK**: *Spelerpes cephalicus** Cope, 1869
**KG**: *Aquiloeurycea** Rovito[+3], 2015
**KF**: *Plethodontidae* 1850.ga.f002
*Aquixalus* Delorme[+3], 2005 • **AK**
**ST**: **PO.JD** • **CI**: h0089 • **ID**: 441

**PN**: *Philautus odontotarsus* Ye[+1], 1993
**PK**: *Philautus odontotarsus** Ye[+1], 1993
**KG**: *Kurixalus** Fei[+2] *in* Fei, 1999
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001
***Aralobatrachus*** Nessov, 1981 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0090 • **ID**: †010
**PN**: *Aralobatrachus robustus* Nessov, 1981 ‡
**PK**: *Aralobatrachus robustus*° Nessov, 1981 †
**KG**: *Aralobatrachus*° Nessov, 1981 †
**KF**: **ANURA** Familia *INCERTAE SEDIS*
***Arariphrynus*** Leal[+1], 2006 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0091 • **ID**: †011
**PN**: *Arariphrynus placidoi* Leal[+1], 2006 ‡
**PK**: *Arariphrynus placidoi*° Leal[+1], 2006 †
**KG**: *Arariphrynus*° Leal[+1], 2006 †
**KF**: **ANURA** Familia *INCERTAE SEDIS*
***Archaeoovulus*** Capasso[+3], 2013 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0092 • **ID**: †001§
**PN**: *Archaeoovulus palenae* Capasso[+3], 2013 ‡
**PK**: *Archaeoovulus palenae*° Capasso[+3], 2013 †
**KG**: *Archaeoovulus*° Capasso[+3], 2013 †
**KF**: **LISSAMPHIBIA** Familia *INCERTAE SEDIS*
*Archaeopelobates* Kuhn, 1941 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0093 • **ID**: †090
**PN**: *Archaeopelobates efremovi* Kuhn, 1941 ‡
**PK**: *Halleobatrachus hinschei*° Kuhn, 1941 †
**KG**: *Eopelobates*° Parker, 1929 †
**KF**: *PELOBATIDAE* 1850.bb.f004
***Archaeotriton*** Meyer, 1860 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0094 • **ID**: †190
**PN**: *Triton basalticus* Meyer, 1859 ‡
**PK**: *Triton basalticus*° Meyer, 1859 †
**KG**: *Archaeotriton*° Meyer, 1860 †
**KF**: *SALAMANDRIDAE* 1820.ga.f002
*Archipelobates*: Tatarinov 1970 ‡ • **AN**
**ST**: **AL** • **CI**: n0004 • **ID**: †012§
**PN**: *Archipelobates giganteum* Tatarinov, 1970 ‡ • **AS**
**PK**: *Archipelobates giganteum*° Tatarinov, 1970 † • **AS**
**KG**: *Archipelobates*° Tatarinov, 1970 † • **AG**
**KF**: **ANURA** Familia *INCERTAE SEDIS*
***Arcovomer*** Carvalho, 1954 • **KY**
**ST**: **PO.KN** • **CI**: h0095 • **ID**: 296
**PN**: *Arcovomer passarellii* Carvalho, 1954
**PK**: *Arcovomer passarellii** Carvalho, 1954
**KG**: *Arcovomer** Carvalho, 1954
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001
***Arenophryne*** Tyler, 1976 • **KY**
**ST**: **PO.KN** • **CI**: h0096 • **ID**: 271
**PN**: *Arenophryne rotunda* Tyler, 1976
**PK**: *Arenophryne rotunda** Tyler, 1976
**KG**: *Arenophryne** Tyler, 1976
**KF**: *MYOBATRACHIDAE* 1850.sa.f001
*Arethusa* Montfort, 1808 • **ZH**
**ST**: **ZO** • **CI**: zh007
*Arethusa*: Bonaparte 1838 • **AN**
**ST**: **AL** • **CI**: n0005 • **ID**: 026
**PN**: *Bombina marmorata* Koch *in* Sturm,1828
**PK**: *Bufo fuscus** Laurenti, 1768
**KG**: *Pelobates** Wagler, 1830
**KF**: *PELOBATIDAE* 1850.bb.f004
*Arethusa*: Duméril[+1], 1841 • **AN**
**ST**: **AL** • **CI**: n0006 • **ID**: 027
**PN**: *Rana punctata* Daudin, 1802
**PK**: *Rana punctata** Daudin, 1802
**KG**: *Pelodytes** Bonaparte, 1838
**KF**: *PELODYTIDAE* 1850.bb.f002
***Argenteohyla*** Trueb, 1970 • **KY**
**ST**: **PO.KN** • **CI**: h0097 • **ID**: 229
**PN**: *Hyla siemersi* Mertens, 1937
**PK**: *Hyla siemersi** Mertens, 1937
**KG**: *Argenteohyla** Trueb, 1970
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|
***Arlequinus*** Perret, 1988 • **KY**
**ST**: **PO.KN** • **CI**: h0098 • **ID**: 326
**PN**: *Hyperolius krebsi* Mertens, 1938
**PK**: *Hyperolius krebsi*° Mertens, 1938
**KG**: *Arlequinus*° Perret, 1988
**KF**: *HYPEROLIIDAE* 1943.lb.f001
***Aromobates*** Myers[+2], 1991 • **KY**
**ST**: **PO.KN** • **CI**: h0099 • **ID**: 037
**PN**: *Aromobates nocturnus* Myers[+2], 1991
**PK**: *Aromobates nocturnus** Myers[+2], 1991
**KG**: *Aromobates** Myers[+2], 1991
**KF**: *AROMOBATIDAE* 2006.gc.f004
***Arthroleptella*** Hewitt, 1926 • **KY**
**ST**: **PO.KN** • **CI**: h0100 • **ID**: 360
**PN**: *Arthroleptis lightfooti* Boulenger, 1910
**PK**: *Arthroleptis lightfooti** Boulenger, 1910
**KG**: *Arthroleptella** Hewitt, 1926
**KF**: *CACOSTERNIDAE* 1931.na.f008
***Arthroleptides*** Nieden, 1911 • **KY**
**ST**: **PO.KN** • **CI**: h0101 • **ID**: 354
**PN**: *Arthroleptides martiensseni* Nieden, 1911
**PK**: *Arthroleptides martiensseni** Nieden, 1911
**KG**: *Arthroleptides** Nieden, 1911
**KF**: *PETROPEDETIDAE* 1931.na.f006
***Arthroleptis*** Smith, 1849 • **KY**
**ST**: **PO.KN** • **CI**: h0102 • **ID**: 320
**PN**: *Arthroleptis wahlbergii* Smith, 1849
**PK**: *Arthroleptis wahlbergii** Smith, 1849
**KG**: *Arthroleptis** Smith, 1849
**KF**: *ARTHROLEPTIDAE* 1869.mc.f011
*Arthroleptulus* Laurent, 1941 • **AK**
**ST**: **PO.JD** • **CI**: h0103 • **ID**: 320
**PN**: *Arthroleptis xenodactylus* Boulenger, 1909
**PK**: *Arthroleptis xenodactylus** Boulenger, 1909
**KG**: *Arthroleptis** Smith, 1849
**KF**: *ARTHROLEPTIDAE* 1869.mc.f011
*Aruncus*: Philippi 1899 • **AN**
**ST**: **AL** • **CI**: n0007 • **ID**: 138
**PN**: *Aruncus valdivianus* Philippi, 1902
**PK**: *Bufo spinulosus** Wiegmann, 1834

**KG**: *Rhinella*[2] Fitzinger, 1826

**KF**: *BUFONIDAE* 1825.gb.f004

*Aruncus* Philippi, 1902 • **AK**

**ST**: **PO.JD** • **CI**: h0104 • **ID**: 138

**PN**: *Aruncus valdivianus* Philippi, 1902

**PK**: *Bufo spinulosus** Wiegmann, 1834

**KG**: *Rhinella*[2] Fitzinger, 1826

**KF**: *BUFONIDAE* 1825.gb.f004

***Ascaphus*** Stejneger, 1899 • **KY**

**ST**: **PO.KN** • **CI**: h0105 • **ID**: 004

**PN**: *Ascaphus truei* Stejneger, 1899

**PK**: *Ascaphus truei** Stejneger, 1899

**KG**: *Ascaphus** Stejneger, 1899

**KF**: *ASCAPHIDAE* 1923.fa.f001

*Asperomantis* Vences[+10], 2017 • **AK**

**ST**: **PO.JD** • **CI**: h0106 • **ID**: 431

**PN**: *Rana aspera* Boulenger, 1882

**PK**: *Rana aspera*° Boulenger, 1882

**KG**: *Gephyromantis** Methuen, 1920

**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

*Asphaerion* Meyer, 1847 ‡ • **AK**

**ST**: **PO.JD** • **CI**: h0107 • **ID**: 406

**PN**: *Asphaerion reussi* Meyer, 1847 ‡

**PK**: *Asphaerion reussi*° Meyer, 1847 †

**KG**: *Pelophylax** Fitzinger, 1843

**KF**: *RANIDAE* 1796.ba.f001

*Assa*: Gray 1851 • **ZA**

**ST**: **ZN** • **CI**: zn001

***Assa*** Tyler, 1972 • **KY**

**ST**: **PO.KN** • **CI**: h0108 • **ID**: 267

**PN**: *Crinia darlingtoni* Loveridge, 1933

**PK**: *Crinia darlingtoni** Loveridge, 1933

**KG**: *Assa** Tyler, 1972

**KF**: *MYOBATRACHIDAE* 1850.sa.f001

*Asterodactylus* Wagler *in* Boie, 1827 • **AK**

**ST**: **NL.JI** • **CI**: h0109 • **ID**: 012

**PN**: *Pipa americana* Laurenti,1768

**PK**: *Rana pipa** Linnaeus, 1758

**KG**: *Pipa*[1] Laurenti, 1768

**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|

*Asterofrys* Palacký, 1898 • **AK**

**ST**: **NT.JI** • **CI**: h0110 • **ID**: 280

**PN**: *Ceratophrys turpicola* Schlegel, 1837

**PK**: *Ceratophrys turpicola** Schlegel, 1837

**KG**: *Asterophrys** Tschudi, 1838

**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

***Asterophrys*** Tschudi, 1838 • **KY**

**ST**: **PO.KN** • **CI**: h0111 • **ID**: 280

**PN**: *Ceratophrys turpicola* Schlegel, 1837

**PK**: *Ceratophrys turpicola** Schlegel, 1837

**KG**: *Asterophrys** Tschudi, 1838

**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

***Astrobatrachus*** Vijayakumar[+8], 2019 • **KY**

**ST**: **PO.KN** • **CI**: h0112 • **ID**: 398

**PN**: *Astrobatrachus kurichiyana* Vijayakumar[+8], 2019

**PK**: *Astrobatrachus kurichiyana*° Vijayakumar[+8], 2019

**KG**: *Astrobatrachus*° Vijayakumar[+8], 1838

**KF**: *NYCTIBATRACHIDAE* 1993.ba.f001-01

*Astrodactylus* [Hogg, 1838] Hogg, 1839 • **AK**

**ST**: **NS.JI** • **CI**: h0113 • **ID**: 012

**PN**: *Pipa americana* Laurenti,1768

**PK**: *Rana pipa** Linnaeus, 1758

**KG**: *Pipa*[1] Laurenti, 1768

**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|

***Astylosternus*** Werner, 1898 • **KY**

**ST**: **PO.KN** • **CI**: h0114 • **ID**: 321

**PN**: *Astylosternus diadematus* Werner, 1898

**PK**: *Astylosternus diadematus** Werner, 1898

**KG**: *Astylosternus** Werner, 1898

**KF**: *ARTHROLEPTIDAE* 1869.mc.f011

*Ateleopus* Agassiz, 1847 • **AK**

**ST**: **NT.JI** • **CI**: h0115 • **ID**: 100

**PN**: *Atelopus flavescens* Duméril[+1], 1841

**PK**: *Atelopus flavescens** Duméril[+1], 1841

**KG**: *Atelopus** Duméril[+1], 1841

**KF**: *BUFONIDAE* 1825.gb.f004

***Atelognathus*** Lynch, 1978 • **KY**

**ST**: **PO.KN** • **CI**: h0116 • **ID**: 175

**PN**: *Batrachophrynus patagonicus* Gallardo, 1962

**PK**: *Batrachophrynus patagonicus** Gallardo, 1962

**KG**: *Atelognathus** Lynch, 1978

**KF**: *BATRACHYLIDAE* 1965.ga.f002

*Atelophryne* Boulenger, 1906 • **AK**

**ST**: **PO.JD** • **CI**: h0117 • **ID**: 124

**PN**: *Atelophryne minuta* Boulenger, 1906

**PK**: *Didynamipus sjostedti** Andersson, 1903

**KG**: *Didynamipus** Andersson, 1903

**KF**: *BUFONIDAE* 1825.gb.f004

*Atelophryniscus* McCranie[+2], 1989 • **AK**

**ST**: **PO.JD** • **CI**: h0118 • **ID**: 138

**PN**: *Atelophryniscus chrysophorus* McCranie[+2], 1989

**PK**: *Atelophryniscus chrysophorus*° McCranie[+2], 1989

**KG**: *Rhinella*[2] Fitzinger, 1826

**KF**: *BUFONIDAE* 1825.gb.f004

***Atelopus*** Duméril[+1], 1841 • **KY**

**ST**: **PO.KN** • **CI**: h0119 • **ID**: 100

**PN**: *Atelopus flavescens* Duméril[+1], 1841

**PK**: *Atelopus flavescens** Duméril[+1], 1841

**KG**: *Atelopus** Duméril[+1], 1841

**KF**: *BUFONIDAE* 1825.gb.f004

*Atilophus* Cuvier[+1], 1840 • **AK**

**ST**: **PO.JD** • **CI**: h0120 • **ID**: 138

**PN**: *Rana margaritifera* Laurenti, 1768

**PK**: *Rana margaritifera** Laurenti, 1768

**KG**: *Rhinella*[2] Fitzinger, 1826

**KF**: *BUFONIDAE* 1825.gb.f004

***Atlantihyla*** Faivovich[+15], 2018 • **KY**

**ST**: **PO.KN** • **CI**: h0121 • **ID**: 212

**PN**: *Atlantihyla spinipollex* Faivovich[+15], 2018

**PK**: *Atlantihyla spinipollex** Faivovich[+15], 2018

**KG**: *Atlantihyla** Faivovich[+15], 2018

**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

***Atopophrynus*** Lynch[+1], 1982 • **KY**

**ST**: **po.kn** • **CI**: h0122 • **ID**: 055
**PN**: *Atopophrynus syntomopus* Lynch[+1], 1982
**PK**: *Atopophrynus syntomopus*° Lynch[+1], 1982
**KG**: *Atopophrynus*° Lynch[+1], 1982
**KF**: *Brachycephalidae* 1858.gc.f002

***Atretochoana*** Nussbaum[+1], 1995 • **KY**

**ST**: **po.kn** • **CI**: h0123 • **ID**: 476
**PN**: *Typhlonectes eiselti* Taylor, 1968
**PK**: *Typhlonectes eiselti*° Taylor, 1968
**KG**: *Atretochoana*° Nussbaum[+1], 1995
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Atylodes* Gistel, 1868 • **AK**

**ST**: **po.ro** • **CI**: h0124 • **ID**: 545
**PN**: *Salamandra genei* Temminck[+1], 1838
**PK**: *Salamandra genei** Temminck[+1], 1838
**KG**: *Speleomantes** Dubois, 1984
**KF**: *Plethodontidae* 1850.ga.f002

*Atympanolalax* Fei[+1], 2016 • **AK**

**ST**: **po.jd** • **CI**: h0125 • **ID**: 016
**PN**: *Scutiger rugosa* Liu, 1943
**PK**: *Scutiger rugosa** Liu, 1943
**KG**: *Oreolalax** Myers[+1], 1962
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

***Atympanophrys*** Tian[+1], 1983 • **KY**

**ST**: **po.kn** • **CI**: h0126 • **ID**: 019
**PN**: *Megophrys shapingensis* Liu, 1950
**PK**: *Megophrys shapingensis** Liu, 1950
**KG**: *Atympanophrys** Tian[+1], 1983
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

***Aubria*** Boulenger, 1917 • **KY**

**ST**: **po.kn** • **CI**: h0127 • **ID**: 366
**PN**: *Rana subsigillata* Duméril, 1856
**PK**: *Rana subsigillata** Duméril, 1856
**KG**: *Aubria** Boulenger, 1917
**KF**: *Pyxicephalidae* 1850.bb.f005

*Aubrya*: Schiøtz 1964 • **AN**

**ST**: **am** • **CI**: n0008 • **ID**: 366
**PN**: *Rana subsigillata* Duméril, 1856
**PK**: *Rana subsigillata** Duméril, 1856
**KG**: *Aubria** Boulenger, 1917
**KF**: *Pyxicephalidae* 1850.bb.f005

***Audaciella*** **nov.** • **KY**

**ST**: **po.kn** • **CI**: h0128 • **ID**: 160
**PN**: *Centrolenella audax* Lynch[+1], 1973
**PK**: *Centrolenella audax** Lynch[+1], 1973
**KG**: *Audaciella** **nov.**
**KF**: *Centrolenidae* 1951.ta.f001

*Auletris* Wagler, 1830 • **AK**

**ST**: **po.ji** • **CI**: h0129 • **ID**: 189
**PN**: *Rana boans* Linnaeus, 1758
**PK**: *Rana boans** Linnaeus, 1758
**KG**: *Boana** Gray, 1825
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Aurana* Walker, 1863 • **ZH**

**ST**: **zo** • **CI**: zh008

*Aurana* Bauer, 1985 • **AK**

**ST**: **po.jh** • **CI**: h0130 • **ID**: 418
**PN**: *Rana aurora* Baird[+1], 1852
**PK**: *Rana aurora** Baird[+1], 1852
**KG**: *Amerana** Dubois,1992
**KF**: *Ranidae* 1796.ba.f001

*Aurorana* Dubois, 1992 • **AK**

**ST**: **po.jd** • **CI**: h0131 • **ID**: 418
**PN**: *Rana aurora* Baird[+1], 1852
**PK**: *Rana aurora** Baird[+1], 1852
**KG**: *Amerana** Dubois,1992
**KF**: *Ranidae* 1796.ba.f001

***Australobatrachus*** Tyler, 1976 ‡ • **KY**

**ST**: **po.kn** • **CI**: h0132 • **ID**: †102
**PN**: *Australobatrachus ilius* Tyler, 1976 ‡
**PK**: *Australobatrachus ilius*° Tyler, 1976 †
**KG**: *Australobatrachus*° Tyler, 1976 †
**KF**: *Phyllomedusidae* 1858.gc.f009

*Australocrinia* Heyer[+1], 1976 • **AK**

**ST**: **po.jd** • **CI**: h0133 • **ID**: 270
**PN**: *Pterophrynus tasmaniensis* Günther, 1864
**PK**: *Pterophrynus tasmaniensis** Günther, 1864
**KG**: *Crinia** Tschudi, 1838
**KF**: *Myobatrachidae* 1850.sa.f001

*Australotheca* Malinsky, 2009 • **ZH**

**ST**: **zo** • **CI**: zh009

*Australotheca* Duellman, 2015 • **AK**

**ST**: **po.jh** • **CI**: h0134 • **ID**: 090
**PN**: *Nototrema microdiscus* Andersson, 1910
**PK**: *Nototrema microdiscus** Andersson, 1910
**KG**: *Alainia** Duellman[+1], 2018
**KF**: *Hemiphractidae* 1862.pa.f001

*Austrochaperina* Fry, 1912 • **AK**

**ST**: **po.jd** • **CI**: h0135 • **ID**: 280
**PN**: *Austrochaperina robusta* Fry, 1912
**PK**: *Austrochaperina robusta*° Fry, 1912
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Autodax* Boulenger, 1887 • **AK**

**ST**: **nl.ca** • **CI**: h0136 • **ID**: 547
**PN**: *Salamandra lugubris* Hallowell, 1849
**PK**: *Salamandra lugubris** Hallowell, 1849
**KG**: *Aneides** Baird, 1851
**KF**: *Plethodontidae* 1850.ga.f002

***Avitabatrachus*** Báez[+2], 2000 ‡ • **KY**

**ST**: **po.kn** • **CI**: h0137 • **ID**: †061
**PN**: *Avitabatrachus uliana* Báez[+2], 2000 ‡
**PK**: *Avitabatrachus uliana*° Báez[+2], 2000 †
**KG**: *Avitabatrachus*° Báez[+2], 2000 †
**KF**: **Dorsipares** Familia *Incertae sedis*

***Aviturus*** Gubin, 1991 ‡ • **KY**

**ST**: **po.kn** • **CI**: h0138 • **ID**: †164
**PN**: *Aviturus exsecratus* Gubin, 1991 ‡
**PK**: *Aviturus exsecratus*° Gubin, 1991 †
**KG**: *Aviturus*° Gubin, 1991 †
**KF**: *Cryptobranchidae* 1826.fb.f003

*Axolot* Bonaparte, 1831 • **AK**
**ST**: **PO.CA** • **CI**: h0139 • **ID**: 555
**PN**: *Axolotus pisciformis* Jarocki, 1822
**PK**: *Gyrinus mexicanus** Shaw[+1], 1789
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

*Axolotes* Owen, 1844 • **AK**
**ST**: **NT.JD** • **CI**: h0140 • **ID**: 555
**PN**: *Gyrinus mexicanus* Shaw[+1], 1789
**PK**: *Gyrinus mexicanus** Shaw[+1], 1789
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

*Axoloth* Gray, 1842 • **AK**
**ST**: **NS.JD** • **CI**: h0141 • **ID**: 555
**PN**: *Siren pisciformis* Shaw, 1802
**PK**: *Gyrinus mexicanus** Shaw[+1], 1789
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

*Axolotl*: Oken 1821 • **EX**
**ST**: **PO.CE** • **CI**: e0002 • **ID**: 555
**PN**: *Siren pisciformis* Shaw, 1802
**PK**: *Gyrinus mexicanus** Shaw[+1], 1789
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

*Axolotus* Jarocki, 1822 • **EX**
**ST**: **PO.CE** • **CI**: e0003 • **ID**: 555
**PN**: *Siren pisciformis* Shaw 18022
**PK**: *Gyrinus mexicanus** Shaw[+1], 1789
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

***Aygroua*** Jones[+2], 2003 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0143 • **ID**: †013
**PN**: *Aygroua anoualensis* Jones[+2], 2003 ‡
**PK**: *Aygroua anoualensis*° Jones[+2], 2003 †
**KG**: *Aygroua*° Jones[+2], 2003 †
**KF**: **ANURA** Familia *INCERTAE SEDIS*

***Babina*** Thompson, 1912 • **KY**
**ST**: **PO.KN** • **CI**: h0144 • **ID**: 410
**PN**: *Rana holsti* Boulenger, 1892
**PK**: *Rana holsti** Boulenger, 1892
**KG**: *Babina** Thompson, 1912
**KF**: *RANIDAE* 1796.ba.f001

*Babina* Van Denburgh, 1912 • **AK**
**ST**: **PO.JI** • **CI**: h0145 • **ID**: 410
**PN**: *Rana holsti* Boulenger, 1892
**PK**: *Rana holsti** Boulenger, 1892
**KG**: *Babina** Thompson, 1912
**KF**: *RANIDAE* 1796.ba.f001

***Bahius*** **nov.** • **KY**
**ST**: **PO.KN** • **CI**: h0146 • **ID**: 063
**PN**: *Eleutherodactylus bilineatus* Bokermann, 1975
**PK**: *Eleutherodactylus bilineatus** Bokermann, 1975
**KG**: *Bahius** **nov.**
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

***Bakonybatrachus*** Szentesi[+1], 2012 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0147 • **ID**: †115
**PN**: *Bakonybatrachus fedori* Szentesi[+1], 2012 ‡
**PK**: *Bakonybatrachus fedori*° Szentesi[+1], 2012 †
**KG**: *Bakonybatrachus*° Szentesi[+1], 2012 †
**KF**: *DISCOGLOSSIDAE* 1858.gc.f004

*Baleaphryne* Sanchíz[+1], 1979 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0148 • **ID**: 467
**PN**: *Baleaphryne muletensis* Sanchíz[+1], 1979
**PK**: *Baleaphryne muletensis** Sanchíz[+1], 1979
**KG**: *Alytes** Wagler, 1829
**KF**: *ALYTIDAE* 1843.fa.f008

***Balebreviceps*** Largen[+1], 1989 • **KY**
**ST**: **PO.KN** • **CI**: h0149 • **ID**: 343
**PN**: *Balebreviceps hillmani* Largen[+1], 1989
**PK**: *Balebreviceps hillmani** Largen[+1], 1989
**KG**: *Balebreviceps** Largen[+1], 1989
**KF**: *BREVICIPITIDAE* 1850.bb.f012

*Baliopygus* Schulze, 1891 • **AK**
**ST**: **PO.JD** • **CI**: h0150 • **ID**: 406
**PN**: *Rana ridibunda* Pallas, 1771
**PK**: *Rana ridibunda** Pallas, 1771
**KG**: *Pelophylax** Fitzinger, 1843
**KF**: *RANIDAE* 1796.ba.f001

*Balveherpeton*: Skutschas[+2] 2020*a* ‡ • **AN**
**ST**: **AL** • **CI**: n0009 • **ID**: †125
**PN**: *Balveherpeton hoennetalensis* Skutschas[+6], 2020*a* ‡
**PK**: *Balveherpeton hoennetalensis*° Skutschas[+6], 2020*b* †
**KG**: *Balveherpeton*° Skutschas[+6], 2020*b* †
**KF**: **URODELA** Familia *INCERTAE SEDIS*

***Balveherpeton*** Skutschas[+2], 2020*b* ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0151 • **ID**: †125
**PN**: *Balveherpeton hoennetalensis* Skutschas[+6], 2020*b* ‡
**PK**: *Balveherpeton hoennetalensis*° Skutschas[+6], 2020*b* †
**KG**: *Balveherpeton*° Skutschas[+6], 2020*b* †
**KF**: **URODELA** Familia *INCERTAE SEDIS*

*Bamburana* Fei[+2] *in* Fei[+4], 2005 • **AK**
**ST**: **PO.JD** • **CI**: h0152 • **ID**: 412
**PN**: *Rana versabilis* Liu[+1], 1962
**PK**: *Rana versabilis** Liu[+1], 1962
**KG**: *Odorrana** Fei[+2], 1990
**KF**: *RANIDAE* 1796.ba.f001

*Baranophrys*: Kretzoi 1956 ‡ • **AN**
**ST**: **AL** • **CI**: n0010 • **ID**: †014§
**PN**: *Baranophrys discoglossoides* Kretzoi, 1956 ‡ • **AS**
**PK**: *Baranophrys discoglossoides*° Kretzoi, 1956 † • **AS**
**KG**: *Baranophrys*° Kretzoi, 1956 † • **AG**
**KF**: **ANURA** Familia *INCERTAE SEDIS*

***Barbarophryne*** Beukema[+8], 2013 • **KY**
**ST**: **PO.KN** • **CI**: h0153 • **ID**: 115
**PN**: *Bufo brongersmai* Hoogmoed, 1972
**PK**: *Bufo brongersmai** Hoogmoed, 1972
**KG**: *Barbarophryne** Beukema[+8], 2013
**KF**: *BUFONIDAE* 1825.gb.f004

***Barbourula*** Taylor[+1], 1924 • **KY**
**ST**: **PO.KN** • **CI**: h0154 • **ID**: 471
**PN**: *Barbourula busuangensis* Taylor[+1], 1924
**PK**: *Barbourula busuangensis** Taylor[+1], 1924

**KG**: *Barbourula** Taylor[+1], 1924
**KF**: *Bombinatoridae* 1825.gb.f002
*Bargmannia* Totton, 1954 • **zh**
**ST**: **zo** • **CI**: zh010
*Bargmannia* Herre, 1955 ‡ • **ak**
**ST**: **po.jh** • **CI**: h0155 • **ID**: †188
**PN**: *Bargmannia wettsteini* Herre, 1955 ‡
**PK**: *Bargmannia wettsteini*° Herre, 1955 †
**KG**: *Sanchizia*° Dubois[+1], 2012 †
**KF**: *Ambystomatidae* 1850.ga.f004
*Baryboas* Gistel, 1848 ‡ • **ak**
**ST**: **nl.ji** • **CI**: h0156 • **ID**: †111
**PN**: *Pelophilus agassizii* Tschudi, 1838 ‡
**PK**: *Pelophilus agassizii*° Tschudi, 1838 †
**KG**: *Pelophilus*° Tschudi, 1838 †
**KF**: **Mediogyrinia** Familia *Incertae sedis*
***Barycholos*** Heyer, 1969 • **ky**
**ST**: **po.kn** • **CI**: h0157 • **ID**: 064
**PN**: *Leptodactylus pulcher* Boulenger, 1898
**PK**: *Leptodactylus pulcher** Boulenger, 1898
**KG**: *Barycholos** Heyer, 1969
**KF**: *Brachycephalidae* 1858.gc.f002
*Barygenys* Parker, 1936 • **ak**
**ST**: **po.jd** • **CI**: h0158 • **ID**: 280
**PN**: *Barygenys cheesmanae* Parker, 1936
**PK**: *Barygenys cheesmanae*° Parker, 1936
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Basanitia* Miranda-Ribeiro, 1923 • **ak**
**ST**: **po.jd** • **CI**: h0159 • **ID**: 058
**PN**: *Basanitia lactea* Miranda-Ribeiro, 1923
**PK**: *Basanitia lactea** Miranda-Ribeiro, 1923
**KG**: *Ischnocnema** Reinhardt[+1], 1862
**KF**: *Brachycephalidae* 1858.gc.f002
*Bathysiredon* Dunn, 1939 • **ak**
**ST**: **po.jd** • **CI**: h0160 • **ID**: 555
**PN**: *Siredon dumerilii* Dugès, 1870
**PK**: *Siredon dumerilii** Dugès, 1870
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *Ambystomatidae* 1850.ga.f004
*Batrachohyperus* Rye, 1881 • **ak**
**ST**: **nt.ji** • **CI**: h0161 • **ID**: 509
**PN**: *Desmodactylus pinchonii* David, 1872
**PK**: *Desmodactylus pinchonii** David, 1872
**KG**: *Batrachuperus** Boulenger, 1878
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002
*Batrachophrynus* Peters, 1873 • **ak**
**ST**: **po.jd** • **CI**: h0162 • **ID**: 186
**PN**: *Batrachophrynus macrostomus* Peters, 1873
**PK**: *Batrachophrynus macrostomus*° Peters, 1873
**KG**: *Telmatobius*[3] Wiegmann, 1834
**KF**: *Telmatobiidae* 1843.fa.f006
*Batrachopsis* Fitzinger, 1843 • **ak**
**ST**: **po.ji** • **CI**: h0163 • **ID**: 540
**PN**: *Salamandra subfusca* Green, 1818
**PK**: *Salamandra rubra** Sonnini[+1], 1801
**KG**: *Pseudotriton*[1] Tschudi, 1838
**KF**: *Plethodontidae* 1850.ga.f002
*Batrachopsis* Boulenger, 1882 • **ak**
**ST**: **po.jh** • **CI**: h0164 • **ID**: 264
**PN**: *Asterophrys melanopyga* Doria, 1875
**PK**: *Asterophrys melanopyga** Doria, 1875
**KG**: *Platyplectrum*[1] Günther, 1863
**KF**: *Myobatrachidae* 1850.sa.f001
***Batrachosauroides*** Taylor[+1], 1943 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0165 • **ID**: †145
**PN**: *Batrachosauroides dissimulans* Taylor[+1], 1943 ‡
**PK**: *Batrachosauroides dissimulans*° Taylor[+1], 1943 †
**KG**: *Batrachosauroides*° Taylor[+1], 1943 †
**KF**: *Hylaeobatrachidae* 1889.la.f001 †
***Batrachoseps*** Bonaparte, 1839 • **ky**
**ST**: **po.kn** • **CI**: h0166 • **ID**: 521
**PN**: *Salamandrina attenuata* Eschscholtz, 1833
**PK**: *Salamandrina attenuata** Eschscholtz, 1833
**KG**: *Batrachoseps** Bonaparte, 1839
**KF**: *Plethodontidae* 1850.ga.f002
***Batrachulina*** Kuhn, 1962 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0167 • **ID**: †015
**PN**: *Batrachus lemanensis* Pomel, 1853 ‡
**PK**: *Batrachus lemanensis*° Pomel, 1853 †
**KG**: *Batrachulina*° Kuhn, 1962 †
**KF**: **Anura** Familia *Incertae sedis*
***Batrachuperus*** Boulenger, 1878 • **ky**
**ST**: **po.kn** • **CI**: h0168 • **ID**: 509
**PN**: *Desmodactylus pinchonii* David, 1872
**PK**: *Desmodactylus pinchonii** David, 1872
**KG**: *Batrachuperus** Boulenger, 1878
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002
*Batrachus* Schaeffer, 1760 • **zh**
**ST**: **zo** • **CI**: zh011
*Batrachus* Rafinesque, 1814 • **ak**
**ST**: **po.jh** • **CI**: h0169 • **ID**: 121
**PN**: *Bufo viridis* Laurenti, 1768
**PK**: *Bufo viridis** Laurenti, 1768
**KG**: *Bufotes** Rafinesque, 1815
**KF**: *Bufonidae* 1825.gb.f004
*Batrachus* Pomel, 1853 ‡ • **ak**
**ST**: **po.jh** • **CI**: h0170 • **ID**: †015
**PN**: *Batrachus lemanensis* Pomel, 1853 ‡
**PK**: *Batrachus lemanensis*° Pomel, 1853 †
**KG**: *Batrachulina*° Kuhn, 1962 †
**KF**: **Anura** Familia *Incertae sedis*
*Batrachchythis*: Garman 1877 • **an**
**ST**: **am** • **CI**: n0011 • **ID**: 196
**PN**: *Rana paradoxa* Linnaeus, 1758
**PK**: *Rana paradoxa** Linnaeus, 1758
**KG**: *Pseudis** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Batrachichthys*: Garman 1877 • **an**
**ST**: **am** • **CI**: n0012 • **ID**: 196
**PN**: *Rana paradoxa* Linnaeus, 1758
**PK**: *Rana paradoxa** Linnaeus, 1758

**KG**: *Pseudis** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Batrachychthis* Pizarro, 1876 • **AK**
**ST**: **LC.JI** • **CI**: h0171 • **ID**: 196
**PN**: *Rana paradoxa* Linnaeus, 1758
**PK**: *Rana paradoxa** Linnaeus, 1758
**KG**: *Pseudis** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Batrachychthys*: Pizarro 1876 • **AN**
**ST**: **LI** • **CI**: n0013 • **ID**: 196
**PN**: *Rana paradoxa* Linnaeus, 1758
**PK**: *Rana paradoxa** Linnaeus, 1758
**KG**: *Pseudis** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Batrachyla*** Bell, 1843 • **KY**
**ST**: **PO.KN** • **CI**: h0172 • **ID**: 177
**PN**: *Batrachyla leptopus* Bell, 1843
**PK**: *Batrachyla leptopus** Bell, 1843
**KG**: *Batrachyla** Bell, 1843
**KF**: *Batrachylidae* 1965.ga.f002
*Batrachylodes* Boulenger, 1887 • **AK**
**ST**: **PO.JD** • **CI**: h0173 • **ID**: 369
**PN**: *Batrachylodes vertebralis* Boulenger, 1887
**PK**: *Batrachylodes vertebralis** Boulenger, 1887
**KG**: *Cornufer** Tschudi, 1838
**KF**: *Ceratobatrachidae* 1884.ba.f001
*Batrachyperus* Boulenger, 1882 • **AK**
**ST**: **NT.JI** • **CI**: h0174 • **ID**: 509
**PN**: *Desmodactylus pinchonii* David, 1872
**PK**: *Desmodactylus pinchonii** David, 1872
**KG**: *Batrachuperus** Boulenger, 1878
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002
*Batracinus*: Rafinesque 1815 • **AN**
**ST**: **AL** • **CI**: n0014 • **ID**: 419
**PN**: *Rana temporaria* Linnaeus, 1758
**PK**: *Rana temporaria** Linnaeus, 1758
**KG**: *Rana** Linnaeus, 1758
**KF**: *Ranidae* 1796.ba.f001
***Baurubatrachus*** Báez[+1], 1990 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0175 • **ID**: †097
**PN**: *Baurubatrachus pricei* Báez[+1], 1990 ‡
**PK**: *Baurubatrachus pricei*° Báez[+1], 1990 †
**KG**: *Baurubatrachus*° Báez[+1], 1990 †
**KF**: *Ceratophryidae* 1838.ta.f002
*Bdellophis* Boulenger, 1895 • **AK**
**ST**: **PO.JD** • **CI**: h0176 • **ID**: 499
**PN**: *Bdellophis vittatus* Boulenger, 1895
**PK**: *Bdellophis vittatus** Boulenger, 1895
**KG**: *Scolecomorphus*[2] Boulenger, 1883
**KF**: *Scolecomorphidae* 1969.ta.f001
***Beddomixalus*** Abraham[+4], 2013 • **KY**
**ST**: **PO.KN** • **CI**: h0177 • **ID**: 442
**PN**: *Polypedates bijui* Zachariah[+5], 2011
**PK**: *Polypedates bijui** Zachariah[+5], 2011
**KG**: *Beddomixalus** Abraham[+4], 2013
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001
***Beduka*** **nov.** • **KY**
**ST**: **PO.KN** • **CI**: h0178 • **ID**: 105
**PN**: *Bufo koynayensis* Soman, 1963
**PK**: *Bufo koynayensis** Soman, 1963
**KG**: *Beduka** **nov.**
**KF**: *Bufonidae* 1825.gb.f004
***Beelzebufo*** Evans[+1], 2008 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0179 • **ID**: †096
**PN**: *Beelzebufo ampinga* Evans[+1], 2008 ‡
**PK**: *Beelzebufo ampinga*° Evans[+1], 2008 †
**KG**: *Beelzebufo*° Evans[+1], 2008 †
**KF**: *Ceratophryidae* 1838.ta.f002
***Beiyanerpeton*** Gao[+1], 2012 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0180 • **ID**: †177
**PN**: *Beiyanerpeton jianpingensis* Gao[+1], 2012 ‡
**PK**: *Beiyanerpeton jianpingensis*° Gao[+1], 2012 †
**KG**: *Beiyanerpeton*° Gao[+1], 2012 †
**KF**: **Pseudosauria** Familia *Incertae sedis*
*Berdmorea* Stoliczka, 1872 • **AK**
**ST**: **PO.JD** • **CI**: h0181 • **ID**: 305
**PN**: *Engystoma interlineatum* Blyth, 1855
**PK**: *Engystoma interlineatum** Blyth, 1855
**KG**: *Kalophrynus** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Bijurana* Chandramouli[+3], 2020 • **AK**
**ST**: **PO.JD** • **CI**: h0182 • **ID**: 409
**PN**: *Hylorana nicobariensis* Stoliczka, 1870
**PK**: *Hylarana nicobariensis** (Stoliczka, 1870)
**KG**: *Hylarana** Tschudi, 1838
**KF**: *Ranidae* 1796.ba.f001
*Bilaterana* Bauer, 1985 • **AK**
**ST**: **PO.JD** • **CI**: h0183 • **ID**: 406
**PN**: *Rana ridibunda* Pallas, 1771
**PK**: *Rana ridibunda** Pallas, 1771
**KG**: *Pelophylax** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001
***Bishara*** Nessov, 1997 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0184 • **ID**: †126
**PN**: *Bishara backa* Nessov, 1997 ‡
**PK**: *Bishara backa*° Nessov, 1997 †
**KG**: *Bishara*° Nessov, 1997 †
**KF**: **Urodela** Familia *Incertae sedis*
***Bissektia*** Nessov, 1981 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0185 • **ID**: †127
**PN**: *Bissektia nana* Nessov, 1981 ‡
**PK**: *Bissektia nana*° Nessov, 1981 †
**KG**: *Bissektia*° Nessov, 1981 †
**KF**: **Urodela** Familia *Incertae sedis*
***Blaira*** **nov.** • **KY**
**ST**: **PO.KN** • **CI**: h0186 • **ID**: 116
**PN**: *Ansonia ornata* Gunther, 1876
**PK**: *Ansonia ornata** Gunther, 1876
**KG**: *Blaira** **nov.**
**KF**: *Bufonidae* 1825.gb.f004
*Blepsimolge* Hillis[+3], 2001 • **AK**
**ST**: **PO.JD** • **CI**: h0187 • **ID**: 542

**PN**: *Eurycea nana* Bishop, 1941
**PK**: *Eurycea nana** Bishop, 1941
**KG**: *Eurycea** Rafinesque, 1822
**KF**: *PLETHODONTIDAE* 1850.ga.f002

***Blommersia*** Dubois, 1992 • **KY**
**ST**: **PO.KN** • **CI**: h0188 • **ID**: 426
**PN**: *Gephyromantis blommersae* Guibé, 1975
**PK**: *Gephyromantis blommersae** Guibé, 1975
**KG**: *Blommersia** Dubois, 1992
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

***Blythophryne*** Chandramouli[+7], 2016 • **KY**
**ST**: **PO.KN** • **CI**: h0189 • **ID**: 106
**PN**: *Blythophryne beryet* Chandramouli[+7], 2016
**PK**: *Blythophryne beryet*° Chandramouli[+7], 2016
**KG**: *Blythophryne*° Chandramouli[+7], 2016
**KF**: *BUFONIDAE* 1825.gb.f004

***Boana*** Gray, 1825 • **KY**
**ST**: **PO.KN** • **CI**: h0190 • **ID**: 189
**PN**: *Rana boans* Linnaeus, 1758
**PK**: *Rana boans** Linnaeus, 1758
**KG**: *Boana** Gray, 1825
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

***Boehmantis*** Glaw[+1], 2006 • **KY**
**ST**: **PO.KN** • **CI**: h0191 • **ID**: 430
**PN**: *Mantidactylus microtympanum* Angel, 1935
**PK**: *Mantidactylus microtympanum** Angel, 1935
**KG**: *Boehmantis** Glaw[+1], 2006
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

***Bokermannohyla*** Faivovich[+5], 2005 • **KY**
**ST**: **PO.KN** • **CI**: h0192 • **ID**: 187
**PN**: *Hyla circumdata* Cope, 1871
**PK**: *Hyla circumdata** Cope, 1871
**KG**: *Bokermannohyla** Faivovich[+5], 2005
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

***Bolitoglossa*** Duméril[+2], 1854 • **KY**
**ST**: **PO.KN** • **CI**: h0193 • **ID**: 522
**PN**: *Bolitoglossa mexicana* Duméril[+2], 1854
**PK**: *Bolitoglossa mexicana** Duméril[+2], 1854
**KG**: *Bolitoglossa** Duméril[+2], 1854
**KF**: *PLETHODONTIDAE* 1850.ga.f002

***Bombina*** Oken, 1816 • **CK** • **KY**
**ST**: **PO.KN** • **CI**: h0194 • **ID**: 472
**PN**: *Rana bombina* Linnaeus, 1760
**PK**: *Rana bombina** Linnaeus, 1760
**KG**: *Bombina** Oken, 1816
**KF**: *BOMBINATORIDAE* 1825.gb.f002

*Bombinator* Merrem, 1820 • **AK**
**ST**: **PO.JD** • **CI**: h0195 • **ID**: 472
**PN**: *Bufo igneus* Laurenti, 1768
**PK**: *Rana bombina** Linnaeus, 1760
**KG**: *Bombina** Oken, 1816
**KF**: *BOMBINATORIDAE* 1825.gb.f002

*Bombitator* Wagler, 1830 • **AK**
**ST**: **NT.JD** • **CI**: h0196 • **ID**: 472
**PN**: *Bufo igneus* Laurenti, 1768
**PK**: *Rana bombina** Linnaeus, 1760
**KG**: *Bombina** Oken, 1816
**KF**: *BOMBINATORIDAE* 1825.gb.f002

***Boophis*** Tschudi, 1838 • **KY**
**ST**: **PO.KN** • **CI**: h0197 • **ID**: 423
**PN**: *Boophis goudotii* Tschudi, 1838
**PK**: *Boophis goudotii** Tschudi, 1838
**KG**: *Boophis** Tschudi, 1838
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

*Borborocoetea* Strand, 1928 • **AK**
**ST**: **NT.JD** • **CI**: h0198 • **ID**: 174
**PN**: *Borborocoetes grayii* Bell, 1843
**PK**: *Cystignathus roseus** Duméril[+1], 1841
**KG**: *Eupsophus** Fitzinger, 1843
**KF**: *ALSODIDAE* 1869.mc.f005

*Borborocoetes* Schoenherr, 1842 • **ZH**
**ST**: **ZO** • **CI**: zh012

*Borborocoetes* Bell, 1843 • **AK**
**ST**: **PO.JH** • **CI**: h0199 • **ID**: 174
**PN**: *Borborocoetes grayii* Bell, 1843
**PK**: *Cystignathus roseus** Duméril[+1], 1841
**KG**: *Eupsophus** Fitzinger, 1843
**KF**: *ALSODIDAE* 1869.mc.f005

*Borborocoites* Gistel, 1848 ‡ • **AK**
**ST**: **NL.JI** • **CI**: h0200 • **ID**: †069
**PN**: *Palaeobatrachus goldfussii* Tschudi, 1838 ‡
**PK**: *Rana diluviana*° Goldfuss, 1831 †
**KG**: *Palaeobatrachus*° Tschudi, 1838 †
**KF**: *PALAEOBATRACHIDAE* 1865.ca.f001 †

*Borealophrys* Fei[+2], 2016 • **AK**
**ST**: **PO.JD** • **CI**: h0201 • **ID**: 019
**PN**: *Megophrys nankiangensis* Liu[+1], 1966
**PK**: *Megophrys nankiangensis** Liu[+1], 1966
**KG**: *Atympanophrys** Tian[+1], 1983
**KF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

***Boreorana*** **nov.** • **KY**
**ST**: **PO.KN** • **CI**: h0202 • **ID**: 414
**PN**: *Rana sylvatica* Le Conte, 1825
**PK**: *Rana sylvatica** Le Conte, 1825
**KG**: *Boreorana** **nov.**
**KF**: *RANIDAE* 1796.ba.f001

*Borneophrys* Delorme[+3], 2006 • **AK**
**ST**: **PO.JD** • **CI**: h0203 • **ID**: 021
**PN**: *Megophrys edwardinae* Inger, 1989
**PK**: *Megophrys edwardinae*° Inger, 1989
**KG**: *Megophrys*[2] Kuhl[+1], 1822
**KF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

*Boulengerana* Fei[+2], 2010 • **AK**
**ST**: **PO.JD** • **CI**: h0204 • **ID**: 409
**PN**: *Rana guentheri* Boulenger, 1882
**PK**: *Rana guentheri** Boulenger, 1882
**KG**: *Hylarana** Tschudi, 1838
**KF**: *RANIDAE* 1796.ba.f001

***Boulengerula*** Tornier, 1896 • **KY**
**ST**: **PO.KN** • **CI**: h0205 • **ID**: 496
**PN**: *Boulengerula boulengeri* Tornier, 1896
**PK**: *Boulengerula boulengeri** Tornier, 1896

**KG**: *Boulengerula** Tornier, 1896

**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Boulenophrys*** Fei[+2], 2016 • **ky**

**ST**: **po.kn** • **CI**: h0206 • **ID**: 023

**PN**: *Leptobrachium boettgeri* Boulenger, 1899

**PK**: *Leptobrachium boettgeri** Boulenger, 1899

**KG**: *Boulenophrys** Fei[+2], 2016

**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003

*Bourretia* Dubois, 1987 • **ak**

**ST**: **po.jd** • **CI**: h0207 • **ID**: 380

**PN**: *Rana toumanoffi* Bourret, 1941

**PK**: *Rana macrognathus dabana** Smith, 1922

**KG**: *Limnonectes** Fitzinger, 1843

**KF**: *Dicroglossidae* 1987.da.f004

***Brachycephalus*** Fitzinger, 1826 • **ky**

**ST**: **po.kn** • **CI**: h0208 • **ID**: 057

**PN**: *Bufo ephippium* Spix, 1824

**PK**: *Bufo ephippium** Spix, 1824

**KG**: *Brachycephalus** Fitzinger, 1826

**KF**: *Brachycephalidae* 1858.gc.f002

***Brachycormus*** Meyer, 1860 ‡ • **ky**

**ST**: **po.kn** • **CI**: h0209 • **ID**: †191

**PN**: *Triton noachicus* Goldfuss, 1831 ‡

**PK**: *Triton noachicus*° Goldfuss, 1831 †

**KG**: *Brachycormus*° Meyer, 1860 †

**KF**: *Salamandridae* 1820.ga.f002

*Brachymerus*: Dejean 1835 • **za**

**ST**: **zn** • **CI**: zn002

*Brachymerus* Chevrolat *in* Hope, 1841 • **zh**

**ST**: **zo** • **CI**: zh013

*Brachymerus* Smith, 1847 • **ak**

**ST**: **po.jh** • **CI**: h0210 • **ID**: 319

**PN**: *Brachymerus bifasciatus* Smith, 1847

**PK**: *Brachymerus bifasciatus** Smith, 1847

**KG**: *Phrynomantis** Peters, 1867

**KF**: *Phrynomeridae* 1931.na.f013

***Brachytarsophrys*** Tian[+1], 1983 • **ky**

**ST**: **po.kn** • **CI**: h0211 • **ID**: 020

**PN**: *Leptobrachium carinensis* Boulenger, 1889

**PK**: *Leptobrachium carinensis** Boulenger, 1889

**KG**: *Brachytarsophrys** Tian[+1], 1983

**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Bradyarges* Gistel, 1868 • **ak**

**ST**: **nl.ji** • **CI**: h0212 • **ID**: 557

**PN**: *Euproctus rusconii* Gené, 1839

**PK**: *Molge platycephala** Gravenhorst, 1829

**KG**: *Euproctus*[1] Gené, 1839

**KF**: *Salamandridae* 1820.ga.f002

*Bradybates* Tschudi, 1838 • **ak**

**ST**: **po.jd** • **CI**: h0213 • **ID**: 571

**PN**: *Bradybates ventricosus* Tschudi, 1838

**PK**: *Pleurodeles waltl** Michahelles, 1830

**KG**: *Pleurodeles** Michahelles, 1830

**KF**: *Salamandridae* 1820.ga.f002

*Bradymedusa* Miranda-Ribeiro, 1926 • **ak**

**ST**: **po.jd** • **CI**: h0214 • **ID**: 245

**PN**: *Bradymedusa moschata* Miranda-Ribeiro, 1926

**PK**: *Phyllomedusa rohdei** Mertens, 1926

**KG**: *Pithecopus** Cope, 1866

**KF**: *Phyllomedusidae* 1858.gc.f009

*Bradytes*: Dejean 1834 • **za**

**ST**: **zn** • **CI**: zn003

*Bradytes* Gistel, 1848 • **ak**

**ST**: **nl.jd** • **CI**: h0215 • **ID**: 571

**PN**: *Bradybates ventricosus* Tschudi, 1838

**PK**: *Pleurodeles waltl** Michahelles, 1830

**KG**: *Pleurodeles** Michahelles, 1830

**KF**: *Salamandridae* 1820.ga.f002

***Bradytriton*** Wake[+1], 1983 • **ky**

**ST**: **po.kn** • **CI**: h0216 • **ID**: 533

**PN**: *Bradytriton silus* Wake[+1], 1983

**PK**: *Bradytriton silus** Wake[+1], 1983

**KG**: *Bradytriton** Wake[+1], 1983

**KF**: *Plethodontidae* 1850.ga.f002

***Brasilotyphlus*** Taylor, 1968 • **ky**

**ST**: **po.kn** • **CI**: h0217 • **ID**: 490

**PN**: *Gymnopis braziliensis* Dunn, 1945

**PK**: *Gymnopis braziliensis*° Dunn, 1945

**KG**: *Brasilotyphlus*° Taylor, 1968

**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Brendanura* Wells[+1], 1985 • **ak**

**ST**: **po.jd** • **CI**: h0218 • **ID**: 237

**PN**: *Chiroleptes alboguttatus* Günther, 1867

**PK**: *Chiroleptes alboguttatus** Günther, 1867

**KG**: *Ranoidea*[1] Tschudi, 1838

**KF**: *Phyllomedusidae* 1858.gc.f009

***Breviceps*** Merrem, 1820 • **ky**

**ST**: **po.kn** • **CI**: h0219 • **ID**: 342

**PN**: *Rana gibbosa* Linnaeus, 1758

**PK**: *Rana gibbosa*° Linnaeus, 1758

**KG**: *Breviceps*[3] Merrem, 1820

**KF**: *Brevicipitidae* 1850.bb.f012

***Bromeliohyla*** Faivovich[+5], 2005 • **ky**

**ST**: **po.kn** • **CI**: h0220 • **ID**: 213

**PN**: *Hyla bromeliacia* Schmidt, 1933

**PK**: *Hyla bromeliacia** Schmidt, 1933

**KG**: *Bromeliohyla** Faivovich[+5], 2005

**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Brygoomantis* Dubois, 1992 • **ak**

**ST**: **po.jd** • **CI**: h0221 • **ID**: 432

**PN**: *Limnodytes ulcerosus* Boettger, 1880

**PK**: *Limnodytes ulcerosus** Boettger, 1880

**KG**: *Mantidactylus** Boulenger, 1895

**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Bryobatrachus* Rounsevell[+4], 1994 • **ak**

**ST**: **po.jd** • **CI**: h0222 • **ID**: 270

**PN**: *Bryobatrachus nimbus* Rounsevell[+4], 1994

**PK**: *Bryobatrachus nimbus** Rounsevell[+4], 1994

**KG**: *Crinia** Tschudi, 1838

**KF**: *Myobatrachidae* 1850.sa.f001

***Bryophryne*** Hedges[+2], 2008 • **ky**

**ST**: **po.kn** • **CI**: h0223 • **ID**: 066

**PN**: *Phrynopus cophites* Lynch, 1975
**PK**: *Phrynopus cophites** Lynch, 1975
**KG**: *Bryophryne** Hedges[+2], 2008
**KF**: *Brachycephalidae* 1858.gc.f002

*Bryotriton* Dubois[+1], 2012 • **AK**
**ST**: **PO.JD** • **CI**: h0224 • **ID**: 537
**PN**: *Oedipus barbouri* Schmidt, 1936
**PK**: *Oedipus barbouri** Schmidt, 1936
**KG**: *Nototriton** Wake[+1], 1983
**KF**: *Plethodontidae* 1850.ga.f002

*Bubonias* Cope, 1874 • **AK**
**ST**: **PO.JD** • **CI**: h0225 • **ID**: 247
**PN**: *Bubonias plicifrons* Cope, 1874
**PK**: *Edalorhina perezi** Jiménez de la Espada, 1870
**KG**: *Edalorhina** Jiménez de la Espada, 1870
**KF**: *Leiuperidae* 1850.bb.f010

*Buccinator* Gistel, 1848 • **AK**
**ST**: **NL.JI** • **CI**: h0226 • **ID**: 423
**PN**: *Boophis goudotii* Tschudi, 1838
**PK**: *Boophis goudotii** Tschudi, 1838
**KG**: *Boophis** Tschudi, 1838
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Buergeria*** Tschudi, 1838 • **KY**
**ST**: **PO.KN** • **CI**: h0227 • **ID**: 436
**PN**: *Hyla buergeri* Temminck[+1], 1838
**PK**: *Hyla buergeri** Temminck[+1], 1838
**KG**: *Buergeria** Tschudi, 1838
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Bufavus* Portis, 1885 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0228 • **ID**: 120
**PN**: *Bufavus meneghinii* Portis, 1885 ‡
**PK**: *Rana bufo** Linnaeus, 1758
**KG**: *Bufo** Garsault, 1764
**KF**: *Bufonidae* 1825.gb.f004

*Buffo* La Cepède, 1788 • **EX**
**ST**: **NT.CW** • **CI**: e0004 • **ID**: 121
**PN**: *Bufo viridis* Laurenti, 1768
**PK**: *Bufo viridis** Laurenti, 1768
**KG**: *Bufotes** Rafinesque, 1815
**KF**: *Bufonidae* 1825.gb.f004

*Buffo* Montfort, 1810 • **ZH**
**ST**: **ZO** • **CI**: zh014

*Bufo*: Rösel von Rosenhof 1758 • **AN**
**ST**: **AL** • **CI**: n0015 • **ID**: 120
**PN**: *Rana bufo* Linnaeus, 1758
**PK**: *Rana bufo** Linnaeus, 1758
**KG**: *Bufo** Garsault, 1764
**KF**: *Bufonidae* 1825.gb.f004

*Bufo*: Vogel 1758 • **AN**
**ST**: **AL** • **CI**: n0016 • **ID**: 120
**PN**: *Rana bufo* Linnaeus, 1758
**PK**: *Rana bufo** Linnaeus, 1758
**KG**: *Bufo** Garsault, 1764
**KF**: *Bufonidae* 1825.gb.f004

***Bufo*** Garsault, 1764 • **KY**
**ST**: **PO.KN** • **CI**: h0230 • **ID**: 120
**PN**: *Rana bufo* Linnaeus, 1758
**PK**: *Rana bufo** Linnaeus, 1758
**KG**: *Bufo** Garsault, 1764
**KF**: *Bufonidae* 1825.gb.f004

*Bufo* Laurenti, 1768 • **AK**
**ST**: **PO.JH** • **CI**: h0231 • **ID**: 121
**PN**: *Bufo viridis* Laurenti, 1768
**PK**: *Bufo viridis** Laurenti, 1768
**KG**: *Bufotes** Rafinesque, 1815
**KF**: *Bufonidae* 1825.gb.f004

***Bufoides*** Pillai[+1], 1974 • **KY**
**ST**: **PO.KN** • **CI**: h0232 • **ID**: 107
**PN**: *Ansonia meghalayana* Yazdani[+1], 1971
**PK**: *Ansonia meghalayana*° Yazdani[+1], 1971
**KG**: *Bufoides*° Pillai[+1], 1974
**KF**: *Bufonidae* 1825.gb.f004

*Bufonella* Girard, 1853 • **AK**
**ST**: **PO.JD** • **CI**: h0233 • **ID**: 274
**PN**: *Bufonella crucifera* Girard, 1853
**PK**: *Bombinator australis*° Gray, 1835
**KG**: *Pseudophryne*[3] Fitzinger, 1843
**KF**: *Myobatrachidae* 1850.sa.f001

*Bufonopsis* Kuhn, 1941 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0234 • **ID**: †069
**PN**: *Bufonopsis dentatus* Kuhn, 1941 ‡
**PK**: *Pelobatinopsis hinschei*° Kuhn, 1941 †
**KG**: *Palaeobatrachus*° Tschudi, 1838 †
**KF**: *Palaeobatrachidae* 1865.ca.f001 †

***Bufotes*** Rafinesque, 1815 • **KY**
**ST**: **PO.KN** • **CI**: h0235 • **ID**: 121
**PN**: *Bufo viridis* Laurenti, 1768
**PK**: *Bufo viridis** Laurenti, 1768
**KG**: *Bufotes** Rafinesque, 1815
**KF**: *Bufonidae* 1825.gb.f004

*Bulga* Gistel, 1868 • **AK**
**ST**: **NL.JI** • **CI**: h0236 • **ID**: 557
**PN**: *Euproctus rusconii* Gené, 1839
**PK**: *Molge platycephala** Gravenhorst, 1829
**KG**: *Euproctus*[1] Gené, 1839
**KF**: *Salamandridae* 1820.ga.f002

*Bulua* Boulenger, 1904 • **AK**
**ST**: **PO.JD** • **CI**: h0237 • **ID**: 324
**PN**: *Bulua ventrimarmorata* Boulenger, 1904
**PK**: *Bulua ventrimarmorata*° Boulenger, 1904
**KG**: *Leptodactylodon*[3] Andersson, 1903
**KF**: *Arthroleptidae* 1869.mc.f011

*Cacophryne* Davis, 1935 • **AK**
**ST**: **PO.JD** • **CI**: h0238 • **ID**: 123
**PN**: *Hylaplesia borbonica* Tschudi, 1838
**PK**: *Hylaplesia borbonica** Tschudi, 1838
**KG**: *Leptophryne*[2] Fitzinger, 1843
**KF**: *Bufonidae* 1825.gb.f004

*Cacophrynus* Cope, 1867 • **AK**
**ST**: **PO.JD** • **CI**: h0239 • **ID**: 347
**PN**: *Kakophrynus sudanensis* Steindachner, 1863
**PK**: *Engystoma marmoratum** Peters, 1854

**KG**: *Hemisus*[2] Günther, 1859
**KF**: *Hemisotidae* 1867.ca.f002
*Cacopoides* Barbour, 1908 • **AK**
**ST**: **PO.JD** • **CI**: h0240 • **ID**: 310
**PN**: *Cacopoides borealis* Barbour, 1908
**PK**: *Cacopoides borealis** Barbour, 1908
**KG**: *Kaloula** Gray, 1831
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Cacopus* Günther, 1864 • **AK**
**ST**: **NL.JI** • **CI**: h0241 • **ID**: 309
**PN**: *Engystoma marmoratum* Guérin-Méneville, 1838
**PK**: *Rana systoma** Schneider, 1799
**KG**: *Uperodon*[1] Duméril[+1], 1841
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Cacosternum*** Boulenger, 1887 • **KY**
**ST**: **PO.KN** • **CI**: h0242 • **ID**: 357
**PN**: *Cacosternum nanum* Boulenger, 1887
**PK**: *Cacosternum nanum** Boulenger, 1887
**KG**: *Cacosternum** Boulenger, 1887
**KF**: *Cacosternidae* 1931.na.f008
*Cacotus* Günther, 1869 • **AK**
**ST**: **PO.JD** • **CI**: h0243 • **ID**: 173
**PN**: *Cacotus maculatus* Günther, 1869
**PK**: *Cystignathus nodosus** Duméril[+1], 1841
**KG**: *Alsodes** Bell, 1843
**KF**: *Alsodidae* 1869.mc.f005
***Caecilia*** Linnaeus, 1758 • **KY**
**ST**: **LC.KN** • **CI**: h0244 • **ID**: 474
**PN**: *Caecilia tentaculata* Linnaeus, 1758
**PK**: *Caecilia tentaculata** Linnaeus, 1758
**KG**: *Caecilia** Linnaeus, 1758
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|
*Caecilita* Wake[+1], 2009 • **AK**
**ST**: **PO.JD** • **CI**: h0245 • **ID**: 492
**PN**: *Caecilita iwokramae* Wake[+1], 2009
**PK**: *Caecilita iwokramae*° Wake[+1], 2009
**KG**: *Microcaecilia*[3] Taylor, 1968
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|
*Caecilius* Curtis, 1837 • **ZH**
**ST**: **ZF** • **CI**: zh015
*Calamita* Schneider, 1799 • **AK**
**ST**: **PO.JI** • **CI**: h0246 • **ID**: 204
**PN**: *Rana arborea* Linnaeus, 1758
**PK**: *Rana arborea** Linnaeus, 1758
**KG**: *Hyla** Laurenti, 1768
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Calamita* Oken, 1816 • **EX**
**ST**: **PO.CW** • **CI**: e0005 • **ID**: 122
**PN**: *Bufo calamita* Laurenti, 1768
**PK**: *Bufo calamita** Laurenti, 1768
**KG**: *Epidalea** Cope, 1864
**KF**: *Bufonidae* 1825.gb.f004
*Calamita* Fitzinger, 1826 • **AK**
**ST**: **PO.JH** • **CI**: h0248 • **ID**: 237
**PN**: *Hyla cyanea* Daudin, 1803
**PK**: *Rana caerulea** White, 1890
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009
*Calamites* Guettard, 1770 • **ZH**
**ST**: **ZO** • **CI**: zh016
*Calamites* Wagler, 1830 • **AK**
**ST**: **PO.JH** • **CI**: h0249 • **ID**: 237
**PN**: *Rana caerulea* White, 1890
**PK**: *Rana caerulea** White, 1890
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009
*Calamitus*: Rafinesque 1815 • **AN**
**ST**: **AL** • **CI**: n0017 • **ID**: 122
**PN**: *Bufo calamita* Laurenti, 1768
**PK**: *Bufo calamita** Laurenti, 1768
**KG**: *Epidalea** Cope, 1864
**KF**: *Bufonidae* 1825.gb.f004
*Calamobates* Witte, 1930 • **AK**
**ST**: **PO.JD** • **CI**: h0250 • **ID**: 181
**PN**: *Calamobates boulengeri* Witte, 1930
**PK**: *Calamobates boulengeri*° Witte, 1930
**KG**: *Crossodactylus*[3] Duméril[+1], 1841
**KF**: *Hylodidae* 1858.gc.f010
*Caledon* Goldfuss, 1820 • **AK**
**ST**: **NL.JI** • **CI**: h0251 • **ID**: 554
**PN**: *Proteus anguinus* Laurenti, 1768
**PK**: *Proteus anguinus** Laurenti, 1768
**KG**: *Proteus** Laurenti, 1768
**KF**: *Proteidae* 1831.ba.f002
*Calliglutus* Barbour[+1], 1916 • **AK**
**ST**: **PO.JD** • **CI**: h0252 • **ID**: 313
**PN**: *Calliglutus smithi* Barbour[+1], 1916
**PK**: *Calliglutus smithi*° Barbour[+1], 1916
**KG**: *Glyphoglossus** Günther, 1869
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Callimedusa*** Duellman[+2], 2016 • **KY**
**ST**: **PO.KN** • **CI**: h0253 • **ID**: 244
**PN**: *Phyllomedusa perinesos* Duellman, 1973
**PK**: *Phyllomedusa perinesos** Duellman, 1973
**KG**: *Callimedusa** Duellman[+2], 2016
**KF**: *Phyllomedusidae* 1858.gc.f009
*Calliopersa* Safaei-Mahroo & Ghaffari, 2020 • **AK**
**ST**: **PO.JD** • **CI**: h0254 • **ID**: 121
**PN**: *Bufo surdus* Boulenger, 1891
**PK**: *Bufotes surdus*° (Boulenger, 1891)
**KG**: *Bufotes** Rafinesque, 1815
**KF**: *Bufonidae* 1825.gb.f004
*Calliphryne* Agassiz, 1847 • **AK**
**ST**: **NT.JI** • **CI**: h0255 • **ID**: 305
**PN**: *Kalophrynus pleurostigma* Tschudi, 1838
**PK**: *Kalophrynus pleurostigma** Tschudi, 1838
**KG**: *Kalophrynus** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Callixalus*** Laurent, 1950 • **KY**
**ST**: **PO.KN** • **CI**: h0256 • **ID**: 327
**PN**: *Callixalus pictus* Laurent, 1950
**PK**: *Callixalus pictus*° Laurent, 1950

KG: *Callixalus*° Laurent, 1950
KF: *Hyperoliidae* 1943.lb.f001
***Callobatrachus*** Wang+1, 1999 ‡ • ky
ST: po.kn • CI: h0257 • ID: †107
PN: *Callobatrachus sanyanensis* Wang+1, 1999 ‡
PK: *Callobatrachus sanyanensis*° Wang+1, 1999 †
KG: *Callobatrachus*° Wang+1, 1999 †
KF: Mediogyrinia Familia *Incertae sedis*
*Calluella* Stoliczka, 1872 • ak
ST: po.jd • CI: h0258 • ID: 313
PN: *Megalophrys guttulata* Blyth, 1856
PK: *Megalophrys guttulata** Blyth, 1856
KG: *Glyphoglossus** Günther, 1869
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Callula* Günther, 1864 • ak
ST: nt.ji • CI: h0259 • ID: 310
PN: *Kaloula pulchra* Gray, 1831
PK: *Kaloula pulchra** Gray, 1831
KG: *Kaloula** Gray, 1831
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Callulina*** Nieden, 1911 • ky
ST: po.kn • CI: h0260 • ID: 344
PN: *Callulina kreffti* Nieden, 1911
PK: *Callulina kreffti** Nieden, 1911
KG: *Callulina** Nieden, 1911
KF: *Brevicipitidae* 1850.bb.f012
*Callulops* Boulenger, 1888 • ak
ST: po.jd • CI: h0261 • ID: 280
PN: *Callulops doriae* Boulenger, 1888
PK: *Callulops doriae** Boulenger, 1888
KG: *Asterophrys** Tschudi, 1838
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Calofrynus* Palacký, 1898 • ak
ST: nt.ji • CI: h0262 • ID: 305
PN: *Kalophrynus pleurostigma* Tschudi, 1838
PK: *Kalophrynus pleurostigma** Tschudi, 1838
KG: *Kalophrynus** Tschudi, 1838
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Calohyla* Peters, 1863 • ak
ST: nt.ji • CI: h0263 • ID: 310
PN: *Kaloula pulchra* Gray, 1831
PK: *Kaloula pulchra** Gray, 1831
KG: *Kaloula** Gray, 1831
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Calophryne* Fitzinger, 1843 • ak
ST: ns.ji • CI: h0264 • ID: 305
PN: *Kalophrynus pleurostigma* Tschudi, 1838
PK: *Kalophrynus pleurostigma** Tschudi, 1838
KG: *Kalophrynus** Tschudi, 1838
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Calophrynus* Cope, 1863 • ak
ST: ns.ji • CI: h0265 • ID: 305
PN: *Kalophrynus pleurostigma* Tschudi, 1838
PK: *Kalophrynus pleurostigma** Tschudi, 1838
KG: *Kalophrynus** Tschudi, 1838
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Calostethus* Mivart, 1869 • ak
ST: ns.ji • CI: h0266 • ID: 040
PN: *Phyllobates latinasus* Cope, 1863
PK: *Phyllobates latinasus** Cope, 1863
KG: *Colostethus** Cope, 1866
KF: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002
***Calotriton*** Gray, 1858 • ky
ST: po.kn • CI: h0267 • ID: 565
PN: *Hemitriton punctulatus* Dugès, 1852
PK: *Hemitriton asper** Dugès, 1852
KG: *Calotriton*[1] Gray, 1858
KF: *Salamandridae* 1820.ga.f002
*Calyptahyla* Trueb+1, 1974 • ak
ST: po.jd • CI: h0268 • ID: 225
PN: *Trachycephalus lichenatus* Gosse, 1851
PK: *Hyla crucialis** Harlan, 1826
KG: *Osteopilus*[1] Fitzinger, 1843
KF: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Calyptocephala* : Dejean 1834 • za
ST: zn • CI: zn004
*Calyptocephala* Boheman, 1850 • zh
ST: zo • CI: zh017
*Calyptocephala* Nieden, 1923 • ak
ST: po.jh • CI: h0269 • ID: 257
PN: *Calyptocephalus gayi* Duméril+1, 1841
PK: *Calyptocephalus gayi** Duméril+1, 1841
KG: *Calyptocephalella** Strand, 1928
KF: *Calyptocephalellidae* 1960.ra.f001
***Calyptocephalella*** Strand, 1928 • ky
ST: po.kn • CI: h0270 • ID: 257
PN: *Calyptocephalus gayi* Duméril+1, 1841
PK: *Calyptocephalus gayi** Duméril+1, 1841
KG: *Calyptocephalella** Strand, 1928
KF: *Calyptocephalellidae* 1960.ra.f001
*Calyptocephalus* Gray, 1832 • zh
ST: zo • CI: zh018
*Calyptocephalus* Duméril+1, 1841 • ak
ST: po.jh • CI: h0271 • ID: 257
PN: *Calyptocephalus gayi* Duméril+1, 1841
PK: *Calyptocephalus gayi** Duméril+1, 1841
KG: *Calyptocephalella** Strand, 1928
KF: *Calyptocephalellidae* 1960.ra.f001
*Camarataxis* Cope, 1859 • ak
ST: po.jd • CI: h0272 • ID: 555
PN: *Ambystoma maculatum* Hallowell, 1858
PK: *Ambystoma mavortia*° Baird, 1850
KG: *Ambystoma*[1] Tschudi, 1838
KF: *Ambystomatidae* 1850.ga.f004
*Camariolius* Peters, 1863 • ak
ST: po.jd • CI: h0273 • ID: 270
PN: *Camariolius varius* Peters, 1863
PK: *Crinia* (*Ranidella*) *signifera** Girard, 1853
KG: *Crinia** Tschudi, 1838
KF: *Myobatrachidae* 1850.sa.f001
*Campbellius* Hedges+2, 2008 • ak
ST: po.jd • CI: h0274 • ID: 059

**PN**: *Eleutherodactylus stadelmani* Schmidt, 1936
**PK**: *Eleutherodactylus stadelmani*° Schmidt, 1936
**KG**: *Craugastor** Cope, 1862
**KF**: *Brachycephalidae* 1858.gc.f002

***Capensibufo*** Grandison, 1980 • **ky**
**ST**: **po.kn** • **CI**: h0275 • **ID**: 139
**PN**: *Bufo tradouwi* Hewitt, 1926
**PK**: *Bufo tradouwi** Hewitt, 1926
**KG**: *Capensibufo** Grandison, 1980
**KF**: *Bufonidae* 1825.gb.f004

*Cardioglossa* Boulenger, 1900 • **ak**
**ST**: **po.jd** • **CI**: h0276 • **ID**: 320
**PN**: *Cardioglossa gracilis* Boulenger, 1900
**PK**: *Cardioglossa gracilis** Boulenger, 1900
**KG**: *Arthroleptis** Smith, 1849
**KF**: *Arthroleptidae* 1869.mc.f011

***Carpathotriton*** Venczel, 2008 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0277 • **ID**: †192
**PN**: *Carpathotriton matraensis* Venczel, 2008 ‡
**PK**: *Carpathotriton matraensis*° Venczel, 2008 †
**KG**: *Carpathotriton*° Venczel, 2008 †
**KF**: *Salamandridae* 1820.ga.f002

*Carpophrys*: Anonymous 1976 • **an**
**ST**: **al** • **CI**: n0018 • **ID**: 018
**PN**: *Megophrys oshanensis* Liu, 1950
**PK**: *Megophrys oshanensis** Liu, 1950
**KG**: *Leptobrachella*° Smith, 1925
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Cassina*: Cope 1864 • **an**
**ST**: **al** • **CI**: n0019 • **ID**: 338
**PN**: *Cystignathus senegalensis* Duméril[+1], 1841
**PK**: *Cystignathus senegalensis** Duméril[+1], 1841
**KG**: *Kassina** Girard, 1853
**KF**: *Hyperoliidae* 1943.lb.f001

*Cassina* Boulenger, 1882 • **ak**
**ST**: **nt.ji** • **CI**: h0278 • **ID**: 338
**PN**: *Cystignathus senegalensis* Duméril[+1], 1841
**PK**: *Cystignathus senegalensis** Duméril[+1], 1841
**KG**: *Kassina** Girard, 1853
**KF**: *Hyperoliidae* 1943.lb.f001

*Cassiniopsis* Monard, 1937 • **ak**
**ST**: **po.jd** • **CI**: h0279 • **ID**: 338
**PN**: *Cassiniopsis kuvangensis* Monard, 1937
**PK**: *Cassiniopsis kuvangensis*° Monard, 1937
**KG**: *Kassina** Girard, 1853
**KF**: *Hyperoliidae* 1943.lb.f001

*Castaneides* Dubois[+1], 2012 • **ak**
**ST**: **po.jd** • **CI**: h0280 • **ID**: 547
**PN**: *Plethodon aeneus* Cope[+1], 1881
**PK**: *Plethodon aeneus** Cope[+1], 1881
**KG**: *Aneides** Baird, 1851
**KF**: *Plethodontidae* 1850.ga.f002

*Caudacaecilia* Taylor, 1968 • **ak**
**ST**: **po.jd** • **CI**: h0281 • **ID**: 500
**PN**: *Ichthyophis nigroflavus* Taylor, 1960
**PK**: *Ichthyophis nigroflavus*° Taylor, 1960
**KG**: *Epicrium*° Wagler, 1828
**KF**: *Ichthyophiidae* 1968.ta.f001

*Cauphias* Brocchi, 1877 • **ak**
**ST**: **po.ji** • **CI**: h0282 • **ID**: 219
**PN**: *Plectrohyla guatemalensis* Brocchi, 1877
**PK**: *Plectrohyla guatemalensis** Brocchi, 1877
**KG**: *Plectrohyla** Brocchi, 1877
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001⌋

*Cavicola* Ancey, 1887 • **zh**
**ST**: **zo** • **CI**: zh019

*Cavicola* Lutz, 1930 • **ak**
**ST**: **po.jh** • **CI**: h0283 • **ID**: 253
**PN**: *Rana mystacea* Spix, 1824
**PK**: *Rana mystacea** Spix, 1824
**KG**: *Leptodactylus*[1] Fitzinger, 1826
**KF**: *Leptodactylidae* ||1838.ta.f001||-1896.wa.f001

*Cecilia* [Rafinesque, 1814] Rafinesque, 1815 • **ak**
**ST**: **ns.ji** • **CI**: h0284 • **ID**: 474
**PN**: *Caecilia tentaculata* Linnaeus, 1758
**PK**: *Caecilia tentaculata** Linnaeus, 1758
**KG**: *Caecilia** Linnaeus, 1758
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Celsiella*** Guayasamin[+5], 2009 • **ky**
**ST**: **po.kn** • **CI**: h0285 • **ID**: 166
**PN**: *Centrolenella revocata* Rivero, 1985
**PK**: *Centrolenella revocata** Rivero, 1985
**KG**: *Celsiella** Guayasamin[+5], 2009
**KF**: *Centrolenidae* 1951.ta.f001

***Celtedens*** McGowan[+1], 1995 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0286 • **ID**: †004
**PN**: *Triton megacephalus* Costa, 1864 ‡
**PK**: *Triton megacephalus*° Costa, 1864 †
**KG**: *Celtedens*° McGowan[+1], 1995 †
**KF**: *Albanerpetidae* 1982.fa.f001 †

***Centrolene*** Jiménez de la Espada, 1872 • **ky**
**ST**: **po.kn** • **CI**: h0287 • **ID**: 156
**PN**: *Centrolene geckoideum* Jiménez de la Espada, 1872
**PK**: *Centrolene geckoideum** Jiménez de la Espada, 1872
**KG**: *Centrolene** Jiménez de la Espada, 1872
**KF**: *Centrolenidae* 1951.ta.f001

*Centrolenella* Noble, 1920 • **ak**
**ST**: **po.jd** • **CI**: h0288 • **ID**: 156
**PN**: *Centrolenella antioquiensis* Noble, 1920
**PK**: *Centrolenella antioquiensis** Noble, 1920
**KG**: *Centrolene** Jiménez de la Espada, 1872
**KF**: *Centrolenidae* 1951.ta.f001

*Centrotelma* Burmeister, 1856 • **ak**
**ST**: **po.jd** • **CI**: h0289 • **ID**: 189
**PN**: *Hyla infulata* Neuwied, 1824
**PK**: *Hyla albomarginata** Spix, 1824
**KG**: *Boana** Gray, 1825
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Cephaloloxes*: Gistel 1848 • **an**
**ST**: **al** • **CI**: n0020 • **ID**: 001§
**PN**: INR
**PK**: INR

**KG**: INR

**KF**: **Lissamphibia** Familia *Incertae sedis*

*Cephalopeltis* Mueller, 1832 • **ZH**

**ST**: **ZO** • **CI**: zh020

*Cephalopeltis*: Duméril[+1] 1841 • **AN**

**ST**: **AL** • **CI**: n0021 • **ID**: 257

**PN**: *Calyptocephalus gayi* Duméril[+1], 1841

**PK**: *Calyptocephalus gayi** Duméril[+1], 1841

**KG**: *Calyptocephalella** Strand, 1928

**KF**: *Calyptocephalellidae* 1960.ra.f001

*Cephalopeltis* Jiménez de la Espada, 1875 • **AK**

**ST**: **PO.JH** • **CI**: h0290 • **ID**: 257

**PN**: *Calyptocephalus gayi* Duméril[+1], 1841

**PK**: *Calyptocephalus gayi** Duméril[+1], 1841

**KG**: *Calyptocephalella** Strand, 1928

**KF**: *Calyptocephalellidae* 1960.ra.f001

*Cephalophractus*: Fitzinger 1843 • **AN**

**ST**: **AL** • **CI**: n0022 • **ID**: 231

**PN**: *Cephalophractus galeatus* Fitzinger, 1843 **AN**

**PK**: *Trachycephalus nigromaculatus** Tschudi, 1838

**KG**: *Trachycephalus** Tschudi, 1838

**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Cerathyla* Jiménez de la Espada, 1870 • **AK**

**ST**: **PO.JD** • **CI**: h0291 • **ID**: 095

**PN**: *Cerathyla bubalus* Jiménez de la Espada,1870

**PK**: *Cerathyla bubalus** Jiménez de la Espada, 1870

**KG**: *Hemiphractus*[1] Wagler, 1828

**KF**: *Hemiphractidae* 1862.pa.f001

*Ceratobatrachus* Boulenger, 1884 • **AK**

**ST**: **PO.JD** • **CI**: h0292 • **ID**: 369

**PN**: *Ceratobatrachus guentheri* Boulenger, 1884

**PK**: *Ceratobatrachus guentheri** Boulenger, 1884

**KG**: *Cornufer** Tschudi, 1838

**KF**: *Ceratobatrachidae* 1884.ba.f001

*Ceratohyla* Boulenger, 1882 • **AK**

**ST**: **NT.JD** • **CI**: h0293 • **ID**: 095

**PN**: *Cerathyla bubalus* Jiménez de la Espada,1870

**PK**: *Cerathyla bubalus** Jiménez de la Espada, 1870

**KG**: *Hemiphractus*[1] Wagler, 1828

**KF**: *Hemiphractidae* 1862.pa.f001

*Ceratophris* Cuvier, 1829 • **AK**

**ST**: **NS.JI** • **CI**: h0294 • **ID**: 169

**PN**: *Ceratophrys varius* Neuwied, 1824

**PK**: *Bufo auritus*° Raddi, 1823

**KG**: *Ceratophrys*[3] Neuwied, 1824

**KF**: *Ceratophryidae* 1838.ta.f002

*Ceratophryne* Schlegel, 1858 • **AK**

**ST**: **NS.JI** • **CI**: h0295 • **ID**: 169

**PN**: *Ceratophrys varius* Neuwied, 1824

**PK**: *Bufo auritus*° Raddi, 1823

**KG**: *Ceratophrys*[3] Neuwied, 1824

**KF**: *Ceratophryidae* 1838.ta.f002

*Ceratophryne* Günther, 1859 • **AK**

**ST**: **PO.JH** • **CI**: h0296 • **ID**: 021

**PN**: *Ceratophryne nasuta* Schlegel, 1858

**PK**: *Ceratophryne nasuta** Schlegel, 1858

**KG**: *Megophrys*[2] Kuhl[+1], 1822

**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

***Ceratophrys*** Neuwied, 1824 • **KY**

**ST**: **PO.KN** • **CI**: h0297 • **ID**: 169

**PN**: *Ceratophrys varius* Neuwied, 1824

**PK**: *Bufo auritus*° Raddi, 1823

**KG**: *Ceratophrys*[3] Neuwied, 1824

**KF**: *Ceratophryidae* 1838.ta.f002

***Ceuthomantis*** Heinicke[+5], 2009 • **KY**

**ST**: **PO.KN** • **CI**: h0298 • **ID**: 085

**PN**: *Ceuthomantis smaragdinus* Heinicke[+5], 2009

**PK**: *Ceuthomantis smaragdinus** Heinicke[+5], 2009

**KG**: *Ceuthomantis** Heinicke[+5], 2009

**KF**: *Ceuthomantidae* 2009.ha.f003

***Chachaiphrynus*** Nicoli, 2017 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h0299 • **ID**: †095

**PN**: *Chachaiphrynus lynchi* Nicoli, 2017 ‡

**PK**: *Chachaiphrynus lynchi*° Nicoli, 2017 †

**KG**: *Chachaiphrynus*° Nicoli, 2017 †

**KF**: *Odontophrynidae* 1971.la.f002

***Chacophrys*** Reig[+1], 1963 • **KY**

**ST**: **PO.KN** • **CI**: h0300 • **ID**: 170

**PN**: *Ceratophrys pierottii* Vellard, 1948

**PK**: *Ceratophrys pierottii** Vellard, 1948

**KG**: *Chacophrys** Reig[+1], 1963

**KF**: *Ceratophryidae* 1838.ta.f002

*Chalcorana* Dubois, 1992 • **AK**

**ST**: **PO.JD** • **CI**: h0301 • **ID**: 409

**PN**: *Hyla chalconota* Schlegel, 1837

**PK**: *Hyla chalconota** Schlegel, 1837

**KG**: *Hylarana** Tschudi, 1838

**KF**: *Ranidae* 1796.ba.f001

***Chaltenobatrachus*** Basso[+3], 2011 • **KY**

**ST**: **PO.KN** • **CI**: h0302 • **ID**: 176

**PN**: *Telmatobius grandisonae* Lynch, 1975

**PK**: *Telmatobius grandisonae*° Lynch, 1975

**KG**: *Chaltenobatrachus*° Basso[+3], 2011

**KF**: *Batrachylidae* 1965.ga.f002

***Chaparana*** Bourret, 1939 • **KY**

**ST**: **PO.KN** • **CI**: h0303 • **ID**: 383

**PN**: *Rana* (*Chaparana*) *fansipani* Bourret, 1939

**PK**: *Rana aenea** Smith, 1922

**KG**: *Chaparana*[1] Bourret, 1939

**KF**: *Dicroglossidae* 1987.da.f004

***Chaperina*** Mocquard, 1892 • **KY**

**ST**: **PO.KN** • **CI**: h0304 • **ID**: 308

**PN**: *Chaperina fusca* Mocquard, 1892

**PK**: *Chaperina fusca** Mocquard, 1892

**KG**: *Chaperina** Mocquard, 1892

**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Charadrahyla*** Faivovich[+5], 2005 • **KY**

**ST**: **PO.KN** • **CI**: h0305 • **ID**: 201

**PN**: *Hyla taeniopus* Günther, 1901

**PK**: *Hyla taeniopus** Günther, 1901

**KG**: *Charadrahyla** Faivovich[+5], 2005

**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Chascax* Ritgen, 1828 • AK
**ST**: PO.JD • **CI**: h0306 • **ID**: 138
**PN**: *Bufo horridus* Daudin, 1802
**PK**: *Bufo spinulosus** Wiegmann, 1834
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

*Chaunus* Wagler, 1828 • AK
**ST**: PO.JD • **CI**: h0307 • **ID**: 138
**PN**: *Chaunus marmoratus* Wagler, 1828
**PK**: *Bufo granulosus** Spix, 1824
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

***Chelomophrynus*** Henrici, 1991 ‡ • KY
**ST**: PO.KN • **CI**: h0308 • **ID**: †081
**PN**: *Chelomophrynus bayi* Henrici, 1991 ‡
**PK**: *Chelomophrynus bayi*° Henrici, 1991 †
**KG**: *Chelomophrynus*° Henrici, 1991 †
**KF**: *Rhinophrynidae* 1858.gc.f013

***Chelotriton*** Pomel, 1853 ‡ • KY
**ST**: PO.KN • **CI**: h0309 • **ID**: †193
**PN**: *Chelotriton paradoxus* Pomel, 1853 ‡
**PK**: *Chelotriton paradoxus*° Pomel, 1853 †
**KG**: *Chelotriton*° Pomel, 1853 †
**KF**: *Salamandridae* 1820.ga.f002

*Chelydobatrachus* Günther, 1859 • AK
**ST**: PO.JD • **CI**: h0310 • **ID**: 273
**PN**: *Breviceps gouldii* Gray, 1841
**PK**: *Breviceps gouldii** Gray, 1841
**KG**: *Myobatrachus*[1] Schlegel, 1850
**KF**: *Myobatrachidae* 1850.sa.f001

*Chianopelas*: Tschudi 1845*a* • AN
**ST**: AL • **CI**: n0023 • **ID**: 246
**PN**: *Leiuperus viridis* Tschudi, 1845
**PK**: *Leiuperus marmoratus** Duméril[+1], 1841
**KG**: *Pleurodema** Tschudi, 1838
**KF**: *Leiuperidae* 1850.bb.f010

***Chiasmocleis*** Méhelÿ, 1904 • KY
**ST**: PO.KN • **CI**: h0311 • **ID**: 292
**PN**: *Engystoma albopunctatum* Boettger, 1885
**PK**: *Engystoma albopunctatum** Boettger, 1885
**KG**: *Chiasmocleis** Méhelÿ, 1904
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Chikila*** Kamei[+9,] 2012 • KY
**ST**: PO.KN • **CI**: h0312 • **ID**: 495
**PN**: *Herpele fulleri* Alcock, 1904
**PK**: *Herpele fulleri** Alcock, 1904
**KG**: *Chikila** Kamei[+9,] 2012
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Chilixalus* Werner, 1899 • AK
**ST**: PO.JD • **CI**: h0313 • **ID**: 415
**PN**: *Ixalus warszewitschii* Schmidt, 1857
**PK**: *Ixalus warszewitschii** Schmidt, 1857
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001

*Chilophryne* Fitzinger, 1843 • AK
**ST**: PO.JD • **CI**: h0314 • **ID**: 138
**PN**: *Bufo dorbignyi* Duméril[+1], 1841
**PK**: *Bufo dorbignyi*° Duméril[+1], 1841
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

***Chimerella*** Guayasamin[+5], 2009 • KY
**ST**: PO.KN • **CI**: h0315 • **ID**: 158
**PN**: *Centrolene mariaelenae* Cisneros-Heredia[+1], 2006
**PK**: *Centrolene mariaelenae** Cisneros-Heredia[+1], 2006
**KG**: *Chimerella** Guayasamin[+5], 2009
**KF**: *Centrolenidae* 1951.ta.f001

***Chioglossa*** Bocage, 1864 • KY
**ST**: PO.KN • **CI**: h0316 • **ID**: 575
**PN**: *Chioglossa lusitanica* Bocage, 1864
**PK**: *Chioglossa lusitanica** Bocage, 1864
**KG**: *Chioglossa** Bocage, 1864
**KF**: *Salamandridae* 1820.ga.f002

*Chionopelas*: Tschudi 1845*b* • AN
**ST**: AL • **CI**: n0024 • **ID**: 246
**PN**: *Leiuperus viridis* Tschudi, 1845
**PK**: *Leiuperus marmoratus** Duméril[+1], 1841
**KG**: *Pleurodema** Tschudi, 1838
**KF**: *Leiuperidae* 1850.bb.f010

***Chirixalus*** Boulenger, 1893 • KY
**ST**: PO.KN • **CI**: h0317 • **ID**: 448
**PN**: *Chirixalus doriae* Boulenger, 1893
**PK**: *Chirixalus doriae** Boulenger, 1893
**KG**: *Chirixalus** Boulenger, 1893
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Chirodryas* Keferstein, 1867 • AK
**ST**: PO.JD • **CI**: h0318 • **ID**: 237
**PN**: *Chirodryas raniformis* Kefertsein, 1867
**PK**: *Chirodryas raniformis** Kefertsein, 1867
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

*Chiroleptes* Richardson, 1837 • ZH
**ST**: ZO • **CI**: zh021

*Chiroleptes* Günther, 1859 • AK
**ST**: PO.JH • **CI**: h0319 • **ID**: 237
**PN**: *Alytes australis* Gray, 1842
**PK**: *Alytes australis** Gray, 1842
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

***Chiromantis*** Peters, 1854 • KY
**ST**: PO.KN • **CI**: h0320 • **ID**: 449
**PN**: *Chiromantis xerampelina* Peters, 1854
**PK**: *Chiromantis xerampelina** Peters, 1854
**KG**: *Chiromantis** Peters, 1854
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Chiropterotriton*** Taylor, 1944 • KY
**ST**: PO.KN • **CI**: h0321 • **ID**: 528
**PN**: *Oedipus multidentatus* Taylor, 1939
**PK**: *Oedipus multidentatus** Taylor, 1939
**KG**: *Chiropterotriton** Taylor, 1944
**KF**: *Plethodontidae* 1850.ga.f002

*Chlorofilus* Palacký, 1898 • AK
**ST**: NT.JI • **CI**: h0322 • **ID**: 200

**PN**: *Rana nigrita* Le Conte, 1825
**PK**: *Rana nigrita** Le Conte, 1825
**KG**: *Pseudacris** Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Chlorolius* Perret, 1988 • **ak**
**ST**: **po.jd** • **CI**: h0323 • **ID**: 331
**PN**: *Hyperolius koehleri* Mertens, 1940
**PK**: *Hyperolius koehleri*° Mertens, 1940
**KG**: *Hyperolius** Rapp, 1842
**KF**: *Hyperoliidae* 1943.lb.f001

*Choanacantha* Méhelÿ, 1898 • **ak**
**ST**: **po.jd** • **CI**: h0324 • **ID**: 280
**PN**: *Choanacantha rostrata* Méhelÿ, 1898
**PK**: *Choanacantha rostrata*° Méhelÿ, 1898
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Choerophryne* Van Kampen, 1914 • **ak**
**ST**: **po.jd** • **CI**: h0325 • **ID**: 280
**PN**: *Choerophryne proboscidea* Van Kampen, 1914
**PK**: *Choerophryne proboscidea*° Van Kampen, 1914
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Chondrodela*: Rafinesque 1815 • **an**
**ST**: **al** • **CI**: n0025 • **ID**: 419
**PN**: *Rana temporaria* Linnaeus, 1758
**PK**: *Rana temporaria** Linnaeus, 1758
**KG**: *Rana** Linnaeus, 1758
**KF**: *Ranidae* 1796.ba.f001

*Chondrotus* Cope, 1887 • **ak**
**ST**: **po.jd** • **CI**: h0326 • **ID**: 556
**PN**: *Amblystoma tenebrosum* Baird[+1], 1852
**PK**: *Amblystoma tenebrosum** Baird[+1], 1852
**KG**: *Dicamptodon** Strauch, 1870
**KF**: *Ambystomatidae* 1850.ga.f004

*Chonomantis* Glaw[+1], 1994 • **ak**
**ST**: **po.jd** • **CI**: h0327 • **ID**: 432
**PN**: *Rana albofrenata* Müller, 1892
**PK**: *Rana albofrenata** Müller, 1892
**KG**: *Mantidactylus** Boulenger, 1895
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Chorophilus* Baird, 1854 • **ak**
**ST**: **po.ji** • **CI**: h0328 • **ID**: 200
**PN**: *Rana nigrita* Le Conte, 1825
**PK**: *Rana nigrita** Le Conte, 1825
**KG**: *Pseudacris** Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Chrysobatrachus*** Laurent, 1951 • **ky**
**ST**: **po.kn** • **CI**: h0329 • **ID**: 328
**PN**: *Chrysobatrachus cupreonitens* Laurent, 1951
**PK**: *Chrysobatrachus cupreonitens*° Laurent, 1951
**KG**: *Chrysobatrachus*° Laurent, 1951
**KF**: *Hyperoliidae* 1943.lb.f001

*Chrysodonta* Mitchill, 1822 • **ak**
**ST**: **po.jd** • **CI**: h0330 • **ID**: 520
**PN**: *Chrysodonta larvaeformis* Mitchill, 1822
**PK**: *Amphiuma means** Garden *in* Smith, 1821
**KG**: *Amphiuma** Garden *in* Smith, 1821
**KF**: *Amphiumidae* 1825.gb.f07

***Chrysopaa*** Ohler[+1], 2006 • **ky**
**ST**: **po.kn** • **CI**: h0331 • **ID**: 372
**PN**: *Rana sternosignata* Murray, 1885
**PK**: *Rana sternosignata*° Murray, 1885
**KG**: *Chrysopaa*° Ohler[+1], 2006
**KF**: *Dicroglossidae* 1987.da.f004

***Chrysotriton*** Estes, 1981 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0332 • **ID**: †187
**PN**: *Chrysotriton tiheni* Estes, 1981 ‡
**PK**: *Chrysotriton tiheni*° Estes, 1981 †
**KG**: *Chrysotriton*° Estes, 1981 †
**KF**: *Ambystomatidae* 1850.ga.f004

***Chthonerpeton*** Peters, 1880 • **ky**
**ST**: **po.kn** • **CI**: h0333 • **ID**: 477
**PN**: *Siphonops indistinctus* Reinhardt[+1], 1862
**PK**: *Siphonops indistinctus** Reinhardt[+1], 1862
**KG**: *Chthonerpeton** Peters, 1880
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Chunerpeton*** Gao[+1], 2003 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0334 • **ID**: †165
**PN**: *Chunerpeton tianyiensis* Gao[+1], 2003 ‡
**PK**: *Chunerpeton tianyiensis*° Gao[+1], 2003 †
**KG**: *Chunerpeton*° Gao[+1], 2003 †
**KF**: *Cryptobranchidae* 1826.fb.f003

***Churamiti*** Channing[+1], 2002 • **ky**
**ST**: **po.kn** • **CI**: h0335 • **ID**: 134
**PN**: *Churamiti maridadi* Channing[+1], 2002
**PK**: *Churamiti maridadi** Channing[+1], 2002
**KG**: *Churamiti** Channing[+1], 2002
**KF**: *Bufonidae* 1825.gb.f004

*Cinclidium* Blyth, 1842 • **zh**
**ST**: **zo** • **CI**: zh022

*Cinclidium* Cope, 1867 • **ak**
**ST**: **po.jh** • **CI**: h0336 • **ID**: 189
**PN**: *Cinclidium granulatum* Cope, 1867
**PK**: *Rana boans** Linnaeus, 1758
**KG**: *Boana** Gray, 1825
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Cincloscopus* Cope, 1871 • **ak**
**ST**: **po.jd** • **CI**: h0337 • **ID**: 189
**PN**: *Cinclidium granulatum* Cope, 1867
**PK**: *Rana boans** Linnaeus, 1758
**KG**: *Boana** Gray, 1825
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Clinotarsus*** Mivart, 1869 • **ky**
**ST**: **po.kn** • **CI**: h0338 • **ID**: 402
**PN**: *Pachybatrachus robustus* Mivart, 1869
**PK**: *Rana curtipes** Jerdon, 1853
**KG**: *Clinotarsus*[1] Mivart, 1869
**KF**: *Ranidae* 1796.ba.f001

***Cochranella*** Taylor, 1951 • **ky**
**ST**: **po.kn** • **CI**: h0339 • **ID**: 157
**PN**: *Centrolenella granulosa* Taylor, 1949
**PK**: *Centrolenella granulosa** Taylor, 1949

**KG**: *Cochranella** Taylor, 1951
**KF**: *Centrolenidae* 1951.ta.f001
*Coecilia*: Linnaeus 1758 • **an**
**ST**: **li** • **CI**: n0026 • **ID**: 474
**PN**: *Caecilia tentaculata* Linnaeus, 1758
**PK**: *Caecilia tentaculata** Linnaeus, 1758
**KG**: *Caecilia** Linnaeus, 1758
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|
*Coecilia* Sonnini[+1], 1801 • **ak**
**ST**: **ns.ji** • **CI**: h0340 • **ID**: 474
**PN**: *Caecilia tentaculata* Linnaeus, 1758
**PK**: *Caecilia tentaculata** Linnaeus, 1758
**KG**: *Caecilia** Linnaeus, 1758
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|
*Coelonotus* Peters, 1855 • **zh**
**ST**: **zo** • **CI**: zh023
*Coelonotus* Miranda-Ribeiro, 1920 • **ak**
**ST**: **po.jh** • **CI**: h0341 • **ID**: 094
**PN**: *Coelonotus fissilis* Miranda-Ribeiro, 1920
**PK**: *Coelonotus fissilis** Miranda-Ribeiro, 1920
**KG**: *Fritziana** Mello-Leitão, 1937
**KF**: *Hemiphractidae* 1862.pa.f001
*Cofofryne* Palacký, 1898 • **ak**
**ST**: **nt.ji** • **CI**: h0342 • **ID**: 017
**PN**: *Bombinator sikimmensis* Blyth, 1854
**PK**: *Bombinator sikimmensis*° Blyth, 1854
**KG**: *Scutiger*[2] Theobald, 1868
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|
*Coggerdonia* Wells[+1], 1985 • **ak**
**ST**: **po.jd** • **CI**: h0343 • **ID**: 235
**PN**: *Hyla adelaidensis* Gray, 1841
**PK**: *Hyla adelaidensis** Gray, 1841
**KG**: *Litoria** Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009
*Colleeneremia* Wells[+1], 1985 • **ak**
**ST**: **po.jd** • **CI**: h0344 • **ID**: 235
**PN**: *Hyla rubella* Gray, 1842
**PK**: *Hyla rubella** Gray, 1842
**KG**: *Litoria** Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009
*Colodactylus* Tschudi, 1845 • **ky**
**ST**: **po.kn** • **CI**: h0345 • **ID**: 014
**PN**: *Colodactylus coerulescens* Tschudi, 1845
**PK**: *Colodactylus coerulescens*° Tschudi, 1845
**KG**: *Colodactylus*° Tschudi, 1845
**KF**: **Laevogyrinia** Familia *Incertae sedis*
***Colomascirtus*** Duellman[+2], 2016 • **ky**
**ST**: **po.kn** • **CI**: h0346 • **ID**: 190
**PN**: *Hyla larinopygion* Duellman, 1973
**PK**: *Hyla larinopygion** Duellman, 1973
**KG**: *Colomascirtus** Duellman[+2], 2016
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Colostethus*** Cope, 1866 • **ky**
**ST**: **po.kn** • **CI**: h0347 • **ID**: 040
**PN**: *Phyllobates latinasus* Cope, 1863
**PK**: *Phyllobates latinasus** Cope, 1863
**KG**: *Colostethus** Cope, 1866
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002
*Colosthetus* Gadow, 1901 • **ak**
**ST**: **ns.ji** • **CI**: h0348 • **ID**: 040
**PN**: *Phyllobates latinasus* Cope, 1863
**PK**: *Phyllobates latinasus** Cope, 1863
**KG**: *Colostethus** Cope, 1866
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002
*Colpoglossus* Boulenger, 1904 • **ak**
**ST**: **po.jd** • **CI**: h0349 • **ID**: 313
**PN**: *Colpoglossus brooksii* Boulenger, 1904
**PK**: *Colpoglossus brooksii*° Boulenger, 1904
**KG**: *Glyphoglossus** Günther, 1869
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Comobatrachus*** Hecht[+1], 1960 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0350 • **ID**: †016
**PN**: *Comobatrachus aenigmatis* Hecht *in* Hecht[+1], 1960 ‡
**PK**: *Comobatrachus aenigmatis*° Hecht *in* Hecht[+1], 1960 †
**KG**: *Comobatrachus*° Hecht[+1], 1960 †
**KF**: **Anura** Familia *Incertae sedis*
***Comonecturoides*** Hecht[+1], 1960 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0351 • **ID**: †128
**PN**: *Comonecturoides marshi* Estes *in* Hecht[+1], 1960 ‡
**PK**: *Comonecturoides marshi*° Estes *in* Hecht[+1], 1960 †
**KG**: *Comonecturoides*° Hecht[+1], 1960 †
**KF**: **Urodela** Familia *Incertae sedis*
*Conrana* Boulenger, 1910 • **ak**
**ST**: **ns.ji** • **CI**: h0352 • **ID**: 351
**PN**: *Conraua robusta* Nieden, 1908
**PK**: *Conraua robusta** Nieden, 1908
**KG**: *Conraua** Nieden, 1908
**KF**: *Conrauidae* 1992.da.f001
*Conrana* Bauer, 1985 • **ak**
**ST**: **po.jh** • **CI**: h0353 • **ID**: 413
**PN**: *Rana catesbeiana* Shaw, 1802
**PK**: *Rana catesbeiana** Shaw, 1802
**KG**: *Aquarana** Dubois, 1992
**KF**: *Ranidae* 1796.ba.f001
***Conraua*** Nieden, 1908 • **ky**
**ST**: **po.kn** • **CI**: h0354 • **ID**: 351
**PN**: *Conraua robusta* Nieden, 1908
**PK**: *Conraua robusta** Nieden, 1908
**KG**: *Conraua** Nieden, 1908
**KF**: *Conrauidae* 1992.da.f001
*Copea* Steindachner, 1864 • **ak**
**ST**: **po.jd** • **CI**: h0355 • **ID**: 314
**PN**: *Copea fulva* Steindachner, 1864
**PK**: *Engystoma rubrum** Jerdon, 1853
**KG**: *Microhyla** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Copeicaecilia* Taylor, 1968 • **ak**
**ST**: **po.jd** • **CI**: h0356 • **ID**: 487
**PN**: *Siphonops syntremus* Cope, 1866
**PK**: *Siphonops syntremus*° Cope, 1866
**KG**: *Gymnopis** Peters, 1874
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Copeotyphlinus* Taylor, 1968 • **AK**
**ST**: **PO.JD** • **CI**: h0357 • **ID**: 487
**PN**: *Siphonops syntremus* Cope, 1866
**PK**: *Siphonops syntremus*° Cope, 1866
**KG**: *Gymnopis** Peters, 1874
**KF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|
*Cophaeus* Cope, 1889 • **AK**
**ST**: **NL.JI** • **CI**: h0358 • **ID**: 186
**PN**: *Telmatobius peruvianus* Wiegmann, 1834
**PK**: *Telmatobius peruvianus*° Wiegmann, 1834
**KG**: *Telmatobius*[3] Wiegmann, 1834
**KF**: *TELMATOBIIDAE* 1843.fa.f006
*Cophixalus* Boettger, 1892 • **AK**
**ST**: **PO.JD** • **CI**: h0359 • **ID**: 280
**PN**: *Sphenophryne verrucosa* Boulenger, 1898
**PK**: *Sphenophryne verrucosa*° Boulenger, 1898
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001
*Cophomantis* Peters, 1870 • **AK**
**ST**: **PO.JD** • **CI**: h0360 • **ID**: 189
**PN**: *Cophomantis punctillata* Peters, 1870
**PK**: *Hyla geographica* var. *semilineata** Spix, 1824
**KG**: *Boana** Gray, 1825
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|
*Cophophryne* Boulenger, 1887 • **AK**
**ST**: **NT.JI** • **CI**: h0361 • **ID**: 017
**PN**: *Bombinator sikimmensis* Blyth, 1854
**PK**: *Bombinator sikimmensis*° Blyth, 1854
**KG**: *Scutiger*[2] Theobald, 1868
**KF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|
***Cophyla*** Boettger, 1880 • **KY**
**ST**: **PO.KN** • **CI**: h0362 • **ID**: 286
**PN**: *Cophyla phyllodactyla* Boettger, 1880
**PK**: *Cophyla phyllodactyla** Boettger, 1880
**KG**: *Cophyla** Boettger, 1880
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001
*Copiula* Méhelÿ, 1901 • **AK**
**ST**: **PO.JD** • **CI**: h0363 • **ID**: 280
**PN**: *Phrynixalus oxyrhinus* Boulenger, 1898
**PK**: *Phrynixalus oxyrhinus** Boulenger, 1898
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001
*Coplandia* Wells[+1], 1985 • **AK**
**ST**: **PO.JD** • **CI**: h0364 • **ID**: 262
**PN**: *Kyarranus kundagungan* Ingram[+1], 1958
**PK**: *Kyarranus kundagungan*° Ingram[+1], 1958
**KG**: *Philoria*[2] Spencer, 1901
**KF**: *MYOBATRACHIDAE* 1850.sa.f001
*Coracodichus* Laurent, 1941 • **AK**
**ST**: **PO.JD** • **CI**: h0365 • **ID**: 320
**PN**: *Arthroleptis whytii* Boulenger, 1897
**PK**: *Arthroleptis stenodactylus** Pfeffer, 1893
**KG**: *Arthroleptis** Smith, 1849
**KF**: *ARTHROLEPTIDAE* 1869.mc.f011
*Cordicephalus* Wardle[+2], 1947 • **ZH**
**ST**: **ZO** • **CI**: zh024
*Cordicephalus* Nevo, 1968 ‡ • **AK**
**ST**: **PO.JH** • **CI**: h0366 • **ID**: †064
**PN**: *Cordicephalus gracilis* Nevo, 1968 ‡
**PK**: *Cordicephalus gracilis*° Nevo, 1968 †
**KG**: *Nevobatrachus*° Mahony, 2019 †
**KF**: **DORSIPARES** Familia *INCERTAE SEDIS*
*Cordylus* Gronovius, 1763 • **ZA**
**ST**: **ZN** • **CI**: zn005
*Cordylus* Laurenti, 1768 • **ZH**
**ST**: **ZO** • **CI**: zh025
*Cordylus* Wagler, 1828 • **AK**
**ST**: **NL.JH** • **CI**: h0367 • **ID**: 554
**PN**: *Proteus anguinus* Laurenti, 1768
**PK**: *Proteus anguinus** Laurenti, 1768
**KG**: *Proteus** Laurenti, 1768
**KF**: *PROTEIDAE* 1831.ba.f002
***Cornufer*** Tschudi, 1838 • **KY**
**ST**: **PO.KN** • **CI**: h0368 • **ID**: 369
**PN**: *Halophila vitiensis* Girard, 1853
**PK**: *Halophila vitiensis** Girard, 1853
**KG**: *Cornufer** Tschudi, 1838
**KF**: *CERATOBATRACHIDAE* 1884.ba.f001
*Corsandra* Dubois[+1], 2009 • **AK**
**ST**: **PO.JD** • **CI**: h0369 • **ID**: 578
**PN**: *Salamandra corsica* Savi, 1838
**PK**: *Salamandra corsica** Savi, 1838
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *SALAMANDRIDAE* 1820.ga.f002
***Corythomantis*** Boulenger, 1896 • **KY**
**ST**: **PO.KN** • **CI**: h0370 • **ID**: 227
**PN**: *Corythomantis greeningi* Boulenger, 1896
**PK**: *Corythomantis greeningi** Boulenger, 1896
**KG**: *Corythomantis** Boulenger, 1896
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|
*Cosmus*: Dejean 1821 • **ZA**
**ST**: **ZN** • **CI**: zn006
*Cosmus*: Gistel 1848 • **AN**
**ST**: **AL** • **CI**: n0027 • **ID**: 001§
**PN**: INR
**PK**: INR
**KG**: INR
**KF**: **LISSAMPHIBIA** Familia *INCERTAE SEDIS*
*Cotobotes* Gistel, 1848 • **AK**
**ST**: **NL.JI** • **CI**: h0371 • **ID**: 538
**PN**: *Salamandra scutata* Temminck[+1], 1838
**PK**: *Salamandra scutata** Temminck[+1], 1838
**KG**: *Hemidactylium** Tschudi, 1838
**KF**: *PLETHODONTIDAE* 1850.ga.f002
*Cranophryne* Cope, 1889 • **AK**
**ST**: **PO.JD** • **CI**: h0372 • **ID**: 137
**PN**: *Cranopsis fastidiosus* Cope, 1875
**PK**: *Cranopsis fastidiosus** Cope, 1875
**KG**: *Incilius** Cope, 1863
**KF**: *BUFONIDAE* 1825.gb.f004
*Cranopsis* Adams, 1860 • **ZH**
**ST**: **ZO** • **CI**: zh026

*Cranopsis* Cope, 1875 • **AK**
**ST**: **PO.JH** • **CI**: h0373 • **ID**: 137
**PN**: *Cranopsis fastidiosus* Cope, 1875
**PK**: *Cranopsis fastidiosus** Cope, 1875
**KG**: *Incilius** Cope, 1863
**KF**: *BUFONIDAE* 1825.gb.f004

*Craspedoglossa* Müller, 1922 • **AK**
**ST**: **PO.JD** • **CI**: h0374 • **ID**: 179
**PN**: *Craspedoglossa santaecatharinae* Müller, 1922
**PK**: *Borborocoetes bolitoglossus*° Werner, 1897
**KG**: *Cycloramphus** Tschudi, 1838
**KF**: *CYCLORAMPHIDAE* 1850.bb.f003-|1852.ba.f001|

***Cratia*** Báez[+2], 2009 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0375 • **ID**: †017
**PN**: *Cratia gracilis* BÁEZ[+2], 2009 ‡
**PK**: *Cratia gracilis*° Báez[+2], 2009 †
**KG**: *Cratia*° Báez[+2], 2009 †
**KF**: **ANURA** Familia *INCERTAE SEDIS*

*Cratopipa*: Souza Carvalho[+6] 2019*a* ‡ • **AN**
**ST**: **AL** • **CI**: n0028 • **ID**: †071
**PN**: *Cratopipa novaolindensis* Souza Carvalho[+6], 2019*a* ‡
**PK**: *Cratopipa novaolindensis*° Souza Carvalho[+6], 2019*b* †
**KG**: *Cratopipa*° Souza Carvalho[+6], 2019*b* †
**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|

***Cratopipa*** Souza Carvalho[+6], 2019*b* ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0376 • **ID**: †071
**PN**: *Cratopipa novaolindensis* Souza Carvalho[+6], 2019*b* ‡
**PK**: *Cratopipa novaolindensis*° Souza Carvalho[+6], 2019*b* †
**KG**: *Cratopipa*° Souza Carvalho[+6], 2019*b* †
**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|

***Craugastor*** Cope, 1862 • **KY**
**ST**: **PO.KN** • **CI**: h0377 • **ID**: 059
**PN**: *Hylodes fitzingeri* Schmidt, 1857
**PK**: *Hylodes fitzingeri** Schmidt, 1857
**KG**: *Craugastor** Cope, 1862
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Crepidius* Candèze, 1859 • **ZH**
**ST**: **ZO** • **CI**: zh027

*Crepidius* Cope, 1875 • **AK**
**ST**: **PO.JH** • **CI**: h0378 • **ID**: 137
**PN**: *Crepidius epioticus* Cope, 1875
**PK**: *Crepidius epioticus*° Cope, 1875
**KG**: *Incilius** Cope, 1863
**KF**: *BUFONIDAE* 1825.gb.f004

*Crepidophryne* Cope, 1889 • **AK**
**ST**: **PO.JD** • **CI**: h0379 • **ID**: 137
**PN**: *Crepidius epioticus* Cope, 1875
**PK**: *Crepidius epioticus*° Cope, 1875
**KG**: *Incilius** Cope, 1863
**KF**: *BUFONIDAE* 1825.gb.f004

***Cretasalia*** Gubin, 1999 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0380 • **ID**: †112
**PN**: *Cretasalia tsybini* Gubin, 1999 ‡
**PK**: *Cretasalia tsybini** Gubin, 1999 †
**KG**: *Cretasalia** Gubin, 1999 †
**KF**: *GOBIATIDAE* 1991.ra.f001 †

***Crinia*** Tschudi, 1838 • **KY**
**ST**: **PO.KN** • **CI**: h0381 • **ID**: 270
**PN**: *Crinia georgiana* Tschudi, 1838
**PK**: *Crinia georgiana** Tschudi, 1838
**KG**: *Crinia** Tschudi, 1838
**KF**: *MYOBATRACHIDAE* 1850.sa.f001

*Crossodactyle*: Brocchi, 1879 • **AN**
**ST**: **AM** • **CI**: n0029 • **ID**: 181
**PN**: *Crossodactylus gaudichaudii* Duméril[+1], 1841
**PK**: *Crossodactylus gaudichaudii*° Duméril[+1], 1841
**KG**: *Crossodactylus*[3] Duméril[+1], 1841
**KF**: *HYLODIDAE* 1858.gc.f010

***Crossodactylodes*** Cochran, 1938 • **KY**
**ST**: **PO.KN** • **CI**: h0382 • **ID**: 254
**PN**: *Crossodactylodes pintoi* Cochran, 1938
**PK**: *Crossodactylodes pintoi*° Cochran, 1938
**KG**: *Crossodactylodes*[2] Cochran, 1938
**KF**: *PARATELMATOBIIDAE* 2012.oa.f001

***Crossodactylus*** Duméril[+1], 1841 • **KY**
**ST**: **PO.KN** • **CI**: h0383 • **ID**: 181
**PN**: *Crossodactylus gaudichaudii* Duméril[+1], 1841
**PK**: *Crossodactylus gaudichaudii*° Duméril[+1], 1841
**KG**: *Crossodactylus*[3] Duméril[+1], 1841
**KF**: *HYLODIDAE* 1858.gc.f010

***Crotaphatrema*** Nussbaum, 1985 • **KY**
**ST**: **PO.KN** • **CI**: h0384 • **ID**: 498
**PN**: *Herpele bornmuelleri* Werner, 1899
**PK**: *Herpele bornmuelleri*° Werner, 1899
**KG**: *Crotaphatrema*[3] Nussbaum, 1985
**KF**: *SCOLECOMORPHIDAE* 1969.ta.f001

*Crotaphitis* Schulze, 1891 • **AK**
**ST**: **PO.JD** • **CI**: h0385 • **ID**: 419
**PN**: *Rana arvalis* Nilsson, 1842
**PK**: *Rana arvalis** Nilsson, 1842
**KG**: *Rana** Linnaeus, 1758
**KF**: *RANIDAE* 1796.ba.f001

*Crumenifera* Cope, 1862 • **AK**
**ST**: **PO.JD** • **CI**: h0386 • **ID**: 331
**PN**: *Crumenifera pusilla* Cope, 1862
**PK**: *Crumenifera pusilla** Cope, 1862
**KG**: *Hyperolius** Rapp, 1842
**KF**: *HYPEROLIIDAE* 1943.lb.f001

***Cruziohyla*** Faivovich[+5], 2005 • **KY**
**ST**: **PO.KN** • **CI**: h0387 • **ID**: 240
**PN**: *Agalychnis calcarifer* Boulenger, 1902
**PK**: *Agalychnis calcarifer** Boulenger, 1902
**KG**: *Cruziohyla** Faivovich[+5], 2005
**KF**: *PHYLLOMEDUSIDAE* 1858.gc.f009

***Cryptobatrachus*** Ruthven, 1916 • **KY**
**ST**: **PO.KN** • **CI**: h0388 • **ID**: 092
**PN**: *Cryptobatrachus boulengeri* Ruthven, 1916
**PK**: *Cryptobatrachus boulengeri** Ruthven, 1916
**KG**: *Cryptobatrachus** Ruthven, 1916
**KF**: *HEMIPHRACTIDAE* 1862.pa.f001

***Cryptobranchichnus*** Huene, 1941 ‡¡ • **KY**
**ST**: **PO.KN** • **CI**: h0389 • **ID**: †129

**PN**: *Cryptobranchichnus infericolor* Huene, 1941 ‡¡
**PK**: *Cryptobranchichnus infericolor*° Huene, 1941 †
**KG**: *Cryptobranchichnus*° Huene, 1941 †
**KF**: **URODELA** Familia *INCERTAE SEDIS*

***Cryptobranchus*** Leuckart, 1821 • **KY**
**ST**: **PO.KN** • **CI**: h0390 • **ID**: 504
**PN**: *Salamandra salamandroides* Leuckart, 1821
**PK**: *Salamandra alleganiensis** Sonnini[+1], 1801
**KG**: *Cryptobranchus*[1] Leuckart, 1821
**KF**: *CRYPTOBRANCHIDAE* 1826.fb.f003

*Cryptophyllobates* Lötters[+1], 2000 • **AK**
**ST**: **PO.JD** • **CI**: h0391 • **ID**: 053
**PN**: *Phyllobates azureiventris* Kneller[+1], 1985
**PK**: *Phyllobates azureiventris** Kneller[+1], 1985
**KG**: *Hyloxalus*[2] Jiménez de la Espada, 1870
**KF**: *DENDROBATIDAE* ||1850.bb.f006||-1865.ca.f002

*Cryptopsophis* Boulenger, 1883 • **AK**
**ST**: **PO.JD** • **CI**: h0392 • **ID**: 487
**PN**: *Cryptopsophis multiplicatus* Boulenger, 1883
**PK**: *Gymnopis multiplicata** Peters, 1874
**KG**: *Gymnopis** Peters, 1874
**KF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|

***Cryptotheca*** Duellman, 2015 • **KY**
**ST**: **PO.KN** • **CI**: h0393 • **ID**: 088
**PN**: *Gastrotheca walkeri* Duellman, 1980
**PK**: *Gastrotheca walkeri** Duellman, 1980
**KG**: *Cryptotheca** Duellman, 2015
**KF**: *HEMIPHRACTIDAE* 1862.pa.f001

***Cryptothylax*** Laurent[+1], 1950 • **KY**
**ST**: **PO.KN** • **CI**: h0394 • **ID**: 329
**PN**: *Hylambates greshoffii* Schilthuis, 1889
**PK**: *Hylambates greshoffii** Schilthuis, 1889
**KG**: *Cryptothylax** Laurent[+1], 1950
**KF**: *HYPEROLIIDAE* 1943.lb.f001

*Cryptotis* Pomel, 1848 • **ZH**
**ST**: **ZO** • **CI**: zh028

*Cryptotis* Günther, 1863 • **AK**
**ST**: **PO.JH** • **CI**: h0395 • **ID**: 260
**PN**: *Cryptotis brevis* Günther, 1863
**PK**: *Cryptotis brevis** Günther, 1863
**KG**: *Adelotus** Ogilby, 1907
**KF**: *MYOBATRACHIDAE* 1850.sa.f001

***Cryptotriton*** García-París[+1], 2000 • **KY**
**ST**: **PO.KN** • **CI**: h0396 • **ID**: 529
**PN**: *Oedipus nasalis* Dunn, 1924
**PK**: *Oedipus nasalis** Dunn, 1924
**KG**: *Cryptotriton** García-París[+1], 2000
**KF**: *PLETHODONTIDAE* 1850.ga.f002

*Ctenocranius* Melin, 1941 • **AK**
**ST**: **PO.JD** • **CI**: h0397 • **ID**: 073
**PN**: *Limnophys cornutus* Jiménez de la Espada, 1870
**PK**: *Limnophys cornutus*° Jiménez de la Espada, 1870
**KG**: *Strabomantis** Peters, 1863
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

***Ctenophryne*** Mocquard, 1904 • **KY**
**ST**: **PO.KN** • **CI**: h0398 • **ID**: 293
**PN**: *Ctenophryne geayi* Mocquard, 1904
**PK**: *Ctenophryne geayi** Mocquard, 1904
**KG**: *Ctenophryne** Mocquard, 1904
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Cultripes* Müller, 1832 • **AK**
**ST**: **PO.JD** • **CI**: h0399 • **ID**: 026
**PN**: *Rana cultripes* Cuvier, 1829
**PK**: *Rana cultripes** Cuvier, 1829
**KG**: *Pelobates** Wagler, 1830
**KF**: *PELOBATIDAE* 1850.bb.f004

*Cuttysarkus* Estes, 1964 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0400 • **ID**: †149
**PN**: *Cuttysarkus mcnallyi* Estes, 1964 ‡
**PK**: *Prodesmodon copei*° Estes, 1964 †
**KG**: *Prodesmodon*° Estes, 1964 †
**KF**: *HYLAEOBATRACHIDAE* 1889.la.f001 †

*Cyclocephalus* Berthold, 1827 • **ZH**
**ST**: **ZO** • **CI**: zh029

*Cyclocephalus* Jiménez de la Espada, 1875 • **AK**
**ST**: **PO.JH** • **CI**: h0401 • **ID**: 078
**PN**: *Cyclocephalus lacrimosus* Jiménez de la Espada, 1875
**PK**: *Cyclocephalus lacrimosus*° Jiménez de la Espada, 1875
**KG**: *Pristimantis** Jiménez de la Espada, 1870
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Cycloramphos*: Tschudi 1838 • **AN**
**ST**: **LI** • **CI**: n0030 • **ID**: 179
**PN**: *Cycloramphus fulginosus* Tschudi, 1838
**PK**: *Cycloramphus fuliginosus** Tschudi, 1838
**KG**: *Cycloramphus** Tschudi, 1838
**KF**: *CYCLORAMPHIDAE* 1850.bb.f003-|1852.ba.f001|

*Cycloramphos* Agassiz, 1847 • **AK**
**ST**: **NT.JI** • **CI**: h0402 • **ID**: 179
**PN**: *Cycloramphus fulginosus* Tschudi, 1838
**PK**: *Cycloramphus fuliginosus** Tschudi, 1838
**KG**: *Cycloramphus** Tschudi, 1838
**KF**: *CYCLORAMPHIDAE* 1850.bb.f003-|1852.ba.f001|

***Cycloramphus*** Tschudi, 1838 • **KY**
**ST**: **LC.KN** • **CI**: h0403 • **ID**: 179
**PN**: *Cycloramphus fuliginosus* Tschudi, 1838
**PK**: *Cycloramphus fuliginosus** Tschudi, 1838
**KG**: *Cycloramphus** Tschudi, 1838
**KF**: *CYCLORAMPHIDAE* 1850.bb.f003-|1852.ba.f001|

*Cyclorana* Steindachner, 1867 • **AK**
**ST**: **PO.JD** • **CI**: h0404 • **ID**: 237
**PN**: *Cyclorana novaehollandiae* Steindachner, 1867
**PK**: *Cyclorana novaehollandiae** Steindachner, 1867
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *PHYLLOMEDUSIDAE* 1858.gc.f009

*Cyclorhamphus* Agassiz, 1847 • **AK**
**ST**: **NT.JI** • **CI**: h0405 • **ID**: 179
**PN**: *Cycloramphus fulginosus* Tschudi, 1838
**PK**: *Cycloramphus fuliginosus** Tschudi, 1838
**KG**: *Cycloramphus** Tschudi, 1838
**KF**: *CYCLORAMPHIDAE* 1850.bb.f003-|1852.ba.f001|

*Cylindrosoma* Tschudi, 1838 • **AK**
**ST**: **PO.JD** • **CI**: h0406 • **ID**: 542

**PN**: *Salamandra longicauda* Green, 1818
**PK**: *Salamandra longicauda** Green, 1818
**KG**: *Eurycea** Rafinesque, 1822
**KF**: *Plethodontidae* 1850.ga.f002

***Cynops*** Tschudi, 1838 • **ky**
**ST**: **po.kn** • **CI**: h0407 • **ID**: 558
**PN**: *Salamandra subcristatus* Temminck[+1], 1838
**PK**: *Molge pyrrhogaster** Boie, 1826
**KG**: *Cynops*[1] Tschudi, 1838
**KF**: *Salamandridae* 1820.ga.f002

*Cynotriton* Dubois[+1], 2011 • **ak**
**ST**: **po.jd** • **CI**: h0408 • **ID**: 559
**PN**: *Triton (Cynops) orientalis* David, 1875
**PK**: *Triton (Cynops) orientalis** David, 1875
**KG**: *Hypselotriton*[2] Wolterstorff, 1934
**KF**: *Salamandridae* 1820.ga.f002

*Cystignathus* Wagler, 1830 • **ak**
**ST**: **po.jd** • **CI**: h0409 • **ID**: 253
**PN**: *Rana pachypus* Spix, 1824
**PK**: *Rana latrans** Steffen, 1815
**KG**: *Leptodactylus*[1] Fitzinger, 1826
**KF**: *Leptodactylidae* ||1838.ta.f001||-1896.wa.f001

***Czatkobatrachus*** Evans[+1], 1998 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0410 • **ID**: †018
**PN**: *Czatkobatrachus polonicus* Evans[+1], 1998 ‡
**PK**: *Czatkobatrachus polonicus*° Evans[+1], 1998 †
**KG**: *Czatkobatrachus*° Evans[+1], 1998 †
**KF**: **Anura** Familia *Incertae sedis*

*Dactylethra* Cuvier, 1829 • **ak**
**ST**: **po.jd** • **CI**: h0411 • **ID**: 009
**PN**: *Bufo laevis* Daudin, 1802
**PK**: *Bufo laevis** Daudin, 1802
**KG**: *Xenopus*[1] Wagler *in* Boie, 1827
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Dactyletra* Hoffmann, 1878 • **ak**
**ST**: **ns.jd** • **CI**: h0412 • **ID**: 009
**PN**: *Bufo laevis* Daudin, 1802
**PK**: *Bufo laevis** Daudin, 1802
**KG**: *Xenopus*[1] Wagler *in* Boie, 1827
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Dactylonyx*: Bonaparte 1839 • **an**
**ST**: **al** • **CI**: n0031 • **ID**: 517
**PN**: *Onychodactylus schlegeli* Tschudi, 1838
**PK**: *Salamandra japonica** Houttuyn, 1782
**KG**: *Onychodactylus*[1] Tschudi, 1838
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

*Dalianbatrachus* Gao[+1], 2004 ‡ • **ak**
**ST**: **po.jd** • **CI**: h0413 • **ID**: †033
**PN**: *Dalianbatrachus mengi* Gao[+1], 2004 ‡
**PK**: *Mesophryne beipiaoensis*° Gao[+1], 2001 †
**KG**: *Mesophryne*° Gao[+1], 2001 †
**KF**: **Anura** Familia *Incertae sedis*

***Dasypops*** Miranda Ribeiro, 1924 • **ky**
**ST**: **po.kn** • **CI**: h0414 • **ID**: 294
**PN**: *Dasypops schirchi* Miranda Ribeiro, 1924
**PK**: *Dasypops schirchi** Miranda Ribeiro, 1924
**KG**: *Dasypops** Miranda Ribeiro, 1924
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Dehmiella* Herre[+1], 1950 ‡ • **ak**
**ST**: **po.jd** • **CI**: h0415 • **ID**: 578
**PN**: *Dehmiella schindewolfi* Herre[+1], 1950 ‡
**PK**: *Salamandra sansaniensis*° Lartet, 1851 †
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *Salamandridae* 1820.ga.f002

*Dendricus* Gistel, 1848 • **ak**
**ST**: **nl.ji** • **CI**: h0416 • **ID**: 436
**PN**: *Hyla buergeri* Temminck[+1], 1838
**PK**: *Hyla buergeri** Temminck[+1], 1838
**KG**: *Buergeria** Tschudi, 1838
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Dendrobates*** Wagler, 1830 • **ky**
**ST**: **po.kn** • **CI**: h0417 • **ID**: 048
**PN**: *Rana tinctoria* Cuvier, 1797
**PK**: *Rana tinctoria** Cuvier, 1797
**KG**: *Dendrobates** Wagler, 1830
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

***Dendrobatorana*** Ahl, 1927 • **ky**
**ST**: **po.kn** • **CI**: h0418 • **ID**: 435
**PN**: *Hylambates dorsalis* Peters, 1875
**PK**: *Hylambates dorsalis*° Peters, 1875
**KG**: *Dendrobatorana*° Ahl, 1927
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Dendrohyas* Wagler, 1830 • **ak**
**ST**: **po.ji** • **CI**: h0419 • **ID**: 204
**PN**: *Rana arborea* Linnaeus, 1758
**PK**: *Rana arborea** Linnaeus, 1758
**KG**: *Hyla** Laurenti, 1768
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Dendromanes* Gistel, 1848 • **ak**
**ST**: **nl.ji** • **CI**: h0420 • **ID**: 314
**PN**: *Microhyla achatina* Tschudi, 1838
**PK**: *Microhyla achatina** Tschudi, 1838
**KG**: *Microhyla** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Dendromedusa* Gistel, 1848 • **ak**
**ST**: **nl.jd** • **CI**: h0421 • **ID**: 189
**PN**: *Calamita punctatus* Schneider, 1799
**PK**: *Calamita punctatus** Schneider, 1799
**KG**: *Boana** Gray, 1825
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Dendrophryniscus*** Jiménez de la Espada, 1870 • **ky**
**ST**: **po.kn** • **CI**: h0422 • **ID**: 147
**PN**: *Dendrophryniscus brevipollicatus* Jiménez de la Espada, 1870
**PK**: *Dendrophryniscus brevipollicatus** Jiménez de la Espada, 1870
**KG**: *Dendrophryniscus** Jiménez de la Espada, 1870
**KF**: *Bufonidae* 1825.gb.f004

***Dendropsophus*** Fitzinger, 1843 • **ky**
**ST**: **po.kn** • **CI**: h0423 • **ID**: 194
**PN**: *Hyla frontalis* Daudin, 1800
**PK**: *Rana leucophyllata** Beireis, 1783
**KG**: *Dendropsophus*[1] Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Dendrotriton*** Wake[+1], 1983 • **KY**
**ST**: **PO.KN** • **CI**: h0424 • **ID**: 531
**PN**: *Oedipus bromeliacia* Schmidt, 1936
**PK**: *Oedipus bromeliacia** Schmidt, 1936
**KG**: *Dendrotriton** Wake[+1], 1983
**KF**: *Plethodontidae* 1850.ga.f002

***Dermatonotus*** Méhelÿ, 1904 • **KY**
**ST**: **PO.KN** • **CI**: h0425 • **ID**: 297
**PN**: *Engystoma muelleri* Boettger, 1885
**PK**: *Engystoma muelleri** Boettger, 1885
**KG**: *Dermatonotus** Méhelÿ, 1904
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Dermophis* Peters, 1880 • **AK**
**ST**: **PO.JD** • **CI**: h0426 • **ID**: 487
**PN**: *Siphonops mexicanus* Duméril[+1], 1841
**PK**: *Siphonops mexicanus** Duméril[+1], 1841
**KG**: *Gymnopis** Peters, 1874
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Desmiostoma* Sager, 1858 • **AK**
**ST**: **PO.JD** • **CI**: h0427 • **ID**: 555
**PN**: *Desmiostoma maculatus* Sager, 1858
**PK**: *Ambystoma mavortia*° Baird, 1850
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *Ambystomatidae* 1850.ga.f004

*Desmodactylus* Duméril[+2], 1854 • **AK**
**ST**: **NL.JI** • **CI**: h0428 • **ID**: 538
**PN**: *Salamandra scutata* Temminck[+1], 1838
**PK**: *Salamandra scutata** Temminck[+1], 1838
**KG**: *Hemidactylium** Tschudi, 1838
**KF**: *Plethodontidae* 1850.ga.f002

***Desmognathus*** Baird, 1850 • **KY**
**ST**: **PO.KN** • **CI**: h0429 • **ID**: 548
**PN**: *Triturus fuscus* Rafinesque, 1820
**PK**: *Triturus fuscus** Rafinesque, 1820
**KG**: *Desmognathus** Baird, 1850
**KF**: *Plethodontidae* 1850.ga.f002

***Diaglena*** Cope, 1887 • **KY**
**ST**: **PO.KN** • **CI**: h0430 • **ID**: 207
**PN**: *Triprion spatulatus* Günther, 1882
**PK**: *Triprion spatulatus** Günther, 1882
**KG**: *Diaglena** Cope, 1887
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Dianrana* Fei[+2], 2010 • **AK**
**ST**: **PO.JD** • **CI**: h0431 • **ID**: 411
**PN**: *Rana pleuraden* Boulenger, 1904
**PK**: *Rana pleuraden** Boulenger, 1904
**KG**: *Nidirana*[1] Dubois, 1992
**KF**: *Ranidae* 1796.ba.f001

***Diasporus*** Hedges[+2], 2008 • **KY**
**ST**: **PO.KN** • **CI**: h0432 • **ID**: 080
**PN**: *Lithodytes diastema* Cope, 1875
**PK**: *Lithodytes diastema** Cope, 1875
**KG**: *Diasporus** Hedges[+2], 2008
**KF**: *Brachycephalidae* 1858.gc.f002

***Dicamptodon*** Strauch, 1870 • **KY**
**ST**: **PO.KN** • **CI**: h0433 • **ID**: 556
**PN**: *Triton ensatus* Eschscholtz, 1833
**PK**: *Triton ensatus** Eschscholtz, 1833
**KG**: *Dicamptodon** Strauch, 1870
**KF**: *Ambystomatidae* 1850.ga.f004

*Dicroglossus* Günther, 1860 • **AK**
**ST**: **PO.JD** • **CI**: h0434 • **ID**: 373
**PN**: *Dicroglossus adolfi* Günther, 1860
**PK**: *Rana cyanophlyctis** Schneider, 1799
**KG**: *Euphlyctis*[1] Fitzinger, 1843
**KF**: *Dicroglossidae* 1987.da.f004

*Didocus* Cope, 1866 • **AK**
**ST**: **PO.JD** • **CI**: h0435 • **ID**: 026
**PN**: *Rana calcarata* Michahelles, 1830
**PK**: *Rana cultripes** Cuvier, 1829
**KG**: *Pelobates** Wagler, 1830
**KF**: *Pelobatidae* 1850.bb.f004

***Didynamipus*** Andersson, 1903 • **KY**
**ST**: **PO.KN** • **CI**: h0436 • **ID**: 124
**PN**: *Didynamipus sjostedti* Andersson, 1903
**PK**: *Didynamipus sjostedti** Andersson, 1903
**KG**: *Didynamipus** Andersson, 1903
**KF**: *Bufonidae* 1825.gb.f004

*Diemictylus* Rafinesque, 1820 • **AK**
**ST**: **PO.JD** • **CI**: h0437 • **ID**: 569
**PN**: *Triturus* (*Diemictylus*) *viridescens* Rafinesque, 1820
**PK**: *Triturus* (*Diemictylus*) *viridescens** Rafinesque, 1820
**KG**: *Notophthalmus*[1] Rafinesque, 1820
**KF**: *Salamandridae* 1820.ga.f002

*Dilobates* Boulenger, 1900 • **AK**
**ST**: **PO.JD** • **CI**: h0438 • **ID**: 321
**PN**: *Dilobates platycephalus* Boulenger, 1900
**PK**: *Gampsosteonyx batesi** Boulenger, 1900
**KG**: *Astylosternus** Werner, 1898
**KF**: *Arthroleptidae* 1869.mc.f011

*Dimorphognathus* Boulenger, 1906 • **AK**
**ST**: **PO.JD** • **CI**: h0439 • **ID**: 350
**PN**: *Heteroglossa africana* Hallowell, 1858
**PK**: *Heteroglossa africana** Hallowell, 1858
**KG**: *Phrynobatrachus** Günther, 1862
**KF**: *Phrynobatrachidae* 1941.lb.f001

***Diplopaa*** **nov.** • **KY**
**ST**: **PO.KN** • **CI**: h0440 • **ID**: 385
**PN**: *Paa (Feirana) taihangnicus* Chen[+1], 2002
**PK**: *Paa (Feirana) taihangnicus** Chen[+1], 2002
**KG**: *Diplopaa** **nov.**, 2006
**KF**: *Dicroglossidae* 1987.da.f004

*Diplopelma* Günther, 1859 • **AK**
**ST**: **PO.JD** • **CI**: h0441 • **ID**: 314
**PN**: *Engystoma ornatum* Duméril[+1], 1841
**PK**: *Engystoma ornatum** Duméril[+1], 1841
**KG**: *Microhyla** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Diplopelturus* Depéret, 1897 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0442 • **ID**: 470
**PN**: *Diplopelturus ruscinensis* Depéret, 1897 ‡
**PK**: *Rana gigantea*° Lartet, 1851 †

**KG**: *Latonia*[3] Meyer, 1845 †
**KF**: *Discoglossidae* 1858.gc.f004
***Dischidodactylus*** Lynch, 1979 • **ky**
**ST**: **po.kn** • **CI**: h0443 • **ID**: 086
**PN**: *Elosia duidensis* Rivero, 1968
**PK**: *Elosia duidensis*° Rivero, 1968
**KG**: *Dischidodactylus*° Lynch, 1979
**KF**: *Ceuthomantidae* 2009.ha.f003
*Discodactylus* Wagler *in* Michahelles, 1833 • **ak**
**ST**: **nl.ji** • **CI**: h0444 • **ID**: 204
**PN**: *Rana arborea* Linnaeus, 1758
**PK**: *Rana arborea** Linnaeus, 1758
**KG**: *Hyla** Laurenti, 1768
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Discodeles* Boulenger, 1918 • **ak**
**ST**: **po.jd** • **CI**: h0445 • **ID**: 369
**PN**: *Rana guppyi* Boulenger, 1884
**PK**: *Rana guppyi** Boulenger, 1884
**KG**: *Cornufer** Tschudi, 1838
**KF**: *Ceratobatrachidae* 1884.ba.f001
***Discoglossus*** Otth, 1837 • **ky**
**ST**: **po.kn** • **CI**: h0446 • **ID**: 469
**PN**: *Discoglossus pictus* Otth, 1837
**PK**: *Discoglossus pictus** Otth, 1837
**KG**: *Discoglossus** Otth, 1837
**KF**: *Discoglossidae* 1858.gc.f004
*Docidophryne* Fitzinger, 1843 • **ak**
**ST**: **po.jd** • **CI**: h0447 • **ID**: 138
**PN**: *Bufo agua* Latreille *in* Sonnini[+1], 1801
**PK**: *Bufo ictericus** Spix, 1824
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004
*Doctylethra*: Hoffmann 1878 • **an**
**ST**: **am** • **CI**: n0032 • **ID**: 009
**PN**: *Bufo laevis* Daudin, 1802
**PK**: *Bufo laevis** Daudin, 1802
**KG**: *Xenopus*[1] Wagler *in* Boie, 1827
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|
*Doctyletra*: Hoffmann 1878 • **an**
**ST**: **am** • **CI**: n0033 • **ID**: 009
**PN**: *Bufo laevis* Daudin, 1802
**PK**: *Bufo laevis** Daudin, 1802
**KG**: *Xenopus*[1] Wagler *in* Boie, 1827
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|
*Doryphoros* Mayer, 1835 • **ak**
**ST**: **po.jd** • **CI**: h0448 • **ID**: 253
**PN**: *Rana pachypus* Spix, 1824
**PK**: *Rana latrans** Steffen, 1815
**KG**: *Leptodactylus*[1] Fitzinger, 1826
**KF**: *Leptodactylidae* ||1838.ta.f001||-1896.wa.f001
*Dromoplectrus* Camerano, 1879 • **ak**
**ST**: **po.jd** • **CI**: h0449 • **ID**: 136
**PN**: *Bufo anomalus* Günther, 1859
**PK**: *Bufo compactilis*° Wiegmann, 1833
**KG**: *Anaxyrus*[3] Tschudi, 1845
**KF**: *Bufonidae* 1825.gb.f004
***Dryaderces*** Jungfer[+24], 2013 • **ky**
**ST**: **po.kn** • **CI**: h0450 • **ID**: 222
**PN**: *Hyla pearsoni* Gaige, 1929
**PK**: *Hyla pearsoni*° Gaige, 1929
**KG**: *Dryaderces*° Jungfer[+24], 2013
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Drymomantis* Peters, 1882 • **ak**
**ST**: **po.jd** • **CI**: h0451 • **ID**: 235
**PN**: *Hylomantis fallax* Peters, 1880
**PK**: *Hylomantis fallax** Peters, 1880
**KG**: *Litoria** Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009
*Dryomelictes* Fitzinger, 1843 • **ak**
**ST**: **po.ji** • **CI**: h0452 • **ID**: 234
**PN**: *Hyla lactea* Daudin, 1800
**PK**: *Hyla lactea** Daudin, 1800
**KG**: *Sphaenorhynchus** Tschudi, 1838
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Dryomelictes* Cope, 1865 • **ak**
**ST**: **po.jh** • **CI**: h0453 • **ID**: 234
**PN**: *Hyla aurantiaca* Daudin, 1802
**PK**: *Hyla lactea** Daudin, 1800
**KG**: *Sphaenorhynchus** Tschudi, 1838
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Dryophytes*** Fitzinger, 1843 • **ky**
**ST**: **po.kn** • **CI**: h0454 • **ID**: 203
**PN**: *Hyla versicolor* Le Conte, 1825
**PK**: *Hyla versicolor** Le Conte, 1825
**KG**: *Dryophytes** Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001↓
*Dryopsophus* Fitzinger, 1843 • **ak**
**ST**: **po.jd** • **CI**: h0455 • **ID**: 237
**PN**: *Hyla citripoda* Péron, 1807
**PK**: *Hyla citropa** Péron, 1825
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009
*Duboimantis* Glaw[+1], 2006 • **ak**
**ST**: **po.jd** • **CI**: h0456 • **ID**: 431
**PN**: *Limnodytes granulatus* Boettger, 1881
**PK**: *Limnodytes granulatus** Boettger, 1881
**KG**: *Gephyromantis** Methuen, 1920
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001
*Duellmania* Dubois, 1987 • **ak**
**ST**: **po.jd** • **CI**: h0457 • **ID**: 091
**PN**: *Hyla argenteovirens* Boettger, 1892
**PK**: *Hyla argenteovirens** Boettger, 1892
**KG**: *Gastrotheca** Fitzinger, 1843
**KF**: *Hemiphractidae* 1862.pa.f001
***Duellmanohyla*** Campbell[+1], 1992 • **ky**
**ST**: **po.kn** • **CI**: h0458 • **ID**: 214
**PN**: *Hyla uranochroa* Cope, 1875
**PK**: *Hyla uranochroa** Cope, 1875
**KG**: *Duellmanohyla** Campbell[+1], 1992
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Duttaphrynus*** Frost[+18], 2006 • **ky**
**ST**: **po.kn** • **CI**: h0459 • **ID**: 108

**PN**: *Bufo melanostictus* Schneider, 1799
**PK**: *Bufo melanostictus** Schneider, 1799
**KG**: *Duttaphrynus** Frost[+18], 2006
**KF**: *Bufonidae* 1825.gb.f004

*Dyscophina* Van Kampen, 1905 • **ak**
**ST**: **po.jd** • **CI**: h0460 • **ID**: 313
**PN**: *Dyscophina volzi* Van Kampen, 1905
**PK**: *Dyscophina volzi*° Van Kampen, 1905
**KG**: *Glyphoglossus** Günther, 1869
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Dyscophus*** Grandidier, 1872 • **ky**
**ST**: **po.kn** • **CI**: h0461 • **ID**: 307
**PN**: *Dyscophus insularis* Grandidier, 1872
**PK**: *Dyscophus insularis** Grandidier, 1872
**KG**: *Dyscophus** Grandidier, 1872
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Eburana* Dubois, 1992 • **ak**
**ST**: **po.jd** • **CI**: h0462 • **ID**: 412
**PN**: *Rana narina* Stejneger, 1901
**PK**: *Rana narina** Stejneger, 1901
**KG**: *Odorrana** Fei[+2], 1990
**KF**: *Ranidae* 1796.ba.f001

***Echinotriton*** Nussbaum[+1], 1982 • **ky**
**ST**: **po.kn** • **CI**: h0463 • **ID**: 572
**PN**: *Tylototriton andersoni* Boulenger, 1892
**PK**: *Tylototriton andersoni** Boulenger, 1892
**KG**: *Echinotriton** Nussbaum[+1], 1982
**KF**: *Salamandridae* 1820.ga.f002

***Ecnomiohyla*** Faivovich[+5], 2005 • **ky**
**ST**: **po.kn** • **CI**: h0464 • **ID**: 211
**PN**: *Hypsiboas miliarius* Cope, 1886
**PK**: *Hypsiboas miliarius** Cope, 1886
**KG**: *Ecnomiohyla** Faivovich[+5], 2005
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Ectopoglossus*** Grant[+7], 2017 • **ky**
**ST**: **po.kn** • **CI**: h0465 • **ID**: 052
**PN**: *Ectopoglossus saxatilis* Grant[+7], 2017
**PK**: *Ectopoglossus saxatilis*° Grant[+7], 2017
**KG**: *Ectopoglossus*° Grant[+7], 2017
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

***Edalorhina*** Jiménez de la Espada, 1870 • **ky**
**ST**: **po.kn** • **CI**: h0466 • **ID**: 247
**PN**: *Edalorhina perezi* Jiménez de la Espada, 1870
**PK**: *Edalorhina perezi** Jiménez de la Espada, 1870
**KG**: *Edalorhina** Jiménez de la Espada, 1870
**KF**: *Leiuperidae* 1850.bb.f010

*Edaphotheca* Duellman, 2015 • **ak**
**ST**: **po.jd** • **CI**: h0467 • **ID**: 091
**PN**: *Gastrotheca galeata* Trueb[+1], 1978
**PK**: *Gastrotheca galeata** Trueb[+1], 1978
**KG**: *Gastrotheca** Fitzinger, 1843
**KF**: *Hemiphractidae* 1862.pa.f001

*Edwardtayloria* Marx, 1975 • **ak**
**ST**: **po.jd** • **CI**: h0468 • **ID**: 437
**PN**: *Hazelia spinosa* Taylor, 1920
**PK**: *Hazelia spinosa** Taylor, 1920
**KG**: *Nyctixalus** Boulenger, 1882
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Egoria*** Skutschas[+6], 2020 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0469 • **ID**: †130
**PN**: *Egoria malashichevi* Skutschas[+6], 2020 ‡
**PK**: *Egoria malashichevi*° Skutschas[+6], 2020 †
**KG**: *Egoria*° Skutschas[+6], 2020 †
**KF**: **Urodela** Familia *Incertae sedis*

*Elachistocleis* Parker, 1927 • **ak**
**ST**: **po.ji** • **CI**: h0470 • **ID**: 298
**PN**: *Rana ovalis* Schneider, 1799
**PK**: *Rana ovalis** Schneider, 1799
**KG**: *Engystoma** Fitzinger, 1826
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Elachyglossa* Andersson, 1916 • **ak**
**ST**: **po.jd** • **CI**: h0471 • **ID**: 380
**PN**: *Elachyglossa gyldenstolpei* Andersson, 1916
**PK**: *Elachyglossa gyldenstolpei** Andersson, 1916
**KG**: *Limnonectes** Fitzinger, 1843
**KF**: *Dicroglossidae* 1987.da.f004

*Eladinea* Miranda-Ribeiro, 1937 • **ak**
**ST**: **po.jd** • **CI**: h0472 • **ID**: 522
**PN**: *Eladinea estheri* Miranda-Ribeiro, 1937
**PK**: *Oedipus paraensis** Unterstein, 1930
**KG**: *Bolitoglossa** Duméril[+2], 1854
**KF**: *Plethodontidae* 1850.ga.f002

*Elaphromantis* Laurent, 1941 • **ak**
**ST**: **po.jd** • **CI**: h0473 • **ID**: 325
**PN**: *Hylambates notatus* Buchholz[+1] *in* Peters, 1875
**PK**: *Hylambates notatus*° Buchholz[+1] *in* Peters, 1875
**KG**: *Leptopelis*[2] Günther, 1859
**KF**: *Arthroleptidae* 1869.mc.f011

***Electrorana*** Xing[+3]; 2018 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0474 • **ID**: †108
**PN**: *Electrorana limoae* Xing[+3], 2018 ‡
**PK**: *Electrorana limoae*° Xing[+3], 2018 †
**KG**: *Electrorana*° Xing[+3], 2018 †
**KF**: **Mediogyrinia** Familia *Incertae sedis*

***Eleutherodactylus*** Duméril[+1], 1841 • **ky**
**ST**: **po.kn** • **CI**: h0475 • **ID**: 081
**PN**: *Hylodes martinicensis* Tschudi, 1838
**PK**: *Hylodes martinicensis** Tschudi, 1838
**KG**: *Eleutherodactylus** Duméril[+1], 1841
**KF**: *Brachycephalidae* 1858.gc.f002

***Elkobatrachus*** Henrici[+1], 2006 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0476 • **ID**: †085
**PN**: *Elkobatrachus brocki* Henrici[+1], 2006 ‡
**PK**: *Elkobatrachus brocki*° Henrici[+1], 2006 †
**KG**: *Elkobatrachus*° Henrici[+1], 2006 †
**KF**: **Archaeosalientia** Familia *Incertae sedis*

*Ellipsoglossa* Duméril[+2], 1854 • **ak**
**ST**: **po.jd** • **CI**: h0477 • **ID**: 505
**PN**: *Salamandra naevia* Temminck[+1], 1838
**PK**: *Salamandra naevia** Temminck[+1], 1838
**KG**: *Hynobius** Tschudi, 1838
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

*Elophila* Huebner, 1822 • **zh**
**ST**: **zo** • **CI**: zh030
*Elophila*: Duméril[+1] 1841 • **an**
**ST**: **al** • **CI**: n0034 • **ID**: 423
**PN**: *Boophis goudotii* Tschudi, 1838
**PK**: *Boophis goudotii** Tschudi, 1838
**KG**: *Boophis** Tschudi, 1838
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001
*Elosia* Tschudi, 1838 • **ak**
**ST**: **po.jd** • **CI**: h0478 • **ID**: 182
**PN**: *Hyla nasus* Lichtenstein, 1823
**PK**: *Hyla nasus** Lichtenstein, 1823
**KG**: *Hylodes*[1] Fitzinger, 1826
**KF**: *Hylodidae* 1858.gc.f010
*Emydops* Broom, 1912 • **zh**
**ST**: **zo** • **CI**: zh031
*Emydops* Miranda-Ribeiro, 1920 • **ak**
**ST**: **po.jh** • **CI**: h0479 • **ID**: 302
**PN**: *Emydops hypomelas* Miranda-Ribeiro, 1920
**PK**: *Stereocyclops incrassatus** Cope, 1870
**KG**: *Stereocyclops** Cope, 1870
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Engistoma* Peracca, 1904 • **ak**
**ST**: **ns.ji** • **CI**: h0480 • **ID**: 298
**PN**: *Rana ovalis* Schneider, 1799
**PK**: *Rana ovalis** Schneider, 1799
**KG**: *Engystoma** Fitzinger, 1826
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Engystoma*** Fitzinger, 1826 • **ky**
**ST**: **po.kn** • **CI**: h0481 • **ID**: 298
**PN**: *Rana ovalis* Schneider, 1799
**PK**: *Rana ovalis** Schneider, 1799
**KG**: *Engystoma** Fitzinger, 1826
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Engystomops*** Jiménez de la Espada, 1872 • **ky**
**ST**: **po.kn** • **CI**: h0482 • **ID**: 248
**PN**: *Engystomops petersi* Jiménez de la Espada, 1872
**PK**: *Engystomops petersi** Jiménez de la Espada, 1872
**KG**: *Engystomops** Jiménez de la Espada, 1872
**KF**: *Leiuperidae* 1850.bb.f010
*Enigmatosaurus* Nopcsa, 1908 ‡ • **ak**
**ST**: **nl.ji** • **CI**: h0483 • **ID**: †045
**PN**: *Thaumastosaurus bottii* Stefano, 1904 ‡
**PK**: *Thaumastosaurus bottii*° Stefano, 1904 †
**KG**: *Thaumastosaurus*° Stefano, 1904 †
**KF**: **Anura** Familia *Incertae sedis*
***Enneabatrachus*** Evans[+1], 1993 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0484 • **ID**: †109
**PN**: *Enneabatrachus hechti* Evans[+1], 1993 ‡
**PK**: *Enneabatrachus hechti*° Evans[+1], 1993 †
**KG**: *Enneabatrachus*° Evans[+1], 1993 †
**KF**: **Mediogyrinia** Familia *Incertae sedis*
***Ensatina*** Gray, 1850 • **ky**
**ST**: **po.kn** • **CI**: h0485 • **ID**: 550
**PN**: *Ensatina eschscholtzii* Gray, 1850
**PK**: *Ensatina eschscholtzii** Gray, 1850
**KG**: *Ensatina** Gray, 1850
**KF**: *Plethodontidae* 1850.ga.f002
*Entomoglossus* Peters, 1870 • **ak**
**ST**: **po.jd** • **CI**: h0486 • **ID**: 253
**PN**: *Entomoglossus pustulatus* Peters, 1870
**PK**: *Entomoglossus pustulatus*° Peters, 1870
**KG**: *Leptodactylus*[1] Fitzinger, 1826
**KF**: *Leptodactylidae* ||1838.ta.f001||-1896.wa.f001
*Enydrobius* Wagler, 1830 • **ak**
**ST**: **nl.ji** • **CI**: h0487 • **ID**: 182
**PN**: *Hyla ranoides* Spix, 1824
**PK**: *Hyla nasus** Lichtenstein, 1823
**KG**: *Hylodes*[1] Fitzinger, 1826
**KF**: *Hylodidae* 1858.gc.f010
***Eobarbourula*** Folie[+6], 2013 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0488 • **ID**: †120
**PN**: *Eobarbourula delfinoi* Folie[+6], 2013 ‡
**PK**: *Eobarbourula delfinoi*° Folie[+6], 2013 †
**KG**: *Eobarbourula*° Folie[+6], 2013 †
**KF**: *Bombinatoridae* 1825.gb.f002
***Eobatrachus*** Marsh, 1887 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0489 • **ID**: †019
**PN**: *Eobatrachus agilis* Marsh, 1887 ‡
**PK**: *Eobatrachus agilis*° Marsh, 1887 †
**KG**: *Eobatrachus*° Marsh, 1887 †
**KF**: **Anura** Familia *Incertae sedis*
*Eobufella* Kuhn, 1941 ‡ • **ak**
**ST**: **po.jd** • **CI**: h0490 • **ID**: †090
**PN**: *Eobufella parvula* Kuhn, 1941 ‡
**PK**: *Halleobatrachus hinschei*° Kuhn, 1941 †
**KG**: *Eopelobates*° Parker, 1929 †
**KF**: *Pelobatidae* 1850.bb.f004
***Eocaecilia*** Jenkins[+1], 1993 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0491 • **ID**: †123
**PN**: *Eocaecilia micropodia* Jenkins[+1], 1993 ‡
**PK**: *Eocaecilia micropodia*° Jenkins[+1], 1993 †
**KG**: *Eocaecilia*° Jenkins[+1], 1993 †
**KF**: *Eocaeciliidae* 1993.ja.f001 †
***Eodiscoglossus*** Villalta, 1954 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0492 • **ID**: †116
**PN**: *Eodiscoglossus santonjae* Villalta, 1954 ‡
**PK**: *Eodiscoglossus santonjae*° Villalta, 1954 †
**KG**: *Eodiscoglossus*° Villalta, 1954 †
**KF**: *Discoglossidae* 1858.gc.f004
***Eopelobates*** Parker, 1929 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0493 • **ID**: †090
**PN**: *Eopelobates anthracinus* Parker, 1929 ‡
**PK**: *Eopelobates anthracinus*° Parker, 1929 †
**KG**: *Eopelobates*° Parker, 1929 †
**KF**: *Pelobatidae* 1850.bb.f004
*Eophractus* Schaeffer, 1949 ‡ • **ak**
**ST**: **po.jd** • **CI**: h0494 • **ID**: 257
**PN**: *Eophractus casamayorensis* Schaeffer, 1949 ‡
**PK**: *Eophractus casamayorensis*° Schaeffer, 1949 †
**KG**: *Calyptocephalella** Strand, 1928
**KF**: *Calyptocephalellidae* 1960.ra.f001

***Eorhinophrynus*** Hecht, 1959 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h0495 • **ID**: †082

**PN**: *Eorhinophrynus septentrionalis* Hecht, 1959 ‡

**PK**: *Eorhinophrynus septentrionalis*° Hecht, 1959 †

**KG**: *Eorhinophrynus*° Hecht, 1959 †

**KF**: *RHINOPHRYNIDAE* 1858.gc.f013

***Eorubeta*** Hecht, 1960 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h0496 • **ID**: †020

**PN**: *Eorubeta nevadensis* Hecht, 1960 ‡

**PK**: *Eorubeta nevadensis*° Hecht, 1960 †

**KG**: *Eorubeta*° Hecht, 1960 †

**KF**: **ANURA** Familia *INCERTAE SEDIS*

***Eoscapherpeton*** Nessov, 1981 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h0497 • **ID**: †166

**PN**: *Eoscapherpeton asiaticum* Nessov, 1981 ‡

**PK**: *Eoscapherpeton asiaticum*° Nessov, 1981 †

**KG**: *Eoscapherpeton*° Nessov, 1981 †

**KF**: *CRYPTOBRANCHIDAE* 1826.fb.f003

***Eotheca*** Duellman, 2015 • **KY**

**ST**: **PO.KN** • **CI**: h0498 • **ID**: 089

**PN**: *Nototrema fissipes* Boulenger, 1888

**PK**: *Nototrema fissipes** Boulenger, 1888

**KG**: *Eotheca** Duellman, 2015

**KF**: *HEMIPHRACTIDAE* 1862.pa.f001

***Eoxenopoides*** Haughton, 1931 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h0499 • **ID**: †072

**PN**: *Eoxenopoides reuningi* Haughton, 1931 ‡

**PK**: *Eoxenopoides reuningi*° Haughton, 1931 †

**KG**: *Eoxenopoides*° Haughton, 1931 †

**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|

*Epedaphus* Cope, 1885 • **AK**

**ST**: **PO.JD** • **CI**: h0500 • **ID**: 203

**PN**: *Hyla gratiosa* Le Conte, 1856

**PK**: *Hyla gratiosa** Le Conte, 1856

**KG**: *Dryophytes** Fitzinger, 1843

**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Ephippifer* Agassiz, 1844 • **AK**

**ST**: **NS.JI** • **CI**: h0501 • **ID**: 057

**PN**: *Bufo ephippium* Spix, 1824

**PK**: *Bufo ephippium** Spix, 1824

**KG**: *Brachycephalus** Fitzinger, 1826

**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Ephippiger*: Gravenhorst 1845 • **AN**

**ST**: **AL** • **CI**: n0035 • **ID**: 057

**PN**: *Bufo ephippium* Spix, 1824

**PK**: *Bufo ephippium** Spix, 1824

**KG**: *Brachycephalus** Fitzinger, 1826

**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Ephippipher* Cocteau, 1835 • **AK**

**ST**: **NL.JI** • **CI**: h0502 • **ID**: 057

**PN**: *Bufo ephippium* Spix, 1824

**PK**: *Bufo ephippium** Spix, 1824

**KG**: *Brachycephalus** Fitzinger, 1826

**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Epicrionops* Boulenger, 1883 • **AK**

**ST**: **PO.JD** • **CI**: h0503 • **ID**: 473

**PN**: *Epicrionops bicolor* Boulenger, 1883

**PK**: *Epicrionops bicolor*° Boulenger, 1883

**KG**: *Rhinatrema** Duméril[+1], 1841

**KF**: *RHINATREMATIDAE* 1977.na.f001

***Epicrium*** Wagler, 1828 • **KY**

**ST**: **PO.KC** • **CI**: h0504 • **ID**: 500

**PN**: *Caecilia hypocyana* Boie, 1827

**PK**: *Caecilia hypocyana*° Boie, 1827

**KG**: *Epicrium*° Wagler, 1828

**KF**: *ICHTHYOPHIIDAE* 1968.ta.f001

***Epidalea*** Cope, 1864 • **KY**

**ST**: **PO.KN** • **CI**: h0505 • **ID**: 122

**PN**: *Bufo calamita* Laurenti, 1768

**PK**: *Bufo calamita** Laurenti, 1768

**KG**: *Epidalea** Cope, 1864

**KF**: *BUFONIDAE* 1825.gb.f004

***Epipedobates*** Myers, 1987 • **KY**

**ST**: **PO.KN** • **CI**: h0506 • **ID**: 042

**PN**: *Prostherapis tricolor* Boulenger, 1899

**PK**: *Prostherapis tricolor** Boulenger, 1899

**KG**: *Epipedobates** Myers, 1987

**KF**: *DENDROBATIDAE* ||1850.bb.f006||-1865.ca.f002

*Epipole* Gistel, 1848 • **AK**

**ST**: **NL.JI** • **CI**: h0507 • **ID**: 331

**PN**: *Hyla horstockii* Schlegel, 1837

**PK**: *Hyla horstockii** Schlegel, 1837

**KG**: *Hyperolius** Rapp, 1842

**KF**: *HYPEROLIIDAE* 1943.lb.f001

*Epipolysemia* Brame, 1973 ‡ • **AK**

**ST**: **PO.JD** • **CI**: h0508 • **ID**: †193

**PN**: *Salamandra ogygia* Goldfuss, 1831 ‡

**PK**: *Salamandra ogygia*° Goldfuss, 1831 †

**KG**: *Chelotriton*° Pomel, 1853 †

**KF**: *SALAMANDRIDAE* 1820.ga.f002

*Epirhexis* Cope, 1866 • **EX**

**ST**: **PO.CE** • **CI**: e0006 • **ID**: 082

**PN**: *Batrachyla longipes* Baird, 1859

**PK**: *Batrachyla longipes*° Baird, 1859

**KG**: *Euhyas** Fitzinger, 1843

**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Eremiophilus* Fitzinger, 1843 • **EX**

**ST**: **PO.CE** • **CI**: e0007 • **ID**: 338

**PN**: *Cystignathus senegalensis* Duméril[+1], 1841

**PK**: *Cystignathus senegalensis** Duméril[+1], 1841

**KG**: *Kassina** Girard, 1853

**KF**: *HYPEROLIIDAE* 1943.lb.f001

***Ericabatrachus*** Largen, 1991 • **KY**

**ST**: **PO.KN** • **CI**: h0511 • **ID**: 352

**PN**: *Ericabatrachus baleensis* Largen, 1991

**PK**: *Ericabatrachus baleensis** Largen, 1991

**KG**: *Ericabatrachus** Largen, 1991

**KF**: *ERICABATRACHIDAE* **nov.** 2017.da.f96

***Eripaa*** Dubois, 1992 • **KY**

**ST**: **PO.KN** • **CI**: h0512 • **ID**: 390

**PN**: *Rana fasciculispina* Inger, 1970

**PK**: *Rana fasciculispina** Inger, 1970

**KG**: *Eripaa** Dubois, 1992
**KF**: *Dicroglossidae* 1987.da.f004

*Esophus*: Cope 1870 • **AN**
**ST**: **AM** • **CI**: n0036 • **ID**: 173
**PN**: *Cystignathus nodosus* Duméril[+1], 1841
**PK**: *Cystignathus nodosus** Duméril[+1], 1841
**KG**: *Alsodes** Bell, 1843
**KF**: *Alsodidae* 1869.mc.f005

***Espadarana*** Guayasamin[+5], 2009 • **KY**
**ST**: **PO.KN** • **CI**: h0513 • **ID**: 159
**PN**: *Centrolenella andina* Rivero, 1968
**PK**: *Centrolenella andina** Rivero, 1968
**KG**: *Espadarana** Guayasamin[+5], 2009
**KF**: *Centrolenidae* 1951.ta.f001

***Estesiella*** Báez, 1995 ‡ • **KY**
**ST**: **NT.KN** • **CI**: h0514 • **ID**: †021
**PN**: *Estesius boliviensis* Báez, 1991 ‡
**PK**: *Estesius boliviensis*° Báez, 1991 †
**KG**: *Estesiella*° Báez, 1995 †
**KF**: **Anura** Familia *Incertae sedis*

***Estesina*** Roček[+1], 1993 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0515 • **ID**: †022
**PN**: *Estesina elegans* Roček[+1], 1993 ‡
**PK**: *Estesina elegans*° Roček[+1], 1993 †
**KG**: *Estesina*° Roček[+1], 1993 †
**KF**: **Anura** Familia *Incertae sedis*

*Estesius* Wallach, 1984 • **ZH**
**ST**: **ZO** • **CI**: zh032

*Estesius* Báez, 1991 ‡ • **AK**
**ST**: **PO.JH** • **CI**: h0516 • **ID**: †021
**PN**: *Estesius boliviensis* Báez, 1991 ‡
**PK**: *Estesius boliviensis*° Báez, 1991 †
**KG**: *Estesiella*°Báez, 1995 †
**KF**: **Anura** Familia *Incertae sedis*

***Etnabatrachus*** Hochnull, 2003 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0517 • **ID**: †099
**PN**: *Etnabatrachus maximus* Hochnull, 2003 ‡
**PK**: *Etnabatrachus maximus*° Hochnull, 2003 †
**KG**: *Etnabatrachus*° Hochnull, 2003 †
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Eubaphus* Bonaparte, 1831 • **AK**
**ST**: **PO.JI** • **CI**: h0518 • **ID**: 048
**PN**: *Rana tinctoria* Cuvier, 1797
**PK**: *Rana tinctoria** Cuvier, 1797
**KG**: *Dendrobates** Wagler, 1830
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

*Eubates*: Steindachner 1864 • **AN**
**ST**: **AL** • **CI**: n0037 • **ID**: 331
**PN**: *Hyperoliuss heuglini* Steindachner, 1864
**PK**: *Crumenifera pusilla** Cope, 1862
**KG**: *Hyperolius** Rapp, 1842
**KF**: *Hyperoliidae* 1943.lb.f001

*Eucnemis* Ahrens, 1812 • **ZH**
**ST**: **ZO** • **CI**: zh033

*Eucnemis* Tschudi, 1838 • **AK**
**ST**: **PO.JH** • **CI**: h0519 • **ID**: 331
**PN**: *Hyla horstockii* Schlegel, 1837
**PK**: *Hyla horstockii** Schlegel, 1837
**KG**: *Hyperolius** Rapp, 1842
**KF**: *Hyperoliidae* 1943.lb.f001

***Euhyas*** Fitzinger, 1843 • **KY**
**ST**: **PO.KN** • **CI**: h0520 • **ID**: 082
**PN**: *Hylodes ricordii* Duméril[+1], 1841
**PK**: *Hylodes ricordii** Duméril[+1], 1841
**KG**: *Euhyas** Fitzinger, 1843
**KF**: *Brachycephalidae* 1858.gc.f002

***Euparkerella*** Griffiths, 1959 • **KY**
**ST**: **PO.KN** • **CI**: h0521 • **ID**: 067
**PN**: *Sminthillus brasiliensis* Parker, 1926
**PK**: *Sminthillus brasiliensis** Parker, 1926
**KG**: *Euparkerella** Griffiths, 1959
**KF**: *Brachycephalidae* 1858.gc.f002

*Eupemfix* Palacký, 1898 • **AK**
**ST**: **NT.JI** • **CI**: h0522 • **ID**: 249
**PN**: *Eupemphix nattereri* Steindachner, 1863
**PK**: *Eupemphix nattereri** Steindachner, 1863
**KG**: *Eupemphix** Steindachner, 1863
**KF**: *Leiuperidae* 1850.bb.f010

***Eupemphix*** Steindachner, 1863 • **KY**
**ST**: **PO.KN** • **CI**: h0523 • **ID**: 249
**PN**: *Eupemphix nattereri* Steindachner, 1863
**PK**: *Eupemphix nattereri** Steindachner, 1863
**KG**: *Eupemphix** Steindachner, 1863
**KF**: *Leiuperidae* 1850.bb.f010

***Euphlyctis*** Fitzinger, 1843 • **KY**
**ST**: **PO.KN** • **CI**: h0524 • **ID**: 373
**PN**: *Rana leschenaultii* Duméril[+1], 1841
**PK**: *Rana cyanophlyctis** Schneider, 1799
**KG**: *Euphlyctis*[1] Fitzinger, 1843
**KF**: *Dicroglossidae* 1987.da.f004

*Eupodion*: Jan 1857 • **AN**
**ST**: **AL** • **CI**: n0038 • **ID**: 249
**PN**: *Eupemphix nattereri* Steindachner, 1863
**PK**: *Eupemphix nattereri** Steindachner, 1863
**KG**: *Eupemphix** Steindachner, 1863
**KF**: *Leiuperidae* 1850.bb.f010

*Eupomplyx*: Jan 1857 • **AN**
**ST**: **AL** • **CI**: n0039 • **ID**: 249
**PN**: *Eupemphix nattereri* Steindachner, 1863
**PK**: *Eupemphix nattereri** Steindachner, 1863
**KG**: *Eupemphix** Steindachner, 1863
**KF**: *Leiuperidae* 1850.bb.f010

***Euproctus*** Gené, 1839 • **KY**
**ST**: **PO.KN** • **CI**: h0525 • **ID**: 557
**PN**: *Euproctus rusconii* Gené, 1839
**PK**: *Molge platycephala** Gravenhorst, 1829
**KG**: *Euproctus*[1] Gené, 1839
**KF**: *Salamandridae* 1820.ga.f002

***Eupsophus*** Fitzinger, 1843 • **KY**
**ST**: **PO.KN** • **CI**: h0526 • **ID**: 174
**PN**: *Cystignathus roseus* Duméril[+1], 1841
**PK**: *Cystignathus roseus** Duméril[+1], 1841

**KG**: *Eupsophus** Fitzinger, 1843
**KF**: *Alsodidae* 1869.mc.f005

*Eurhina* Fitzinger, 1843 • **ak**
**ST**: **po.ji** • **CI**: h0527 • **ID**: 138
**PN**: *Bufo proboscideus* Spix, 1824
**PK**: *Bufo proboscideus*° Spix, 1824
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

***Eurycea*** Rafinesque, 1822 • **ky**
**ST**: **po.kn** • **CI**: h0528 • **ID**: 542
**PN**: *Eurycea lucifuga* Rafinesque, 1822
**PK**: *Eurycea lucifuga** Rafinesque, 1822
**KG**: *Eurycea** Rafinesque, 1822
**KF**: *Plethodontidae* 1850.ga.f002

*Eurycea* Rafinesque, 1832 • **ak**
**ST**: **po.jh** • **CI**: h0529 • **ID**: 504
**PN**: *Eurycea mucronata* Rafinesque, 1832
**PK**: *Salamandra alleganiensis** Sonnini[+1], 1801
**KG**: *Cryptobranchus*[1] Leuckart, 1821
**KF**: *Cryptobranchidae* 1826.fb.f003

***Eurycephalella*** Báez[+2], 2009 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0530 • **ID**: †023
**PN**: *Eurycephalella alcinae* Báez[+2], 2009 ‡
**PK**: *Eurycephalella alcinae*° Báez[+2], 2009 †
**KG**: *Eurycephalella*° Báez[+2], 2009 †
**KF**: **Anura** Familia *Incertae sedis*

*Euscelis* Fitzinger, 1843 • **ak**
**ST**: **po.jd** • **CI**: h0531 • **ID**: 237
**PN**: *Hyla lesueurii* Duméril[+1], 1841
**PK**: *Hyla lesueurii** Duméril[+1], 1841
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

*Eusophis* Neave, 1940 • **ak**
**ST**: **nt.jd** • **CI**: h0532 • **ID**: 174
**PN**: *Cystignathus roseus* Duméril[+1], 1841
**PK**: *Cystignathus roseus** Duméril[+1], 1841
**KG**: *Eupsophus** Fitzinger, 1843
**KF**: *Alsodidae* 1869.mc.f005

*Eusophus* Cope, 1865 • **ak**
**ST**: **po.jd** • **CI**: h0533 • **ID**: 173
**PN**: *Cystignathus nodosus* Duméril[+1], 1841
**PK**: *Cystignathus nodosus** Duméril[+1], 1841
**KG**: *Alsodes** Bell, 1843
**KF**: *Alsodidae* 1869.mc.f005

*Exaeretus* Fieber, 1864 • **zh**
**ST**: **zo** • **CI**: zh034

*Exaeretus* Waga, 1876 • **ak**
**ST**: **po.jh** • **CI**: h0534 • **ID**: 576
**PN**: *Exaeretus caucasicus* Waga, 1876
**PK**: *Exaeretus caucasicus** Waga, 1876
**KG**: *Mertensiella** Wolterstorff, 1925
**KF**: *Salamandridae* 1820.ga.f002

***Excidobates*** Twomey[+1], 2008 • **ky**
**ST**: **po.kn** • **CI**: h0535 • **ID**: 046
**PN**: *Dendrobates mysteriosus* Myers, 1982
**PK**: *Dendrobates mysteriosus** Myers, 1982
**KG**: *Excidobates** Twomey[+1], 2008
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

***Exerodonta*** Brocchi, 1879 • **ky**
**ST**: **po.kn** • **CI**: h0536 • **ID**: 218
**PN**: *Exerodonta sumichrasti* Brocchi, 1879
**PK**: *Exerodonta sumichrasti** Brocchi, 1879
**KG**: *Exerodonta** Brocchi, 1879
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Exobranchia*: Rafinesque 1815 • **an**
**ST**: **al** • **CI**: n0040 • **ID**: 554
**PN**: *Proteus anguinus* Laurenti, 1768
**PK**: *Proteus anguinus** Laurenti, 1768
**KG**: *Proteus** Laurenti, 1768
**KF**: *Proteidae* 1831.ba.f002

*Fanchonia* Werner, 1893 • **ak**
**ST**: **po.jd** • **CI**: h0537 • **ID**: 237
**PN**: *Fanchonia elegans* Werner, 1893
**PK**: *Rana aurea** Lesson, 1829
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

***Feihyla*** Frost[+18], 2006 • **ky**
**ST**: **po.kn** • **CI**: h0538 • **ID**: 450
**PN**: *Philautus palpebralis* Smith, 1924
**PK**: *Philautus palpebralis** Smith, 1924
**KG**: *Feihyla** Frost[+18], 2006
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Feirana*** Dubois, 1992 • **ky**
**ST**: **po.kn** • **CI**: h0539 • **ID**: 386
**PN**: *Rana quadranus* Liu[+2], 1960
**PK**: *Rana quadranus** Liu[+2], 1960
**KG**: *Feirana** Dubois, 1992
**KF**: *Dicroglossidae* 1987.da.f004

***Fejervarya*** Bolkay, 1915 • **ky**
**ST**: **po.kn** • **CI**: h0540 • **ID**: 377
**PN**: *Rana limnocharis* Boie *in* Gravenhorst, 1829
**PK**: *Rana limnocharis** Boie *in* Gravenhorst, 1829
**KG**: *Fejervarya** Bolkay, 1915
**KF**: *Dicroglossidae* 1987.da.f004

*Fergusonia* Hoffmann, 1878 • **ak**
**ST**: **nl.jd** • **CI**: h0541 • **ID**: 376
**PN**: *Trachucephalus ceylanicus* Ferguson, 1874
**PK**: *Nannophrys ceylonensis** Günther, 1869
**KG**: *Nannophrys** Günther, 1869
**KF**: *Dicroglossidae* 1987.da.f004

*Fichteria* Scortecci, 1941 • **ak**
**ST**: **po.jd** • **CI**: h0542 • **ID**: 319
**PN**: *Fichteria somalica* Scortecci, 1941
**PK**: *Fichteria somalica*° Scortecci, 1941
**KG**: *Phrynomantis** Peters, 1867
**KF**: *Phrynomeridae* 1931.na.f013

***Firouzophrynus*** Safaei-Mahroo & Ghaffari, 2020 • **ky**
**ST**: **po.kn** • **CI**: h0543 • **ID**: 109
**PN**: *Bufo olivaceus* Blanford, 1874
**PK**: *Firouzophrynus olivaceus*° (Blanford, 1874)
**KG**: *Firouzophrynus*[3] Safaei-Mahroo & Ghaffari, 2020
**KF**: *Bufonidae* 1825.gb.f004

***Flectonotus*** Miranda-Ribeiro, 1926 • **KY**

**ST**: **PO.KN** • **CI**: h0544 • **ID**: 093

**PN**: *Nototrema pygmaeum* Boettger, 1893

**PK**: *Nototrema pygmaeum** Boettger, 1893

**KG**: *Flectonotus** Miranda-Ribeiro, 1926

**KF**: *HEMIPHRACTIDAE* 1862.pa.f001

*Frankixalus* Biju[+9], 2016 • **AK**

**ST**: **PO.JD** • **CI**: h0545 • **ID**: 446

**PN**: *Polypedates jerdonii* Günther, 1876

**PK**: *Polypedates jerdonii*° Günther, 1876

**KG**: *Nasutixalus** Jiang[+3] *in* Jiang[+5], 2016

**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

***Frethia* nov.** • **KY**

**ST**: **PO.KN** • **CI**: h0546 • **ID**: 394

**PN**: *Oxyglossus laevis* Günther, 1859

**PK**: *Oxyglossus laevis** Günther, 1859

**KG**: *Frethia** **nov.**

**KF**: *OCCIDOZYGIDAE* 1990.fa.f002

*Fritzia* Cambridge, 1879 • **ZH**

**ST**: **ZO** • **CI**: zh035

*Fritzia* Miranda-Ribeiro, 1920 • **AK**

**ST**: **PO.JH** • **CI**: h0547 • **ID**: 094

**PN**: *Hyla goeldii* Boulenger, 1895

**PK**: *Hyla goeldii** Boulenger, 1895

**KG**: *Fritziana** Mello-Leitão, 1937

**KF**: *HEMIPHRACTIDAE* 1862.pa.f001

***Fritziana*** Mello-Leitão, 1937 • **KY**

**ST**: **NT.KN** • **CI**: h0548 • **ID**: 094

**PN**: *Hyla goeldii* Boulenger, 1895

**PK**: *Hyla goeldii** Boulenger, 1895

**KG**: *Fritziana** Mello-Leitão, 1937

**KF**: *HEMIPHRACTIDAE* 1862.pa.f001

***Frostius*** Cannatella, 1986 • **KY**

**ST**: **PO.KN** • **CI**: h0549 • **ID**: 150

**PN**: *Atelopus pernambucensis* Bokermann, 1962

**PK**: *Atelopus pernambucensis*° Bokermann, 1962

**KG**: *Frostius*[3] Cannatella, 1986

**KF**: *BUFONIDAE* 1825.gb.f004

***Gabohyla*** Araujo-Vieira[+3], 2020 • **KY**

**ST**: **PO.KN** • **CI**: h0550 • **ID**: 233

**PN**: *Sphaenorhynchus pauloalvini* Bokermann, 1973

**PK**: *Sphaenorhynchus pauloalvini*° Bokermann, 1973

**KG**: *Gabohyla*° Araujo-Vieira[+3], 2020

**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

***Galverpeton*** Estes[+1], 1982 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h0551 • **ID**: †131

**PN**: *Galverpeton ibericum* Estes[+1], 1982 ‡

**PK**: *Galverpeton ibericum*° Estes[+1], 1982 †

**KG**: *Galverpeton*° Estes[+1], 1982 †

**KF**: **URODELA** Familia *INCERTAE SEDIS*

*Gampsosteonyx* Boulenger, 1900 • **AK**

**ST**: **PO.JD** • **CI**: h0552 • **ID**: 321

**PN**: *Gampsosteonyx batesi* Boulenger, 1900

**PK**: *Gampsosteonyx batesi** Boulenger, 1900

**KG**: *Astylosternus** Werner, 1898

**KF**: *ARTHROLEPTIDAE* 1869.mc.f011

*Garbeana* Miranda-Ribeiro, 1926 • **AK**

**ST**: **PO.JD** • **CI**: h0553 • **ID**: 232

**PN**: *Garbeana garbei* Miranda-Ribeiro, 1926

**PK**: *Garbeana garbei** Miranda-Ribeiro, 1926

**KG**: *Scinax*[2] Wagler, 1830

**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

***Gastrophryne*** Fitzinger, 1843 • **KY**

**ST**: **PO.KN** • **CI**: h0554 • **ID**: 299

**PN**: *Engystoma rugosum* Duméril[+1], 1841

**PK**: *Engystoma carolinense** Holbrook, 1836

**KG**: *Gastrophryne*[1] Fitzinger, 1843

**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

***Gastrophrynoides*** Noble, 1926 • **KY**

**ST**: **PO.KN** • **CI**: h0555 • **ID**: 281

**PN**: *Engystoma borneense* Boulenger, 1897

**PK**: *Engystoma borneense*° Boulenger, 1897

**KG**: *Gastrophrynoides*[3] Noble, 1926

**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

***Gastrotheca*** Fitzinger, 1843 • **KY**

**ST**: **PO.KN** • **CI**: h0556 • **ID**: 091

**PN**: *Hyla marsupiata* Duméril[+1], 1841

**PK**: *Hyla marsupiata** Duméril[+1], 1841

**KG**: *Gastrotheca** Fitzinger, 1843

**KF**: *HEMIPHRACTIDAE* 1862.pa.f001

***Gegeneophis*** Peters, 1880 • **KY**

**ST**: **NL.KN** • **CI**: h0557 • **ID**: 485

**PN**: *Epicrium carnosum* Beddome, 1870

**PK**: *Epicrium carnosum** Beddome, 1870

**KG**: *Gegeneophis** Peters, 1880

**KF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|

*Gegenes* Hübner, 1819 • **ZH**

**ST**: **ZO** • **CI**: zh036

*Gegenes* Günther, 1876 • **AK**

**ST**: **PO.JH** • **CI**: h0558 • **ID**: 485

**PN**: *Epicrium carnosum* Beddome, 1870

**PK**: *Epicrium carnosum** Beddome, 1870

**KG**: *Gegeneophis** Peters, 1880

**KF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|

*Gegenophis* Boulenger, 1882 • **AK**

**ST**: **NT.JI** • **CI**: h0559 • **ID**: 485

**PN**: *Epicrium carnosum* Beddome, 1870

**PK**: *Epicrium carnosum** Beddome, 1870

**KG**: *Gegeneophis** Peters, 1880

**KF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|

***Genibatrachus*** Gao[+1], 2017 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h0560 • **ID**: †060

**PN**: *Genibatrachus baoshanensis* Gao[+1], 2017 ‡

**PK**: *Genibatrachus baoshanensis*° Gao[+1], 2017 †

**KG**: *Genibatrachus*° Gao[+1], 2017 †

**KF**: **GEOBATRACHIA** Familia *INCERTAE SEDIS*

*Genyofryne* Palacký, 1898 • **AK**

**ST**: **NT.JD** • **CI**: h0561 • **ID**: 280

**PN**: *Genyophryne thomsoni* Boulenger, 1890

**PK**: *Genyophryne thomsoni** Boulenger, 1890

**KG**: *Asterophrys** Tschudi, 1838

**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Genyophryne* Boulenger, 1890 • **AK**

**ST**: **PO.JD** • **CI**: h0562 • **ID**: 280
**PN**: *Genyophryne thomsoni* Boulenger, 1890
**PK**: *Genyophryne thomsoni** Boulenger, 1890
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

***Geobatrachus*** Ruthven, 1915 • **KY**

**ST**: **PO.KN** • **CI**: h0563 • **ID**: 056
**PN**: *Geobatrachus walkeri* Ruthven, 1915
**PK**: *Geobatrachus walkeri*° Ruthven, 1915
**KG**: *Geobatrachus*° Ruthven, 1915
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

***Geocrinia*** Blake, 1973 • **KY**

**ST**: **PO.KN** • **CI**: h0564 • **ID**: 268
**PN**: *Pterophrynus laevis* Günther, 1864
**PK**: *Pterophrynus laevis*° Günther, 1864
**KG**: *Geocrinia*[3] Blake, 1973
**KF**: *MYOBATRACHIDAE* 1850.sa.f001

*Geognathus* Dubois[+1], 2012 • **AK**

**ST**: **PO.JD** • **CI**: h0565 • **ID**: 548
**PN**: *Desmognathus wrighti* King, 1936
**PK**: *Desmognathus wrighti** King, 1936
**KG**: *Desmognathus** Baird, 1850
**KF**: *PLETHODONTIDAE* 1850.ga.f002

*Geomolge* Boulenger, 1886 • **AK**

**ST**: **PO.JD** • **CI**: h0566 • **ID**: 517
**PN**: *Geomolge fischeri* Boulenger, 1886
**PK**: *Geomolge fischeri** Boulenger, 1886
**KG**: *Onychodactylus*[1] Tschudi, 1838
**KF**: *HYNOBIIDAE* ||1856.ha.f001||-1859.cb.f002

***Geophryne*** Brown[+1], 2014 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h0567 • **ID**: †100
**PN**: *Pseudacris nordensis* Chantell, 1964 ‡
**PK**: *Pseudacris nordensis*° Chantell, 1964 †
**KG**: *Geophryne*° Brown[+1], 2014 †
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Geotriton*: Bonaparte 1831 • **AN**

**ST**: **AL** • **CI**: n0041 • **ID**: 564
**PN**: *Salamandra exigua* Laurenti, 1768
**PK**: *Lacerta vulgaris** Linnaeus, 1758
**KG**: *Lissotriton*[1] Bell, 1839
**KF**: *SALAMANDRIDAE* 1820.ga.f002

*Geotriton* Bonaparte, 1832 • **EX**

**ST**: **PO.CE** • **CI**: e0008 • **ID**: 564
**PN**: *Salamandra exigua* Laurenti, 1768
**PK**: *Lacerta vulgaris** Linnaeus, 1758
**KG**: *Lissotriton*[1] Bell, 1839
**KF**: *SALAMANDRIDAE* 1820.ga.f002

***Geotrypetes*** Peters, 1880 • **KY**

**ST**: **PO.KN** • **CI**: h0569 • **ID**: 489
**PN**: *Caecilia seraphini* Duméril, 1859
**PK**: *Caecilia seraphini** Duméril, 1859
**KG**: *Geotrypetes** Peters, 1880
**KF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|

***Gephyromantis*** Methuen, 1920 • **KY**

**ST**: **PO.KN** • **CI**: h0570 • **ID**: 431
**PN**: *Gephyromantis boulengeri* Methuen, 1920
**PK**: *Gephyromantis boulengeri** Methuen, 1920
**KG**: *Gephyromantis** Methuen, 1920
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

*Germanobatrachus* Kuhn, 1941 ‡ • **AK**

**ST**: **PO.JD** • **CI**: h0571 • **ID**: †110
**PN**: *Germanobatrachus beurleni* Kuhn, 1941 ‡
**PK**: *Opisthocoelellus weigelti*° Kuhn, 1941 †
**KG**: *Opisthocoelellus*° Kuhn, 1941 †
**KF**: **MEDIOGYRINIA** Familia *INCERTAE SEDIS*

***Geyeriella*** Herre, 1950 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h0572 • **ID**: †171
**PN**: *Geyeriella mertensi* Herre, 1950 ‡
**PK**: *Geyeriella mertensi*° Herre, 1950 †
**KG**: *Geyeriella*° Herre, 1950 †
**KF**: *HYNOBIIDAE* ||1856.ha.f001||-1859.cb.f002

***Ghatixalus*** Biju[+2], 2008 • **KY**

**ST**: **PO.KN** • **CI**: h0573 • **ID**: 451
**PN**: *Polypedates variabilis* Jerdon, 1853
**PK**: *Polypedates variabilis** Jerdon, 1853
**KG**: *Ghatixalus** Biju[+2], 2008
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

*Ghatophryne*: Biju[+4] 2009 • **AN**

**ST**: **AL** • **CI**: n0042 • **ID**: 116
**PN**: *Ansonia ornata* Gunther, 1876
**PK**: *Ansonia ornata** Gunther, 1876
**KG**: *Blaira** **nov.**
**KF**: *BUFONIDAE* 1825.gb.f004

*Gigantobatrachus* Casamiquela, 1958 ‡ • **AK**

**ST**: **PO.JD** • **CI**: h0574 • **ID**: 257
**PN**: *Gigantobatrachus parodii* Casamiquela, 1958 ‡
**PK**: *Gigantobatrachus parodii*° Casamiquela, 1958 †
**KG**: *Calyptocephalella** Strand, 1928
**KF**: *CALYPTOCEPHALELLIDAE* 1960.ra.f001

*Gigantophrys* Fei[+2], 2016 • **AK**

**ST**: **PO.JD** • **CI**: h0575 • **ID**: 019
**PN**: *Megophrys giganticus* Liu[+2], 1960
**PK**: *Megophrys giganticus*° Liu[+2], 1960
**KG**: *Atympanophrys** Tian[+1], 1983
**KF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

*Gigantorana* Noble, 1931 • **AK**

**ST**: **PO.JD** • **CI**: h0576 • **ID**: 351
**PN**: *Rana goliath* Boulenger, 1906
**PK**: *Rana goliath** Boulenger, 1906
**KG**: *Conraua** Nieden, 1908
**KF**: *CONRAUIDAE* 1992.da.f001

***Glandirana*** Fei[+2], 1990 • **KY**

**ST**: **PO.KN** • **CI**: h0577 • **ID**: 407
**PN**: *Rana minima* Ting[+1], 1979
**PK**: *Rana minima** Ting[+1], 1979
**KG**: *Glandirana** Fei[+1], 1990
**KF**: *RANIDAE* 1796.ba.f001

*Glandula* Stimpson, 1852 • **ZH**

**ST**: **ZO** • **CI**: zh037

*Glandula* Tian[+1], 1985 • **AK**

**ST**: **PO.JH** • **CI**: h0578 • **ID**: 472

**PN**: *Bombinator maximus* Boulenger, 1905
**PK**: *Bombinator maximus** Boulenger, 1905
**KG**: *Bombina** Oken, 1816
**KF**: *BOMBINATORIDAE* 1825.gb.f002

*Glauertia* Loveridge, 1933 • **AK**
**ST**: **PO.JD** • **CI**: h0579 • **ID**: 276
**PN**: *Glauertia russelli* Loveridge, 1933
**PK**: *Glauertia russelli** Loveridge, 1933
**KG**: *Uperoleia*[2] Gray, 1841
**KF**: *MYOBATRACHIDAE* 1850.sa.f001

*Glossiphus*: Green *in* Rafinesque 1832 • **AN**
**ST**: **AL** • **CI**: n0043 • **ID**: 542
**PN**: *Salamandra longicauda* Green, 1818
**PK**: *Salamandra longicauda** Green, 1818
**KG**: *Eurycea** Rafinesque, 1822
**KF**: *PLETHODONTIDAE* 1850.ga.f002

*Glossoliga* Bonaparte, 1839 • **AK**
**ST**: **PO.JD** • **CI**: h0580 • **ID**: 571
**PN**: *Triton poireti* Gervais, 1835
**PK**: *Triton poireti** Gervais, 1835
**KG**: *Pleurodeles** Michahelles, 1830
**KF**: *SALAMANDRIDAE* 1820.ga.f002

*Glossostoma* Le Conte, 1851 • **ZH**
**ST**: **ZO** • **CI**: zh038

*Glossostoma* Günther, 1901 • **AK**
**ST**: **PO.JH** • **CI**: h0581 • **ID**: 293
**PN**: *Glossostoma aterrimum* Günther, 1901
**PK**: *Glossostoma aterrimum*° Günther, 1901
**KG**: *Ctenophryne** Mocquard, 1904
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Glyfoglossus* Palacký, 1898 • **AK**
**ST**: **NT.JI** • **CI**: h0582 • **ID**: 313
**PN**: *Glyphoglossus molossus* Günther, 1869
**PK**: *Glyphoglossus molossus** Günther, 1869
**KG**: *Glyphoglossus** Günther, 1869
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

***Glyphoglossus*** Günther, 1869 • **KY**
**ST**: **PO.KN** • **CI**: h0583 • **ID**: 313
**PN**: *Glyphoglossus molossus* Günther, 1869
**PK**: *Glyphoglossus molossus** Günther, 1869
**KG**: *Glyphoglossus** Günther, 1869
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Gnathophryne* Méhelÿ, 1901 • **AK**
**ST**: **PO.JD** • **CI**: h0584 • **ID**: 280
**PN**: *Mantophryne robusta* Boulenger, 1898
**PK**: *Mantophryne robusta** Boulenger, 1898
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Gnathophysa* Fitzinger, 1843 • **AK**
**ST**: **PO.JD** • **CI**: h0585 • **ID**: 253
**PN**: *Rana labyrinthica* Spix, 1824
**PK**: *Rana labyrinthica** Spix, 1824
**KG**: *Leptodactylus*[1] Fitzinger, 1826
**KF**: *LEPTODACTYLIDAE* ||1838.ta.f001||-1896.wa.f001

*Gobiates*: Špinar 1983 ‡ • **AN**
**ST**: **AL** • **CI**: n0044 • **ID**: †113
**PN**: *Gobiates khermeentsavi* Špinar[+1], 1986 ‡
**PK**: *Gobiates khermeentsavi*° Špinar[+1], 1986 †
**KG**: *Gobiates*° Špinar[+1,] 1986 †
**KF**: *GOBIATIDAE* 1991.ra.f001 †

***Gobiates*** Špinar[+1,] 1986 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0586 • **ID**: †113
**PN**: *Gobiates khermeentsavi* Špinar[+1], 1986 ‡
**PK**: *Gobiates khermeentsavi*° Špinar[+1], 1986 †
**KG**: *Gobiates*° Špinar[+1,] 1986 †
**KF**: *GOBIATIDAE* 1991.ra.f001 †

***Gobiatoides*** Roček[+1], 1993 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0587 • **ID**: †024
**PN**: *Gobiatoides parvus* Roček[+1], 1993 ‡
**PK**: *Gobiatoides parvus*° Roček[+1], 1993 †
**KG**: *Gobiatoides*° Roček[+1], 1993 †
**KF**: **ANURA** Familia *INCERTAE SEDIS*

*Gomphobates* Reinhardt[+1], 1862 • **AK**
**ST**: **PO.JD** • **CI**: h0588 • **ID**: 250
**PN**: *Gomphobates notatus* Reinhardt[+1], 1862
**PK**: *Physalaemus cuvieri** Fitzinger, 1826
**KG**: *Physalaemus** Fitzinger, 1826
**KF**: *LEIUPERIDAE* 1850.bb.f010

*Gorhixalus* Dubois, 1987 • **AK**
**ST**: **PO.JD** • **CI**: h0589 • **ID**: 447
**PN**: *Rhacophorus hosii* Boulenger, 1895
**PK**: *Rhacophorus hosii** Boulenger, 1895
**KG**: *Philautus** Gistel, 1848
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

***Gracilibatrachus*** Báez, 2013 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0590 • **ID**: †062
**PN**: *Gracilibatrachus avallei* Báez, 2013 ‡
**PK**: *Gracilibatrachus avallei*° Báez, 2013 †
**KG**: *Gracilibatrachus*° Báez, 2013 †
**KF**: **DORSIPARES** Familia *INCERTAE SEDIS*

***Gracixalus*** Delorme[+3], 2005 • **KY**
**ST**: **PO.KN** • **CI**: h0591 • **ID**: 439
**PN**: *Philautus gracilipes* Bourret, 1937
**PK**: *Philautus gracilipes** Bourret, 1937
**KG**: *Gracixalus** Delorme[+3], 2005
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

*Gradwellia* Wells[+1], 1985 • **AK**
**ST**: **PO.JD** • **CI**: h0592 • **ID**: 274
**PN**: *Pseudophryne major* Parker, 1940
**PK**: *Pseudophryne major*° Parker, 1940
**KG**: *Pseudophryne*[3] Fitzinger, 1843
**KF**: *MYOBATRACHIDAE* 1850.sa.f001

*Grandisonia* Taylor, 1968 • **AK**
**ST**: **PO.JD** • **CI**: h0593 • **ID**: 482
**PN**: *Hypogeophis alternans* Stejneger, 1893
**PK**: *Hypogeophis alternans** Stejneger, 1893
**KG**: *Hypogeophis** Peters, 1880
**KF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|

***Grillitschia* nov.** • **KY**
**ST**: **PO.KN** • **CI**: h0594 • **ID**: 022
**PN**: *Megalophrys longipes* Boulenger, 1886
**PK**: *Megalophrys longipes** Boulenger, 1886

**KG**: *Grillitschia** **nov.**
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|
*Grippiella* Herre, 1949 ‡ • **ak**
**ST**: **po.jd** • **CI**: h0595 • **ID**: †193
**PN**: *Grippiella mohri* Herre, 1949 ‡
**PK**: *Chelotriton paradoxus*° Pomel, 1853 †
**KG**: *Chelotriton*° Pomel, 1853 †
**KF**: *Salamandridae* 1820.ga.f002
*Grobina* Dubois, 1987 • **ak**
**ST**: **po.jd** • **CI**: h0596 • **ID**: 472
**PN**: *Bombinator maximus* Boulenger, 1905
**PK**: *Bombinator maximus** Boulenger, 1905
**KG**: *Bombina** Oken, 1816
**KF**: *Bombinatoridae* 1825.gb.f002
*Gryphius*: Gistel 1848 • **an**
**ST**: **al** • **CI**: n0045 • **ID**: 002§
**PN**: INR
**PK**: INR
**KG**: INR
**KF**: **Lissamphibia** Familia *Incertae sedis*
*Grypiscus* Cope, 1867 • **ak**
**ST**: **po.jd** • **CI**: h0597 • **ID**: 179
**PN**: *Grypiscus umbrinus* Cope, 1867
**PK**: *Cycloramphus fuliginosus** Tschudi, 1838
**KG**: *Cycloramphus** Tschudi, 1838
**KF**: *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|
*Guentheria* Bleeker, 1861 • **zh**
**ST**: **zo** • **CI**: zh039
*Guentheria* Miranda-Ribeiro, 1926 • **ak**
**ST**: **po.jh** • **CI**: h0598 • **ID**: 194
**PN**: *Hyla dasynota* Günther, 1869
**PK**: *Hyla senicula** Cope, 1868
**KG**: *Dendropsophus*[1] Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Guibemantis*** Dubois, 1992 • **ky**
**ST**: **po.kn** • **CI**: h0599 • **ID**: 427
**PN**: *Rhacophorus depressiceps* Boulenger, 1882
**PK**: *Rhacophorus depressiceps** Boulenger, 1882
**KG**: *Guibemantis** Dubois, 1992
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001
*Gymnophis* Gadow, 1901 • **ak**
**ST**: **ns.ji** • **CI**: h0600 • **ID**: 487
**PN**: *Gymnopis multiplicata* Peters, 1874
**PK**: *Gymnopis multiplicata** Peters, 1874
**KG**: *Gymnopis** Peters, 1874
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|
***Gymnopis*** Peters, 1874 • **ky**
**ST**: **po.kn** • **CI**: h0601 • **ID**: 487
**PN**: *Gymnopis multiplicata* Peters, 1874
**PK**: *Gymnopis multiplicata** Peters, 1874
**KG**: *Gymnopis** Peters, 1874
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|
***Gynandropaa*** Dubois, 1992 • **ky**
**ST**: **po.kn** • **CI**: h0602 • **ID**: 384
**PN**: *Rana yunnanensis* Anderson, 1878
**PK**: *Rana yunnanensis** Anderson, 1878
**KG**: *Gynandropaa** Dubois, 1992
**KF**: *Dicroglossidae* 1987.da.f004
***Gyrinophilus*** Cope, 1869 • **ky**
**ST**: **po.kn** • **CI**: h0603 • **ID**: 539
**PN**: *Salamandra porphyritica* Green, 1827
**PK**: *Salamandra porphyritica** Green, 1827
**KG**: *Gyrinophilus** Cope, 1869
**KF**: *Plethodontidae* 1850.ga.f002
*Gyrinus* Geoffroy, 1762 • **zh**
**ST**: **zo** • **CI**: zh040
*Gyrinus*: Hermann 1783 • **an**
**ST**: **al** • **CI**: n0046 • **ID**: 419
**PN**: *Rana temporaria* Linnaeus, 1758
**PK**: *Rana temporaria** Linnaeus, 1758
**KG**: *Rana** Linnaeus, 1758
**KF**: *Ranidae* 1796.ba.f001
*Gyrinus* Shaw[+1], 1798 • **ak**
**ST**: **po.jh** • **CI**: h0604 • **ID**: 555
**PN**: *Gyrinus mexicanus* Shaw[+1], 1798
**PK**: *Gyrinus mexicanus** Shaw[+1], 1798
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *Ambystomatidae* 1850.ga.f004
*Habrahyla* Goin, 1961 • **ak**
**ST**: **po.jd** • **CI**: h0605 • **ID**: 325
**PN**: *Habrahyla eiselti* Goin, 1961
**PK**: *Hylambates notatus*° Buchholz[+1] *in* Peters, 1875
**KG**: *Leptopelis*[2] Günther, 1859
**KF**: *Arthroleptidae* 1869.mc.f011
***Habrosaurus*** Gilmore, 1928 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0606 • **ID**: †176
**PN**: *Habrosaurus dilatus* Gilmore, 1928 ‡
**PK**: *Habrosaurus dilatus*° Gilmore, 1928 †
**KG**: *Habrosaurus*° Gilmore, 1928 †
**KF**: *Sirenidae* 1825gb.f005
***Haddadus*** Hedges[+2], 2008 • **ky**
**ST**: **po.kn** • **CI**: h0607 • **ID**: 060
**PN**: *Rana binotata* Spix, 1824
**PK**: *Rana binotata** Spix, 1824
**KG**: *Haddadus** Hedges[+2], 2008
**KF**: *Brachycephalidae* 1858.gc.f002
***Hadromophryne*** Van Dijk, 2008 • **ky**
**ST**: **po.kn** • **CI**: h0608 • **ID**: 465
**PN**: *Heleophryne natalensis* Hewitt, 1913
**PK**: *Heleophryne natalensis** Hewitt, 1913
**KG**: *Hadromophryne** Van Dijk, 2008
**KF**: *Heleophrynidae* 1931.na.f004
*Haideotriton* Carr, 1939 • **ak**
**ST**: **po.jd** • **CI**: h0609 • **ID**: 542
**PN**: *Haideotriton wallacei* Carr, 1939
**PK**: *Haideotriton wallacei** Carr, 1939
**KG**: *Eurycea** Rafinesque, 1822
**KF**: *Plethodontidae* 1850.ga.f002
*Halleobatrachus* Kuhn, 1941 ‡ • **ak**
**ST**: **po.jd** • **CI**: h0610 • **ID**: †090
**PN**: *Halleobatrachus hinschei* Kuhn, 1941 ‡
**PK**: *Halleobatrachus hinschei*° Kuhn, 1941 †

**KG**: *Eopelobates*° Parker, 1929 †
**KF**: *Pelobatidae* 1850.bb.f004

*Halophila* Gray, 1843 • **zh**
**ST**: **zo** • **CI**: zh041

*Halophila* Girard, 1853 • **ak**
**ST**: **po.jh** • **CI**: h0611 • **ID**: 369
**PN**: *Halophila vitiensis* Girard, 1853
**PK**: *Halophila vitiensis** Girard, 1853
**KG**: *Cornufer** Tschudi, 1838
**KF**: *Ceratobatrachidae* 1884.ba.f001

*Hammatodactylus* Fitzinger, 1843 • **ak**
**ST**: **po.jd** • **CI**: h0612 • **ID**: 173
**PN**: *Cystignathus nodosus* Duméril[+1], 1841
**PK**: *Cystignathus nodosus** Duméril[+1], 1841
**KG**: *Alsodes** Bell, 1843
**KF**: *Alsodidae* 1869.mc.f005

***Hamptophryne*** Carvalho, 1954 • **ky**
**ST**: **po.kn** • **CI**: h0613 • **ID**: 301
**PN**: *Chiasmocleis boliviana* Parker, 1927
**PK**: *Chiasmocleis boliviana** Parker, 1927
**KG**: *Hamptophryne** Carvalho, 1954
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Haptoglossa* Cope, 1893 • **ak**
**ST**: **po.jd** • **CI**: h0614 • **ID**: 534
**PN**: *Haptoglossa pressicauda* Cope, 1893
**PK**: *Haptoglossa pressicauda** Cope, 1893
**KG**: *Oedipina** Keferstein, 1868
**KF**: *Plethodontidae* 1850.ga.f002

***Hatzegobatrachus*** Venczel[+1], 2003 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0615 • **ID**: †025
**PN**: *Hatzegobatrachus grigorescui* Venczel[+1], 2003 ‡
**PK**: *Hatzegobatrachus grigorescui*° Venczel[+1], 2003 †
**KG**: *Hatzegobatrachus*° Venczel[+1], 2003 †
**KF**: **Anura** Familia *Incertae sedis*

*Hazelia* Walcott, 1920 • **zh**
**ST**: **zo** • **CI**: zh042

*Hazelia* Taylor, 1920 • **ak**
**ST**: **po.jh** • **CI**: h0616 • **ID**: 437
**PN**: *Hazelia spinosa* Taylor, 1920
**PK**: *Hazelia spinosa** Taylor, 1920
**KG**: *Nyctixalus** Boulenger, 1882
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Hedronchus*** Cope, 1877 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0617 • **ID**: †155
**PN**: *Hedronchus sternbergii* Cope 1877 ‡
**PK**: *Hedronchus sternbergii*° Cope, 1877 †
**KG**: *Hedronchus*° Cope, 1877 †
**KF**: *Scapherpetidae* 1959.aa.f001 †

*Hekatobatrachus* Špinar, 1972 ‡ • **ak**
**ST**: **po.jd** • **CI**: h0618 • **ID**: †069
**PN**: *Palaeophrynos grandipes* Giebel, 1851 ‡
**PK**: *Palaeophrynos grandipes*° Giebel, 1851 †
**KG**: *Palaeobatrachus*° Tschudi, 1838 †
**KF**: *Palaeobatrachidae* 1865.ca.f001 †

*Heleioforus* Krefft, 1865 • **ak**
**ST**: **ns.ji** • **CI**: h0619 • **ID**: 259
**PN**: *Heleioporus albopunctatus* Gray, 1841
**PK**: *Heleioporus albopunctatus*° Gray, 1841
**KG**: *Heleioporus*[2] Gray, 1841
**KF**: *Myobatrachidae* 1850.sa.f001

***Heleioporus*** Gray, 1841*a* • **ky**
**ST**: **po.kn** • **CI**: h0620 • **ID**: 259
**PN**: *Heleioporus albopunctatus* Gray, 1841
**PK**: *Heleioporus albopunctatus*° Gray, 1841
**KG**: *Heleioporus*[2] Gray, 1841
**KF**: *Myobatrachidae* 1850.sa.f001

***Heleophryne*** Sclater, 1898 • **ky**
**ST**: **po.kn** • **CI**: h0621 • **ID**: 466
**PN**: *Heleophryne purcelli* Sclater, 1898
**PK**: *Heleophryne purcelli** Sclater, 1898
**KG**: *Heleophryne** Sclater, 1898
**KF**: *Heleophrynidae* 1931.na.f004

*Heliarchon* Meyer, 1860 ‡ • **ak**
**ST**: **po.jd** • **CI**: h0622 • **ID**: †193
**PN**: *Heliarchon fuscillatus* Meyer, 1860 ‡
**PK**: *Chelotriton paradoxus*° Pomel, 1853 †
**KG**: *Chelotriton*° Pomel, 1853 †
**KF**: *Salamandridae* 1820.ga.f002

*Heliophryne* Heyer, 1975 • **ak**
**ST**: **ns.ji** • **CI**: h0623 • **ID**: 466
**PN**: *Heleophryne purcelli* Sclater, 1898
**PK**: *Heleophryne purcelli** Sclater, 1898
**KG**: *Heleophryne** Sclater, 1898
**KF**: *Heleophrynidae* 1931.na.f004

*Helioporus*: Gray 1841*b* • **an**
**ST**: **am** • **CI**: n0047 • **ID**: 259
**PN**: *Heleioporus albopunctatus* Gray, 1841
**PK**: *Heleioporus albopunctatus*° Gray, 1841
**KG**: *Heleioporus*[2] Gray, 1841
**KF**: *Myobatrachidae* 1850.sa.f001

*Heliorana* Steindachner, 1867 • **ak**
**ST**: **po.jd** • **CI**: h0624 • **ID**: 261
**PN**: *Heliorana grayi* Steindachner, 1867
**PK**: *Limnodynastes (Platyplectron) dumerilii** Peters, 1863
**KG**: *Limnodynastes** Fitzinger, 1843
**KF**: *Myobatrachidae* 1850.sa.f001

*Helocaetes* Baird, 1854 • **ak**
**ST**: **po.jd** • **CI**: h0625 • **ID**: 200
**PN**: *Hyla triseriata* Wied-Neuwied, 1838
**PK**: *Hyla triseriata** Wied-Neuwied, 1838
**KG**: *Pseudacris** Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Heloecetes* Baird, 1859 • **ak**
**ST**: **nt.jd** • **CI**: h0626 • **ID**: 200
**PN**: *Hyla triseriata* Wied-Neuwied, 1838
**PK**: *Hyla triseriata** Wied-Neuwied, 1838
**KG**: *Pseudacris** Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Hemidactylium*** Tschudi, 1838 • **ky**
**ST**: **po.kn** • **CI**: h0627 • **ID**: 538
**PN**: *Salamandra scutata* Temminck[+1], 1838
**PK**: *Salamandra scutata** Temminck[+1], 1838

**KG**: *Hemidactylium** Tschudi, 1838
**KF**: *Plethodontidae* 1850.ga.f002

*Hemimantis* Peters, 1863 • **ak**
**ST**: **po.jd** • **CI**: h0628 • **ID**: 350
**PN**: *Hemimantis calcaratus* Peters, 1863
**PK**: *Hemimantis calcaratus** Peters, 1863
**KG**: *Phrynobatrachus** Günther, 1862
**KF**: *Phrynobatrachidae* 1941.lb.f001

*Heminectes* Philippi, 1902 • **ak**
**ST**: **po.jd** • **CI**: h0629 • **ID**: 185
**PN**: *Heminectes rufus* Philippi, 1902
**PK**: *Heminectes rufus*° Philippi, 1902
**KG**: *Rhinoderma** Duméril+1, 1841
**KF**: *Rhinodermatidae* 1850.bb.f011

***Hemiphractus*** Wagler, 1828 • **ky**
**ST**: **po.kn** • **CI**: h0630 • **ID**: 095
**PN**: *Hemiphractus spixii* Wagler, 1828
**PK**: *Rana scutata** Spix, 1824
**KG**: *Hemiphractus*[1] Wagler, 1828
**KF**: *Hemiphractidae* 1862.pa.f001

*Hemipipa* Miranda-Ribeiro, 1937 • **ak**
**ST**: **po.jd** • **CI**: h0631 • **ID**: 012
**PN**: *Protopipa carvalhoi* Miranda-Ribeiro, 1937
**PK**: *Protopipa carvalhoi** Miranda-Ribeiro, 1937
**KG**: *Pipa*[1] Laurenti, 1768
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Hemisalamandra* Dugès, 1852 • **ak**
**ST**: **po.ji** • **CI**: h0632 • **ID**: 566
**PN**: *Triton cristatus* Laurenti, 1768
**PK**: *Triton cristatus** Laurenti, 1768
**KG**: *Triturus** Rafinesque, 1815
**KF**: *Salamandridae* 1820.ga.f002

***Hemisus*** Günther, 1859 • **ky**
**ST**: **po.kn** • **CI**: h0633 • **ID**: 347
**PN**: *Engystoma guttatum* Rapp, 1842
**PK**: *Engystoma guttatum*° Rapp, 1842
**KG**: *Hemisus*[2] Günther, 1859
**KF**: *Hemisotidae* 1867.ca.f002

*Hemitriton* Van der Hoeven, 1833 • **ak**
**ST**: **po.ji** • **CI**: h0634 • **ID**: 554
**PN**: *Proteus anguinus* Laurenti, 1768
**PK**: *Proteus anguinus** Laurenti, 1768
**KG**: *Proteus** Laurenti, 1768
**KF**: *Proteidae* 1831.ba.f002

*Hemitriton* Dugès, 1852 • **ak**
**ST**: **po.jh** • **CI**: h0635 • **ID**: 563
**PN**: *Triton alpestris* Laurenti, 1768
**PK**: *Triton alpestris** Laurenti, 1768
**KG**: *Ichthyosaura*[1] Sonnini+1, 1801
**KF**: *Salamandridae* 1820.ga.f002

*Hemitrypus* Cope, 1877 ‡ • **ak**
**ST**: **po.jd** • **CI**: h0636 • **ID**: †155
**PN**: *Hemitrypus jordanianus* Cope 1877 ‡
**PK**: *Hedronchus sternbergii*° Cope, 1877 †
**KG**: *Hedronchus*° Cope, 1877 †
**KF**: *Scapherpetidae* 1959.aa.f001 †

***Hensonbatrachus*** Gardner+1, 2015 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0637 • **ID**: †026
**PN**: *Hensonbatrachus kermiti* Gardner+1, 2015 ‡
**PK**: *Hensonbatrachus kermiti*° Gardner+1, 2015 †
**KG**: *Hensonbatrachus*° Gardner+1, 2015 †
**KF**: **Anura** Familia *Incertae sedis*

*Heredia* Girard, 1857 • **ak**
**ST**: **po.jd** • **CI**: h0638 • **ID**: 550
**PN**: *Heredia oregonensis* Girard, 1857
**PK**: *Ensatina eschscholtzii** Gray, 1850
**KG**: *Ensatina** Gray, 1850
**KF**: *Plethodontidae* 1850.ga.f002

***Herpele*** Peters, 1880 • **ky**
**ST**: **po.kn** • **CI**: h0639 • **ID**: 497
**PN**: *Caecilia squalostoma* Stutchbury, 1834
**PK**: *Caecilia squalostoma** Stutchbury, 1834
**KG**: *Herpele** Peters, 1880
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Hesperocrinia* Wells+1, 1985 • **ak**
**ST**: **po.jd** • **CI**: h0640 • **ID**: 268
**PN**: *Crinia leai* Fletcher, 1898
**PK**: *Crinia leai*° Fletcher, 1898
**KG**: *Geocrinia*[3] Blake, 1973
**KF**: *Myobatrachidae* 1850.sa.f001

***Heterixalus*** Laurent, 1944 • **ky**
**ST**: **po.kn** • **CI**: h0641 • **ID**: 335
**PN**: *Eucnemis madagascariensis* Duméril+1, 1841
**PK**: *Eucnemis madagascariensis** Duméril+1, 1841
**KG**: *Heterixalus** Laurent, 1944
**KF**: *Hyperoliidae* 1943.lb.f001

*Heteroclitotriton* Stefano, 1903 ‡ • **ak**
**ST**: **po.jd** • **CI**: h0642 • **ID**: 578
**PN**: *Heteroclitotriton zitelli* Stefano, 1903 ‡
**PK**: *Salamandra sansaniensis*° Lartet, 1851 †
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *Salamandridae* 1820.ga.f002

*Heteroglossa* Nietner, 1856 • **zh**
**ST**: **zo** • **CI**: zh043

*Heteroglossa*: Hallowell 1857 • **an**
**ST**: **al** • **CI**: n0048 • **ID**: 550
**PN**: *Heredia oregonensis* Girard, 1856
**PK**: *Ensatina eschscholtzii** Gray, 1850
**KG**: *Ensatina** Gray, 1850
**KF**: *Plethodontidae* 1850.ga.f002

*Heteroglossa* Hallowell, 1858 • **ak**
**ST**: **po.jh** • **CI**: h0643 • **ID**: 350
**PN**: *Heteroglossa africana* Hallowell, 1858
**PK**: *Heteroglossa africana** Hallowell, 1858
**KG**: *Phrynobatrachus** Günther, 1862
**KF**: *Phrynobatrachidae* 1941.lb.f001

*Heteropelis* Laurent, 1941 • **ak**
**ST**: **po.jd** • **CI**: h0644 • **ID**: 325
**PN**: *Leptopelis parkeri* Barbour+1, 1928
**PK**: *Leptopelis parkeri*° Barbour+1, 1928
**KG**: *Leptopelis*[2] Günther, 1859
**KF**: *Arthroleptidae* 1869.mc.f011

*Heterotriton* Gray, 1850 • **AK**
**ST**: **PO.JD** • **CI**: h0645 • **ID**: 555
**PN**: *Salamandra ingens* Green, 1831
**PK**: *Salamandra tigrina** Green, 1825
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

*Hightonia* Vieites[+3], 2011 • **AK**
**ST**: **PO.JD** • **CI**: h0646 • **ID**: 551
**PN**: *Ambystoma vehiculum* Cooper, 1869
**PK**: *Ambystoma vehiculum** Cooper, 1869
**KG**: *Plethodon** Tschudi, 1838
**KF**: *PLETHODONTIDAE* 1850.ga.f002

***Hildebrandtia*** Nieden, 1907 • **KY**
**ST**: **PO.KN** • **CI**: h0647 • **ID**: 462
**PN**: *Pyxicephalus ornatus* Peters, 1878
**PK**: *Pyxicephalus ornatus** Peters, 1878
**KG**: *Hildebrandtia** Nieden, 1907
**KF**: *PTYCHADENIDAE* 1987.da.f002

*Hiperoodon*: Philippi 1902 • **AN**
**ST**: **LI** • **CI**: n0049 • **ID**: 309
**PN**: *Engystoma marmoratum* Guérin-Méneville, 1838
**PK**: *Rana systoma** Schneider, 1799
**KG**: *Uperodon** Duméril[+1], 1841
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

***Holoaden*** Miranda-Ribeiro, 1920 • **KY**
**ST**: **PO.KN** • **CI**: h0648 • **ID**: 068
**PN**: *Holoaden luederwaldti* Miranda-Ribeiro, 1920
**PK**: *Holoaden luederwaldti** Miranda-Ribeiro, 1920
**KG**: *Holoaden** Miranda-Ribeiro, 1920
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Holonectes* Peters, 1863 • **AK**
**ST**: **PO.JD** • **CI**: h0649 • **ID**: 310
**PN**: *Hylaedactylus* (*Holonectes*) *conjunctus* Peters, 1863
**PK**: *Hylaedactylus* (*Holonectes*) *conjunctus** Peters, 1863
**KG**: *Kaloula** Gray, 1831
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Hoplobactrachus*: Theobald 1868 • **AN**
**ST**: **AM** • **CI**: n0050 • **ID**: 374
**PN**: *Hoplobatrachus ceylanicus* Peters, 1863
**PK**: *Rana crassa** Jerdon, 1853
**KG**: *Hoplobatrachus*[1] Peters, 1863
**KF**: *DICROGLOSSIDAE* 1987.da.f004

***Hoplobatrachus*** Peters, 1863 • **KY**
**ST**: **PO.KN** • **CI**: h0650 • **ID**: 374
**PN**: *Hoplobatrachus ceylanicus* Peters, 1863
**PK**: *Rana crassa** Jerdon, 1853
**KG**: *Hoplobatrachus*[1] Peters, 1863
**KF**: *DICROGLOSSIDAE* 1987.da.f004

***Hoplophryne*** Barbour[+1], 1928 • **KY**
**ST**: **PO.KN** • **CI**: h0651 • **ID**: 303
**PN**: *Hoplophryne uluguruensis* Barbour[+1], 1928
**PK**: *Hoplophryne uluguruensis** Barbour[+1], 1928
**KG**: *Hoplophryne** Barbour[+1], 1928
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

***Horezmia*** Nessov, 1981 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0652 • **ID**: †167
**PN**: *Horezmia gracile* Nessov, 1981 ‡
**PK**: *Horezmia gracile*° Nessov, 1981 †
**KG**: *Horezmia*° Nessov, 1981 †
**KF**: *CRYPTOBRANCHIDAE* 1826.fb.f003

*Hosmeria* Wells[+1], 1985 • **AK**
**ST**: **PO.JD** • **CI**: h0653 • **ID**: 276
**PN**: *Uperoleia marmorata laevigata* Keferstein, 1867
**PK**: *Uperoleia marmorata laevigata** Keferstein, 1867
**KG**: *Uperoleia*[2] Gray, 1841
**KF**: *MYOBATRACHIDAE* 1850.sa.f001

*Houlema* Gray, 1831 • **AK**
**ST**: **PO.JD** • **CI**: h0654 • **ID**: 395
**PN**: *Houlema obscura* Gray, 1831
**PK**: *Rana lima** Gravenhorst, 1829
**KG**: *Occidozyga** Kuhl[+1], 1822
**KF**: *OCCIDOZYGIDAE* 1990.fa.f002

*Huangixalus* Fei[+2], 2012 • **AK**
**ST**: **PO.JD** • **CI**: h0655 • **ID**: 455
**PN**: *Rhacophorus translineatus* Wu, 1977
**PK**: *Rhacophorus translineatus** Wu, 1977
**KG**: *Rhacophorus** Kuhl[+1], 1822
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

*Huia* Yang, 1991 • **AK**
**ST**: **PO.JD** • **CI**: h0656 • **ID**: 403
**PN**: *Rana cavitympanum* Boulenger, 1893
**PK**: *Rana cavitympanum** Boulenger, 1893
**KG**: *Meristogenys** Yang, 1991
**KF**: *RANIDAE* 1796.ba.f001

*Huicundomantis* Paéz & Ron, 2019 • **KY**
**ST**: **PO.KN** • **CI**: h0657 • **ID**: 078
**PN**: *Eleutherodactylus phoxocephalus* Lynch, 1979
**PK**: *Eleutherodactylus phoxocephalus** Lynch, 1979
**KG**: *Pristimantis** Jiménez de la Espada, 1870
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Humerana* Dubois, 1992 • **AK**
**ST**: **PO.JD** • **CI**: h0658 • **ID**: 409
**PN**: *Rana humeralis* Boulenger, 1887
**PK**: *Rana humeralis*° Boulenger, 1887
**KG**: *Hylarana** Tschudi, 1838
**KF**: *RANIDAE* 1796.ba.f001

***Hungarobatrachus*** Szentesi[+1], 2010 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0659 • **ID**: †104
**PN**: *Hungarobatrachus szukacsi* Szentesi[+1], 2010 ‡
**PK**: *Hungarobatrachus szukacsi*° Szentesi[+1], 2010 †
**KG**: *Hungarobatrachus*° Szentesi[+1], 2010 †
**KF**: **SCOPTANURA** Familia *INCERTAE SEDIS*

***Hyalinobatrachium*** Ruíz-Carranza[+1], 1991 • **KY**
**ST**: **PO.KN** • **CI**: h0660 • **ID**: 167
**PN**: *Hylella fleischmanni* Boettger, 1893
**PK**: *Hylella fleischmanni** Boettger, 1893
**KG**: *Hyalinobatrachium** Ruíz-Carranza[+1], 1991
**KF**: *CENTROLENIDAE* 1951.ta.f001

*Hyas* Leach, 1814 • **ZH**
**ST**: **ZO** • **CI**: zh044

*Hyas* Wagler, 1830 • **AK**
**ST**: **PO.JH** • **CI**: h0661 • **ID**: 204

**PN**: *Rana arborea* Linnaeus, 1758
**PK**: *Rana arborea** Linnaeus, 1758
**KG**: *Hyla** Laurenti, 1768
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Hydochthon*: Gray 1831 • **AN**
**ST**: **AM** • **CI**: n0051 • **ID**: 554
**PN**: *Proteus anguinus* Laurenti, 1768
**PK**: *Proteus anguinus** Laurenti, 1768
**KG**: *Proteus** Laurenti, 1768
**KF**: *PROTEIDAE* 1831.ba.f002

*Hydrobatrachus* Stadie, 1962 • **AK**
**ST**: **PO.JD** • **CI**: h0662 • **ID**: 351
**PN**: *Rana beccarii* Boulenger, 1911
**PK**: *Rana beccarii*° Boulenger, 1911
**KG**: *Conraua** Nieden, 1908
**KF**: *CONRAUIDAE* 1992.da.f001

*Hydrognathus* Dubois[+1], 2012 • **AK**
**ST**: **PO.JD** • **CI**: h0663 • **ID**: 548
**PN**: *Desmognathus brimleyorum* Stejneger, 1895
**PK**: *Desmognathus brimleyorum** Stejneger, 1895
**KG**: *Desmognathus** Baird, 1850
**KF**: *PLETHODONTIDAE* 1850.ga.f002

*Hydrolaetare* Gallardo, 1963 • **AK**
**ST**: **PO.JD** • **CI**: h0664 • **ID**: 253
**PN**: *Limnomedusa schmidti* Cochran[+1], 1959
**PK**: *Limnomedusa schmidti*° Cochran[+1], 1959
**KG**: *Leptodactylus*[1] Fitzinger, 1826
**KF**: *LEPTODACTYLIDAE* ||1838.ta.f001||-1896.wa.f001

***Hydromantes*** Gistel, 1848 • **KY**
**ST**: **PO.KC** • **CI**: h0665 • **ID**: 544
**PN**: *Spelerpes platycephalus* Camp, 1916
**PK**: *Spelerpes platycephalus** Camp, 1916
**KG**: *Hydromantes** Gistel, 1848
**KF**: *PLETHODONTIDAE* 1850.ga.f002

*Hydromantoides* Lanza[+1], 1981 • **AK**
**ST**: **PO.JI** • **CI**: h0666 • **ID**: 544
**PN**: *Spelerpes platycephalus* Camp, 1916
**PK**: *Spelerpes platycephalus** Camp, 1916
**KG**: *Hydromantes** Gistel, 1848
**KF**: *PLETHODONTIDAE* 1850.ga.f002

*Hydrophylax* Fitzinger, 1843 • **AK**
**ST**: **PO.JD** • **CI**: h0667 • **ID**: 409
**PN**: *Rana malabarica* Tschudi, 1838
**PK**: *Rana malabarica** Tschudi, 1838
**KG**: *Hylarana** Tschudi, 1838
**KF**: *RANIDAE* 1796.ba.f001

*Hydrosalamandra* Leuckart, 1840 • **AK**
**ST**: **PO.JD** • **CI**: h0668 • **ID**: 503
**PN**: *Megalobatrachus sieboldi* Tschudi, 1837 ‡
**PK**: *Triton japonicus** Temminck, 1836
**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *CRYPTOBRANCHIDAE* 1826.fb.f003

*Hydroscopes* Gistel, 1848 • **AK**
**ST**: **NL.JD** • **CI**: h0669 • **ID**: 505
**PN**: *Salamandra naevia* Temminck[+1], 1838
**PK**: *Salamandra naevia** Temminck[+1], 1838
**KG**: *Hynobius** Tschudi, 1838
**KF**: *HYNOBIIDAE* ||1856.ha.f001||-1859.cb.f002

*Hydrospelaeus* Leuckart, 1821 • **AK**
**ST**: **NL.JI** • **CI**: h0670 • **ID**: 554
**PN**: *Proteus anguinus* Laurenti, 1768
**PK**: *Proteus anguinus** Laurenti, 1768
**KG**: *Proteus** Laurenti, 1768
**KF**: *PROTEIDAE* 1831.ba.f002

*Hydrostentor*: Fitzinger 1861 • **AN**
**ST**: **AL** • **CI**: n0052 • **ID**: 374
**PN**: *Rana tigrina pantherina* Steindachner, 1867
**PK**: *Rana chinensis** Osbeck, 1765
**KG**: *Hoplobatrachus*[1] Peters, 1863
**KF**: *DICROGLOSSIDAE* 1987.da.f004

*Hydryla*: Rafinesque 1815 • **AN**
**ST**: **AL** • **CI**: n0053 • **ID**: 204
**PN**: *Rana arborea* Linnaeus, 1758
**PK**: *Rana arborea** Linnaeus, 1758
**KG**: *Hyla** Laurenti, 1768
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

***Hyla*** Laurenti, 1768 • **KY**
**ST**: **PO.RP** • **CI**: h0671 • **ID**: 204
**PN**: *Hyla viridis* Laurenti, 1768
**PK**: *Rana arborea** Linnaeus, 1758
**KG**: *Hyla** Laurenti, 1768
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Hyla* Ritgen, 1828 • **AK**
**ST**: **PO.JH** • **CI**: h0672 • **ID**: 243
**PN**: *Rana bicolor* Boddaert, 1772
**PK**: *Rana bicolor** Boddaert, 1772
**KG**: *Phyllomedusa** Wagler, 1830
**KF**: *PHYLLOMEDUSIDAE* 1858.gc.f009

*Hyla* Burmeister, 1856 • **AK**
**ST**: **PO.JH** • **CI**: h0673 • **ID**: 189
**PN**: *Rana boans* Linnaeus, 1758
**PK**: *Rana boans** Linnaeus, 1758
**KG**: *Boana** Gray, 1825
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Hylactophryne* Lynch, 1968 • **AK**
**ST**: **PO.JD** • **CI**: h0674 • **ID**: 059
**PN**: *Hylodes augusti* Dugés, 1879
**PK**: *Hylodes augusti** Dugés, 1879
**KG**: *Craugastor** Cope, 1862
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Hyladactyla*: Tschudi, 1838 • **AN**
**ST**: **LI** • **CI**: n0054 • **ID**: 310
**PN**: *Bombinator baleatus* Müller, 1836
**PK**: *Bombinator baleatus** Müller, 1836
**KG**: *Kaloula** Gray, 1831
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Hyladactylus* Tschudi, 1838 • **AK**
**ST**: **LC.JD** • **CI**: h0675 • **ID**: 310
**PN**: *Bombinator baleatus* Müller, 1836
**PK**: *Bombinator baleatus** Müller, 1836
**KG**: *Kaloula** Gray, 1831
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Hylaedactyla*: Duméril[+1] 1841 • AN
**ST**: AL • **CI**: n0055 • **ID**: 310
**PN**: *Bombinator baleatus* Müller, 1836
**PK**: *Bombinator baleatus** Müller, 1836
**KG**: *Kaloula** Gray, 1831
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Hylaedactylus* Duméril[+1], 1841 • AK
**ST**: NT.JD • **CI**: h0676 • **ID**: 310
**PN**: *Bombinator baleatus* Müller, 1836
**PK**: *Bombinator baleatus** Müller, 1836
**KG**: *Kaloula** Gray, 1831
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Hylaemorphus*: Jan 1857 • AN
**ST**: AL • **CI**: n0056 • **ID**: 100
**PN**: *Hylaemorphus pluto* Schmidt, 1858
**PK**: *Phrynidium varium** Lichtenstein[+2], 1856
**KG**: *Atelopus** Duméril[+1], 1841
**KF**: *BUFONIDAE* 1825.gb.f004

*Hylaemorphus* Schmidt, 1857 • AK
**ST**: PO.JD • **CI**: h0677 • **ID**: 100
**PN**: *Hylaemorphus dumerilii* Schmidt, 1857
**PK**: *Phrynidium varium** Lichtenstein[+2], 1856
**KG**: *Atelopus** Duméril[+1], 1841
**KF**: *BUFONIDAE* 1825.gb.f004

***Hylaeobatrachus*** Dollo, 1884 ‡ • KY
**ST**: PO.KN • **CI**: h0678 • **ID**: †146
**PN**: *Hylaeobatrachus croyii* Dollo, 1884 ‡
**PK**: *Hylaeobatrachus croyii*° Dollo, 1884 †
**KG**: *Hylaeobatrachus*° Dollo, 1884 †
**KF**: *HYLAEOBATRACHIDAE* 1889.la.f001 †

***Hylambates*** Duméril, 1853 • KY
**ST**: PO.KN • **CI**: h0679 • **ID**: 337
**PN**: *Hylambates maculatus* Duméril, 1853
**PK**: *Hylambates maculatus** Duméril, 1853
**KG**: *Hylambates** Duméril, 1853
**KF**: *HYPEROLIIDAE* 1943.lb.f001

*Hylanus*: Rafinesque 1815 • AN
**ST**: AL • **CI**: n0057 • **ID**: 204
**PN**: *Rana arborea* Linnaeus, 1758
**PK**: *Rana arborea** Linnaeus, 1758
**KG**: *Hyla** Laurenti, 1768
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Hylapesia*: Savage[+3] 2007 • AN
**ST**: AM • **CI**: n0058 • **ID**: 189
**PN**: *Calamita punctatus* Schneider, 1799
**PK**: *Calamita punctatus** Schneider, 1799
**KG**: *Boana** Gray, 1825
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Hylaplesia* Boie *in* Schlegel, 1826*b* • AK
**ST**: PO.CA • **CI**: h0680 • **ID**: 189
**PN**: *Calamita punctatus* Schneider, 1799
**PK**: *Calamita punctatus** Schneider, 1799
**KG**: *Boana** Gray, 1825
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Hylaplesia* Boie *in* Boie, 1828 • AK
**ST**: PO.JD • **CI**: h0681 • **ID**: 189
**PN**: *Calamita punctatus* Schneider, 1799
**PK**: *Calamita punctatus** Schneider, 1799
**KG**: *Boana** Gray, 1825
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

***Hylarana*** Tschudi, 1838 • KY
**ST**: PO.KN • **CI**: h0682 • **ID**: 409
**PN**: *Hyla erythraea* Schlegel, 1827
**PK**: *Hyla erythraea** Schlegel, 1827
**KG**: *Hylarana** Tschudi, 1838
**KF**: *RANIDAE* 1796.ba.f001

*Hylaria* Rafinesque, 1814 • AK
**ST**: NT.JI • **CI**: h0683 • **ID**: 204
**PN**: *Hyla viridis* Laurenti, 1768
**PK**: *Rana arborea** Linnaeus, 1758
**KG**: *Hyla** Laurenti, 1768
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Hylarthroleptis* Ahl, 1925 • AK
**ST**: PO.JD • **CI**: h0684 • **ID**: 350
**PN**: *Hylarthroleptis accraensis* Ahl, 1925
**PK**: *Hylarthroleptis accraensis** Ahl, 1925
**KG**: *Phrynobatrachus** Günther, 1862
**KF**: *PHRYNOBATRACHIDAE* 1941.lb.f001

*Hyledactylus* Casto de Elera, 1895 • AK
**ST**: NT.JD • **CI**: h0685 • **ID**: 310
**PN**: *Bombinator baleatus* Müller, 1836
**PK**: *Bombinator baleatus** Müller, 1836
**KG**: *Kaloula** Gray, 1831
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Hylella* Reinhardt[+1], 1862 • AK
**ST**: PO.JD • **CI**: h0686 • **ID**: 194
**PN**: *Hylella tenera* Reinhardt[+1], 1862
**PK**: *Hyla bipunctata** Spix, 1824
**KG**: *Dendropsophus*[1] Fitzinger, 1843
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Hylesinus* Fabricius, 1801 • ZH
**ST**: ZO • **CI**: zh045

*Hylesinus*: Rafinesque 1815 • AN
**ST**: AL • **CI**: n0059 • **ID**: 204
**PN**: *Rana arborea* Linnaeus, 1758
**PK**: *Rana arborea** Linnaeus, 1758
**KG**: *Hyla** Laurenti, 1768
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

***Hyliola*** Mocquard, 1899 • KY
**ST**: PO.KN • **CI**: h0687 • **ID**: 199
**PN**: *Hyla regilla* Baird[+1], 1852
**PK**: *Hyla regilla** Baird[+1], 1852
**KG**: *Hyliola** Mocquard, 1899
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Hylixalus* Boulenger, 1882 • AK
**ST**: NT.JI • **CI**: h0688 • **ID**: 053
**PN**: *Hyloxalus fuliginosus* Jiménez de la Espada, 1870
**PK**: *Hyloxalus fuliginosus*° Jiménez de la Espada, 1870
**KG**: *Hyloxalus*[2] Jiménez de la Espada, 1870
**KF**: *DENDROBATIDAE* ||1850.bb.f006||-1865.ca.f002

*Hylobatrachus* Laurent, 1943 • AK
**ST**: PO.JD • **CI**: h0689 • **ID**: 432

**PN**: *Rana cowanii* Boulenger, 1882
**PK**: *Rana cowanii** Boulenger, 1882
**KG**: *Mantidactylus** Boulenger, 1895
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Hylodactylus* Agassiz, 1847 • **ak**
**ST**: **nt.jd** • **CI**: h0690 • **ID**: 310
**PN**: *Bombinator baleatus* Müller, 1836
**PK**: *Bombinator baleatus** Müller, 1836
**KG**: *Kaloula** Gray, 1831
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Hylodes*** Fitzinger, 1826 • **ky**
**ST**: **po.kn** • **CI**: h0691 • **ID**: 182
**PN**: *Hyla ranoides* Spix, 1824
**PK**: *Hyla nasus** Lichtenstein, 1823
**KG**: *Hylodes*[1] Fitzinger, 1826
**KF**: *Hylodidae* 1858.gc.f010

***Hylomantis*** Peters, 1873 • **ky**
**ST**: **po.kn** • **CI**: h0692 • **ID**: 239
**PN**: *Hylomantis aspera* Peters, 1873
**PK**: *Hylomantis aspera** Peters, 1873
**KG**: *Hylomantis** Peters, 1873
**KF**: *Phyllomedusidae* 1858.gc.f009

*Hylomantis* Peters, 1880 • **ak**
**ST**: **po.jh** • **CI**: h0693 • **ID**: 235
**PN**: *Hylomantis fallax* Peters, 1880
**PK**: *Hylomantis fallax** Peters, 1880
**KG**: *Litoria** Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

*Hylomedusa* Burmeister, 1856 • **ak**
**ST**: **po.jd** • **CI**: h0694 • **ID**: 189
**PN**: *Hyla crepitans* Wied-Neuwied, 1824
**PK**: *Hyla crepitans** Wied-Neuwied, 1824
**KG**: *Boana** Gray, 1825
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Hylonomus* Dawson, 1860 • **zh**
**ST**: **zo** • **CI**: zh046

*Hylonomus* Peters, 1882 • **ak**
**ST**: **po.jh** • **CI**: h0695 • **ID**: 191
**PN**: *Hylonomus bogotensis* Peters, 1882
**PK**: *Hylonomus bogotensis*° Peters, 1882
**KG**: *Hyloscirtus*[3] Peters, 1882
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Hylophorbus* Macleay, 1878 • **ak**
**ST**: **po.jd** • **CI**: h0696 • **ID**: 280
**PN**: *Hylophorbus rufescens* Macleay, 1878
**PK**: *Hylophorbus rufescens** Macleay, 1878
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Hylophryne*: Steindachner 1864 • **an**
**ST**: **al** • **CI**: n0060 • **ID**: 310
**PN**: *Hylaedactylus* (*Holonectes*) *conjunctus* Peters, 1863
**PK**: *Hylaedactylus* (*Holonectes*) *conjunctus** Peters, 1863
**KG**: *Kaloula** Gray, 1831
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Hyloplesia* Agassiz, 1847 • **ak**
**ST**: **nt.jd** • **CI**: h0697 • **ID**: 189
**PN**: *Calamita punctatus* Schneider, 1799
**PK**: *Calamita punctatus** Schneider, 1799
**KG**: *Boana** Gray, 1825
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Hylopsis*: Rafinesque 1815 • **an**
**ST**: **al** • **CI**: n0061 • **ID**: 204
**PN**: *Rana arborea* Linnaeus, 1758
**PK**: *Rana arborea** Linnaeus, 1758
**KG**: *Hyla** Laurenti, 1768
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Hylopsis* Werner, 1894 • **ak**
**ST**: **po.jd** • **CI**: h0698 • **ID**: 234
**PN**: *Hylopsis platycephalus* Werner, 1894
**PK**: *Hylopsis platycephalus*° Werner, 1894
**KG**: *Sphaenorhynchus** Tschudi, 1838
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Hylorana* Günther, 1864 • **ak**
**ST**: **nt.ji** • **CI**: h0699 • **ID**: 409
**PN**: *Hyla erythraea* Schlegel, 1827
**PK**: *Hyla erythraea** Schlegel, 1827
**KG**: *Hylarana** Tschudi, 1838
**KF**: *Ranidae* 1796.ba.f001

*Hylorhina* Agassiz, 1847 • **ak**
**ST**: **nt.ji** • **CI**: h0700 • **ID**: 178
**PN**: *Hylorina sylvatica* Bell, 1843
**PK**: *Hylorina sylvatica** Bell, 1843
**KG**: *Hylorina** Bell, 1843
**KF**: *Batrachylidae* 1965.ga.f002

***Hylorina*** Bell, 1843 • **ky**
**ST**: **po.kn** • **CI**: h0701 • **ID**: 178
**PN**: *Hylorina sylvatica* Bell, 1843
**PK**: *Hylorina sylvatica** Bell, 1843
**KG**: *Hylorina** Bell, 1843
**KF**: *Batrachylidae* 1965.ga.f002

***Hyloscirtus*** Peters, 1882 • **ky**
**ST**: **po.kn** • **CI**: h0702 • **ID**: 191
**PN**: *Hylonomus bogotensis* Peters, 1882
**PK**: *Hylonomus bogotensis*° Peters, 1882
**KG**: *Hyloscirtus*[3] Peters, 1882
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Hyloxalus*** Jiménez de la Espada, 1870 • **ky**
**ST**: **po.kn** • **CI**: h0703 • **ID**: 053
**PN**: *Hyloxalus fuliginosus* Jiménez de la Espada, 1870
**PK**: *Hyloxalus fuliginosus*° Jiménez de la Espada, 1870
**KG**: *Hyloxalus*[2] Jiménez de la Espada, 1870
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

***Hymenochirus*** Boulenger, 1896 • **ky**
**ST**: **po.kn** • **CI**: h0704 • **ID**: 010
**PN**: *Xenopus boettgeri* Tornier, 1896
**PK**: *Xenopus boettgeri** Tornier, 1896
**KG**: *Hymenochirus** Boulenger, 1896
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Hynobius*** Tschudi, 1838 • **ky**
**ST**: **po.kn** • **CI**: h0705 • **ID**: 505
**PN**: *Salamandra nebulosa* Temminck[+1], 1838
**PK**: *Salamandra nebulosa** Temminck[+1], 1838

KG: *Hynobius** Tschudi, 1838
KF: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002
*Hyobates*: Jan 1857 • an
ST: al • CI: n0062 • ID: 250
PN: *Eupemphix fuscomaculatus* Steindachner, 1864
PK: *Liuperus biligonigerus** Cope, 1861
KG: *Physalaemus** Fitzinger, 1826
KF: *Leiuperidae* 1850.bb.f010
***Hyogobatrachus*** Ikeda[+2], 2016 ‡ • ky
ST: po.kn • CI: h0706 • ID: †056
PN: *Hyogobatrachus wadai* Ikeda[+2], 2016 ‡
PK: *Hyogobatrachus wadai*° Ikeda[+2], 2016 †
KG: *Hyogobatrachus*° Ikeda[+2], 2016 †
KF: Hydrobatrachia Familia *Incertae sedis*
*Hyophryne* Carvalho, 1954 • ak
ST: po.jd • CI: h0707 • ID: 302
PN: *Hyophryne histrio* Carvalho, 1954
PK: *Hyophryne histrio*° Carvalho, 1954
KG: *Stereocyclops** Cope, 1870
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Hyperobatrachus* Rye, 1881 • ak
ST: nt.ji • CI: h0708 • ID: 509
PN: *Desmodactylus pinchonii* David, 1872
PK: *Desmodactylus pinchonii** David, 1872
KG: *Batrachuperus** Boulenger, 1878
KF: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002
*Hyperodon* Duméril, 1804 • zh
ST: zo • CI: zh047
*Hyperodon* Agassiz, 1847 • ak
ST: nt.jh • CI: h0709 • ID: 309
PN: *Engystoma marmoratum* Guérin-Méneville, 1838
PK: *Rana systoma** Schneider, 1799
KG: *Uperodon** Duméril[+1], 1841
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Hyperolia* Agassiz, 1847 • ak
ST: nt.ji • CI: h0710 • ID: 276
PN: *Uperoleia marmorata* Gray, 1841
PK: *Uperoleia marmorata*° Gray, 1841
KG: *Uperoleia*[2] Gray, 1841
KF: *Myobatrachidae* 1850.sa.f001
***Hyperolius*** Rapp, 1842 • ky
ST: po.kn • CI: h0711 • ID: 331
PN: *Hyla horstockii* Schlegel, 1837
PK: *Hyla horstockii** Schlegel, 1837
KG: *Hyperolius** Rapp, 1842
KF: *Hyperoliidae* 1943.lb.f001
*Hyperolius*: Boulenger 1882 • an
ST: al • CI: n0063 • ID: 276
PN: *Uperoleia marmorata* Gray, 1841
PK: *Uperoleia marmorata*° Gray, 1841
KG: *Uperoleia*[2] Gray, 1841
KF: *Myobatrachidae* 1850.sa.f001
*Hyperoodon* La Cepède, 1804 • zh
ST: zo • CI: zh048
*Hyperoodon* Philippi, 1902 • ak
ST: lc.jh • CI: h0712 • ID: 309
PN: *Engystoma marmoratum* Guérin-Méneville, 1838
PK: *Rana systoma** Schneider, 1799
KG: *Uperodon** Duméril[+1], 1841
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Hypochthon* Merrem, 1820 • ak
ST: nt.ji • CI: h0713 • ID: 554
PN: *Proteus anguinus* Laurenti, 1768
PK: *Proteus anguinus** Laurenti, 1768
KG: *Proteus** Laurenti, 1768
KF: *Proteidae* 1831.ba.f002
***Hypodactylus*** Hedges[+2], 2008 • ky
ST: po.kn • CI: h0714 • ID: 074
PN: *Eleutherodactylus elassodiscus* Lynch, 1973
PK: *Eleutherodactylus elassodiscus** Lynch, 1973
KG: *Hypodactylus** Hedges[+2], 2008
KF: *Brachycephalidae* 1858.gc.f002
*Hypodictyon* Cope, 1885 • ak
ST: po.jd • CI: h0715 • ID: 078
PN: *Phyllobates ridens* Cope, 1866
PK: *Phyllobates ridens** Cope, 1866
KG: *Pristimantis** Jiménez de la Espada, 1870
KF: *Brachycephalidae* 1858.gc.f002
***Hypogeophis*** Peters, 1880 • ky
ST: po.kn • CI: h0716 • ID: 482
PN: *Coecilia rostrata* Cuvier, 1829
PK: *Coecilia rostrata** Cuvier, 1829
KG: *Hypogeophis** Peters, 1880
KF: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|
***Hypopachus*** Keferstein, 1867 • ky
ST: po.kn • CI: h0717 • ID: 300
PN: *Hypopachus seebachii* Keferstein, 1867
PK: *Engystoma variolosum** Cope, 1866
KG: *Hypopachus** Keferstein, 1867
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Hypselotriton*** Wolterstorff, 1934 • ky
ST: po.kn • CI: h0718 • ID: 559
PN: *Molge wolterstorffi* Boulenger, 1905
PK: *Molge wolterstorffi*° Boulenger, 1905
KG: *Hypselotriton*[2] Wolterstorff, 1934
KF: *Salamandridae* 1820.ga.f002
*Hypsiboas* Wagler, 1830 • ak
ST: po.jd • CI: h0719 • ID: 189
PN: *Hyla palmata* Bonnaterre, 1789
PK: *Rana boans** Linnaeus, 1758
KG: *Boana** Gray, 1825
KF: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Hypsipsophus* Fitzinger, 1843 • ak
ST: po.jd • CI: h0720 • ID: 189
PN: *Hyla xerophilla* Duméril[+1], 1841
PK: *Hyla crepitans** Wied-Neuwied, 1824
KG: *Boana** Gray, 1825
KF: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Hypsirana* Kinghorn, 1928 • ak
ST: po.jd • CI: h0721 • ID: 369
PN: *Hypsirana heffernani* Kinghorn, 1928
PK: *Hypsirana heffernani*° Kinghorn, 1928

**KG**: *Cornufer** Tschudi, 1838
**KF**: *Ceratobatrachidae* 1884.ba.f001
*Hysaplesia* Boie *in* Schlegel, 1826*a* • **AK**
**ST**: **PO.CA** • **CI**: h0722 • **ID**: 189
**PN**: *Calamita punctatus* Schneider, 1799
**PK**: *Calamita punctatus** Schneider, 1799
**KG**: *Boana** Gray, 1825
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Iberobatrachus*** Báez, 2013 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0723 • **ID**: †027
**PN**: *Iberobatrachus angelae* Báez, 2013 ‡
**PK**: *Iberobatrachus angelae*° Báez, 2013 †
**KG**: *Iberobatrachus*° Báez, 2013 †
**KF**: **Anura** Familia *Incertae sedis*
***Ichthyophis*** Fitzinger, 1826 • **KY**
**ST**: **PO.KN** • **CI**: h0724 • **ID**: 501
**PN**: *Caecilia glutinosa* Linnaeus, 1758
**PK**: *Caecilia glutinosa** Linnaeus, 1758
**KG**: *Ichthyophis** Fitzinger, 1826
**KF**: *Ichthyophiidae* 1968.ta.f001
***Ichthyosaura*** Sonnini[+1], 1801 • **KY**
**ST**: **PO.KN** • **CI**: h0725 • **ID**: 563
**PN**: *Proteus tritonius* Laurenti, 1768
**PK**: *Triton alpestris** Laurenti, 1768
**KG**: *Ichthyosaura*[1] Sonnini[+1], 1801
**KF**: *Salamandridae* 1820.ga.f002
***Idiocranium*** Parker, 1936 • **KY**
**ST**: **PO.KN** • **CI**: h0726 • **ID**: 483
**PN**: *Idiocranium russeli* Parker, 1936
**PK**: *Idiocranium russeli*° Parker, 1936
**KG**: *Idiocranium*° Parker, 1936
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|
***Ikakogi*** Guayasamin[+5], 2009 • **KY**
**ST**: **PO.KN** • **CI**: h0727 • **ID**: 168
**PN**: *Centrolene tayrona* Ruiz-Carranza[+1], 1991
**PK**: *Centrolene tayrona** Ruiz-Carranza[+1], 1991
**KG**: *Ikakogi** Guayasamin[+5], 2009
**KF**: *Centrolenidae* 1951.ta.f001
*Iliodiscus* Miranda-Ribeiro, 1920 • **AK**
**ST**: **PO.JD** • **CI**: h0728 • **ID**: 179
**PN**: *Iliodiscus dubius* Miranda-Ribeiro, 1920
**PK**: *Iliodiscus dubius*° Miranda-Ribeiro, 1920
**KG**: *Cycloramphus** Tschudi, 1838
**KF**: *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|
***Incilius*** Cope, 1863 • **KY**
**ST**: **PO.KN** • **CI**: h0729 • **ID**: 137
**PN**: *Bufo coniferus* Cope, 1862
**PK**: *Bufo coniferus** Cope, 1862
**KG**: *Incilius** Cope, 1863
**KF**: *Bufonidae* 1825.gb.f004
*Indirana*: Bauer 1985 • **AN**
**ST**: **AL** • **CI**: n0064 • **ID**: 461
**PN**: *Rana leptodactyla* Boulenger, 1882
**PK**: *Rana leptodactyla** Boulenger, 1882
**KG**: *Walkerana** Dahanukar[+5], 2016
**KF**: *Ranixalidae* 1987.da.f005
***Indirana*** Laurent, 1986 • **KY**
**ST**: **PO.KN** • **CI**: h0730 • **ID**: 460
**PN**: *Polypedates beddomii* Günther, 1875
**PK**: *Polypedates beddomii** Günther, 1875
**KG**: *Indirana** Laurent, 1986
**KF**: *Ranixalidae* 1987.da.f005
***Indobatrachus*** Noble, 1930 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0731 • **ID**: †103
**PN**: *Rana pusilla* Owen, 1847 ‡
**PK**: *Rana pusilla*° Owen, 1847 †
**KG**: *Indobatrachus*° Noble, 1930 †
**KF**: *Myobatrachidae* 1850.sa.f001
***Indorana*** Folie[+6], 2013 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0732 • **ID**: †106
**PN**: *Indorana prasadi* Folie[+6], 2013 ‡
**PK**: *Indorana prasadi*° Folie[+6], 2013 †
**KG**: *Indorana*° Folie[+6], 2013 †
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001
*Indosylvirana* Oliver[+3], 2015 • **AK**
**ST**: **PO.JD** • **CI**: h0733 • **ID**: 409
**PN**: *Rana flavescens* Jerson, 1853
**PK**: *Rana flavescens*° Jerson, 1853
**KG**: *Hylarana** Tschudi, 1838
**KF**: *Ranidae* 1796.ba.f001
***Indotyphlus*** Taylor, 1960 • **KY**
**ST**: **PO.KN** • **CI**: h0734 • **ID**: 486
**PN**: *Indotyphlus battersbyi* Taylor, 1960
**PK**: *Indotyphlus battersbyi** Taylor, 1960
**KG**: *Indotyphlus** Taylor, 1960
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|
***Ingerana*** Dubois, 1987 • **KY**
**ST**: **PO.KN** • **CI**: h0735 • **ID**: 393
**PN**: *Rana tenasserimensis* Sclater, 1892
**PK**: *Rana tenasserimensis** Sclater, 1892
**KG**: *Ingerana** Dubois, 1987
**KF**: *Occidozygidae* 1990.fa.f002
***Ingerophrynus*** Frost[+18], 2006 • **KY**
**ST**: **PO.KN** • **CI**: h0736 • **ID**: 117
**PN**: *Bufo biporcatus* Gravenhorst, 1829
**PK**: *Bufo biporcatus** Gravenhorst, 1829
**KG**: *Ingerophrynus** Frost[+18], 2006
**KF**: *Bufonidae* 1825.gb.f004
***Insuetophrynus*** Barrio, 1970 • **KY**
**ST**: **PO.KN** • **CI**: h0737 • **ID**: 184
**PN**: *Insuetophrynus acarpicus* Barrio, 1970
**PK**: *Insuetophrynus acarpicus** Barrio, 1970
**KG**: *Insuetophrynus** Barrio, 1970
**KF**: *Rhinodermatidae* 1850.bb.f011
***Iranodon*** Dubois[+1], 2012 • **KY**
**ST**: **PO.KN** • **CI**: h0738 • **ID**: 515
**PN**: *Batrachuperus persicus* Eiselt[+1], 1970
**PK**: *Batrachuperus persicus** Eiselt[+1], 1970
**KG**: *Iranodon** Dubois[+1], 2012
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002
***Iridotriton*** Evans[+4], 2005 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0739 • **ID**: †132

**PN**: *Iridotriton hechti* Evans[+4], 2005 ‡
**PK**: *Iridotriton hechti*° Evans[+4], 2005 †
**KG**: *Iridotriton*° Evans[+4], 2005 †
**KF**: **Urodela** Familia *Incertae sedis*

***Ischnocnema*** Reinhardt[+1], 1862 • **KY**
**ST**: **po.kn** • **CI**: h0740 • **ID**: 058
**PN**: *Leiuperus verrucosus* Reinhardt[+1], 1862
**PK**: *Leiuperus verrucosus** Reinhardt[+1], 1862
**KG**: *Ischnocnema** Reinhardt[+1], 1862
**KF**: *Brachycephalidae* 1858.gc.f002

*Isodactylium* Strauch, 1870 • **AK**
**ST**: **po.jd** • **CI**: h0741 • **ID**: 513
**PN**: *Isodactylium schrenckii* Strauch, 1870
**PK**: *Salamandrella keyserlingii** Dybowski, 1870
**KG**: *Salamandrella** Dybowski, 1870
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

*Isodactylus* Gray, 1845 • **ZH**
**ST**: **zo** • **CI**: zh049

*Isodactylus* Hedges[+2], 2008 • **AK**
**ST**: **po.jh** • **CI**: h0742 • **ID**: 073
**PN**: *Eleutherodactylus elassodiscus* Lynch, 1973
**PK**: *Eleutherodactylus elassodiscus** Lynch, 1973
**KG**: *Hypodactylus** Hedges[+1], 2008
**KF**: *Brachycephalidae* 1858.gc.f002

***Isthmohyla*** Faivovich[+5], 2005 • **KY**
**ST**: **po.kn** • **CI**: h0743 • **ID**: 205
**PN**: *Hyla pseudopuma* Günther, 1901
**PK**: *Hyla pseudopuma** Günther, 1901
**KG**: *Isthmohyla** Faivovich[+5], 2005
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Isthmura*** Dubois[+1], 2012 • **KY**
**ST**: **po.kn** • **CI**: h0744 • **ID**: 524
**PN**: *Spelerpes bellii* Gray, 1850
**PK**: *Spelerpes bellii** Gray, 1850
**KG**: *Isthmura** Dubois[+1], 2012
**KF**: *Plethodontidae* 1850.ga.f002

***Itapotihyla*** Faivovich[+5], 2005 • **KY**
**ST**: **po.kn** • **CI**: h0745 • **ID**: 220
**PN**: *Hyla langsdorffii* Duméril[+1], 1841
**PK**: *Hyla langsdorffii** Duméril[+1], 1841
**KG**: *Itapotihyla** Faivovich[+5], 2005
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Itemirella*** Nessov, 1981 ‡ • **KY**
**ST**: **po.kn** • **CI**: h0746 • **ID**: †028
**PN**: *Itemirella cretacea* Nessov, 1981 ‡
**PK**: *Itemirella cretacea*° Nessov, 1981 †
**KG**: *Itemirella*° Nessov, 1981 †
**KF**: **Anura** Familia *Incertae sedis*

***Ixalotriton*** Wake[+1], 1989 • **KY**
**ST**: **po.kn** • **CI**: h0747 • **ID**: 525
**PN**: *Ixalotriton niger* Wake[+1], 1989
**PK**: *Ixalotriton niger** Wake[+1], 1989
**KG**: *Ixalotriton** Wake[+1], 1989
**KF**: *Plethodontidae* 1850.ga.f002

*Ixalus* Ogilby, 1837 • **ZH**
**ST**: **zo** • **CI**: zh050

*Ixalus* Duméril[+1], 1841 • **AK**
**ST**: **po.jh** • **CI**: h0748 • **ID**: 447
**PN**: *Hyla aurifasciata* Schlegel, 1837
**PK**: *Hyla aurifasciata** Schlegel, 1837
**KG**: *Philautus** Gistel, 1848
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Jeholotriton*** Wang, 2000 ‡ • **KY**
**ST**: **po.kn** • **CI**: h0749 • **ID**: †133
**PN**: *Jeholotriton paradoxus* Wang, 2000 ‡
**PK**: *Jeholotriton paradoxus*° Wang, 2000 †
**KG**: *Jeholotriton*° Wang, 2000 †
**KF**: **Urodela** Familia *Incertae sedis*

*Julianus* Duellman[+2], 2016 • **AK**
**ST**: **po.jd** • **CI**: h0750 • **ID**: 232
**PN**: *Hyla uruguaya* Schmidt, 1944
**PK**: *Hyla uruguaya** Schmidt, 1944
**KG**: *Scinax*[2] Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Kababisha*** Evans[+2], 1996 ‡ • **KY**
**ST**: **po.kn** • **CI**: h0751 • **ID**: †174
**PN**: *Kababisha humarensis* Evans[+2], 1996 ‡
**PK**: *Kababisha humarensis*° Evans[+2], 1996 †
**KG**: *Kababisha*° Evans[+2], 1996 †
**KF**: *Noterpetidae* 1993.ra.f001

*Kakophrynus* Steindachner, 1863 • **AK**
**ST**: **po.jd** • **CI**: h0752 • **ID**: 347
**PN**: *Kakophrynus sudanensis* Steindachner, 1863
**PK**: *Engystoma marmoratum** Peters, 1854
**KG**: *Hemisus*[2] Günther, 1859
**KF**: *Hemisotidae* 1867.ca.f002

***Kalophrynus*** Tschudi, 1838 • **KY**
**ST**: **po.kn** • **CI**: h0753 • **ID**: 305
**PN**: *Kalophrynus pleurostigma* Tschudi, 1838
**PK**: *Kalophrynus pleurostigma** Tschudi, 1838
**KG**: *Kalophrynus** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Kalooula*: Castro de Elera, 1895 • **AN**
**ST**: **am** • **CI**: n0065 • **ID**: 310
**PN**: *Kaloula pulchra* Gray, 1831
**PK**: *Kaloula pulchra** Gray, 1831
**KG**: *Kaloula** Gray, 1831
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Kaloula*** Gray, 1831 • **KY**
**ST**: **po.kn** • **CI**: h0754 • **ID**: 310
**PN**: *Kaloula pulchra* Gray, 1831
**PK**: *Kaloula pulchra** Gray, 1831
**KG**: *Kaloula** Gray, 1831
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Kankanophryne* Heyer[+1], 1976 • **AK**
**ST**: **po.jd** • **CI**: h0755 • **ID**: 274
**PN**: *Pseudophryne occidentalis* Parker, 1940
**PK**: *Pseudophryne occidentalis*° Parker, 1940
**KG**: *Pseudophryne*[3] Fitzinger, 1843
**KF**: *Myobatrachidae* 1850.sa.f001

***Karaurus*** Ivachnenko, 1978 ‡ • **KY**
**ST**: **po.kn** • **CI**: h0756 • **ID**: †152

**PN**: *Karaurus sharovi* Ivachnenko 1978 ‡
**PK**: *Karaurus sharovi*° Ivachnenko 1978 †
**KG**: *Karaurus*° Ivachnenko, 1978 †
**KF**: *Karauridae* 1978.ia.f001 †

***Karsenia*** Min[+5], 2005 • **ky**
**ST**: **po.kn** • **CI**: h0757 • **ID**: 546
**PN**: *Karsenia koreana* Min[+5], 2005
**PK**: *Karsenia koreana** Min[+5], 2005
**KG**: *Karsenia** Min[+5], 2005
**KF**: *Plethodontidae* 1850.ga.f002

*Karstotriton* Fei[+1], 2016 • **ak**
**ST**: **po.jd** • **CI**: h0758 • **ID**: 562
**PN**: *Paramesotriton zhijinensis* Li[+2], 2008
**PK**: *Paramesotriton zhijinensis** Li[+2], 2008
**KG**: *Paramesotriton** Chang, 1936
**KF**: *Salamandridae* 1820.ga.f002

***Kassina*** Girard, 1853 • **ky**
**ST**: **po.kn** • **CI**: h0759 • **ID**: 338
**PN**: *Cystignathus senegalensis* Duméril[+1], 1841
**PK**: *Cystignathus senegalensis** Duméril[+1], 1841
**KG**: *Kassina** Girard, 1853
**KF**: *Hyperoliidae* 1943.lb.f001

***Kassinula*** Laurent, 1940 • **ky**
**ST**: **po.kn** • **CI**: h0760 • **ID**: 339
**PN**: *Kassinula wittei* Laurent, 1940
**PK**: *Kassinula wittei*° Laurent, 1940
**KG**: *Kassinula*° Laurent, 1940
**KF**: *Hyperoliidae* 1943.lb.f001

*Kirtixalus* Dubois, 1987 • **ak**
**ST**: **po.jd** • **CI**: h0761 • **ID**: 444
**PN**: *Polypedates microtympanum* Günther, 1859
**PK**: *Polypedates microtympanum** Günther, 1859
**KG**: *Pseudophilautus** Laurent, 1943
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Kiyatriton*** Averianov[+1], 2002 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0762 • **ID**: †134
**PN**: *Kiyatriton leshchinskiyi* Averianov[+1], 2002 ‡
**PK**: *Kiyatriton leshchinskiyi* Averianov[+1], 2002 †
**KG**: *Kiyatriton* Averianov[+1], 2002 †
**KF**: **Urodela** Familia *Incertae sedis*

***Kizylkuma*** Nessov, 1981 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0763 • **ID**: †114
**PN**: *Kizylkuma antiqua* Nessov, 1981 ‡
**PK**: *Kizylkuma antiqua*° Nessov, 1981 †
**KG**: *Kizylkuma*° Nessov, 1981 †
**KF**: *Alytidae* 1843.fa.f008

***Koalliella*** Herre, 1950 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0764 • **ID**: †194
**PN**: *Koalliella genzeli* Herre, 1950 ‡
**PK**: *Koalliella genzeli*° Herre, 1950 †
**KG**: *Koalliella*° Herre, 1950 †
**KF**: *Salamandridae* 1820.ga.f002

***Kokartus*** Nessov, 1988 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0765 • **ID**: †153
**PN**: *Kokartus honorarius* Nessov, 1988 ‡
**PK**: *Kokartus honorarius*° Nessov, 1988 †
**KG**: *Kokartus*° Nessov, 1988 †
**KF**: *Karauridae* 1978.ia.f001 †

***Kulgeriherpeton*** Skutschas[+6], 2018 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0766 • **ID**: †135
**PN**: *Kulgeriherpeton ultimum* Skutschas[+6], 2018 ‡
**PK**: *Kulgeriherpeton ultimum* Skutschas[+6], 2018 †
**KG**: *Kulgeriherpeton* Skutschas[+6], 2018 †
**KF**: **Urodela** Familia *Incertae sedis*

***Kurixalus*** Fei[+2] *in* Fei, 1999 • **ky**
**ST**: **po.kn** • **CI**: h0767 • **ID**: 441
**PN**: *Rana eiffingeri* Boettger, 1895
**PK**: *Rana eiffingeri** Boettger, 1895
**KG**: *Kurixalus** Fei[+2] *in* Fei, 1999
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Kuruleufemia*** Gómez, 2016 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0768 • **ID**: †077
**PN**: *Kuruleufemia xenopoides* Gómez, 2016 ‡
**PK**: *Kuruleufemia xenopoides*° Gómez, 2016 †
**KG**: *Kuruleufemia*° Gómez, 2016
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Kururubatrachus*: Agnolin[+6] 2020*a* ‡ • **an**
**ST**: **al** • **CI**: n0066 • **ID**: †057
**PN**: *Kururubatrachus gondwanicus* Agnolin[+6], 2020*a* ‡
**PK**: *Kururubatrachus gondwanicus*° Agnolin[+6], 2020*b* †
**KG**: *Kururubatrachus*° Agnolin[+6], 2020*b* †
**KF**: **Hydrobatrachia** Familia *Incertae sedis*

***Kururubatrachus*** Agnolin[+6], 2020*b* ‡ • **ky**
**ST**: **po.kn** • **CI**: h0769 • **ID**: †057
**PN**: *Kururubatrachus gondwanicus* Agnolin[+6], 2020*b* ‡
**PK**: *Kururubatrachus gondwanicus*° Agnolin[+6], 2020*b* †
**KG**: *Kururubatrachus*° Agnolin[+6], 2020*b* †
**KF**: **Hydrobatrachia** Familia *Incertae sedis*

*Kyarranus* Moore, 1959 • **ak**
**ST**: **po.jd** • **CI**: h0770 • **ID**: 262
**PN**: *Kyarranus sphagnicolus* Moore, 1958
**PK**: *Kyarranus sphagnicolus** Moore, 1958
**KG**: *Philoria*[2] Spencer, 1901
**KF**: *Myobatrachidae* 1850.sa.f001

***Laccotriton*** Gao[+2], 1998 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0771 • **ID**: †136
**PN**: *Laccotriton subsolanus* Gao[+2], 1998 ‡
**PK**: *Laccotriton subsolanus*° Gao[+2], 1998 †
**KG**: *Laccotriton*° Gao[+2], 1998 †
**KF**: **Urodela** Familia *Incertae sedis*

*Lacusirana* Hillis[+1], 2005 • **ak**
**ST**: **po.jd** • **CI**: h0772 • **ID**: 415
**PN**: *Rana megapoda* Taylor, 1942
**PK**: *Rana megapoda*° Taylor, 1942
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001

*Ladailadne* Dubois, 1987 • **ak**
**ST**: **po.jd** • **CI**: h0773 • **ID**: 081
**PN**: *Eleutherodactylus jasperi* Drewry[+1], 1976
**PK**: *Eleutherodactylus jasperi*° Drewry[+1], 1976
**KG**: *Eleutherodactylus** Duméril[+1], 1841
**KF**: *Brachycephalidae* 1858.gc.f002

*Lahatnanguri* Brown[+4], 2015 • **AK**
**ST**: **PO.JD** • **CI**: h0774 • **ID**: 370
**PN**: *Platymantis levigatus* Brown[+1], 1974
**PK**: *Platymantis levigatus*° Brown[+1], 1974
**KG**: *Platymantis*[1] Günther, 1859
**KF**: *CERATOBATRACHIDAE* 1884.ba.f001

*Lalax* Hamilton, 1990 • **ZH**
**ST**: **ZO** • **CI**: zh051

*Lalax* Delorme[+3], 2006 • **AK**
**ST**: **PO.JH** • **CI**: h0775 • **ID**: 018
**PN**: *Leptolalax bourreti* Dubois, 1983
**PK**: *Leptolalax bourreti** Dubois, 1983
**KG**: *Leptobrachella*° Smith, 1925
**KF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

***Laliostoma*** Glaw[+2], 1998 • **KY**
**ST**: **PO.KN** • **CI**: h0776 • **ID**: 425
**PN**: *Tomopterna labrosa* Cope, 1868
**PK**: *Tomopterna labrosa** Cope, 1868
**KG**: *Laliostoma** Glaw[+2], 1998
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

*Lalos* Dubois[+4], 2010 • **AK**
**ST**: **PO.JD** • **CI**: h0777 • **ID**: 018
**PN**: *Leptolalax bourreti* Dubois, 1983
**PK**: *Leptolalax bourreti** Dubois, 1983
**KG**: *Leptobrachella*° Smith, 1925
**KF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

*Lanebatrachus* Taylor, 1941 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0778 • **ID**: 555
**PN**: *Lanebatrachus martini* Taylor, 1941 ‡
**PK**: *Plioambystoma kansense*° Adams[+1], 1929 †
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

***Lankanectes*** Dubois[+1], 2001 • **KY**
**ST**: **PO.KN** • **CI**: h0779 • **ID**: 399
**PN**: *Rana corrugata* Peters, 1863
**PK**: *Rana corrugata** Peters, 1863
**KG**: *Lankanectes** Dubois[+1], 2001
**KF**: *NYCTIBATRACHIDAE* 1993.ba.f001

***Lanzarana*** Clarke, 1982 • **KY**
**ST**: **PO.KN** • **CI**: h0780 • **ID**: 463
**PN**: *Hildebrandtia largeni* Lanza, 1978
**PK**: *Hildebrandtia largeni*° Lanza, 1978
**KG**: *Lanzarana*° Clarke, 1982
**KF**: *PTYCHADENIDAE* 1987.da.f002

***Laotriton*** Dubois[+1], 2009 • **KY**
**ST**: **PO.KN** • **CI**: h0781 • **ID**: 560
**PN**: *Paramesotriton laoensis* Stuart[+1], 2002
**PK**: *Paramesotriton laoensis** Stuart[+1], 2002
**KG**: *Laotriton** Dubois[+1], 2009
**KF**: *SALAMANDRIDAE* 1820.ga.f002

*Larvarius* Rafinesque, 1815 • **AK**
**ST**: **NT.JI** • **CI**: h0782 • **ID**: 554
**PN**: *Proteus anguinus* Laurenti, 1768
**PK**: *Proteus anguinus** Laurenti, 1768
**KG**: *Proteus** Laurenti, 1768
**KF**: *PROTEIDAE* 1831.ba.f002

***Latoglossus*** Hossini, 2000 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0783 • **ID**: †117
**PN**: *Latoglossus zraus* Hossini, 2000 ‡
**PK**: *Latoglossus zraus*° Hossini, 2000 †
**KG**: *Latoglossus zraus*° Hossini, 2000 †
**KF**: *DISCOGLOSSIDAE* 1858.gc.f004

*Latonia*: Braun 1843*a* ‡ • **AN**
**ST**: **AL** • **CI**: n0067 • **ID**: 470
**PN**: *Latonia seyfriedii* Braun, 1843*a* ‡ • **AS**
**PK**: *Latonia seyfriedii*° Meyer, 1845 †
**KG**: *Latonia*[3] Meyer, 1845
**KF**: *DISCOGLOSSIDAE* 1858.gc.f004

*Latonia*: Meyer 1843*c* ‡ • **AN**
**ST**: **AL** • **CI**: n0068 • **ID**: 470
**PN**: *Latonia* (*Ceratophrys*) *seyfriedii* Meyer, 1843*c* ‡ • **AS**
**PK**: *Latonia seyfriedii*° Meyer, 1845 †
**KG**: *Latonia*[3] Meyer, 1845
**KF**: *DISCOGLOSSIDAE* 1858.gc.f004

***Latonia*** Meyer, 1845 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0784 • **ID**: 470
**PN**: *Latonia seyfriedii* Meyer, 1845 ‡
**PK**: *Latonia seyfriedii*° Meyer, 1845 †
**KG**: *Latonia*[3] Meyer, 1845
**KF**: *DISCOGLOSSIDAE* 1858.gc.f004

*Latonix*: Meyer 1843*b* ‡ • **AN**
**ST**: **AL** • **CI**: n0069 • **ID**: 470
**PN**: *Latonix* (*Ceratophrys*) *seyfriedii* Meyer, 1843*b* ‡ • **AS**
**PK**: *Latonix seyfriedii*° Meyer, 1845 †
**KG**: *Latonia*[3] Meyer, 1845
**KF**: *DISCOGLOSSIDAE* 1858.gc.f004

*Laurasiarana*: Hillis[+1] 2005 • **AN**
**ST**: **AL** • **CI**: n0070 • **ID**: 418
**PN**: *Rana aurora* Baird[+1], 1852
**PK**: *Rana aurora** Baird[+1], 1852
**KG**: *Amerana** Dubois,1992
**KF**: *RANIDAE* 1796.ba.f001

*Laurentixalus* Amiet, 2012 • **AK**
**ST**: **PO.JD** • **CI**: h0785 • **ID**: 334
**PN**: *Megalixalus laevis* Ahl, 1930
**PK**: *Megalixalus laevis** Ahl, 1930
**KG**: *Afrixalus** Laurent, 1944
**KF**: *HYPEROLIIDAE* 1943.lb.f001

*Laurentomantis* Dubois, 1980 • **AK**
**ST**: **PO.JD** • **CI**: h0786 • **ID**: 431
**PN**: *Microphryne malagasia* Methuen[+1], 1913
**PK**: *Microphryne malagasia** Methuen[+1], 1913
**KG**: *Gephyromantis** Methuen, 1920
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

***Laurentophryne*** Tihen, 1960 • **KY**
**ST**: **PO.KN** • **CI**: h0787 • **ID**: 125
**PN**: *Wolterstorffina parkeri* Laurent, 1950
**PK**: *Wolterstorffina parkeri*° Laurent, 1950
**KG**: *Laurentophryne*° Tihen, 1960
**KF**: *BUFONIDAE* 1825.gb.f004

*Lechriodus* Boulenger, 1882 • **AK**
**ST**: **PO.JD** • **CI**: h0788 • **ID**: 264

**PN**: *Asterophrys melanopyga* Doria, 1875
**PK**: *Asterophrys melanopyga** Doria, 1875
**KG**: *Platyplectrum*[1] Günther, 1863
**KF**: *Myobatrachidae* 1850.sa.f001

***Leioaspetos*** Wells[+1], 1985 • **ky**
**ST**: **po.kn** • **CI**: h0789 • **ID**: 005
**PN**: *Liopelma hamiltoni* McCulloch, 1919
**PK**: *Liopelma hamiltoni** McCulloch, 1919
**KG**: *Leioaspetos** Wells[+1], 1985
**KF**: *Leiopelmatidae* 1869.mc.f07-|1942.ta.f001|

***Leiopelma*** Fitzinger, 1861 • **ky**
**ST**: **po.kn** • **CI**: h0790 • **ID**: 006
**PN**: *Leiopelma hochstetteri* Fitzinger, 1861
**PK**: *Leiopelma hochstetteri** Fitzinger, 1861
**KG**: *Leiopelma** Fitzinger, 1861
**KF**: *Leiopelmatidae* 1869.mc.f07-|1942.ta.f001|

*Leiuperus* Duméril[+1], 1841 • **ak**
**ST**: **po.jd** • **CI**: h0791 • **ID**: 246
**PN**: *Leiuperus marmoratus* Duméril[+1], 1841
**PK**: *Leiuperus marmoratus** Duméril[+1], 1841
**KG**: *Pleurodema** Tschudi, 1838
**KF**: *Leiuperidae* 1850.bb.f010

*Leiyla* Keferstein, 1868 • **ak**
**ST**: **po.jd** • **CI**: h0792 • **ID**: 059
**PN**: *Leiyla guentherii* Keferstein, 1868
**PK**: *Hylodes fitzingeri** Schmidt, 1857
**KG**: *Craugastor** Cope, 1862
**KF**: *Brachycephalidae* 1858.gc.f002

***Lepidobatrachus*** Budgett, 1899 • **ky**
**ST**: **po.kn** • **CI**: h0793 • **ID**: 171
**PN**: *Lepidobatrachus asper* Budgett, 1899
**PK**: *Lepidobatrachus asper*° Budgett, 1899
**KG**: *Lepidobatrachus*[3] Budgett, 1899
**KF**: *Ceratophryidae* 1838.ta.f002

*Lepthyla*: Duméril[+1] 1841 • **an**
**ST**: **al** • **CI**: n0071 • **ID**: 235
**PN**: *Litoria freycineti* Tschudi, 1838
**PK**: *Litoria freycineti** Tschudi, 1838
**KG**: *Litoria** Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

***Leptobrachella*** Smith, 1925 • **ky**
**ST**: **po.kn** • **CI**: h0794 • **ID**: 018
**PN**: *Leptobrachella mjobergi* Smith, 1925
**PK**: *Leptobrachella mjobergi*° Smith, 1925
**KG**: *Leptobrachella*° Smith, 1925
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

***Leptobrachium*** Tschudi, 1838 • **ky**
**ST**: **po.kn** • **CI**: h0795 • **ID**: 015
**PN**: *Leptobrachium hasseltii* Tschudi, 1838
**PK**: *Leptobrachium hasseltii** Tschudi, 1838
**KG**: *Leptobrachium** Tschudi, 1838
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

***Leptodactylodon*** Andersson, 1903 • **ky**
**ST**: **po.kn** • **CI**: h0796 • **ID**: 324
**PN**: *Leptodactylodon ovatus* Andersson, 1903
**PK**: *Leptodactylodon ovatus*° Andersson, 1903
**KG**: *Leptodactylodon*[3] Andersson, 1903
**KF**: *Arthroleptidae* 1869.mc.f011

***Leptodactylus*** Fitzinger, 1826 • **ky**
**ST**: **po.kn** • **CI**: h0797 • **ID**: 253
**PN**: *Rana typhonia* Latreille *in* Sonnini[+1], 1801
**PK**: *Rana fusca** Schneider, 1799
**KG**: *Leptodactylus*[1] Fitzinger, 1826
**KF**: *Leptodactylidae* ||1838.ta.f001||-1896.wa.f001

*Leptolalax* Dubois, 1980 • **ak**
**ST**: **po.jd** • **CI**: h0798 • **ID**: 018
**PN**: *Leptobrachium gracile* Günther, 1872
**PK**: *Leptobrachium gracile** Günther, 1872
**KG**: *Leptobrachella*° Smith, 1925
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

***Leptomantis*** Peters, 1867 • **ky**
**ST**: **po.kn** • **CI**: h0799 • **ID**: 454
**PN**: *Leptomantis bimaculata* Peters, 1867
**PK**: *Leptomantis bimaculata** Peters, 1867
**KG**: *Leptomantis** Peters, 1867
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Leptoparius* Peters, 1863 • **ak**
**ST**: **po.jd** • **CI**: h0800 • **ID**: 350
**PN**: *Stenorhynchus natalensis* Smith, 1849
**PK**: *Stenorhynchus natalensis** Smith, 1849
**KG**: *Phrynobatrachus** Günther, 1862
**KF**: *Phrynobatrachidae* 1941.lb.f001

***Leptopelis*** Günther, 1859 • **ky**
**ST**: **po.kn** • **CI**: h0801 • **ID**: 325
**PN**: *Hyla aubryi* Duméril, 1856
**PK**: *Hyla aubryi*° Duméril, 1856
**KG**: *Leptopelis*[2] Günther, 1859
**KF**: *Arthroleptidae* 1869.mc.f011

***Leptophryne*** Fitzinger, 1843 • **ky**
**ST**: **po.kn** • **CI**: h0802 • **ID**: 123
**PN**: *Bufo cruentatus* Tschudi, 1838
**PK**: *Bufo cruentatus*° Tschudi, 1838
**KG**: *Leptophryne*[2] Fitzinger, 1843
**KF**: *Bufonidae* 1825.gb.f004

*Leptopus* Latreille, 1809 • **zh**
**ST**: **zo** • **CI**: zh052

*Leptopus* Mayer, 1835 • **ak**
**ST**: **po.jh** • **CI**: h0803 • **ID**: 012
**PN**: *Pipa americana* Laurenti,1768
**PK**: *Rana pipa** Linnaeus, 1758
**KG**: *Pipa*[1] Laurenti, 1768
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Leptosooglossus* Van der Meijden[+5], 2007 • **ak**
**ST**: **po.ji** • **CI**: h0804 • **ID**: 032
**PN**: *Nectophryne gardineri* Boulenger, 1911
**PK**: *Nectophryne gardineri** Boulenger, 1911
**KG**: *Sechellophryne** Nussbaum[+1], 2007
**KF**: *Sooglossidae* 1931.na.f002

***Leucostethus*** Grant[+7], 2017 • **ky**
**ST**: **po.kn** • **CI**: h0805 • **ID**: 041
**PN**: *Leucostethus argyrogaster* Morales[+1], 1993
**PK**: *Leucostethus argyrogaster** Morales[+1], 1993

**KG**: *Leucostethus** Morales[+1], 1993
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

*Leurognathus* Moore, 1899 • **AK**
**ST**: **PO.JD** • **CI**: h0806 • **ID**: 548
**PN**: *Leurognathus marmorata* Moore, 1899
**PK**: *Leurognathus marmorata** Moore, 1899
**KG**: *Desmognathus** Baird, 1850
**KF**: *Plethodontidae* 1850.ga.f002

*Levirana* Cope, 1894 • **AK**
**ST**: **PO.JD** • **CI**: h0807 • **ID**: 415
**PN**: *Levirana vibicaria* Cope, 1894
**PK**: *Levirana vibicaria** Cope, 1894
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001

*Liangshantriton* Fei[+1], 2012 • **AK**
**ST**: **PO.JD** • **CI**: h0808 • **ID**: 573
**PN**: *Tylototriton taliangensis* Liu, 1950
**PK**: *Tylototriton taliangensis** Liu, 1950
**KG**: *Tylototriton** Anderson, 1871
**KF**: *Salamandridae* 1820.ga.f002

***Liaobatrachus*** Ji[+1], 1998 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0809 • **ID**: †029
**PN**: *Liaobatrachus grabaui* Ji[+1], 1998 ‡
**PK**: *Liaobatrachus grabaui*° Ji[+1], 1998 †
**KG**: *Liaobatrachus*° Ji[+1], 1998 †
**KF**: **Anura** Familia *Incertae sedis*

***Liaoxitriton*** Dong[+1], 1998 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0810 • **ID**: †159
**PN**: *Liaoxitriton zhongjiani* Dong[+1], 1998 ‡
**PK**: *Liaoxitriton zhongjiani*° Dong[+1], 1998 †
**KG**: *Liaoxitriton*° Dong[+1], 1998 †
**KF**: **Imperfectibranchia** Familia *Incertae sedis*

*Libycus* Špinar, 1980 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0811 • **ID**: 009
**PN**: *Xenopus* (*Libycus*) *hasaunus* Špinar, 1980 ‡
**PK**: *Xenopus* (*Libycus*) *hasaunus*° pinar, 1980 †
**KG**: *Xenopus*[1] Wagler *in* Boie, 1827
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Lihyla*: Cope 1887 • **AN**
**ST**: **AM** • **CI**: n0072 • **ID**: 059
**PN**: *Leiyla guentherii* Keferstein, 1868
**PK**: *Hylodes fitzingeri** Schmidt, 1857
**KG**: *Craugastor** Cope, 1862
**KF**: *Brachycephalidae* 1858.gc.f002

*Lihyperus* O'Shaughnessy, 1875 • **AK**
**ST**: **NT.JD** • **CI**: h0812 • **ID**: 244
**PN**: *Leiuperus marmoratus* Duméril[+1], 1841
**PK**: *Leiuperus marmoratus** Duméril[+1], 1841
**KG**: *Pleurodema** Tschudi, 1838
**KF**: *Leiuperidae* 1850.bb.f010

*Limnaoedus* Mittleman[+1], 1953 • **AK**
**ST**: **PO.JD** • **CI**: h0813 • **ID**: 200
**PN**: *Hylodes ocularis* Holbrook, 1838
**PK**: *Hylodes ocularis** Holbrook, 1838
**KG**: *Pseudacris** Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Limnarches* Gistel, 1848 • **AK**
**ST**: **NL.JI** • **CI**: h0814 • **ID**: 555
**PN**: *Lacerta subviolacea* Barton, 1804
**PK**: *Lacerta maculata** Shaw, 1802
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *Ambystomatidae* 1850.ga.f004

*Limnocharis* Berthold, 1827 • **ZH**
**ST**: **ZO** • **CI**: zh053

*Limnocharis* Bell, 1843 • **AK**
**ST**: **PO.JH** • **CI**: h0815 • **ID**: 181
**PN**: *Limnocharis fuscus* Bell, 1843
**PK**: *Crossodactylus gaudichaudii*° Duméril[+1], 1841
**KG**: *Crossodactylus*[3] Duméril[+1], 1841
**KF**: *Hylodidae* 1858.gc.f010

***Limnodynastes*** Fitzinger, 1843 • **KY**
**ST**: **PO.KN** • **CI**: h0816 • **ID**: 261
**PN**: *Cystignathus peronii* Duméril[+1], 1841
**PK**: *Cystignathus peronii** Duméril[+1], 1841
**KG**: *Limnodynastes** Fitzinger, 1843
**KF**: *Myobatrachidae* 1850.sa.f001

*Limnodytes* Duméril[+1], 1841 • **AK**
**ST**: **NT.JI** • **CI**: h0817 • **ID**: 409
**PN**: *Hyla erythraea* Schlegel, 1827
**PK**: *Hyla erythraea** Schlegel, 1827
**KG**: *Hylarana** Tschudi, 1838
**KF**: *Ranidae* 1796.ba.f001

***Limnomedusa*** Fitzinger, 1843 • **KY**
**ST**: **PO.KN** • **CI**: h0818 • **ID**: 183
**PN**: *Cystignathus macroglossus* Duméril[+1], 1841
**PK**: *Cystignathus macroglossus** Duméril[+1], 1841
**KG**: *Limnomedusa** Fitzinger, 1843
**KF**: *Limnomedusidae* 2017.daf46

***Limnonectes*** Fitzinger, 1843 • **KY**
**ST**: **PO.KN** • **CI**: h0819 • **ID**: 380
**PN**: *Rana kuhlii* Tschudi, 1838
**PK**: *Rana kuhlii** Tschudi, 1838
**KG**: *Limnonectes** Fitzinger, 1843
**KF**: *Dicroglossidae* 1987.da.f004

*Limnophilus* Burmeister, 1839 • **ZH**
**ST**: **ZO** • **CI**: zh054

*Limnophilus* Fitzinger, 1843 • **AK**
**ST**: **PO.JH** • **CI**: h0820 • **ID**: 464
**PN**: *Rana mascareniensis* Duméril[+1], 1841
**PK**: *Rana mascareniensis** Duméril[+1], 1841
**KG**: *Ptychadena** Boulenger, 1917
**KF**: *Ptychadenidae* 1987.da.f002

*Limnophys* Jiménez de la Espada, 1870 • **AK**
**ST**: **PO.JD** • **CI**: h0821 • **ID**: 073
**PN**: *Limnophys cornutus* Jiménez de la Espada, 1870
**PK**: *Limnophys cornutus*° Jiménez de la Espada, 1870
**KG**: *Strabomantis** Peters, 1863
**KF**: *Brachycephalidae* 1858.gc.f002

*Lineatriton* Tanner, 1950 • **AK**
**ST**: **PO.JD** • **CI**: h0822 • **ID**: 527
**PN**: *Spelerpes lineola* Cope, 1865
**PK**: *Spelerpes lineola** Cope, 1865

**KG**: *Pseudoeurycea** Taylor, 1944
**KF**: *Plethodontidae* 1850.ga.f002
***Linglongtriton*** Jia[+1], 2019 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0823 • **ID**: †160
**PN**: *Linglongtriton daxishanensis* Jia[+1], 2019 ‡
**PK**: *Linglongtriton daxishanensis*° Jia[+1], 2019 †
**KG**: *Linglongtriton*° Jia[+1], 2019 †
**KF**: **Imperfectibranchia** Familia *Incertae sedis*
*Linguaelapsus* Cope, 1887 • **AK**
**ST**: **PO.JD** • **CI**: h0824 • **ID**: 555
**PN**: *Ambystoma annulatum* Cope, 1886
**PK**: *Ambystoma annulatum** Cope, 1886
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *Ambystomatidae* 1850.ga.f004
*Liohyla*: Günther 1900 • **AN**
**ST**: **AM** • **CI**: n0073 • **ID**: 059
**PN**: *Leiyla guentherii* Keferstein, 1868
**PK**: *Hylodes fitzingeri** Schmidt, 1857
**KG**: *Craugastor** Cope, 1862
**KF**: *Brachycephalidae* 1858.gc.f002
*Liopelma*: Cope 1865 • **AN**
**ST**: **AM** • **CI**: n0074 • **ID**: 006
**PN**: *Leiopelma hochstetteri* Fitzinger, 1861
**PK**: *Leiopelma hochstetteri** Fitzinger, 1861
**KG**: *Leiopelma** Fitzinger, 1861
**KF**: *Leiopelmatidae* 1869.mc.f07-|1942.ta.f001|
*Liopelma* Günther, 1869 • **AK**
**ST**: **NC.JI** • **CI**: h0825 • **ID**: 006
**PN**: *Leiopelma hochstetteri* Fitzinger, 1861
**PK**: *Leiopelma hochstetteri** Fitzinger, 1861
**KG**: *Leiopelma** Fitzinger, 1861
**KF**: *Leiopelmatidae* 1869.mc.f07-|1942.ta.f001|
*Liophryne* Boulenger, 1897 • **AK**
**ST**: **PO.JD** • **CI**: h0826 • **ID**: 280
**PN**: *Liophryne rhododactyla* Boulenger, 1897
**PK**: *Liophryne rhododactyla** Boulenger, 1897
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Lisapsus* Steindachner, 1867 • **AK**
**ST**: **NS.JD** • **CI**: h0827 • **ID**: 196
**PN**: *Lysapsus limellum* Cope, 1862
**PK**: *Lysapsus limellum** Cope, 1862
**KG**: *Pseudis** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Lisserpeton*** Estes, 1965 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0828 • **ID**: †156
**PN**: *Lisserpeton bairdi* Estes, 1965 ‡
**PK**: *Lisserpeton bairdi*° Estes, 1965 †
**KG**: *Lisserpeton*° Estes, 1965 †
**KF**: *Scapherpetidae* 1959.aa.f001 †
***Lissotriton*** Bell, 1839 • **KY**
**ST**: **PO.KN** • **CI**: h0829 • **ID**: 564
**PN**: *Salamandra punctata* Latreille, 1800
**PK**: *Lacerta vulgaris** Linnaeus, 1758
**KG**: *Lissotriton*[1] Bell, 1839
**KF**: *Salamandridae* 1820.ga.f002
***Lithobates*** Fitzinger, 1843 • **KY**
**ST**: **PO.KN** • **CI**: h0830 • **ID**: 415
**PN**: *Rana palmipes* Spix, 1824
**PK**: *Rana palmipes** Spix, 1824
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001
*Lithobatrachus* Parker, 1929 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0831 • **ID**: †069
**PN**: *Hyla europaea* Noble, 1929 ‡
**PK**: *Rana diluviana*° Goldfuss, 1831 †
**KG**: *Palaeobatrachus*° Tschudi, 1838 †
**KF**: *Palaeobatrachidae* 1865.ca.f001 †
***Lithodytes*** Fitzinger, 1843 • **KY**
**ST**: **PO.KN** • **CI**: h0832 • **ID**: 252
**PN**: *Rana lineata* Schneider, 1799
**PK**: *Rana lineata** Schneider, 1799
**KG**: *Lithodytes** Fitzinger, 1843
**KF**: *Leptodactylidae* ||1838.ta.f001||-1896.wa.f001
*Litopleura* Jiménez de la Espada, 1875 • **AK**
**ST**: **PO.JD** • **CI**: h0833 • **ID**: 183
**PN**: *Litopleura maritimum* Jiménez de la Espada, 1875
**PK**: *Cystignathus macroglossus** Duméril[+1], 1841
**KG**: *Limnomedusa** Fitzinger, 1843
**KF**: *Limnomedusidae* 2017.daf46
***Litoria*** Tschudi, 1838 • **KY**
**ST**: **PO.KN** • **CI**: h0834 • **ID**: 235
**PN**: *Litoria freycineti* Tschudi, 1838
**PK**: *Litoria freycineti** Tschudi, 1838
**KG**: *Litoria** Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009
*Littlejohnophryne* Wells[+1], 1985 • **AK**
**ST**: **PO.JD** • **CI**: h0835 • **ID**: 270
**PN**: *Crinia riparia* Littlejohn[+1], 1965
**PK**: *Crinia riparia** Littlejohn[+1], 1965
**KG**: *Crinia** Tschudi, 1838
**KF**: *Myobatrachidae* 1850.sa.f001
***Liua*** Zhao[+1], 1983 • **KY**
**ST**: **PO.KN** • **CI**: h0836 • **ID**: 510
**PN**: *Hynobius wushanensis* Liu[+2], 1960
**PK**: *Hynobius shihi** Liu, 1950
**KG**: *Liua*[1] Zhao[+1], 1983
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002
***Liuhurana*** Fei[+4] *in* Fei[+2], 2010 • **KY**
**ST**: **PO.KN** • **CI**: h0837 • **ID**: 417
**PN**: *Rana shuchinae* Liu, 1950
**PK**: *Rana shuchinae** Liu, 1950
**KG**: *Liuhurana** Fei[+4] *in* Fei[+2], 2010
**KF**: *Ranidae* 1796.ba.f001
*Liuia* Frost, 1985 • **AK**
**ST**: **NS.JI** • **CI**: h0838 • **ID**: 510
**PN**: *Hynobius wushanensis* Liu[+2], 1960
**PK**: *Hynobius shihi** Liu, 1950
**KG**: *Liua*[1] Zhao[+1], 1983
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002
*Liuixalus*: Li[+4] 2008 • **AN**
**ST**: **AL** • **CI**: n0075 • **ID**: 459

**PN**: *Philautus romeri* Smith, 1953
**PK**: *Philautus romeri** Smith, 1953
**KG**: *Romerus** **nov.**
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Liuophrys* Fei[+2], 2016 • **ak**
**ST**: **po.jd** • **CI**: h0839 • **ID**: 025
**PN**: *Megophrys glandulosa* Fei[+2], 1990
**PK**: *Megophrys glandulosa*° Fei[+2], 1990
**KG**: *Xenophrys*° Günther, 1864
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Liuperus* Cope, 1861 • **ak**
**ST**: **ns.jd** • **CI**: h0840 • **ID**: 244
**PN**: *Leiuperus marmoratus* Duméril[+1], 1841
**PK**: *Leiuperus marmoratus** Duméril[+1], 1841
**KG**: *Pleurodema** Tschudi, 1838
**KF**: *Leiuperidae* 1850.bb.f010

***Liurana*** Dubois, 1987 • **ky**
**ST**: **po.kn** • **CI**: h0841 • **ID**: 371
**PN**: *Cornufer xizangensis* Hu, 1977
**PK**: *Cornufer xizangensis*° Hu, 1977
**KG**: *Liurana*° Dubois, 1987
**KF**: *Liuranidae* 2010.ma.f0010

***Liventsovkia*** Ratnikov, 1993 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0842 • **ID**: †030
**PN**: *Liventsovkia jucunda* Ratnikov, 1993 ‡
**PK**: *Liventsovkia jucunda*° Ratnikov, 1993 †
**KG**: *Liventsovkia*° Ratnikov, 1993 †
**KF**: **Anura** Familia *Incertae sedis*

*Liyla*: Cope 1870 • **an**
**ST**: **am** • **CI**: n0076 • **ID**: 059
**PN**: *Leiyla guentherii* Keferstein, 1868
**PK**: *Hylodes fitzingeri** Schmidt, 1857
**KG**: *Craugastor** Cope, 1862
**KF**: *Brachycephalidae* 1858.gc.f002

*Liyperus* Agassiz, 1847 • **ak**
**ST**: **nt.jd** • **CI**: h0843 • **ID**: 246
**PN**: *Leiuperus marmoratus* Duméril[+1], 1841
**PK**: *Leiuperus marmoratus** Duméril[+1], 1841
**KG**: *Pleurodema** Tschudi, 1838
**KF**: *Leiuperidae* 1850.bb.f010

***Llankibatrachus*** Báez[+1], 2003 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0844 • **ID**: †073
**PN**: *Llankibatrachus truebae* Báez[+1], 2003 ‡
**PK**: *Llankibatrachus truebae*° Báez[+1], 2003 †
**KG**: *Llankibatrachus*° Báez[+1], 2003 †
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Llewellynura* Wells[+1], 1985 • **ak**
**ST**: **po.jd** • **CI**: h0845 • **ID**: 235
**PN**: *Hyla dorsalis microbelos* Cogger, 1966
**PK**: *Hyla dorsalis microbelos** Cogger, 1966
**KG**: *Litoria** Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

*Lobipes* Cuvier, 1817 • **zh**
**ST**: **zo** • **CI**: zh055

*Lobipes* Fitzinger, 1843 • **ak**
**ST**: **po.jh** • **CI**: h0846 • **ID**: 189
**PN**: *Hyla palmata* Bonnaterre, 1789
**PK**: *Rana boans** Linnaeus, 1758
**KG**: *Boana** Gray, 1825
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Lophinus*: Rafinesque 1815 • **an**
**ST**: **al** • **CI**: n0077 • **ID**: 564
**PN**: *Salamandra punctata* Latreille, 1800
**PK**: *Lacerta vulgaris** Linnaeus, 1758
**KG**: *Lissotriton*[1] Bell, 1839
**KF**: *Salamandridae* 1820.ga.f002

*Lophinus* Gray, 1850 • **ak**
**ST**: **po.ji** • **CI**: h0847 • **ID**: 564
**PN**: *Salamandra punctata* Latreille, 1800
**PK**: *Lacerta vulgaris** Linnaeus, 1758
**KG**: *Lissotriton*[1] Bell, 1839
**KF**: *Salamandridae* 1820.ga.f002

*Lophiohyla* Miranda-Ribeiro, 1926 • **ak**
**ST**: **ns.jd** • **CI**: h0848 • **ID**: 221
**PN**: *Lophyohyla piperata* Miranda-Ribeiro, 1923
**PK**: *Hyla luteola** Wied-Neuwied, 1824
**KG**: *Phyllodytes** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Lophopus* Dumortier, 1835 • **zh**
**ST**: **zo** • **CI**: zh056

*Lophopus* Tschudi, 1838 • **ak**
**ST**: **po.jh** • **CI**: h0849 • **ID**: 194
**PN**: *Bufo marmoratus* Laurenti, 1768
**PK**: *Bufo marmoratus** Laurenti, 1768
**KG**: *Dendropsophus*[1] Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Lophyohila*: Miranda-Ribeiro 1923 • **an**
**ST**: **li** • **CI**: n0078 • **ID**: 221
**PN**: *Lophyohyla piperata* Miranda-Ribeiro, 1923
**PK**: *Hyla luteola** Wied-Neuwied, 1824
**KG**: *Phyllodytes** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Lophyohyla* Miranda-Ribeiro, 1923 • **ak**
**ST**: **lc.jd** • **CI**: h0850 • **ID**: 221
**PN**: *Lophyohyla piperata* Miranda-Ribeiro, 1923
**PK**: *Hyla luteola** Wied-Neuwied, 1824
**KG**: *Phyllodytes** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Luetkenotyphlus*** Taylor, 1968 • **ky**
**ST**: **po.kn** • **CI**: h0851 • **ID**: 493
**PN**: *Siphonops brasiliensis* Lütken, 1852
**PK**: *Siphonops brasiliensis** Lütken, 1852
**KG**: *Luetkenotyphlus** Taylor, 1968
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Lupacolus* Brown[+4], 2015 • **ak**
**ST**: **po.jd** • **CI**: h0852 • **ID**: 370
**PN**: *Cornufer dorsalis* Duméril, 1853
**PK**: *Cornufer dorsalis** Duméril, 1853
**KG**: *Platymantis*[1] Günther, 1859
**KF**: *Ceratobatrachidae* 1884.ba.f001

***Lutetiobatrachus*** Wuttke, 1998 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0853 • **ID**: †031

**PN**: *Lutetiobatrachus gracilis* Wuttke, 1988 ‡
**PK**: *Lutetiobatrachus gracilis*° Wuttke, 1988 †
**KG**: *Lutetiobatrachus*° Wuttke, 1998 †
**KF**: **Anura** Familia *Incertae sedis*

*Lutkenotyphlus* Nussbaum, 1986 • **ak**
**ST**: **nt.ji** • **CI**: h0854 • **ID**: 493
**PN**: *Siphonops brasiliensis* Lütken, 1852
**PK**: *Siphonops brasiliensis** Lütken, 1852
**KG**: *Luetkenotyphlus** Taylor, 1968
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Lyciasalamandra*** Veith[+1], 2004 • **ky**
**ST**: **po.kn** • **CI**: h0855 • **ID**: 577
**PN**: *Molge luschani* Steindachner, 1891
**PK**: *Molge luschani** Steindachner, 1891
**KG**: *Lyciasalamandra** Veith[+1], 2004
**KF**: *Salamandridae* 1820.ga.f002

***Lynchius*** Hedges[+2], 2008 • **ky**
**ST**: **po.kn** • **CI**: h0856 • **ID**: 075
**PN**: *Phrynopus parkeri* Lynch, 1975
**PK**: *Phrynopus parkeri** Lynch, 1975
**KG**: *Lynchius** Hedges[+2], 2008
**KF**: *Brachycephalidae* 1858.gc.f002

*Lynchophrys* Laurent, 1983 • **ak**
**ST**: **po.jd** • **CI**: h0857 • **ID**: 186
**PN**: *Batrachophrynus brachydactylus* Peters, 1873
**PK**: *Batrachophrynus brachydactylus*° Peters, 1873
**KG**: *Telmatobius*[3] Wiegmann, 1834
**KF**: *Telmatobiidae* 1843.fa.f006

*Lysapsus* Cope, 1862 • **ak**
**ST**: **po.jd** • **CI**: h0858 • **ID**: 196
**PN**: *Lysapsus limellum* Cope, 1862
**PK**: *Lysapsus limellum** Cope, 1862
**KG**: *Pseudis** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Lysapus* Hoffmann, 1878 • **ak**
**ST**: **ns.jd** • **CI**: h0859 • **ID**: 196
**PN**: *Lysapsus limellum* Cope, 1862
**PK**: *Lysapsus limellum** Cope, 1862
**KG**: *Pseudis** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Lystris* Cope, 1869 • **ak**
**ST**: **po.jd** • **CI**: h0860 • **ID**: 246
**PN**: *Lystris brachyops* Cope, 1869
**PK**: *Lystris brachyops** Cope, 1869
**KG**: *Pleurodema** Tschudi, 1838
**KF**: *Leiuperidae* 1850.bb.f010

***Macrogenioglottus*** Carvalho, 1946 • **ky**
**ST**: **po.kn** • **CI**: h0861 • **ID**: 152
**PN**: *Macrogenioglottus alipioi* Carvalho, 1946
**PK**: *Macrogenioglottus alipioi** Carvalho, 1946
**KG**: *Macrogenioglottus** Carvalho, 1946
**KF**: *Odontophrynidae* 1971.la.f002

***Macropelobates*** Noble, 1924 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0862 • **ID**: †086
**PN**: *Macropelobates osborni* Noble, 1924 ‡
**PK**: *Macropelobates osborni*° Noble, 1924 †
**KG**: *Macropelobates*° Noble, 1924 †
**KF**: **Archaeosalientia** Familia *Incertae sedis*

*Macrothaelacion* Wagler *in* Michahelles, 1833 • **ak**
**ST**: **po.jd** • **CI**: h0863 • **ID**: 138
**PN**: *Bufo nasutus* Schneider, 1799
**PK**: *Rana margaritifera** Laurenti, 1768
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

*Maculopaa* Fei[+2], 2010 • **ak**
**ST**: **po.jd** • **CI**: h0864 • **ID**: 388
**PN**: *Rana maculosa* Liu[+2], 1960
**PK**: *Rana maculosa** Liu[+2], 1960
**KG**: *Paa** Dubois, 1975
**KF**: *Dicroglossidae* 1987.da.f004

***Madecassophryne*** Guibé, 1974 • **ky**
**ST**: **po.kn** • **CI**: h0865 • **ID**: 284
**PN**: *Madecassophryne truebae* Guibé, 1974
**PK**: *Madecassophryne truebae*° Guibé, 1974
**KG**: *Madecassophryne*° Guibé, 1974
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Magaelosia*: Miranda-Ribeiro 1923 • **an**
**ST**: **li** • **CI**: n0079 • **ID**: 182
**PN**: *Helosia bufonium* Girard, 1853
**PK**: *Hyla nasus** Lichtenstein, 1823
**KG**: *Hylodes*[1] Fitzinger, 1826
**KF**: *Hylodidae* 1858.gc.f010

*Magnadigita* Taylor, 1944 • **ak**
**ST**: **po.jd** • **CI**: h0866 • **ID**: 522
**PN**: *Bolitoglossa nigroflavescens* Taylor, 1941
**PK**: *Oedipus franklini** Schmidt, 1936
**KG**: *Bolitoglossa** Duméril[+2], 1854
**KF**: *Plethodontidae* 1850.ga.f002

*Mahonabatrachus* Wells[+1], 1985 • **ak**
**ST**: **po.jd** • **CI**: h0867 • **ID**: 235
**PN**: *Hyla meiriana* Tyler, 1969
**PK**: *Hyla meiriana** Tyler, 1969
**KG**: *Litoria** Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

*Maitsomantis* Glaw[+1], 2006 • **ak**
**ST**: **po.jd** • **CI**: h0868 • **ID**: 432
**PN**: *Mantidactylus argenteus* Methuen, 1920
**PK**: *Mantidactylus argenteus** Methuen, 1920
**KG**: *Mantidactylus** Boulenger, 1895
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Makihynobius* Fei[+2], 2012 • **ak**
**ST**: **po.jd** • **CI**: h0869 • **ID**: 507
**PN**: *Salamandrella sonani* Maki, 1922
**PK**: *Salamandrella sonani** Maki, 1922
**KG**: *Poyarius** Dubois[+1], 2012
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

*Malachylodes* Cope, 1879 • **ak**
**ST**: **po.jd** • **CI**: h0870 • **ID**: 082
**PN**: *Malachylodes guttilatus* Cope, 1879
**PK**: *Malachylodes guttilatus*° Cope, 1879
**KG**: *Euhyas** Fitzinger, 1843
**KF**: *Brachycephalidae* 1858.gc.f002

*Maltzania* Boettger, 1881 • **AK**
**ST**: **PO.JD** • **CI**: h0871 • **ID**: 367
**PN**: *Maltzania bufonia* Boettger, 1881
**PK**: *Pyxicephalus edulis** Peters, 1854
**KG**: *Pyxicephalus** Tschudi, 1838
**KF**: *Pyxicephalidae* 1850.bb.f005

*Manculus* Cope, 1869 • **AK**
**ST**: **PO.JD** • **CI**: h0872 • **ID**: 542
**PN**: *Salamandra quadridigitata* Holbrook, 1842
**PK**: *Salamandra quadridigitata** Holbrook, 1842
**KG**: *Eurycea** Rafinesque, 1822
**KF**: *Plethodontidae* 1850.ga.f002

***Mannophryne*** La Marca, 1992 • **KY**
**ST**: **PO.KN** • **CI**: h0873 • **ID**: 038
**PN**: *Colostethus yustizi* La Marca, 1989
**PK**: *Colostethus yustizi** La Marca, 1989
**KG**: *Mannophryne** La Marca, 1992
**KF**: *Aromobatidae* 2006.gc.f004

***Mantella*** Boulenger, 1882 • **KY**
**ST**: **PO.KN** • **CI**: h0874 • **ID**: 428
**PN**: *Dendrobates betsileo* Grandidier, 1872
**PK**: *Dendrobates betsileo** Grandidier, 1872
**KG**: *Mantella** Boulenger, 1882
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Mantidactylus*** Boulenger, 1895 • **KY**
**ST**: **PO.KN** • **CI**: h0875 • **ID**: 432
**PN**: *Rana guttulata* Boulenger, 1881
**PK**: *Rana guttulata** Boulenger, 1881
**KG**: *Mantidactylus** Boulenger, 1895
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Mantiphrys* Mocquard, 1895 • **AK**
**ST**: **PO.JD** • **CI**: h0876 • **ID**: 289
**PN**: *Mantiphrys laevipes* Mocquard, 1895
**PK**: *Mantiphrys laevipes** Mocquard, 1895
**KG**: *Rhombophryne** Boettger, 1880
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Mantipus*** Peters, 1883 • **KY**
**ST**: **PO.KN** • **CI**: h0877 • **ID**: 287
**PN**: *Mantipus hildebrandti* Peters, 1883
**PK**: *Plethodontohyla inguinalis** Boulenger, 1882
**KG**: *Mantipus*[1] Peters, 1883
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Mantophryne* Boulenger, 1897 • **AK**
**ST**: **PO.JD** • **CI**: h0878 • **ID**: 280
**PN**: *Mantophryne lateralis* Boulenger, 1897
**PK**: *Mantophryne lateralis** Boulenger, 1897
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Mantophrys* Mocquard, 1909 • **AK**
**ST**: **NT.JD** • **CI**: h0879 • **ID**: 289
**PN**: *Mantiphrys laevipes* Mocquard, 1895
**PK**: *Mantiphrys laevipes** Mocquard, 1895
**KG**: *Rhombophryne** Boettger, 1880
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Marmorerpeton*** Evans[+2], 1988 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0880 • **ID**: †137
**PN**: *Marmorerpeton kermacki* Evans[+2], 1988 ‡
**PK**: *Marmorerpeton kermacki*° Evans[+2], 1988 †
**KG**: *Marmorerpeton*° Evans[+2], 1988 †
**KF**: **Urodela** Familia *Incertae sedis*

*Matsuirana* Fei[+2], 2010 • **AK**
**ST**: **PO.JD** • **CI**: h0881 • **ID**: 412
**PN**: *Rana ishikawae* Stejneger, 1901
**PK**: *Rana ishikawae** Stejneger, 1901
**KG**: *Odorrana** Fei[+2], 1990
**KF**: *Ranidae* 1796.ba.f001

*Mayamandra* Parra-Olea[+2], 2004 • **AK**
**ST**: **PO.JD** • **CI**: h0882 • **ID**: 522
**PN**: *Bolitoglossa hartwegi* Wake[+1], 1969
**PK**: *Bolitoglossa hartwegi** Wake[+1], 1969
**KG**: *Bolitoglossa** Duméril[+2], 1854
**KF**: *Plethodontidae* 1850.ga.f002

*Meantes*: Rafinesque 1822 • **AN**
**ST**: **AL** • **CI**: n0080 • **ID**: 519
**PN**: *Siren lacertina* Österdam, 1766
**PK**: *Siren lacertina** Österdam, 1766
**KG**: *Siren** Österdam, 1766
**KF**: *Sirenidae* 1825gb.f005

*Megaelosia* Miranda-Ribeiro, 1923 • **AK**
**ST**: **LC.JD** • **CI**: h0883 • **ID**: 182
**PN**: *Helosia bufonium* Girard, 1853
**PK**: *Hyla nasus** Lichtenstein, 1823
**KG**: *Hylodes*[1] Fitzinger, 1826
**KF**: *Hylodidae* 1858.gc.f010

*Megalixalus* Günther, 1869 • **AK**
**ST**: **PO.JD** • **CI**: h0884 • **ID**: 336
**PN**: *Megalixalus infrarufus* Günther, 1869
**PK**: *Eucnemis seychellensis** Tschudi, 1838
**KG**: *Tachycnemis** Fitzinger, 1843
**KF**: *Hyperoliidae* 1943.lb.f001

*Megalobatrachus* Tschudi, 1837 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0885 • **ID**: 503
**PN**: *Megalobatrachus sieboldi* Tschudi, 1837 ‡
**PK**: *Triton japonicus** Temminck, 1836
**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *Cryptobranchidae* 1826.fb.f003

*Megalofrys* Palacký, 1898 • **AK**
**ST**: **NT.JI** • **CI**: h0886 • **ID**: 021
**PN**: *Megophrys montana* Kuhl[+1], 1822
**PK**: *Megophrys montana*° Kuhl[+1], 1822
**KG**: *Megophrys*[2] Kuhl[+1], 1822
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Megalophrys* Wagler, 1830 • **AK**
**ST**: **NS.JI** • **CI**: h0887 • **ID**: 021
**PN**: *Megophrys montana* Kuhl[+1], 1822
**PK**: *Megophrys montana*° Kuhl[+1], 1822
**KG**: *Megophrys*[2] Kuhl[+1], 1822
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Megalophys*: Gray 1842 • **AN**
**ST**: **AM** • **CI**: n0081 • **ID**: 021
**PN**: *Megophrys montana* Kuhl[+1], 1822
**PK**: *Megophrys montana*° Kuhl[+1], 1822

KG: *Megophrys*[2] Kuhl[+1], 1822
KF: *Megophryidae* 1850.bb.f008-|1931.na.f003|

***Megalotriton*** Zittel, 1890 ‡ • KY
ST: PO.KN • CI: h0888 • ID: †199
PN: *Megalotriton filholi* Zittel, 1890 ‡
PK: *Megalotriton filholi*° Zittel, 1890 †
KG: *Megalotriton*° Zittel, 1890 †
KF: *Salamandridae* 1820.ga.f002

*Megapterna* Savi, 1839 • AK
ST: PO.JD • CI: h0889 • ID: 557
PN: *Megapterna montana* Savi, 1839
PK: *Megapterna montana** Savi, 1839
KG: *Euproctus*[1] Gené, 1839
KF: *Salamandridae* 1820.ga.f002

***Megastomatohyla*** Faivovich[+5], 2005 • KY
ST: PO.KN • CI: h0890 • ID: 202
PN: *Hyla mixe* Duellman, 1965
PK: *Hyla mixe** Duellman, 1965
KG: *Megastomatohyla** Faivovich[+5], 2005
KF: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Megistolotis* Tyler[+2], 1979 • AK
ST: PO.JD • CI: h0891 • ID: 261
PN: *Megistolotis lignarius* Tyler[+2], 1979
PK: *Megistolotis lignarius** Tyler[+2], 1979
KG: *Limnodynastes** Fitzinger, 1843
KF: *Myobatrachidae* 1850.sa.f001

***Megophrys*** Kuhl[+1], 1822 • KY
ST: LC.KN • CI: h0892 • ID: 021
PN: *Megophrys montana* Kuhl[+1], 1822
PK: *Megophrys montana*° Kuhl[+1], 1822
KG: *Megophrys*[2] Kuhl[+1], 1822
KF: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Mehelyia* Wandolleck, 1911 • AK
ST: PO.JD • CI: h0893 • ID: 280
PN: *Mehelyia lineata* Wandolleck, 1911
PK: *Sphenophryne biroi*° Méhelÿ, 1897
KG: *Asterophrys** Tschudi, 1838
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Meinus*: Rafinesque 1815 • AN
ST: AL • CI: n0082 • ID: 564
PN: *Pelonectes boscai* Lataste *in* Blanchard, 1879
PK: *Pelonectes boscai** Lataste *in* Blanchard, 1879
KG: *Lissotriton*[1] Bell, 1839
KF: *Salamandridae* 1820.ga.f002

*Meinus* Dubois[+1], 2009 • AK
ST: PO.JD • CI: h0894 • ID: 564
PN: *Pelonectes boscai* Lataste *in* Blanchard, 1879
PK: *Pelonectes boscai** Lataste *in* Blanchard, 1879
KG: *Lissotriton*[1] Bell, 1839
KF: *Salamandridae* 1820.ga.f002

***Melanobatrachus*** Beddome, 1878 • KY
ST: PO.KN • CI: h0895 • ID: 306
PN: *Melanobatrachus indicus* Beddome, 1878
PK: *Melanobatrachus indicus** Beddome, 1878
KG: *Melanobatrachus** Beddome, 1878
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Melanophryne* Lehr[+1], 2007 • AK
ST: PO.JD • CI: h0896 • ID: 293
PN: *Phrynopus carpish* Lehr[+2], 2002
PK: *Phrynopus carpish*° Lehr[+2], 2002
KG: *Ctenophryne** Mocquard, 1904
KF: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Melanophryniscus*** Gallardo, 1961 • KY
ST: PO.KN • CI: h0897 • ID: 151
PN: *Phryniscus stelzneri* Weyenbergh, 1875
PK: *Phryniscus stelzneri** Weyenbergh, 1875
KG: *Melanophryniscus** Gallardo, 1961
KF: *Bufonidae* 1825.gb.f004

***Mengbatrachus*** Tan[+3], 2018 ‡ • KY
ST: PO.KN • CI: h0898 • ID: †032
PN: *Mengbatrachus moqi* Tan[+3], 2018 ‡
PK: *Mengbatrachus moqi*° Tan[+3], 2018 †
KG: *Mengbatrachus*° Tan[+3], 2018 †
KF: Anura Familia *Incertae sedis*

*Menobranchus* Harlan, 1825 • AK
ST: PO.JD • CI: h0899 • ID: 553
PN: *Triton lateralis* Say *in* James, 1822
PK: *Sirena maculosa** Rafinesque, 1818
KG: *Necturus** Rafinesque, 1819
KF: *Proteidae* 1831.ba.f002

*Menopoma* Harlan, 1825 • AK
ST: PO.JD • CI: h0900 • ID: 504
PN: *Salamandra alleganiensis* Sonnini[+1], 1801
PK: *Salamandra alleganiensis** Sonnini[+1], 1801
KG: *Cryptobranchus*[1] Leuckart, 1821
KF: *Cryptobranchidae* 1826.fb.f003

***Mercurana*** Abraham[+4], 2013 • KY
ST: PO.KN • CI: h0901 • ID: 443
PN: *Mercurana myristicapalustris* Abraham[+4], 2013
PK: *Mercurana myristicapalustris** Abraham[+4], 2013
KG: *Mercurana** Abraham[+4], 2013
KF: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Meristogenys*** Yang, 1991 • KY
ST: PO.KN • CI: h0902 • ID: 403
PN: *Hylarana jerboa* Günther, 1872
PK: *Hylarana jerboa** Günther, 1872
KG: *Meristogenys** Yang, 1991
KF: *Ranidae* 1796.ba.f001

*Merothaelacium* Wagler *in* Michahelles, 1833 • AK
ST: PO.JD • CI: h0903 • ID: 138
PN: *Rana margaritifera* Laurenti, 1768
PK: *Rana margaritifera** Laurenti, 1768
KG: *Rhinella*[2] Fitzinger, 1826
KF: *Bufonidae* 1825.gb.f004

***Mertensiella*** Wolterstorff, 1925 • KY
ST: PO.KN • CI: h0904 • ID: 576
PN: *Exaeretus caucasicus* Waga, 1876
PK: *Exaeretus caucasicus** Waga, 1876
KG: *Mertensiella** Wolterstorff, 1925
KF: *Salamandridae* 1820.ga.f002

***Mertensophryne*** Tihen, 1960 • KY
ST: PO.KN • CI: h0905 • ID: 141

**PN**: *Bufo micranotis rondoensis* Loveridge, 1942
**PK**: *Bufo micranotis** Loveridge, 1925
**KG**: *Mertensophryne*[1] Tihen, 1960
**KF**: *Bufonidae* 1825.gb.f004

***Mesophryne*** Gao[+1], 2001 ‡ • KY
**ST**: PO.KN • **CI**: h0906 • **ID**: †033
**PN**: *Mesophryne beipiaoensis* Gao[+1], 2001 ‡
**PK**: *Mesophryne beipiaoensis*° Gao[+1], 2001 †
**KG**: *Mesophryne*° Gao[+1], 2001 †
**KF**: **Anura** Familia *Incertae sedis*

*Mesotriton* Bolkay, 1927 • AK
**ST**: PO.JD • **CI**: h0907 • **ID**: 563
**PN**: *Triton alpestris* Laurenti, 1768
**PK**: *Triton alpestris** Laurenti, 1768
**KG**: *Ichthyosaura*[1] Sonnini[+1], 1801
**KF**: *Salamandridae* 1820.ga.f002

*Mesotriton* Bourret, 1934 • AK
**ST**: PO.JH • **CI**: h0908 • **ID**: 562
**PN**: *Mesotriton deloustali* Bourret, 1934
**PK**: *Mesotriton deloustali** Bourret, 1934
**KG**: *Paramesotriton** Chang, 1936
**KF**: *Salamandridae* 1820.ga.f002

*Messelobatrachus* Wuttke, 1988 ‡ • AK
**ST**: PO.JD • **CI**: h0909 • **ID**: †069
**PN**: *Messelobatrachus tobieni* Wuttke, 1988 ‡
**PK**: *Messelobatrachus tobieni*° Wuttke, 1988 †
**KG**: *Palaeobatrachus*° Tschudi, 1838 †
**KF**: *Palaeobatrachidae* 1865.ca.f001 †

***Metacrinia*** Parker, 1940 • KY
**ST**: PO.KN • **CI**: h0910 • **ID**: 272
**PN**: *Pseudophryne nichollsi* Harrison, 1927
**PK**: *Pseudophryne nichollsi** Harrison, 1927
**KG**: *Metacrinia** Parker, 1940
**KF**: *Myobatrachidae* 1850.sa.f001

*Metaeus* Girard, 1853 • AK
**ST**: PO.JD • **CI**: h0911 • **ID**: 246
**PN**: *Metaeus timidus* Girard, 1853
**PK**: *Metaeus timidus*° Girard, 1853
**KG**: *Pleurodema** Tschudi, 1838
**KF**: *Leiuperidae* 1850.bb.f010

*Metamagnusia* Günther, 2009 • AK
**ST**: PO.JD • **CI**: h0912 • **ID**: 280
**PN**: *Metamagnusia marani* Günther, 2009
**PK**: *Metamagnusia marani** Günther, 2009
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Metaphrynella*** Parker, 1934 • KY
**ST**: PO.KN • **CI**: h0913 • **ID**: 311
**PN**: *Phrynella pollicaris* Boulenger, 1890
**PK**: *Phrynella pollicaris** Boulenger, 1890
**KG**: *Metaphrynella** Parker, 1934
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Metaphryniscus*** Señaris[+2], 1994 • KY
**ST**: PO.KN • **CI**: h0914 • **ID**: 098
**PN**: *Metaphryniscus sosai* Señaris[+2], 1994
**PK**: *Metaphryniscus sosai*° Señaris[+2], 1994
**KG**: *Metaphryniscus*° Señaris[+2], 1994
**KF**: *Bufonidae* 1825.gb.f004

*Metopostira* Méhelÿ, 1901 • AK
**ST**: PO.JD • **CI**: h0915 • **ID**: 280
**PN**: *Metopostira ocellata* Méhelÿ, 1901
**PK**: *Hylophorbus rufescens** Macleay, 1878
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Micrarthroleptis* Deckert, 1938 • AK
**ST**: PO.JD • **CI**: h0916 • **ID**: 350
**PN**: *Arthroleptis pygmaeus* Ahl, 1925
**PK**: *Arthroleptis pygmaeus*°Ahl, 1925
**KG**: *Phrynobatrachus** Günther, 1862
**KF**: *Phrynobatrachidae* 1941.lb.f001

*Micrhyla* Duméril[+1], 1841 • AK
**ST**: NS.JI • **CI**: h0917 • **ID**: 314
**PN**: *Microhyla achatina* Tschudi, 1838
**PK**: *Microhyla achatina** Tschudi, 1838
**KG**: *Microhyla** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Micrixalus*** Boulenger, 1888 • KY
**ST**: PO.KN • **CI**: h0918 • **ID**: 353
**PN**: *Ixalus fuscus* Boulenger, 1882
**PK**: *Ixalus fuscus** Boulenger, 1882
**KG**: *Micrixalus** Boulenger, 1888
**KF**: *Micrixalidae* 2001.db.f001

***Microbatrachella*** Hewitt, 1926 • KY
**ST**: PO.KN • **CI**: h0919 • **ID**: 358
**PN**: *Phrynobatrachus capensis* Boulenger, 1910
**PK**: *Phrynobatrachus capensis** Boulenger, 1910
**KG**: *Microbatrachella** Hewitt, 1926
**KF**: *Cacosternidae* 1931.na.f008

*Microbatrachus* Roux, 1910 • AK
**ST**: PO.JD • **CI**: h0920 • **ID**: 280
**PN**: *Microbatrachus pusillus* Roux, 1910
**PK**: *Microbatrachus pusillus*° Roux, 1910
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Microbatrachus* Hewitt, 1926 • AK
**ST**: PO.JH • **CI**: h0921 • **ID**: 358
**PN**: *Phrynobatrachus capensis* Boulenger, 1910
**PK**: *Phrynobatrachus capensis** Boulenger, 1910
**KG**: *Microbatrachella** Hewitt, 1926
**KF**: *Cacosternidae* 1931.na.f008

*Microbatrachylus* Taylor, 1939 • AK
**ST**: PO.JD • **CI**: h0922 • **ID**: 059
**PN**: *Eleutherodactylus hobartsmithi* Taylor, 1936
**PK**: *Eleutherodactylus hobartsmithi*° Taylor, 1936
**KG**: *Craugastor** Cope, 1862
**KF**: *Brachycephalidae* 1858.gc.f002

***Microcaecilia*** Taylor, 1968 • KY
**ST**: PO.KN • **CI**: h0923 • **ID**: 492
**PN**: *Dermophis albiceps* Boulenger, 1882
**PK**: *Dermophis albiceps*° Boulenger, 1882
**KG**: *Microcaecilia*[3] Taylor, 1968
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Microdiscopus* Peters, 1877 • **AK**
**ST**: **PO.JD** • **CI**: h0924 • **ID**: 397
**PN**: *Microdiscopus sumatranus* Peters, 1877
**PK**: *Microdiscopus sumatranus*° Peters, 1877
**KG**: *Phrynoglossus** Peters, 1867
**KF**: *Occidozygidae* 1990.fa.f002

***Microhyla*** Tschudi, 1838 • **KY**
**ST**: **PO.KN** • **CI**: h0925 • **ID**: 314
**PN**: *Microhyla achatina* Tschudi, 1838
**PK**: *Microhyla achatina** Tschudi, 1838
**KG**: *Microhyla** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Microkayla*** Riva[+3], 2017 • **KY**
**ST**: **PO.KN** • **CI**: h0926 • **ID**: 069
**PN**: *Microkayla teqta* Riva[+1], 2014
**PK**: *Microkayla teqta*° Riva[+1], 2014
**KG**: *Microkayla*[3] Riva[+3], 2014
**KF**: *Brachycephalidae* 1858.gc.f002

*Microphryne* Peters, 1873 • **AK**
**ST**: **PO.JD** • **CI**: h0927 • **ID**: 248
**PN**: *Paludicola pustulosa* Cope, 1864
**PK**: *Paludicola pustulosa** Cope, 1864
**KG**: *Engystomops** Jiménez de la Espada, 1872
**KF**: *Leiuperidae* 1850.bb.f010

*Microphryne* Methuen[+1], 1913 • **AK**
**ST**: **PO.JH** • **CI**: h0928 • **ID**: 431
**PN**: *Microphryne malagasia* Methuen[+1], 1913
**PK**: *Microphryne malagasia** Methuen[+1], 1913
**KG**: *Gephyromantis** Methuen, 1920
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Microps* Dahl, 1823 • **ZH**
**ST**: **ZO** • **CI**: zh057

*Microps* Wagler, 1828 • **AK**
**ST**: **PO.JH** • **CI**: h0929 • **ID**: 298
**PN**: *Microps unicolor* Wagler, 1828
**PK**: *Rana ovalis** Schneider, 1799
**KG**: *Engystoma** Fitzinger, 1826
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Micryletta*** Dubois, 1987 • **KY**
**ST**: **PO.KN** • **CI**: h0930 • **ID**: 315
**PN**: *Microhyla inornata* Boulenger, 1890
**PK**: *Microhyla inornata** Boulenger, 1890
**KG**: *Micryletta** Dubois, 1987
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Mimandra* Dubois[+1], 2009 • **AK**
**ST**: **PO.JD** • **CI**: h0931 • **ID**: 578
**PN**: *Salamandra lanzai* Nascetti[+3], 1988
**PK**: *Salamandra lanzai** Nascetti[+3], 1988
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *Salamandridae* 1820.ga.f002

***Mimosiphonops*** Taylor, 1968 • **KY**
**ST**: **PO.KN** • **CI**: h0932 • **ID**: 491
**PN**: *Mimosiphonops vermiculatus* Taylor, 1968
**PK**: *Mimosiphonops vermiculatus*° Taylor, 1968
**KG**: *Mimosiphonops*° Taylor, 1968
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Minascaecilia* Wake[+1], 1983 • **AK**
**ST**: **PO.JD** • **CI**: h0933 • **ID**: 487
**PN**: *Minascaecilia sartoria* Wake[+1], 1983
**PK**: *Siphonops syntremus*° Cope, 1866
**KG**: *Gymnopis*° Peters, 1874
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Minervarya*** Dubois[+2], 2001 • **KY**
**ST**: **PO.KN** • **CI**: h0934 • **ID**: 378
**PN**: *Minervarya sahyadris* Dubois[+2], 2001
**PK**: *Minervarya sahyadris** Dubois[+2], 2001
**KG**: *Minervarya** Dubois[+2], 2001
**KF**: *Dicroglossidae* 1987.da.f004

*Mini* Scherz[+10], 2019• **AK**
**ST**: **PO.JD** • **CI**: h0935 • **ID**: 286
**PN**: *Mini mum* Scherz[+10], 2019
**PK**: *Mini mum*° Scherz[+10], 2019
**KG**: *Cophyla** Boettger, 1880
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Minyobates*** Myers, 1987 • **KY**
**ST**: **PO.KN** • **CI**: h0936 • **ID**: 049
**PN**: *Dendrobates steyermarki* Rivero, 1971
**PK**: *Dendrobates steyermarki** Rivero, 1971
**KG**: *Minyobates** Myers, 1987
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

*Miopelobates* Wettstein-Westersheimb, 1955 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h0937 • **ID**: 470
**PN**: *Miopelobates zapfei* Wettstein-Westersheimb, 1955 ‡
**PK**: *Rana gigantea*° Lartet, 1851 †
**KG**: *Latonia*[3] Meyer, 1845 †
**KF**: *Discoglossidae* 1858.gc.f004

***Miopelodytes*** Taylor, 1941 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0938 • **ID**: †092
**PN**: *Miopelodytes gilmorei* Taylor, 1941 ‡
**PK**: *Miopelodytes gilmorei*° Taylor, 1941 †
**KG**: *Miopelodytes*° Taylor, 1941 †
**KF**: *Pelodytidae* 1850.bb.f002

***Mioproteus*** Estes[+1], 1978 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h0939 • **ID**: †182
**PN**: *Mioproteus caucasicus* Estes[+1], 1978 ‡
**PK**: *Mioproteus caucasicus*° Estes[+1], 1978 †
**KG**: *Mioproteus*° Estes[+1], 1978 †
**KF**: *Proteidae* 1831.ba.f002

*Mitrolysis* Cope, 1889 • **AK**
**ST**: **PO.JD** • **CI**: h0940 • **ID**: 237
**PN**: *Chiroleptes alboguttatus* Günther, 1867
**PK**: *Chiroleptes alboguttatus** Günther, 1867
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

***Mixophyes*** Günther, 1864 • **KY**
**ST**: **PO.KN** • **CI**: h0941 • **ID**: 266
**PN**: *Mixophyes fasciolatus* Günther, 1864
**PK**: *Mixophyes fasciolatus** Günther, 1864
**KG**: *Mixophyes** Günther, 1864
**KF**: *Myobatrachidae* 1850.sa.f001

*Mixophys* Ford[+1], 1993 • **AK**
**ST**: **NS.JI** • **CI**: h0942 • **ID**: 266

**PN**: *Mixophyes fasciolatus* Günther, 1864
**PK**: *Mixophyes fasciolatus** Günther, 1864
**KG**: *Mixophyes** Günther, 1864
**KF**: *Myobatrachidae* 1850.sa.f001

***Mo* nov.** • **ky**
**ST**: **po.kn** • **CI**: h0943 • **ID**: 126
**PN**: *Bufo bambutensis* Amiet, 1972
**PK**: *Bufo bambutensis** Amiet, 1972
**KG**: *Mo** **nov.**
**KF**: *Bufonidae* 1825.gb.f004

*Mocquardia* Ahl, 1931 • **ak**
**ST**: **nt.jd** • **CI**: h0944 • **ID**: 340
**PN**: *Rothschildia kounhiensis* Mocquard, 1905
**PK**: *Rothschildia kounhiensis*° Mocquard, 1905
**KG**: *Paracassina*° Peracca, 1907
**KF**: *Hyperoliidae* 1943.lb.f001

*Mogophrys*: Kuhl[+1] 1822 • **an**
**ST**: **li** • **CI**: n0083 • **ID**: 021
**PN**: *Megophrys montana* Kuhl[+1], 1822
**PK**: *Megophrys montana*° Kuhl[+1], 1822
**KG**: *Megophrys*[2] Kuhl[+1], 1822
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Molge* Merrem, 1820 • **ak**
**ST**: **nt.ji** • **CI**: h0945 • **ID**: 566
**PN**: *Triton cristatus* Laurenti, 1768
**PK**: *Triton cristatus** Laurenti, 1768
**KG**: *Triturus** Rafinesque, 1815
**KF**: *Salamandridae* 1820.ga.f002

***Monsechobatrachus*** Fejérváry, 1921 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0946 • **ID**: †034
**PN**: *Palaeobatrachus gaudryi* Vidal, 1902 ‡
**PK**: *Palaeobatrachus gaudryi*° Vidal, 1902 †
**KG**: *Monsechobatrachus*° Fejérváry, 1921 †
**KF**: **Anura** Familia *Incertae sedis*

*Montorana* Vogt, 1924 • **ak**
**ST**: **po.jd** • **CI**: h0947 • **ID**: 387
**PN**: *Montorana ahli* Vogt, 1924
**PK**: *Nanorana pleskei** Günther, 1896
**KG**: *Nanorana** Günther, 1896
**KF**: *Dicroglossidae* 1987.da.f004

*Montsechobatrachus*: Simpson 1926 ‡ • **an**
**ST**: **am** • **CI**: n0084 • **ID**: †034
**PN**: *Palaeobatrachus gaudryi* Vidal, 1902 ‡
**PK**: *Palaeobatrachus gaudryi*° Vidal, 1902 †
**KG**: *Monsechobatrachus*° Fejérváry, 1921 †
**KF**: **Anura** Familia *Incertae sedis*

***Morerella*** Rödel[+4] *in* Rödel[+12], 2009 • **ky**
**ST**: **po.kn** • **CI**: h0948 • **ID**: 332
**PN**: *Morerella cyanophthalma* Rödel[+4] *in* Rödel[+12], 2009
**PK**: *Morerella cyanophthalma** Rödel[+4] *in* Rödel[+12], 2009
**KG**: *Morerella** Rödel[+4] *in* Rödel[+12]2009
**KF**: *Hyperoliidae* 1943.lb.f001

*Mosleyia* Wells[+1], 1985 • **ak**
**ST**: **po.jd** • **CI**: h0949 • **ID**: 237
**PN**: *Hyla nannotis* Andersson, 1916
**PK**: *Hyla nannotis** Andersson, 1916
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

*Mucubatrachus* La Marca, 2007 • **ak**
**ST**: **po.jd** • **CI**: h0950 • **ID**: 078
**PN**: *Hylodes briceni* Boulenger, 1903
**PK**: *Hylodes briceni*° Boulenger, 1903
**KG**: *Pristimantis** Jiménez de la Espada, 1870
**KF**: *Brachycephalidae* 1858.gc.f002

*Muraenopsis* Fitzinger, 1843 • **ak**
**ST**: **po.jd** • **CI**: h0951 • **ID**: 520
**PN**: *Amphiuma tridactylum* Cuvier, 1827
**PK**: *Amphiuma tridactylum** Cuvier, 1827
**KG**: *Amphiuma** Garden *in* Smith, 1821
**KF**: *Amphiumidae* 1825.gb.f07

*Musergus* Dubois[+1], 2009 • **ak**
**ST**: **po.jd** • **CI**: h0952 • **ID**: 567
**PN**: *Molge strauchii* Steindachner, 1888
**PK**: *Molge strauchii** Steindachner, 1888
**KG**: *Neurergus** Cope, 1862
**KF**: *Salamandridae* 1820.ga.f002

*Mycetoglossus* Bonaparte, 1839 • **ex**
**ST**: **nt.ce** • **CI**: e0009 • **ID**: 540
**PN**: *Salamandra subfusca* Green, 1818
**PK**: *Salamandra rubra** Sonnini[+1], 1801
**KG**: *Pseudotriton*[1] Tschudi, 1838
**KF**: *Plethodontidae* 1850.ga.f002

*Mycetoides*: Duméril[+2] 1854 • **an**
**ST**: **al** • **CI**: n0085 • **ID**: 522
**PN**: *Bolitoglossa mexicana* Duméril[+2], 1854
**PK**: *Bolitoglossa mexicana** Duméril[+2], 1854
**KG**: *Bolitoglossa** Duméril[+2], 1854
**KF**: *Plethodontidae* 1850.ga.f002

*Mycrohyla* Casto de Elera, 1895 • **ak**
**ST**: **nt.ji** • **CI**: h0954 • **ID**: 314
**PN**: *Microhyla achatina* Tschudi, 1838
**PK**: *Microhyla achatina** Tschudi, 1838
**KG**: *Microhyla** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Myersiella*** Carvalho, 1954 • **ky**
**ST**: **po.kn** • **CI**: h0955 • **ID**: 295
**PN**: *Engystoma subnigrum* Miranda-Ribeiro, 1924
**PK**: *Engystoma microps** Duméril[+1], 1841
**KG**: *Myersiella*[1] Carvalho, 1954
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Myersiohyla*** Faivovich[+5], 2005 • **ky**
**ST**: **po.kn** • **CI**: h0956 • **ID**: 192
**PN**: *Hyla inparquesi* Ayarzagüena[+1], 1994
**PK**: *Hyla inparquesi** Ayarzagüena[+1], 1994
**KG**: *Myersiohyla** Faivovich[+5], 2005
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Myiobatrachus* [Bonaparte, 1850] Schlegel, 1858 • **ak**
**ST**: **ns.ji** • **CI**: h0957 • **ID**: 273
**PN**: *Myobatrachus paradoxus* Schlegel, 1850
**PK**: *Breviceps gouldii** Gray, 1841
**KG**: *Myobatrachus*[1] Schlegel, 1850
**KF**: *Myobatrachidae* 1850.sa.f001

*Mynbulakia* Nessov, 1981 ‡ • AK
ST: PO.JD • CI: h0958 • ID: †166
PN: *Mynbulakia surgayi* Nessov, 1981 ‡
PK: *Eoscapherpeton asiaticum*° Nessov, 1981 †
KG: *Eoscapherpeton*° Nessov, 1981 †
KF: *CRYPTOBRANCHIDAE* 1826.fb.f003

***Myobatrachus*** Schlegel, 1850 • KY
ST: PO.KN • CI: h0959 • ID: 273
PN: *Myobatrachus paradoxus* Schlegel, 1850
PK: *Breviceps gouldii** Gray, 1841
KG: *Myobatrachus*[1] Schlegel, 1850
KF: *MYOBATRACHIDAE* 1850.sa.f001

*Myraenopsis* Agassiz, 1847 • AK
ST: PO.JD • CI: h0960 • ID: 520
PN: *Amphiuma tridactylum* Cuvier, 1827
PK: *Amphiuma tridactylum** Cuvier, 1827
KG: *Amphiuma** Garden *in* Smith, 1821
KF: *AMPHIUMIDAE* 1825.gb.f07

***Mysticellus*** Garg[+1], 2019 • KY
ST: PO.KN • CI: h0961 • ID: 316
PN: *Mysticellus franki* Garg[+1], 2019
PK: *Mysticellus franki*° Garg[+1], 2019
KG: *Mysticellus*° Garg[+1], 2019
KF: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Myxophyes* Krefft, 1865 • AK
ST: NS.JI • CI: h0962 • ID: 266
PN: *Mixophyes fasciolatus* Günther, 1864
PK: *Mixophyes fasciolatus** Günther, 1864
KG: *Mixophyes** Günther, 1864
KF: *MYOBATRACHIDAE* 1850.sa.f001

*Nannobatrachus* Boulenger, 1882 • AK
ST: PO.JD • CI: h0963 • ID: 400
PN: *Nannobatrachus beddomii* Boulenger, 1882
PK: *Nannobatrachus beddomii** Boulenger, 1882
KG: *Nyctibatrachus** Boulenger, 1882
KF: *NYCTIBATRACHIDAE* 1993.ba.f001

*Nannofrys* Palacký, 1898 • AK
ST: NT.JI • CI: h0964 • ID: 376
PN: *Nannophrys ceylonensis* Günther, 1869
PK: *Nannophrys ceylonensis** Günther, 1869
KG: *Nannophrys** Günther, 1869
KF: *DICROGLOSSIDAE* 1987.da.f004

***Nannophryne*** Günther, 1870 • KY
ST: PO.KN • CI: h0965 • ID: 146
PN: *Nannophryne variegata* Günther, 1870
PK: *Nannophryne variegata** Günther, 1870
KG: *Nannophryne** Günther, 1870
KF: *BUFONIDAE* 1825.gb.f004

***Nannophrys*** Günther, 1869 • KY
ST: PO.KN • CI: h0966 • ID: 376
PN: *Nannophrys ceylonensis* Günther, 1869
PK: *Nannophrys ceylonensis** Günther, 1869
KG: *Nannophrys** Günther, 1869
KF: *DICROGLOSSIDAE* 1987.da.f004

***Nanorana*** Günther, 1896 • KY
ST: PO.KN • CI: h0967 • ID: 387
PN: *Nanorana pleskei* Günther, 1896
PK: *Nanorana pleskei** Günther, 1896
KG: *Nanorana** Günther, 1896
KF: *DICROGLOSSIDAE* 1987.da.f004

*Nanotriton* Parra-Olea[+2], 2004 • AK
ST: PO.JD • CI: h0968 • ID: 522
PN: *Oedipus rufescens* Cope, 1869
PK: *Oedipus rufescens** Cope, 1869
KG: *Bolitoglossa** Duméril[+2], 1854
KF: *PLETHODONTIDAE* 1850.ga.f002

***Nasikabatrachus*** Biju[+1], 2003 • KY
ST: PO.KN • CI: h0969 • ID: 031
PN: *Nasikabatrachus sahyadrensis* Biju[+1], 2003
PK: *Nasikabatrachus sahyadrensis** Biju[+1], 2003
KG: *Nasikabatrachus** Biju[+1], 2003
KF: *NASIKABATRACHIDAE* 2003.bb.f001

*Nasirana* Dubois, 1992 • AK
ST: PO.JD • CI: h0970 • ID: 402
PN: *Rana alticola* Boulenger, 1882
PK: *Rana alticola** Boulenger, 1882
KG: *Clinotarsus** Mivart, 1869
KF: *RANIDAE* 1796.ba.f001

***Nasutixalus*** Jiang[+3] *in* Jiang[+5], 2016 • KY
ST: PO.KN • CI: h0971 • ID: 446
PN: *Nasutixalus medogensis* Jiang[+3] *in* Jiang[+5], 2016
PK: *Nasutixalus medogensis** Jiang[+3] *in* Jiang[+5], 2016
KG: *Nasutixalus** Jiang[+3] *in* Jiang[+5], 2016
KF: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

***Natalobatrachus*** Hewitt[+1], 1912 • KY
ST: PO.KN • CI: h0972 • ID: 361
PN: *Natalobatrachus bonebergi* Hewitt[+1], 1912
PK: *Natalobatrachus bonebergi** Hewitt[+1], 1912
KG: *Natalobatrachus** Hewitt[+1], 1912
KF: *CACOSTERNIDAE* 1931.na.f008

*Nattereria* Steindachner, 1864 • AK
ST: PO.JD • CI: h0973 • ID: 250
PN: *Nattereria lateristriga* Steindachner, 1864
PK: *Nattereria lateristriga*° Steindachner, 1864
KG: *Physalaemus** Fitzinger, 1826
KF: *LEIUPERIDAE* 1850.bb.f010

*Nectes*: Bleeker 1857 • AN
ST: AL • CI: n0086 • ID: 111
PN: *Nectes pleurotaenia* Bleeker, 1857 UN
PK: *Pseudobufo subasper*° Tschudi, 1838
KG: *Pseudobufo*° Tschudi, 1838
KF: *BUFONIDAE* 1825.gb.f004

*Nectes* Cope, 1865 • AK
ST: NT.JI • CI: h0974 • ID: 111
PN: *Pseudobufo subasper* Tschudi, 1838
PK: *Pseudobufo subasper*° Tschudi, 1838
KG: *Pseudobufo*° Tschudi, 1838
KF: *BUFONIDAE* 1825.gb.f004

***Nectocaecilia*** Taylor, 1968 • KY
ST: PO.KN • CI: h0975 • ID: 478
PN: *Chthonerpeton petersii* Boulenger, 1882
PK: *Chthonerpeton petersii*° Boulenger, 1882

**KG**: *Nectocaecilia*° Taylor, 1968
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|
*Nectodactylus* Miranda Ribeiro, 1924 • AK
**ST**: PO.JD • **CI**: h0976 • **ID**: 292
**PN**: *Nectodactylus spinulosus* Miranda Ribeiro, 1924
**PK**: *Engystoma leucosticta** Boulenger, 1888
**KG**: *Chiasmocleis** Méhelÿ, 1904
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Nectofryne* Palacký, 1898 • AK
**ST**: NT.JI • **CI**: h0977 • **ID**: 127
**PN**: *Nectophryne afra* Buchholz[+1] *in* Peters, 1875
**PK**: *Nectophryne afra** Buchholz[+1] *in* Peters, 1875
**KG**: *Nectophryne** Buchholz[+1] *in* Peters, 1875
**KF**: *Bufonidae* 1825.gb.f004
***Nectophryne*** Buchholz[+1] *in* Peters, 1875 • KY
**ST**: PO.KN • **CI**: h0978 • **ID**: 127
**PN**: *Nectophryne afra* Buchholz[+1] *in* Peters, 1875
**PK**: *Nectophryne afra** Buchholz[+1] *in* Peters, 1875
**KG**: *Nectophryne** Buchholz[+1] *in* Peters, 1875
**KF**: *Bufonidae* 1825.gb.f004
***Nectophrynoides*** Noble, 1926 • KY
**ST**: PO.KN • **CI**: h0979 • **ID**: 135
**PN**: *Nectophryne tornieri* Roux, 1906
**PK**: *Nectophryne tornieri** Roux, 1906
**KG**: *Nectophrynoides** Noble, 1926
**KF**: *Bufonidae* 1825.gb.f004
*Nectura*: Neave 1940 • AN
**ST**: AM • **CI**: n0087 • **ID**: 553
**PN**: *Sirena maculosa* Rafinesque, 1818
**PK**: *Sirena maculosa** Rafinesque, 1818
**KG**: *Necturus** Rafinesque, 1819
**KF**: *Proteidae* 1831.ba.f002
***Necturus*** Rafinesque, 1819 • KY
**ST**: PO.KN • **CI**: h0980 • **ID**: 553
**PN**: *Sirena maculosa* Rafinesque, 1818
**PK**: *Sirena maculosa** Rafinesque, 1818
**KG**: *Necturus** Rafinesque, 1819
**KF**: *Proteidae* 1831.ba.f002
*Nectusus*: Neave 1940 • AN
**ST**: AM • **CI**: n0088 • **ID**: 553
**PN**: *Sirena maculosa* Rafinesque, 1818
**PK**: *Sirena maculosa** Rafinesque, 1818
**KG**: *Necturus** Rafinesque, 1819
**KF**: *Proteidae* 1831.ba.f002
***Negatchevkia*** Ratnikov, 1993 ‡ • KY
**ST**: PO.KN • **CI**: h0981 • **ID**: †035
**PN**: *Negatchevkia donensis* Ratnikov, 1993 ‡
**PK**: *Negatchevkia donensis*° Ratnikov, 1993 †
**KG**: *Negatchevkia*° Ratnikov, 1993 †
**KF**: **Anura** Familia *Incertae sedis*
*Nelsonophryne* Frost, 1987 • AK
**ST**: PO.JD • **CI**: h0982 • **ID**: 293
**PN**: *Glossostoma aterrimum* Günther, 1901
**PK**: *Glossostoma aterrimum*° Günther, 1901
**KG**: *Ctenophryne** Mocquard, 1904
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Nenirana* Hillis[+1], 2005 • AK
**ST**: PO.JD • **CI**: h0983 • **ID**: 415
**PN**: *Rana areolata* Baird[+1], 1852
**PK**: *Rana areolata** Baird[+1], 1852
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001
***Neobatrachus*** Peters, 1863 • KY
**ST**: PO.KN • **CI**: h0984 • **ID**: 263
**PN**: *Neobatrachus pictus* Peters, 1863
**PK**: *Neobatrachus pictus** Peters, 1863
**KG**: *Neobatrachus** Peters, 1863
**KF**: *Myobatrachidae* 1850.sa.f001
*Neobufo* Bolkay, 1919 • AK
**ST**: PO.JD • **CI**: h0985 • **ID**: 120
**PN**: *Bufo vulgaris* Laurenti, 1768
**PK**: *Rana bufo** Linnaeus, 1758
**KG**: *Bufo** Garsault, 1764
**KF**: *Bufonidae* 1825.gb.f004
*Neophractops* Wells[+1], 1985 • AK
**ST**: PO.JD • **CI**: h0986 • **ID**: 237
**PN**: *Chiroleptes platycephalus* Günther, 1873
**PK**: *Chiroleptes platycephalus** Günther, 1873
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009
***Neoprocoela*** Schaeffer, 1949 ‡ • KY
**ST**: PO.KN • **CI**: h0987 • **ID**: †098
**PN**: *Neoprocoela edentatus* Schaeffer, 1949 ‡
**PK**: *Neoprocoela edentata*° Schaeffer, 1949 †
**KG**: *Neoprocoela*° Schaeffer, 1949 †
**KF**: *Telmatobiidae* 1843.fa.f006
*Neoruinosus* Wells[+1], 1985 • AK
**ST**: PO.JD • **CI**: h0988 • **ID**: 263
**PN**: *Heleioporus sudelli* Lamb, 1911
**PK**: *Heleioporus sudelli** Lamb, 1911
**KG**: *Neobatrachus** Peters, 1863
**KF**: *Myobatrachidae* 1850.sa.f001
*Neoscaphiopus* Taylor, 1942 ‡ • AK
**ST**: PO.JD • **CI**: h0989 • **ID**: 030
**PN**: *Neoscaphiopus noblei* Taylor, 1941 ‡
**PK**: *Neoscaphiopus noblei*° Taylor, 1941 †
**KG**: *Spea** Cope, 1866
**KF**: *Scaphiopodidae* 1865.ca.f003
*Neotriton* Bolkay, 1927 • AK
**ST**: PO.JD • **CI**: h0990 • **ID**: 566
**PN**: *Triton karelinii* Strauch, 1870
**PK**: *Triton karelinii** Strauch, 1870
**KG**: *Triturus** Rafinesque, 1815
**KF**: *Salamandridae* 1820.ga.f002
*Nephelobates* La Marca, 1994 • AK
**ST**: PO.JD • **CI**: h0991 • **ID**: 037
**PN**: *Phyllobates alboguttatus* Boulenger, 1903
**PK**: *Phyllobates alboguttatus*° Boulenger, 1903
**KG**: *Aromobates** Myers[+2], 1991
**KF**: *Aromobatidae* 2006.gc.f004
*Nesionixalus* Perret, 1976 • AK
**ST**: PO.JD • **CI**: h0992 • **ID**: 331

**PN**: *Hyperolius thomensis* Bocage, 1886
**PK**: *Hyperolius thomensis** Bocage, 1886
**KG**: *Hyperolius** Rapp, 1842
**KF**: *Hyperoliidae* 1943.lb.f001

*Nesobia* Ancey, 1887 • **zh**
**ST**: **zo** • **CI**: zh058

*Nesobia* Van Kampen, 1923 • **ak**
**ST**: **po.jh** • **CI**: h0993 • **ID**: 018
**PN**: *Leptobrachium natunae* Günther, 1895
**PK**: *Leptobrachium natunae*° Günther, 1895
**KG**: *Leptobrachella*° Smith, 1925
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Nesomantis* Boulenger, 1909 • **ak**
**ST**: **po.jd** • **CI**: h0994 • **ID**: 033
**PN**: *Nesomantis thomasseti* Boulenger, 1909
**PK**: *Nesomantis thomasseti** Boulenger, 1909
**KG**: *Sooglossus** Boulenger, 1906
**KF**: *Sooglossidae* 1931.na.f002

***Nesorohyla*** Pinheiro[+4,] 2019 • **ky**
**ST**: **po.kn** • **CI**: h0995 • **ID**: 193
**PN**: *Hyla kanaima* Goin[+1], 1969
**PK**: *Hyla kanaima** Goin[+1], 1969
**KG**: *Nesorohyla** Pinheiro[+4,] 2019
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Nesovtriton*** Skutschas, 2009 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0996 • **ID**: †138
**PN**: *Nesovtriton mynbulakensis* Skutschas 2009 ‡
**PK**: *Nesovtriton mynbulakensis*° Skutschas 2009 †
**KG**: *Nesovtriton*° Skutschas 2009 †
**KF**: **Urodela** Familia *Incertae sedis*

***Neurergus*** Cope, 1862 • **ky**
**ST**: **po.kn** • **CI**: h0997 • **ID**: 567
**PN**: *Neurergus crocatus* Cope, 1862
**PK**: *Neurergus crocatus** Cope, 1862
**KG**: *Neurergus** Cope, 1862
**KF**: *Salamandridae* 1820.ga.f002

***Neusibatrachus*** Seiffert, 1972 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0998 • **ID**: †063
**PN**: *Neusibatrachus wilferti* Seiffert, 1972 ‡
**PK**: *Neusibatrachus wilferti*° Seiffert, 1972 †
**KG**: *Neusibatrachus*° Seiffert, 1972 †
**KF**: **Dorsipares** Familia *Incertae sedis*

***Nevobatrachus*** Mahony, 2019 ‡ • **ky**
**ST**: **po.kn** • **CI**: h0999 • **ID**: †064
**PN**: *Cordicephalus gracilis* Nevo, 1968 ‡
**PK**: *Cordicephalus gracilis*° Nevo, 1968 †
**KG**: *Nevobatrachus*° Mahony, 2019 †
**KF**: **Dorsipares** Familia *Incertae sedis*

***Nezpercius*** Blob[+4], 2001 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1000 • **ID**: †139
**PN**: *Nezpercius dodsoni* Blob[+4], 2001 ‡
**PK**: *Nezpercius dodsoni*° Blob[+4], 2001 †
**KG**: *Nezpercius*° Blob[+4], 2001 †
**KF**: **Urodela** Familia *Incertae sedis*

***Niceforonia*** Goin[+1], 1963 • **ky**
**ST**: **po.kn** • **CI**: h1001 • **ID**: 061
**PN**: *Niceforonia nana* Goin[+1], 1963
**PK**: *Niceforonia nana*° Goin[+1], 1963
**KG**: *Niceforonia*° Goin[+1], 1963
**KF**: *Brachycephalidae* 1858.gc.f002

***Nidirana*** Dubois, 1992 • **ky**
**ST**: **po.kn** • **CI**: h1002 • **ID**: 411
**PN**: *Rana psaltes* Kuramoto, 1985
**PK**: *Rana okinavana** Boettger, 1895
**KG**: *Nidirana*[1] Dubois, 1992
**KF**: *Ranidae* 1796.ba.f001

*Niedenia* Ahl, 1924 • **ak**
**ST**: **po.jd** • **CI**: h1003 • **ID**: 179
**PN**: *Niedenia spinulifer* Ahl, 1923
**PK**: *Cycloramphus asper*° Werner, 1899
**KG**: *Cycloramphus** Tschudi, 1838
**KF**: *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|

***Nimbaphrynoides*** Dubois, 1987 • **ky**
**ST**: **po.kn** • **CI**: h1004 • **ID**: 128
**PN**: *Nectophrynoides occidentalis* Angel, 1943
**PK**: *Nectophrynoides occidentalis** Angel, 1943
**KG**: *Nimbaphrynoides** Dubois, 1987
**KF**: *Bufonidae* 1825.gb.f004

*Nireus* Agassiz, 1847 • **zh**
**ST**: **zo** • **CI**: zh059

*Nireus* Theobald, 1880 • **ak**
**ST**: **po.jh** • **CI**: h1005 • **ID**: 015
**PN**: *Nireus pulcherrimus* Theobald, 1880
**PK**: *Leptobrachium hasseltii** Tschudi, 1838
**KG**: *Leptobrachium** Tschudi, 1838
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

***Noblella*** Barbour, 1930 • **ky**
**ST**: **po.kn** • **CI**: h1006 • **ID**: 070
**PN**: *Sminthillus peruvianus* Noble, 1921
**PK**: *Sminthillus peruvianus** Noble, 1921
**KG**: *Noblella** Barbour, 1930
**KF**: *Brachycephalidae* 1858.gc.f002

***Notaden*** Günther, 1873 • **ky**
**ST**: **po.kn** • **CI**: h1007 • **ID**: 265
**PN**: *Notaden bennettii* Günther, 1873
**PK**: *Notaden bennettii** Günther, 1873
**KG**: *Notaden** Günther, 1873
**KF**: *Myobatrachidae* 1850.sa.f001

***Noterpeton*** Rage[+2], 1993 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1008 • **ID**: †175
**PN**: *Noterpeton bolivianum* Rage[+2], 1993 ‡
**PK**: *Noterpeton bolivianum*° Rage[+2], 1993 †
**KG**: *Noterpeton*° Rage[+2], 1993 †
**KF**: *Noterpetidae* 1993.ra.f001 †

***Nothophryne*** Poynton, 1963 • **ky**
**ST**: **po.kn** • **CI**: h1009 • **ID**: 364
**PN**: *Nothophryne broadleyi* Poynton, 1963
**PK**: *Nothophryne broadleyi*° Poynton, 1963
**KG**: *Nothophryne*° Poynton, 1963
**KF**: *Cacosternidae* 1931.na.f008

*Notiomolge* Hillis[+3], 2001 • **ak**
**ST**: **po.jd** • **CI**: h1010 • **ID**: 542

**PN**: *Eurycea neotenes* Bishop+1, 1937
**PK**: *Eurycea neotenes** Bishop+1, 1937
**KG**: *Eurycea** Rafinesque, 1822
**KF**: *Plethodontidae* 1850.ga.f002

***Notobatrachus*** Reig *in* Stipanicic+1, 1956 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1011 • **ID**: †055
**PN**: *Notobatrachus degiustoi* Reig *in* Stipanicic+1, 1956 ‡
**PK**: *Notobatrachus degiustoi*° Reig *in* Stipanicic+1, 1956 †
**KG**: *Notobatrachus*° Reig *in* Stipanicic+1, 1956 †
**KF**: *Leiopelmatidae* 1869.mc.f07-|1942.ta.f001|

*Notodelphis* Hoffmann, 1878 • **AK**
**ST**: **NS.JD** • **CI**: h1012 • **ID**: 091
**PN**: *Notodelphys ovifera* Lichtenstein+1, 1854
**PK**: *Notodelphys ovifera** Lichtenstein+1, 1854
**KG**: *Gastrotheca** Fitzinger, 1843
**KF**: *Hemiphractidae* 1862.pa.f001

*Notodelphys* Alleman, 1847 • **ZH**
**ST**: **ZO** • **CI**: zh060

*Notodelphys* Lichtenstein+1, 1854 • **AK**
**ST**: **PO.JH**• **CI**: h1013 • **ID**: 091
**PN**: *Notodelphys ovifera* Lichtenstein+1, 1854
**PK**: *Notodelphys ovifera** Lichtenstein+1, 1854
**KG**: *Gastrotheca** Fitzinger, 1843
**KF**: *Hemiphractidae* 1862.pa.f001

*Notokassina* Drewes, 1985 • **AK**
**ST**: **PO.JD** • **CI**: h1014 • **ID**: 341
**PN**: *Cassina wealii* Boulenger, 1882
**PK**: *Cassina wealii** Boulenger, 1882
**KG**: *Semnodactylus*[1] Hoffman, 1939
**KF**: *Hyperoliidae* 1943.lb.f001

***Notophthalmus*** Rafinesque, 1820 • **KY**
**ST**: **PO.KN** • **CI**: h1015 • **ID**: 569
**PN**: *Triturus miniatus* Rafinesque, 1820
**PK**: *Triturus* (*Diemictylus*) *viridescens** Rafinesque, 1820
**KG**: *Notophthalmus*[1] Rafinesque, 1820
**KF**: *Salamandridae* 1820.ga.f002

*Nototheca* Bokermann, 1950 • **AK**
**ST**: **PO.JD** • **CI**: h1016 • **ID**: 094
**PN**: *Coelonotus fissilis* Miranda-Ribeiro, 1920
**PK**: *Coelonotus fissilis** Miranda-Ribeiro, 1920
**KG**: *Fritziana** Mello-Leitão, 1937
**KF**: *Hemiphractidae* 1862.pa.f001

*Nototrema* Agassiz, 1847 • **ZH**
**ST**: **ZO** • **CI**: zh061

*Nototrema* Günther, 1859 • **AK**
**ST**: **PO.JH** • **CI**: h1017 • **ID**: 091
**PN**: *Hyla marsupiata* Duméril+1, 1841
**PK**: *Hyla marsupiata** Duméril+1, 1841
**KG**: *Gastrotheca** Fitzinger, 1843
**KF**: *Hemiphractidae* 1862.pa.f001

***Nototriton*** Wake+1, 1983 • **KY**
**ST**: **PO.KN** • **CI**: h1018 • **ID**: 537
**PN**: *Spelerpes picadoi* Stejneger, 1911
**PK**: *Spelerpes picadoi** Stejneger, 1911
**KG**: *Nototriton** Wake+1, 1983
**KF**: *Plethodontidae* 1850.ga.f002

*Novirana*: Hillis+1 2005 • **AN**
**ST**: **AL** • **CI**: n0089 • **ID**: 415
**PN**: *Rana pipiens* Schreber, 1782
**PK**: *Rana pipiens** Schreber, 1782
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001

***Novooskolia*** Ratnikov, 1993 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1019 • **ID**: †036
**PN**: *Novooskolia cristata* Ratnikov, 1993 ‡
**PK**: *Novooskolia cristata*° Ratnikov, 1993 †
**KG**: *Novooskolia*° Ratnikov, 1993 †
**KF**: **Anura** Familia *Incertae sedis*

***Nuominerpeton*** Jia+1, 2016 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1020 • **ID**: †161
**PN**: *Nuominerpeton aquilonaris* Jia+1, 2016 ‡
**PK**: *Nuominerpeton aquilonaris*° Jia+1, 2016 †
**KG**: *Nuominerpeton*° Jia+1, 2016 †
**KF**: **Imperfectibranchia** Familia *Incertae sedis*

***Nukusurus*** Nessov, 1981 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1021 • **ID**: †005
**PN**: *Nukusurus insuetus* Nessov, 1981 ‡
**PK**: *Nukusurus insuetus*° Nessov, 1981 †
**KG**: *Nukusurus*° Nessov, 1981 †
**KF**: *Albanerpetidae* 1982.fa.f001 †

***Nyctanolis*** Elias+1, 1983 • **KY**
**ST**: **PO.KN** • **CI**: h1022 • **ID**: 532
**PN**: *Nyctanolis pernix* Elias+1, 1983
**PK**: *Nyctanolis pernix** Elias+1, 1983
**KG**: *Nyctanolis** Elias+1, 1983
**KF**: *Plethodontidae* 1850.ga.f002

***Nyctibates*** Boulenger, 1904 • **KY**
**ST**: **PO.KN** • **CI**: h1023 • **ID**: 322
**PN**: *Nyctibates corrugatus* Boulenger, 1904
**PK**: *Nyctibates corrugatus** Boulenger, 1904
**KG**: *Nyctibates** Boulenger, 1904
**KF**: *Arthroleptidae* 1869.mc.f011

***Nyctibatrachus*** Boulenger, 1882 • **KY**
**ST**: **PO.KN** • **CI**: h1024 • **ID**: 400
**PN**: *Nyctibatrachus major* Boulenger, 1882
**PK**: *Nyctibatrachus major** Boulenger, 1882
**KG**: *Nyctibatrachus** Boulenger, 1882
**KF**: *Nyctibatrachidae* 1993.ba.f001

***Nyctimantis*** Boulenger, 1882 • **KY**
**ST**: **PO.KN** • **CI**: h1025 • **ID**: 230
**PN**: *Nyctimantis rugiceps* Boulenger, 1882
**PK**: *Nyctimantis rugiceps** Boulenger, 1882
**KG**: *Nyctimantis** Boulenger, 1882
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Nyctimystes*** Stejneger, 1916 • **KY**
**ST**: **PO.KN** • **CI**: h1026 • **ID**: 236
**PN**: *Nyctimantis papua* Boulenger, 1897
**PK**: *Nyctimantis papua** Boulenger, 1897
**KG**: *Nyctimystes** Stejneger, 1916
**KF**: *Phyllomedusidae* 1858.gc.f009

***Nyctixalus*** Boulenger, 1882 • **KY**
**ST**: **PO.KN** • **CI**: h1027 • **ID**: 437

**PN**: *Nyctixalus margaritifer* Boulenger, 1882
**PK**: *Nyctixalus margaritifer** Boulenger, 1882
**KG**: *Nyctixalus** Boulenger, 1882
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Nymphargus*** Cisneros-Heredia[+1], 2007 • **ky**
**ST**: **po.kn** • **CI**: h1028 • **ID**: 165
**PN**: *Cochranella cochranae* Goin, 1961
**PK**: *Cochranella cochranae** Goin, 1961
**KG**: *Nymphargus** Cisneros-Heredia[+1], 2007
**KF**: *Centrolenidae* 1951.ta.f001

*Oaxakia* Parra-Olea[+2], 2004 • **ak**
**ST**: **po.jd** • **CI**: h1029 • **ID**: 522
**PN**: *Oedipus macrinii* Lafrentz, 1930
**PK**: *Oedipus macrinii** Lafrentz, 1930
**KG**: *Bolitoglossa** Duméril[+2], 1854
**KF**: *Plethodontidae* 1850.ga.f002

*Obstetricans* Dugès, 1834 • **ak**
**ST**: **po.jd** • **CI**: h1030 • **ID**: 467
**PN**: *Bufo obstetricans* Laurenti, 1768
**PK**: *Bufo obstetricans** Laurenti, 1768
**KG**: *Alytes** Wagler, 1829
**KF**: *Alytidae* 1843.fa.f008

***Occidozyga*** Kuhl[+1], 1822 • **ky**
**ST**: **po.kn** • **CI**: h1031 • **ID**: 395
**PN**: *Rana lima* Gravenhorst, 1829
**PK**: *Rana lima** Gravenhorst, 1829
**KG**: *Occidozyga** Kuhl[+1], 1822
**KF**: *Occidozygidae* 1990.fa.f002

*Ochthomantis* Glaw[+1], 1994 • **ak**
**ST**: **po.jd** • **CI**: h1032 • **ID**: 432
**PN**: *Rana femoralis* Boulenger, 1882
**PK**: *Rana femoralis** Boulenger, 1882
**KG**: *Mantidactylus** Boulenger, 1895
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Odontobatrachus*** Barej[+3] *in* Barej[+10], 2014 • **ky**
**ST**: **po.kn** • **CI**: h1033 • **ID**: 348
**PN**: *Petropedetes natator* Boulenger, 1905
**PK**: *Petropedetes natator** Boulenger, 1905
**KG**: *Odontobatrachus** Barej[+3] *in* Barej[+10], 2014
**KF**: *Odontobatrachidae* 2014.ba.f001

***Odontophrynus*** Reinhardt[+1], 1862 • **ky**
**ST**: **po.kn** • **CI**: h1034 • **ID**: 153
**PN**: *Odontophrynus cultripes* Reinhardt[+1], 1862
**PK**: *Odontophrynus cultripes** Reinhardt[+1], 1862
**KG**: *Odontophrynus** Reinhardt[+1], 1862
**KF**: *Odontophrynidae* 1971.la.f002

***Odorrana*** Fei[+2], 1990 • **ky**
**ST**: **po.kn** • **CI**: h1035 • **ID**: 412
**PN**: *Rana margaretae* Liu, 1950
**PK**: *Rana margaretae** Liu, 1950
**KG**: *Odorrana** Fei[+2], 1990
**KF**: *Ranidae* 1796.ba.f001

***Oedipina*** Keferstein, 1868 • **ky**
**ST**: **po.kn** • **CI**: h1036 • **ID**: 534
**PN**: *Oedipina uniformis* Keferstein, 1868
**PK**: *Oedipina uniformis** Keferstein, 1868
**KG**: *Oedipina** Keferstein, 1868
**KF**: *Plethodontidae* 1850.ga.f002

*Oedipus* Berthold, 1827 • **zh**
**ST**: **zo** • **CI**: zh062

*Oedipus* Tschudi, 1838 • **ak**
**ST**: **po.jh** • **CI**: h1037 • **ID**: 522
**PN**: *Salamandra platydactylus* Gray, 1831
**PK**: *Salamandra platydactylus** Gray, 1831
**KG**: *Bolitoglossa** Duméril[+1], 1854
**KF**: *Plethodontidae* 1850.ga.f002

*Oeditriton*: McCranie[+1] 2008 • **an**
**ST**: **al** • **CI**: n0090 • **ID**: 536
**PN**: *Oedipina quadra* McCranie[+1], 2008
**PK**: *Oedipina quadra** McCranie[+1], 2008
**KG**: *Thornella* **nov.**
**KF**: *Plethodontidae* 1850.ga.f002

***Oedopinola*** Hilton, 1946 • **ky**
**ST**: **po.kn** • **CI**: h1038 • **ID**: 535
**PN**: *Oedipus complex* Dunn, 1924
**PK**: *Oedipus complex** Dunn, 1924
**KG**: *Oedopinola** Hilton, 1946
**KF**: *Plethodontidae* 1850.ga.f002

*Ogallalabatrachus* Taylor, 1941 ‡ • **ak**
**ST**: **po.jd** • **CI**: h1039 • **ID**: 555
**PN**: *Ogallalabatrachus horarium* Taylor, 1941 ‡
**PK**: *Plioambystoma kansense*° Adams[+1], 1929 †
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *Ambystomatidae* 1850.ga.f004

*Oiacurus* Leuckart, 1821 • **ak**
**ST**: **nt.ji** • **CI**: h1040 • **ID**: 566
**PN**: *Triton cristatus* Laurenti, 1768
**PK**: *Triton cristatus** Laurenti, 1768
**KG**: *Triturus** Rafinesque, 1815
**KF**: *Salamandridae* 1820.ga.f002

***Oligosemia*** Navás, 1922 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1041 • **ID**: †195
**PN**: *Oligosemia spinosa* Navás 1922 ‡
**PK**: *Oligosemia spinosa*° Navás 1922 †
**KG**: *Oligosemia*° Navás 1922 †
**KF**: *Salamandridae* 1820.ga.f002

*Ollotis* Cope, 1875 • **ak**
**ST**: **po.jd** • **CI**: h1042 • **ID**: 137
**PN**: *Ollotis coerulescens* Cope, 1875
**PK**: *Cranopsis fastidiosus** Cope, 1875
**KG**: *Incilius** Cope, 1863
**KF**: *Bufonidae* 1825.gb.f004

*Ologigon*: Miranda-Ribeiro 1923 • **an**
**ST**: **am** • **CI**: n0091 • **ID**: 232
**PN**: *Hyla strigilata* Spix, 1824
**PK**: *Hyla strigilata*° Spix, 1824
**KG**: *Scinax*[2] Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Ololigon*: Miranda-Ribeiro 1923 • **an**
**ST**: **am** • **CI**: n0092 • **ID**: 232
**PN**: *Hyla strigilata* Spix, 1824
**PK**: *Hyla strigilata*° Spix, 1824

**KG**: *Scinax*[2] Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Ololygon* Fitzinger, 1843 • **AK**
**ST**: **PO.JD** • **CI**: h1043 • **ID**: 232
**PN**: *Hyla strigilata* Spix, 1824
**PK**: *Hyla strigilata*° Spix, 1824
**KG**: *Scinax*[2] Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Ombrana* Dubois, 1992 • **AK**
**ST**: **PO.JD** • **CI**: h1044 • **ID**: 388
**PN**: *Rana sikimensis* Jerdon, 1870
**PK**: *Rana sikimensis*° Jerdon, 1870
**KG**: *Paa** Dubois, 1975
**KF**: *Dicroglossidae* 1987.da.f004
***Ombropaa* nov.** • **KY**
**ST**: **PO.KN** • **CI**: h1045 • **ID**: 382
**PN**: *Rana gammii* Anderson, 1871
**PK**: *Rana gammii*° Anderson, 1871
**KG**: *Ombropaa*° **nov.**
**KF**: *Dicroglossidae* 1987.da.f004
***Ommatotriton*** Gray, 1850 • **KY**
**ST**: **PO.KN** • **CI**: h1046 • **ID**: 568
**PN**: *Triton vittatus* Gray, 1835
**PK**: *Triton vittatus** Gray, 1835
**KG**: *Ommatotriton** Gray, 1850
**KF**: *Salamandridae* 1820.ga.f002
*Oninia* Günther[+2], 2010 • **AK**
**ST**: **PO.JD** • **CI**: h1047 • **ID**: 280
**PN**: *Oninia senglaubi* Günther[+2], 2010
**PK**: *Oninia senglaubi** Günther[+2], 2010
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Onychodactylus*** Tschudi, 1838 • **KY**
**ST**: **PO.KN** • **CI**: h1048 • **ID**: 517
**PN**: *Onychodactylus schlegeli* Tschudi, 1838
**PK**: *Salamandra japonica** Houttuyn, 1782
**KG**: *Onychodactylus*[1] Tschudi, 1838
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002
*Onychopus* Fitzinger, 1843 • **ZH**
**ST**: **ZO** • **CI**: zh063
*Onychopus*: Duméril[+2] 1854 • **AN**
**ST**: **AM** • **CI**: n0093 • **ID**: 517
**PN**: *Onychodactylus schlegeli* Tschudi, 1838
**PK**: *Salamandra japonica** Houttuyn, 1782
**KG**: *Onychodactylus*[1] Tschudi, 1838
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002
*Onycopus*: Duméril[+1] 1841 • **AN**
**ST**: **AL** • **CI**: n0094 • **ID**: 503
**PN**: *Megalobatrachus sieboldi* Tschudi, 1837 ‡
**PK**: *Triton japonicus** Temminck, 1836
**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *Cryptobranchidae* 1826.fb.f003
*Oocormus* Boulenger, 1905 • **AK**
**ST**: **PO.JD** • **CI**: h1049 • **ID**: 179
**PN**: *Oocormus microps* Boulenger, 1905
**PK**: *Cystignathus parvulus** Girard, 1853
**KG**: *Cycloramphus** Tschudi, 1838
**KF**: *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|
*Ooeidozyga* Kuhl[+1], 1822 • **AK**
**ST**: **PO.JI** • **CI**: h1050 • **ID**: 395
**PN**: *Rana lima* Gravenhorst, 1829
**PK**: *Rana lima** Gravenhorst, 1829
**KG**: *Occidozyga** Kuhl[+1], 1822
**KF**: *Occidozygidae* 1990.fa.f002
***Oophaga*** Bauer, 1994 • **KY**
**ST**: **PO.KN** • **CI**: h1051 • **ID**: 050
**PN**: *Dendrobates pumilio* Schmidt, 1857
**PK**: *Dendrobates pumilio** Schmidt, 1857
**KG**: *Oophaga** Bauer, 1994
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002
*Ophiobatrachus* Gray, 1868 • **AK**
**ST**: **PO.JD** • **CI**: h1052 • **ID**: 534
**PN**: *Ophiobatrachus vermicularis* Gray, 1868
**PK**: *Oedipina uniformis** Keferstein, 1868
**KG**: *Oedipina** Keferstein, 1868
**KF**: *Plethodontidae* 1850.ga.f002
***Ophryophryne*** Boulenger, 1903 • **KY**
**ST**: **PO.KN** • **CI**: h1053 • **ID**: 024
**PN**: *Ophryophryne microstoma* Boulenger, 1903
**PK**: *Ophryophryne microstoma** Boulenger, 1903
**KG**: *Ophryophryne** Boulenger, 1903
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|
***Opisthocoelellus*** Kuhn, 1941 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1054 • **ID**: †110
**PN**: *Opisthocoelellus weigelti* Kuhn, 1941 ‡
**PK**: *Opisthocoelellus weigelti*° Kuhn, 1941 †
**KG**: *Opisthocoelellus*° Kuhn, 1941 †
**KF**: **Mediogyrinia** Familia *Incertae sedis*
*Opisthodelphis* Brocchi, 1881 • **AK**
**ST**: **NS.JD** • **CI**: h1055 • **ID**: 091
**PN**: *Notodelphys ovifera* Lichtenstein[+1], 1854
**PK**: *Notodelphys ovifera** Lichtenstein[+1], 1854
**KG**: *Gastrotheca** Fitzinger, 1843
**KF**: *Hemiphractidae* 1862.pa.f001
*Opisthodelphys* Günther, 1859 • **AK**
**ST**: **NT.JD** • **CI**: h1056 • **ID**: 091
**PN**: *Notodelphys ovifera* Lichtenstein[+1], 1854
**PK**: *Notodelphys ovifera** Lichtenstein[+1], 1854
**KG**: *Gastrotheca** Fitzinger, 1843
**KF**: *Hemiphractidae* 1862.pa.f001
*Opisthodon* Steindachner, 1867 • **AK**
**ST**: **PO.JD** • **CI**: h1057 • **ID**: 264
**PN**: *Opisthodon frauenfeldi* Steindachner, 1867
**PK**: *Discoglossus ornatus** Gray, 1842
**KG**: *Platyplectrum*[1] Günther, 1863
**KF**: *Myobatrachidae* 1850.sa.f001
*Opisthothylax*: Perret 1962 • **AN**
**ST**: **AL** • **CI**: n0095 • **ID**: 333
**PN**: *Megalixalus immaculatus* Boulenger, 1903
**PK**: *Megalixalus immaculatus** Boulenger, 1903
**KG**: *Opisthothylax** Perret, 1966
**KF**: *Hyperoliidae* 1943.lb.f001

***Opisthothylax*** Perret, 1966 • KY
**ST**: PO.KN • **CI**: h1058 • **ID**: 333
**PN**: *Megalixalus immaculatus* Boulenger, 1903
**PK**: *Megalixalus immaculatus** Boulenger, 1903
**KG**: *Opisthothylax** Perret, 1966
**KF**: *Hyperoliidae* 1943.lb.f001

***Opisthotriton*** Auffenberg, 1961 ‡ • KY
**ST**: PO.KN • **CI**: h1059 • **ID**: †147
**PN**: *Opisthotriton kayi* Auffenberg, 1961 ‡
**PK**: *Opisthotriton kayi°* Auffenberg, 1961 †
**KG**: *Opisthotriton°* Auffenberg, 1961 †
**KF**: *Hylaeobatrachidae* 1889.la.f001 †

*Orchestes* Illiger, 1798 • ZH
**ST**: ZO • **CI**: zh064

*Orchestes* Tschudi, 1838 • AK
**ST**: PO.JH • **CI**: h1060 • **ID**: 447
**PN**: *Hyla aurifasciata* Schlegel, 1837
**PK**: *Hyla aurifasciata** Schlegel, 1837
**KG**: *Philautus** Gistel, 1848
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Oreobates*** Jiménez de la Espada, 1872 • KY
**ST**: PO.KN • **CI**: h1061 • **ID**: 076
**PN**: *Oreobates quixensis* Jiménez de la Espada, 1872
**PK**: *Oreobates quixensis** Jiménez de la Espada, 1872
**KG**: *Oreobates** Jiménez de la Espada, 1872
**KF**: *Brachycephalidae* 1858.gc.f002

***Oreobatrachus*** Boulenger, 1896 • KY
**ST**: PO.KN • **CI**: h1062 • **ID**: 396
**PN**: *Oreobatrachus baluensis* Boulenger, 1896
**PK**: *Oreobatrachus baluensis** Boulenger, 1896
**KG**: *Oreobatrachus** Boulenger, 1896
**KF**: *Occidozygidae* 1990.fa.f002

***Oreolalax*** Myers[+1], 1962 • KY
**ST**: PO.KN • **CI**: h1063 • **ID**: 016
**PN**: *Scutiger pingii* Liu, 1943
**PK**: *Scutiger pingii** Liu, 1943
**KG**: *Oreolalax** Myers[+1], 1962
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Oreophryne* Boettger, 1895 • AK
**ST**: PO.JD • **CI**: h1064 • **ID**: 280
**PN**: *Oreophryne senckengergiana* Boettger, 1895
**PK**: *Microhyla achatina moluccensis°* Peters[+1], 1878
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Oreophryne* Boulenger, 1895 • AK
**ST**: PO.JH • **CI**: h1065 • **ID**: 148
**PN**: *Oreophryne quelchii* Boulenger, 1895
**PK**: *Oreophryne quelchii** Boulenger, 1895
**KG**: *Oreophrynella** Boulenger, 1895
**KF**: *Bufonidae* 1825.gb.f004

***Oreophrynella*** Boulenger, 1895 • KY
**ST**: PO.KN • **CI**: h1066 • **ID**: 148
**PN**: *Oreophryne quelchii* Boulenger, 1895
**PK**: *Oreophryne quelchii** Boulenger, 1895
**KG**: *Oreophrynella** Boulenger, 1895
**KF**: *Bufonidae* 1825.gb.f004

*Oriandra* Dubois[+1], 2009 • AK
**ST**: PO.JD • **CI**: h1067 • **ID**: 578
**PN**: *Salamandra maculosa infraimmaculata* Martens, 1885
**PK**: *Salamandra maculosa infraimmaculata** Martens, 1885
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *Salamandridae* 1820.ga.f002

***Orixalus*** **nov.** • KY
**ST**: PO.KN • **CI**: h1068 • **ID**: 440
**PN**: *Gracixalus nonggangensis* Mo[+4], 2013
**PK**: *Gracixalus nonggangensis** Mo[+4], 2013
**KG**: *Orixalus** **nov.**
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Orthophyia*** Meyer, 1845 ‡ • KY
**ST**: PO.KN • **CI**: h1069 • **ID**: †183
**PN**: *Orthophyia longa* Meyer, 1845 ‡
**PK**: *Orthophyia longa°* Meyer, 1845 †
**KG**: *Orthophyia°* Meyer, 1845 †
**KF**: *Proteidae* 1831.ba.f002

***Oscaecilia*** Taylor, 1968 • KY
**ST**: PO.KN • **CI**: h1070 • **ID**: 475
**PN**: *Caecilia ochrocephala* Cope, 1866
**PK**: *Caecilia ochrocephala** Cope, 1866
**KG**: *Oscaecilia** Taylor, 1968
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Osilophus* Tschudi, 1838 • AK
**ST**: PO.JD • **CI**: h1071 • **ID**: 231
**PN**: *Rana typhonia* Linnaeus, 1758
**PK**: *Rana typhonia** Linnaeus, 1758
**KG**: *Trachycephalus** Tschudi, 1838
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Osornophryne*** Ruiz-Carranza[+1], 1976 • KY
**ST**: PO.KN • **CI**: h1072 • **ID**: 149
**PN**: *Osornophryne percrassa* Ruiz-Carranza[+1], 1976
**PK**: *Osornophryne percrassa** Ruiz-Carranza[+1], 1976
**KG**: *Osornophryne** Ruiz-Carranza[+1], 1976
**KF**: *Bufonidae* 1825.gb.f004

*Osteocephalus*: Fitzinger 1843 • AN
**ST**: AL • **CI**: n0096 • **ID**: 223
**PN**: *Osteocephalus taurinus* Steindachner, 1862
**PK**: *Osteocephalus taurinus** Steindachner, 1862
**KG**: *Osteocephalus** Steindachner, 1862
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Osteocephalus*** Steindachner, 1862 • KY
**ST**: PO.KN • **CI**: h1073 • **ID**: 223
**PN**: *Osteocephalus taurinus* Steindachner, 1862
**PK**: *Osteocephalus taurinus** Steindachner, 1862
**KG**: *Osteocephalus** Steindachner, 1862
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Osteopilus*** Fitzinger, 1843 • KY
**ST**: PO.KN • **CI**: h1074 • **ID**: 225
**PN**: *Trachycephalus marmoratus* Duméril[+1], 1841
**PK**: *Hyla septentrionalis** Duméril[+1], 1841
**KG**: *Osteopilus*[1] Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Osteosternum* Wu, 1929 • AK
**ST**: PO.JD • **CI**: h1075 • **ID**: 395

**PN**: *Osteosternum amoyense* Wu, 1929
**PK**: *Rana lima** Gravenhorst, 1829
**KG**: *Occidozyga** Kuhl$^{+1}$, 1822
**KF**: *Occidozygidae* 1990.fa.f002

*Otaspis* Cope, 1869 • **AK**
**ST**: **PO.JD** • **CI**: h1076 • **ID**: 144
**PN**: *Peltaphryne empusa* Cope, 1862
**PK**: *Peltaphryne empusa** Cope, 1862
**KG**: *Peltophryne** Fitzinger, 1843
**KF**: *Bufonidae* 1825.gb.f004

*Otilopha* Gray *in* Griffith, 1831 • **AK**
**ST**: **PO.JD** • **CI**: h1077 • **ID**: 138
**PN**: *Rana margaritifera* Laurenti, 1768
**PK**: *Rana margaritifera** Laurenti, 1768
**KG**: *Rhinella*$^{2}$ Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

*Otilophes*: Cuvier 1829 • **AN**
**ST**: **AL** • **CI**: n0097 • **ID**: 138
**PN**: *Rana margaritifera* Laurenti, 1768
**PK**: *Rana margaritifera** Laurenti, 1768
**KG**: *Rhinella*$^{2}$ Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

*Otilophis* Cuvier$^{+1}$, 1831 • **AK**
**ST**: **PO.JD** • **CI**: h1078 • **ID**: 138
**PN**: *Rana margaritifera* Laurenti, 1768
**PK**: *Rana margaritifera** Laurenti, 1768
**KG**: *Rhinella*$^{2}$ Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

*Otilophus* Cuvier$^{+1}$, 1832 • **AK**
**ST**: **PO.JD** • **CI**: h1079 • **ID**: 138
**PN**: *Rana margaritifera* Laurenti, 1768
**PK**: *Rana margaritifera** Laurenti, 1768
**KG**: *Rhinella*$^{2}$ Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

*Otilophus* Günther, 1859 • **AK**
**ST**: **PO.JH** • **CI**: h1080 • **ID**: 231
**PN**: *Rana typhonia* Linnaeus, 1758
**PK**: *Rana typhonia** Linnaeus, 1758
**KG**: *Trachycephalus** Tschudi, 1838
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Otolophus* Fitzinger, 1843 • **AK**
**ST**: **PO.JD** • **CI**: h1081 • **ID**: 138
**PN**: *Rana margaritifera* Laurenti, 1768
**PK**: *Rana margaritifera** Laurenti, 1768
**KG**: *Rhinella*$^{2}$ Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

***Otophryne*** Boulenger, 1900 • **KY**
**ST**: **PO.KN** • **CI**: h1082 • **ID**: 317
**PN**: *Otophryne robusta* Boulenger, 1900
**PK**: *Otophryne robusta** Boulenger, 1900
**KG**: *Otophryne** Boulenger, 1900
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Otylophus*: Cei 1953 • **AN**
**ST**: **AM** • **CI**: n0098 • **ID**: 138
**PN**: *Rana margaritifera* Laurenti, 1768
**PK**: *Rana margaritifera** Laurenti, 1768
**KG**: *Rhinella*$^{2}$ Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

***Oumtkoutia*** Rage$^{+1}$, 2008 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1083 • **ID**: †074
**PN**: *Oumtkoutia anae* Rage$^{+1}$, 2008 ‡
**PK**: *Oumtkoutia anae*° Rage$^{+1}$, 2008 †
**KG**: *Oumtkoutia*° Rage$^{+1}$, 2008 †
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Oxydactyla* Van Kampen, 1913 • **AK**
**ST**: **PO.JD** • **CI**: h1084 • **ID**: 280
**PN**: *Oxydactyla brevicrus* Van Kampen, 1913
**PK**: *Oxydactyla brevicrus*° Van Kampen, 1913
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Oxyglossus* Swainson, 1827 • **ZH**
**ST**: **ZO** • **CI**: zh065

*Oxyglossus* Tschudi, 1838 • **AK**
**ST**: **PO.JH** • **CI**: h1085 • **ID**: 395
**PN**: *Rana lima* Gravenhorst, 1829
**PK**: *Rana lima** Gravenhorst, 1829
**KG**: *Occidozyga** Kuhl$^{+1}$, 1822
**KF**: *Occidozygidae* 1990.fa.f002

*Oxyrhachis* Germar, 1833 • **ZH**
**ST**: **ZO** • **CI**: zh066

*Oxyrhachis*: Nicholls 1916 • **AN**
**ST**: **AL** • **CI**: n0099 • **ID**: 394
**PN**: *Oxyglossus laevis* Günther, 1859
**PK**: *Oxyglossus laevis** Günther, 1859
**KG**: *Frethia** **nov.**
**KF**: *Occidozygidae* 1990.fa.f002

*Oxyrhinchus*: Duméril$^{+1}$ 1841 • **AN**
**ST**: **AM** • **CI**: n0100 • **ID**: 138
**PN**: *Bufo granulosus* Spix, 1824
**PK**: *Bufo granulosus** Spix, 1824
**KG**: *Rhinella*$^{2}$ Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

*Oxyrhynchus* Leach, 1818 • **ZH**
**ST**: **ZO** • **CI**: zh067

*Oxyrhynchus* Spix, 1824 • **AK**
**ST**: **PO.JH** • **CI**: h1086 • **ID**: 138
**PN**: *Bufo granulosus* Spix, 1824
**PK**: *Bufo granulosus** Spix, 1824
**KG**: *Rhinella*$^{2}$ Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

***Paa*** Dubois, 1975 • **KY**
**ST**: **PO.KN** • **CI**: h1087 • **ID**: 388
**PN**: *Rana liebigii* Günther, 1860
**PK**: *Rana liebigii** Günther, 1860
**KG**: *Paa** Dubois, 1975
**KF**: *Dicroglossidae* 1987.da.f004

*Pachybatrachus* Keferstein, 1868 • **AK**
**ST**: **PO.JD** • **CI**: h1088 • **ID**: 309
**PN**: *Pachybatrachus petersii* Keferstein, 1868
**PK**: *Rana systoma** Schneider, 1799
**KG**: *Uperodon** Duméril$^{+1}$, 1841
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Pachybatrachus* Mivart, 1869 • AK

**ST**: PO.JH • **CI**: h1089 • **ID**: 402

**PN**: *Pachybatrachus robustus* Mivart, 1869

**PK**: *Rana curtipes** Jerdon, 1853

**KG**: *Clinotarsus** Mivart, 1869

**KF**: *Ranidae* 1796.ba.f001

*Pachybatrachus* Báez[+1, 1998] ‡ • AK

**ST**: PO.JH • **CI**: h1090 • **ID**: †075

**PN**: *Pachybatrachus taqueti* Báez[+1], 1998 ‡

**PK**: *Pachybatrachus taqueti*° Báez[+1], 1998 †

**KG**: *Pachycentrata*° Báez[+1], 2004 †

**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|

***Pachycentrata*** Báez[+1], 2004 ‡ • KY

**ST**: PO.KN • **CI**: h1091 • **ID**: †075

**PN**: *Pachybatrachus taqueti* Báez[+1], 1998 ‡

**PK**: *Pachybatrachus taqueti*° Báez[+1], 1998 †

**KG**: *Pachycentrata*° Báez[+1], 2004 †

**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|

***Pachyhynobius*** Fei[+2], 1983 • KY

**ST**: PO.KN • **CI**: h1092 • **ID**: 512

**PN**: *Pachyhynobius shangchengensis* Fei[+1], 1983

**PK**: *Pachyhynobius shangchengensis** Fei[+1], 1983

**KG**: *Pachyhynobius** Fei[+1], 1983

**KF**: *HYNOBIIDAE* ||1856.ha.f001||-1859.cb.f002

*Pachymandra* Parra-Olea[+2], 2004 • AK

**ST**: PO.JD • **CI**: h1093 • **ID**: 522

**PN**: *Spelerpes dofleini* Werner, 1903

**PK**: *Spelerpes dofleini** Werner, 1903

**KG**: *Bolitoglossa** Duméril[+2], 1854

**KF**: *PLETHODONTIDAE* 1850.ga.f002

*Pachymedusa* Duellman, 1968 • AK

**ST**: PO.JD • **CI**: h1094 • **ID**: 238

**PN**: *Phyllomedusa dacnicolor* Cope, 1864

**PK**: *Phyllomedusa dacnicolor** Cope, 1864

**KG**: *Agalychnis** Cope, 1864

**KF**: *PHYLLOMEDUSIDAE* 1858.gc.f009

***Pachypalaminus*** Thompson, 1912 • KY

**ST**: PO.KN • **CI**: h1095 • **ID**: 506

**PN**: *Pachypalaminus boulengeri* Thompson, 1912

**PK**: *Pachypalaminus boulengeri** Thompson, 1912

**KG**: *Pachypalaminus** Thompson, 1912

**KF**: *HYNOBIIDAE* ||1856.ha.f001||-1859.cb.f002

*Pachypus* Billberg, 1820 • ZH

**ST**: ZO • **CI**: zh068

*Pachypus* Lutz, 1930 • AK

**ST**: PO.JH • **CI**: h1096 • **ID**: 253

**PN**: *Rana pentadactyla* Laurenti, 1768

**PK**: *Rana pentadactyla** Laurenti, 1768

**KG**: *Leptodactylus*[1] Fitzinger, 1826

**KF**: *LEPTODACTYLIDAE* ||1838.ta.f001||-1896.wa.f001

***Pachytriton*** Boulenger, 1878 • KY

**ST**: PO.KN • **CI**: h1097 • **ID**: 561

**PN**: *Triton brevipes* Sauvage, 1877

**PK**: *Triton brevipes** Sauvage, 1877

**KG**: *Pachytriton** Boulenger, 1878

**KF**: *SALAMANDRIDAE* 1820.ga.f002

*Paedomolge* Hillis[+3], 2001 • AK

**ST**: PO.JD • **CI**: h1098 • **ID**: 542

**PN**: *Eurycea tonkawae* Chippindale[+3], 2000

**PK**: *Eurycea tonkawae** Chippindale[+3], 2000

**KG**: *Eurycea** Rafinesque, 1822

**KF**: *PLETHODONTIDAE* 1850.ga.f002

*Paedophryne* Kraus, 2010 • AK

**ST**: PO.JD • **CI**: h1099 • **ID**: 280

**PN**: *Paedophryne kathismaphlox* Kraus, 2010

**PK**: *Paedophryne kathismaphlox*° Kraus, 2010

**KG**: *Asterophrys** Tschudi, 1838

**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

***Palaeobatrachus*** Tschudi, 1838 ‡ • KY

**ST**: PO.KN • **CI**: h1100 • **ID**: †069

**PN**: *Palaeobatrachus goldfussii* Tschudi, 1838 ‡

**PK**: *Rana diluviana*° Goldfuss, 1831 †

**KG**: *Palaeobatrachus*° Tschudi, 1838 †

**KF**: *PALAEOBATRACHIDAE* 1865.ca.f001 †

*Palaeobufo* Bolkay, 1919 • AK

**ST**: PO.JD • **CI**: h1101 • **ID**: 138

**PN**: *Rana marina* Linnaeus, 1758

**PK**: *Rana marina** Linnaeus, 1758

**KG**: *Rhinella*[2] Fitzinger, 1826

**KF**: *BUFONIDAE* 1825.gb.f004

*Palaeopelobates* Kuhn, 1941 ‡ • AK

**ST**: PO.JD • **CI**: h1102 • **ID**: †090

**PN**: *Palaeopelobates geiseltalensis* Kuhn, 1941 ‡

**PK**: *Halleobatrachus hinschei*° Kuhn, 1941 †

**KG**: *Eopelobates*° Parker, 1929 †

**KF**: *PELOBATIDAE* 1850.bb.f004

*Palaeophryne*: Fitzinger 1843 ‡ • AN

**ST**: AM • **CI**: n0101 • **ID**: †094

**PN**: *Palaeophrynos gessneri* Tschudi, 1838 ‡

**PK**: *Palaeophrynos gessneri*° Tschudi, 1838 †

**KG**: *Palaeophrynos*° Tschudi, 1838 †

**KF**: *BUFONIDAE* 1825.gb.f004

***Palaeophrynos*** Tschudi, 1838 ‡ • KY

**ST**: PO.KN • **CI**: h1103 • **ID**: †094

**PN**: *Palaeophrynos gessneri* Tschudi, 1838 ‡

**PK**: *Palaeophrynos gessneri*° Tschudi, 1838 †

**KG**: *Palaeophrynos*° Tschudi, 1838 †

**KF**: *BUFONIDAE* 1825.gb.f004

*Palaeophrynus* Agassiz, 1844 ‡ • AK

**ST**: NT.JI • **CI**: h1104 • **ID**: †094

**PN**: *Palaeophrynos gessneri* Tschudi, 1838 ‡

**PK**: *Palaeophrynos gessneri*° Tschudi, 1838 †

**KG**: *Palaeophrynos*° Tschudi, 1838 †

**KF**: *BUFONIDAE* 1825.gb.f004

***Palaeoplethodon*** Poinar[+1], 2015 ‡ • KY

**ST**: PO.KN • **CI**: h1105 • **ID**: †181

**PN**: *Palaeoplethodon hispaniolae* Poinar[+1], 2015 ‡

**PK**: *Palaeoplethodon hispaniolae*° Poinar[+1], 2015 †

**KG**: *Palaeoplethodon*° Poinar[+1], 2015 †

**KF**: *PLETHODONTIDAE* 1850.ga.f002

***Palaeopleurodeles*** Herre, 1941 ‡ • KY

**ST**: PO.KN • **CI**: h1106 • **ID**: †196

**PN**: *Palaeopleurodeles hauffi* Herre, 1941 ‡
**PK**: *Palaeopleurodeles hauffi*° Herre, 1941 †
**KG**: *Palaeopleurodeles*° Herre, 1941 †
**KF**: *Salamandridae* 1820.ga.f002

***Palaeoproteus*** Herre, 1935 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1107 • **ID**: †148
**PN**: *Palaeoproteus klatti* Herre, 1935 ‡
**PK**: *Palaeoproteus klatti*° Herre, 1935 †
**KG**: *Palaeoproteus*° Herre, 1935 †
**KF**: *Hylaeobatrachidae* 1889.la.f001 †

*Palaeosalamandra* Herre, 1949 ‡ • **ak**
**ST**: **po.jd** • **CI**: h1108 • **ID**: 578
**PN**: *Palaeosalamandra kohlitzi* Herre, 1949 ‡
**PK**: *Salamandra sansaniensis*° Lartet, 1851 †
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *Salamandridae* 1820.ga.f002

*Palaeosalamandrina* Herre, 1949 ‡ • **ak**
**ST**: **po.jd** • **CI**: h1109 • **ID**: †193
**PN**: *Palaeosalamandrina dehmi* Herre, 1949 ‡
**PK**: *Chelotriton paradoxus*° Pomel, 1853 †
**KG**: *Chelotriton*° Pomel, 1853 †
**KF**: *Salamandridae* 1820.ga.f002

*Palaeotaricha* Frank, 1955 ‡ • **ak**
**ST**: **po.jd** • **CI**: h1110 • **ID**: 570
**PN**: *Palaeotaricha oligocenica* Frank, 1955 ‡
**PK**: *Palaeotaricha oligocenica*° Frank, 1955 †
**KG**: *Taricha** Gray, 1850
**KF**: *Salamandridae* 1820.ga.f002

*Palaeotriton* Fitzinger, 1837 ‡ • **ak**
**ST**: **po.ca** • **CI**: h1111 • **ID**: 503
**PN**: *Salamandra gigantea* Meyer, 1832 ‡
**PK**: *Salamandra scheuchzeri*° Holl, 1831 †
**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *Cryptobranchidae* 1826.fb.f003

*Palaeotriton* Kittl, 1894 • **zh**
**ST**: **zo** • **CI**: zh069

*Palaeotriton* Bolkay, 1927 • **ak**
**ST**: **po.jh** • **CI**: h1112 • **ID**: 564
**PN**: *Lacerta vulgaris* Linnaeus, 1758
**PK**: *Lacerta vulgaris** Linnaeus, 1758
**KG**: *Lissotriton*[1] Bell, 1839
**KF**: *Salamandridae* 1820.ga.f002

***Paleoamphiuma*** Rieppel[+1], 1998 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1113 • **ID**: †179
**PN**: *Paleoamphiuma tetradactylum* Rieppel[+1], 1998 ‡
**PK**: *Paleoamphiuma tetradactylum*° Rieppel[+1], 1998 †
**KG**: *Paleoamphiuma*° Rieppel[+1], 1998 †
**KF**: *Amphiumidae* 1825.gb.f07

*Paleorana*: Scortecci 1931 • **an**
**ST**: **al** • **CI**: n0102 • **ID**: 351
**PN**: *Rana beccarii* Boulenger, 1911
**PK**: *Rana beccarii*° Boulenger, 1911
**KG**: *Conraua** Nieden, 1908
**KF**: *Conrauidae* 1992.da.f001

*Paleotriton*: Bronn 1838 ‡ • **an**
**ST**: **am** • **CI**: n0103 • **ID**: 503
**PN**: *Salamandra gigantea* Burton, 1808 ‡
**PK**: *Salamandra scheuchzeri*° Holl, 1831 †
**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *Cryptobranchidae* 1826.fb.f003

*Palmatorappia* Ahl, 1927 • **ak**
**ST**: **po.jd** • **CI**: h1114 • **ID**: 369
**PN**: *Hylella solomonis* Sternfeld, 1918
**PK**: *Hypsirana heffernani*° Kinghorn, 1928
**KG**: *Cornufer** Tschudi, 1838
**KF**: *Ceratobatrachidae* 1884.ba.f001

*Palmatotriton* Smith, 1945 • **ak**
**ST**: **po.ca** • **CI**: h1115 • **ID**: 522
**PN**: *Oedipus rufescens* Cope, 1869
**PK**: *Oedipus rufescens** Cope, 1869
**KG**: *Bolitoglossa** Duméril[+2], 1854
**KF**: *Plethodontidae* 1850.ga.f002

*Palmirana* Ritgen, 1828 • **ak**
**ST**: **po.ji** • **CI**: h1116 • **ID**: 419
**PN**: *Rana temporaria* Linnaeus, 1758
**PK**: *Rana temporaria** Linnaeus, 1758
**KG**: *Rana** Linnaeus, 1758
**KF**: *Ranidae* 1796.ba.f001

*Palmitus*: Rafinesque 1815 • **an**
**ST**: **al** • **CI**: n0104 • **ID**: 564
**PN**: *Lacerta helvetica* Razoumowsky, 1789
**PK**: *Lacerta helvetica** Razoumowsky, 1789
**KG**: *Lissotriton*[1] Bell, 1839
**KF**: *Salamandridae* 1820.ga.f002

*Paludicola* Wagler, 1830 • **ak**
**ST**: **po.jd** • **CI**: h1117 • **ID**: 250
**PN**: *Bufo albifrons* Spix, 1824
**PK**: *Bufo albifrons*° Spix, 1824
**KG**: *Physalaemus** Fitzinger, 1826
**KF**: *Leiuperidae* 1850.bb.f010

*Pandanusicola* Glaw[+1], 1994 • **ak**
**ST**: **po.jd** • **CI**: h1118 • **ID**: 427
**PN**: *Rhacophorus bicalcaratus* Boettger, 1913
**PK**: *Rhacophorus bicalcaratus** Boettger, 1913
**KG**: *Guibemantis** Dubois, 1992
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Pangerpeton*** Wang[+1], 2006 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1119 • **ID**: †162
**PN**: *Pangerpeton sinensis* Wang[+1], 2006 ‡
**PK**: *Pangerpeton sinensis*° Wang[+1], 2006 †
**KG**: *Pangerpeton*° Wang[+1], 2006 †
**KF**: **Imperfectibranchia** Familia *Incertae sedis*

*Panophrys*: Dujardin 1840 • **za**
**ST**: **zn** • **CI**: zn007

*Panophrys* Dujardin, 1841 • **zh**
**ST**: **zo** • **CI**: zh070

*Panophrys* Rao[+1], 1997 • **ak**
**ST**: **po.jh** • **CI**: h1120 • **ID**: 023
**PN**: *Megophrys omeimontis* Liu, 1950
**PK**: *Megophrys omeimontis** Liu, 1950
**KG**: *Boulenophrys** Fei[+1], 2016
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Pantherana* Dubois, 1992 • **AK**
**ST**: **PO.JD** • **CI**: h1121 • **ID**: 415
**PN**: *Rana pipiens* Schreber, 1782
**PK**: *Rana pipiens** Schreber, 1782
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001

*Papurana* Dubois, 1992 • **AK**
**ST**: **PO.JD** • **CI**: h1122 • **ID**: 409
**PN**: *Rana papua* Lesson, 1830
**PK**: *Rana papua** Lesson, 1830
**KG**: *Hylarana** Tschudi, 1838
**KF**: *Ranidae* 1796.ba.f001

*Parabufella* Kuhn, 1941 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h1123 • **ID**: †090
**PN**: *Parabufella longipes* Kuhn, 1941 ‡
**PK**: *Halleobatrachus hinschei*° Kuhn, 1941 †
**KG**: *Eopelobates*° Parker, 1929 †
**KF**: *Pelobatidae* 1850.bb.f004

***Paracassina*** Peracca, 1907 • **KY**
**ST**: **PO.KN** • **CI**: h1124 • **ID**: 340
**PN**: *Cassina obscura* Boulenger, 1895
**PK**: *Cassina obscura*° Boulenger, 1895
**KG**: *Paracassina*° Peracca, 1907
**KF**: *Hyperoliidae* 1943.lb.f001

*Paracophyla* Millot[+1], 1951 • **AK**
**ST**: **PO.JD** • **CI**: h1125 • **ID**: 288
**PN**: *Paracophyla tuberculata* Millot[+1], 1951
**PK**: *Platypelis barbouri** Noble, 1940
**KG**: *Platypelis*[2] Boulenger, 1882
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Paracrinia*** Heyer[+1], 1976 • **KY**
**ST**: **PO.KN** • **CI**: h1126 • **ID**: 269
**PN**: *Crinia haswelli* Fletcher, 1894
**PK**: *Crinia haswelli** Fletcher, 1894
**KG**: *Paracrinia** Heyer[+1], 1976
**KF**: *Myobatrachidae* 1850.sa.f001

*Paradactylodon*: Risch 1984 • **AN**
**ST**: **AL** • **CI**: n0105 • **ID**: 515
**PN**: *Batrachuperus gorganensis* Clergue-Gazeau[+1], 1979
**PK**: *Batrachuperus gorganensis** Clergue-Gazeau[+1], 1979
**KG**: *Iranodon** Dubois[+1], 2012
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

***Paradiscoglossus*** Estes[+1], 1982 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1127 • **ID**: †118
**PN**: *Paradiscoglossus americanus* Estes[+1], 1982 ‡
**PK**: *Paradiscoglossus americanus*° Estes[+1], 1982 †
**KG**: *Paradiscoglossus*° Estes[+1], 1982 †
**KF**: *Discoglossidae* 1858.gc.f004

***Paradoxophyla*** Blommers-Schlösser[+1], 1991 • **KY**
**ST**: **PO.KN** • **CI**: h1128 • **ID**: 290
**PN**: *Microhyla palmata* Guibé, 1974
**PK**: *Microhyla palmata** Guibé, 1974
**KG**: *Paradoxophyla** Blommers-Schlösser[+1], 1991
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Paraheleioporus* Hoser, 2019 • **KY**
**ST**: **PO.KN** • **CI**: h1129 • **ID**: 259
**PN**: *Heleioporus barycragus* Lee, 1967
**PK**: *Heleioporus barycragus*° Lee, 1967
**KG**: *Heleioporus*[2] Gray, 1841
**KF**: *Myobatrachidae* 1850.sa.f001

***Parahynobius*** Venczel, 1999 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1130 • **ID**: †172
**PN**: *Parahynobius betfianus* Venczel, 1999 ‡
**PK**: *Parahynobius betfianus*° Venczel, 1999 †
**KG**: *Parahynobius*° Venczel, 1999 †
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

***Paralatonia*** Venczel[+1], 2003 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1131 • **ID**: †119
**PN**: *Paralatonia transylvanica* Venczel[+1], 2003 ‡
**PK**: *Paralatonia transylvanica*° Venczel[+1], 2003 †
**KG**: *Paralatonia*° Venczel[+1], 2003 †
**KF**: *Discoglossidae* 1858.gc.f004

*Paramegophrys*: Liu 1964 • **AN**
**ST**: **AL** • **CI**: n0106 • **ID**: 018
**PN**: *Leptobrachium pelodytoides* Boulenger, 1893
**PK**: *Leptobrachium pelodytoides** Boulenger, 1893
**KG**: *Leptobrachella*° Smith, 1925
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

***Paramesotriton*** Chang, 1936 • **KY**
**ST**: **PO.KN** • **CI**: h1132 • **ID**: 562
**PN**: *Mesotriton deloustali* Bourret, 1934
**PK**: *Mesotriton deloustali** Bourret, 1934
**KG**: *Paramesotriton** Chang, 1936
**KF**: *Salamandridae* 1820.ga.f002

*Paramophrynella* La Marca, 2007 • **AK**
**ST**: **PO.JD** • **CI**: h1133 • **ID**: 078
**PN**: *Eupsophus ginesi* Rivero, 1964
**PK**: *Eupsophus ginesi*° Rivero, 1964
**KG**: *Pristimantis** Jiménez de la Espada, 1870
**KF**: *Brachycephalidae* 1858.gc.f002

***Paranecturus*** Demar, 2013 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1134 • **ID**: †184
**PN**: *Paranecturus garbanii* Demar, 2013 ‡
**PK**: *Paranecturus garbanii*° Demar, 2013 †
**KG**: *Paranecturus*° Demar, 2013 †
**KF**: *Proteidae* 1831.ba.f002

***Parapelophryne*** Fei[+2], 2003 • **KY**
**ST**: **PO.KN** • **CI**: h1135 • **ID**: 103
**PN**: *Nectophryne scalptus* Liu[+1], 1973
**PK**: *Nectophryne scalptus*° Liu[+1], 1973
**KG**: *Parapelophryne*° Fei[+1], 2003
**KF**: *Bufonidae* 1825.gb.f004

*Paraphyllobates*: Bauer 1994 • **AN**
**ST**: **AL** • **CI**: n0107 • **ID**: 039
**PN**: *Hyla trivittata* Spix, 1824
**PK**: *Hyla trivittata** Spix, 1824
**KG**: *Ameerega** Bauer, 1986
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

*Parapseudacris* Hardy[+1], 1986 • **AK**
**ST**: **PO.JD** • **CI**: h1136 • **ID**: 200
**PN**: *Hyla crucifer* Wied-Neuwied, 1838
**PK**: *Hyla crucifer** Wied-Neuwied, 1838

**KG**: *Pseudacris** Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Pararthroleptis* Ahl, 1925 • **AK**
**ST**: **PO.JD** • **CI**: h1137 • **ID**: 350
**PN**: *Pararthroleptis nanus* Ahl, 1925
**PK**: *Pararthroleptis nanus*° Ahl, 1925
**KG**: *Phrynobatrachus** Günther, 1862
**KF**: *Phrynobatrachidae* 1941.lb.f001

*Paratelmatobius* Lutz[+1], 1958 • **AK**
**ST**: **PO.JD** • **CI**: h1138 • **ID**: 254
**PN**: *Paratelmatobius lutzii* Lutz[+1], 1958
**PK**: *Paratelmatobius lutzii*° Lutz[+1], 1958
**KG**: *Crossodactylodes*[2] Cochran, 1938
**KF**: *Paratelmatobiidae* 2012.oa.f001

***Parhoplophryne*** Barbour[+1], 1928 • **KY**
**ST**: **PO.KN** • **CI**: h1139 • **ID**: 304
**PN**: *Parhoplophryne usambarica* Barbour[+1], 1928
**PK**: *Parhoplophryne usambarica*° Barbour[+1], 1928
**KG**: *Parhoplophryne*° Barbour[+1], 1928
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Parkerana* Dubois, 1984 • **AK**
**ST**: **PO.JD** • **CI**: h1140 • **ID**: 464
**PN**: *Abrana cotti* Parker, 1931
**PK**: *Rana schillukorum*° Werner, 1908
**KG**: *Ptychadena** Boulenger, 1917
**KF**: *Ptychadenidae* 1987.da.f002

***Parrisia*** Denton[+1], 1998 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1141 • **ID**: †149
**PN**: *Parrisia neocesariensis* Denton[+1], 1998 ‡
**PK**: *Parrisia neocesariensis*° Denton[+1], 1998 †
**KG**: *Parrisia*° Denton[+1], 1998 †
**KF**: *Hylaeobatrachidae* 1889.la.f001 †

***Paruwrobates*** Bauer, 1994 • **KY**
**ST**: **PO.KN** • **CI**: h1142 • **ID**: 054
**PN**: *Dendrobates andinus* Myers[+1], 1987
**PK**: *Dendrobates andinus*° Myers[+1], 1987
**KG**: *Paruwrobates*° Bauer, 1994
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

*Parvibranchus* Hogg, 1839 • **AK**
**ST**: **NL.JI** • **CI**: h1143 • **ID**: 518
**PN**: *Siren striata* Le Conte, 1824
**PK**: *Siren striata** Le Conte, 1824
**KG**: *Pseudobranchus** Gray, 1825
**KF**: *Sirenidae* 1825gb.f005

*Parvicaecilia* Taylor, 1968 • **AK**
**ST**: **PO.JD** • **CI**: h1144 • **ID**: 492
**PN**: *Gymnophis nicefori* Barbour, 1924
**PK**: *Gymnophis nicefori*° Barbour, 1924
**KG**: *Microcaecilia*[3] Taylor, 1968
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Parvimolge*** Taylor, 1944 • **KY**
**ST**: **PO.KN** • **CI**: h1145 • **ID**: 526
**PN**: *Oedipus townsendi* Dunn, 1922
**PK**: *Oedipus townsendi** Dunn, 1922
**KG**: *Parvimolge** Taylor, 1944
**KF**: *Plethodontidae* 1850.ga.f002

*Parvulus* Lutz, 1930 • **AK**
**ST**: **PO.JD** • **CI**: h1146 • **ID**: 251
**PN**: *Leptodactylus nanus* Müller, 1922
**PK**: *Leptodactylus nanus*° Müller, 1922
**KG**: *Adenomera*[3] Steindachner, 1867
**KF**: *Leptodactylidae* ||1838.ta.f001||-1896.wa.f001

*Parvurus* Dubois[+1], 2012 • **AK**
**ST**: **PO.JD** • **CI**: h1147 • **ID**: 553
**PN**: *Menobranchus punctatus* Gibbes, 1850
**PK**: *Menobranchus punctatus** Gibbes, 1850
**KG**: *Necturus** Rafinesque, 1819
**KF**: *Proteidae* 1831.ba.f002

***Patagopipa*** Aranciaga Rolando[+2], 2019 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1148 • **ID**: †078
**PN**: *Patagopipa corsolinii* Aranciaga Rolando[+2], 2019 ‡
**PK**: *Patagopipa corsolinii*° Aranciaga Rolando[+2], 2019 †
**KG**: *Patagopipa*° Aranciaga Rolando[+2], 2019 †
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Pectoglossa* Mivart, 1868 • **AK**
**ST**: **PO.JD** • **CI**: h1149 • **ID**: 555
**PN**: *Plethodon persimilis* Gray, 1859
**PK**: *Salamandra jeffersoniana** Green, 1827
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *Ambystomatidae* 1850.ga.f004

***Pedostibes*** Günther, 1876 • **KY**
**ST**: **PO.KN** • **CI**: h1150 • **ID**: 110
**PN**: *Pedostibes tuberculosus* Günther, 1876
**PK**: *Pedostibes tuberculosus** Günther, 1876
**KG**: *Pedostibes** Günther, 1876
**KF**: *Bufonidae* 1825.gb.f004

*Pegaeus* Gistel, 1868 • **AK**
**ST**: **PO.JI** • **CI**: h1151 • **ID**: 120
**PN**: *Rana bufo* Linnaeus, 1758
**PK**: *Rana bufo** Linnaeus, 1758
**KG**: *Bufo** Garsault, 1764
**KF**: *Bufonidae* 1825.gb.f004

*Pelida* Gistel, 1848 • **AK**
**ST**: **NL.JD** • **CI**: h1152 • **ID**: 310
**PN**: *Bombinator baleatus* Müller, 1836
**PK**: *Bombinator baleatus** Müller, 1836
**KG**: *Kaloula** Gray, 1831
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Pelobates*** Wagler, 1830 • **KY**
**ST**: **PO.KN** • **CI**: h1153 • **ID**: 026
**PN**: *Bufo fuscus* Laurenti, 1768
**PK**: *Bufo fuscus** Laurenti, 1768
**KG**: *Pelobates** Wagler, 1830
**KF**: *Pelobatidae* 1850.bb.f004

*Pelobatinopsis* Kuhn, 1941 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h1154 • **ID**: †069
**PN**: *Pelobatinopsis hinschei* Kuhn, 1941 ‡
**PK**: *Pelobatinopsis hinschei*° Kuhn, 1941 †
**KG**: *Palaeobatrachus*° Tschudi, 1838 †
**KF**: *Palaeobatrachidae* 1865.ca.f001 †

*Pelobatrachus* Beddard, 1908 • **AK**
**ST**: **PO.JD** • **CI**: h1155 • **ID**: 021

**PN**: *Ceratophryne nasuta* Schlegel, 1858
**PK**: *Ceratophryne nasuta** Schlegel, 1858
**KG**: *Megophrys*[2] Kuhl[+1], 1822
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Pelobius* Erichson, 1832 • **zh**
**ST**: **zo** • **CI**: zh071

*Pelobius* Fitzinger, 1843 • **ak**
**ST**: **po.jh** • **CI**: h1156 • **ID**: 235
**PN**: *Litoria freycineti* Tschudi, 1838
**PK**: *Litoria freycineti** Tschudi, 1838
**KG**: *Litoria** Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

*Pelodryas*: Günther 1858 • **an**
**ST**: **al** • **CI**: n0108 • **ID**: 237
**PN**: *Rana caerulea* White, 1890
**PK**: *Rana caerulea** White, 1890
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

*Pelodryas* Günther, 1859 • **ak**
**ST**: **po.jd** • **CI**: h1157 • **ID**: 237
**PN**: *Rana caerulea* White, 1890
**PK**: *Rana caerulea** White, 1890
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

***Pelodytes*** Bonaparte, 1838 • **ky**
**ST**: **po.kn** • **CI**: h1158 • **ID**: 027
**PN**: *Rana punctata* Daudin, 1802
**PK**: *Rana punctata** Daudin, 1802
**KG**: *Pelodytes** Bonaparte, 1838
**KF**: *Pelodytidae* 1850.bb.f002

*Pelodytes* Gistel, 1848 • **ak**
**ST**: **nl.jh** • **CI**: h1159 • **ID**: 540
**PN**: *Salamandra subfusca* Green, 1818
**PK**: *Salamandra rubra** Sonnini[+1], 1801
**KG**: *Pseudotriton*[1] Tschudi, 1838
**KF**: *Plethodontidae* 1850.ga.f002

***Pelodytopsis*** Nikolskii, 1896 • **ky**
**ST**: **po.kn** • **CI**: h1160 • **ID**: 028
**PN**: *Pelodytes caucasicus* Boulenger, 1896
**PK**: *Pelodytes caucasicus** Boulenger, 1896
**KG**: *Pelodytopsis* Nikolskii, 1896
**KF**: *Pelodytidae* 1850.bb.f002

*Pelonectes* Fitzinger, 1843 • **ak**
**ST**: **po.jd** • **CI**: h1161 • **ID**: 557
**PN**: *Molge platycephala* Gravenhorst, 1829
**PK**: *Molge platycephala** Gravenhorst, 1829
**KG**: *Euproctus*[1] Gené, 1839
**KF**: *Salamandridae* 1820.ga.f002

*Pelonectes* Lataste *in* Blanchard, 1879 • **ak**
**ST**: **po.jh** • **CI**: h1162 • **ID**: 564
**PN**: *Pelonectes boscai* Lataste *in* Blanchard, 1879
**PK**: *Pelonectes boscai** Lataste *in* Blanchard, 1879
**KG**: *Lissotriton*[1] Bell, 1839
**KF**: *Salamandridae* 1820.ga.f002

*Pelopeltis* Bauer, 1986 • **ak**
**ST**: **po.jd** • **CI**: h1163 • **ID**: 325
**PN**: *Leptopelis bufonides* Schiøtz, 1967
**PK**: *Leptopelis bufonides*° Schiøtz, 1967
**KG**: *Leptopelis** Günther, 1859
**KF**: *Arthroleptidae* 1869.ma.f011

***Pelophilus*** Tschudi, 1838 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1164 • **ID**: †111
**PN**: *Pelophilus agassizii* Tschudi, 1838 ‡
**PK**: *Pelophilus agassizii*° Tschudi, 1838 †
**KG**: *Pelophilus*° Tschudi, 1838 †
**KF**: **Mediogyrinia** Familia *Incertae sedis*

***Pelophryne*** Barbour, 1938 • **ky**
**ST**: **po.kn** • **CI**: h1165 • **ID**: 114
**PN**: *Pelophryne albotaeniata* Barbour, 1938
**PK**: *Pelophryne albotaeniata*° Barbour, 1938
**KG**: *Pelophryne*[3] Barbour, 1938
**KF**: *Bufonidae* 1825.gb.f004

***Pelophylax*** Fitzinger, 1843 • **ky**
**ST**: **po.kn** • **CI**: h1166 • **ID**: 406
**PN**: *Rana esculenta* Linnaeus, 1758
**PK**: *Rana esculenta** Linnaeus, 1758
**KG**: *Pelophylax** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001

*Pelorius* Hedges, 1989 • **ak**
**ST**: **po.jd** • **CI**: h1167 • **ID**: 081
**PN**: *Leptodactylus inoptatus* Barbour, 1914
**PK**: *Leptodactylus inoptatus** Barbour, 1914
**KG**: *Eleutherodactylus** Duméril[+1], 1841
**KF**: *Brachycephalidae* 1858.gc.f002

*Peltocephalus* Duméril[+1], 1835 • **zh**
**ST**: **zo** • **CI**: zh072

*Peltocephalus* Tschudi, 1838 • **ak**
**ST**: **po.jh** • **CI**: h1168 • **ID**: 257
**PN**: *Peltocephalus quoyi* Tschudi, 1838
**PK**: *Calyptocephalus gayi** Duméril[+1], 1841
**KG**: *Calyptocephalella** Strand, 1928
**KF**: *Calyptocephalellidae* 1960.ra.f001

***Peltophryne*** Fitzinger, 1843 • **ky**
**ST**: **po.kn** • **CI**: h1169 • **ID**: 144
**PN**: *Bufo peltocephalus* Tschudi, 1838
**PK**: *Bufo peltocephalus** Tschudi, 1838
**KG**: *Peltophryne** Fitzinger, 1843
**KF**: *Bufonidae* 1825.gb.f004

*Pelusius*: Wagler 1830 • **an**
**ST**: **am** • **CI**: n0109 • **ID**: 504
**PN**: *Salamandra gigantea* Barton, 1808
**PK**: *Salamandra alleganiensis** Sonnini[+1], 1801
**KG**: *Cryptobranchus*[1] Leuckart, 1821
**KF**: *Cryptobranchidae* 1826.fb.f003

*Pengilleyia* Wells[+1], 1985 • **ak**
**ST**: **po.jd** • **CI**: h1170 • **ID**: 235
**PN**: *Litoria tyleri* Martin[+4], 1979
**PK**: *Litoria tyleri** Martin[+4], 1979
**KG**: *Litoria** Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

*Peralaimos* Jiménez de la Espada, 1875 • **ak**
**ST**: **po.jd** • **CI**: h1171 • **ID**: 248

**PN**: *Bufo stentor* Jiménez de la Espada, 1872
**PK**: *Paludicola pustulosa** Cope, 1864
**KG**: *Engystomops** Jiménez de la Espada, 1872
**KF**: *Leiuperidae* 1850.bb.f010
***Peratosauroides*** Naylor *in* Estes, 1981 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1172 • **ID**: †150
**PN**: *Peratosauroides problematica* Naylor *in* Estes, 1981 ‡
**PK**: *Peratosauroides problematica°* Naylor *in* Estes, 1981 †
**KG**: *Peratosauroides°* Naylor *in* Estes, 1981 †
**KF**: *Hylaeobatrachidae* 1889.la.f001 †
*Perialia* Gray, 1845 • **ak**
**ST**: **po.jd** • **CI**: h1173 • **ID**: 259
**PN**: *Perialia eyrei* Gray, 1845
**PK**: *Perialia eyrei°* Gray, 1845
**KG**: *Heleioporus*[2] Gray, 1841
**KF**: *Myobatrachidae* 1850.sa.f001
*Petraponia* Massalongo, 1853 • **ak**
**ST**: **po.jd** • **CI**: h1174 • **ID**: 566
**PN**: *Petroponia nigra* Massalongo, 1854
**PK**: *Triton carnifex** Laurenti, 1768
**KG**: *Triturus** Rafinesque, 1815
**KF**: *Salamandridae* 1820.ga.f002
***Petropedetes*** Reichenow, 1874 • **ky**
**ST**: **po.kn** • **CI**: h1175 • **ID**: 355
**PN**: *Petropedetes cameronensis* Reichenow, 1874
**PK**: *Petropedetes cameronensis** Reichenow, 1874
**KG**: *Petropedetes** Reichenow, 1874
**KF**: *Petropedetidae* 1931.na.f006
*Phaenerobranchus* Fitzinger, 1826 • **ak**
**ST**: **ns.jd** • **CI**: h1176 • **ID**: 553
**PN**: *Phanerobranchus tetradactylus* Leuckart, 1821
**PK**: *Sirena maculosa** Rafinesque, 1818
**KG**: *Necturus** Rafinesque, 1819
**KF**: *Proteidae* 1831.ba.f002
***Phaeognathus*** Highton, 1961 • **ky**
**ST**: **po.kn** • **CI**: h1177 • **ID**: 549
**PN**: *Phaeognathus hubrichti* Highton, 1961
**PK**: *Phaeognathus hubrichti** Highton, 1961
**KG**: *Phaeognathus** Highton, 1961
**KF**: *Plethodontidae* 1850.ga.f002
*Phanerabronchus*: Baird 1849 • **an**
**ST**: **am** • **CI**: n0110 • **ID**: 553
**PN**: *Phanerobranchus tetradactylus* Leuckart, 1821
**PK**: *Sirena maculosa** Rafinesque, 1818
**KG**: *Necturus** Rafinesque, 1819
**KF**: *Proteidae* 1831.ba.f002
*Phanerobranchus* Leuckart, 1821 • **ak**
**ST**: **po.jd** • **CI**: h1178 • **ID**: 553
**PN**: *Phanerobranchus tetradactylus* Leuckart, 1821
**PK**: *Sirena maculosa** Rafinesque, 1818
**KG**: *Necturus** Rafinesque, 1819
**KF**: *Proteidae* 1831.ba.f002
*Phanerobronchus*: Baird 1849 • **an**
**ST**: **am** • **CI**: n0111 • **ID**: 553
**PN**: *Phanerobranchus tetradactylus* Leuckart, 1821
**PK**: *Sirena maculosa** Rafinesque, 1818
**KG**: *Necturus** Rafinesque, 1819
**KF**: *Proteidae* 1831.ba.f002
*Phanerotis* Boulenger, 1890 • **ak**
**ST**: **po.jd** • **CI**: h1179 • **ID**: 264
**PN**: *Phanerotis fletcheri* Boulenger, 1890
**PK**: *Phanerotis fletcheri** Boulenger, 1890
**KG**: *Platyplectrum*[1] Günther, 1863
**KF**: *Myobatrachidae* 1850.sa.f001
*Pharyngodon* Diesing, 1861 • **zh**
**ST**: **zo** • **CI**: zh073
*Pharyngodon* Cope, 1865 • **ak**
**ST**: **po.jh** • **CI**: h1180 • **ID**: 210
**PN**: *Pharyngodon petasatus* Cope, 1865
**PK**: *Pharyngodon petasatus** Cope, 1865
**KG**: *Triprion** Cope, 1866
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Phasmahyla*** Cruz, 1991 • **ky**
**ST**: **po.kn** • **CI**: h1181 • **ID**: 242
**PN**: *Phyllomedusa guttata* Lutz, 1924
**PK**: *Phyllomedusa guttata** Lutz, 1924
**KG**: *Phasmahyla** Cruz, 1991
**KF**: *Phyllomedusidae* 1858.gc.f009
*Phatnomatorhina*: Bonaparte 1839 • **an**
**ST**: **al** • **CI**: n0112 • **ID**: 551
**PN**: *Salamandra glutinosa* Green, 1818
**PK**: *Salamandra glutinosa** Green, 1818
**KG**: *Plethodon** Tschudi, 1838
**KF**: *Plethodontidae* 1850.ga.f002
*Pherohapsis* Zweifel, 1972 • **ak**
**ST**: **po.jd** • **CI**: h1182 • **ID**: 280
**PN**: *Pherohapsis menziesi* Zweifel, 1972
**PK**: *Pherohapsis menziesi** Zweifel, 1972
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Philautus*** Gistel, 1848 • **ky**
**ST**: **nl.kn** • **CI**: h1183 • **ID**: 447
**PN**: *Hyla aurifasciata* Schlegel, 1837
**PK**: *Hyla aurifasciata** Schlegel, 1837
**KG**: *Philautus** Gistel, 1848
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001
*Philhydrus* Brookes, 1828 • **ex**
**ST**: **po.ce** • **CI**: e0010 • **ID**: 555
**PN**: *Siren pisciformis* Shaw, 1802
**PK**: *Gyrinus mexicanus** Shaw[+1], 1789
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *Ambystomatidae* 1850.ga.f004
*Philocryphus* Fletcher, 1894 • **ak**
**ST**: **po.jd** • **CI**: h1185 • **ID**: 259
**PN**: *Philocryphus flavoguttatus* Fletcher, 1894
**PK**: *Rana australiaca** Shaw[+1], 1795
**KG**: *Heleioporus*[2] Gray, 1841
**KF**: *Myobatrachidae* 1850.sa.f001
***Philoria*** Spencer, 1901 • **ky**
**ST**: **po.kn** • **CI**: h1186 • **ID**: 262
**PN**: *Philoria frosti* Spencer, 1901
**PK**: *Philoria frosti°* Spencer, 1901

**KG**: *Philoria*[2] Spencer, 1901
**KF**: *Myobatrachidae* 1850.sa.f001
*Phirix* Schmidt, 1857 • **ak**
**ST**: **po.jd** • **CI**: h1187 • **ID**: 100
**PN**: *Phirix pachydermus* Schmidt, 1857
**PK**: *Phirix pachydermus*° Schmidt, 1857
**KG**: *Atelopus** Duméril[+1], 1841
**KF**: *Bufonidae* 1825.gb.f004
*Phlyctimantis* Laurent[+1], 1950 • **ak**
**ST**: **po.jd** • **CI**: h1188 • **ID**: 337
**PN**: *Hylambates leonardi* Boulenger, 1906
**PK**: *Hylambates leonardi** Boulenger, 1906
**KG**: *Hylambates** Duméril, 1853
**KF**: *Hyperoliidae* 1943.lb.f001
*Phobobates* Zimmermann[+1], 1988 • **ak**
**ST**: **po.jd** • **CI**: h1189 • **ID**: 039
**PN**: *Dendrobates silverstonei* Myers[+1], 1979
**PK**: *Dendrobates silverstonei** Myers[+1], 1979
**KG**: *Ameerega** Bauer, 1986
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002
*Phosphotriton*: Tissier[+6] 2015 ‡ • **an**
**ST**: **al** • **CI**: n0113 • **ID**: †197
**PN**: *Phosphotriton sigei* Tissier[+6], 2016 ‡
**PK**: *Phosphotriton sigei*° Tissier[+6], 2016 †
**KG**: *Phosphotriton*° Tissier[+6], 2016 †
**KF**: *Salamandridae* 1820.ga.f002
***Phosphotriton*** Tissier[+6], 2016 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1190 • **ID**: †197
**PN**: *Phosphotriton sigei* Tissier[+6], 2016 ‡
**PK**: *Phosphotriton sigei*° Tissier[+6], 2016 †
**KG**: *Phosphotriton*° Tissier[+6], 2016 †
**KF**: *Salamandridae* 1820.ga.f002
*Phractops* Peters, 1867 • **ak**
**ST**: **po.jd** • **CI**: h1191 • **ID**: 237
**PN**: *Phractops alutaceus* Peters, 1867
**PK**: *Cyclorana novaehollandiae** Steindachner, 1867
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009
*Phreniscus*: Gray 1841 • **an**
**ST**: **am** • **CI**: n0114 • **ID**: 138
**PN**: *Phryniscus nigricans* Wiegmann, 1834
**PK**: *Bufo spinulosus** Wiegmann, 1834
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004
*Phrynacius*: Rafinesque 1815 • **an**
**ST**: **al** • **CI**: n0115 • **ID**: 120
**PN**: *Rana bufo* Linnaeus, 1758
**PK**: *Rana bufo** Linnaeus, 1758
**KG**: *Bufo** Garsault, 1764
**KF**: *Bufonidae* 1825.gb.f004
*Phrynanodus* Ahl, 1933 • **ak**
**ST**: **po.jd** • **CI**: h1192 • **ID**: 058
**PN**: *Phrynanodus nanus* Ahl, 1933
**PK**: *Hylodes parvus** Girard, 1853
**KG**: *Ischnocnema** Reinhardt[+1], 1862
**KF**: *Brachycephalidae* 1858.gc.f002
*Phryne* Meigen, 1800 • **zh**
**ST**: **zo** • **CI**: zh074
*Phryne* Oken, 1816 • **ex**
**ST**: **po.cw** • **CI**: e0011 • **ID**: 120
**PN**: *Bufo vulgaris* Laurenti, 1768
**PK**: *Rana bufo** Linnaeus, 1758
**KG**: *Bufo** Garsault, 1764
**KF**: *Bufonidae* 1825.gb.f004
*Phryne* Fitzinger, 1843 • **ak**
**ST**: **po.jh** • **CI**: h1194 • **ID**: 120
**PN**: *Bufo vulgaris* Laurenti, 1768
**PK**: *Rana bufo** Linnaeus, 1758
**KG**: *Bufo** Garsault, 1764
**KF**: *Bufonidae* 1825.gb.f004
***Phrynella*** Boulenger, 1887 • **ky**
**ST**: **po.kn** • **CI**: h1195 • **ID**: 312
**PN**: *Phrynella pulchra* Boulenger, 1887
**PK**: *Phrynella pulchra** Boulenger, 1887
**KG**: *Phrynella** Boulenger, 1887
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Phrynidium* Lichtenstein[+2], 1856 • **ak**
**ST**: **po.jd** • **CI**: h1196 • **ID**: 100
**PN**: *Phrynidium varium* Lichtenstein[+2], 1856
**PK**: *Phrynidium varium** Lichtenstein[+2], 1856
**KG**: *Atelopus** Duméril[+1], 1841
**KF**: *Bufonidae* 1825.gb.f004
*Phryniscus* Wiegmann, 1834 • **ak**
**ST**: **po.jd** • **CI**: h1197 • **ID**: 138
**PN**: *Phryniscus nigricans* Wiegmann, 1834
**PK**: *Bufo spinulosus** Wiegmann, 1834
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004
*Phrynixalus* Boettger, 1895 • **ak**
**ST**: **po.jd** • **CI**: h1198 • **ID**: 280
**PN**: *Phrynixalus montanus* Boettger, 1895
**PK**: *Phrynixalus montanus*° Boettger, 1895
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Phrynobatrachus*** Günther, 1862 • **ky**
**ST**: **po.kn** • **CI**: h1199 • **ID**: 350
**PN**: *Phrynobatrachus natalensis* Günther, 1862
**PK**: *Stenorhynchus natalensis** Smith, 1849
**KG**: *Phrynobatrachus** Günther, 1862
**KF**: *Phrynobatrachidae* 1941.lb.f001
*Phrynocara* Peters, 1883 • **ak**
**ST**: **po.jd** • **CI**: h1200 • **ID**: 287
**PN**: *Phrynocara tuberatum* Peters, 1883
**PK**: *Phrynocara tuberatum** Peters, 1883
**KG**: *Mantipus*[1] Peters, 1883
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Phrynoceros* Tschudi, 1838 • **ak**
**ST**: **po.jd** • **CI**: h1201 • **ID**: 169
**PN**: *Phrynoceros vaillanti* Tschudi, 1838
**PK**: *Rana cornuta** Linnaeus, 1758
**KG**: *Ceratophrys*[3] Neuwied, 1824
**KF**: *Ceratophryidae* 1838.ta.f002

*Phrynocerus*: Rafinesque 1815 • **AN**
**ST**: **AL** • **CI**: n0116 • **ID**: 120
**PN**: *Rana bufo* Linnaeus, 1758
**PK**: *Rana bufo** Linnaeus, 1758
**KG**: *Bufo** Garsault, 1764
**KF**: *BUFONIDAE* 1825.gb.f004

*Phrynocerus* Cope, 1862 • **AK**
**ST**: **NS.JD** • **CI**: h1202 • **ID**: 169
**PN**: *Phrynoceros vaillanti* Tschudi, 1838
**PK**: *Rana cornuta** Linnaeus, 1758
**KG**: *Ceratophrys*[3] Neuwied, 1824
**KF**: *CERATOPHRYIDAE* 1838.ta.f002

*Phrynoderma*: Sturm 1843 • **ZA**
**ST**: **ZN** • **CI**: zn008

***Phrynoderma*** Fitzinger, 1843 • **KY**
**ST**: **PO.KN** • **CI**: h1203 • **ID**: 375
**PN**: *Rana cutipora* Duméril[+1], 1841
**PK**: *Rana hexadactyla** Lesson, 1834
**KG**: *Phrynoderma*[1] Fitzinger, 1843
**KF**: *DICROGLOSSIDAE* 1987.da.f004

*Phrynoderma* Boulenger, 1893 • **AK**
**ST**: **PO.JH** • **CI**: h1204 • **ID**: 438
**PN**: *Phrynoderma asperum* Boulenger, 1893
**PK**: *Phrynoderma asperum** Boulenger, 1893
**KG**: *Theloderma** Tschudi, 1838
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

***Phrynodon*** Parker, 1935 • **KY**
**ST**: **PO.KN** • **CI**: h1205 • **ID**: 349
**PN**: *Phrynodon sandersoni* Parker, 1935
**PK**: *Phrynodon sandersoni** Parker, 1935
**KG**: *Phrynobatrachus** Günther, 1862
**KF**: *PHRYNOBATRACHIDAE* 1941.lb.f001

***Phrynoglossus*** Peters, 1867 • **KY**
**ST**: **PO.KN** • **CI**: h1206 • **ID**: 397
**PN**: *Phrynoglossus martensii* Peters, 1867
**PK**: *Phrynoglossus martensii** Peters, 1867
**KG**: *Phrynoglossus** Peters, 1867
**KF**: *OCCIDOZYGIDAE* 1990.fa.f002

*Phrynohyas* Fitzinger, 1843 • **AK**
**ST**: **PO.JD** • **CI**: h1207 • **ID**: 231
**PN**: *Hyla zonata* Spix, 1824
**PK**: *Rana typhonia** Linnaeus, 1758
**KG**: *Trachycephalus** Tschudi, 1838
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001↓

***Phrynoidis*** Fitzinger *in* Treitschke, 1842 • **KY**
**ST**: **PO.KN** • **CI**: h1208 • **ID**: 118
**PN**: *Bufo asper* Gravenhorst, 1829
**PK**: *Bufo asper** Gravenhorst, 1829
**KG**: *Phrynoidis** Fitzinger *in* Treitschke, 1842
**KF**: *BUFONIDAE* 1825.gb.f004

***Phrynomantis*** Peters, 1867 • **KY**
**ST**: **PO.KN** • **CI**: h1209 • **ID**: 319
**PN**: *Brachymerus bifasciatus* Smith, 1847
**PK**: *Brachymerus bifasciatus** Smith, 1847
**KG**: *Phrynomantis** Peters, 1867
**KF**: *PHRYNOMERIDAE* 1931.na.f013

***Phrynomedusa*** Miranda-Ribeiro, 1923 • **KY**
**ST**: **PO.KN** • **CI**: h1210 • **ID**: 241
**PN**: *Phrynomedusa fimbriata* Miranda-Ribeiro, 1923
**PK**: *Phrynomedusa fimbriata*° Miranda-Ribeiro, 1923
**KG**: *Phrynomedusa*[3] Miranda-Ribeiro, 1923
**KF**: *PHYLLOMEDUSIDAE* 1858.gc.f009

*Phrynomerus* Noble, 1926 • **AK**
**ST**: **NT.JI** • **CI**: h1211 • **ID**: 319
**PN**: *Brachymerus bifasciatus* Smith, 1847
**PK**: *Brachymerus bifasciatus** Smith, 1847
**KG**: *Phrynomantis** Peters, 1867
**KF**: *PHRYNOMERIDAE* 1931.na.f013

*Phrynomorphus*: Curtis 1829 • **ZA**
**ST**: **ZN** • **CI**: zn009

*Phrynomorphus* Curtis, 1833 • **ZH**
**ST**: **ZO** • **CI**: zh075

*Phrynomorphus* Fitzinger, 1843 • **AK**
**ST**: **PO.JH** • **CI**: h1212 • **ID**: 145
**PN**: *Bufo leschenaulti* Duméril[+1], 1841
**PK**: *Bufo guttatus** Schneider, 1799
**KG**: *Rhaebo** Cope, 1862
**KF**: *BUFONIDAE* 1825.gb.f004

*Phrynophrys*: Bonaparte 1839 • **AN**
**ST**: **AL** • **CI**: n0117 • **ID**: 021
**PN**: *Megophrys montana* Kuhl[+1], 1822
**PK**: *Megophrys montana*° Kuhl[+1], 1822
**KG**: *Megophrys*[2] Kuhl[+1], 1822
**KF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

*Phrynopsis* Rafinesque, 1815 • **ZH**
**ST**: **ZO** • **CI**: zh076

*Phrynopsis* Pfeffer, 1893 • **AK**
**ST**: **PO.JH** • **CI**: h1213 • **ID**: 367
**PN**: *Phrynopsis boulengerii* Pfeffer, 1893
**PK**: *Pyxicephalus edulis** Peters, 1854
**KG**: *Pyxicephalus** Tschudi, 1838
**KF**: *PYXICEPHALIDAE* 1850.bb.f005

***Phrynopus*** Peters, 1873 • **KY**
**ST**: **PO.KN** • **CI**: h1214 • **ID**: 077
**PN**: *Phrynopus peruanus* Peters, 1873
**PK**: *Phrynopus peruanus*° Peters, 1873
**KG**: *Phrynopus*[3] Peters, 1873
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Phrynotes*: Rafinesque 1815 • **AN**
**ST**: **AL** • **CI**: n0118 • **ID**: 120
**PN**: *Rana bufo* Linnaeus, 1758
**PK**: *Rana bufo** Linnaeus, 1758
**KG**: *Bufo** Garsault, 1764
**KF**: *BUFONIDAE* 1825.gb.f004

*Phylacomantis* Glaw[+1], 1994 • **AK**
**ST**: **PO.JD** • **CI**: h1215 • **ID**: 431
**PN**: *Mantidactylus corvus* Glaw[+1], 1994
**PK**: *Mantidactylus corvus** Glaw[+1], 1994
**KG**: *Gephyromantis** Methuen, 1920
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

*Phylhydrus* Swainson, 1839 • **AK**
**ST**: **PO.JD** • **CI**: h1216 • **ID**: 555

**PN**: *Siren pisciformis* Shaw, 1802
**PK**: *Gyrinus mexicanus** Shaw[+1], 1789
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004
*Phyllhydrus* Gray, 1831 • **EX**
**ST**: **NS.CE** • **CI**: e0012 • **ID**: 555
**PN**: *Siren pisciformis* Shaw, 1802
**PK**: *Gyrinus mexicanus** Shaw[+1], 1789
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004
*Phyllidrus* Agassiz, 1845 • **AK**
**ST**: **NT.JD** • **CI**: h1218 • **ID**: 555
**PN**: *Siren pisciformis* Shaw, 1802
**PK**: *Gyrinus mexicanus** Shaw[+1], 1789
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004
***Phyllobates*** Duméril[+1], 1841 • **KY**
**ST**: **PO.KN** • **CI**: h1219 • **ID**: 051
**PN**: *Phyllobates bicolor* Duméril[+1], 1841
**PK**: *Phyllobates bicolor** Duméril[+1], 1841
**KG**: *Phyllobates** Duméril[+1], 1841
**KF**: *DENDROBATIDAE* ||1850.bb.f006||-1865.ca.f002
*Phyllobius* Schoenherr, 1824 • **ZH**
**ST**: **ZO** • **CI**: zh077
*Phyllobius* Fitzinger, 1843 • **AK**
**ST**: **PO.JH** • **CI**: h1220 • **ID**: 189
**PN**: *Hyla albomarginata* Spix, 1824
**PK**: *Hyla albomarginata** Spix, 1824
**KG**: *Boana** Gray, 1825
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|
*Phyllodromus* Jiménez de la Espada, 1875 • **AK**
**ST**: **PO.JD** • **CI**: h1221 • **ID**: 053
**PN**: *Phyllodromus pulchellum* Jiménez de la Espada, 1875
**PK**: *Phyllodromus pulchellum** Jiménez de la Espada, 1875
**KG**: *Hyloxalus*[2] Jiménez de la Espada, 1870
**KF**: *DENDROBATIDAE* ||1850.bb.f006||-1865.ca.f002
***Phyllodytes*** Wagler, 1830 • **KY**
**ST**: **PO.KN** • **CI**: h1222 • **ID**: 221
**PN**: *Hyla luteola* Wied-Neuwied, 1824
**PK**: *Hyla luteola** Wied-Neuwied, 1824
**KG**: *Phyllodytes** Wagler, 1830
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|
*Phyllodytes* Gistel, 1848 • **AK**
**ST**: **PO.JH** • **CI**: h1223 • **ID**: 369
**PN**: *Halophila vitiensis* Girard, 1853
**PK**: *Halophila vitiensis** Girard, 1853
**KG**: *Cornufer** Tschudi, 1838
**KF**: *CERATOBATRACHIDAE* 1884.ba.f001
***Phyllomedusa*** Wagler, 1830 • **KY**
**ST**: **PO.KN** • **CI**: h1224 • **ID**: 243
**PN**: *Rana bicolor* Boddaert, 1772
**PK**: *Rana bicolor** Boddaert, 1772
**KG**: *Phyllomedusa** Wagler, 1830
**KF**: *PHYLLOMEDUSIDAE* 1858.gc.f009
***Phyllonastes*** Heyer, 1977 • **KY**
**ST**: **PO.KN** • **CI**: h1225 • **ID**: 065
**PN**: *Euparkerella myrmecoides* Lynch, 1976
**PK**: *Euparkerella myrmecoides** Lynch, 1976
**KG**: *Phyllonastes** Heyer, 1977
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002
***Physalaemus*** Fitzinger, 1826 • **KY**
**ST**: **PO.KN** • **CI**: h1226 • **ID**: 250
**PN**: *Physalaemus cuvieri* Fitzinger, 1826
**PK**: *Physalaemus cuvieri** Fitzinger, 1826
**KG**: *Physalaemus** Fitzinger, 1826
**KF**: *LEIUPERIDAE* 1850.bb.f010
*Physalamis*: Gray 1831 • **AN**
**ST**: **AL** • **CI**: n0119 • **ID**: 250
**PN**: *Physalaemus cuvieri* Fitzinger, 1826
**PK**: *Physalaemus cuvieri** Fitzinger, 1826
**KG**: *Physalaemus** Fitzinger, 1826
**KF**: *LEIUPERIDAE* 1850.bb.f010
*Physalus* La Cepède, 1804 • **ZH**
**ST**: **ZO** • **CI**: zh078
*Physalus* Jan, 1857 • **AN**
**ST**: **AL** • **CI**: n0120 • **ID**: 100
**PN**: *Phryniscus ignescens* Cornalia, 1849
**PK**: *Phryniscus ignescens** Cornalia, 1849
**KG**: *Atelopus** Duméril[+1], 1841
**KF**: *BUFONIDAE* 1825.gb.f004
*Physodes* Desmarest, 1825 • **ZH**
**ST**: **ZO** • **CI**: zh079
*Physodes*: Jan 1857 • **AN**
**ST**: **AL** • **CI**: n0121 • **ID**: 246
**PN**: *Lystris brachyops* Cope, 1869
**PK**: *Lystris brachyops** Cope, 1869
**KG**: *Pleurodema** Tschudi, 1838
**KF**: *LEIUPERIDAE* 1850.bb.f010
*Physolaemus* Agassiz, 1847 • **AK**
**ST**: **NT.JI** • **CI**: h1227 • **ID**: 250
**PN**: *Physalaemus cuvieri* Fitzinger, 1826
**PK**: *Physalaemus cuvieri** Fitzinger, 1826
**KG**: *Physalaemus** Fitzinger, 1826
**KF**: *LEIUPERIDAE* 1850.bb.f010
***Phytotriades*** Jowers[+2], 2009 • **KY**
**ST**: **PO.KN** • **CI**: h1228 • **ID**: 226
**PN**: *Amphodus auratus* Boulenger, 1917
**PK**: *Amphodus auratus** Boulenger, 1917
**KG**: *Phytotriades** Jowers[+2], 2009
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|
***Phyzelaphryne*** Heyer, 1977 • **KY**
**ST**: **PO.KN** • **CI**: h1229 • **ID**: 084
**PN**: *Phyzelaphryne miriamae* Heyer, 1977
**PK**: *Phyzelaphryne miriamae** Heyer, 1977
**KG**: *Phyzelaphryne** Heyer, 1977
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002
***Piceoerpeton*** Meszoely, 1967 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1230 • **ID**: †157
**PN**: *Piceoerpeton willwoodense* Meszoely, 1967 ‡
**PK**: *Piceoerpeton willwoodense*° Meszoely, 1967 †
**KG**: *Piceoerpeton*° Meszoely, 1967 †
**KF**: *SCAPHERPETIDAE* 1959.aa.f001 †

*Pingia* Chang, 1936 • **AK**
**ST**: **PO.JD** • **CI**: h1231 • **ID**: 561
**PN**: *Pachytriton granulosus* Chang, 1933
**PK**: *Pachytriton granulosus** Chang, 1933
**KG**: *Pachytriton** Boulenger, 1878
**KF**: *SALAMANDRIDAE* 1820.ga.f002
***Pipa*** Laurenti, 1768 • **KY**
**ST**: **PO.KN** • **CI**: h1232 • **ID**: 012
**PN**: *Pipa americana* Laurenti,1768
**PK**: *Rana pipa** Linnaeus, 1758
**KG**: *Pipa*[1] Laurenti, 1768
**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|
*Piparius* Rafinesque, 1815 • **AK**
**ST**: **NT.JI** • **CI**: h1233 • **ID**: 012
**PN**: *Pipa americana* Laurenti,1768
**PK**: *Rana pipa** Linnaeus, 1758
**KG**: *Pipa*[1] Laurenti, 1768
**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|
*Pipra* Linnaeus, 1758 • **ZH**
**ST**: **ZO** • **CI**: zh080
*Pipra* Gray, 1825 • **AK**
**ST**: **NT.JH** • **CI**: h1234 • **ID**: 012
**PN**: *Pipa americana* Laurenti,1768
**PK**: *Rana pipa** Linnaeus, 1758
**KG**: *Pipa*[1] Laurenti, 1768
**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|
*Pithecopsis* Duméril[+1], 1841 • **AK**
**ST**: **PO.JI** • **CI**: h1235 • **ID**: 179
**PN**: *Cycloramphus fuliginosus* Tschudi, 1838
**PK**: *Cycloramphus fuliginosus** Tschudi, 1838
**KG**: *Cycloramphus** Tschudi, 1838
**KF**: *CYCLORAMPHIDAE* 1850.bb.f003-|1852.ba.f001|
***Pithecopus*** Cope, 1866 • **KY**
**ST**: **PO.KN** • **CI**: h1236 • **ID**: 245
**PN**: *Phyllomedusa azurea* Cope, 1862
**PK**: *Phyllomedusa azurea** Cope, 1862
**KG**: *Pithecopus** Cope, 1866
**KF**: *PHYLLOMEDUSIDAE* 1858.gc.f009
*Plagiodon* Duméril, 1853 • **ZH**
**ST**: **ZO** • **CI**: zh081
*Plagiodon*: Duméril[+2] 1854 • **AN**
**ST**: **AL** • **CI**: n0122 • **ID**: 555
**PN**: *Lacerta subviolacea* Barton, 1804
**PK**: *Lacerta maculata** Shaw, 1802
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004
*Plagiodons*: Duméril[+2] 1854 • **AN**
**ST**: **AL** • **CI**: n0123 • **ID**: 555
**PN**: *Lacerta subviolacea* Barton, 1804
**PK**: *Lacerta maculata** Shaw, 1802
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004
*Platosphus* L'Isle, 1877 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h1237 • **ID**: 120
**PN**: *Platosphus gervaisii* L'Isle, 1877 ‡
**PK**: *Rana bufo** Linnaeus, 1758
**KG**: *Bufo** Garsault, 1764
**KF**: *BUFONIDAE* 1825.gb.f004
*Platyhyla* Boulenger, 1889 • **AK**
**ST**: **PO.JD** • **CI**: h1238 • **ID**: 288
**PN**: *Platyhyla grandis* Boulenger, 1889
**PK**: *Platyhyla grandis** Boulenger, 1889
**KG**: *Platypelis*[2] Boulenger, 1882
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001
*Platymantis*: Günther, 1858 • **AN**
**ST**: **AL** • **CI**: n0124 • **ID**: 370
**PN**: *Platymantis plicifera* Günther, 1859
**PK**: *Hylodes corrugatus** Duméril, 1853
**KG**: *Platymantis*[1] Günther, 1859
**KF**: *CERATOBATRACHIDAE* 1884.ba.f001
***Platymantis*** Günther, 1859 • **KY**
**ST**: **PO.KN** • **CI**: h1239 • **ID**: 370
**PN**: *Platymantis plicifera* Günther, 1859
**PK**: *Hylodes corrugatus** Duméril, 1853
**KG**: *Platymantis*[1] Günther, 1859
**KF**: *CERATOBATRACHIDAE* 1884.ba.f001
***Platypelis*** Boulenger, 1882 • **KY**
**ST**: **PO.KN** • **CI**: h1240 • **ID**: 288
**PN**: *Platypelis cowanii* Boulenger, 1882
**PK**: *Platypelis cowanii*° Boulenger, 1882
**KG**: *Platypelis*[2] Boulenger, 1882
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001
*Platyplectron*: Peters 1863 • **AN**
**ST**: **AM** • **CI**: n0125 • **ID**: 264
**PN**: *Platyplectrum marmoratum* Günther, 1863
**PK**: *Discoglossus ornatus** Gray, 1842
**KG**: *Platyplectrum*[1] Günther, 1863
**KF**: *MYOBATRACHIDAE* 1850.sa.f001
***Platyplectrum*** Günther, 1863 • **KY**
**ST**: **PO.KN** • **CI**: h1241 • **ID**: 264
**PN**: *Platyplectrum marmoratum* Günther, 1863
**PK**: *Discoglossus ornatus** Gray, 1842
**KG**: *Platyplectrum*[1] Günther, 1863
**KF**: *MYOBATRACHIDAE* 1850.sa.f001
*Platyrhynchus* Leuckart, 1816 • **AK**
**ST**: **NL.JI** • **CI**: h1242 • **ID**: 554
**PN**: *Proteus anguinus* Laurenti, 1768
**PK**: *Proteus anguinus** Laurenti, 1768
**KG**: *Proteus** Laurenti, 1768
**KF**: *PROTEIDAE* 1831.ba.f002
***Plectrohyla*** Brocchi, 1877 • **KY**
**ST**: **PO.KN** • **CI**: h1243 • **ID**: 219
**PN**: *Plectrohyla guatemalensis* Brocchi, 1877
**PK**: *Plectrohyla guatemalensis** Brocchi, 1877
**KG**: *Plectrohyla** Brocchi, 1877
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|
*Plectromantis* Peters, 1862 • **AK**
**ST**: **PO.JD** • **CI**: h1244 • **ID**: 253
**PN**: *Plectromantis wagneri* Peters, 1862
**PK**: *Plectromantis wagneri** Peters, 1862
**KG**: *Leptodactylus*[1] Fitzinger, 1826
**KF**: *LEPTODACTYLIDAE* ||1838.ta.f001||-1896.wa.f001

*Plectropus* Kirby, 1826 • **ZH**
**ST**: **ZO** • **CI**: zh082
*Plectropus* Duméril[+1], 1841 • **AK**
**ST**: **PO.JH** • **CI**: h1245 • **ID**: 310
**PN**: *Plectropus pictus* Duméril[+1], 1841
**PK**: *Plectropus pictus** Duméril[+1], 1841
**KG**: *Kaloula** Gray, 1831
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001
***Plethodon*** Tschudi, 1838 • **KY**
**ST**: **PO.KN** • **CI**: h1246 • **ID**: 551
**PN**: *Salamandra glutinosa* Green, 1818
**PK**: *Salamandra glutinosa** Green, 1818
**KG**: *Plethodon** Tschudi, 1838
**KF**: *PLETHODONTIDAE* 1850.ga.f002
*Plethodontohyla* Boulenger, 1882 • **AK**
**ST**: **PO.JD** • **CI**: h1247 • **ID**: 286
**PN**: *Callula notosticta* Günther, 1877
**PK**: *Callula notosticta** Günther, 1877
**KG**: *Cophyla** Boettger, 1880
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001
*Plethopsis* Bishop, 1937 • **AK**
**ST**: **PO.JD** • **CI**: h1248 • **ID**: 521
**PN**: *Plethopsis wrighti* Bishop, 1937
**PK**: *Plethopsis wrighti** Bishop, 1937
**KG**: *Batrachoseps** Bonaparte, 1839
**KF**: *PLETHODONTIDAE* 1850.ga.f002
***Pleurodeles*** Michahelles, 1830 • **KY**
**ST**: **PO.KN** • **CI**: h1249 • **ID**: 571
**PN**: *Pleurodeles waltl* Michahelles, 1830
**PK**: *Pleurodeles waltl** Michahelles, 1830
**KG**: *Pleurodeles** Michahelles, 1830
**KF**: *SALAMANDRIDAE* 1820.ga.f002
***Pleurodema*** Tschudi, 1838 • **KY**
**ST**: **LC.KN** • **CI**: h1250 • **ID**: 246
**PN**: *Pleurodema bibroni* Tschudi, 1838
**PK**: *Pleurodema bibroni** Tschudi, 1838
**KG**: *Pleurodema** Tschudi, 1838
**KF**: *LEIUPERIDAE* 1850.bb.f010
*Pleuroderes*: Hoffmann 1878 • **AN**
**ST**: **AM** • **CI**: n0126 • **ID**: 571
**PN**: *Pleurodeles waltl* Michahelles, 1830
**PK**: *Pleurodeles waltl** Michahelles, 1830
**KG**: *Pleurodeles** Michahelles, 1830
**KF**: *SALAMANDRIDAE* 1820.ga.f002
*Pleuroderma*: Tschudi 1838 • **AN**
**ST**: **LI** • **CI**: n0127 • **ID**: 246
**PN**: *Pleurodema bibroni* Tschudi, 1838
**PK**: *Pleurodema bibroni** Tschudi, 1838
**KG**: *Pleurodema** Tschudi, 1838
**KF**: *LEIUPERIDAE* 1850.bb.f010
*Plicagnathus* Cook, 1917 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h1251 • **ID**: 503
**PN**: *Plicagnathus matthewi* Cook, 1917 ‡
**PK**: *Plicagnathus matthewi*° Cook, 1917 †
**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *CRYPTOBRANCHIDAE* 1826.fb.f003
*Plioambystoma* Adams *in* Adams[+1], 1929 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h1252 • **ID**: 555
**PN**: *Plioambystoma kansense* Adams[+1], 1929 ‡
**PK**: *Plioambystoma kansense*° Adams[+1], 1929 †
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004
*Pliobatrachus* Fejérváry, 1917 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h1253 • **ID**: †069
**PN**: *Pliobatrachus langhae* Fejérváry, 1917 ‡
**PK**: *Pliobatrachus langhae*° Fejérváry, 1917 †
**KG**: *Palaeobatrachus°* Tschudi, 1838 †
**KF**: *PALAEOBATRACHIDAE* 1865.ca.f001 †
*Podonectes*: Steindachner 1864 • **AN**
**ST**: **AL** • **CI**: n0128 • **ID**: 196
**PN**: *Lysapsus limellum* Cope, 1862
**PK**: *Lysapsus limellum** Cope, 1862
**KG**: *Pseudis** Wagler, 1830
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|
*Pohlia* Steindachner, 1867 • **AK**
**ST**: **PO.JI** • **CI**: h1254 • **ID**: 415
**PN**: *Rana palmipes* Spix, 1824
**PK**: *Rana palmipes** Spix, 1824
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *RANIDAE* 1796.ba.f001
***Polypedates*** Tschudi, 1838 • **KY**
**ST**: **LC.KN** • **CI**: h1255 • **ID**: 452
**PN**: *Hyla leucomystax* Gravenhorst, 1829
**PK**: *Hyla leucomystax** Gravenhorst, 1829
**KG**: *Polypedates** Tschudi, 1838
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001
*Polypedetes* Whitney, 1890 • **AK**
**ST**: **NT.JI** • **CI**: h1256 • **ID**: 452
**PN**: *Hyla leucomystax* Gravenhorst, 1829
**PK**: *Hyla leucomystax** Gravenhorst, 1829
**KG**: *Polypedates** Tschudi, 1838
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001
*Polypedotes*: Tschudi 1838 • **AN**
**ST**: **LI** • **CI**: n0129 • **ID**: 452
**PN**: *Hyla leucomystax* Gravenhorst, 1829
**PK**: *Hyla leucomystax** Gravenhorst, 1829
**KG**: *Polypedates** Tschudi, 1838
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001
*Polyphone* Gistel, 1848 • **AK**
**ST**: **NL.JI** • **CI**: h1257 • **ID**: 237
**PN**: *Ranoidea jacksoniensis* Tschudi, 1838
**PK**: *Rana aurea** Lesson, 1829
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *PHYLLOMEDUSIDAE* 1858.gc.f009
*Polysemia* Guenée *in* Boisduval[+1], 1857 • **ZH**
**ST**: **ZO** • **CI**: zh083
*Polysemia* Meyer, 1860 ‡ • **AK**
**ST**: **PO.JH** • **CI**: h1258 • **ID**: †193
**PN**: *Salamandra ogygia* Goldfuss, 1831 ‡
**PK**: *Salamandra ogygia*° Goldfuss, 1831 †
**KG**: *Chelotriton°* Pomel, 1853 †
**KF**: *SALAMANDRIDAE* 1820.ga.f002

*Pomatops* Barbour, 1910 • **AK**

**ST**: **PO.JD** • **CI**: h1259 • **ID**: 280

**PN**: *Pomatops valvifera* Barbour, 1910

**PK**: *Pomatops valvifera*° Barbour, 1910

**KG**: *Asterophrys** Tschudi, 1838

**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Potamorana* Brown[+4], 2015 • **AK**

**ST**: **PO.JD** • **CI**: h1260 • **ID**: 369

**PN**: *Rana bufoniformis* Boulenger, 1884

**PK**: *Rana bufoniformis*° Boulenger, 1884

**KG**: *Cornufer** Tschudi, 1838

**KF**: *CERATOBATRACHIDAE* 1884.ba.f001

***Potamotyphlus*** Taylor, 1968 • **KY**

**ST**: **LC.KN** • **CI**: h1261 • **ID**: 479

**PN**: *Caecilia kaupii* Berthold, 1859

**PK**: *Caecilia kaupii*° Berthold, 1859

**KG**: *Potamotyphlus*° Taylor, 1968

**KF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|

*Potomotyphlus*: Taylor 1968 • **AN**

**ST**: **LI** • **CI**: n0130 • **ID**: 479

**PN**: *Caecilia kaupii* Berthold, 1859

**PK**: *Caecilia kaupii*° Berthold, 1859

**KG**: *Potamotyphlus*° Taylor, 1968

**KF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|

***Poyarius*** Dubois[+1], 2012 • **KY**

**ST**: **PO.KN** • **CI**: h1262 • **ID**: 507

**PN**: *Hynobius formosanus* Maki, 1922

**PK**: *Hynobius formosanus** Maki, 1922

**KG**: *Poyarius** Dubois[+1], 2012

**KF**: *HYNOBIIDAE* ||1856.ha.f001||-1859.cb.f002

***Poyntonia*** Channing[+1], 1989 • **KY**

**ST**: **PO.KN** • **CI**: h1263 • **ID**: 359

**PN**: *Poyntonia paludicola* Channing[+1], 1989

**PK**: *Poyntonia paludicola** Channing[+1], 1989

**KG**: *Poyntonia** Channing[+1], 1989

**KF**: *CACOSTERNIDAE* 1931.na.f008

***Poyntonophrynus*** Frost[+18], 2006 • **KY**

**ST**: **PO.KN** • **CI**: h1264 • **ID**: 142

**PN**: *Bufo vertebralis* Smith, 1848

**PK**: *Bufo vertebralis*° Smith, 1848

**KG**: *Poyntonophrynus*[3] Frost[+18], 2006

**KF**: *BUFONIDAE* 1825.gb.f004

*Prana* Bauer, 1985 • **AK**

**ST**: **PO.JD** • **CI**: h1265 • **ID**: 415

**PN**: *Rana pipiens* Schreber, 1782

**PK**: *Rana pipiens** Schreber, 1782

**KG**: *Lithobates** Fitzinger, 1843

**KF**: *RANIDAE* 1796.ba.f001

***Praslinia*** Boulenger, 1909 • **KY**

**ST**: **PO.KN** • **CI**: h1266 • **ID**: 484

**PN**: *Praslinia cooperi* Boulenger, 1909

**PK**: *Praslinia cooperi** Boulenger, 1909

**KG**: *Praslinia** Boulenger, 1909

**KF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|

***Pristimantis*** Jiménez de la Espada, 1870 • **KY**

**ST**: **PO.KN** • **CI**: h1267 • **ID**: 078

**PN**: *Pristimantis galdi* Jiménez de la Espada, 1870

**PK**: *Pristimantis galdi** Jiménez de la Espada, 1870

**KG**: *Pristimantis** Jiménez de la Espada, 1870

**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

***Proacris*** Holman, 1961 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h1268 • **ID**: †101

**PN**: *Proacris mintoni* Holman, 1961 ‡

**PK**: *Proacris mintoni*° Holman, 1961 †

**KG**: *Proacris*° Holman, 1961 †

**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

***Proamphiuma*** Estes, 1969 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h1269 • **ID**: †180

**PN**: *Proamphiuma cretacea* Estes, 1969 ‡

**PK**: *Proamphiuma cretacea*° Estes, 1969 †

**KG**: *Proamphiuma*° Estes, 1969 †

**KF**: *AMPHIUMIDAE* 1825.gb.f07

***Probatrachus*** Peters, 1878 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h1270 • **ID**: †070

**PN**: *Probatrachus vicetinus* Peters 1878 ‡

**PK**: *Probatrachus vicetinus*° Peters 1878 †

**KG**: *Probatrachus*° Peters, 1878 †

**KF**: *PALAEOBATRACHIDAE* 1865.ca.f001 †

***Probreviceps*** Parker, 1931 • **KY**

**ST**: **PO.KN** • **CI**: h1271 • **ID**: 345

**PN**: *Breviceps macrodactylus* Nieden, 1926

**PK**: *Breviceps macrodactylus** Nieden, 1926

**KG**: *Probreviceps** Parker, 1931

**KF**: *BREVICIPITIDAE* 1850.bb.f012

***Proceratophrys*** Miranda-Ribeiro, 1920 • **KY**

**ST**: **PO.KN** • **CI**: h1272 • **ID**: 154

**PN**: *Ceratophrys bigibbosa* Peters, 1872

**PK**: *Ceratophrys bigibbosa** Peters, 1872

**KG**: *Proceratophrys** Miranda-Ribeiro, 1920

**KF**: *ODONTOPHRYNIDAE* 1971.la.f002

***Procerobatrachus*** Roček[+1], 1993 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h1273 • **ID**: †037

**PN**: *Procerobatrachus paulus* Roček[+1], 1993 ‡

**PK**: *Procerobatrachus paulus*° Roček[+1], 1993 †

**KG**: *Procerobatrachus*° Roček[+1], 1993 †

**KF**: **ANURA** Familia *INCERTAE SEDIS*

***Procynops*** Young, 1965 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h1274 • **ID**: †198

**PN**: *Procynops miocenicus* Young, 1965 ‡

**PK**: *Procynops miocenicus*° Young, 1965 †

**KG**: *Procynops*° Young, 1965 †

**KF**: *SALAMANDRIDAE* 1820.ga.f002

***Prodesmodon*** Estes, 1964 ‡ • **KY**

**ST**: **PO.KN** • **CI**: h1275 • **ID**: †151

**PN**: *Prodesmodon copei* Estes, 1964 ‡

**PK**: *Prodesmodon copei*° Estes, 1964 †

**KG**: *Prodesmodon*° Estes, 1964 †

**KF**: *HYLAEOBATRACHIDAE* 1889.la.f001 †

*Prodiscoglossus* Friant, 1944 ‡ • **AK**

**ST**: **PO.JD** • **CI**: h1276 • **ID**: 470

**PN**: *Prodiscoglossus vertaizoni* Friant, 1944 ‡

**PK**: *Prodiscoglossus vertaizoni*° Friant, 1944 †

**KG**: *Latonia*[3] Meyer, 1845 †
**KF**: *Discoglossidae* 1858.gc.f004

*Prohartia* Wells[+1], 1985 • **ak**
**ST**: **po.jd** • **CI**: h1277 • **ID**: 276
**PN**: *Pseudophryne fimbrianus* Parker, 1926
**PK**: *Pseudophryne rugosa** Andersson, 1916
**KG**: *Uperoleia*[2] Gray, 1841
**KF**: *Myobatrachidae* 1850.sa.f001

*Prohynobius* Fei[+1], 1985 ‡ • **an**
**ST**: **al** • **CI**: n0131 • **ID**: †173§
**PN**: INR
**PK**: INR
**KG**: INR
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

*Propelodytes* Weitzel, 1938 ‡ • **ak**
**ST**: **po.jd** • **CI**: h1278 • **ID**: †090
**PN**: *Propelodytes wagneri* Weitzel, 1938 ‡
**PK**: *Propelodytes wagneri*° Weitzel, 1938 †
**KG**: *Eopelobates*° Parker, 1929 †
**KF**: *Pelobatidae* 1850.bb.f004

***Prosalirus*** Shubin[+1], 1995 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1279 • **ID**: †052
**PN**: *Prosalirus bitis* Shubin[+1], 1995 ‡
**PK**: *Prosalirus bitis*° Shubin[+1], 1995 †
**KG**: *Prosalirus*° Shubin[+1], 1995 †
**KF**: *Prosaliridae* 1995.sa.f001 †

***Prosiren*** Goin[+1], 1958 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1280 • **ID**: †154
**PN**: *Prosiren elinorae* Goin[+1], 1958 ‡
**PK**: *Prosiren elinorae*° Goin[+1], 1958 †
**KG**: *Prosiren*° Goin[+1], 1958 †
**KF**: *Prosirenidae* 1969.ea.f001 †

*Prospea*: Chen[+3] 2016 ‡ • **an**
**ST**: **al** • **CI**: n0132 • **ID**: †093§
**PN**: *Prospea holoserisca* Chen[+3], 2016 ‡ • **as**
**PK**: *Prospea holoserisca*° Chen[+3], 2016 † • **as**
**KG**: *Prospea*° Chen[+3], 2016 † • **ag**
**KF**: *Scaphiopodidae* 1865.ca.f003 †

*Prostherapis* Cope, 1868 • **ak**
**ST**: **po.jd** • **CI**: h1281 • **ID**: 040
**PN**: *Prostherapis inguinalis* Cope, 1868
**PK**: *Prostherapis inguinalis** Cope, 1868
**KG**: *Colostethus** Cope, 1866
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

*Prostheraspis* Hoffmann, 1877 • **ak**
**ST**: **nt.jd** • **CI**: h1282 • **ID**: 040
**PN**: *Prostherapis inguinalis* Cope, 1868
**PK**: *Prostherapis inguinalis** Cope, 1868
**KG**: *Colostethus** Cope, 1866
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

*Proteocordylus* Eichwald, 1831 ‡ • **ak**
**ST**: **po.ca** • **CI**: h1283 • **ID**: 503
**PN**: *Proteocordylus diluvii* Eichwald, 1831 ‡
**PK**: *Salamandra scheuchzeri*° Holl, 1831 †
**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *Cryptobranchidae* 1826.fb.f003

***Proteus*** Laurenti, 1768 • **ky**
**ST**: **po.kn** • **CI**: h1284 • **ID**: 554
**PN**: *Proteus anguinus* Laurenti, 1768
**PK**: *Proteus anguinus** Laurenti, 1768
**KG**: *Proteus** Laurenti, 1768
**KF**: *Proteidae* 1831.ba.f002

*Protobatrachus* Gistel, 1848 • **ak**
**ST**: **po.jd** • **CI**: h1285 • **ID**: 419
**PN**: *Protobatrachus nodicaudatus* Gistel, 1848
**PK**: *Rana temporaria** Linnaeus, 1758
**KG**: *Rana** Linnaeus, 1758
**KF**: *Ranidae* 1796.ba.f001

*Protobatrachus* Piveteau, 1936 ‡ • **ak**
**ST**: **po.jh** • **CI**: h1286 • **ID**: †054
**PN**: *Protobatrachus massinoti* Piveteau, 1936 ‡
**PK**: *Protobatrachus massinoti*° Piveteau, 1936 †
**KG**: *Triadobatrachus*° Kuhn, 1962 †
**KF**: *Triadobatrachidae* 1962.ka.f001 †

*Protohynobius* Fei[+1], 2000 • **ak**
**ST**: **po.jd** • **CI**: h1287 • **ID**: 511
**PN**: *Protohynobius puxiongensis* Fei[+1], 2000
**PK**: *Protohynobius puxiongensis** Fei[+1], 2000
**KG**: *Pseudohynobius** Fei[+1], 1983
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

*Protonophis*: Tschudi 1838 • **an**
**ST**: **am** • **CI**: n0133 • **ID**: 504
**PN**: *Salamandra horrida* Barton, 1808
**PK**: *Salamandra alleganiensis** Sonnini[+1], 1801
**KG**: *Cryptobranchus*[1] Leuckart, 1821
**KF**: *Cryptobranchidae* 1826.fb.f003

*Protonopsis* Le Conte, 1824 • **ak**
**ST**: **po.jd** • **CI**: h1288 • **ID**: 504
**PN**: *Salamandra horrida* Barton, 1808
**PK**: *Salamandra alleganiensis** Sonnini[+1], 1801
**KG**: *Cryptobranchus*[1] Leuckart, 1821
**KF**: *Cryptobranchidae* 1826.fb.f003

*Protopelobates* Bieber, 1881 ‡ • **ak**
**ST**: **po.jd** • **CI**: h1289 • **ID**: †069
**PN**: *Protopelobates gracilis* Bieber, 1881 ‡
**PK**: *Palaeobatrachus laubei*° Bieber, 1881 †
**KG**: *Palaeobatrachus*° Tschudi, 1838 †
**KF**: *Palaeobatrachidae* 1865.ca.f001 †

*Protopelobates*: Bauer 1986 ‡ • **an**
**ST**: **al** • **CI**: n0134 • **ID**: †084§
**PN**: INR
**PK**: INR
**KG**: INR
**KF**: **Laevogyrinia** Familia *Incertae sedis*

*Protophrynos*: Zittel 1888 ‡ • **an**
**ST**: **al** • **CI**: n0135 • **ID**: †038§
**PN**: *Protophrynus arethusae* Pomel, 1853 ‡
**PK**: *Protophrynus arethusae*° Pomel, 1853 †
**KG**: *Protophrynus*° Pomel, 1853 †
**KF**: **Anura** Familia *Incertae sedis*

*Protophrynus*: Pomel 1853 ‡ • **an**
**ST**: **al** • **CI**: n0136 • **ID**: †038§

**PN**: *Protophrynus arethusae* Pomel, 1853 ‡
**PK**: *Protophrynus arethusae*° Pomel, 1853 †
**KG**: *Protophrynus*° Pomel, 1853 †
**KF**: **Anura** Familia *Incertae sedis*

*Protopipa* Noble, 1925 • **ak**
**ST**: **po.jd** • **CI**: h1290 • **ID**: 012
**PN**: *Pipa aspera* Müller, 1924
**PK**: *Pipa aspera*° Müller, 1924
**KG**: *Pipa*[1] Laurenti, 1768
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Pseudacris*** Fitzinger, 1843 • **ky**
**ST**: **po.kn** • **CI**: h1291 • **ID**: 200
**PN**: *Rana nigrita* Le Conte, 1825
**PK**: *Rana nigrita** Le Conte, 1825
**KG**: *Pseudacris** Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Pseudarthroleptis* Deckert, 1938 • **ak**
**ST**: **po.jd** • **CI**: h1292 • **ID**: 350
**PN**: *Hemimantis calcaratus* Peters, 1863
**PK**: *Hemimantis calcaratus** Peters, 1863
**KG**: *Phrynobatrachus** Günther, 1862
**KF**: *Phrynobatrachidae* 1941.lb.f001

*Pseudendrobates* Bauer, 1987 • **ak**
**ST**: **po.jd** • **CI**: h1293 • **ID**: 039
**PN**: *Dendrobates silverstonei* Myers[+1], 1979
**PK**: *Dendrobates silverstonei** Myers[+1], 1979
**KG**: *Ameerega** Bauer, 1986
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

*Pseudengystoma* Witte, 1930 • **ak**
**ST**: **po.jd** • **CI**: h1294 • **ID**: 280
**PN**: *Pseudengystoma bouwensi* Witte, 1930
**PK**: *Pseudengystoma bouwensi** Witte, 1930
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Pseudepidalea* Frost[+18], 2006 • **ak**
**ST**: **po.ji** • **CI**: h1295 • **ID**: 121
**PN**: *Bufo viridis* Laurenti, 1768
**PK**: *Bufo viridis** Laurenti, 1768
**KG**: *Bufotes** Rafinesque, 1815
**KF**: *Bufonidae* 1825.gb.f004

*Pseudes* Leunis, 1844 • **ak**
**ST**: **ns.ji** • **CI**: h1296 • **ID**: 196
**PN**: *Rana paradoxa* Linnaeus, 1758
**PK**: *Rana paradoxa** Linnaeus, 1758
**KG**: *Pseudis** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Pseudhymenochirus*** Chabanaud, 1920 • **ky**
**ST**: **po.kn** • **CI**: h1297 • **ID**: 011
**PN**: *Pseudhymenochirus merlini* Chabanaud, 1920
**PK**: *Pseudhymenochirus merlini** Chabanaud, 1920
**KG**: *Pseudhymenochirus** Chabanaud, 1920
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Pseudis*** Wagler, 1830 • **ky**
**ST**: **po.kn** • **CI**: h1298 • **ID**: 196
**PN**: *Rana paradoxa* Linnaeus, 1758
**PK**: *Rana paradoxa** Linnaeus, 1758
**KG**: *Pseudis** Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Pseudoamolops*: Jiang[+6] 1997 • **an**
**ST**: **al** • **CI**: n0137 • **ID**: 419
**PN**: *Rana sauteri* Boulenger, 1909
**PK**: *Rana sauteri** Boulenger, 1909
**KG**: *Rana** Linnaeus, 1758
**KF**: *Ranidae* 1796.ba.f001

*Pseudoamolops* Fei[+2], 2000 • **ak**
**ST**: **po.jd** • **CI**: h1299 • **ID**: 419
**PN**: *Rana sauteri* Boulenger, 1909
**PK**: *Rana sauteri** Boulenger, 1909
**KG**: *Rana** Linnaeus, 1758
**KF**: *Ranidae* 1796.ba.f001

*Pseudobatrachus* Peters, 1873 • **ak**
**ST**: **po.jd** • **CI**: h1300 • **ID**: 186
**PN**: *Pseudobatrachus jelskii* Peters, 1873
**PK**: *Pseudobatrachus jelskii*° Peters, 1873
**KG**: *Telmatobius*[3] Wiegmann, 1834
**KF**: *Telmatobiidae* 1843.fa.f006

***Pseudobranchus*** Gray, 1825 • **ky**
**ST**: **po.kn** • **CI**: h1301 • **ID**: 518
**PN**: *Siren striata* Le Conte, 1824
**PK**: *Siren striata** Le Conte, 1824
**KG**: *Pseudobranchus** Gray, 1825
**KF**: *Sirenidae* 1825gb.f005

***Pseudobufo*** Tschudi, 1838 • **ky**
**ST**: **po.kn** • **CI**: h1302 • **ID**: 111
**PN**: *Pseudobufo subasper* Tschudi, 1838
**PK**: *Pseudobufo subasper*° Tschudi, 1838
**KG**: *Pseudobufo*° Tschudi, 1838
**KF**: *Bufonidae* 1825.gb.f004

*Pseudocallulops* Günther, 2009 • **ak**
**ST**: **po.jd** • **CI**: h1303 • **ID**: 280
**PN**: *Callulops pullifer* Günther, 2006
**PK**: *Callulops pullifer** Günther, 2006
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Pseudocassina* Ahl, 1924 • **ak**
**ST**: **po.jd** • **CI**: h1304 • **ID**: 325
**PN**: *Pseudocassina ocellata* Ahl, 1923
**PK**: *Megalixalus gramineus*° Boulenger, 1898
**KG**: *Leptopelis*[2] Günther, 1859
**KF**: *Arthroleptidae* 1869.mc.f011

***Pseudoeurycea*** Taylor, 1944 • **ky**
**ST**: **po.kn** • **CI**: h1305 • **ID**: 527
**PN**: *Spelerpes leprosus* Cope, 1869
**PK**: *Spelerpes leprosus** Cope, 1869
**KG**: *Pseudoeurycea** Taylor, 1944
**KF**: *Plethodontidae* 1850.ga.f002

*Pseudofryne* Palacký, 1898 • **ak**
**ST**: **nt.ji** • **CI**: h1306 • **ID**: 274
**PN**: *Bombinator australis* Gray, 1835
**PK**: *Bombinator australis*° Gray, 1835
**KG**: *Pseudophryne*[3] Fitzinger, 1843
**KF**: *Myobatrachidae* 1850.sa.f001

*Pseudohemisus* Mocquard, 1895 • AK
**ST**: PO.JD • **CI**: h1307 • **ID**: 291
**PN**: *Hemisus obscurus* Grandidier, 1872
**PK**: *Hemisus obscurus*° Grandidier, 1872
**KG**: *Scaphiophryne** Boulenger, 1882
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Pseudohyla* Andersson, 1946 • AK
**ST**: PO.JD • **CI**: h1308 • **ID**: 078
**PN**: *Pseudohyla nigrogrisea* Andersson, 1946
**PK**: *Pseudohyla nigrogrisea*° Andersson, 1946
**KG**: *Pristimantis** Jiménez de la Espada, 1870
**KF**: *Brachycephalidae* 1858.gc.f002

***Pseudohynobius*** Fei[+1], 1983 • KY
**ST**: PO.KN • **CI**: h1309 • **ID**: 511
**PN**: *Hynobius flavomaculatus* Hu[+1], 1978
**PK**: *Hynobius flavomaculatus** Hu[+1], 1978
**KG**: *Pseudohynobius** Fei[+1], 1983
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

***Pseudopaludicola*** Miranda-Ribeiro, 1926 • KY
**ST**: PO.KN • **CI**: h1310 • **ID**: 256
**PN**: *Liuperus falcipes* Hensel, 1867
**PK**: *Liuperus falcipes** Hensel, 1867
**KG**: *Pseudopaludicola** Miranda-Ribeiro, 1926
**KF**: *Pseudopaludicolidae* 1965.ga.f003

*Pseudopelobates* Pasteur, 1958 • AK
**ST**: PO.JD • **CI**: h1311 • **ID**: 026
**PN**: *Pelobates transcaucasicus* Delwig, 1928
**PK**: *Pelobates syriacus** Boettger, 1889
**KG**: *Pelobates** Wagler, 1830
**KF**: *Pelobatidae* 1850.bb.f004

***Pseudophilautus*** Laurent, 1943 • KY
**ST**: PO.KN • **CI**: h1312 • **ID**: 444
**PN**: *Ixalus temporalis* Günther, 1864
**PK**: *Ixalus temporalis*° Günther, 1864
**KG**: *Pseudophilautus*[2] Laurent, 1943
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Pseudophryne*** Fitzinger, 1843 • KY
**ST**: PO.KN • **CI**: h1313 • **ID**: 274
**PN**: *Bombinator australis* Gray, 1835
**PK**: *Bombinator australis*° Gray, 1835
**KG**: *Pseudophryne*[3] Fitzinger, 1843
**KF**: *Myobatrachidae* 1850.sa.f001

*Pseudopipa* Ritgen, 1828 • AK
**ST**: PO.JD • **CI**: h1314 • **ID**: 009
**PN**: *Bufo laevis* Daudin, 1802
**PK**: *Bufo laevis** Daudin, 1802
**KG**: *Xenopus*[1] Wagler *in* Boie, 1827
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Pseudorana*** Fei[+2], 1990 • KY
**ST**: PO.KN • **CI**: h1315 • **ID**: 416
**PN**: *Rana weiningensis* Liu[+2], 1962
**PK**: *Rana weiningensis** Liu[+2], 1962
**KG**: *Pseudorana** Fei[+2], 1990
**KF**: *Ranidae* 1796.ba.f001

*Pseudosalamandra* Tschudi, 1838 • AK
**ST**: PO.JD • **CI**: h1316 • **ID**: 505
**PN**: *Salamandra naevia* Temminck[+1], 1838
**PK**: *Salamandra naevia** Temminck[+1], 1838
**KG**: *Hynobius** Tschudi, 1838
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

*Pseudosiphonops* Taylor, 1968 • AK
**ST**: PO.JD • **CI**: h1317 • **ID**: 491
**PN**: *Pseudosiphonops ptychodermis* Taylor, 1968
**PK**: *Mimosiphonops vermiculatus*° Taylor, 1968
**KG**: *Mimosiphonops*° Taylor, 1968
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Pseudotriton*** Tschudi, 1838 • KY
**ST**: PO.KN • **CI**: h1318 • **ID**: 540
**PN**: *Salamandra subfusca* Green, 1818
**PK**: *Salamandra rubra** Sonnini[+1], 1801
**KG**: *Pseudotriton*[1] Tschudi, 1838
**KF**: *Plethodontidae* 1850.ga.f002

*Pseudotyphlonectes* Lescure[+1], 1986 • AK
**ST**: PO.JD • **CI**: h1319 • **ID**: 480
**PN**: *Caecilia natans* Fischer *in* Peters, 1880
**PK**: *Caecilia natans** Fischer *in* Peters, 1880
**KG**: *Typhlonectes** Peters, 1880
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Pseudoxenopus* Barbour[+1], 1927 • AK
**ST**: PO.JD • **CI**: h1320 • **ID**: 351
**PN**: *Pseudoxenopus alleni* Barbour[+1], 1927
**PK**: *Pseudoxenopus alleni** Barbour[+1], 1927
**KG**: *Conraua** Nieden, 1908
**KF**: *Conrauidae* 1992.da.f001

***Psychrophrynella*** Hedges[+2], 2008 • KY
**ST**: PO.KN • **CI**: h1321 • **ID**: 071
**PN**: *Phrynopus bagrecito* Lynch, 1986
**PK**: *Phrynopus bagrecito*° Lynch, 1986
**KG**: *Psychrophrynella*° Hedges[+2], 2008
**KF**: *Brachycephalidae* 1858.gc.f002

*Psyllophryne* Izecksohn, 1971 • AK
**ST**: PO.JD • **CI**: h1322 • **ID**: 057
**PN**: *Psyllophryne didactyla* Izecksohn, 1971
**PK**: *Psyllophryne didactyla** Izecksohn, 1971
**KG**: *Brachycephalus** Fitzinger, 1826
**KF**: *Brachycephalidae* 1858.gc.f002

*Pternohyla* Boulenger, 1882 • AK
**ST**: PO.JD • **CI**: h1323 • **ID**: 208
**PN**: *Pternohyla fodiens* Boulenger, 1882
**PK**: *Pternohyla fodiens** Boulenger, 1882
**KG**: *Smilisca*[1] Cope, 1865
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Pterophrynus* Lütken, 1864 • AK
**ST**: PO.JD • **CI**: h1324 • **ID**: 270
**PN**: *Pterophrynus verrucosus* Lütken, 1864
**PK**: *Crinia* (*Ranidella*) *signifera** Girard, 1853
**KG**: *Crinia** Tschudi, 1838
**KF**: *Myobatrachidae* 1850.sa.f001

***Pterorana*** Kiyasetuo[+1], 1986 • KY
**ST**: PO.KN • **CI**: h1325 • **ID**: 401
**PN**: *Pterorana khare* Kiyasetuo[+1], 1986
**PK**: *Pterorana khare*° Kiyasetuo[+1], 1986

**KG**: *Pterorana*° Kiyasetuo[+1], 1986
**KF**: *Ranidae* 1796.ba.f001

*Ptychadaena* Parker, 1930 • **ak**
**ST**: **ns.ji** • **CI**: h1326 • **ID**: 464
**PN**: *Rana mascareniensis* Duméril[+1], 1841
**PK**: *Rana mascareniensis** Duméril[+1], 1841
**KG**: *Ptychadena** Boulenger, 1917
**KF**: *Ptychadenidae* 1987.da.f002

***Ptychadena*** Boulenger, 1917 • **ky**
**ST**: **po.kn** • **CI**: h1327 • **ID**: 464
**PN**: *Rana mascareniensis* Duméril[+1], 1841
**PK**: *Rana mascareniensis** Duméril[+1], 1841
**KG**: *Ptychadena** Boulenger, 1917
**KF**: *Ptychadenidae* 1987.da.f002

***Ptychohyla*** Taylor, 1944 • **ky**
**ST**: **po.kn** • **CI**: h1328 • **ID**: 215
**PN**: *Ptychohyla adipoventris* Taylor, 1944
**PK**: *Hyla leonhardschultzei** Ahl, 1934
**KG**: *Ptychohyla*[1] Taylor, 1944
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Pulchrana* Dubois, 1992 • **ak**
**ST**: **po.jd** • **CI**: h1329 • **ID**: 407
**PN**: *Polypedates signatus* Günther, 1872
**PK**: *Polypedates signatus** Günther, 1872
**KG**: *Hylarana** Tschudi, 1838
**KF**: *Ranidae* 1796.ba.f001

*Pycnacris* Fouquette[+1], 2014 • **ak**
**ST**: **po.jd** • **CI**: h1330 • **ID**: 200
**PN**: *Rana ornata* Holbrook, 1836
**PK**: *Rana ornata** Holbrook, 1836
**KG**: *Pseudacris** Fitzinger, 1843
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Pyleus* Gistel, 1848 • **ak**
**ST**: **nl.ji** • **CI**: h1331 • **ID**: 111
**PN**: *Pseudobufo subasper* Tschudi, 1838
**PK**: *Pseudobufo subasper*° Tschudi, 1838
**KG**: *Pseudobufo*° Tschudi, 1838
**KF**: *Bufonidae* 1825.gb.f004

*Pyronicia* Gray, 1858 • **ak**
**ST**: **po.jd** • **CI**: h1332 • **ID**: 566
**PN**: *Salamandra marmorata* Latreille, 1800
**PK**: *Salamandra marmorata** Latreille, 1800
**KG**: *Triturus** Rafinesque, 1815
**KF**: *Salamandridae* 1820.ga.f002

***Pyxicephalus*** Tschudi, 1838 • **ky**
**ST**: **po.kn** • **CI**: h1333 • **ID**: 367
**PN**: *Pyxicephalus adspersus* Tschudi, 1838
**PK**: *Pyxicephalus adspersus** Tschudi, 1838
**KG**: *Pyxicephalus** Tschudi, 1838
**KF**: *Pyxicephalidae* 1850.bb.f005

*Qiantriton* Fei[+2], 2012 • **ak**
**ST**: **po.jd** • **CI**: h1334 • **ID**: 573
**PN**: *Tylototriton kweichowensis* Fang[+1], 1932
**PK**: *Tylototriton kweichowensis** Fang[+1], 1932
**KG**: *Tylototriton** Anderson, 1871
**KF**: *Salamandridae* 1820.ga.f002

*Qianotriton* Fei[+1], 2016 • **ak**
**ST**: **nt.ji** • **CI**: h1335 • **ID**: 573
**PN**: *Tylototriton kweichowensis* Fang[+1], 1932
**PK**: *Tylototriton kweichowensis** Fang[+1], 1932
**KG**: *Tylototriton** Anderson, 1871
**KF**: *Salamandridae* 1820.ga.f002

***Qinglongtriton*** Jia[+1], 2016 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1336 • **ID**: †178
**PN**: *Qinglongtriton gangouensis* Jia[+1], 2016 ‡
**PK**: *Qinglongtriton gangouensis*° Jia[+1], 2016 †
**KG**: *Qinglongtriton*° Jia[+1], 2016 †
**KF**: **Pseudosauria** Familia *Incertae sedis*

*Qiongbufo* Fei[+2], 2012 • **ak**
**ST**: **po.jd** • **CI**: h1337 • **ID**: 117
**PN**: *Bufo ledongensis* Fei[+1], 2009
**PK**: *Bufo ledongensis*° Fei[+1], 2009
**KG**: *Ingerophrynus** Frost[+18], 2006
**KF**: *Bufonidae* 1825.gb.f004

*Qiongobufo* Fei[+1], 2016 • **ak**
**ST**: **ns.jd** • **CI**: h1338 • **ID**: 117
**PN**: *Bufo ledongensis* Fei[+2], 2009
**PK**: *Bufo ledongensis*° Fei[+2], 2009
**KG**: *Ingerophrynus** Frost[+18], 2006
**KF**: *Bufonidae* 1825.gb.f004

***Qosqophryne*** Catenazzi[+3], 2020 • **ky**
**ST**: **po.kn** • **CI**: h1339 • **ID**: 072
**PN**: *Bryophryne gymnotis* Lehr[+1], 2009
**PK**: *Bryophryne gymnotis*° Lehr[+1], 2009
**KG**: *Qosqophryne*° Catenazzi[+3], 2020
**KF**: *Brachycephalidae* 1858.gc.f002

*Quadrana* Caldwell[+1], 1952 • **zh**
**ST**: **zo** • **CI**: zh084

*Quadrana* Fei[+2], 1990 • **ak**
**ST**: **po.jh** • **CI**: h1340 • **ID**: 386
**PN**: *Rana quadranus* Liu[+2], 1960
**PK**: *Rana quadranus** Liu[+2], 1960
**KG**: *Feirana** Dubois, 1992
**KF**: *Dicroglossidae* 1987.da.f004

***Quasipaa*** Dubois, 1992 • **ky**
**ST**: **po.kn** • **CI**: h1341 • **ID**: 391
**PN**: *Rana boulengeri* Günther, 1889
**PK**: *Rana boulengeri** Günther, 1889
**KG**: *Quasipaa** Dubois, 1992
**KF**: *Dicroglossidae* 1987.da.f004

***Quilticohyla*** Faivovich[+15], 2018 • **ky**
**ST**: **po.kn** • **CI**: h1342 • **ID**: 216
**PN**: *Quilticohyla sanctaecrucis* Faivovich[+15], 2018
**PK**: *Quilticohyla sanctaecrucis*° Faivovich[+15], 2018
**KG**: *Quilticohyla*° Faivovich[+15], 2018
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Quinquevertebron* Kuhn, 1941 ‡ • **ak**
**ST**: **po.jd** • **CI**: h1343 • **ID**: †069
**PN**: *Quinquevertebron germanicum* Kuhn, 1941 ‡
**PK**: *Pelobatinopsis hinschei*° Kuhn, 1941 †
**KG**: *Palaeobatrachus*° Tschudi, 1838 †
**KF**: *Palaeobatrachidae* 1865.ca.f001 †

*Quinzhyla* Bauer, 2005 • **AK**
**ST**: **PO.JD** • **CI**: h1344 • **ID**: 194
**PN**: *Bufo marmoratus* Laurenti, 1768
**PK**: *Bufo marmoratus** Laurenti, 1768
**KG**: *Dendropsophus*[1] Fitzinger, 1843
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Racophorus* Schlegel, 1826 • **AK**
**ST**: **NS.JI** • **CI**: h1345 • **ID**: 455
**PN**: *Rhacophorus moschatus* Kuhl[+1], 1822
**PK**: *Hyla reinwardtii** Schlegel, 1840
**KG**: *Rhacophorus** Kuhl[+1], 1822
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

*Rafinus* Dubois[+1], 2009 • **AK**
**ST**: **PO.JD** • **CI**: h1346 • **ID**: 569
**PN**: *Diemyctylus miniatus meridionalis* Cope, 1880
**PK**: *Diemyctylus miniatus meridionalis** Cope, 1880
**KG**: *Notophthalmus*[1] Rafinesque, 1820
**KF**: *SALAMANDRIDAE* 1820.ga.f002

*Ramanella* Rao[+1], 1925 • **AK**
**ST**: **PO.JD** • **CI**: h1347 • **ID**: 309
**PN**: *Ramanella symbioitica* Rao[+1], 1925
**PK**: *Callula variegata** Stoliczka, 1872
**KG**: *Uperodon** Duméril[+1], 1841
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

***Ramonellus*** Nevo[+1], 1969 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1348 • **ID**: †140
**PN**: *Ramonellus longispinus* Nevo[+1], 1969 ‡
**PK**: *Ramonellus longispinus*° Nevo[+1], 1969 †
**KG**: *Ramonellus*° Nevo[+1], 1969 †
**KF**: **URODELA** Familia *INCERTAE SEDIS*

***Rana*** Linnaeus, 1758 • **KY**
**ST**: **PO.KN** • **CI**: h1349 • **ID**: 419
**PN**: *Rana temporaria* Linnaeus, 1758
**PK**: *Rana temporaria** Linnaeus, 1758
**KG**: *Rana** Linnaeus, 1758
**KF**: *RANIDAE* 1796.ba.f001

*Rana*: Rösel von Rosenhof 1758 • **AN**
**ST**: **AL** • **CI**: n0138 • **ID**: 419
**PN**: *Rana temporaria* Linnaeus, 1758
**PK**: *Rana temporaria** Linnaeus, 1758
**KG**: *Rana** Linnaeus, 1758
**KF**: *RANIDAE* 1796.ba.f001

*Rana*: Vogel 1758 • **AN**
**ST**: **AL** • **CI**: n0139 • **ID**: 419
**PN**: *Rana temporaria* Linnaeus, 1758
**PK**: *Rana temporaria** Linnaeus, 1758
**KG**: *Rana** Linnaeus, 1758
**KF**: *RANIDAE* 1796.ba.f001

*Rana* Ritgen, 1828 • **AK**
**ST**: **PO.JH** • **CI**: h1350 • **ID**: 252
**PN**: *Rana schneideri* Merrem, 1820
**PK**: *Rana lineata** Schneider, 1799
**KG**: *Lithodytes** Fitzinger, 1843
**KF**: *LEPTODACTYLIDAE* ||1838.ta.f001||-1896.wa.f001

*Ranapes*: Lockley[+1] 2014 ‡¡ • **AN**
**ST**: **LI** • **CI**: n0140 • **ID**: †039
**PN**: *Ranipes laci* Lockley[+1], 2014 ‡¡
**PK**: *Ranipes laci*° Lockley[+1], 2014 †
**KG**: *Ranipes*° Lockley[+1], 2014 †
**KF**: **ANURA** Familia *INCERTAE SEDIS*

*Ranaria* Rafinesque, 1814 • **AK**
**ST**: **NT.JI** • **CI**: h1351 • **ID**: 419
**PN**: *Rana temporaria* Linnaeus, 1758
**PK**: *Rana temporaria** Linnaeus, 1758
**KG**: *Rana** Linnaeus, 1758
**KF**: *RANIDAE* 1796.ba.f001

*Ranaster* Macleay, 1878 • **AK**
**ST**: **PO.JD** • **CI**: h1352 • **ID**: 261
**PN**: *Ranaster convexiusculus* Macleay, 1878
**PK**: *Ranaster convexiusculus** Macleay, 1878
**KG**: *Limnodynastes** Fitzinger, 1843
**KF**: *MYOBATRACHIDAE* 1850.sa.f001

***Ranavus*** Portis, 1885 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1353 • **ID**: †105
**PN**: *Ranavus scarabellii* Portis, 1885 ‡
**PK**: *Ranavus scarabellii*° Portis, 1885 †
**KG**: *Ranavus*° Portis, 1885 †
**KF**: *RANIDAE* 1796.ba.f001

*Ranella*: Garsault 1764 • **AN**
**ST**: **LI** • **CI**: n0141 • **ID**: 204
**PN**: *Rana arborea* Linnaeus, 1758
**PK**: *Rana arborea** Linnaeus, 1758
**KG**: *Hyla** Laurenti, 1768
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Ranetta* Garsault, 1764 • **AK**
**ST**: **LC.RO** • **CI**: h1354 • **ID**: 204
**PN**: *Rana arborea* Linnaeus, 1758
**PK**: *Rana arborea** Linnaeus, 1758
**KG**: *Hyla** Laurenti, 1768
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Ranhyla*: Girard 1858 • **AN**
**ST**: **AL** • **CI**: n0142 • **ID**: 409
**PN**: *Hyla erythraea* Schlegel, 1827
**PK**: *Hyla erythraea** Schlegel, 1827
**KG**: *Hylarana** Tschudi, 1838
**KF**: *RANIDAE* 1796.ba.f001

*Ranidella* Girard, 1853 • **AK**
**ST**: **PO.JD** • **CI**: h1355 • **ID**: 270
**PN**: *Crinia* (*Ranidella*) *signifera* Girard, 1853
**PK**: *Crinia* (*Ranidella*) *signifera** Girard, 1853
**KG**: *Crinia** Tschudi, 1838
**KF**: *MYOBATRACHIDAE* 1850.sa.f001

*Ranidens* Boulenger, 1882 • **AK**
**ST**: **NT.JI** • **CI**: h1356 • **ID**: 516
**PN**: *Ranodon sibiricus* Kessler, 1866
**PK**: *Ranodon sibiricus** Kessler, 1866
**KG**: *Ranodon** Kessler, 1866
**KF**: *HYNOBIIDAE* ||1856.ha.f001||-1859.cb.f002

*Ranina* Lamarck, 1801 • **ZH**
**ST**: **ZO** • **CI**: zh085

*Ranina*: Bibron *in* Bonaparte 1839 • **AN**
**ST**: **AL** • **CI**: n0143 • **ID**: 007§

**PN**: INR
**PK**: INR
**KG**: INR
**KF**: **Hydrobatrachia** Familia *Incertae sedis*

*Ranina* David, 1872 • **ak**
**ST**: **po.jh** • **CI**: h1357 • **ID**: 314
**PN**: *Ranina symetrica* David, 1872
**PK**: *Engystoma pulchrum** Hallowell, 1861
**KG**: *Microhyla** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Ranipes*** Lockley[+1], 2014 ‡¡ • **ky**
**ST**: **lc.kn** • **CI**: h1358 • **ID**: †039
**PN**: *Ranipes laci* Lockley[+1], 2014 ‡
**PK**: *Ranipes laci*° Lockley[+1], 2014 †
**KG**: *Ranipes*° Lockley[+1], 2014 †
**KF**: **Anura** Familia *Incertae sedis*

***Ranitomeya*** Bauer, 1985 • **ky**
**ST**: **po.kn** • **CI**: h1359 • **ID**: 045
**PN**: *Dendrobates reticulatus* Boulenger, 1884
**PK**: *Dendrobates reticulatus** Boulenger, 1884
**KG**: *Ranitomeya** Bauer, 1985
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002

*Ranixalus* Dubois, 1986 • **ak**
**ST**: **po.jd** • **CI**: h1360 • **ID**: 460
**PN**: *Ranixalus gundia* Dubois, 1986
**PK**: *Ranixalus gundia*° Dubois, 1986
**KG**: *Indirana** Laurent, 1986
**KF**: *Ranixalidae* 1987.da.f005

***Ranodon*** Kessler, 1866 • **ky**
**ST**: **po.kn** • **CI**: h1361 • **ID**: 516
**PN**: *Ranodon sibiricus* Kessler, 1866
**PK**: *Ranodon sibiricus** Kessler, 1866
**KG**: *Ranodon** Kessler, 1866
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

***Ranoidea*** Tschudi, 1838 • **ky**
**ST**: **lc.kn** • **CI**: h1362 • **ID**: 237
**PN**: *Ranoidea jacksoniensis* Tschudi, 1838
**PK**: *Rana aurea** Lesson, 1829
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

*Ranoides*: Tschudi 1838 • **an**
**ST**: **li** • **CI**: n0144 • **ID**: 237
**PN**: *Ranoidea jacksoniensis* Tschudi, 1838
**PK**: *Rana aurea** Lesson, 1829
**KG**: *Ranoidea*[1] Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

***Ranomorphus*** Ratnikov, 1993 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1363 • **ID**: †040
**PN**: *Ranomorphus similis* Ratnikov, 1993 ‡
**PK**: *Ranomorphus similis*° Ratnikov, 1993 †
**KG**: *Ranomorphus*° Ratnikov, 1993 †
**KF**: **Anura** Familia *Incertae sedis*

*Ranosoma* Ahl, 1924 • **ak**
**ST**: **po.jd** • **CI**: h1364 • **ID**: 374
**PN**: *Ranosoma schereri* Ahl, 1924
**PK**: *Rana occipitalis** Günther, 1859
**KG**: *Hoplobatrachus*[1] Peters, 1863
**KF**: *Dicroglossidae* 1987.da.f004

*Ranula*: Schumacher 1817 • **za**
**ST**: **zn** • **CI**: zn010

*Ranula* Peters, 1859 • **ak**
**ST**: **po.jh** • **CI**: h1365 • **ID**: 415
**PN**: *Ranula gollmeri* Peters, 1859
**PK**: *Rana palmipes** Spix, 1824
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001

***Raorchestes*** Biju[+4], 2010 • **ky**
**ST**: **po.kn** • **CI**: h1366 • **ID**: 445
**PN**: *Ixalus glandulosus* Jerdon, 1854
**PK**: *Ixalus glandulosus** Jerdon, 1854
**KG**: *Raorchestes** Biju[+4], 2010
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Rappia* Günther, 1865 • **ak**
**ST**: **nl.ji** • **CI**: h1367 • **ID**: 331
**PN**: *Hyla horstockii* Schlegel, 1837
**PK**: *Hyla horstockii** Schlegel, 1837
**KG**: *Hyperolius** Rapp, 1842
**KF**: *Hyperoliidae* 1943.lb.f001

*Rawlinsonia* Wells[+1], 1985 • **ak**
**ST**: **po.jd** • **CI**: h1368 • **ID**: 235
**PN**: *Hyla ewingi* Duméril[+1], 1841
**PK**: *Hyla ewingi** Duméril[+1], 1841
**KG**: *Litoria** Tschudi, 1838
**KF**: *Phyllomedusidae* 1858.gc.f009

***Regalerpeton*** Zhang[+3,] 2009 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1369 • **ID**: †163
**PN**: *Regalerpeton weichangensis* Zhang[+3], 2009 ‡
**PK**: *Regalerpeton weichangensis*° Zhang[+3], 2009 †
**KG**: *Regalerpeton*° Zhang[+3], 2009 †
**KF**: **Imperfectibranchia** Familia *Incertae sedis*

*Relictivomer* Carvalho, 1954 • **ak**
**ST**: **po.jd** • **CI**: h1370 • **ID**: 298
**PN**: *Hypopachus pearsei* Ruthven, 1914
**PK**: *Hypopachus pearsei*° Ruthven, 1914
**KG**: *Engystoma** Fitzinger, 1826
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Relictocleis* nov.** • **ky**
**ST**: **po.kn** • **CI**: h1371 • **ID**: 292
**PN**: *Chiasmocleis gnoma* Canedo[+2], 2004
**PK**: *Chiasmocleis gnoma*° Canedo[+2], 2004
**KG**: *Chiasmocleis** Méhelÿ, 1904
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Relictus* Hubbs[+1], 1972• **zh**
**ST**: **zo** • **CI**: zh086

*Relictus*: Sá[+8] 2018 • **an**
**ST**: **al** • **CI**: n0145 • **ID**: 292
**PN**: *Chiasmocleis gnoma* Canedo[+2], 2004
**PK**: *Chiasmocleis gnoma*° Canedo[+2], 2004
**KG**: *Chiasmocleis** Méhelÿ, 1904
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Relictus*: Sá[+8] 2019 • **an**
**ST**: **al** • **CI**: n0146 • **ID**: 292

**PN**: *Chiasmocleis gnoma* Canedo[+2], 2004
**PK**: *Chiasmocleis gnoma*° Canedo[+2], 2004
**KG**: *Chiasmocleis** Méhelÿ, 1904
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Rentapia*** Chan[+4], 2016 • **ky**
**ST**: **po.kn** • **CI**: h1372 • **ID**: 119
**PN**: *Nectophryne hosii* Boulenger, 1892
**PK**: *Nectophryne hosii** Boulenger, 1892
**KG**: *Rentapia** Chan[+4], 2016
**KF**: *Bufonidae* 1825.gb.f004

*Rhacoforus* Palacký, 1898 • **ak**
**ST**: **nt.ji** • **CI**: h1373 • **ID**: 455
**PN**: *Rhacophorus moschatus* Kuhl[+1], 1822
**PK**: *Hyla reinwardtii** Schlegel, 1840
**KG**: *Rhacophorus** Kuhl[+1], 1822
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Rhacophorus*** Kuhl[+1], 1822 • **ky**
**ST**: **po.kn** • **CI**: h1374 • **ID**: 455
**PN**: *Rhacophorus moschatus* Kuhl[+1], 1822
**PK**: *Hyla reinwardtii** Schlegel, 1840
**KG**: *Rhacophorus** Kuhl[+1], 1822
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Rhadinosteus*** Henrici, 1998 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1375 • **ID**: †083
**PN**: *Rhadinosteus parvus* Henrici, 1998 ‡
**PK**: *Rhadinosteus parvus*° Henrici, 1998 †
**KG**: *Rhadinosteus*° Henrici, 1998 †
**KF**: *Rhinophrynidae* 1858.gc.f013

*Rhaeba*: Boulenger 1882 • **an**
**ST**: **am** • **CI**: n0147 • **ID**: 145
**PN**: *Bufo leschenaulti* Duméril[+1], 1841
**PK**: *Bufo guttatus** Schneider, 1799
**KG**: *Rhaebo** Cope, 1862
**KF**: *Bufonidae* 1825.gb.f004

***Rhaebo*** Cope, 1862 • **ky**
**ST**: **po.kn** • **CI**: h1376 • **ID**: 145
**PN**: *Bufo leschenaulti* Duméril[+1], 1841
**PK**: *Bufo guttatus** Schneider, 1799
**KG**: *Rhaebo** Cope, 1862
**KF**: *Bufonidae* 1825.gb.f004

*Rhamphophryne* Trueb, 1971 • **ak**
**ST**: **po.jd** • **CI**: h1377 • **ID**: 138
**PN**: *Rhamphophryne acrolopha* Trueb, 1971
**PK**: *Rhamphophryne acrolopha*° Trueb, 1971
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

*Rhaphidochir* Wagler *in* Michahelles, 1833 • **ak**
**ST**: **po.jd** • **CI**: h1378 • **ID**: 009
**PN**: *Bufo laevis* Daudin, 1802
**PK**: *Bufo laevis** Daudin, 1802
**KG**: *Xenopus*[1] Wagler *in* Boie, 1827
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Rheobates*** Grant[+9], 2006 • **ky**
**ST**: **po.kn** • **CI**: h1379 • **ID**: 036
**PN**: *Phyllobates palmatus* Werner, 1899
**PK**: *Phyllobates palmatus** Werner, 1899
**KG**: *Rheobates** Grant[+9], 2006
**KF**: *Aromobatidae* 2006.gc.f004

***Rheobatrachus*** Liem, 1973 • **ky**
**ST**: **po.kn** • **CI**: h1380 • **ID**: 278
**PN**: *Rheobatrachus silus* Liem, 1973
**PK**: *Rheobatrachus silus** Liem, 1973
**KG**: *Rheobatrachus** Liem, 1973
**KF**: *Myobatrachidae* 1850.sa.f001

***Rheohyla*** Duellman[+2], 2016 • **ky**
**ST**: **po.kn** • **CI**: h1381 • **ID**: 217
**PN**: *Hyla miotympanum* Cope, 1863
**PK**: *Hyla miotympanum** Cope, 1863
**KG**: *Rheohyla** Duellman[+2], 2016
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Rhinatrema*** Duméril[+1], 1841 • **ky**
**ST**: **po.kn** • **CI**: h1382 • **ID**: 473
**PN**: *Caecilia bivittata* Guérin-Méneville, 1838
**PK**: *Caecilia bivittata** Guérin-Méneville, 1838
**KG**: *Rhinatrema** Duméril[+1], 1841
**KF**: *Rhinatrematidae* 1977.na.f001

***Rhinella*** Fitzinger, 1826 • **ky**
**ST**: **po.kn** • **CI**: h1383 • **ID**: 138
**PN**: *Bufo proboscideus* Spix, 1824
**PK**: *Bufo proboscideus*° Spix, 1824
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

*Rhinellus* Cuvier[+1], 1831 • **ak**
**ST**: **ns.jd** • **CI**: h1384 • **ID**: 138
**PN**: *Bufo proboscideus* Spix, 1824
**PK**: *Bufo proboscideus*° Spix, 1824
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

***Rhinoderma*** Duméril[+1], 1841 • **ky**
**ST**: **po.kn** • **CI**: h1385 • **ID**: 185
**PN**: *Rhinoderma darwinii* Duméril[+1], 1841
**PK**: *Rhinoderma darwinii** Duméril[+1], 1841
**KG**: *Rhinoderma** Duméril[+1], 1841
**KF**: *Rhinodermatidae* 1850.bb.f011

***Rhinophrynus*** Duméril[+1], 1841 • **ky**
**ST**: **po.kn** • **CI**: h1386 • **ID**: 013
**PN**: *Rhinophrynus dorsalis* Duméril[+1], 1841
**PK**: *Rhinophrynus dorsalis** Duméril[+1], 1841
**KG**: *Rhinophrynus** Duméril[+1], 1841
**KF**: *Rhinophrynidae* 1858.gc.f013

*Rhithrotriton* Nesterov, 1916 • **ak**
**ST**: **po.jd** • **CI**: h1387 • **ID**: 567
**PN**: *Rhithrotriton derjugini* Nesterov, 1916
**PK**: *Rhithrotriton derjugini*° Nesterov, 1916
**KG**: *Neurergus** Cope, 1862
**KF**: *Salamandridae* 1820.ga.f002

*Rhombofryne* Palacký, 1898 • **ak**
**ST**: **nt.ji** • **CI**: h1388 • **ID**: 289
**PN**: *Rhombophryne testudo* Boettger, 1880
**PK**: *Rhombophryne testudo** Boettger, 1880
**KG**: *Rhombophryne** Boettger, 1880
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Rhomboglossus*: Duméril[+1] 1841 • **AN**
**ST**: **AL** • **CI**: n0148 • **ID**: 395
**PN**: *Rana lima* Gravenhorst, 1829
**PK**: *Rana lima** Gravenhorst, 1829
**KG**: *Occidozyga** Kuhl[+1], 1822
**KF**: *OCCIDOZYGIDAE* 1990.fa.f002
***Rhombophryne*** Boettger, 1880 • **KY**
**ST**: **PO.KN** • **CI**: h1389 • **ID**: 289
**PN**: *Rhombophryne testudo* Boettger, 1880
**PK**: *Rhombophryne testudo** Boettger, 1880
**KG**: *Rhombophryne** Boettger, 1880
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001
*Rhyacosiredon* Dunn, 1928 • **AK**
**ST**: **PO.JD** • **CI**: h1390 • **ID**: 555
**PN**: *Amblystoma altamirani* Dugès, 1895
**PK**: *Amblystoma altamirani** Dugès, 1895
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004
***Rhyacotriton*** Dunn, 1920 • **KY**
**ST**: **PO.KN** • **CI**: h1391 • **ID**: 552
**PN**: *Ranodon olympicus* Gaige, 1917
**PK**: *Ranodon olympicus** Gaige, 1917
**KG**: *Rhyacotriton** Dunn, 1920
**KF**: *RHYACOTRITONIDAE* 1958.ta.f002
*Ribeirina* Parker, 1934 • **AK**
**ST**: **PO.JD** • **CI**: h1392 • **ID**: 302
**PN**: *Emydops hypomelas* Miranda-Ribeiro, 1920
**PK**: *Stereocyclops incrassatus** Cope, 1870
**KG**: *Stereocyclops** Cope, 1870
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001
*Rohanixalus* Biju[+9], 2020 • **AK**
**ST: PO.JD** • **CI**: h1653 • **ID**: 450
**PN**: *Ixalus vittatus* Boulenger, 1887
**PK**: *Ixalus vittatus** Boulenger, 1887
**KG**: *Feihyla** Frost[+18], 2006
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001
***Romerus*** **nov**. • **KY**
**ST**: **PO.KN** • **CI**: h1393 • **ID**: 459
**PN**: *Philautus romeri* Smith, 1953
**PK**: *Philautus romeri** Smith, 1953
**KG**: *Romerus** **nov**.
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001
*Rothschildia* Grote, 1896 • **ZH**
**ST**: **ZO** • **CI**: zh087
*Rothschildia* Mocquard, 1905 • **AK**
**ST**: **LC.JH** • **CI**: h1394 • **ID**: 340
**PN**: *Rothschildia kounhiensis* Mocquard, 1905
**PK**: *Rothschildia kounhiensis*° Mocquard, 1905
**KG**: *Paracassina*° Peracca, 1907
**KF**: *HYPEROLIIDAE* 1943.lb.f001
*Rotschildia*: Mocquard 1905 • **AN**
**ST**: **LI** • **CI**: n0149 • **ID**: 340
**PN**: *Rothschildia kounhiensis* Mocquard, 1905
**PK**: *Rothschildia kounhiensis*° Mocquard, 1905
**KG**: *Paracassina*° Peracca, 1907
**KF**: *HYPEROLIIDAE* 1943.lb.f001
*Rubeta* Fatio, 1872 • **AK**
**ST**: **PO.JI** • **CI**: h1395 • **ID**: 121
**PN**: *Bufo calamita* Laurenti, 1768
**PK**: *Bufo calamita** Laurenti, 1768
**KG**: *Epidalea** Cope, 1864
**KF**: *BUFONIDAE* 1825.gb.f004
***Rubricacaecilia*** Evans[+1], 2001 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1396 • **ID**: †122
**PN**: *Rubricacaecilia monbaroni* Evans[+1], 2001 ‡
**PK**: *Rubricacaecilia monbaroni*° Evans[+1], 2001 †
**KG**: *Rubricacaecilia*° Evans[+1], 2001 †
**KF**: **GYMNOPHIONA** Familia *INCERTAE SEDIS*
***Rugosa*** Fei[+2], 1990 • **KY**
**ST**: **PO.KN** • **CI**: h1397 • **ID**: 420
**PN**: *Rana rugosa* Temminck[+1], 1838
**PK**: *Rana rugosa** Temminck[+1], 1838
**KG**: *Rugosa** Fei[+2], 1990
**KF**: *RANIDAE* 1796.ba.f001
***Rulyrana*** Guayasamin[+5], 2009 • **KY**
**ST**: **PO.KN** • **CI**: h1398 • **ID**: 161
**PN**: *Centrolenella flavopunctata* Lynch[+1], 1973
**PK**: *Centrolenella flavopunctata** Lynch[+1], 1973
**KG**: *Rulyrana** Guayasamin[+5], 2009
**KF**: *CENTROLENIDAE* 1951.ta.f001
***Rupirana*** Heyer, 1999 • **KY**
**ST**: **PO.KN** • **CI**: h1399 • **ID**: 255
**PN**: *Rupirana cardosoi* Heyer, 1999
**PK**: *Rupirana cardosoi** Heyer, 1999
**KG**: *Rupirana** Heyer, 1999
**KF**: *PARATELMATOBIIDAE* 2012.oa.f001
***Sabahphrynus*** Matsui[+2], 2007 • **KY**
**ST**: **PO.KN** • **CI**: h1400 • **ID**: 131
**PN**: *Nectophryne maculata* Mocquard, 1890
**PK**: *Nectophryne maculata** Mocquard, 1890
**KG**: *Sabahphrynus** Matsui[+2], 2007
**KF**: *BUFONIDAE* 1825.gb.f004
***Sachatamia*** Guayasamin[+5], 2009 • **KY**
**ST**: **PO.KN** • **CI**: h1401 • **ID**: 162
**PN**: *Centrolenella albomaculata* Taylor, 1949
**PK**: *Centrolenella albomaculata** Taylor, 1949
**KG**: *Sachatamia** Guayasamin[+5], 2009
**KF**: *CENTROLENIDAE* 1951.ta.f001
***Saevesoederberghia*** Roček[+1], 1993 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1402 • **ID**: †041
**PN**: *Saevesoederberghia egredia* Roček[+1], 1993 ‡
**PK**: *Saevesoederberghia egredia*° Roček[+1], 1993 †
**KG**: *Saevesoederberghia*° Roček[+1], 1993 †
**KF**: **ANURA** Familia *INCERTAE SEDIS*
*Saganura* Wells[+1], 1985 • **AK**
**ST**: **PO.JD** • **CI**: h1403 • **ID**: 235
**PN**: *Hyla burrowsi* Scott, 1942
**PK**: *Hyla burrowsi** Scott, 1942
**KG**: *Litoria** Tschudi, 1838
**KF**: *PHYLLOMEDUSIDAE* 1858.gc.f009
*Sahona* Glaw[+1], 2006 • **AK**
**ST**: **PO.JD** • **CI**: h1404 • **ID**: 423

**PN**: *Polypedates tephraeomystax* Duméril, 1853
**PK**: *Polypedates tephraeomystax** Duméril, 1853
**KG**: *Boophis** Tschudi, 1838
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Salamandra*: Gronovius 1763 • **an**
**ST**: **al** • **CI**: n0150 • **ID**: 578
**PN**: *Salamandra maculosa* Laurenti, 1768
**PK**: *Lacerta salamandra** Linnaeus, 1758
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *Salamandridae* 1820.ga.f002

***Salamandra*** Garsault, 1764 • **ky**
**ST**: **po.kn** • **CI**: h1405 • **ID**: 578
**PN**: *Salamandra terrestris* Bonnaterre, 1789
**PK**: *Lacerta salamandra** Linnaeus, 1758
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *Salamandridae* 1820.ga.f002

*Salamandra* Laurenti, 1768 • **ak**
**ST**: **po.jd** • **CI**: h1406 • **ID**: 578
**PN**: *Salamandra maculosa* Laurenti, 1768
**PK**: *Lacerta salamandra** Linnaeus, 1758
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *Salamandridae* 1820.ga.f002

*Salamandraches* Gistel, 1848 • **ak**
**ST**: **po.jd** • **CI**: h1407 • **ID**: 578
**PN**: *Salamandraches crassicaudis* Gistel, 1848
**PK**: *Lacerta salamandra** Linnaeus, 1758
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *Salamandridae* 1820.ga.f002

***Salamandrella*** Dybowski, 1870 • **ky**
**ST**: **po.kn** • **CI**: h1408 • **ID**: 513
**PN**: *Salamandrella keyserlingii* Dybowski, 1870
**PK**: *Salamandrella keyserlingii** Dybowski, 1870
**KG**: *Salamandrella** Dybowski, 1870
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

***Salamandrina*** Fitzinger, 1826 • **ky**
**ST**: **po.kn** • **CI**: h1409 • **ID**: 579
**PN**: *Salamandra perspicillata* Savi, 1821
**PK**: *Salamandra perspicillata** Savi, 1821
**KG**: *Salamandrina** Fitzinger, 1826
**KF**: *Salamandridae* 1820.ga.f002

*Salamandroidis* Fitzinger, 1843 • **ak**
**ST**: **po.ji** • **CI**: h1410 • **ID**: 555
**PN**: *Lacerta subviolacea* Barton, 1804
**PK**: *Lacerta maculata** Shaw, 1802
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *Ambystomatidae* 1850.ga.f004

*Salamandrops* Wagler, 1830 • **ak**
**ST**: **po.jd** • **CI**: h1411 • **ID**: 504
**PN**: *Salamandra gigantea* Barton, 1808
**PK**: *Salamandra alleganiensis** Sonnini[+1], 1801
**KG**: *Cryptobranchus*[1] Leuckart, 1821
**KF**: *Cryptobranchidae* 1826.fb.f003

*Sallywalkerana* Dahanukar[+5], 2016 • **ak**
**ST**: **nt.ji** • **CI**: h1412 • **ID**: 461
**PN**: *Ixalus diplostictus* Günther, 1875
**PK**: *Ixalus diplostictus** Günther, 1875
**KG**: *Walkerana** Dahanukar[+5], 2016
**KF**: *Ranixalidae* 1987.da.f005

***Saltenia*** Reig, 1959 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1413 • **ID**: †079
**PN**: *Saltenia ibanezi* Reig, 1959 ‡
**PK**: *Saltenia ibanezi*° Reig, 1959 †
**KG**: *Saltenia*° Reig, 1959 †
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Sanchizia*** Dubois[+1], 2012 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1414 • **ID**: †188
**PN**: *Bargmannia wettsteini* Herre, 1955 ‡
**PK**: *Bargmannia wettsteini*° Herre, 1955 †
**KG**: *Sanchizia*° Dubois[+1], 2012 †
**KF**: *Ambystomatidae* 1850.ga.f004

*Sandyrana* Wells[+1], 1985 • **ak**
**ST**: **po.jd** • **CI**: h1415 • **ID**: 236
**PN**: *Hyla infrafrenata* Günther, 1867
**PK**: *Hyla infrafrenata** Günther, 1867
**KG**: *Nyctimystes** Stejneger, 1916
**KF**: *Phyllomedusidae* 1858.gc.f009

***Sanguirana*** Dubois, 1992 • **ky**
**ST**: **po.kn** • **CI**: h1416 • **ID**: 421
**PN**: *Rana sanguinea* Boettger, 1893
**PK**: *Rana sanguinea** Boettger, 1893
**KG**: *Sanguirana** Dubois, 1992
**KF**: *Ranidae* 1796.ba.f001

***Sanshuibatrachus*** Wang[+2], 2017 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1417 • **ID**: †089
**PN**: *Sanshuibatrachus sinensis* Wang[+2], 2017 ‡
**PK**: *Sanshuibatrachus sinensis*° Wang[+2], 2017 †
**KG**: *Sanshuibatrachus*° Wang[+2], 2017 †
**KF**: *Pelobatoidae* Familia *Incertae sedis*

*Sarcohyla* Duellman[+2], 2016 • **ak**
**ST**: **po.jd** • **CI**: h1418 • **ID**: 219
**PN**: *Cauphias crassus* Brocchi, 1877
**PK**: *Cauphias crassus*° Brocchi, 1877
**KG**: *Plectrohyla** Brocchi, 1877
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Satobius*** Adler[+1], 1990 • **ky**
**ST**: **po.kn** • **CI**: h1419 • **ID**: 508
**PN**: *Hynobius retardatus* Dunn, 1923
**PK**: *Hynobius retardatus** Dunn, 1923
**KG**: *Satobius** Adler[+1], 1990
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

*Saurocercus* Fitzinger, 1843 • **ak**
**ST**: **po.jd** • **CI**: h1420 • **ID**: 542
**PN**: *Salamandra longicauda* Green, 1818
**PK**: *Salamandra longicauda** Green, 1818
**KG**: *Eurycea** Rafinesque, 1822
**KF**: *Plethodontidae* 1850.ga.f002

*Saurophis* Fitzinger, 1826 • **zh**
**ST**: **zo** • **CI**: zh088

*Saurophis* Gray, 1850 • **ak**
**ST**: **nt.jh** • **CI**: h1421 • **ID**: 551
**PN**: *Salamandra erythronota* Rafinesque, 1818
**PK**: *Salamandra cinerea** Green, 1818

**KG**: *Plethodon** Tschudi, 1838
**KF**: *Plethodontidae* 1850.ga.f002
*Sauropsis* Agassiz, 1832 • **zh**
**ST**: **zo** • **CI**: zh089
*Sauropsis* Fitzinger, 1843 • **ak**
**ST**: **po.jh** • **CI**: h1422 • **ID**: 551
**PN**: *Salamandra erythronota* Rafinesque, 1818
**PK**: *Salamandra cinerea** Green, 1818
**KG**: *Plethodon** Tschudi, 1838
**KF**: *Plethodontidae* 1850.ga.f002
*Scafiopus* Palacký, 1898 • **ak**
**ST**: **nt.ji** • **CI**: h1423 • **ID**: 029
**PN**: *Scaphiopus solitarius* Holbrook, 1836
**PK**: *Rana holbrooki** Harlan, 1835
**KG**: *Scaphiopus*[1] Holbrook, 1836
**KF**: *Scaphiopodidae* 1865.ca.f003
*Scafiorhina* Palacký, 1898 • **ak**
**ST**: **nt.ji** • **CI**: h1424 • **ID**: 291
**PN**: *Scaphiophryne marmorata* Boulenger, 1882
**PK**: *Scaphiophryne marmorata** Boulenger, 1882
**KG**: *Scaphiophryne** Boulenger, 1882
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Scapherpeton* Cope, 1877 ‡ • **ak**
**ST**: **po.jd** • **CI**: h1425 • **ID**: †155
**PN**: *Scapherpeton tectum* Cope, 1877 ‡
**PK**: *Hedronchus sternbergii*° Cope, 1877 †
**KG**: *Hedronchus*° Cope, 1877 †
**KF**: *Scapherpetidae* 1959.aa.f001 †
***Scaphiophryne*** Boulenger, 1882 • **ky**
**ST**: **po.kn** • **CI**: h1426 • **ID**: 291
**PN**: *Scaphiophryne marmorata* Boulenger, 1882
**PK**: *Scaphiophryne marmorata** Boulenger, 1882
**KG**: *Scaphiophryne** Boulenger, 1882
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Scaphiopus*** Holbrook, 1836 • **ky**
**ST**: **po.kn** • **CI**: h1427 • **ID**: 029
**PN**: *Scaphiopus solitarius* Holbrook, 1836
**PK**: *Rana holbrooki** Harlan, 1835
**KG**: *Scaphiopus*[1] Holbrook, 1836
**KF**: *Scaphiopodidae* 1865.ca.f003
*Scaptophryne*: Fitzinger 1861 • **an**
**ST**: **al** • **CI**: n0151 • **ID**: 314
**PN**: *Engystoma pulchrum* Hallowell, 1861
**PK**: *Engystoma pulchrum** Hallowell, 1861
**KG**: *Microhyla** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Scarthyla*** Duellman[+1], 1988 • **ky**
**ST**: **po.kn** • **CI**: h1428 • **ID**: 197
**PN**: *Scarthyla ostinodactyla* Duellman[+1], 1988
**PK**: *Hyla goinorum** Bokermann, 1962
**KG**: *Scarthyla*[1] Duellman[+1], 1988
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Schismaderma*** Smith, 1849 • **ky**
**ST**: **po.kn** • **CI**: h1429 • **ID**: 133
**PN**: *Schismaderma lateralis* Smith, 1849
**PK**: *Bufo carens** Smith, 1848
**KG**: *Schismaderma*[1] Smith, 1849
**KF**: *Bufonidae* 1825.gb.f004
***Schistometopum*** Parker, 1941 • **ky**
**ST**: **po.kn** • **CI**: h1430 • **ID**: 488
**PN**: *Dermophis gregorii* Boulenger, 1895
**PK**: *Dermophis gregorii** Boulenger, 1895
**KG**: *Schistometopum** Parker, 1941
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|
*Schmibufo* Fei[+1], 2016 • **ak**
**ST**: **po.jd** • **CI**: h1431 • **ID**: 120
**PN**: *Bufo stejnegeri* Schmidt, 1931
**PK**: *Bufo stejnegeri** Schmidt, 1931
**KG**: *Bufo** Garsault, 1764
**KF**: *Bufonidae* 1825.gb.f004
*Schoutedenella* Witte, 1921 • **ak**
**ST**: **po.jd** • **CI**: h1432 • **ID**: 320
**PN**: *Schoutedenella globosa* Witte, 1921
**PK**: *Arthroleptis xenochirus*° Boulenger, 1905
**KG**: *Arthroleptis** Smith, 1849
**KF**: *Arthroleptidae* 1869.mc.f011
*Schwartzius* Hedges[+2], 2008 • **ak**
**ST**: **po.jd** • **CI**: h1433 • **ID**: 081
**PN**: *Eleutherodactylus counouspeus* Schwartz, 1964
**PK**: *Eleutherodactylus counouspeus** Schwartz, 1964
**KG**: *Eleutherodactylus** Duméril[+1], 1841
**KF**: *Brachycephalidae* 1858.gc.f002
*Sciaphos* Gray, 1845 • **an**
**ST**: **al** • **CI**: n0152 • **ID**: 003§
**PN**: INR
**PK**: INR
**KG**: INR
**KF**: **Anura** Familia *Incertae sedis*
*Scinacodes* Fitzinger, 1843 • **ak**
**ST**: **po.jd** • **CI**: h1434 • **ID**: 182
**PN**: *Hyla nasus* Lichtenstein, 1823
**PK**: *Hyla nasus** Lichtenstein, 1823
**KG**: *Hylodes*[1] Fitzinger, 1826
**KF**: *Hylodidae* 1858.gc.f010
***Scinax*** Wagler, 1830 • **ky**
**ST**: **po.kn** • **CI**: h1435 • **ID**: 232
**PN**: *Hyla aurata* Wied-Neuwied, 1821
**PK**: *Hyla aurata*° Wied-Neuwied, 1821
**KG**: *Scinax*[2] Wagler, 1830
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Sclerophrys*** Tschudi, 1838 • **ky**
**ST**: **po.kn** • **CI**: h1436 • **ID**: 140
**PN**: *Sclerophrys capensis* Tschudi, 1838
**PK**: *Sclerophrys capensis** Tschudi, 1838
**KG**: *Sclerophrys** Tschudi, 1838
**KF**: *Bufonidae* 1825.gb.f004
***Scolecomorphus*** Boulenger, 1883 • **ky**
**ST**: **po.kn** • **CI**: h1437 • **ID**: 499
**PN**: *Scolecomorphus kirkii* Boulenger, 1883
**PK**: *Scolecomorphus kirkii*° Boulenger, 1883
**KG**: *Scolecomorphus*[2] Boulenger, 1883
**KF**: *Scolecomorphidae* 1969.ta.f001

***Scotiophryne*** Estes, 1969 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1438 • **ID**: †042
**PN**: *Scotiophryne pustulosa* Estes, 1969 ‡
**PK**: *Scotiophryne pustulosa*° Estes, 1969 †
**KG**: *Scotiophryne*° Estes, 1969 †
**KF**: **ANURA** Familia *INCERTAE SEDIS*

*Scotobius* Germar, 1824 • **ZH**
**ST**: **ZO** • **CI**: zh090

*Scotobius* Gistel, 1848 • **AN**
**ST**: **AL** • **CI**: n0153 • **ID**: 002§
**PN**: INR
**PK**: INR
**KG**: INR
**KF**: **LISSAMPHIBIA** Familia *INCERTAE SEDIS*

***Scotobleps*** Boulenger, 1900 • **KY**
**ST**: **PO.KN** • **CI**: h1439 • **ID**: 323
**PN**: *Scotobleps gabonicus* Boulenger, 1900
**PK**: *Scotobleps gabonicus** Boulenger, 1900
**KG**: *Scotobleps** Boulenger, 1900
**KF**: *ARTHROLEPTIDAE* 1869.mc.f011

*Scurrilirana* Hillis[+1], 2005 • **AK**
**ST**: **PO.JD** • **CI**: h1440 • **ID**: 415
**PN**: *Rana berlandieri* Baird, 1854
**PK**: *Rana berlandieri** Baird, 1854
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *RANIDAE* 1796.ba.f001

***Scutiger*** Theobald, 1868 • **KY**
**ST**: **PO.KN** • **CI**: h1441 • **ID**: 017
**PN**: *Bombinator sikimmensis* Blyth, 1854
**PK**: *Bombinator sikimmensis*° Blyth, 1854
**KG**: *Scutiger*[2] Theobald, 1868
**KF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

*Scythrophrys* Lynch, 1971 • **AK**
**ST**: **PO.JD** • **CI**: h1442 • **ID**: 254
**PN**: *Zachaenus sawayae* Cochran, 1953
**PK**: *Zachaenus sawayae** Cochran, 1953
**KG**: *Crossodactylodes*[2] Cochran, 1938
**KF**: *PARATELMATOBIIDAE* 2012.oa.f001

*Scytopis* Cope, 1862 • **AK**
**ST**: **PO.JD** • **CI**: h1443 • **ID**: 231
**PN**: *Scytopis hebes* Cope, 1862
**PK**: *Rana typhonia** Linnaeus, 1758
**KG**: *Trachycephalus** Tschudi, 1838
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Scytopsis* Knauer, 1878 • **AK**
**ST**: **NS.JD** • **CI**: h1444 • **ID**: 231
**PN**: *Scytopis hebes* Cope, 1862
**PK**: *Rana typhonia** Linnaeus, 1758
**KG**: *Trachycephalus** Tschudi, 1838
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

***Sechellophryne*** Nussbaum[+1], 2007 • **KY**
**ST**: **PO.KN** • **CI**: h1445 • **ID**: 032
**PN**: *Nectophryne gardineri* Boulenger, 1911
**PK**: *Nectophryne gardineri** Boulenger, 1911
**KG**: *Sechellophryne** Nussbaum[+1], 2007
**KF**: *SOOGLOSSIDAE* 1931.na.f002

*Seiranota* Barnes, 1826 • **AK**
**ST**: **PO.JD** • **CI**: h1446 • **ID**: 579
**PN**: *Seiranota condylura* Barnes, 1826
**PK**: *Salamandra perspicillata** Savi, 1821
**KG**: *Salamandrina** Fitzinger, 1826
**KF**: *SALAMANDRIDAE* 1820.ga.f002

***Seminobatrachus*** Skutschas[+1], 2012 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1447 • **ID**: †141
**PN**: *Seminobatrachus boltyschkensis* Skutschas[+1], 2012 ‡
**PK**: *Seminobatrachus boltyschkensis* Skutschas[+1], 2012 †
**KG**: *Seminobatrachus* Skutschas[+1], 2012 †
**KF**: **URODELA** Familia *INCERTAE SEDIS*

***Semnodactylus*** Hoffman, 1939 • **KY**
**ST**: **PO.KN** • **CI**: h1448 • **ID**: 341
**PN**: *Semnodactylus thabanchuensis* Hoffman, 1939
**PK**: *Cassina wealii** Boulenger, 1882
**KG**: *Semnodactylus*[1] Hoffman, 1939
**KF**: *HYPEROLIIDAE* 1943.lb.f001

*Septentriomolge* Hillis[+3], 2001 • **AK**
**ST**: **PO.JD** • **CI**: h1449 • **ID**: 542
**PN**: *Eurycea chisholmensis* Chippindale[+3], 2000
**PK**: *Eurycea chisholmensis** Chippindale[+3], 2000
**KG**: *Eurycea** Rafinesque, 1822
**KF**: *PLETHODONTIDAE* 1850.ga.f002

*Septobrachium*: Tschudi, 1838 • **AN**
**ST**: **LI** • **CI**: n0154 • **ID**: 015
**PN**: *Leptobrachium hasseltii* Tschudi, 1838
**PK**: *Leptobrachium hasseltii** Tschudi, 1838
**KG**: *Leptobrachium** Tschudi, 1838
**KF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

***Shelania*** Casamiquela, 1960 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1450 • **ID**: †080
**PN**: *Shelania pascuali* Casamiquela, 1960 ‡
**PK**: *Shelania pascuali*° Casamiquela, 1960 †
**KG**: *Shelania*° Casamiquela, 1960 †
**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|

***Shirerpeton*** Matsumoto[+1], 2018 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1451 • **ID**: †006
**PN**: *Shirerpeton isajii* Matsumoto[+1], 2018 ‡
**PK**: *Shirerpeton isajii*° Matsumoto[+1], 2018 †
**KG**: *Shirerpeton*° Matsumoto[+1], 2018 †
**KF**: *ALBANERPETIDAE* 1982.fa.f001 †

***Shomronella*** Estes[+2], 1978 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1452 • **ID**: †065
**PN**: *Shomronella jordanica* Estes[+2], 1979 ‡
**PK**: *Shomronella jordanica*° Estes[+2], 1979 †
**KG**: *Shomronella*° Estes[+2], 1978 †
**KF**: **DORSIPARES** Familia *INCERTAE SEDIS*

***Siamophryne*** Suwannapom[+6], 2018 • **KY**
**ST**: **PO.KN** • **CI**: h1453 • **ID**: 282
**PN**: *Siamophryne troglodytes* Suwannapom[+6], 2018
**PK**: *Siamophryne troglodytes*° Suwannapom[+6], 2018
**KG**: *Siamophryne*° Suwannapom[+6], 2018
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Sibilatrix* Kaup, 1829 • **ZH**
**ST**: **ZO** • **CI**: zh091

*Sibilatrix* Fitzinger, 1843 • **AK**
**ST**: **PO.JD** • **CI**: h1454 • **ID**: 253
**PN**: *Cystignathus gracilis* Duméril[+1], 1840
**PK**: *Cystignathus gracilis** Duméril[+1], 1840
**KG**: *Leptodactylus*[1] Fitzinger, 1826
**KF**: *LEPTODACTYLIDAE* ||1838.ta.f001||-1896.wa.f001
*Sieboldia* Gray, 1838 • **AK**
**ST**: **PO.JD** • **CI**: h1455 • **ID**: 503
**PN**: *Megalobatrachus sieboldi* Tschudi, 1837 ‡
**PK**: *Triton japonicus** Temminck, 1836
**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *CRYPTOBRANCHIDAE* 1826.fb.f003
*Sieboldiana* Ishikawa, 1904 • **AK**
**ST**: **NS.JD** • **CI**: h1456 • **ID**: 503
**PN**: *Megalobatrachus sieboldi* Tschudi, 1837 ‡
**PK**: *Triton japonicus** Temminck, 1836
**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *CRYPTOBRANCHIDAE* 1826.fb.f003
*Sieboldtia* Agassiz, 1839 • **AK**
**ST**: **NS.JD** • **CI**: h1457 • **ID**: 503
**PN**: *Megalobatrachus sieboldi* Tschudi, 1837 ‡
**PK**: *Triton japonicus** Temminck, 1836
**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *CRYPTOBRANCHIDAE* 1826.fb.f003
*Sierrana* Dubois, 1992 • **AK**
**ST**: **PO.JD** • **CI**: h1458 • **ID**: 415
**PN**: *Rana sierramadrensis* Taylor, 1939
**PK**: *Rana sierramadrensis** Taylor, 1939
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *RANIDAE* 1796.ba.f001
***Sigalegalephrynus*** Smart[+7], 2017 • **KY**
**ST**: **PO.KN** • **CI**: h1459 • **ID**: 112
**PN**: *Sigalegalephrynus mandailinguensis* Smart[+7], 2017
**PK**: *Sigalegalephrynus mandailinguensis*° Smart[+7], 2017
**KG**: *Sigalegalephrynus*° Smart[+7], 2017
**KF**: *BUFONIDAE* 1825.gb.f004
***Silurana*** Gray, 1864 • **KY**
**ST**: **PO.KN** • **CI**: h1460 • **ID**: 008
**PN**: *Silurana tropicalis* Gray, 1864
**PK**: *Silurana tropicalis** Gray, 1864
**KG**: *Silurana** Gray, 1864
**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|
***Silverstoneia*** Grant[+9], 2006 • **KY**
**ST**: **PO.KN** • **CI**: h1461 • **ID**: 043
**PN**: *Phyllobates nubicola* Dunn, 1924
**PK**: *Phyllobates nubicola** Dunn, 1924
**KG**: *Silverstoneia** Grant[+9], 2006
**KF**: *DENDROBATIDAE* ||1850.bb.f006||-1865.ca.f002
*Simomantis* Boulenger, 1918 • **AK**
**ST**: **PO.JD** • **CI**: h1462 • **ID**: 422
**PN**: *Ixalus latopalmatus* Boulenger, 1887
**PK**: *Ixalus latopalmatus** Boulenger, 1887
**KG**: *Staurois** Cope, 1865
**KF**: *RANIDAE* 1796.ba.f001
***Sinerpeton*** Gao[+1], 2001 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1463 • **ID**: †142
**PN**: *Sinerpeton fengshanensis* Gao[+1], 2001 ‡
**PK**: *Sinerpeton fengshanensis*° Gao[+1], 2001 †
**KG**: *Sinerpeton*° Gao[+1], 2001 †
**KF**: **URODELA** Familia *INCERTAE SEDIS*
***Singidella*** Báez[+1], 2005 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1464 • **ID**: †076
**PN**: *Singidella latecostata* Báez[+1], 2005 ‡
**PK**: *Singidella latecostata*° Báez[+1], 2005 †
**KG**: *Singidella*° Báez[+1], 2005 †
**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|
*Sinobius* Dubois, 1987 • **AK**
**ST**: **PO.JD** • **CI**: h1465 • **ID**: 512
**PN**: *Xenobius melanonychus* Zhang[+1], 1985
**PK**: *Pachyhynobius shangchengensis** Fei[+2], 1983
**KG**: *Pachyhynobius** Fei[+2], 1983
**KF**: *HYNOBIIDAE* ||1856.ha.f001||-1859.cb.f002
*Siphneus* Brants, 1827 • **ZH**
**ST**: **ZO** • **CI**: zh092
*Siphneus* Fitzinger, 1843 • **AK**
**ST**: **PO.JH** • **CI**: h1466 • **ID**: 314
**PN**: *Engystoma ornatum* Duméril[+1], 1841
**PK**: *Engystoma ornatum** Duméril[+1], 1841
**KG**: *Microhyla** Tschudi, 1838
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001
***Siphonops*** Wagler, 1828 • **KY**
**ST**: **PO.KN** • **CI**: h1467 • **ID**: 494
**PN**: *Caecilia annulata* Mikan, 1820
**PK**: *Caecilia annulata** Mikan, 1820
**KG**: *Siphonops** Wagler, 1828
**KF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|
*Siredon* Wagler, 1829 • **AK**
**ST**: **PO.CA** • **CI**: h1468 • **ID**: 555
**PN**: *Siredon axolotl* Wagler, 1830
**PK**: *Gyrinus mexicanus** Shaw[+1], 1789
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004
***Siren*** Österdam, 1766 • **KY**
**ST**: **PO.KN** • **CI**: h1469 • **ID**: 519
**PN**: *Siren lacertina* Österdam, 1766
**PK**: *Siren lacertina** Österdam, 1766
**KG**: *Siren** Österdam, 1766
**KF**: *SIRENIDAE* 1825gb.f005
*Sirena*: Fischer 1808 • **AN**
**ST**: **AM** • **CI**: n0155 • **ID**: 519
**PN**: *Siren lacertina* Österdam, 1766
**PK**: *Siren lacertina** Österdam, 1766
**KG**: *Siren** Österdam, 1766
**KF**: *SIRENIDAE* 1825gb.f005
*Sirene* Link, 1794 • **ZH**
**ST**: **ZO** • **CI**: zh093
*Sirene*: Fischer 1813 • **AN**
**ST**: **AM** • **CI**: n0156 • **ID**: 519
**PN**: *Siren lacertina* Österdam, 1766
**PK**: *Siren lacertina** Österdam, 1766
**KG**: *Siren** Österdam, 1766
**KF**: *SIRENIDAE* 1825gb.f005

*Sirene* Oken, 1816 • EX
**ST**: PO.CW • **CI**: e0013 • **ID**: 519
**PN**: *Siren lacertina* Österdam, 1766
**PK**: *Siren lacertina** Österdam, 1766
**KG**: *Siren** Österdam, 1766
**KF**: *SIRENIDAE* 1825gb.f005

*Sirenodon* Wiegmann, 1832 • AK
**ST**: PO.CA • **CI**: h1471 • **ID**: 555
**PN**: *Siredon axolotl* Wagler, 1830
**PK**: *Gyrinus mexicanus** Shaw[+1], 1789
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

*Sirenoides* Gray, 1850 • AK
**ST**: NS.JD • **CI**: h1472 • **ID**: 520
**PN**: *Amphiuma didactylum* Cuvier, 1827
**PK**: *Amphiuma means** Garden *in* Smith, 1821
**KG**: *Amphiuma** Garden *in* Smith, 1821
**KF**: *AMPHIUMIDAE* 1825.gb.f07

*Sirenoidis* Fitzinger, 1843 • AK
**ST**: PO.JD • **CI**: h1473 • **ID**: 520
**PN**: *Amphiuma didactylum* Cuvier, 1827
**PK**: *Amphiuma means** Garden *in* Smith, 1821
**KG**: *Amphiuma** Garden *in* Smith, 1821
**KF**: *AMPHIUMIDAE* 1825.gb.f07

***Smilisca*** Cope, 1865 • KY
**ST**: PO.KN • **CI**: h1474 • **ID**: 208
**PN**: *Smilisca daulinia* Cope, 1865
**PK**: *Hyla baudinii** Duméril[+1], 1841
**KG**: *Smilisca*[1] Cope, 1865
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001↓

*Sminthillus* Barbour[+1], 1920 • AK
**ST**: PO.JD • **CI**: h1475 • **ID**: 082
**PN**: *Phyllobates limbatus* Cope, 1862
**PK**: *Phyllobates limbatus** Cope, 1862
**KG**: *Euhyas** Fitzinger, 1843
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Somuncuria* Lynch, 1978 • AK
**ST**: PO.JD • **CI**: h1476 • **ID**: 246
**PN**: *Telmatobius somuncurensis* Cei, 1969
**PK**: *Telmatobius somuncurensis** Cei, 1969
**KG**: *Pleurodema** Tschudi, 1838
**KF**: *LEIUPERIDAE* 1850.bb.f010

***Sooglossus*** Boulenger, 1906 • KY
**ST**: PO.KN • **CI**: h1477 • **ID**: 033
**PN**: *Arthroleptis sechellensis* Boettger, 1896
**PK**: *Arthroleptis sechellensis** Boettger, 1896
**KG**: *Sooglossus** Boulenger, 1906
**KF**: *SOOGLOSSIDAE* 1931.na.f002

***Spea*** Cope, 1866 • KY
**ST**: PO.KN • **CI**: h1478 • **ID**: 030
**PN**: *Scaphiopus bombifrons* Cope, 1863
**PK**: *Scaphiopus bombifrons** Cope, 1863
**KG**: *Spea** Cope, 1866
**KF**: *SCAPHIOPODIDAE* 1865.ca.f003

***Spelaeophryne*** Ahl, 1924 • KY
**ST**: PO.KN • **CI**: h1479 • **ID**: 346
**PN**: *Spelaeophryne methneri* Ahl, 1924
**PK**: *Spelaeophryne methneri** Ahl, 1924
**KG**: *Spelaeophryne** Ahl, 1924
**KF**: *BREVICIPITIDAE* 1850.bb.f012

***Speleomantes*** Dubois, 1984 • KY
**ST**: PO.RP • **CI**: h1480 • **ID**: 545
**PN**: *Hydromantes italicus* Dunn, 1923
**PK**: *Hydromantes italicus** Dunn, 1923
**KG**: *Speleomantes** Dubois, 1984
**KF**: *PLETHODONTIDAE* 1850.ga.f002

*Spelerpes* Rafinesque, 1832 • AK
**ST**: PO.JI • **CI**: h1481 • **ID**: 542
**PN**: *Eurycea lucifuga* Rafinesque, 1822
**PK**: *Eurycea lucifuga** Rafinesque, 1822
**KG**: *Eurycea** Rafinesque, 1822
**KF**: *PLETHODONTIDAE* 1850.ga.f002

***Sphaenorhynchus*** Tschudi, 1838 • KY
**ST**: PO.KN • **CI**: h1482 • **ID**: 234
**PN**: *Hyla lactea* Daudin, 1800
**PK**: *Hyla lactea** Daudin, 1800
**KG**: *Sphaenorhynchus** Tschudi, 1838
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Sphaenorynchus* Nieden, 1923 • AK
**ST**: NT.JI • **CI**: h1483 • **ID**: 234
**PN**: *Hyla lactea* Daudin, 1800
**PK**: *Hyla lactea** Daudin, 1800
**KG**: *Sphaenorhynchus** Tschudi, 1838
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

*Sphaeroteca* Dubois 1987 • AK
**ST**: NS.JI • **CI**: h1484 • **ID**: 379
**PN**: *Sphaerotheca strigata* Günther, 1859
**PK**: *Rana breviceps** Schneider, 1799
**KG**: *Sphaerotheca*[1] Günther, 1859
**KF**: *DICROGLOSSIDAE* 1987.da.f004

***Sphaerotheca*** Günther, 1859 • KY
**ST**: PO.KN • **CI**: h1485 • **ID**: 379
**PN**: *Sphaerotheca strigata* Günther, 1859
**PK**: *Rana breviceps** Schneider, 1799
**KG**: *Sphaerotheca*[1] Günther, 1859
**KF**: *DICROGLOSSIDAE* 1987.da.f004

*Sphagepodium*: Steindachner 1864 • AN
**ST**: AL • **CI**: n0157 • **ID**: 250
**PN**: *Leiuperus albonotatus* Steindachner, 1864
**PK**: *Leiuperus albonotatus** Steindachner, 1864
**KG**: *Physalaemus** Fitzinger, 1826
**KF**: *LEIUPERIDAE* 1850.bb.f010

*Sphenophryne* Peters[+1], 1878 • AK
**ST**: PO.JD • **CI**: h1486 • **ID**: 280
**PN**: *Sphenophryne cornuta* Peters[+1], 1878
**PK**: *Sphenophryne cornuta** Peters[+1], 1878
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Sphoenohyla* Lutz[+1], 1938 • AK
**ST**: PO.JD • **CI**: h1487 • **ID**: 234
**PN**: *Hyla aurantiaca* Daudin, 1802
**PK**: *Hyla lactea** Daudin, 1800

**KG**: *Sphaenorhynchus** Tschudi, 1838
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Spicospina*** Roberts[+4], 1997 • **ky**
**ST**: **po.kn** • **CI**: h1488 • **ID**: 275
**PN**: *Spicospina flammocaerulea* Roberts[+4], 1997
**PK**: *Spicospina flammocaerulea** Roberts[+4], 1997
**KG**: *Spicospina** Roberts[+4], 1997
**KF**: *Myobatrachidae* 1850.sa.f001
***Spinomantis*** Dubois, 1992 • **ky**
**ST**: **po.kn** • **CI**: h1489 • **ID**: 433
**PN**: *Rhacophorus aglavei* Methuen[+1], 1913
**PK**: *Rhacophorus aglavei** Methuen[+1], 1913
**KG**: *Spinomantis** Dubois, 1992
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001
*Spinophrynoides* Dubois, 1987 • **ak**
**ST**: **po.jd** • **CI**: h1490 • **ID**: 102
**PN**: *Bufo osgoodi* Loveridge, 1932
**PK**: *Bufo osgoodi*° Loveridge, 1932
**KG**: *Altiphrynoides*° Dubois, 1987
**KF**: *Bufonidae* 1825.gb.f004
*Spondylophryne*: Kretzoi 1956 ‡ • **an**
**ST**: **al** • **CI**: n0158 • **ID**: †043§
**PN**: *Spondylophryne villanyensis* Kretzoi, 1956 ‡ • **as**
**PK**: *Spondylophryne villanyensis*° Kretzoi, 1956 † • **as**
**KG**: *Spondylophryne*° Kretzoi, 1956 † • **ag**
**KF**: **Anura** Familia *Incertae sedis*
***Staurois*** Cope, 1865 • **ky**
**ST**: **po.kn** • **CI**: h1491 • **ID**: 422
**PN**: *Ixalus natator* Günther, 1859
**PK**: *Ixalus natator** Günther, 1859
**KG**: *Staurois** Cope, 1865
**KF**: *Ranidae* 1796.ba.f001
***Stefania*** Rivero, 1968 • **ky**
**ST**: **po.kn** • **CI**: h1492 • **ID**: 096
**PN**: *Hyla evansi* Boulenger, 1904
**PK**: *Hyla evansi** Boulenger, 1904
**KG**: *Stefania** Rivero, 1968
**KF**: *Hemiphractidae* 1862.pa.f001
*Stegoporus* Wiegmann, 1832 • **ex**
**ST**: **po.ce** • **CI**: e0014 • **ID**: 555
**PN**: *Siredon axolotl* Wagler, 1830
**PK**: *Gyrinus mexicanus** Shaw[+1], 1789
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *Ambystomatidae* 1850.ga.f004
*Stelladerma* Poyarkov[+8], 2015 • **ak**
**ST**: **po.jd** • **CI**: h1655 • **ID**: 438
**PN**: *Theloderma stellatum* Taylor, 1962
**PK**: *Theloderma stellatum** Taylor, 1962
**KG**: *Theloderma** Tschudi, 1838
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001
*Stemobates*: Bauer 1994 • **an**
**ST**: **al** • **CI**: n0159 • **ID**: 050
**PN**: *Dendrobates pumilio* Schmidt, 1857
**PK**: *Dendrobates pumilio** Schmidt, 1857
**KG**: *Oophaga** Bauer, 1994
**KF**: *Dendrobatidae* ||1850.bb.f006||-1865.ca.f002
*Stenocephalus* Latreille, 1829 • **zh**
**ST**: **zo** • **CI**: zh094
*Stenocephalus* Tschudi, 1838 • **ak**
**ST**: **po.jh** • **CI**: h1494 • **ID**: 298
**PN**: *Microps unicolor* Wagler, 1828
**PK**: *Rana ovalis** Schneider, 1799
**KG**: *Engystoma** Fitzinger, 1826
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Stenodactylus* Fitzinger, 1826 • **zh**
**ST**: **zo** • **CI**: zh095
*Stenodactylus* Philippi, 1902 • **ak**
**ST**: **po.jh** • **CI**: h1495 • **ID**: 138
**PN**: *Bufo ventralis* Philippi, 1902
**PK**: *Bufo spinulosus** Wiegmann, 1834
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004
*Stenofryne* Palacký, 1898 • **ak**
**ST**: **nt.jd** • **CI**: h1496 • **ID**: 280
**PN**: *Sphenophryne cornuta* Peters[+1], 1878
**PK**: *Sphenophryne cornuta** Peters[+1], 1878
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
*Stenoglossa* Chaudoir, 1848 • **zh**
**ST**: **zo** • **CI**: zh096
*Stenoglossa* Andersson, 1903 • **ak**
**ST**: **po.jh** • **CI**: h1497 • **ID**: 129
**PN**: *Stenoglossa fulva* Andersson, 1903
**PK**: *Bufo preussi*° Matschie, 1893
**KG**: *Werneria*[3] Poche, 1903
**KF**: *Bufonidae* 1825.gb.f004
*Stenorhynchus* Hemprich, 1820 • **zh**
**ST**: **zo** • **CI**: zh097
*Stenorhynchus* Smith, 1849 • **ak**
**ST**: **po.jh** • **CI**: h1498 • **ID**: 350
**PN**: *Stenorhynchus natalensis* Smith, 1849
**PK**: *Stenorhynchus natalensis** Smith, 1849
**KG**: *Phrynobatrachus** Günther, 1862
**KF**: *Phrynobatrachidae* 1941.lb.f001
*Stephopaedes* Channing, 1979 • **ak**
**ST**: **po.jd** • **CI**: h1499 • **ID**: 141
**PN**: *Bufo anotis* Boulenger, 1907
**PK**: *Bufo anotis** Boulenger, 1907
**KG**: *Mertensophryne*[1] Tihen, 1960
**KF**: *Bufonidae* 1825.gb.f004
***Stereochilus*** Cope, 1869 • **ky**
**ST**: **po.kn** • **CI**: h1500 • **ID**: 541
**PN**: *Pseudotriton marginatus* Hallowell, 1856
**PK**: *Pseudotriton marginatus** Hallowell, 1856
**KG**: *Stereochilus** Cope, 1869
**KF**: *Plethodontidae* 1850.ga.f002
***Stereocyclops*** Cope, 1870 • **ky**
**ST**: **po.kn** • **CI**: h1501 • **ID**: 302
**PN**: *Stereocyclops incrassatus* Cope, 1870
**PK**: *Stereocyclops incrassatus** Cope, 1870
**KG**: *Stereocyclops** Cope, 1870
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Stertirana*: Hillis[+1] 2005 • **AN**
**ST**: **AL** • **CI**: n0160 • **ID**: 415
**PN**: *Rana montezumae* Baird, 1854
**PK**: *Rana montezumae** Baird, 1854
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *RANIDAE* 1796.ba.f001

***Stombus*** Gravenhorst, 1825 • **KY**
**ST**: **PO.KN** • **CI**: h1502 • **ID**: 172
**PN**: *Rana cornuta* Linnaeus, 1758
**PK**: *Rana cornuta** Linnaeus, 1758
**KG**: *Stombus** Gravenhorst, 1825
**KF**: *CERATOPHRYIDAE* 1838.ta.f002

***Strabomantis*** Peters, 1863 • **KY**
**ST**: **PO.KN** • **CI**: h1503 • **ID**: 073
**PN**: *Strabomantis biporcatus* Peters, 1863
**PK**: *Strabomantis biporcatus** Peters, 1863
**KG**: *Strabomantis** Peters, 1863
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

***Strauchbufo*** Fei[+2], 2012 • **KY**
**ST**: **PO.KN** • **CI**: h1504 • **ID**: 132
**PN**: *Bufo raddei* Strauch, 1876
**PK**: *Bufo raddei** Strauch, 1876
**KG**: *Strauchbufo** Fei[+2], 2012
**KF**: *BUFONIDAE* 1825.gb.f004

*Strauchibufo* Fei[+1], 2016 • **AK**
**ST**: **NT.JI** • **CI**: h1505 • **ID**: 132
**PN**: *Bufo raddei* Strauch, 1876
**PK**: *Bufo raddei** Strauch, 1876
**KG**: *Strauchbufo** Fei[+1], 2012
**KF**: *BUFONIDAE* 1825.gb.f004

*Strauchophryne* Borkin[+1], 2013 • **AK**
**ST**: **PO.JI** • **CI**: h1506 • **ID**: 132
**PN**: *Bufo raddei* Strauch, 1876
**PK**: *Bufo raddei** Strauch, 1876
**KG**: *Strauchbufo** Fei[+2], 2012
**KF**: *BUFONIDAE* 1825.gb.f004

*Strombus*: Gray 1831 • **AN**
**ST**: **AM** • **CI**: n0161 • **ID**: 172
**PN**: *Rana cornuta* Linnaeus, 1758
**PK**: *Rana cornuta** Linnaeus, 1758
**KG**: *Stombus** Gravenhorst, 1825
**KF**: *CERATOPHRYIDAE* 1838.ta.f002

***Strongylopus*** Tschudi, 1838 • **KY**
**ST**: **PO.KN** • **CI**: h1507 • **ID**: 363
**PN**: *Rana fasciata* Smith, 1849
**PK**: *Rana fasciata** Smith, 1849
**KG**: *Strongylopus** Tschudi, 1838
**KF**: *CACOSTERNIDAE* 1931.na.f008

*Stumpffia* Boettger, 1881 • **AK**
**ST**: **PO.JD** • **CI**: h1508 • **ID**: 289
**PN**: *Stumpffia psologlossa* Boettger, 1881
**PK**: *Stumpffia psologlossa** Boettger, 1881
**KG**: *Rhombophryne** Boettger, 1880
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Suleobatrachus* Špinar, 1972 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h1509 • **ID**: †069
**PN**: *Palaeobatrachus laubei* Bieber, 1881 ‡
**PK**: *Palaeobatrachus laubei*° Bieber, 1881 †
**KG**: *Palaeobatrachus*° Tschudi, 1838 †
**KF**: *PALAEOBATRACHIDAE* 1865.ca.f001 †

***Sumaterana*** Arikin[+5], 2018 • **KY**
**ST**: **PO.KN** • **CI**: h1510 • **ID**: 404
**PN**: *Sumaterana crassiovis* Boulenger, 1920
**PK**: *Sumaterana crassiovis*° Boulenger, 1920
**KG**: *Sumaterana*° Boulenger, 1920
**KF**: *RANIDAE* 1796.ba.f001

***Sunnybatrachus*** Evans[+1], 2002 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1511 • **ID**: †044
**PN**: *Sunnybatrachus purbeckensis* Evans[+1], 2002 ‡
**PK**: *Sunnybatrachus purbeckensis*° Evans[+1], 2002 †
**KG**: *Sunnybatrachus*° Evans[+1], 2002 †
**KF**: **ANURA** Familia *INCERTAE SEDIS*

***Sylvacaecilia*** Wake, 1987 • **KY**
**ST**: **PO.KN** • **CI**: h1512 • **ID**: 481
**PN**: *Geotrypetes grandisonae* Taylor, 1970
**PK**: *Geotrypetes grandisonae*° Taylor, 1970
**KG**: *Sylvacaecilia*° Wake, 1987
**KF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|

*Sylvirana* Dubois, 1992 • **AK**
**ST**: **PO.JD** • **CI**: h1513 • **ID**: 409
**PN**: *Limnodytes nigrovittatus* Blyth, 1855
**PK**: *Limnodytes nigrovittatus** Blyth, 1855
**KG**: *Hylarana** Tschudi, 1838
**KF**: *RANIDAE* 1796.ba.f001

***Synapturanus*** Carvalho, 1954 • **KY**
**ST**: **PO.KN** • **CI**: h1514 • **ID**: 318
**PN**: *Synapturanus mirandaribeiroi* Nelson[+1], 1975
**PK**: *Synapturanus mirandaribeiroi** Nelson[+1], 1975
**KG**: *Synapturanus** Carvalho, 1954
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

***Syncope*** Walker, 1973 • **KY**
**ST**: **PO.KN** • **CI**: h1515 • **ID**: 292
**PN**: *Syncope antenori* Walker, 1973
**PK**: *Syncope antenori** Walker, 1973
**KG**: *Chiasmocleis** Méhelÿ, 1904
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Syren* Freeman[+1], 1807 • **AK**
**ST**: **NS.JI** • **CI**: h1516 • **ID**: 519
**PN**: *Siren lacertina* Österdam, 1766
**PK**: *Siren lacertina** Österdam, 1766
**KG**: *Siren** Österdam, 1766
**KF**: *SIRENIDAE* 1825gb.f005

*Syrrhaphus* Günther, 1900 • **AK**
**ST**: **NT.JD** • **CI**: h1517 • **ID**: 082
**PN**: *Syrrhophus marnocki* Cope, 1878
**PK**: *Syrrhophus marnocki** Cope, 1878
**KG**: *Euhyas** Fitzinger, 1843
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Syrrhophus* Cope, 1878 • **AK**
**ST**: **PO.JD** • **CI**: h1518 • **ID**: 082
**PN**: *Syrrhophus marnocki* Cope, 1878
**PK**: *Syrrhophus marnocki** Cope, 1878

**KG**: *Euhyas** Fitzinger, 1843
**KF**: *Brachycephalidae* 1858.gc.f002

*Syrrhopus* Boulenger, 1888 • **ak**
**ST**: **ns.jd** • **CI**: h1519 • **ID**: 082
**PN**: *Syrrhophus marnocki* Cope, 1878
**PK**: *Syrrhophus marnocki** Cope, 1878
**KG**: *Euhyas** Fitzinger, 1843
**KF**: *Brachycephalidae* 1858.gc.f002

*Syrrophus* Dickerson, 1907 • **ak**
**ST**: **ns.jd** • **CI**: h1520 • **ID**: 082
**PN**: *Syrrhophus marnocki* Cope, 1878
**PK**: *Syrrhophus marnocki** Cope, 1878
**KG**: *Euhyas** Fitzinger, 1843
**KF**: *Brachycephalidae* 1858.gc.f002

*Systoma* Wagler, 1830 • **ak**
**ST**: **nt.ji** • **CI**: h1521 • **ID**: 298
**PN**: *Rana ovalis* Schneider, 1799
**PK**: *Rana ovalis** Schneider, 1799
**KG**: *Engystoma** Fitzinger, 1826
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Tachiramantis*** Heinicke[+2], 2015 • **ky**
**ST**: **po.kn** • **CI**: h1522 • **ID**: 062
**PN**: *Eleutherodactylus prolixodiscus* Lynch, 1978
**PK**: *Eleutherodactylus prolixodiscus*° Lynch, 1978
**KG**: *Tachiramantis*° Heinicke[+2], 2015
**KF**: **Gaianura** Familia *Incertae sedis*

***Tachycnemis*** Fitzinger, 1843 • **ky**
**ST**: **po.kn** • **CI**: h1523 • **ID**: 336
**PN**: *Eucnemis seychellensis* Tschudi, 1838
**PK**: *Eucnemis seychellensis** Tschudi, 1838
**KG**: *Tachycnemis** Fitzinger, 1843
**KF**: *Hyperoliidae* 1943.lb.f001

*Tahananpuno* Brown[+4], 2015 • **ak**
**ST**: **po.jd** • **CI**: h1524 • **ID**: 370
**PN**: *Cornufer guentheri* Boulenger, 1882
**PK**: *Cornufer guentheri** Boulenger, 1882
**KG**: *Platymantis*[1] Günther, 1859
**KF**: *Ceratobatrachidae* 1884.ba.f001

*Talmalsodes* Diaz, 1992 • **ak**
**ST**: **po.ji** • **CI**: h1525 • **ID**: 173
**PN**: *Telmatobius montanus* Philippi, 1902
**PK**: *Telmatobius montanus*° Philippi, 1902
**KG**: *Alsodes** Bell, 1843
**KF**: *Alsodidae* 1869.mc.f005

***Tambabatrachus*** Ikeda[+2], 2016 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1526 • **ID**: †058
**PN**: *Tambabatrachus kawazu* Ikeda[+2], 2016 ‡
**PK**: *Tambabatrachus kawazu*° Ikeda[+2], 2016 †
**KG**: *Tambabatrachus*° Ikeda[+2], 2016 †
**KF**: **Hydrobatrachia** Familia *Incertae sedis*

***Tamixalus*** **nov.** • **ky**
**ST**: **po.kn** • **CI**: h1527 • **ID**: 457
**PN**: *Rhacophorus calcadensis* Ahl, 1927
**PK**: *Rhacophorus calcadensis** Ahl, 1927
**KG**: *Tamixalus** **nov.**
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Taphriomantis* Laurent, 1941 • **ak**
**ST**: **po.jd** • **CI**: h1528 • **ID**: 325
**PN**: *Cystignathus bocagii* Günther, 1865
**PK**: *Cystignathus bocagii** Günther, 1865
**KG**: *Leptopelis*[2] Günther, 1859
**KF**: *Arthroleptidae* 1869.mc.f011

***Taricha*** Gray, 1850 • **ky**
**ST**: **po.kn** • **CI**: h1529 • **ID**: 570
**PN**: *Triton torosus* Rathke, 1833
**PK**: *Triton torosus** Rathke, 1833
**KG**: *Taricha** Gray, 1850
**KF**: *Salamandridae* 1820.ga.f002

*Tarsopterus* Reinhardt[+1], 1862 • **ak**
**ST**: **po.jd** • **CI**: h1530 • **ID**: 181
**PN**: *Tarsopterus trachystomus* Reinhardt[+1], 1862
**PK**: *Tarsopterus trachystomus*° Reinhardt[+1], 1862
**KG**: *Crossodactylus*[3] Duméril[+1], 1841
**KF**: *Hylodidae* 1858.gc.f010

***Taruga*** Meegaskumbura[+6], 2010 • **ky**
**ST**: **po.kn** • **CI**: h1531 • **ID**: 453
**PN**: *Polypedates fastigo* Manamendra-Arachchi[+1], 2001
**PK**: *Polypedates fastigo** Manamendra-Arachchi[+1], 2001
**KG**: *Taruga** Meegaskumbura[+6], 2010
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

***Taudactylus*** Straughan[+1], 1966 • **ky**
**ST**: **po.kn** • **CI**: h1532 • **ID**: 277
**PN**: *Taudactylus diurnus* Straughan[+1], 1966
**PK**: *Taudactylus diurnus*° Straughan[+1], 1966
**KG**: *Taudactylus*[3] Straughan[+1], 1966
**KF**: *Myobatrachidae* 1850.sa.f001

*Taylorana* Dubois, 1987 • **ak**
**ST**: **po.jd** • **CI**: h1533 • **ID**: 380
**PN**: *Polypedates hascheanus* Stoliczka, 1870
**PK**: *Polypedates hascheanus** Stoliczka, 1870
**KG**: *Limnonectes** Fitzinger, 1843
**KF**: *Dicroglossidae* 1987.da.f004

*Teletrema* Miranda-Ribeiro, 1937 • **ak**
**ST**: **po.jd** • **CI**: h1534 • **ID**: 076
**PN**: *Teletrema heterodactylum* Miranda-Ribeiro, 1937
**PK**: *Teletrema heterodactylum** Miranda-Ribeiro, 1937
**KG**: *Oreobates** Jiménez de la Espada, 1872
**KF**: *Brachycephalidae* 1858.gc.f002

*Telmalsodes* Diaz, 1989 • **ak**
**ST**: **po.jd** • **CI**: h1535 • **ID**: 173
**PN**: *Telmatobius montanus* Philippi, 1902
**PK**: *Telmatobius montanus*° Philippi, 1902
**KG**: *Alsodes** Bell, 1843
**KF**: *Alsodidae* 1869.mc.f005

***Telmatobius*** Wiegmann, 1834 • **ky**
**ST**: **po.kn** • **CI**: h1536 • **ID**: 186
**PN**: *Telmatobius peruvianus* Wiegmann, 1834
**PK**: *Telmatobius peruvianus*° Wiegmann, 1834
**KG**: *Telmatobius*[3] Wiegmann, 1834
**KF**: *Telmatobiidae* 1843.fa.f006

***Telmatobufo*** Schmidt, 1952 • **ky**
**ST**: **po.kn** • **CI**: h1537 • **ID**: 258

PN: *Telmatobufo bullocki* Schmidt, 1952
PK: *Telmatobufo bullocki** Schmidt, 1952
KG: *Telmatobufo** Schmidt, 1952
KF: *Calyptocephalellidae* 1960.ra.f001
*Tenuirana* Fei[+2], 1990 • AK
ST: PO.JD • CI: h1538 • ID: 409
PN: *Rana taipehensis* Van Denburgh, 1909
PK: *Rana taipehensis** Van Denburgh, 1909
KG: *Hylarana** Tschudi, 1838
KF: *Ranidae* 1796.ba.f001
***Tephrodytes*** Henrici, 1994 ‡ • KY
ST: PO.KN • CI: h1539 • ID: †087
PN: *Tephrodytes brassicarvalis* Henrici, 1994 ‡
PK: *Tephrodytes brassicarvalis*° Henrici, 1994 †
KG: *Tephrodytes*° Henrici, 1994 †
KF: **Archaeosalientia** Familia *Incertae sedis*
***Tepuihyla*** Ayarzagüena[+2], 1993 • KY
ST: PO.KN • CI: h1540 • ID: 224
PN: *Hyla rodriguezi* Rivero, 1968
PK: *Hyla rodriguezi** Rivero, 1968
KG: *Tepuihyla** Ayarzagüena[+2], 1993
KF: *Hylidae* 1815.ra.f002-|1825.gb.f001|
*Teracophrys*: Ameghino 1901 ‡ • AN
ST: AL • CI: n0162 • ID: 257
PN: *Teracophrys rugata* Ameghino, 1901 ‡ • AS
PK: *Teracophrys rugata*° Ameghino, 1901 † • AS
KG: *Calyptocephalella** Strand, 1928
KF: *Calyptocephalellidae* 1960.ra.f001
***Teratohyla*** Taylor, 1951 • KY
ST: PO.KN • CI: h1541 • ID: 163
PN: *Centrolenella spinosa* Taylor, 1949
PK: *Centrolenella spinosa** Taylor, 1949
KG: *Teratohyla** Taylor, 1951
KF: *Centrolenidae* 1951.ta.f001
*Tetraprion* Stejneger[+1], 1891 • AK
ST: PO.JD • CI: h1542 • ID: 231
PN: *Tetraprion jordani* Stejneger[+1], 1891
PK: *Tetraprion jordani** Stejneger[+1], 1891
KG: *Trachycephalus** Tschudi, 1838
KF: *Hylidae* 1815.ra.f002-|1825.gb.f001|
***Thaumastosaurus*** Stefano, 1904 ‡ • KY
ST: PO.KN • CI: h1543 • ID: †045
PN: *Thaumastosaurus bottii* Stefano, 1904 ‡
PK: *Thaumastosaurus bottii*° Stefano, 1904 †
KG: *Thaumastosaurus*° Stefano, 1904 †
KF: **Anura** Familia *Incertae sedis*
***Theatonius*** Fox, 1976 ‡ • KY
ST: PO.KN • CI: h1544 • ID: †046
PN: *Theatonius lancensis* Fox, 1976 ‡
PK: *Theatonius lancensis*° Fox, 1976 †
KG: *Theatonius*° Fox, 1976 †
KF: **Anura** Familia *Incertae sedis*
***Theloderma*** Tschudi, 1838 • KY
ST: PO.KN • CI: h1545 • ID: 438
PN: *Theloderma leporosa* Tschudi, 1838
PK: *Theloderma leporosa** Tschudi, 1838
KG: *Theloderma** Tschudi, 1838
KF: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001
***Thoraciliacus*** Nevo, 1968 ‡ • KY
ST: PO.KN • CI: h1546 • ID: †066
PN: *Thoraciliacus rostriceps* Nevo, 1968 ‡
PK: *Thoraciliacus rostriceps*° Nevo, 1968 †
KG: *Thoraciliacus*° Nevo, 1968 †
KF: **Dorsipares** Familia *Incertae sedis*
***Thorius*** Cope, 1869a • KY
ST: PO.KN • CI: h1547 • ID: 530
PN: *Thorius pennatribus* Cope, 1869*a*
PK: *Thorius pennatribus** Cope, 1869*a*
KG: *Thorius** Cope, 1869*a*
KF: *Plethodontidae* 1850.ga.f002
***Thornella*** **nov.** • KY
ST: PO.KN • CI: h1548 • ID: 536
PN: *Oedipina quadra* McCranie[+2], 2008
PK: *Oedipina quadra** McCranie[+2], 2008
KG: *Thornella** **nov.**
KF: *Plethodontidae* 1850.ga.f002
***Thoropa*** Cope, 1865 • KY
ST: PO.KN • CI: h1549 • ID: 180
PN: *Cystignathus missiessii* Eydoux[+1], 1842
PK: *Rana miliaris** Spix, 1824
KG: *Thoropa*[1] Cope, 1865
KF: *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|
*Tianophrys* Fei[+2], 2016 • AK
ST: PO.JD • CI: h1550 • ID: 023
PN: *Megophrys shuichengensis* Tian[+2], 2000
PK: *Megophrys shuichengensis*° Tian[+2], 2000
KG: *Boulenophrys** Fei[+2], 2016
KF: *Megophryidae* 1850.bb.f008-|1931.na.f003|
*Tibetuperus* Dubois[+1], 2012 • AK
ST: PO.JD • CI: h1551 • ID: 507
PN: *Batrachuperus yenyuanensis* Liu, 1950
PK: *Batrachuperus yenyuanensis** Liu, 1950
KG: *Batrachuperus** Boulenger, 1878
KF: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002
*Tigrina* Grevé, 1894 • ZH
ST: ZO • CI: zh098
*Tigrina* Fei[+2], 1990 • AK
ST: PO.JH • CI: h1552 • ID: 374
PN: *Rana tigerina* Daudin, 1802
PK: *Rana tigerina** Daudin, 1802
KG: *Hoplobatrachus*[1] Peters, 1863
KF: *Dicroglossidae* 1987.da.f004
*Tirahanulap* Brown[+4], 2015 • AK
ST: PO.JD • CI: h1553 • ID: 370
PN: *Philautus hazelae* Taylor, 1920
PK: *Philautus hazelae** Taylor, 1920
KG: *Platymantis*[1] Günther, 1859
KF: *Ceratobatrachidae* 1884.ba.f001
*Tischleriella* Herre, 1949 ‡ • AK
ST: PO.JD • CI: h1554 • ID: †193
PN: *Tischleriella buddenbrocki* Herre, 1949 ‡
PK: *Chelotriton paradoxus*° Pomel, 1853 †

**KG**: *Chelotriton*° Pomel, 1853 †
**KF**: *Salamandridae* 1820.ga.f002

***Tlalocohyla*** Faivovich[+5], 2005 • **ky**
**ST**: **po.kn** • **CI**: h1555 • **ID**: 206
**PN**: *Hyla smithii* Boulenger, 1902
**PK**: *Hyla smithii** Boulenger, 1902
**KG**: *Tlalocohyla** Faivovich[+5], 2005
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Tomodactylus* Günther, 1900 • **ak**
**ST**: **po.jd** • **CI**: h1556 • **ID**: 082
**PN**: *Tomodactylus amulae* Günther, 1900
**PK**: *Liuperus nitidus** Peters, 1870
**KG**: *Euhyas** Fitzinger, 1843
**KF**: *Brachycephalidae* 1858.gc.f002

***Tomopterna*** Duméril[+1], 1841 • **ky**
**ST**: **po.kn** • **CI**: h1557 • **ID**: 365
**PN**: *Pyxicephalus delalandii* Tschudi, 1838
**PK**: *Pyxicephalus delalandii** Tschudi, 1838
**KG**: *Tomopterna** Duméril[+1], 1841
**KF**: *Cacosternidae* 1931.na.f008

*Tornierella* Ahl, 1924 • **ak**
**ST**: **po.jd** • **CI**: h1558 • **ID**: 340
**PN**: *Tornierella pulchra* Ahl, 1924
**PK**: *Rothschildia kounhiensis*° Mocquard, 1905
**KG**: *Paracassina*° Peracca, 1907
**KF**: *Hyperoliidae* 1943.lb.f001

*Tornierobates*: Neave 1940 • **an**
**ST**: **am** • **CI**: n0163 • **ID**: 135
**PN**: *Pseudophryne vivipara* Tornier, 1905
**PK**: *Pseudophryne vivipara** Tornier, 1905
**KG**: *Nectophrynoides** Noble, 1926
**KF**: *Bufonidae* 1825.gb.f004

*Tornierobates* Frost[+18], 2006 • **ak**
**ST**: **ns.jd** • **CI**: h1559 • **ID**: 135
**PN**: *Pseudophryne vivipara* Tornier, 1905
**PK**: *Pseudophryne vivipara** Tornier, 1905
**KG**: *Nectophrynoides** Noble, 1926
**KF**: *Bufonidae* 1825.gb.f004

*Tornieriobates* Miranda-Ribeiro, 1926 • **ak**
**ST**: **po.jd** • **CI**: h1560 • **ID**: 135
**PN**: *Pseudophryne vivipara* Tornier, 1905
**PK**: *Pseudophryne vivipara** Tornier, 1905
**KG**: *Nectophrynoides** Noble, 1926
**KF**: *Bufonidae* 1825.gb.f004

*Torrentirana* Hillis[+1], 2005 • **ak**
**ST**: **po.jd** • **CI**: h1561 • **ID**: 415
**PN**: *Rana tarahumarae* Boulenger, 1917
**PK**: *Rana tarahumarae** Boulenger, 1917
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001

*Torrentophryne*: Rao[+1] 1994 • **an**
**ST**: **al** • **CI**: n0164 • **ID**: 120
**PN**: *Torrentophryne aspinia* Rao[+1], 1994
**PK**: *Torrentophryne aspinia** Rao[+1], 1994
**KG**: *Bufo** Garsault, 1764
**KF**: *Bufonidae* 1825.gb.f004

*Torrentophryne* Yang *in* Yang[+2], 1996 • **ak**
**ST**: **po.jd** • **CI**: h1562 • **ID**: 120
**PN**: *Torrentophryne aspinia* Rao[+1], 1994
**PK**: *Torrentophryne aspinia** Rao[+1], 1994
**KG**: *Bufo** Garsault, 1764
**KF**: *Bufonidae* 1825.gb.f004

*Trachucephalus* Ferguson, 1874 • **ak**
**ST**: **po.jd** • **CI**: h1563 • **ID**: 376
**PN**: *Trachucephalus ceylanicus* Ferguson, 1874
**PK**: *Nannophrys ceylonensis** Günther, 1869
**KG**: *Nannophrys** Günther, 1869
**KF**: *Dicroglossidae* 1987.da.f004

*Trachycara* Tschudi, 1845 • **ak**
**ST**: **po.jd** • **CI**: h1564 • **ID**: 138
**PN**: *Trachycara fusca* Tschudi, 1845
**PK**: *Rana margaritifera** Laurenti, 1768
**KG**: *Rhinella*[2] Fitzinger, 1826
**KF**: *Bufonidae* 1825.gb.f004

***Trachycephalus*** Tschudi, 1838 • **ky**
**ST**: **po.kn** • **CI**: h1565 • **ID**: 231
**PN**: *Trachycephalus nigromaculatus* Tschudi, 1838
**PK**: *Trachycephalus nigromaculatus** Tschudi, 1838
**KG**: *Trachycephalus** Tschudi, 1838
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Trachycephalus* Ferguson, 1875 • **ak**
**ST**: **ns.jh** • **CI**: h1566 • **ID**: 376
**PN**: *Trachucephalus ceylanicus* Ferguson, 1874
**PK**: *Nannophrys ceylonensis** Günther, 1869
**KG**: *Nannophrys** Günther, 1869
**KF**: *Dicroglossidae* 1987.da.f004

*Trachyhyas* Fitzinger, 1843 • **ak**
**ST**: **po.jd** • **CI**: h1567 • **ID**: 452
**PN**: *Polypedates rugosus* Duméril[+1], 1841
**PK**: *Hyla leucomystax** Gravenhorst, 1829
**KG**: *Polypedates** Tschudi, 1838
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Trachymantis* Giglio-Tos, 1917 • **zh**
**ST**: **zo** • **CI**: zh099

*Trachymantis* Methuen, 1920 • **ak**
**ST**: **po.jh** • **CI**: h1568 • **ID**: 431
**PN**: *Microphryne malagasia* Methuen[+1], 1913
**PK**: *Microphryne malagasia** Methuen[+1], 1913
**KG**: *Gephyromantis** Methuen, 1920
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Trachyphrynus* Goin[+1], 1963 • **ak**
**ST**: **po.jd** • **CI**: h1569 • **ID**: 078
**PN**: *Trachyphrynus myersi* Goin[+1], 1963
**PK**: *Trachyphrynus myersi*° Goin[+1], 1963
**KG**: *Pristimantis** Jiménez de la Espada, 1870
**KF**: *Brachycephalidae* 1858.gc.f002

***Tregobatrachus*** Holman, 1975 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1570 • **ID**: †053
**PN**: *Tregobatrachus hibbardi* Holman, 1975 ‡
**PK**: *Tregobatrachus hibbardi*° Holman, 1975 †
**KG**: *Tregobatrachus*° Holman, 1975 †
**KF**: *Tregobatrachidae* 1975.hb.f001 †

*Tremeropugus* Smith, 1831 • **AK**
**ST**: **PO.JD** • **CI**: h1571 • **ID**: 009
**PN**: *Tremeropugus typicus* Smith, 1831
**PK**: *Bufo laevis** Daudin, 1802
**KG**: *Xenopus*[1] Wagler *in* Boie, 1827
**KF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Triadobatrachus*** Kuhn, 1962 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1572 • **ID**: †054
**PN**: *Protobatrachus massinoti* Piveteau, 1936 ‡
**PK**: *Protobatrachus massinoti*° Piveteau, 1936 †
**KG**: *Triadobatrachus*° Kuhn, 1962 †
**KF**: *Triadobatrachidae* 1962.ka.f001 †

***Triassurus*** Ivachnenko, 1978 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1573 • **ID**: †158
**PN**: *Triassurus sixtelae* Ivachnenko, 1978 ‡
**PK**: *Triassurus sixtelae*° Ivachnenko, 1978 †
**KG**: *Triassurus*° Ivachnenko, 1978 †
**KF**: *Triassuridae* 1978.ia.f002 †

*Trichobatrachus* Boulenger, 1900 • **AK**
**ST**: **PO.JD** • **CI**: h1574 • **ID**: 321
**PN**: *Trichobatrachus robustus* Boulenger, 1900
**PK**: *Trichobatrachus robustus** Boulenger, 1900
**KG**: *Astylosternus** Werner, 1898
**KF**: *Arthroleptidae* 1869.mc.f011

*Trigonophrys* Hallowell, 1857 • **AK**
**ST**: **PO.JD** • **CI**: h1575 • **ID**: 169
**PN**: *Trigonophrys rugiceps* Hallowell, 1857
**PK**: *Uperodon ornatum** Bell, 1843
**KG**: *Ceratophrys*[3] Neuwied, 1824
**KF**: *Ceratophryidae* 1838.ta.f002

***Triprion*** Cope, 1866 • **KY**
**ST**: **PO.KN** • **CI**: h1576 • **ID**: 210
**PN**: *Pharyngodon petasatus* Cope, 1865
**PK**: *Pharyngodon petasatus** Cope, 1865
**KG**: *Triprion** Cope, 1866
**KF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Tristella*: Gray 1850 • **AN**
**ST**: **AL** • **CI**: n0165 • **ID**: 569
**PN**: *Salamandra symmetrica* Harlan, 1825
**PK**: *Triturus* (*Diemictylus*) *viridescens** Rafinesque, 1820
**KG**: *Notophthalmus*[1] Rafinesque, 1820
**KF**: *Salamandridae* 1820.ga.f002

*Tritogenius* Gistel, 1848 • **AK**
**ST**: **NL.JI** • **CI**: h1577 • **ID**: 503
**PN**: *Salamandra scheuchzeri* Holl, 1831 ‡
**PK**: *Salamandra scheuchzeri*° Holl, 1831 †
**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *Cryptobranchidae* 1826.fb.f003

*Tritomegas* Amyot[+1], 1843 • **ZH**
**ST**: **ZO** • **CI**: zh100

*Tritomegas* Duméril[+1], 1854 • **AK**
**ST**: **PO.JH** • **CI**: h1578 • **ID**: 503
**PN**: *Megalobatrachus sieboldi* Tschudi, 1837 ‡
**PK**: *Triton japonicus** Temminck, 1836
**KG**: *Andrias*[2] Tschudi, 1837
**KF**: *Cryptobranchidae* 1826.fb.f003

*Triton* Linnaeus, 1758 • **ZH**
**ST**: **ZO** • **CI**: zh101

*Triton* Laurenti, 1768 • **AK**
**ST**: **PO.JH** • **CI**: h1579 • **ID**: 566
**PN**: *Triton cristatus* Laurenti, 1768
**PK**: *Triton cristatus** Laurenti, 1768
**KG**: *Triturus** Rafinesque, 1815
**KF**: *Salamandridae* 1820.ga.f002

*Tritonella* Swainson, 1839 • **AK**
**ST**: **NT.JI** • **CI**: h1580 • **ID**: 566
**PN**: *Triton cristatus* Laurenti, 1768
**PK**: *Triton cristatus** Laurenti, 1768
**KG**: *Triturus** Rafinesque, 1815
**KF**: *Salamandridae* 1820.ga.f002

*Trituroides* Chang, 1936 • **AK**
**ST**: **PO.JD** • **CI**: h1581 • **ID**: 562
**PN**: *Cynops chinensis* Gray, 1859
**PK**: *Cynops chinensis** Gray, 1859
**KG**: *Paramesotriton** Chang, 1936
**KF**: *Salamandridae* 1820.ga.f002

***Triturus*** Rafinesque, 1815 • **KY**
**ST**: **PO.KN** • **CI**: h1582 • **ID**: 566
**PN**: *Triton cristatus* Laurenti, 1768
**PK**: *Triton cristatus** Laurenti, 1768
**KG**: *Triturus** Rafinesque, 1815
**KF**: *Salamandridae* 1820.ga.f002

*Troglobates* Gistel, 1848 ‡ • **AK**
**ST**: **NL.JI** • **CI**: h1583 • **ID**: †094
**PN**: *Palaeophrynos gessneri* Tschudi, 1838 ‡
**PK**: *Palaeophrynos gessneri*° Tschudi, 1838 †
**KG**: *Palaeophrynos*° Tschudi, 1838 †
**KF**: *Bufonidae* 1825.gb.f004

***Truebella*** Graybeal[+1], 1995 • **KY**
**ST**: **PO.KN** • **CI**: h1584 • **ID**: 099
**PN**: *Truebella skoptes* Graybeal[+1], 1995
**PK**: *Truebella skoptes*° Graybeal[+1], 1995
**KG**: *Truebella*° Graybeal[+1], 1995
**KF**: *Bufonidae* 1825.gb.f004

*Trypheropsis* Cope, 1868 • **AK**
**ST**: **PO.JD** • **CI**: h1585 • **ID**: 415
**PN**: *Ranula chrysoprasina* Cope, 1866
**PK**: *Ixalus warszewitschii** Schmidt, 1857
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *Ranidae* 1796.ba.f001

***Tsingymantis*** Glaw[+2], 2006 • **KY**
**ST**: **PO.KN** • **CI**: h1586 • **ID**: 434
**PN**: *Tsingymantis antitra* Glaw[+2], 2006
**PK**: *Tsingymantis antitra** Glaw[+2], 2006
**KG**: *Tsingymantis** Glaw[+2], 2006
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001

*Tsinpa* Dubois[+1], 2012 • **AK**
**ST**: **PO.JD** • **CI**: h1587 • **ID**: 510
**PN**: *Ranodon tsinpaensis* Liu[+1], 1966
**PK**: *Ranodon tsinpaensis** Liu[+1], 1966
**KG**: *Liua*[1] Zhao[+1], 1983
**KF**: *Hynobiidae* ||1856.ha.f001||-1859.cb.f002

*Turanomolge* Nikolsky, 1918 • AK
**ST**: PO.JD • **CI**: h1588 • **ID**: 566
**PN**: *Turanomolge mensbieri* Nikolsky, 1918
**PK**: *Triton karelinii** Strauch, 1870
**KG**: *Triturus** Rafinesque, 1815
**KF**: *Salamandridae* 1820.ga.f002

*Twittya* Dubois[+1], 2009 • AK
**ST**: PO.JD • **CI**: h1589 • **ID**: 570
**PN**: *Triturus rivularis* Twitty, 1935
**PK**: *Triturus rivularis** Twitty, 1935
**KG**: *Taricha** Gray, 1850
**KF**: *Salamandridae* 1820.ga.f002

*Tylerana* Dubois, 1992 • AK
**ST**: PO.JD • **CI**: h1590 • **ID**: 409
**PN**: *Rana jimiensis* Tyler, 1963
**PK**: *Rana jimiensis** Tyler, 1963
**KG**: *Hylarana** Tschudi, 1838
**KF**: *Ranidae* 1796.ba.f001

*Tylerdella* Wells[+1], 1985 • AK
**ST**: PO.JD • **CI**: h1591 • **ID**: 270
**PN**: *Ranidella remota* Tyler[+1], 1974
**PK**: *Ranidella remota** Tyler[+1], 1974
**KG**: *Crinia** Tschudi, 1838
**KF**: *Myobatrachidae* 1850.sa.f001

***Tylototriton*** Anderson, 1871 • KY
**ST**: PO.KN • **CI**: h1592 • **ID**: 573
**PN**: *Tylototriton verrucosus* Anderson, 1871
**PK**: *Tylototriton verrucosus** Anderson, 1871
**KG**: *Tylototriton** Anderson, 1871
**KF**: *Salamandridae* 1820.ga.f002

*Tylotriton* Boettger, 1885 • AK
**ST**: NT.JI • **CI**: h1593 • **ID**: 573
**PN**: *Tylototriton verrucosus* Anderson, 1871
**PK**: *Tylototriton verrucosus** Anderson, 1871
**KG**: *Tylototriton** Anderson, 1871
**KF**: *Salamandridae* 1820.ga.f002

*Tympanoceros* Bocage, 1895 • AK
**ST**: PO.JD • **CI**: h1594 • **ID**: 355
**PN**: *Tympanoceros newtonii* Bocage, 1895
**PK**: *Cornufer johnstoni** Boulenger, 1888
**KG**: *Petropedetes** Reichenow, 1874
**KF**: *Petropedetidae* 1931.na.f006

*Typhlomolge* Stejneger, 1896 • AK
**ST**: PO.JD • **CI**: h1595 • **ID**: 542
**PN**: *Typhlomolge rathbuni* Stejneger, 1896
**PK**: *Typhlomolge rathbuni** Stejneger, 1896
**KG**: *Eurycea** Rafinesque, 1822
**KF**: *Plethodontidae* 1850.ga.f002

***Typhlonectes*** Peters, 1880 • KY
**ST**: PO.KN • **CI**: h1596 • **ID**: 480
**PN**: *Caecilia compressicauda* Duméril[+1], 1841
**PK**: *Caecilia compressicauda** Duméril[+1], 1841
**KG**: *Typhlonectes** Peters, 1880
**KF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Typhlotriton* Stejneger, 1892 • AK
**ST**: PO.JD • **CI**: h1597 • **ID**: 542
**PN**: *Typhlotriton spelaeus* Stejneger, 1892
**PK**: *Typhlotriton spelaeus** Stejneger, 1892
**KG**: *Eurycea** Rafinesque, 1822
**KF**: *Plethodontidae* 1850.ga.f002

***Tyrrellbatrachus*** Gardner, 2015 ‡ • KY
**ST**: PO.KN • **CI**: h1598 • **ID**: †047
**PN**: *Tyrrellbatrachus brinkmani* Gardner, 2015 ‡
**PK**: *Tyrrellbatrachus brinkmani*° Gardner, 2015 †
**KG**: *Tyrrellbatrachus*° Gardner, 2015 †
**KF**: **Anura** Familia *Incertae sedis*

***Uberabatrachus*** Báez[+5], 2012 ‡ • KY
**ST**: PO.KN • **CI**: h1599 • **ID**: †048
**PN**: *Uberabatrachus carvalhoi* Báez[+5], 2012 ‡
**PK**: *Uberabatrachus carvalhoi*° Báez[+5], 2012 †
**KG**: *Uberabatrachus*° Báez[+5], 2012 †
**KF**: **Anura** Familia *Incertae sedis*

***Ukrainurus*** Vasilyan[+4,] 2013 ‡ • KY
**ST**: PO.KN • **CI**: h1600 • **ID**: †168
**PN**: *Ukrainurus hypsognathus* Vasilyan[+4], 2013 ‡
**PK**: *Ukrainurus hypsognathus*° Vasilyan[+4], 2013 †
**KG**: *Ukrainurus*° Vasilyan[+4,] 2013 †
**KF**: *Cryptobranchidae* 1826.fb.f003

***Ulanurus*** Gubin, 1991 ‡ • KY
**ST**: PO.KN • **CI**: h1601 • **ID**: †169
**PN**: *Ulanurus fractus* Gubin, 1991 ‡
**PK**: *Ulanurus fractus*° Gubin, 1991 †
**KG**: *Ulanurus*° Gubin, 1991 †
**KF**: *Cryptobranchidae* 1826.fb.f003

***Uldzinia*** Gubin, 1996 ‡ • KY
**ST**: PO.KN • **CI**: h1602 • **ID**: †088
**PN**: *Uldzinia kurochkini* Gubin, 1996 ‡
**PK**: *Uldzinia kurochkini*° Gubin, 1996 †
**KG**: *Uldzinia*° Gubin, 1996 †
**KF**: **Archaeosalientia** Familia *Incertae sedis*

*Unculuana* Fei[+2], 1990 • AK
**ST**: PO.JD • **CI**: h1603 • **ID**: 383
**PN**: *Rana unculuana* Liu[+2], 1960
**PK**: *Rana unculuana** Liu[+2], 1960
**KG**: *Chaparana*[1] Bourret, 1939
**KF**: *Dicroglossidae* 1987.da.f004

*Unicus*: Sá[+8] 2019*a* • AN
**ST**: AL • **CI**: n0166 • **ID**: 292
**PN**: *Chiasmocleis gnoma* Canedo[+2], 2004
**PK**: *Chiasmocleis gnoma*° Canedo[+2], 2004
**KG**: *Chiasmocleis** Méhelÿ, 1904
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

*Unicus*: Sá[+8] 2019*b* • AN
**ST**: AL • **CI**: n0167 • **ID**: 292
**PN**: *Chiasmocleis gnoma* Canedo[+2], 2004
**PK**: *Chiasmocleis gnoma*° Canedo[+2], 2004
**KG**: *Chiasmocleis** Méhelÿ, 1904
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001

***Uperodon*** Duméril[+1], 1841 • KY
**ST**: PO.KN • **CI**: h1604 • **ID**: 309
**PN**: *Engystoma marmoratum* Guérin-Méneville, 1838
**PK**: *Rana systoma** Schneider, 1799

**KG**: *Uperodon** Duméril[+1], 1841
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Uperoleia*** Gray, 1841 • **ky**
**ST**: **po.kn** • **CI**: h1605 • **ID**: 276
**PN**: *Uperoleia marmorata* Gray, 1841
**PK**: *Uperoleia marmorata*° Gray, 1841
**KG**: *Uperoleia*[2] Gray, 1841
**KF**: *Myobatrachidae* 1850.sa.f001
*Uperoleja*: Gray *in* Grey 1841 • **an**
**ST**: **am** • **CI**: n0168 • **ID**: 276
**PN**: *Uperoleia marmorata* Gray, 1841
**PK**: *Uperoleia marmorata*° Gray, 1841
**KG**: *Uperoleia*[2] Gray, 1841
**KF**: *Myobatrachidae* 1850.sa.f001
***Uraeotyphlus*** Peters, 1880 • **ky**
**ST**: **po.kn** • **CI**: h1606 • **ID**: 502
**PN**: *Coecilia oxyura* Duméril[+1], 1841
**PK**: *Coecilia oxyura*° Duméril[+1], 1841
**KG**: *Uraeotyphlus*[3] Peters, 1880
**KF**: *Uraeotyphlidae* 1979.na.f001
*Urotropis* Rafinesque, 1822 • **ak**
**ST**: **po.jd** • **CI**: h1607 • **ID**: 504
**PN**: *Urotropis mucronata* Rafinesque, 1822
**PK**: *Salamandra alleganiensis** Sonnini[+1], 1801
**KG**: *Cryptobranchus*[1] Leuckart, 1821
**KF**: *Cryptobranchidae* 1826.fb.f003
*Urotropis* Jiménez de la Espada, 1875 • **ak**
**ST**: **po.jh** • **CI**: h1608 • **ID**: 550
**PN**: *Urotropis platensis* Jimenez de la Espada, 1875
**PK**: *Ensatina eschscholtzii** Gray, 1850
**KG**: *Ensatina** Gray, 1850
**KF**: *Plethodontidae* 1850.ga.f002
***Urspelerpes*** Camp[+5], 2009 • **ky**
**ST**: **po.kn** • **CI**: h1609 • **ID**: 543
**PN**: *Urspelerpes brucei* Camp[+5], 2009
**PK**: *Urspelerpes brucei** Camp[+5], 2009
**KG**: *Urspelerpes** Camp[+5], 2009
**KF**: *Plethodontidae* 1850.ga.f002
***Urupia*** Skutschas[+1], 2011 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1610 • **ID**: †143
**PN**: *Urupia monstrosa* Skutschas[+1], 2011 ‡
**PK**: *Urupia monstrosa*° Skutschas[+1], 2011 †
**KG**: *Urupia*° Skutschas[+1], 2011 †
**KF**: **Urodela** Familia *Incertae sedis*
***Valdotriton*** Evans[+1], 1996 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1611 • **ID**: †144
**PN**: *Valdotriton gracilis* Evans[+1], 1996 ‡
**PK**: *Valdotriton gracilis*° Evans[+1], 1996 †
**KG**: *Valdotriton*° Evans[+1], 1996 †
**KF**: **Urodela** Familia *Incertae sedis*
***Vampyrius*** **nov.** • **ky**
**ST**: **po.kn** • **CI**: h1612 • **ID**: 458
**PN**: *Rhacophorus vampyrus* Rowley[+4], 2010
**PK**: *Rhacophorus vampyrus** Rowley[+4], 2010
**KG**: *Vampyrius** **nov.**
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001
***Vandijkophrynus*** Frost[+18], 2006 • **ky**
**ST**: **po.kn** • **CI**: h1613 • **ID**: 143
**PN**: *Bufo angusticeps* Smith, 1848
**PK**: *Bufo angusticeps** Smith, 1848
**KG**: *Vandijkophrynus** Frost[+18], 2006
**KF**: *Bufonidae* 1825.gb.f004
*Vanzolinius* Heyer, 1974 • **ak**
**ST**: **po.jd** • **CI**: h1614 • **ID**: 253
**PN**: *Leptodactylus discodactylus* Boulenger, 1883
**PK**: *Leptodactylus discodactylus** Boulenger, 1883
**KG**: *Leptodactylus*[1] Fitzinger, 1826
**KF**: *Leptodactylidae* ||1838.ta.f001||-1896.wa.f001
***Varibatrachus*** Parmley[+2], 2015 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1615 • **ID**: †049
**PN**: *Varibatrachus abraczinskasae* Parmley[+2], 2015
**PK**: *Varibatrachus abraczinskasae*° Parmley[+2], 2015
**KG**: *Varibatrachus*° Parmley[+2], 2015
**KF**: **Anura** Familia *Incertae sedis*
*Vatomantis* Glaw[+1], 2006 • **ak**
**ST**: **po.jd** • **CI**: h1616 • **ID**: 431
**PN**: *Rhacophorus webbi* Grandison, 1953
**PK**: *Rhacophorus webbi** Grandison, 1953
**KG**: *Gephyromantis** Methuen, 1920
**KF**: *Rhacophoridae* ||1858.gc.f012||-1932.ha.f001
*Vibrissaphora* Liu, 1945 • **ak**
**ST**: **po.jd** • **CI**: h1617 • **ID**: 015
**PN**: *Vibrissaphora boringii* Liu, 1945
**PK**: *Vibrissaphora boringii** Liu, 1945
**KG**: *Leptobrachium** Tschudi, 1838
**KF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|
***Vieraella*** Reig, 1961 ‡ • **ky**
**ST**: **po.kn** • **CI**: h1618 • **ID**: †050
**PN**: *Vieraella herbstii* Reig, 1961 ‡
**PK**: *Vieraella herbstii*° Reig, 1961 †
**KG**: *Vieraella*° Reig, 1961 †
**KF**: **Anura** Familia *Incertae sedis*
*Vierella*: Cei 1962 ‡ • **an**
**ST**: **am** • **CI**: n0169 • **ID**: †050
**PN**: *Vieraella herbstii* Reig, 1961 ‡
**PK**: *Vieraella herbstii*° Reig, 1961 †
**KG**: *Vieraella*° Reig, 1961 †
**KF**: **Anura** Familia *Incertae sedis*
*Vierella* Gardner[+1], 2015 ‡ • **ak**
**ST**: **nt.ji** • **CI**: h1619 • **ID**: †050
**PN**: *Vieraella herbstii* Reig, 1961 ‡
**PK**: *Vieraella herbstii*° Reig, 1961 †
**KG**: *Vieraella*° Reig, 1961 †
**KF**: **Anura** Familia *Incertae sedis*
***Vietnamophryne*** Poyarkov[+6], 2018 • **ky**
**ST**: **po.kn** • **CI**: h1620 • **ID**: 283
**PN**: *Vietnamophryne inexpectata* Poyarkov[+6], 2018
**PK**: *Vietnamophryne inexpectata*° Poyarkov[+6], 2018
**KG**: *Vietnamophryne*° Poyarkov[+6], 2018
**KF**: *Microhylidae* ||1843.fa.f012||-1931.na.f001
***Vitreorana*** Guayasamin[+5], 2009 • **ky**
**ST**: **po.kn** • **CI**: h1621 • **ID**: 164

**PN**: *Centrolenella antisthenesi* Goin, 1963
**PK**: *Centrolenella antisthenesi** Goin, 1963
**KG**: *Vitreorana** Guayasamin[+5], 2009
**KF**: *CENTROLENIDAE* 1951.ta.f001

*Voigtiella* Herre, 1949 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h1622 • **ID**: 578
**PN**: *Voigtiella ludwigi* Herre, 1949 ‡
**PK**: *Salamandra sansaniensis*° Lartet, 1851 †
**KG**: *Salamandra*[1] Garsault, 1764
**KF**: *SALAMANDRIDAE* 1820.ga.f002

***Vulcanobatrachus*** Trueb[+2], 2005 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1623 • **ID**: †067
**PN**: *Vulcanobatrachus mandelai* Trueb[+2], 2005 ‡
**PK**: *Vulcanobatrachus mandelai*° Trueb[+2], 2005 †
**KG**: *Vulcanobatrachus*° Trueb[+2], 2005 †
**KF**: **DORSIPARES** Familia *INCERTAE SEDIS*

*Wagleria* Girard, 1853 • **AK**
**ST**: **PO.JI** • **CI**: h1624 • **ID**: 261
**PN**: *Cystignathus peronii* Duméril[+1], 1841
**PK**: *Cystignathus peronii** Duméril[+1], 1841
**KG**: *Limnodynastes** Fitzinger, 1843
**KF**: *MYOBATRACHIDAE* 1850.sa.f001

***Wakea*** Glaw[+1], 2006 • **KY**
**ST**: **PO.KN** • **CI**: h1625 • **ID**: 429
**PN**: *Mantidactylus madinika* Vences[+3], 2002
**PK**: *Mantidactylus madinika** Vences[+3], 2002
**KG**: *Wakea** Glaw[+1], 2006
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

*Walkerana*: Otte[+1] 2009 • **ZA**
**ST**: **ZN** • **CI**: zn011

***Walkerana*** Dahanukar[+5], 2016 • **KY**
**ST**: **PO.KN** • **CI**: h1626 • **ID**: 461
**PN**: *Ixalus diplostictus* Günther, 1875
**PK**: *Ixalus diplostictus** Günther, 1875
**KG**: *Walkerana** Dahanukar[+5], 2016
**KF**: *RANIXALIDAE* 1987.da.f005

*Wawelia* Casamiquela, 1959 ‡• **AK**
**ST**: **PO.JD** • **CI**: h1627 • **ID**: 257
**PN**: *Wawelia gerholdi* Casamiquela, 1959 ‡
**PK**: *Wawelia gerholdi*° Casamiquela, 1959 †
**KG**: *Calyptocephalella** Strand, 1928
**KF**: *CALYPTOCEPHALELLIDAE* 1960.ra.f001

***Wealdenbatrachus*** Fey, 1988 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1628 • **ID**: †059
**PN**: *Wealdenbatrachus jucarensis* Fey, 1988 ‡
**PK**: *Wealdenbatrachus jucarensis*° Fey, 1988 †
**KG**: *Wealdenbatrachus*° Fey, 1988 †
**KF**: **HYDROBATRACHIA** Familia *INCERTAE SEDIS*

***Werneria*** Poche, 1903 • **KY**
**ST**: **PO.KN** • **CI**: h1629 • **ID**: 129
**PN**: *Stenoglossa fulva* Andersson, 1903
**PK**: *Bufo preussi*° Matschie, 1893
**KG**: *Werneria*[3] Poche, 1903
**KF**: *BUFONIDAE* 1825.gb.f004

***Wesserpeton*** Sweetman[+1], 2013 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1630 • **ID**: †007
**PN**: *Wesserpeton evansae* Sweetman[+1], 2013 ‡
**PK**: *Wesserpeton evansae*° Sweetman[+1], 2013 †
**KG**: *Wesserpeton*° Sweetman[+1], 2013 †
**KF**: *ALBANERPETIDAE* 1982.fa.f001 †

*Wolterstorffiella*: Herre 1939 ‡ • **AN**
**ST**: **AL** • **CI**: n0170 • **ID**: †189
**PN**: *Wolterstorffiella wiggeri* Herre, 1950 ‡
**PK**: *Wolterstorffiella wiggeri*° Herre, 1950 †
**KG**: *Wolterstorffiella*° Herre, 1950 †
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

***Wolterstorffiella*** Herre, 1950 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1631 • **ID**: †189
**PN**: *Wolterstorffiella wiggeri* Herre, 1950 ‡
**PK**: *Wolterstorffiella wiggeri*° Herre, 1950 †
**KG**: *Wolterstorffiella*° Herre, 1950 †
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

***Wolterstorffina*** Mertens, 1939 • **KY**
**ST**: **PO.KN** • **CI**: h1632 • **ID**: 130
**PN**: *Nectophryne parvipalmata* Werner, 1898
**PK**: *Nectophryne parvipalmata** Werner, 1898
**KG**: *Wolterstorffina** Mertens, 1939
**KF**: *BUFONIDAE* 1825.gb.f004

*Wurana* Li[+2], 2006 • **AK**
**ST**: **PO.JD** • **CI**: h1633 • **ID**: 412
**PN**: *Rana tormotus* Wu, 1977
**PK**: *Rana tormotus** Wu, 1977
**KG**: *Odorrana** Fei[+2], 1990
**KF**: *RANIDAE* 1796.ba.f001

*Xanthophryne*: Biju[+4] 2009 • **AN**
**ST**: **AL** • **CI**: n0171 • **ID**: 105
**PN**: *Bufo koynayensis* Soman, 1963
**PK**: *Bufo koynayensis** Soman, 1963
**KG**: *Duttaphrynus** Frost[+18], 2006
**KF**: *BUFONIDAE* 1825.gb.f004

*Xenobatrachus* Peters[+1], 1878 • **AK**
**ST**: **PO.JD** • **CI**: h1634 • **ID**: 280
**PN**: *Xenobatrachus ophiodon* Peters[+1], 1878
**PK**: *Xenobatrachus ophiodon*° Peters[+1], 1878
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Xenobius* Borgmeier, 1931 • **ZH**
**ST**: **ZO** • **CI**: zh102

*Xenobius* Zhang[+1], 1985 • **AK**
**ST**: **PO.JH** • **CI**: h1635 • **ID**: 512
**PN**: *Xenobius melanonychus* Zhang[+1], 1985
**PK**: *Pachyhynobius shangchengensis** Fei[+1], 1983
**KG**: *Pachyhynobius** Fei[+1], 1983
**KF**: *HYNOBIIDAE* ||1856.ha.f001||-1859.cb.f002

***Xenohyla*** Izecksohn, 1998 • **KY**
**ST**: **PO.KN** • **CI**: h1636 • **ID**: 195
**PN**: *Hyla truncata* Izecksohn, 1959
**PK**: *Hyla truncata** Izecksohn, 1959
**KG**: *Xenohyla** Izecksohn, 1998
**KF**: *HYLIDAE* 1815.ra.f002-|1825.gb.f001|

***Xenophrys*** Günther, 1864 • **KY**
**ST**: **PO.KN** • **CI**: h1637 • **ID**: 025

**PN**: *Xenophrys monticola* Günther, 1864
**PK**: *Xenophrys monticola*° Günther, 1864
**KG**: *Xenophrys*° Günther, 1864
**KF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

***Xenopus*** Wagler *in* Boie, 1827 • **KY**
**ST**: **PO.KN** • **CI**: h1638 • **ID**: 009
**PN**: *Xenopus boiei* Wagler, 1827
**PK**: *Bufo laevis** Daudin, 1802
**KG**: *Xenopus*[1] Wagler *in* Boie, 1827
**KF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|

*Xenorhina* Peters, 1863 • **AK**
**ST**: **PO.JD** • **CI**: h1639 • **ID**: 280
**PN**: *Bombinator oxycephalus* Schlegel, 1858
**PK**: *Bombinator oxycephalus** Schlegel, 1858
**KG**: *Asterophrys** Tschudi, 1838
**KF**: *MICROHYLIDAE* ||1843.fa.f012||-1931.na.f001

*Xiphoctonus* Gistel, 1848 • **AK**
**ST**: **NL.JD** • **CI**: h1640 • **ID**: 555
**PN**: *Salamandra jeffersoniana* Green, 1827
**PK**: *Salamandra jeffersoniana** Green, 1827
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

*Xiphonura* Tschudi, 1838 • **AK**
**ST**: **PO.JD** • **CI**: h1641 • **ID**: 555
**PN**: *Salamandra jeffersoniana* Green, 1827
**PK**: *Salamandra jeffersoniana** Green, 1827
**KG**: *Ambystoma*[1] Tschudi, 1838
**KF**: *AMBYSTOMATIDAE* 1850.ga.f004

***Yaksha*** Daza[+8], 2020 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1654 • **ID**: †200
**PN**: *Yaksha perettii* Daza[+8], 2020 ‡
**PK**: *Yaksha perettii*° Daza[+8], 2020 †
**KG**: *Yaksha*° Daza[+8], 2020 †
**KF**: *ALBANERPETIDAE* 1982.fa.f001

***Yaotriton*** Dubois[+1], 2009 • **KY**
**ST**: **PO.KN** • **CI**: h1642 • **ID**: 574
**PN**: *Tylototriton asperrimus* Unterstein, 1830
**PK**: *Tylototriton asperrimus** Unterstein, 1830
**KG**: *Yaotriton** Dubois[+1], 2009
**KF**: *SALAMANDRIDAE* 1820.ga.f002

***Yerana*** Jiang[+2], 2006 • **KY**
**ST**: **PO.KN** • **CI**: h1643 • **ID**: 392
**PN**: *Paa* (*Feirana*) *yei* Chen[+2], 2002
**PK**: *Paa* (*Feirana*) *yei** Chen[+2], 2002
**KG**: *Yerana** Jiang[+2], 2006
**KF**: *DICROGLOSSIDAE* 1987.da.f004

***Yizhoubatrachus*** Gao[+1], 2004 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1644 • **ID**: †051
**PN**: *Yizhoubatrachus macilentus* Gao[+1], 2004 ‡
**PK**: *Yizhoubatrachus macilentus*° Gao[+1], 2004 †
**KG**: *Yizhoubatrachus*° Gao[+1], 2004 †
**KF**: **ANURA** Familia *INCERTAE SEDIS*

***Yunganastes*** Padial[+4], 2007 • **KY**
**ST**: **PO.KN** • **CI**: h1645 • **ID**: 079
**PN**: *Eleutherodactylus pluvicanorus* Riva[+1], 1997
**PK**: *Eleutherodactylus pluvicanorus** Riva[+1], 1997
**KG**: *Yunganastes** Padial[+4], 2007
**KF**: *BRACHYCEPHALIDAE* 1858.gc.f002

*Zachaenus* Cope, 1866 • **AK**
**ST**: **PO.JD** • **CI**: h1646 • **ID**: 179
**PN**: *Cystignathus parvulus* Girard, 1853
**PK**: *Cystignathus parvulus** Girard, 1853
**KG**: *Cycloramphus** Tschudi, 1838
**KF**: *CYCLORAMPHIDAE* 1850.bb.f003-|1852.ba.f001|

***Zaissanurus*** Chernov, 1959 ‡ • **KY**
**ST**: **PO.KN** • **CI**: h1647 • **ID**: †170
**PN**: *Zaissanurus beliajevae* Chernov, 1959 ‡
**PK**: *Zaissanurus beliajevae*° Chernov, 1959 †
**KG**: *Zaissanurus*° Chernov, 1959 †
**KF**: *CRYPTOBRANCHIDAE* 1826.fb.f003

*Zakerana* Howlader, 2011 • **AK**
**ST**: **PO.JD** • **CI**: h1648 • **ID**: 378
**PN**: *Rana limnocharis syhadrensis* Annandale, 1919
**PK**: *Rana limnocharis syhadrensis** Annandale, 1919
**KG**: *Minervarya** Dubois[+2], 2001
**KF**: *DICROGLOSSIDAE* 1987.da.f004

*Zaphrissa* Cope, 1866 ‡ • **AK**
**ST**: **PO.JD** • **CI**: h1649 • **ID**: 026
**PN**: *Zaphrissa eurypelis* Cope, 1866 ‡
**PK**: *Pelobates decheni*° Troschel, 1861 †
**KG**: *Pelobates** Wagler, 1830
**KF**: *PELOBATIDAE* 1850.bb.f004

***Zhangixalus*** Li[+3] *in* Jiang[+4], 2019 • **KY**
**ST**: **PO.KN** • **CI**: h1650 • **ID**: 456
**PN**: *Polypedates dugritei* David, 1872
**PK**: *Polypedates dugritei** David, 1872
**KG**: *Zhangixalus** Li[+3] *in* Jiang[+4], 2009
**KF**: *RHACOPHORIDAE* ||1858.gc.f012||-1932.ha.f001

*Zoodioctes* Gistel, 1848 • **AK**
**ST**: **NL.JI** • **CI**: h1651 • **ID**: 409
**PN**: *Hyla erythraea* Schlegel, 1827
**PK**: *Hyla erythraea** Schlegel, 1827
**KG**: *Hylarana** Tschudi, 1838
**KF**: *RANIDAE* 1796.ba.f001

*Zweifelia* Dubois, 1992 • **AK**
**ST**: **PO.JD** • **CI**: h1652 • **ID**: 415
**PN**: *Rana tarahumarae* Boulenger, 1917
**PK**: *Rana tarahumarae** Boulenger, 1917
**KG**: *Lithobates** Fitzinger, 1843
**KF**: *RANIDAE* 1796.ba.f001

## **APPENDIX A6.NFS.** Family-series nomina and taxa of **LISSAMPHIBIA**.

This table provides, in alphabetical order, all lissamphibian family-series (FS) nomina published from 1758 to 31 October 2020, and a few non-lissamphibian senior homonyms of these nomina (in cases where there exist several non-lissamphibian senior homonyms, only that first published is mentioned in this table, as it is enough to make all its junior homonyms invalid). The nomina are listed under the alphabetical order of their protonyms, followed by their status regarding availability, allocation and validity. Then their serial identifier and category identifier are given, as well as their status. In the following lines their relationships (such as neonymy or homonymy) with other nomina, their paronyms, onomatophores, as well as, if relevant, their eunyms and family allocation in the present ergotaxonomy, are indicated. In this table, some of these abbreviations (**AP**, **AN**, **CI**, **JH**) are used for nomina of both the genus- and family-series.

**Protonym** of family-series nomen.

Nomen appearing in one of the Tables of this work, followed by its shortened auctorship and publication date (year), with the following general structure: auctorship + publication year + publication identifier in year + nomen identifier in publication (+ paronym identifier). Whenever the auctorship consists in more than one auctor, only the name of the first one is given, followed by the number of other auctors, as follows: Duméril$^{+1}$, Frost$^{+18}$ (see examples at the end of this legend). The complete auctorship is given in References in the text above. All family-series aponyms and leipoprotographs appear here followed by their known scriptorship and first date of use.

***Available (hoplonyms) and valid (kyronyms) FS nomina of lissamphibian taxa***

- **KY** • FS nomokyronym (nomen considered valid in *CLAD*).
- **CK** • FS archokyronym (nomen validated through the Plenary Power of the Commission).
- **MK** • Valid FS nomen through validation under Article 35.4.1.
- **PK** • FS nomen valid at low ranks but invalid at high ranks because of partial invalidation through airesy, or under Articles 23.9 or 40.2, or of action of the Commission.
- **RK** • FS mnemokyronym (*nomen protectum* under Reversal of Precedence as defined in Article 23.9).
- **SK** • Valid FS nomen through validation under Article 40.2.

***Available and allocated but invalid FS nomina of lissamphibian taxa***

- **CG** • FS archakyronym (invalidated FS nomen) through invalidation of its nucleogenus under the Plenary Power of the Commission.
- **CI** • FS archakyronym (invalidated FS nomen) through the Plenary Power of the Commission.
- **JD** • Invalid FS nomen (nomakyronym) for being junior doxisonym of an available and valid FS lissamphibian nomen.
- **JG** • Invalid FS nomen (nomakyronym) for being based on a GS nomen being a junior homonym or isonym of an available GS nomen.
- **JH** • Invalid FS nomen (nomakyronym) for being junior homonym of an available FS nomen. In such cases only the earliest senior homonym is given in this table, as its existence is sufficient to preoccupy the spelling of the generic nomen at stake over the whole zoology.
- **JI** • Invalid FS nomen (nomakyronym) for being junior isonym of an available and valid FS lissamphibian nomen.
- **IM** • Invalid FS nomen (nomakyronym) for being based on a GS being a metagraph—i.e., an autoneonym or an ameletograph (incorrect subsequent spelling) of the nomen of its nucleogenus (Article 35.4.1).
- **RI** • FS lethakyronym (*nomen oblitum* under Reversal of Precedence as defined in Article 23.9).
- **SG** • Invalid FS nomen (nomakyronym) for having been based on a GS nomen treated as a junior synonym before 1961, having then been replaced by a junior FS synonym and being then in ‘prevailing usage’ (Article 40.2), and having then taken the original date of the senior synonym although not its author.

***Unavailable or unallocated FS nomina or graphs of lissamphibian taxa***

- **AN** • FS anoplonym (unavailable nomen) of lissamphibian taxon for failing to comply with the criteria of availability of publications or of nomina of the *Code*.
- **AP** • FS anaptonym (nomenclaturally available but taxonomically unallocated lissamphibian nomen).

***FS nomina of non-lissamphibian taxa being involved in relations of homonymy with available FS lissamphibian nomina.*** No further information on these nomina (such as their current validity) is provided here and they do not appear in Tables *CLAD*.

- **ZA** • Available (hoplonym) non-amphibian FS nomen being homonym of a lissamphibian available FS nomen.

***Cases under study***

- **UI** • Status of nomen posing problems, case submitted to the Commission for resolution, nomen considered here as invalid.
- **UV** • Status of nomen posing problems, case submitted to the Commission for resolution, nomen considered here as valid.

**SI, Serial identifier of family-series nomen; CI, Category identifier of family-series patronym; ST, Status of FS nomen (As.Av-Al.Va)**: assignment, availability & allocation, validity & correctness of nomen.

**SI. Serial identifier of FS nomen (*n* = 596).**

**CI. Category identifier of FS nomen.**

- h001, h002, etc. • Numbers of family-series hoplonyms designating recent amphibians taxa (**LISSAMPHIBIA**) (*n* = 488).
- n001, n002, etc. • Numbers of family-series anoplonyms designating recent amphibian taxa (**LISSAMPHIBIA**) (*n* = 104).
- zh01, zh02, etc. • Numbers of family-series hoplonyms designating taxa non including lissamphibians (*n* = 4).

**ST • Nomenclatural and taxonomic status of FS nomen (As.Av-Al.Va)**: As (assignment) + Av-Al (availability and allocation) + Va (validity) of nomen (indicated as a three number code: e.g. 0.10.30 stands for a family-nomen, the nucleogenus of which has been explicitly designated, and it is available and valid).

**As • Criterion of assignment to the family-series (see Table CS-FS):**

**0** • Explicit family-series assignment and rhizonymy (FS1).

**1** • Implicit family-series assignment though unclear nominal-series assignment and rhizonymy (FS2).

**2** • Explicit or implicit family-series assignment through rank parordination or subordination to clear family-series nomen or nomina and arhizonymy or pseudarhizonymy (FS3).

**Av-Al • Category of nomen regarding nomenclatural availability and taxonomic allocation:**

**10** • Hoplonym (available nomen), aptonym (taxonomically allocated nomen) and photonym (taxonomically identified nomen).

**22** • Anoplonym (agnostonym), for missing after 1999 the express mention that the nomen is introduced as a new scientific name (Article 16.1).

**23** • Anoplonym (barbaronym) for having been published in non-Latinised form and not having been Latinised and adopted as valid before 1900.

**24** • Anoplonym (arhizonym), for being based on the stem of an unavailable genus-series nomen.

**25** • Anoplonym (arhizonym), for not being based on the stem of an available or unavailable genus-series nomen followed by a simple ending.

**26** • Anoplonym (pseudorhizonym, cenorhizonym), for being based on the stem of an available or unavailable genus-series nomen, but the latter not being referred as valid to the family-series taxon in the publication where the nomen is introduced.

**27** • Anoplonym (pseudorhizonym, auxorhizonym), for being based on the stem of an available or unavailable genus-series nomen, but combined with an ending derived from another or several other terms.

**28** • Anoplonym (gymnonym), for missing after 1930 a description, definition or diagnosis of the taxon for which the new nomen is proposed, or missing reference to such a published statement, and for not being an explicit neonym (Article 13.1).

**29** • Anoplonym (eulabonym), for having been proposed conditionally after 1960 (Article 15.1).

**Va • Category of nomen validity in *CLAD* (see Dubois 2011*a*: figure 5):**

**30** • Kyronym through publication priority over junior homonyms or synonyms.

**31** • Kyronym through airesy among synchronous nomina.

**32** • Kyronym through proedry among synchronous nomina.

**33** • Kyronym (*nomen protectum*, mnemokyronym) through reversal of precedence (Article 23.9).

**34** • Kyronym for being validated through Article 35.4.1 (rejection of senior isonym based on an autoneonym or an incorrect spelling of the nomen of its nucleogenus).

**35** • Kyronym for being validated through Article 40.2 (rejection of nomen having been replaced before 1961 because of synonymy of the nucleogenus and not being in ‘prevailing usage’).

**36** • Kyronym through precedence given to it among isonyms or doxisonyms, or by permanent invalidation of the latter, by the Commission under its Plenary Power.

**37** • Kyronym for low-ranked taxa but exoplonym for higher-ranked taxa as a result of airesy or proedry, or of use of Articles 23.9 (reversal of precedence) or 40.2 (replacement of family-series nomen by a junior nomen because of doxisonymy of nucleogenus), or of conditional invalidation by the Commission under its Plenary Power.

**38** • Case under study, nomen treated here as kyronym.

**40** • Hypnonym for being a junior doxisonym.

**41** • Hypnonym through airesy among doxisonyms.

**42** • Hypnonym through proedry among doxisonyms.

**43** • Hypnonym (*nomen oblitum*) through reversal of precedence among doxisonyms (Article 23.9).

**44** • Hypnonym for having been replaced before 1961 because of doxisonymy of the nucleogenus and not being in ‘prevailing usage’ (Article 40.2).

**45** • Hypnonym (archypnonym) through subservience given to it among doxisonyms by the Commission under its Plenary Power.

**46** • Hypnonym (anaptonym) for being so far taxonomically unallocated.

**50** • Exoplonym for being an anoplonym.

**52** • Exoplonym for being a junior isonym.

**53** • Exoplonym for being based on a nucleogenus being a junior homonym.

**57** • Exoplonym (*nomen oblitum*) through reversal of precedence among isonyms.

**58** • Exoplonym for being based on a metagraph, i.e., an autoneonym or an incorrect spelling of the nomen of its nucleogenus (Article 35.4.1).

**61** • Exoplonym (archexoplonym) through having been invalidated by the Commission under its Plenary Power.

**62** • Exoplonym (archexoplonym) through its nucleogenus having been invalidated by the Commission under its Plenary Power.

**99** • Hoplonym, nomenclatural status regarding validity not explored here, being irrelevant for this study.

**RL • Relationships of neonymy, allelonymy, homonymy and precedence** (other than publication priority) of nomen N with other nomina [*Whenever relevant*].

↔ Allelonym of.

↓ Junior homonym of (only earliest one is cited in case of multiple senior homonyms).

← Neonym of

→ Spelling modified by the Commission under the Plenary Power.

≥ Given precedence over synchronous synonym or homonym. • Reference.

≤ Given subservience under synchronous synonym or homonym. • Reference.

> Given precedence over senior synonym or homonym. • Reference.

< Given subservience under junior synonym or homonym. • Reference.

**AI** • Precedence established through airesy (first-reviser action). • Reference.

**PI** • Precedence established through senior nucleogenus being invalid as a result of an action of the Commission under its Plenary Power (see **A.NGS**).

**PM** • Precedence established through senior synonym being based on a metagraph [i.e., an autoneonym or an incorrect spelling of the nomen of its nucleogenus (Article 35.4.1)], taking the original author and date of the latter.

**PP** • Precedence established through Plenary Power of the Commission • Reference.

**PR** • Precedence established through proedry (rank precedence).

**PS** • Precedence among family-series nomina established through junior synonym having replaced the senior synonym before 1961 because of synonymy of the nucleogenera and being in 'prevailing usage' (Article 40.2), and taking the original date of the senior synonym although not its author.

**RI** • Precedence established through 'Reversal of precedence' (Article 23.9). • Reference.

**SP** • Spelling emended through Plenary Power of the Commission • Reference.

**US** • Case under study.

**PR • Paronyms of FS nomen, in the chronological order of their publication.**

Each paronym is given with mention of its scriptor, reference, page and original rank. For abbreviations of ranks, see **A.RNK**.

1758.la., 1801.sa., etc. • Identifier of publication (see '6. References').

.f001, .f002, etc. • Identifier of FS nomen in publication.

-00 • Protonym of nomen.

-01, -02, etc. • Aponyms of nomen (by order of publication).

-c0. • Lectoprotograph of nomen.

-i1 • Leipoprotograph of nomen.

For each nomen, paronyms are given in chronological order of their publication, followed by their original rank.

Information is also given in this field, if relevant, for:

**The resolution of conflicts of zygography among symprotographs (see Dubois 2013):**

**EEA** • Explicit external airesy.

**IIA**• Implicit internal airesy.

**The mention of placement of the nomen on an *Official List* or *Index* by the Commission:**

**IG** • Nomen placed on the *Official Index of Rejected and Invalid Familial Names in Zoology* (Article 80).

**LG** • Nomen placed on the *Official List of Familial Names in Zoology* (Article 80).

**OS • Onomatophore**: nucleospecies (type species) of GS nomen and its mode of designation.

**AM** • Unavailable GS ameletograph (incorrect subsequent spelling) of lissamphibian taxon resulting from inadvertent change of spelling of original protograph.

**AN** • GS anoplonym (unavailable nomen) of lissamphibian taxon for failing to comply with the criteria of availability of publications or of nomina of the *Code*.

**AP** • GS anaptonym (nomenclaturally available but taxonomically unallocated lissamphibian nomen).

**CI** • GS archakyronym (invalidated nomen) through the Plenary Power of the Commission.

**IN** • Available GS nomen (hoplonym) but not mentioned as valid in the FS taxon for which a new FS nomen is proposed, thus making the latter unavailable (Article 11.7.1.1).

**JH** • Invalid GS nomen (nomakyronym) for being junior homonym of an available GS nomen.

**OA** • Original aphory (no included GS taxon mentioned in original work) (for arhizonyms).

**OD** • Original explicit designation (for rhizonyms and arhizonyms).

**OE** • Original implicit etymological designation (for rhizonyms and pseudorhizonyms).

**OM** • Original monophory (for arhizonyms).

**PD** • Present designation of nucleogenus for new FS nomen or of electonucleogenus among prenucleogenera (for arhizonyms).

**PN** • Number of prenucleogenera, among which a electonucleogenus was subsequently designated (for arhizonyms).

The nucleogenus (type genus) of a family-series nomen is a nominal, not biological, genus. In this field, this nominal genus is mentioned first (N1), whether considered valid or invalid in *CLAD*. When the date of this nomen is followed by a second date between parentheses, this means that the first date is that of the protonym and the second date that of first publication of an aponym (which plays no role regarding zoological nomenclature, as an aponym is just a subsequent avatar of a nomen and does not have its own availability). If it is considered invalid in *CLAD*, it is followed by the valid nomen (N2) that applies to this genus in *CLAD*, with the following distinctions between two situations (see also **A.NGS**):

N1 ≡ N2 • N1 is an invalid isonym (objective synonym) of N2.

N1 ≈ N2 • In *CLAD*, N1 is an invalid doxisonym (subjective synonym) of N2.

For arhizonyms, to save space, the complete list of prenucleogenera (which may be as numerous as 187) is not given here, but the number of prenucleogenera is indicated before the nomen of the electonucleogenus and preceded by the sign ».

**EN • Eunyms of kyronym of FS taxa recognised as valid in *CLAD*.**

To save space, nomina in this field are given followed only by their identifiers (see examples below), without their auctorship (given for each nomen of this table).

If more than one taxon bears this nomen in *CLAD*:

• In the line of the valid nomen, all paronyms used as valid in *CLAD* are given.

• In the lines of synonyms of the valid nomen, only the highest and the lowest ranked paronyms used as valid in *CLAD* are mentioned here, separated by the sign »»» and preceded by a number from (1) for the highest ranked to (*n*) for the lowest ranked.

**EF • Eunym of kyronym of family** including the nucleogenus of FS nomen in *CLAD*.

**Abbreviations and symbols present in several fields**:

DOP. • Part of the identifier of a nomen established as new in the present work ('Dubois, Ohler & Pyron').

INR • Information not relevant here (item does not exist).

● • Nomen designating a taxon containing at least one non-recent amphibian (non-**Lissamphibia**) species/taxon: detailed information on this nomen was not sought, not being necessary for the present work.

† • Nomen designating an all-fossil taxon.

## Examples of citation of FS nomina

**Standard case**

*Ranina* Batsch, 1796.ba.f001 • Original authorship and identifier of FS protonym.

*Ranidae* 1796.ba.f001-05 • Shortened identifier of eunym for a FS taxon at a given rank.

**Double authorship following Article 35.4.1 of the *Code* (format of writing modified from Dubois 2015*a*, see '2.3.7.2')**

*Hylarinia* Rafinesque, 1815.ra.f002 • Original authorship and identifier of FS protonym based on a GS metagraph (autoneonym or ameletograph).

*Hylina* Gray, 1825.gb.f001 • Original authorship and identifier of FS protonym based on a GS archaeonym.

*Hylidae* 1815.ra.f002-|1825.gb.f001|-09 • Shortened identifier of eunym with double authorship for a FS taxon at a given rank.

**Double authorship following Article 40.2 of the *Code* (format of writing modified from Dubois 2015*a*, see '2.3.7.2')**

*Polypedatidae* Günther, 1858.gc.f012 • Original authorship and identifier of protonym based on a GS nomen considered before 1961 as an invalid junior synonym.

*Rhacophoridae* Hoffman, 1932.ha.f001 • Original authorship and identifier of protonym based on a GS nomen considered before 1961 as a valid senior synonym of a GS nomen on which a senior FS nomen was based.

*Rhacophoridae* ||1858.gc.f012||-1932.ha.f001-00 • Shortened identifier of eunym with double authorship for a FS taxon at a given rank.

***Acanthixalini* nov.**, DOP.da.f094 • **KY**
**SI**: 535 • **CI**: h428 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Acanthixalini* • *Hoc loco* • **T**
**OS**: *Acanthixalus* 1944 • **PD**
**EN**: *Acanthixalini* DOP.da.f094-00 • **T**
**EF**: *Hyperoliidae* 1943.lb.f001
*Acholotida* Stannius, 1856.sa.f001 • **AN**
**SI**: 126 • **CI**: n042 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Acholotida* • Stannius 1856.sa: 4 • **F**
**OS**: *Siredon* 1829 ≈ *Ambystoma* 1838 • **OM**
**EN**: *Ambystomatidae* 1850.ga.f002-08 • **F**
**EF**: *Ambystomatidae* 1850.ga.f002
*Acoelonotae* Miranda-Ribeiro, 1926.ma.f002 • **AN**
**SI**: 209 • **CI**: n060 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Acoelonotae* • Miranda-Ribeiro 1926.ma: 64 • **UF**
**OS**: » 11 **PN**, including: *Hyla* 1768 • **PD**
**EN**: (1) *Hyloidea* 1815.ra.f002-|1825.ga.f001|-20 • **pF**
»»»
(8) *Hylites* 1815.ra.f002-|1825.ga.f001|-26 • **Cn**
**EF**: *Hylidae* 1815.ra.f002-|1825.ga.f001|
*Acridina* Macleay, 1821.ma.f001 • **ZA-UI**
**SI**: 014 • **CI**: zh01 • **ST**: 0.10.99
**RL**: > *Acridina* Mivart, 1869.ma.f008
> *Acridodea* Karsch, 1893.ka.f001
**PA**: 00 • *Acridina* • Macleay 1821.ma: 436 • **T**
**OS**: *Acrides* 1821 • **OD**
**EN**: ●
**EF**: ●
***Acridina*** Mivart, 1869.ma.f008 • **JH-UV**
**SI**: 168 • **CI**: h116 • **ST**: 0.10.38
**RL**: < *Acridina* Macleay, 1821.ma.f001 • **PR**: Dubois[+2] 2017.da: 54
> *Acridodea* Karsch, 1893.ka.f001 • **PR**: Dubois[+2] 2017.da: 54
**PA**: 00 • *Acridina* • Mivart 1869.ma: 292 • **bF**
01 • *Acridinae* • Kuhn 1965.ka: 96 • **bF**
02 • *Acrisinae* • Dubois[+2] 2017.da: 54 • **bF**
03 • *Acrisini* • Dubois[+2] 2017.da: 55 • **T**
04 • *Acridini* • Dubois[+2] 2017.da: 55 • **T**
05 • *Acrisina* • *Hoc loco* • **bT**
06 • *Acrisinia* • *Hoc loco* • **iT**
**OS**: *Acris* 1841 • **OE**
**EN**: (1) *Acrisina* 1869.ma.f008-05 • **bT**
(2) *Acrisinia* 1869.ma.f008-06 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.ga.f001|
*Acridodea* Karsch, 1893.ka.f001 • **UV**
**SI**: 193 • **CI**: zh04 • **ST**: 0.10.99
**RL**: < *Acridina* Macleay, 1821.ma.f001
< *Acridina* Mivart, 1869.ma.f008
**PA**: 00 • *Acridodea* • Karsch 1893.ka: 51 • UF
**OS**: *Acrida* 1758 • **OE**
**EN**: ●
**EF**: ●
***Adelastinae*** Peloso[+10], 2016.pa.f001 • **KY**
**SI**: 435 • **CI**: h328 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Adelastinae* • Peloso[+10] 2016.pa: 131 • **bF**
**OS**: *Adelastes* 1986 • **OD**
**EN**: *Adelastinae* 2016.pa.f001-00 • **bF**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001
***Adenomeridae*** Hoffmann, 1878.ha.f003 • **KY**
**SI**: 181 • **CI**: h125 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Adenomeridae* • Hoffmann 1878.ha: 613 • **bF**
01 • *Adenomerini* • *Hoc loco* • **T**
**OS**: *Adenomera* 1867 • **OE**
**EN**: *Adenomerini* 1878.ha.f003-01 • **bF**
**EF**: *Leptodactylidae* |1838.ta.f001|-1896.wa.f001
***Adenomidae*** Cope, 1861.ca.f001 • **KY**
**SI**: 147 • **CI**: h098 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Adenominae* • Cope 1861.ca: 371 • **F**
01 • *Adenomidae* • Hoffmann 1878.ha: 614 • **bF**
02 • *Adenominae* • Dubois 1983.da: 273 • **bF**
03 • *Adenomitoes* • *Hoc loco* • **iCn**
04 • *Adenomitues* • *Hoc loco* • **hCn**
**OS**: *Adenomus* 1861 • **OE**
**EN**: (1) *Adenomitoes* 1861.ca.f001-03 • **iCn**
(2) *Adenomitues* 1861.ca.f001-04 • **hCn**
**EF**: *Bufonidae* 1825.ga.f004
***Afrixalinia* nov.**, DOP.da.f097 • **KY**
**SI**: 538 • **CI**: h431 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Afrixalinia* • *Hoc loco* • **iT**
**OS**: *Afrixalus* 1944 • **PD**
**EN**: *Afrixalinia* DOP.da.f097-00 • **iT**
**EF**: *Hyperoliidae* 1943.lb.f001
*Afrocaeciliiti* Lescure[+2], 1986.lb.f005 • **JD**
**SI**: 324 • **CI**: h232 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Afrocaeciliiti* • Lescure[+2] 1986.lb: 164 • **bT**
**OS**: *Afrocaecilia* 1968 ≈ *Boulengerula* 1896 • **OE**
**EN**: (1) *Herpelinae* 1984.la.f001-00 • **bF**
(2) *Herpelini* 1984.la.f001-02 • **T**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.ga.f008|
***Agalychnini* nov.**, DOP.da.f067 • **KY**
**SI**: 508 • **CI**: h401 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Agalychnini* • *Hoc loco* • **T**
**OS**: *Agalychnis* 1864 • **PD**
**EN**: *Agalychnini* DOP.da.f067-00 • **T**
**EF**: *Phyllomedusidae* 1858.gc.f009
*Aglossa* Wiegmann *in* Wiegmann[+1], 1832.wa.f001 • **AN**
**SI**: 039 • **CI**: n017 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Aglossa* • Wiegmann[+1] 1832.wa: 200 • **F**
01 • *Aglossa* • Leunis 1844.la: 128 • **UF**
02 • *Aglossidae* • Mayer 1849.ma: 37 • **F**
03 • *Aglossa* • Leunis 1860.la: 335 • **T**
04 • *Aglossa* • Huene 1931.ha: 311 • **pF**
**OS**: » 2 **PN**, including: *Pipa* 1768 • **PD**

**EN**: (1) *PIPIDAE* 1825.gb.f003-|1826.fb.f002|-07 • **F**
(2) *PIPINAE* 1825.gb.f003-|1826.fb.f002|-13 • **bF**
**EF**: *PIPIDAE* 1825.gb.f003-|1826.fb.f002|

***ALBANERPETONTIDAE*** Fox[+1], 1982.fa.f001 ‡ • **KY**
**SI**: 309 • **CI**: h220 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *ALBANERPETONTIDAE* • Fox[+1] 1982.fa: 118, 120 • **F**
01 • *ALBANERPETONTINAE* • Wiechmann 2003.wa: [2], 20 • **bF**
02 • *ALBANERPETONTOIDEA* • Dubois 2005.da: 6 • **pF**
03 • *ALBANERPETONTOIDIA* • Dubois 2005.da: 6 • **eF**
04 • *ALBANERPETIDAE* • Averianov[+1] 2012.aa: 466 • **F**
**OS**: *Albanerpeton* 1976 ‡ • **OE**
**EN**: *ALBANERPETIDAE* 1982.fa.f001-04 † • **F**
**EF**: *ALBANERPETIDAE* 1982.fa.f001 †

***ALCALINAE*** Brown[+4], 2015.ba.f002 • **KY**
**SI**: 434 • **CI**: h327 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *ALCALINAE* • Brown[+4] 2015.ba: 142 • **bF**
**OS**: *Alcalus* 2015 • **OD**
**EN**: *ALCALINAE* 2015.ba.f002-00 • **bF**
**EF**: *CERATOBATRACHIDAE* 1884.ba.f001

***ALLOBATINAE*** Grant[+9], 2006.gb.f003 • **KY**
**SI**: 372 • **CI**: h278 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *ALLOBATINAE* • Grant[+9] 2006.gb: 4 • **bF**
**OS**: *Allobates* 1988 • **OD**
**EN**: *ALLOBATINAE* 2006.gb.f003-00 • **bF**
**EF**: *AROMOBATIDAE* 2006.gb.f001

*ALLOPHRYNIDAE* Savage, 1973.sa.f002 • **AN**
**SI**: 294 • **CI**: n083 • **ST**: 0.28.50
**RL**: INR
**PA**: 00 • *ALLOPHRYNIDAE* • Savage 1973.sa: 354 • **F**
**OS**: *Allophryne* 1926 • **OE**
**EN**: *ALLOPHRYNIDAE* 1978.ga.f001-00 • **F**
**EF**: *ALLOPHRYNIDAE* 1978.ga.f001

***ALLOPHRYNIDAE*** Goin[+2], 1978.ga.f001 • **KY**
**SI**: 301 • **CI**: h214 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *ALLOPHRYNIDAE* • Goin[+2] 1978.ga: 240 • **F**
01 • *ALLOPHRYNINAE* • Dubois 1983.da: 274 • **bF**
**OS**: *Allophryne* 1926 • **OE**
**EN**: *ALLOPHRYNIDAE* 1978.ga.f001-00 • **F**
**EF**: *ALLOPHRYNIDAE* 1978.ga.f001

***ALSODINA*** Mivart, 1869.ma.f005 • **KY**
**SI**: 165 • **CI**: h113 • **ST**: 0.10.31
**RL**: > *CACOTINA* 1869.ma.f006 • **AI**: Lynch 1971.la: 9
**PA**: 00 • *ALSODINA* • Mivart 1869.ma: 290 • **bF**
01 • *ALSODINI* • Lynch 1969.lb: 3 • **T**
02 • *ALSODIDAE* • Pyron[+1] 2011.pa: 543 • **F**
03 • *ALSODINAE* • Pyron[+1] 2011.pa: 546 • **bF**
**OS**: *Alsodes* 1843 • **OE**
**EN**: *ALSODINAE* 1869.ma.f005-03 • **bF**
**EF**: *CYCLORAMPHIDAE* 1850.bb.f003-|1852.ba.f001|

***ALYTAE*** Fitzinger, 1843.fa.f008 • **KY**
**SI**: 073 • **CI**: h041 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *ALYTAE* • Fitzinger 1843.fa: 32 • **F**
01 • *ALYTINA* • Bonaparte 1850.bb: pl. • **bF**
02 • *ALYTIDAE* • Günther 1858.gc: 346 • **F**
03 • *ALYTIDAE* • Hoffmann 1878.ha: 613 • **bF**
04 • *ALYTINI* • Sanchíz 1984.sa: 61 • **T**
05 • *ALYTINAE* • Dubois 1987.da: 12 • **bF**
06 • *ALITIDAE* • Spadola[+1] 2010.sa: 271 • **F**
07 • *ALYTOIDEA* • *Hoc loco* • **pF**
**OS**: *Alytes* 1829 • **OE**
**EN**: (1) *ALYTOIDEA* 1843.fa.f008-07 • **pF**
(2) *ALYTIDAE* 1843.fa.f008-02 • **F**
**EF**: *ALYTIDAE* 1843.fa.f008

***AMAZOPHRYNELLINIA*** **nov.**, DOP.da.f015 • **KY**
**SI**: 456 • **CI**: h349 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *AMAZOPHRYNELLINIA* • *Hoc loco* • **iT**
**OS**: *Amazophrynella* 2012 • **PD**
**EN**: *AMAZOPHRYNELLINIA* DOP.da.f015-00 • **iT**
**EF**: *BUFONIDAE* 1825.gb.f004

*AMBLYOPES* Goldfuss, 1820.ga.f003 • **AN**
**SI**: 013 • **CI**: n008 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *AMBLYOPES* • Goldfuss 1820.ga: xi • **F**
**OS**: » 3 **PN**, including: *Coecilia* 1801 ≡ *Caecilia* 1758 • **PD**
**EN**: (1) *CAECILIOIDEA* 1814.ra.f003-|1825.gb.f008|-19 • **pF**
»»»
(5) *CAECILIINA* 1814.ra.f003-|1825.gb.f008|-26 • **bT**
**EF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|

*AMBLYSTOMATA* Cope, 1861.ca.f002 • **JD**
**SI**: 148 • **CI**: h099 • **ST**: 0.10.52
**RL**: INR
**PA**: 00 • *AMBLYSTOMATA* • Cope 1861.ca: 373 • **UF**
01 • *AMBLYSTOMIDAE* • Cope 1863.ca: 343 • **F**
02 • *AMBLYSTOMIDA* • Knauer 1878.ka: 98 • **F**
03 • *AMBLYSTOMATINAE* • Boulenger 1882.bc: vii, 31 • **bF**
04 • *AMBLYSTOMATIDAE* • Garman 1884.ga: 37 • **F**
**OS**: *Amblystoma* 1846 ≡ *Ambystoma* 1838 • **OE**
**EN**: *AMBYSTOMATIDAE* 1850.ga.f002-08 • **F**
**EF**: *AMBYSTOMATIDAE* 1850.ga.f002

***AMBYSTOMINA*** Gray, 1850.ga.f002 • **KY**
**SI**: 113 • **CI**: h075 • **ST**: 1.10.36
**RL**: *AMBYSTOMATIDAE* 1850.ga.f002-08 • **SP**: Opinion 649 (Riley[+1] 1963.rb: 102)
**PA**: 00 • *AMBYSTOMINA* • Gray 1850.ga: 32 • **UF**
01 • *AMBYSTOMINA* • Hallowell 1856.ha: 6 • **bF**
02 • *AMBYSTOMATA* • Hallowell 1856.ha: 7, 9 • **UF**
03 • *AMBYSTOMIDAE* • Hallowell 1856.ha: 11 • **bF**
04 • *AMBYSTOMINAE* • Cope 1859.cb: 122 • **bF**
05 • *AMBYSTIDAE* • Hoffmann 1878.ha: 585 • **F**
06 • *AMBYLSTOMIDAE* • Hoffmann 1878.ha: 585 • **F**
07 • *AMBYSTOMIDAE* • Hoffmann 1878.ha: 726 • **F**
08 • *AMBYSTOMATIDAE* • Hay 1892.ha: 415 • **F**
09 • *AMBYSTOMOIDEA* • Herre 1950.ha: 293 • **pF**
10 • *AMBYSTOMATINAE* • Tihen 1958.ta: 1 • **bF** • **IG**: Smith[+1] 1961.sa: 215
11 • *AMBYSTOMATOIDEA* • Dubois 2005.da: 19 • **pF**

12 • *Ambystomatoidae* • Dubois[+1] 2012.da: 147 • **eF**

**OS**: *Ambystoma* 1838 • **OE**

**EN**: *Ambystomatidae* 1850.ga.f002-08 • **F**

**EF**: *Ambystomatidae* 1850.ga.f002

*Amolopinae* Yang, 1989.ya.f001 • **AN**

**SI**: 341 • **CI**: n089 • **ST**: 0.28.50

**RL**: INR

**PA**: 00 • *Amolopinae* • Yang 1989.ya: 256 • **bF**

**OS**: *Amolops* 1865 • **OE**

**EN**: *Amolopina* 1990.fa.f001-03 • **bT**

**EF**: *Ranidae* 1796.ba.f001

***Amolopinae*** Fei[+2], 1990.fa.f001 • **KY**

**SI**: 344 • **CI**: h251 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Amolopinae* • Fei[+2] 1990.fa: 4, 123 • **bF**

01 • *Amolopsinae* • Yang 1991.ya: 172 • **bF**

02 • *Amolopini* • Scott 2005.sa: 4, 527 • **T**

03 • *Amolopina* • *Hoc loco* • **bT**

**OS**: *Amolops* 1865 • **OE**

**EN**: *Amolopina* 1990.fa.f001-03 • **bT**

**EF**: *Ranidae* 1796.ba.f001

***Amphignathodontidae*** Boulenger, 1882.bb.f002 • **KY**

**SI**: 186 • **CI**: h128 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Amphignathodontidae* • Boulenger 1882.bb: xvi, 449 • **F**

01 • *Amphignathodontinae* • Gadow 1901.ga: xi, 188 • **bF**

02 • *Amphignathodontini* • *Hoc loco* • **T**

**OS**: *Amphignathodon* 1882 • **OE**

**EN**: (1) *Amphignathodontinae* 1882.bb.f002-01 • **bF**

(2) *Amphignathodontini* 1882.bb.f002-02 • **T**

**EF**: *Hemiphractidae* 1862.pa.f001

***Amphiumidae*** Gray, 1825.gb.f007 • **KY**

**SI**: 021 • **CI**: h011 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Amphiumidae* • Gray 1825.gb: 216 • **F**

01 • *Amphiumoidea* • Fitzinger 1828.fa: 24 • **F**

02 • *Amphiumidea* • Jourdan 1834.ja: 61 • **F**

03 • *Amphiumoidae* • Jourdan 1834.ja: 61 • **F**

04 • *Amphiumina* • Bonaparte 1838.bb: 393 • **bF**

05 • *Amphiumoides* • Duméril[+1] 1841.da: 52 • **F**

06 • *Amphiumides* • Duméril[+1] 1841.da: table after page 53 • **F**

07 • *Amphiuminina* • Gray 1850.ga: 54, 70 • **UF**

08 • *Amphiumida* • Jan 1857.ja: 55 • **F**

09 • *Amphiumoideae* • Stejneger 1907.sa: 3 • **pF**

10 • *Amphiumoidea* • Dunn 1922.da: 426 • **pF**

11 • *Amphiumoidae* • Hay 1929.ha: 843 • **pF**

12 • *Amphiumoidae* • Dubois[+1] 2012.da: 138 • **eF**

13 • *Amphiumeidae* • *Hoc loco* • **aF**

**OS**: *Amphiuma* 1821 • **OE**

**EN**: (1) *Amphiumoidea* 1825.gb.f007-10 • **pF**

(2) *Amphiumoidae* 1825.gb.f007-12 • **eF**

(3) *Amphiumeidae* 1825.gb.f007-13 • **aF**

(4) *Amphiumidae* 1825.gb.f007-00 • **F**

**EF**: *Amphiumidae* 1825.gb.f007

***Anaxyritoes*** **nov.**, DOP.da.f028 • **KY**

**SI**: 469 • **CI**: h362 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Anaxyritoes* • *Hoc loco* • **iCn**

**OS**: *Anaxyrus* 1845 • **PD**

**EN**: *Anaxyritoes* DOP.da.f028-00 • **iCn**

**EF**: *Bufonidae* 1825.gb.f004

***Andinobatina*** **nov.**, DOP.da.f004 • **KY**

**SI**: 445 • **CI**: h338 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Andinobatina* • *Hoc loco* • **bT**

01 • *Andinobatinia* • *Hoc loco* • **iT**

**OS**: *Andinobates* 2011 • **PD**

**EN**: (1) *Andinobatina* DOP.da.f004-00 • **bT**

(2) *Andinobatinia* DOP.da.f004-01 • **iT**

**EF**: *Dendrobatidae* |1850.bb.f006|-1865.ca.f002

*Andriadina* Bonaparte, 1839.bd.f001 ‡ • **JD**

**SI**: 056 • **CI**: h029 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Andriadina* • Bonaparte 1839.bd: [260] • **bF**

01 • *Andriadidae* • Bonaparte 1845.ba: 378 • **F**

02 • *Andriantidae* • Bonaparte 1850.bb: pl. • **F**

03 • *Andriantina* • Bonaparte 1850.bb: pl. • **bF**

**OS**: *Andrias* 1837 ‡ • **OE**

**EN**: *Cryptobranchidae* 1826.fb.f003-04 • **F**

**EF**: *Cryptobranchidae* 1826.fb.f003

*Aneidini* Dubois, 2008.da.f002 • **AN**

**SI**: 375 • **CI**: n092 • **ST**: 0.22.50

**RL**: INR

**PA**: 00 • *Aneidini* • Dubois 2008.da: 72 • **T**

01 • *Aneiditoi* • Dubois 2008.da: 74 • **Cn**

**OS**: *Aneides* 1851 • **OE**

**EN**: *Aneidinia* 2012.wa.f002-01 • **iT**

**EF**: *Plethodontidae* 1850.ga.f001

*Aneidini* Vieites[+3], 2011.va.f001 • **AN**

**SI**: 411 • **CI**: n099 • **ST**: 0.28.50

**RL**: INR

**PA**: 00 • *Aneidini* • Vieites[+3] 2011.va: 633 • **T**

**OS**: *Aneides* 1851 • **OD**

**EN**: *Aneidinia* 2012.wa.f002-01 • **iT**

**EF**: *Plethodontidae* 1850.ga.f001

***Aneidini*** Wake, 2012.wa.f002 • **KY**

**SI**: 416 • **CI**: h310 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Aneidini* • Wake 2012.wa: 79 • **T**

01 • *Aneidinia* • *Hoc loco* • **iT**

**OS**: *Aneides* 1851 • **OD**

**EN**: *Aneidinia* 2012.wa.f002-01 • **iT**

**EF**: *Plethodontidae* 1850.ga.f001

*Aneidini* Dubois[+1], 2012.da.f007 • **JD**

**SI**: 424 • **CI**: h318 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Aneidini* • Dubois[+1] 2012.da: 117 • **T**

**OS**: *Aneides* 1851 • **OD**

**EN**: *Aneidinia* 2012.wa.f002-01 • **iT**

**EF**: *Plethodontidae* 1850.ga.f001

*Anguinea* Leunis, 1844.la.f004 • **AN**

**SI**: 089 • **CI**: n035 • **ST**: 2.25.50

**RL**: INR
**PA**: 00 • *Anguinea* • Leunis 1844.la: 129 • **F**
**OS**: » 2 **PN**, including: *Coecilia* 1801 ≡ *Caecilia* 1758 • **PD**
**EN**: (1) *Caecilioidea* 1814.ra.f003-|1825.gb.f008|-19 • **pF**
»»»
(5) *Caeciliina* 1814.ra.f003-|1825.gb.f008|-26 • **bT**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Anguinea* Van der Hoeven, 1855.va.f001 • **an**
**SI**: 119 • **CI**: n038 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Anguinea* • Van der Hoeven 1855.va: 462 • **P**
**OS**: » 3 **PN**, including: *Siren* 1766 • **PD**
**EN**: *Sirenidae* 1825.gb.f005-00 • **F**
**EF**: *Sirenidae* 1825.gb.f005

*Angusticoela* Huene, 1948.ha.f001 • **an**
**SI**: 245 • **CI**: n066 • **ST**: 0.25.50
**RL**: INR
**PA**: 00 • *Angusticoela* • Huene 1948.ha: 71 • **F**
**OS**: **OA**: *Leiopelma* 1861 • **PD**
**EN**: (1) *Leiopelmatidae* 1869.ma.f007-|1942.ta.f001|-02 • **F**
(2) *Leiopelmatinae* 1869.ma.f007-|1942.ta.f001|-03 • **bF**
**EF**: *Leiopelmatidae* 1869.ma.f007-|1942.ta.f001|

***Anhydrophryninae* nov.**, DOP.da.f100 • **ky**
**SI**: 541 • **CI**: h434 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Anhydrophryninae* • *Hoc loco* • **bF**
**OS**: *Anhydrophryne* 1919 • **PD**
**EN**: *Anhydrophryninae* DOP.da.f100-00 • **bF**
**EF**: *Cacosternidae* 1931.na.f008

***Annandiini*** Fei[+2], 2010.fa.f008 • **pk**
**SI**: 399 • **CI**: h299 • **ST**: 0.10.37
**RL**: ≤ *Quasipaini* 2010.fa.f007 • **AI**: *hoc loco*
**PA**: 00 • *Annandiini* • Fei[+2] 2010.fa: 17 • **T**
01 • *Annandiina* • *Hoc loco* • **bT**
**OS**: *Annandia* 1992 • **OD**
**EN**: *Annandiina* 2010.fa.f008-01 • **bT**
**EF**: *Dicroglossidae* 1987.da.f004

***Anodonthylina* nov.**, DOP.da.f081 • **ky**
**SI**: 522 • **CI**: h415 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Anodonthylina* • *Hoc loco* • **bT**
**OS**: *Anodonthyla* 1892 • **PD**
**EN**: *Anodonthylina* DOP.da.f081-00 • **bT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

*Anomalocoela* Huene, 1948.ha.f003 • **an**
**SI**: 247 • **CI**: n068 • **ST**: 0.25.50
**RL**: INR
**PA**: 00 • *Anomalocoela* • Huene 1948.ha: 71 • **F**
**OS**: **OA**: *Pelobates* 1830 • **PD**
**EN**: (1) *Pelobatoidea* 1850.bb.f004-13 • **pF**
»»»
(3) *Pelobatidae* 1850.bb.f004-00 • **F**
**EF**: *Pelobatidae* 1850.bb.f004

***Anomaloglossinae*** Grant[+9], 2006.gb.f002 • **ky**
**SI**: 371 • **CI**: h277 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Anomaloglossinae* • Grant[+9] 2006.gb: 4 • **bF**
**OS**: *Anomaloglossus* 2006 • **OD**
**EN**: *Anomaloglossinae* 2006.gb.f002-00 • **bF**
**EF**: *Aromobatidae* 2006.gb.f001

*Anoura* Latreille, 1825.la.f002 • **an**
**SI**: 024 • **CI**: n011 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Anoura* • Latreille 1825.la: 104 • **F**
01 • *Anuri* • Eichwald 1831.eb: 165 • **F**
02 • *Anura* • Giebel 1846.ga: 306 • **F**
**OS**: » 4 **PN**, including: *Rana* 1758 • **PD**
**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**
»»»
(12) *Ranitoes* 1796.ba.f001-38 • **iCn**
**EF**: *Ranidae* 1796.ba.f001

***Ansoniitoes* nov.**, DOP.da.f017 • **ky**
**SI**: 458 • **CI**: h351 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Ansoniitoes* • *Hoc loco* • **iCn**
01 • *Ansoniitues* • *Hoc loco* • **hCn**
**OS**: *Ansonia* 1870 • **PD**
**EN**: (1) *Ansoniitoes* DOP.da.f017-00 • **iCn**
(2) *Ansoniitues* DOP.da.f017-01 • **hCn**
**EF**: *Bufonidae* 1825.gb.f004

*Apneumidae* Brookes, 1828.bc.f002 • **an**
**SI**: 034 • **CI**: n015 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Apneumidae* • Brookes 1828.bc: 16 • **F**
**OS**: *Philhydrus* 1828 **ci** ≈ *Ambystoma* 1838 • **OM**
**EN**: *Ambystomatidae* 1850.ga.f002-08 • **F**
**EF**: *Ambystomatidae* 1850.ga.f002

*Apoda* Oppel, 1811.oc.f001 • **an**
**SI**: 145 • **CI**: n046 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Apoda* • Oppel 1811.oc: 72 • **F**
**OS**: *Caecilia* 1758 • **PD**
**EN**: (1) *Caecilioidea* 1814.ra.f003-|1825.gb.f008|-19 • **pF**
»»»
(5) *Caeciliina* 1814.ra.f003-|1825.gb.f008|-26 • **bT**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Aquipares* Blainville, 1835.ba.f002 • **an**
**SI**: 046 • **CI**: n024 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Aquipares* • Blainville 1835.ba: 277 • **F**
**OS**: » 29 **PN**, including: *Rana* 1758 • **PD**
**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**
»»»
(12) *Ranitoes* 1796.ba.f001-38 • **iCn**
**EF**: *Ranidae* 1796.ba.f001

***Arcovomerinia* nov.**, DOP.da.f086 • **ky**
**SI**: 527 • **CI**: h420 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Arcovomerinia* • *Hoc loco* • **iT**
**OS**: *Arcovomer* 1954 • **PD**
**EN**: *Arcovomerinia* DOP.da.f086-00 • **iT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Aromobatidae*** Grant[+9], 2006.gb.f001 • **ky**

**SI**: 370 • **CI**: h276 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Aromobatidae* • Grant[+9] 2006.gb: 4 • **F** • **PR**

01 • *Aromobatinae* • Grant[+9] 2006.gb: 4 • **bF**

**OS**: *Aromobates* 1991 • **OD**

**EN**: (1) *Aromobatidae* 2006.gb.f001-00 • **F**

(2) *Aromobatinae* 2006.gb.f001-01 • **bF**

**EF**: *Aromobatidae* 2006.gb.f001

***Arthroleptina*** Mivart, 1869.ma.f011 • **ky**

**SI**: 171 • **CI**: h119 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Arthroleptina* • Mivart 1869.ma: 294 • **bF**

01 • *Arthroleptinae* • Noble 1931.na: 515 • **bF**

02 • *Arthroleptidae* • Laurent 1972.la: 200 • **F**

03 • *Arthroleptoidae* • Dubois 1992.da: 309 • **eF**

04 • *Arthroleptini* • Frost[+18] 2006.fa: 234 • **T**

05 • *Arthroleptoidea* • *Hoc loco* • **pF**

**OS**: *Arthroleptis* 1849 • **OE**

**EN**: (1) *Arthroleptoidea* 1869.ma.f011-05 • **pF**

(2) *Arthroleptidae* 1869.ma.f011-02 • **F**

(3) *Arthroleptinae* 1869.ma.f011-01 • **bF**

**EF**: *Arthroleptidae* 1869.ma.f011

***Ascaphidae*** Fejérváry, 1923.fa.f001 • **ky**

**SI**: 206 • **CI**: h143 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Ascaphidae* • Fejérváry 1923.fa: 178 • **F**

01 • *Ascaphoidea* • Lynch 1973.lb: 162 • **bF**

**OS**: *Ascaphus* 1899 • **OE**

**EN**: *Ascaphidae* 1923.fa.f001-00 • **F**

**EF**: *Ascaphidae* 1923.fa.f001

***Assinia*** **nov.**, DOP.da.f076 • **ky**

**SI**: 517 • **CI**: h410 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Assinia* • *Hoc loco* • **iT**

01 • *Assinoa* • *Hoc loco* • **hT**

**OS**: *Assa* 1972 • **PD**

**EN**: (1) *Assinia* DOP.da.f076-00 • **iT**

(2) *Assinoa* DOP.da.f076-01 • **hT**

**EF**: *Myobatrachidae* 1850.sa.f001

***Asterophrydidae*** Günther, 1858.gc.f006 • **ky**

**SI**: 134 • **CI**: h088 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Asterophrydidae* • Günther 1858.gc: 346 • **F**

01 • *Asterophrydina* • Mivart 1869.ma: 294 • **bF**

02 • *Astophrydidae* • Hoffmann 1878.ha: 589 • **bF**

03 • *Asterophrydidae* • Hoffmann 1878.ha: 613 • **bF**

04 • *Asterophryidae* • Fejérváry 1923.fa: 181 • **F**

05 • *Asterophryinae* • Fejérváry 1923.fa: 181 • **bF**

06 • *Asterophrynae* • Fejérváry 1923.fa: 181 • **bF**

07 • *Asterophrynidae* • Parker 1940.pa: 1 • **F**

08 • *Asterophryninae* • Tatarinov 1964.ta: 133 • **bF**

09 • *Asterophrynini* • Burton 1986.bb: 444 • **T**

**OS**: *Asterophrys* 1838 • **OE**

**EN**: (1) *Asterophryinae* 1858.gc.f006-05 • **bF**

(2) *Asterophryini* 1858.gc.f006-09 • **T**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Astrobatrachinae*** Vijayakumar[+8], 2019.va.f001 • **ky**

**SI**: 592 • **CI**: h485 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Astrobatrachinae* • Vijayakumar[+8] 2019.va: 1 • **bF**

01 • *Astrobatrachidae* • *Hoc loco* • **F**

**OS**: *Astrobatrachus* 2019 • **OD**

**EN**: *Astrobatrachidae* 2019.va.f001-01 • **F**

**EF**: *Astrobatrachidae* 2019.va.f001

***Astrodactylidae*** Hogg 1838.ha.f002 • **ji**

**SI**: 049 • **CI**: h023 • **ST**: 0.10.52

**RL**: INR

**PA**: 00 • *Astrodactliidae* • Hogg 1838.ha: 152 • **F**

01 • *Astrodactylae* • Duméril 1863.da: 300 • **F**

**OS**: *Astrodactylus* [1838] 1839 ≡ *Pipa* 1768 • **OE**

**EN**: (1) *Pipidae* 1825.gb.f003-|1826.fb.f002|-07 • **F**

(2) *Pipinae* 1825.gb.f003-|1826.fb.f002|-13 • **bF**

**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Astylosterninae*** Noble, 1927.na.f002 • **ky**

**SI**: 215 • **CI**: h150 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Astylosterninae* • Noble 1927.na: 110 • **bF**

01 • *Astylosternidae* • Bauer 1986.ba: ii • **F**

02 • *Astylosternoidea* • Bauer 1986.ba: iv • **pF**

03 • *Astylosternini* • Frost[+18] 2006.fa: 234 • **T**

**OS**: *Astylosternus* 1898 • **OE**

**EN**: (1) *Astylosterninae* 1927.na.f002-00 • **bF**

(2) *Astylosternini* 1927.na.f002-03 • **T**

**EF**: *Arthroleptidae* 1869.ma.f011

***Atelognathini*** **nov.**, DOP.da.f048 • **ky**

**SI**: 489 • **CI**: h382 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Atelognathini* • *Hoc loco* • **T**

**OS**: *Atelognathus* 1978 • **PD**

**EN**: *Atelognathini* DOP.da.f048-00 • **T**

**EF**: *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|

***Atelopoda*** Fitzinger, 1843.fa.f005 • **ky**

**SI**: 070 • **CI**: h038 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Atelopoda* • Fitzinger 1843.fa: 32 • **F**

01 • *Atelopodes* • Fitzinger 1861.fa: 414 • **F**

02 • *Atelopodidae* • Parker 1934.pa: 8 • **F**

03 • *Atelopodinae* • Davis 1935.da: 91 • **bF**

04 • *Atelopodidade* • Lutz 1954.la: 172 • **F**

05 • *Atelopididae* • Gallardo 1961.ga: 205 • **F**

06 • *Atelopidae* • Hellmich 1963.ha: 659 • **F**

07 • *Atelopodina* • *Hoc loco* • **bT**

**OS**: *Atelopus* 1841 • **OE**

**EN**: *Atelopodina* 1843.fa.f005.07 • **bT**

**EF**: *Bufonidae* 1825.gb.f004

***Atympanophryni*** **nov.**, DOP.da.f001 • **ky**

**SI**: 442 • **CI**: h335 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Atympanophryni* • *Hoc loco* • **T**

**OS**: *Atympanophrys* 1983 • **PD**

**EN**: *Atympanophryni* DOP.da.f001-00 • **T**

**EF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

***Audaciellites* nov.**, DOP.da.f043 • **KY**

**SI**: 484 • **CI**: h377 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Audaciellites* • *Hoc loco* • **Cn**

**OS**: *Audaciella* **nov.** • **PD**

**EN**: *Audaciellites* DOP.da.f043-00 • **Cn**

**EF**: *Centrolenidae* 1951.ta.f001

*Aviturinae* Gubin, 1991.ga.f001 ‡ • **JD**

**SI**: 346 • **CI**: h253 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Aviturinae* • Gubin 1991.ga: 97 • **bF**

**OS**: *Aviturus* 1991 ‡ • **OE**

**EN**: *Cryptobranchidae* 1826.fb.f003-04 • **F**

**EF**: *Cryptobranchidae* 1826.fb.f003

***Barbarophrynitues* nov.**, DOP.da.f018 • **KY**

**SI**: 459 • **CI**: h352 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Barbarophrynitues* • *Hoc loco* • **hCn**

**OS**: *Barbarophryne* 2013 • **PD**

**EN**: *Barbarophrynitues* DOP.da.f018-00 • **hCn**

**EF**: *Bufonidae* 1825.gb.f004

***Barycholinoa* nov.**, DOP.da.f006 • **KY**

**SI**: 447 • **CI**: h340 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Barycholinoa* • *Hoc loco* • **hT**

**OS**: *Barycholos* 1969 • **PD**

**EN**: *Barycholinoa* DOP.da.f006-00 • **hT**

**EF**: *Brachycephalidae* 1858.gc.f002

*Barygenyini* Burton, 1986.bb.f001 • **JD**

**SI**: 317 • **CI**: h225 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Barygenyini* • Burton 1986.bb: 444 • **T**

**OS**: *Barygenys* 1936 • **OE**

**EN**: (1) *Asterophryinae* 1858.gc.f006-05 • **bF**

(2) *Asterophryini* 1858.gc.f006-09 • **T**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

*Batrachi* Batsch, 1788.ba.f001 • **AN**

**SI**: 001 • **CI**: n001 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Batrachi* • Batsch 1788.ba: 437 • **F**

01 • *Batrachia* • Schinz 1833.sa: 213 • **F**

02 • *Batrachoidea* • Van der Hoeven 1833.va: iii, 308 • **F**

03 • *Batrachii* • Van der Hoeven 1855.va: 468 • **F**

**OS**: » 4 **PN**, including: *Rana* 1758 • **PD**

**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**

»»»

(12) *Ranitoes* 1796.ba.f001-38 • **iCn**

**EF**: *Ranidae* 1796.ba.f001

*Batrachophrynidae* Cope, 1875.ca.f001 • **JD**

**SI**: 176 • **CI**: h122 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Batrachophrynidae* • Cope 1875.ca: 9 • **F**

**OS**: *Batrachophrynus* 1873 ≈ *Telmatobius* 1834 • **OE**

**EN**: (1) *Telmatobioidae* 1843.fa.f006-04 • **eF**

»»»

(3) *Telmatobiidae* 1843.fa.f006-01 • **F**

**EF**: *Telmatobiidae* 1843.fa.f006

*Batrachosauroididae* Auffenberg, 1958.aa.f001 ‡ • **JD**

**SI**: 255 • **CI**: h180 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Batrachosauroididae* • Auffenberg 1958.aa: 172 • **F**

01 • *Batrachosauridae* • Vorobyeva[+1] 1996.va: 69 • **F**

02 • *Batrachosauroididea* • Denton[+1] 1998.da : 485 • **F**

03 • *Batrachosaurididae* • Wilson 2006.wb: 61; Sullivan[+1] 2015.sb: 110 • **F**

04 • *Batrachosauroidae* • Böhme[+2] 2011.bb: online supplementary [5] • **F**

**OS**: *Batrachosauroides* 1943 ‡ • **OE**

**EN**: *Hylaeobatrachidae* 1889.la.f001-00 † • **F**

**EF**: *Hylaeobatrachidae* 1889.la.f001 †

*Batrachosepsini* Dubois, 2008.da.f001 • **AN**

**SI**: 374 • **CI**: n091 • **ST**: 0.22.50

**RL**: INR

**PA**: 00 • *Batrachosepsini* • Dubois 2008.da: 71 • **T**

01 • *Batrachosepsita* • Dubois 2008.da: 73 • **iT**

**OS**: *Batrachoseps* 1839 • **OE**

**EN**: *Batrachosepina* 2012.wa.f001-01 • **bT**

**EF**: *Plethodontidae* 1850.ga.f001

*Batrachosepsini* Vieites[+3], 2011.va.f003 • **AN**

**SI**: 413 • **CI**: n101 • **ST**: 0.28.50

**RL**: INR

**PA**: 00 • *Batrachosepsini* • Vieites[+3] 2011.va: 633 • **T**

**OS**: *Batrachoseps* 1839 • **OD**

**EN**: *Batrachosepina* 2012.wa.f001-01 • **bT**

**EF**: *Plethodontidae* 1850.ga.f001

*Batrachosepsini* Jockusch[+3] 2012.ja.f001 • **AN**

**SI**: 414 • **CI**: n102 • **ST**: 0.28.50

**RL**: INR

**PA**: 00 • *Batrachosepini* • Jockusch[+3] 2012.ja: 1 • **T**

**OS**: *Batrachoseps* 1839 • **OD**

**EN**: *Batrachosepina* 2012.wa.f001-01 • **bT**

**EF**: *Plethodontidae* 1850.ga.f001

***Batrachosepini*** Wake, 2012.wa.f001 • **KY**

**SI**: 415 • **CI**: h309 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Batrachosepini* • Wake 2012.wa: 76 • **T**

01 • *Batrachosepina* • *Hoc loco* • **bT**

**OS**: *Batrachoseps* 1839 • **OD**

**EN**: *Batrachosepina* 2012.wa.f001-01 • **bT**

**EF**: *Plethodontidae* 1850.ga.f001

*Batrachosepina* Dubois[+1], 2012.da.f005 • **JD**

**SI**: 422 • **CI**: h316 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Batrachosepina* • Dubois[+1] 2012.da: 115 • **bT**

**OS**: *Batrachoseps* 1839 • **OD**

**EN**: *Batrachosepina* 2012.wa.f001-01 • **bT**

**EF**: *Plethodontidae* 1850.ga.f001

***Batrachylinae*** Gallardo, 1965.ga.f002 • **KY**

**SI**: 270 • **CI**: h188 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Batrachylinae* • Gallardo 1965.ga: 83 • **bF**

01 • *Batrachylini* • Lynch 1971.la: 123 • **T**
02 • *Batrachylidae* • Pyron[+1] 2011.pa: 546 • **F**
**OS**: *Batrachyla* 1843 • **OE**
**EN**: (1) *Batrachylinae* 1965.ga.f002-00 • **bF**
(2) *Batrachylini* 1965.ga.f002-01 • **T**
**EF**: *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|

*Batracinia* Rafinesque, 1815.ra.f003 • **an**
**SI**: 008 • **CI**: n004 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Batracinia* • Rafinesque 1815.ra: 78 • **bF**
**OS**: *Batracinus* 1815 **an** ≡ *Rana* 1758 • **OE**
**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**
»»»
(12) *Ranitoes* 1796.ba.f001-38 • **iCn**
**EF**: *Ranidae* 1796.ba.f001

*Batracophides* Bonaparte, 1831.ba.f001 • **an**
**SI**: 035 • **CI**: n016 • **ST**: 2.25.50
**RL**: ↔ *Caeciliidae* 1814.ra.f003-|1825.gb.f008|-10
**PA**: c0 • *Batracophides* • Bonaparte 1831.ba: 66 • **F** • **EEA**: *Hoc loco*
i1 • *Batrochophides* • Bonaparte 1831.ba: 66 • **F**
**OS**: *Caecilia* 1758 • **OM**
**EN**: (1) *Caecilioidea* 1814.ra.f003-|1825.gb.f008|-19 • **pF**
»»»
(5) *Caeciliina* 1814.ra.f003-|1825.gb.f008|-26 • **bT**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Beddomixalities* nov.**, DOP.da.f121 • **ky**
**SI**: 562 • **CI**: h455 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Beddomixalities* • *Hoc loco* • **bCn**
**OS**: *Beddomixalus* 2013 • **PD**
**EN**: *Beddomixalities* DOP.da.f121-00 • **bCn**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Blairitues* nov.**, DOP.da.f019 • **ky**
**SI**: 460 • **CI**: h353 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Blairitues* • *Hoc loco* • **hCn**
**OS**: *Blaira* **nov.** • **PD**
**EN**: *Blairitues* DOP.da.f019-00 • **hCn**
**EF**: *Bufonidae* 1825.gb.f004

***Blommersiinia* nov.**, DOP.da.f112 • **ky**
**SI**: 553 • **CI**: h446 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Blommersiinia* • *Hoc loco* • **iT**
**OS**: *Blommersia* 1992 • **PD**
**EN**: *Blommersiinia* DOP.da.f112-00 • **iT**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Boehmantinoa* nov.**, DOP.da.f114 • **ky**
**SI**: 555 • **CI**: h448 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Boehmantinoa* • *Hoc loco* • **hT**
**OS**: *Boehmantis* 2006 • **PD**
**EN**: *Boehmantinoa* DOP.da.f114-00 • **hT**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Bokermannohylinia* nov.**, DOP.da.f050 • **ky**
**SI**: 491 • **CI**: h384 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Bokermannohylinia* • *Hoc loco* • **iT**
**OS**: *Bokermannohyla* 2005 • **PD**
**EN**: *Bokermannohylinia* DOP.da.f050-00 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Bolitoglossidae*** Hallowell, 1856.ha.f002 • **ky**
**SI**: 122 • **CI**: h081 • **ST**: 0.10.37
**RL**: ≤ *Hemidactylidae* 1856.ha.f003 • **AI**: Dubois 2005.da: 5
**PA**: 00 • *Bolitoglossidae* • Hallowell 1856.ha: 11 • **bF**
01 • *Bolitoglossidae* • Hoffmann 1878.ha: 585 • **F**
02 • *Bolitoglossinae* • Regal 1966.ra: 405 • **bF**
03 • *Bolitoglossini* • Wake 1966.wa: 1 • **T**
04 • *Bolitoglossina* • *Hoc loco* • **bT**
05 • *Bolitoglossinia* • *Hoc loco* • **iT**
06 • *Bolitoglossinoa* • *Hoc loco* • **hT**
**OS**: *Bolitoglossa* 1854 • **OE**
**EN**: (1) *Bolitoglossini* 1850.ha.f002-03 • **T**
(2) *Bolitoglossina* 1850.ha.f002-04 • **bT**
(3) *Bolitoglossinia* 1850.ha.f002-05 • **iT**
(4) *Bolitoglossinoa* 1850.ha.f002-06 • **hT**
**EF**: *Plethodontidae* 1850.ga.f0014

***Bombinatorina*** Gray, 1825.gb.f002 • **ky**
**SI**: 016 • **CI**: h007 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Bombinatorina* • Gray 1825.gb: 214 • **UF**
01 • *Bombinatoroidea* • Fitzinger 1826.fb: 37 • **F**
02 • *Bombinatoridae* • Gray 1831.gb: 38 • **F**
03 • *Bombinatores* • Goldfuss 1832.ga: 332 • **Zt**
04 • *Bombinatores* • Tschudi 1838.ta: 26 • **F**
05 • *Bombinatores* • Leunis 1844.la: 128 • **UF**
06 • *Bombinatorina* • Bonaparte 1850.bb: pl. • **bF**
07 • *Bombinatorina* • Günther 1858.gc: 344 • **Sc**
08 • *Bombinatores* • Leunis 1860.la: 337 • **T**
09 • *Bombinatoroides* • Hoffmann 1878.ha: 581 • **F**
10 • *Bombinatorina* • Hoffmann 1878.ha: 613. • **F**
11 • *Bombinatoridae* • Hoffmann 1878.ha: 613. • **bF**
12 • *Bombinatorides* • Lataste 1878.lb: 3. • **F**
13 • *Bombinatorida* • Bayer 1885.ba: 18 • **F**
14 • *Bombinatorinae* • Dubois 1983.da: 271 • **bF**
15 • *Bombinatoroidia* • Dubois 2005.da: 7 • **eF**
16 • *Bombinatoroidea* • Dubois 2005.da: 7 • **pF**
**OS**: *Bombinator* 1820 ≈ *Bombina* 1816 • **OE**
**EN**: (1) *Bombinatoroidea* 1825.gb.f002-16 • **pF**
(2) *Bombinatoridae* 1825.gb.f002-02 • **F**
**EF**: *Bombinatoridae* 1825.gb.f002

*Bombininae* Fejérváry, 1921.fb.f002 • **jd**
**SI**: 205 • **CI**: h142 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Bombininae* • Fejérváry 1921.fb: 24 • **bF**
01 • *Bombinidae* • Tatarinov 1964.ta: 8, 128 • **F**
02 • *Bombidae* • Aubekerova-Tleuberdina 1977.ab: 76 • **F**
03 • *Bombinoidea* • Špinar 1983.sa: 53 • **pF**
**OS**: *Bombina* 1816 • **OE**
**EN**: (1) *Bombinatoroidea* 1825.gb.f002-16 • **pF**
(2) *Bombinatoridae* 1825.gb.f002-02 • **F**
**EF**: *Bombinatoridae* 1825.gb.f002

*Bombitatoroidea* Fitzinger, 1832.fa.f002 • **jd**

**SI**: 038 • **CI**: h021 • **ST**: 2.10.40

**RL**: INR

**PA**: 00 • *Bombitatoroidea* • Fitzinger 1832.fa: 329 • **F**

01 • *Bombitatores* • Fitzinger 1843.fa: 32 • **F**

**OS**: *Bombitator* 1830 ≈ *Bombina* 1816 • **OE**

**EN**: (1) *Bombinatoroidea* 1825.gb.f002-16 • **pF**

(2) *Bombinatoridae* 1825.gb.f002-02 • **F**

**EF**: *Bombinatoridae* 1825.gb.f002

***Boophinae*** Vences[+1], 2001.va.f001 • **ky**

**SI**: 357 • **CI**: h264 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Boophinae* • Vences[+1] 2001.va: 85 • **bF**

01 • *Boophini* • Dubois 2005.da: 16 • **T**

02 • *Boophiinae* • Glaw[+1] 2006.ga: 238 • **bF**

**OS**: *Boophis* 1838 • **OD**

**EN**: *Boophini* 2001.va.f001-01 • **T**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Brachycephalina*** Günther, 1858.gc.f002 • **ky**

**SI**: 130 • **CI**: h084 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Brachycephalina* • Günther 1858.gc: 344 • **Sc**

01 • *Brachycephalidae* • Günther 1858.gc: 346 • **F**

02 • *Brachycephalina* • Hoffmann 1878.ha: 613 • **F**

03 • *Brachycephalidae* • Hoffmann 1878.ha: 613 • **bF**

04 • *Brachycephalinae* • Noble 1931.na: 507 • **bF**

05 • *Brachicephalidae* • Smith 1939.sb: 37 • **F**

06 • *Brachycephaloidea* • Padial[+2] 2014.pa: 49 • **pF**

**OS**: *Brachycephalus* 1826 • **OE**

**EN**: (1) *Brachycephalidae* 1858.gc.f002-01 • **F**

(2) *Brachycephalinae* 1858.gc.f002-04 • **bF**

**EF**: *Brachycephalidae* 1858.gc.f002

*Brachymeridae* Günther, 1858.gc.f011 • **jg**

**SI**: 139 • **CI**: h092 • **ST**: 0.10.53

**RL**: INR

**PA**: 00 • *Brachymeridae* • Günther 1858.gc: 346 • **F**

01 • *Brachymeridae* • Hoffmann 1878.ha: 614 • **bF**

**OS**: *Brachymerus* 1847 **jh** ≡ *Phrynomantis* 1867 • **OE**

**EN**: *Phrynomeridae* 1931.na.f013-01 • **F**

**EF**: *Phrynomeridae* 1931.na.f013

***Brachytarsophryini*** **nov.**, DOP.da.f002 • **ky**

**SI**: 443 • **CI**: h336 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Brachytarsophryini* • *Hoc loco* • **T**

**OS**: *Brachytarsophrys* 1983 • **PD**

**EN**: *Brachytarsophryini* DOP.da.f002-00 • **T**

**EF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Bradybatina* Bonaparte, 1850.bb.f013 • **jd**

**SI**: 105 • **CI**: h067 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Bradybatina* • Bonaparte 1850.bb: pl. • **bF**

**OS**: *Bradybates* 1838 ≈ *Pleurodeles* 1830 • **OE**

**EN**: (1) *Pleurodelinae* 1838.ta.f005-08 • **bF**

»»»

(3) *Pleurodelina* 1838.ta.f005-10 • **bT**

**EF**: *Salamandridae* 1820.ga.f002

***Bradytritonitoes*** **nov.**, DOP.da.f137 • **ky**

**SI**: 578 • **CI**: h471 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Bradytritonitoes* • *Hoc loco* • **iCn**

**OS**: *Bradytriton* 1983 • **PD**

**EN**: *Bradytritonitoes* DOP.da.f137-00 • **iCn**

**EF**: *Plethodontidae* 1850.ga.f001

*Branchiata* Gravenhorst, 1843.ga.f001 • **an**

**SI**: 084 • **CI**: n031 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Branchiata* • Gravenhorst 1843.ga: 393 • **F**

**OS**: » 4 **PN**, including: *Siren* 1766 • **PD**

**EN**: *Sirenidae* 1825.gb.f005-00 • **F**

**EF**: *Sirenidae* 1825.gb.f005

*Brasilotyphlili* Lescure[+2], 1986.lb.f008 • **jd**

**SI**: 327 • **CI**: h235 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Brasilotyphlili* • Lescure[+2] 1986.lb: 166 • **iT**

**OS**: *Brasilotyphlus* 1968 • **OE**

**EN**: *Siphonopini* 1850.bb.f017-08 • **T**

**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Brevicipitina*** Bonaparte, 1850.bb.f012 • **ky**

**SI**: 104 • **CI**: h066 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Brevicipitina* • Bonaparte 1850.bb: pl. • **bF**

01 • *Brevicipitidae* • Cope 1867.ca: 191 • **F**

02 • *Brevicipitinae* • Van Kampen 1923.va: x • **bF**

03 • *Brevicipetidae* • Romer 1933.ra: 437 • **F**

04 • *Brevicepitidae* • Miranda Ribeiro 1937.ma: 56 • **F**

05 • *Brevicipinae* • Lynch 1971.la: 203 • **bF**

06 • *Brevicipedidae* • Ardila-Robayo 1979.aa: 456 • **F**

07 • *Brevicepinae* • Bogart[+1] 1981.ba: 59 • **bF**

08 • *Breviceptidae* • Du Preez[+1] 2009.pa: 4 • **F**

09 • ***Brevicipitoidae*** • Zhang[+5] 2013.za: 1904 • **UF**

10 • *Brevicipitoidea* • *Hoc loco* • **pF**

**OS**: *Breviceps* 1820 • **OE**

**EN**: (1) *Brevicipitoidea* 1850.bb.f012-10 • **pF**

(2) *Brevicipitidae* 1850.bb.f012-01 • **F**

(3) *Brevicipitinae* 1850.bb.f012-02 • **bF**

**EF**: *Brevicipitidae* 1850.bb.f012

***Bryophryninoa*** **nov.**, DOP.da.f007 • **ky**

**SI**: 448 • **CI**: h341 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Bryophryninoa* • *Hoc loco* • **hT**

**OS**: *Bryophryne* 2008 • **PD**

**EN**: *Bryophryninoa* DOP.da.f007-00 • **hT**

**EF**: *Brachycephalidae* 1858.gc.f002

***Buergeriinae*** Channing, 1989.ca.f002 • **ky**

**SI**: 343 • **CI**: h250 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Buergeriinae* • Channing 1989.ca: 116 • **bF**

01 • *Buergeriini* • Dubois 1992.da: 335 • **T**

**OS**: *Buergeria* 1838 • **OE**

**EN**: *Buergeriini* 1989.ca.f002-01 • **T**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

*Bufavidae* Fejérváry, 1921.fa.f002 ‡ • **jd**

**SI**: 203 • **CI**: h140 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Bufavidae* • Fejérváry 1921.fa: 30 • **F**

**OS**: *Bufavus* 1885 ‡ ≈ *Bufo* 1764 • **OE**

**EN**: (1) *Bufonoidea* 1825.gb.f004-20 • **pF**

»»»

(10) *Bufonitoes* 1825.gb.f004-33 • **iCn**

**EF**: *Bufonidae* 1825.gb.f004

*Bufoniformes* Duméril[+1], 1841.da.f003 • **an**

**SI**: 062 • **CI**: n029 • **ST**: 2.27.50

**RL**: INR

**PA**: 00 • *Bufoniformes* • Duméril[+1] 1841.da: 50 • **F**

01 • *Bufoniformes* • Desmarest 1856.da: 4 • **F**

**OS**: *Bufo* 1764 • **OE**

**EN**: (1) *Bufonoidea* 1825.gb.f004-20 • **pF**

»»»

(10) *Bufonitoes* 1825.gb.f004-33 • **iCn**

**EF**: *Bufonidae* 1825.gb.f004

***Bufonina*** Gray, 1825.gb.f004 • **ky**

**SI**: 018 • **CI**: h009 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Bufonina* • Gray 1825.gb: 214 • **UC**

01 • *Bufonoidea* • Fitzinger 1826.fb: 37 • **F**

02 • *Bufonidea* • Fitzinger 1827.fa: 264 • **F**

03 • *Bufones* • Fitzinger 1832.fa: 328; Wiegmann[+1] 1832.wa: 202 • **F**

04 • *Bufonoidea* • Fitzinger 1832.fa: 328 • **Gr**

05 • *Bufones* • Goldfuss 1832.ga: 330 • **Zt**

06 • *Bufonina* • Bonaparte 1838.ba: [195] • **bF**

07 • *Bufonini* • Bonaparte 1838.ba: [196] • **UF**

08 • *Bufonidae* • Bell 1839.ba: 105 • **F**

09 • *Bufoidae* • Swainson 1839.sa: 88 • **F**

10 • *Bufonia* • Gravenhorst 1843.ga: 393 • **L**

11 • *Bufones* • Leunis 1844.la: 128 • **UF**

12 • *Bufonia* • Gravenhorst 1845.ga: 43 • **F**

13 • *Bufonina* • Stannius 1856.sa: 5 • **F**

14 • *Bufonina* • Günther 1858.gc: 344 • **Sc**

15 • *Bufones* • Leunis 1860.la: 337 • **T**

16 • *Bufonides* • Bruch 1862.ba: 221 • **F**

17 • *Bufonida* • Haeckel 1866.ha: cxxxii • **F**

18 • *Bufonoides* • Hoffmann 1878.ha: 581 • **F**

19 • *Bufonidae* • Hoffmann 1878.ha: 581 • **bF**

20 • *Bufonoidea* • Gill 1884.gb: 621 • **pF**

21 • *Bufoniidae* • Boulenger 1893.ba: 39 • **F**

22 • *Bufonidi* • Acloque 1900.aa: 489 • **F**

23 • *Bufoninae* • Fejérváry 1917.fa: 152 • **bF**

24 • *Bufonoidea* • Bolkay 1919.ba: 356 • **Ga**

25 • *Bufoninae* • Fejérváry 1921.fb: 26 • **bF**

26 • *Bufonidea* • Lynch 1973.lb: 165 • **pF**

27 • *Bufonini* • *Hoc loco* • **T**

28 • *Bufonina* • *Hoc loco* • **bT**

29 • *Bufoninia* • *Hoc loco* • **iT**

30 • *Bufoninoa* • *Hoc loco* • **hT**

31 • *Bufonites* • *Hoc loco* • **Cn**

32 • *Bufonities* • *Hoc loco* • **bCn**

33 • *Bufonitoes* • *Hoc loco* • **iCn**

**OS**: *Bufo* 1764 • **OE**

**EN**: (1) *Bufonoidea* 1825.gb.f004-20 • **pF**

(2) *Bufonidae* 1825.gb.f004-08 • **F**

(3) *Bufoninae* 1825.gb.f004-23 • **bF**

(4) *Bufonini* 1825.gb.f004-27 • **T**

(5) *Bufonina* 1825.gb.f004-28 • **bT**

(6) *Bufoninia* 1825.gb.f004-29 • **iT**

(7) *Bufoninoa* 1825.gb.f004-30 • **hT**

(8) *Bufonites* 1825.gb.f004-31 • **Cn**

(9) *Bufonities* 1825.gb.f004-32 • **bCn**

(10) *Bufonitoes* 1825.gb.f004-33 • **iCn**

**EF**: *Bufonidae* 1825.gb.f004

***Bufotitoes* nov.**, DOP.da.f022 • **ky**

**SI**: 463 • **CI**: h356 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Bufotitoes* • *Hoc loco* • **iCn**

**OS**: *Bufotes* 1815 • **PD**

**EN**: *Bufotitoes* DOP.da.f022-00 • **iCn**

**EF**: *Bufonidae* 1825.gb.f004

***Cacopinae*** Noble, 1931.na.f011 • **ky**

**SI**: 226 • **CI**: h161 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Cacopinae* • Noble 1931.na: 532 • **bF**

01 • *Cacopinia* • *Hoc loco* • **iT**

**OS**: *Cacopus* 1864 ≡ *Uperodon* 1841 • **OE**

**EN**: *Cacopinia* 1931.na.f011-01 • **iT**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Cacosterninae*** Noble, 1931.na.f008 • **ky**

**SI**: 223 • **CI**: h158 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Cacosterninae* • Noble 1931.na: 527 • **bF**

01 • *Cacosternidae* • *Hoc loco* • **F**

02 • *Cacosternini* • *Hoc loco* • **T**

03 • *Cacosternina* • *Hoc loco* • **bT**

**OS**: *Cacosternum* 1887 • **OE**

**EN**: (1) *Cacosternidae* 1931.na.f008-01 • **F**

(2) *Cacosterninae* 1931.na.f008-00 • **bF**

(3) *Cacosternini* 1931.na.f008-02 • **T**

(4) *Cacosternina* 1931.na.f008-03 • **bT**

**EF**: *Cacosternidae* 1931.na.f008

*Cacotina* Mivart, 1869.ma.f006 • **jd**

**SI**: 166 • **CI**: h114 • **ST**: 0.10.41

**RL**: < *Alsodina* 1869.ma.f005 • **AI**: Lynch 1971.la: 9

**PA**: 00 • *Cacotina* • Mivart 1869.ma: 290 • **bF**

**OS**: *Cacotus* 1869 ≈ *Alsodes* 1843 • **OE**

**EN**: *Alsodidae* 1869.ma.f005-02 • **F**

**EF**: *Alsodidae* 1869.ma.f005

***Caeciliadae*** Gray, 1825.gb.f008 • **ck**

**SI**: 022 • **CI**: h012 • **ST**: 0.10.36

**RL**: > *Cecilinia* 1814.ra.f003 • **PP**: Opinion 1830 (Anonymous 1996.aa: 68)

> *Caeciliini* Kolbe, 1880.ka.f001 • **PP**: Opinion 1830 (Anonymous 1996.aa: 68)

**PA**: 00 • *Caeciliadae* • Gray 1825.gb: 217 • **F**

01 • *Caecilioides* • Fitzinger 1826.fc: 348 • **F**

02 • *Caeciliaria* • Hemprich 1829.ha: xix, 374 • **F**
03 • *Caecilidae* • Bonaparte 1831.ba: 66 • **F**
04 • *Caeciloidei* • Eichwald 1831.eb: 177 • **F**
05 • *Caeciliadea* • Jourdan 1834.ja: 235 • **F**
06 • *Caecilina* • Bonaparte 1839.bf: 16 • **bF**
07 • *Caeciloides* • Duméril[+1] 1841.da: table after page 53 • **F**
08 • *Caecilinia* • Rafinesque 1845.ra: 226. • **F**
09 • *Caecilioidea* • Gistel 1848.gb: 102 • **F**
10 • *Caecilioides* • Gray 1850.ga: 56 • **UF**
11 • *Caeciliidae* • Bonaparte 1850.bb: pl. • **F**
12 • *Caeciliina* • Bonaparte 1850.bb: pl. • **bF**
13 • *Caeciliade* • Bonaparte 1852.ba: 480 • **F**
14 • *Caeciliae* • Van der Hoeven 1855.va: 460 • **F**
15 • *Caeciloidae* • Keferstein 1867.ka: 361 • **F**
16 • *Caeciliaidae* • Smith[+1] 1948.sb: 108 • **F**
17 • *Caeciliinae* • Taylor 1969.ta: 303 • **bF**
18 • *Caecilioides* • Lescure[+2] 1986.lb: 167 • **hF**
19 • *Caecilioidea* • Lescure[+2] 1986.lb: 167 • **pF**
20 • *Caecilioidae* • Lescure[+2] 1986.lb: 168 • **eF**
21 • *Caeciliilae* • Lescure[+2] 1986.lb: 168 • **iF**
22 • *Caeciliaoidea* • Lescure[+1] 1988.la: 20 • **pF**
23 • *Caeciliainae* • Hedges[+2] 1993.ha: 72 • **bF**
24 • *Caecilioidia* • Dubois 2005.da: 21 • **eF**
25 • *Caeciliini* • *Hoc loco* • **T**
26 • *Caeciliina* • *Hoc loco* • **bT**
**OS**: *Caecilia* 1758 • **OE**
**EN**: (1) *Caecilioidea* 1814.ra.f003-|1825.gb.f008|-19 • **pF**
(2) *Caeciliidae* 1814.ra.f003-|1825.gb.f008|-11 • **F**
(3) *Caeciliinae* 1814.ra.f003-|1825.gb.f008|-17 • **bF**
(4) *Caeciliini* 1814.ra.f003-|1825.gb.f008|-25 • **T**
(5) *Caeciliina* 1814.ra.f003-|1825.gb.f008|-26 • **bT**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Caeciliini* Kolbe, 1880.ea.f001 • **za-ci**
**SI**: 184 • **CI**: zh03 • **ST**: 0.10.99
**RL**: < *Caeciliadae* 1825.gb.f008 • **PP**: Opinion 1830 (Anonymous 1996.aa: 68)
**PA**: 00 • *Caeciliini* • Kolbe 1880.ka: 183 • **T**
**OS**: *Caecilius* 1837 • **OE**
**EN**: ●
**EF**: ●

*Calamitae* Wiegmann *in* Wiegmann[+1], 1832.wa.f002 • **an**
**SI**: 040 • **CI**: n018 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Calamitae* • Wiegmann[+1] 1832.wa: 200 • **UF**
01 • *Calamitina* • Gravenhorst 1843.ga: 393 • **L**
02 • *Calamitae* • Wiegmann[+1] 1843.wa: 200 • **F**
03 • *Calamitina* • Gravenhorst 1845.ga: 43 • **F**
**OS**: *Hyla* 1768 • **OM**
**EN**: (1) *Hyloidea* 1815.ra.f002-|1825.gb.f001|-20 • **pF**
»»»
(8) *Hylites* 1815.ra.f002-|1825.gb.f001|-26 • **Cn**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Calamitae* Leunis, 1844.la.f002 • **jg**
**SI**: 087 • **CI**: h052 • **ST**: 1.10.53
**RL**: INR
**PA**: 00 • *Calamitae* • Leunis 1844.la: 128 • **UF**
01 • *Calamitae* • Leunis 1860.la: 336 • **T**
**OS**: *Calamites* 1830 **jh** ≈ *Ranoidea* 1838 • **OE**
**EN**: *Pelodryadinae* 1859.ga.f001-01 • **bF**
**EF**: *Phyllomedusidae* 1858.gc.f009

*Calluellinae* Fei[+2] *in* Fei[+4], 2005.fb.f001 • **jd**
**SI**: 392 • **CI**: h292 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Calluelliinae* • Fei[+2] *in* Fei[+4] 2005.fb: 4, 177, 271 • **bF**
**OS**: *Calluella* 1872 ≈ *Glyphoglossus* 1869 • **OE**
**EN**: (1) *Microhylidae* |1843.fa.f012|-1931.na.f001-01 • **F**
»»»
(4) *Microhylina* |1843.fa.f012|-1931.na.f001-08 • **bT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Callulininae* nov.**, DOP.da.f098 • **ky**
**SI**: 539 • **CI**: h432 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Callulininae* • *Hoc loco* • **bF**
**OS**: *Callulina* 1911 • **PD**
**EN**: *Callulininae* DOP.da.f098-00 • **bF**
**EF**: *Brevicipitidae* 1850.bb.f012

*Callulopini* Dubois, 1988.da.f001 • **jd**
**SI**: 339 • **CI**: h247 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Callulopini* • Dubois 1988.da: 3 • **T**
**OS**: *Callulops* 1888 ≈ *Asterophrys* 1838 • **OD**
**EN**: (1) *Asterophryinae* 1858.gc.f006-05 • **bF**
(2) *Asterophryini* 1858.gc.f006-09 • **T**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

*Calostethina* Mivart, 1869.ma.f009 • **ji**
**SI**: 169 • **CI**: h117 • **ST**: 0.10.52
**RL**: INR
**PA**: 00 • *Calostethina* • Mivart 1869.ma: 293 • **bF**
01 • *Calostethidae* • Cope 1875.ca: 7 • **F**
**OS**: *Calostethus* 1869 ≡ *Colostethus* 1866 • **OE**
**EN**: (1) *Colostethinae* 1867.ca.f001-01 • **bF**
(2) *Colostethini* 1867.ca.f001-02 • **T**
**EF**: *Dendrobatidae* |1850.bb.f006|-1865.ca.f002

***Calyptocephalellinae*** Reig, 1960.ra.f001 • **ky**
**SI**: 263 • **CI**: h184 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Calyptocephalellinae* • Reig 1960.ra: 113 • **bF**
01 • *Calyptocephalellini* • Lynch 1978.la: 42 • **T**
02 • *Calyptocephalellidae* • Bossuyt[+1] 2009.ba: 359 • **F**
**OS**: *Calyptocephalella* 1928 • **OE**
**EN**: *Calyptocephalellidae* 1960.ra.f001-02 • **F**
**EF**: *Calyptocephalellidae* 1960.ra.f001

*Calyptocephalinae* Cei, 1962.ca.f001 • **jg**
**SI**: 266 • **CI**: h186 • **ST**: 0.10.53
**RL**: INR
**PA**: 00 • *Calyptocephalinae* • Cei 1962.ca: 104 • **bF**
**OS**: *Calyptocephalus* 1841 **jh** ≡ *Calyptocephalella* 1928 • **OE**
**EN**: *Calyptocephalellidae* 1960.ra.f001-02 • **F**
**EF**: *Calyptocephalellidae* 1960.ra.f001

***Capensibufonitoes* nov.**, DOP.da.f029 • **ky**
**SI**: 470 • **CI**: h363 • **ST**: 0.10.30
**RL**: INR

**PA**: 00 • *Capensibufonitoes* • *Hoc loco* • **iCn**
**OS**: *Capensibufo* 1980 • **PD**
**EN**: *Capensibufonitoes* DOP.da.f029-00 • **iCn**
**EF**: *Bufonidae* 1825.gb.f004

*Caudata* Oppel, 1811.oc.f003 • **AN**
**SI**: 088 • **CI**: n034 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Caudata* • Oppel 1811.oc: 22 • **F**
**OS**: » 4 **PN**, including: *Salamandra* 1768 ≈ *Salamandra* 1764 • **PD**
**EN**: (1) *Salamandroidea* 1820.ga.f002-21 • **pF**
»»»
(4) *Salamandrini* 1820.ga.f002-28 • **T**
**EF**: *Salamandridae* 1820.ga.f002

*Cecilinia* Rafinesque, 1814.ra.f003 • **CG**
**SI**: 005 • **CI**: h003 • **ST**: 0.10.61
**RL**: < *Caeciliadae* 1825.gb.f008 • **PP**: Opinion 1830 (Anonymous 1996.aa: 68)
**PA**: 00 • *Cecilinia* • Rafinesque 1814.ra: 104 • **F**
01 • *Cecilidae* • Bonaparte 1839.be: 272 • **F**
02 • *Ceciloides* • Duméril 1839.da: 581 • **F**
03 • *Ceciliodes* • Gray 1850.ga: 56 • **UF**
04 • *Ceciliina* • Bonaparte 1852.ba: 480 • **bF**
05 • *Cecilies* • Lataste 1878.lb: 2 • **F**
06 • *Ceciliidae* • Dubois 1985.da: 71 • **F**
**OS**: *Cecilia* 1814 **CI** ≡ *Caecilia* 1758 • **OE**
**EN**: (1) *Caecilioidea* 1814.ra.f003-|1825.gb.f008|-18 • **pF**
»»»
(5) *Caeciliina* 1814.ra.f003-|1825.gb.f008|-25 • **bT**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Centrolenidae*** Taylor, 1951.ta.f001 • **KY**
**SI**: 250 • **CI**: h176 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Centrolenidae* • Taylor 1951.ta: 36 • **F**
01 • *Centroleninae* • Barrio 1968.ba: 165; Lutz 1968.la: 22 • **bF**
02 • *Centrolenoidea* • *Hoc loco* • **pF**
03 • *Centrolenini* • *Hoc loco* • **T**
**OS**: *Centrolene* 1872 • **OE**
**EN**: (1) *Centrolenoidea* 1951.ta.f001-02 • **pF**
(2) *Centrolenidae* 1951.ta.f001-00 • **F**
(3) *Centroleninae* 1951.ta.f001-01 • **bF**
(4) *Centrolenini* 1951.ta.f001-03 • **T**
**EF**: *Centrolenidae* 1951.ta.f001

*Cephalophrynae* Tschudi, 1845.ta.f002 • **AN**
**SI**: 091 • **CI**: n036 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Cephalophrynae* • Tschudi 1845.ta: 169 • **F**
**OS**: *Trachycara* 1845 ≈ *Rhinella* 1826 • **OM**
**EN**: (1) *Phryniscities* 1858.gc.f005-04 • **bCn**: F.11.01.04
(2) *Phryniscitoes* 1858.gc.f005-05 • **iCn**: F.12.02.05
**EF**: *Bufonidae* 1825.gb.f004

***Ceratobatrachidae*** Boulenger, 1884.ba.f001 • **KY**
**SI**: 187 • **CI**: h129 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Ceratobatrachidae* • Boulenger 1884.ba: 212 • **F**
01 • *Ceratobatrachinae* • Gadow 1901.ga: xi, 237 • **bF**
02 • *Ceratobrachidae* • Kuhn 1961.ka: 22 • **F**
03 • *Ceratobrachini* • Dubois 1981.da: 231 • **T**
04 • *Ceratobatracheidae* • *Hoc loco* • **aF**
**OS**: *Ceratobatrachus* 1884 ≈ *Cornufer* 1838 • **OD**
**EN**: (1) *Ceratobatracheidae* 1884.ba.f001-04 • **aF**
(2) *Ceratobatrachidae* 1884.ba.f001-00 • **F**
(3) *Ceratobatrachinae* 1884.ba.f001-01 • **bF**
**EF**: *Ceratobatrachidae* 1884.ba.f001

*Ceratophreidae* Bonaparte, 1850.bb.f007 • **JI**
**SI**: 099 • **CI**: h061 • **ST**: 0.10.52
**RL**: ← *Ceratophrydes* 1838.ta.f002
**PA**: 00 • *Ceratophreidae* • Bonaparte 1850.bb: pl. • **F**
01 • *Ceratophreidina* • Bonaparte 1850.bb: pl. • **bF**
02 • *Ceratophriidae* • Waite 1927.wa: 328 • **F**
**OS**: *Ceratophris* 1829 ≡ *Ceratophrys* 1824 • **OE**
**EN**: (1) *Ceratophryoidea* 1838.ta.f002-14 • **pF**
»»»
(4) *Ceratophryinae* 1838.ta.f002-06 • **bF**
**EF**: *Ceratophryidae* 1838.ta.f002

***Ceratophrydes*** Tschudi 1838.ta.f002 • **KY**
**SI**: 052 • **CI**: h026 • **ST**: 0.10.30
**RL**: ≤ *Cystignathi* 1838.ta.f001 • **AI**: Cope 1866.ca: 88
**PA**: 00 • *Ceratophrydes* • Tschudi 1838.ta: 26 • **F**
01 • *Ceratophrydes* • Bronn 1849.ba: 684 • **UF**
02 • *Ceratophrydidae* • Cope 1863.cb: 50 • **F**
03 • *Ceratophrydes* • Cope 1866.ca: 89 • **Gr**
04 • *Ceratophrydideas* • Miranda-Ribeiro 1926.ma: 153 • **F**
05 • *Ceratophryidae* • Parker 1933.pa: 12 • **F**
06 • *Ceratophryinae* • Parker 1935.pa: 511 • **bF**
07 • *Ceratophydes* • Parker 1940.pa: 1 • **UC**
08 • *Ceratophyinae* • Parker 1940.pa: 2 • **bF**
09 • *Ceratophydae* • Lutz 1954.la: 156 • **F**
10 • *Ceratophryninae* • Reig 1960.ra: 117 • **bF**
11 • *Ceratophrynidae* • Reig[+1] 1963.ra: 125 • **F**
12 • *Ceratophrynae* • Cei 1970.ca: 183 • **bF**
13 • *Ceratophrynini* • Laurent[+1] 1981.la: 7 • **T**
14 • *Ceratophryoidea* • *Hoc loco* • **pF**
15 • *Ceratophryoidae* • *Hoc loco* • **eF**
**OS**: *Ceratophrys* 1824 • **OE**
**EN**: (1) *Ceratophryoidea* 1838.ta.f002-14 • **pF**
(2) *Ceratophryoidae* 1838.ta.f002.15 • **eF**
(3) *Ceratophryidae* 1838.ta.f002-05 • **F**
(4) *Ceratophryinae* 1838.ta.f002-06 • **bF**
**EF**: *Ceratophryidae* 1838.ta.f002

***Ceuthomantidae*** Heinicke[+5], 2009.ha.f001 • **KY**
**SI**: 391 • **CI**: h291 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Ceuthomantidae* • Heinicke[+5] 2009.ha: 1 • **F**
01 • *Ceuthomantinae* • Padial[+2] 2014.pa: 599 • **bF**
**OS**: *Ceuthomantis* 2009 • **OD**
**EN**: *Ceuthomantidae* 2009.ha.f001-00 • **F**
**EF**: *Ceuthomantidae* 2009.ha.f001

***Chaparanina*** **nov.**, DOP.da.f103 • **KY**
**SI**: 544 • **CI**: h437 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Chaparanina* • *Hoc loco* • **bT**
01 • *Chaparaninia* • *Hoc loco* • **iT**

**OS**: *Chaparana* 1939 • **PD**
**EN**: (1) *Chaparanina* DOP.da.f103-00 • **bT**
(2) *Chaparaninia* DOP.da.f103-01 • **iT**
**EF**: *Dicroglossidae* 1987.da.f004

***Chaperininae*** Peloso[+10], 2016.pa.f002 • **KY**
**SI**: 436 • **CI**: h329 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Chaperininae* • Peloso[+10] 2016.pa: 135 • **bF**
01 • *Chaperinina* • *Hoc loco* • **bT**
**OS**: *Chaperina* 1892 • **OD**
**EN**: *Chaperinina* 2016.pa.f002-01 • **bT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Charadrahylinoa*** **nov.**, DOP.da.f054 • **KY**
**SI**: 495 • **CI**: h388 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Charadrahylinoa* • *Hoc loco* • **hT**
**OS**: *Charadrahyla* 2005 • **PD**
**EN**: *Charadrahylinoa* DOP.da.f054-00 • **hT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Chiasmocleini*** **nov.**, DOP.da.f083 • **KY**
**SI**: 524 • **CI**: h417 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Chiasmocleini* • *Hoc loco* • **T**
**OS**: *Chiasmocleis* 1904 • **PD**
**EN**: *Chiasmocleini* DOP.da.f083-00 • **T**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Chikilidae*** Kamei[+9], 2012.ka.f001 • **KY**
**SI**: 427 • **CI**: h321 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Chikilidae* • Kamei[+9] 2012.ka: 1 • **F**
01 • *Chikilini* • *Hoc loco* • **F**
**OS**: *Chikila* 2012 • **OD**
**EN**: *Chikilini* 2012.ka.f001-01 • **T**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Chimerellinoa*** **nov.**, DOP.da.f041 • **KY**
**SI**: 482 • **CI**: h375 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Chimerellinoa* • *Hoc loco* • h**T**
**OS**: *Chimerella* 2009 • **PD**
**EN**: *Chimerellinoa* DOP.da.f041-00 • **hT**
**EF**: *Centrolenidae* 1951.ta.f001

***Chioglossini*** Dubois[+1], 2009.db.f004 • **KY**
**SI**: 388 • **CI**: h288 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Chioglossini* • Dubois[+1] 2009.db: 60 • **T**
**OS**: *Chioglossa* 1864 • **OD**
**EN**: *Chioglossini* 2009.db.f004-00 • **T**
**EF**: *Salamandridae* 1820.ga.f002

***Chirixalites*** **nov.**, DOP.da.f123 • **KY**
**SI**: 564 • **CI**: h457 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Chirixalites* • *Hoc loco* • **Cn**
**OS**: *Chirixalus* 1893 • **PD**
**EN**: *Chirixalites* DOP.da.f123-00 • **Cn**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

*Chiroleptina* Mivart, 1869.ma.f010 • **JG-JD**
**SI**: 170 • **CI**: h118 • **ST**: 0.10.53
**RL**: INR
**PA**: 00 • *Chiroleptina* • Mivart 1869.ma: 294 • **bF**
**OS**: *Chiroleptes* 1859 **JH** ≈ *Ranoidea* 1838 • **OE**
**EN**: *Pelodryadinae* 1859.ga.f001-01 • **bF**
**EF**: *Phyllomedusidae* 1858.gc.f009

*Clinotarsini* Fei[+2], 2010.fa.f011 • **JD**
**SI**: 402 • **CI**: h302 • **ST**: 0.10.42
**RL**: ≤ *Meristogenyinae* 2010.fa.f003 • **PR**: *hoc loco*
**PA**: 00 • *Clinotarsini* • Fei[+2] 2010.fa: 18 • **T**
**OS**: *Clinotarsus* 1869 • **OD**
**EN**: *Meristogenyini* 2010.fa.f003-02 • **T**
**EF**: *Ranidae* 1796.ba.f001

***Cochranellini*** Guayasamin[+5], 2009.ga.f001 • **KY**
**SI**: 389 • **CI**: h289 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Cochranellini* • Guayasamin[+5] 2009.ga: 3 • **T**
01 • *Cochranellina* • *Hoc loco* • **bT**
02 • *Cochranellinia* • *Hoc loco* • **iT**
**OS**: *Cochranella* 1951 • **OD**
**EN**: (1) *Cochranellini* 2009.ga.f001-00 • **T**
(2) *Cochranellina* 2009.ga.f001-01 • **bT**
(3) *Cochranellinia* 2009.ga.f001-02 • **iT**
**EF**: *Centrolenidae* 1951.ta.f001

*Coecilioidea* Fitzinger, 1826.fb.f001 • **JI**
**SI**: 027 • **CI**: h013 • **ST**: 0.10.52
**RL**: INR
**PA**: 00 • *Coecilioidea* • Fitzinger 1826.fb: 35 • **F**
01 • *Coeciliadae* • Brookes 1828.bc: 16 • **F**
02 • *Coeciliae* • Goldfuss 1832.ga: 326 • **F**
03 • *Coecilina* • Bonaparte 1838.bb: 392 • **bF**
04 • *Coeciliea* • Tschudi 1845.tb: 80 • **F**
05 • *Coeciloidei* • Troschel 1848.ta: 661 • **F**
06 • *Coeciliidae* • Gray 1850.ga: 6, 56, 57 • **F**
07 • *Coecilioidei* • Gray 1850.ga: 56 • **UF**
08 • *Coeciliina* • Gray 1850.ga: 56 • **UF**
09 • *Coeciloides* • Bruch 1862.ba: 221 • **F**
10 • *Coecilodes* • Hoffmann 1878.ha: 590 • **F**
11 • *Coeciliida* • Knauer 1878.ka: 92 • **F**
**OS**: *Coecilia* 1801 ≡ *Caecilia* 1758 • **OE**
**EN**: (1) *Caecilioidea* 1814.ra.f003-|1825.gb.f008|-19 • **pF**
»»»
(5) *Caeciliina* 1814.ra.f003-|1825.gb.f008|-26 • **bT**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Coelonotae* Miranda-Ribeiro, 1926.ma.f003 • **JG**
**SI**: 210 • **CI**: h146 • **ST**: 0.10.53
**RL**: INR
**PA**: 00 • *Coelonotae* • Miranda-Ribeiro 1926.ma: 64 • **UF**
**OS**: *Coelonotus* 1920 **JH** ≈ *Fritziana* 1937 • **OE**
**EN**: *Fritzianinae* DOP.da.f013-00 • **bF**
**EF**: *Hemiphractidae* 1862.pa.f001

*Colodactyli* Tschudi, 1845.ta.f001 • **AP**
**SI**: 090 • **CI**: h053 • **ST**: 0.10.46
**RL**: INR
**PA**: 00 • *Colodactyli* • Tschudi 1845.ta: 167 • **F**

01 • *Colodactylidae* • Dubois 1987.da: 11 • **F**
**OS**: *Colodactylus* 1845 **ap** • **OE**
**EN**: **Laevogyrinia** *Incertae sedis*
**EF**: **Laevogyrinia** *Incertae sedis*

***Colostethidae*** Cope, 1867.ca.f001 • **ky**
**SI**: 158 • **CI**: h106 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Colostethidae* • Cope 1867.ca: 191 • **F**
01 • *Colostethinae* • Bauer 1987.bb: 5 • **bF**
02 • *Colostethini* • *Hoc loco* • **T**
**OS**: *Colostethus* 1866 • **OE**
**EN**: (1) *Colostethinae* 1867.ca.f001-01 • **bF**
(2) *Colostethini* 1867.ca.f001-02 • **T**
**EF**: *Dendrobatidae* |1850.bb.f006|-1865.ca.f002

***Conrauini*** Dubois, 1992.da.f001 • **ky**
**SI**: 348 • **CI**: h255 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Conrauini* • Dubois 1992.da: 314 • **T**
01 • *Conrauinae* • Dubois 2005.da: 16 • **bF**
02 • *Conrauidae* • Pyron[+1] 2011.pa: 547 • **F**
03 • *Conrauoidae* • *Hoc loco* • **eF**
**OS**: *Conraua* 1908 • **OD**
**EN**: (1) *Conrauoidae* 1992.da.f001-03 • **eF**
(2) *Conrauidae* 1992.da.f001-02 • **F**
**EF**: *Conrauidae* 1992.da.f001

***Cophomantina*** Hoffmann, 1878.ha.f004 • **ky**
**SI**: 182 • **CI**: h126 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Cophomantina* • Hoffmann 1878.ha: 614 • **F**
01 • *Cophomantini* • Faivovich[+5] 2005.fa: 3 • **T**
02 • *Cophomantinae* • Duellman[+2] 2016.fa: 3 • **bF**
03 • *Cophomantina* • *Hoc loco* • **bT**
04 • *Cophomantinia* • *Hoc loco* • **iT**
**OS**: *Cophomantis* 1870 ≈ *Boana* 1825 • **OE**
**EN**: (1) *Cophomantinae* 1878.ha.f004-02 • **bF**
(2) *Cophomantini* 1878.ha.f004-01 • **T**
(3) *Cophomantina* 1878.ha.f004-03 • **bT**
(4) *Cophomantinia* 1878.ha.f004-04 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Cophylidae*** Cope, 1889.ca.f001 • **ky**
**SI**: 189 • **CI**: h130 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Cophylidae* • Cope 1889.ca: 248 • **F**
01 • *Cophylinae* • Parker 1934.pa: v • **bF**
02 • *Cophylini* • *Hoc loco* • **T**
03 • *Cophylina* • *Hoc loco* • **bT**
**OS**: *Cophyla* 1880 • **OE**
**EN**: (1) *Cophylinae* 1889.ca.f001-01 • **bF**
(2) *Cophylini* 1889.ca.f001-02 • **T**
(3) *Cophylina* 1889.ca.f001-03 • **bT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

*Cordulina* Van der Hoeven, 1855.va.f002 • **an**
**SI**: 120 • **CI**: n039 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Cordulina* • Van der Hoeven 1855.va: 464 • **P**
**OS**: » 3 **PN**, including: *Cryptobranchus* 1821 • **PD**
**EN**: *Cryptobranchidae* 1826.fb.f003-04 • **F**
**EF**: *Cryptobranchidae* 1826.fb.f003

*Cornuferinae* Noble, 1931.na.f007 • **jd**
**SI**: 222 • **CI**: h157 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Cornuferinae* • Noble 1931.na: 521 • **bF**
**OS**: *Cornufer* 1838 • **OE**
**EN**: (1) *Ceratobatracheidae* 1884.ba.f001-04 • **aF**
(2) *Ceratobatrachidae* 1884.ba.f001-00 • **F**
**EF**: *Ceratobatrachidae* 1884.ba.f001

***Corythomantinia*** **nov.**, DOP.da.f065 • **ky**
**SI**: 506 • **CI**: h399 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Corythomantinia* • *Hoc loco* • **iT**
**OS**: *Corythomantis* 1896 • **PD**
**EN**: *Corythomantinia* DOP.da.f065-00 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Craugastoridae*** Hedges[+2], 2008.ha.f001 • **ky**
**SI**: 381 • **CI**: h281 • **ST**: 0.10.31
**RL**: ≥ *Strabomantidae* 2008.ha.f003 • **AI**: Padial[+2] 2014.pa: 52
**PA**: 00 • *Craugastoridae* • Hedges[+2] 2008.ha: 3 • **F**
01 • *Craugastorinae* • Pyron[+1] 2011.pa: 547 • **bF**
02 • *Craugastorini* • *Hoc loco* • **T**
**OS**: *Craugastor* 1862 • **OD**
**EN**: (1) *Craugastorinae* 2008.ha.f001-01 • **bF**
(2) *Craugastorini* 2008.ha.f001-02 • **T**
**EF**: *Brachycephalidae* 1858.gc.f002

***Criniae*** Cope, 1866.ca.f001 • **ky**
**SI**: 154 • **CI**: h104 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Criniae* • Cope 1866.ca: 89 • **Gr**
01 • *Criniinae* • Noble 1931.na: 496 • **bF**
02 • *Criniina* • *Hoc loco* • **bT**
03 • *Criniinia* • *Hoc loco* • **iT**
**OS**: *Crinia* 1838 • **OE**
**EN**: (1) *Criniina* 1866.ca.f001-02 • **bT**
(2) *Criniinia* 1866.ca.f001-03 • **iT**
**EF**: *Myobatrachidae* 1850.sa.f001

*Crossodactylodinae* Fouquet[+6], 2013.fa.f001 • **jd**
**SI**: 430 • **CI**: h324 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Crossodactylodinae* • Fouquet[+6] 2013.fa: 445 • **bF**
**OS**: *Crossodactylodes* 1938 • **OD**
**EN**: *Paratelmatobiidae* 2012.oa.f001-01 • **F**
**EF**: *Paratelmatobiidae* 2012.oa.f001

***Cruziohylini*** **nov.**, DOP.da.f068 • **ky**
**SI**: 509 • **CI**: h402 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Cruziohylini* • *Hoc loco* • **T**
**OS**: *Cruziohyla* 2005 • **PD**
**EN**: *Cruziohylini* DOP.da.f068-00 • **T**
**EF**: *Phyllomedusidae* 1858.gc.f009

***Cryptobatrachidae*** Frost[+18], 2006.fa.f001 • **ky**
**SI**: 367 • **CI**: h273 • **ST**: 0.10.30
**RL**: INR
**PA**: c0 • *Cryptobatrachidae* • Frost[+18] 2006.fa: 6 • **F** • **EEA**: **PD**

i1 • *Cryptobranchidae* • Frost[+18] 2006.fa: 155 • **F**

02 • *Cryptobatrachinae* • Castroviejo-Fischer[+7] 2015.ca: 20 • **bF**

**OS**: *Cryptobatrachus* 1916 • **OD**

**EN**: *Cryptobatrachinae* 2006.fa.f001-02 • **bF**

**EF**: *Hemiphractidae* 1862.pa.f001

***Cryptobranchoidea*** Fitzinger, 1826.fb.f003 • **KY**

**SI**: 029 • **CI**: h015 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Cryptobranchoidea* • Fitzinger 1826.fb: 41 • **F**

01 • *Cryptobranchoidei* • Eichwald 1831.eb: 164 • **F**

02 • *Cryptobranchoideae* • Gray 1850.ga: 51 • **F**

03 • *Cryptobranchoides* • Duméril[+2] 1854.da: 22 • **F**

04 • *Cryptobranchidae* • Claus 1868.cb: 586 • **F**

05 • *Cryptobranchiata* • Wiedersheim 1877.wa: 356 • **T**

06 • *Cryptobranchioides* • Hoffmann 1878.ha: 581 • **F**

07 • *Cryptobranchiata* • Leunis 1883.la: 624 • **F**

08 • *Cryptobranchia* • Zittel 1888.za: 418 • **F**

09 • *Cryptobranchoida* • Cope 1889.ca: 18 • **F**

10 • *Cryptobranchiidae* • Cope 1889.ca: 30 • **F**

11 • *Cryptochidae* • Cope 1889.cb: 861 • **F**

12 • *Cryptobranchoidea* • Dunn 1922.da: 427 • **pF**

13 • *Cryptobranchiae* • Chang 1936.ca: 118 • **F**

14 • *Cryptobranchinae* • Regal 1966.ra: 405 • **bF**

15 • *Crptobranchidae* • Ye[+2] 1993.ya: 64 • **F**

16 • *Cryptodontidae* • Crespo 2001.ca: 112 • **F**

17 • *Cryptobranchoidia* • Dubois 2005.da: 48 • **eF**

**OS**: *Cryptobranchus* 1821 • **OE**

**EN**: *Cryptobranchidae* 1826.fb.f003-04 • **F**

**EF**: *Cryptobranchidae* 1826.fb.f003

***Cryptothylacinae*** **nov.**, DOP.da.f093 • **KY**

**SI**: 534 • **CI**: h427 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Cryptothylacinae* • *Hoc loco* • **bF**

**OS**: *Cryptothylax* 1950 • **PD**

**EN**: *Cryptothylacinae* DOP.da.f093-00 • **bF**

**EF**: *Hyperoliidae* 1943.lb.f001

***Ctenophrynini*** **nov.**, DOP.da.f084 • **KY**

**SI**: 525 • **CI**: h418 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Ctenophrynini* • *Hoc loco* • **T**

**OS**: *Ctenophryne* 1904 • **PD**

**EN**: *Ctenophrynini* DOP.da.f084-00 • **T**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Cycloramphina*** Bonaparte, 1852.ba.f001 • **MK**

**SI**: 117 • **CI**: h079 • **ST**: 0.10.34

**RL**: > *Cyclorhamphina* 1850.bb.f003 • **MK**: Dubois 1985.da: 66

**PA**: 00 • *Cycloramphina* • Bonaparte 1852.ba: 477 • **bF**

01 • *Cycloramphiinae* • Gallardo 1965.ga: 84 • **bF**

02 • *Cycloramphinae* • Ardila-Robayo 1979.aa: 455 • **bF**

03 • *Cycloramphini* • Dubois 1985.da: 66 • **T**

04 • *Cycloramphidae* • Frost[+18] 2006.fa: 6 • **F**

05 • *Cyclorampheidae* • *Hoc loco* • **aF**

**OS**: *Cycloramphus* 1838 • **OE**

**EN**: (1) *Cycloramphеidae* 1850.bb.f003-|1852.ba.f001|-05 • **aF**

(2) *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|-04 • **F**

(3) *Cycloramphinae* 1850.bb.f003-|1852.ba.f001|-02 • **bF**

**EF**: *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|

*Cycloraninae* Parker, 1940.pa.f001 • **JD**

**SI**: 234 • **CI**: h167 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Cycloraninae* • Parker 1940.pa: 2 • **bF**

01 • *Cycloranini* • Lynch 1969.lb: 3 • **T**

02 • *Cycloraniinae* • Reig 1972.ra: 34 • **bF**

**OS**: *Cyclorana* 1867 ≈ *Litoria* 1838 • **OE**

**EN**: *Pelodryadinae* 1859.ga.f001-01 • **bF**

**EF**: *Phyllomedusidae* 1858.gc.f009

*Cyclorhamphina* Bonaparte, 1850.bb.f003 • **MK**

**SI**: 095 • **CI**: h057 • **ST**: 0.10.58

**RL**: < *Cycloramphina* 1852.ba.f001 • **MK**: Dubois 1985.da: 66

**PA**: 00 • *Cyclorhamphina* • Bonaparte 1850.bb: pl. • **bF**

01 • *Cyclorhamphiinae* • Lutz 1954.la: 157 • **bF**

02 • *Cyclorhamphinae* • Lutz 1954.la: 175 • **bF**

03 • *Cyclorhamphini* • Dubois 1983.da: 273 • **T**

**OS**: *Cyclorhamphus* 1847 ≡ *Cycloramphus* 1838 • **OE**

**EN**: (1) *Cycloramphеidae* 1850.bb.f003-|1852.ba.f001|-05 • **aF**

(2) *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|-04 • **F**

**EF**: *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|

***Cynopita*** Dubois[+1], 2009.db.f001 • **KY**

**SI**: 385 • **CI**: h285 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Cynopita* • Dubois[+1] 2009.db: 44 • **iT**

01 • *Cynopinoa* • *Hoc loco* • **hT**

02 • *Cynopites* • *Hoc loco* • **Cn**

**OS**: *Cynops* 1838 • **OD**

**EN**: (1) *Cynopinoa* 2009.db.f001-01 • **hT**

(2) *Cynopites* 2009.db.f001-02 • **Cn**

**EF**: *Salamandridae* 1820.ga.f002

*Cystignathi* Tschudi 1838.ta.f001 • **SG**

**SI**: 051 • **CI**: h025 • **ST**: 0.10.44

**RL**: ≥ *Ceratophrydes* 1838.ta.f002 • **AI**: Cope 1866.ca: 88

< *Leptodactylidae* |1838.ta.f001|-1896.wa.f001 • **PS**: Dubois 1983.da: 273

**PA**: 00 • *Cystignathi* • Tschudi 1838.ta: 25 • **F**

01 • *Cystignathidae* • Günther 1858.gc: 346 • **F**

02 • *Cystignathi* • Cope 1866.ca: 90 • **Gr**

03 • *Cystignathina* • Mivart 1869.ma: 293 • **bF**

04 • *Cystignathidae* • Hoffmann 1878.ha: 613 • **bF**

05 • *Cystignathinae* • Gadow 1901.ga: xi, 211 • **bF**

06 • *Cystygnathinae* • Fejérváry 1918.fa: 119 • **bF**

**OS**: *Cystignathus* 1830 ≈ *Leptodactylus* 1826 • **OE**

**EN**: (1) *Leptodactyloidea* |1838.ta.f001|-1896.wa.f001-03 • **pF**

»»»

(3) *Leptodactylinae* |1838.ta.f001|-1896.wa.f001-01 • **bF**

**EF**: *Leptodactylidae* |1838.ta.f001|-1896.wa.f001

***Dactylethridae*** Hogg 1838.ha.f017 • **KY**

**SI**: 048 • **CI**: h022 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Dactylethridae* • Hogg 1838.ha: 152 • **F**

01 • *Dactylethrina* • Bonaparte 1850.bb: pl. • **bF**

02 • *Dactylethrida* • Knauer 1878.ka: 103 • **F**

03 • *Dactylethrae* • Peters 1882.pa: xv, 179 • **F**

04 • *Dactylethrinae* • Metcalf 1923.ma: 391 • **bF**
05 • *Dactylethrini* • *Hoc loco* • **T**
**OS**: *Dactylethra* 1829 ≈ *Xenopus* 1827 • **OE**
**EN**: (1) *Dactylethrinae* 1838.ha.f001-04 • **bF**
(2) *Dactylethrini* 1838.ha.f001-05 • **T**
**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Dactyletridae* Hoffmann, 1878.ha.f001 • **ji**
**SI**: 179 • **CI**: h123 • **ST**: 0.10.52
**RL**: INR
**PA**: 00 • *Dactyletridae* • Hoffmann 1878.ha: 584 • **F**
**OS**: *Dactyletra* 1878 ≈ *Xenopus* 1827 • **OE**
**EN**: (1) *Dactylethrinae* 1838.ha.f001-04 • **bF**
(2) *Dactylethrini* 1838.ha.f001-05 • **T**
**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Dasypopina* nov.**, DOP.da.f085 • **ky**
**SI**: 526 • **CI**: h419 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Dasypopina* • *Hoc loco* • **bT**
**OS**: *Dasypops* 1924 • **PD**
**EN**: *Dasypopina* DOP.da.f085-00 • **bT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Dendrobatidae*** Cope, 1865.ca.f002 • **ck**
**SI**: 152 • **CI**: h102 • **ST**: 0.10.36
**RL**: > *Phyllobatae* 1843.fa.f007 • **PP**: Opinion 2223 (Anonymous 2009.aa)
**PA**: 00 • *Dendrobatidae* • Cope 1865.ca: 100 • **F**
01 • *Dendrobatinae* • Gadow 1901.ga: xi, 272 • **bF**
02 • *Dendronatinae* • Bauer 1988.ba: 6 • **bF**
03 • *Dendrobatoidae* • Dubois 1992.da: 309 • **eF**
04 • *Dendrobatini* • Grant[+7] 2017.ga: 27 • **T**
05 • *Dendrobatina* • *Hoc loco* • **bT**
**OS**: *Dendrobates* 1830 • **OE**
**EN**: (1) *Dendrobatidae* |1850.bb.f006|-1865.ca.f002-00 • **F**
(2) *Dendrobatinae* |1850.bb.f006|-1865.ca.f002-01• **bF**
(3) *Dendrobatini* |1850.bb.f006|-1865.ca.f002-04• **T**
(4) *Dendrobatina* |1850.bb.f006|-1865.ca.f002-05 • **bT**
**EF**: *Dendrobatidae* |1850.bb.f006|-1865.ca.f002

*Dendrohyadoidea* Fitzinger, 1832.fa.f001 • **ji**
**SI**: 037 • **CI**: h020 • **ST**: 2.10.52
**RL**: INR
**PA**: 00 • *Dendriohyadoidea* • Fitzinger 1832.fa: 327 • **Gr**
**OS**: *Dendrohyas* 1830 ≡ *Hyla* 1768 • **OE**
**EN**: (1) *Hyloidea* 1815.ra.f002-|1825.gb.f001|-20 • **pF**
»»»
(8) *Hylites* 1815.ra.f002-|1825.gb.f001|-26 • **Cn**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Dendrophryniscina*** Jiménez de la Espada, 1870.ja.f001 • **ky**
**SI**: 173 • **CI**: h121 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Dendrophryniscina* • Jiménez de la Espada 1870.ja: 65 • **Sc**
01 • *Dendrophryniscidae* • Jiménez de la Espada 1870.ja: 65 • **F**
02 • *Dendrophryniscinae* • Gadow 1901.ga: xi, 224 • **bF**
03 • *Dendrophryniscinia* • *Hoc loco* • **iF**
**OS**: *Dendrophryniscus* 1870 • **OD**
**EN**: *Dendrophryniscinia* 1870.ja.f001-03 • **iT**
**EF**: *Bufonidae* 1825.gb.f004

***Dendropsophi*** Fitzinger, 1843.fa.f003 • **ky**
**SI**: 068 • **CI**: h036 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Dendropsophi* • Fitzinger 1843.fa: 31 • **F**
01 • *Dendropsophini* • Faivovich[+5] 2005.fa: 3 • **T**
02 • *Dendropsophinae* • Duellman+2 2016.fa: 3 • **bF**
03 • *Dendropsophina* • *Hoc loco* • **bT**
**OS**: *Dendropsophus* 1843 • **OE**
**EN**: (1) *Dendropsophini* 1843.fa.f003.01 • **T**
(3) *Dendropsophina* 1843.fa.f003.03 • **bT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Dendrotritonites* nov.**, DOP.da.f136 • **ky**
**SI**: 577 • **CI**: h470 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Dendrotritonites* • *Hoc loco* • **Cn**
**OS**: *Dendrotriton* 1983 • **PD**
**EN**: *Dendrotritonites* DOP.da.f136-00 • **Cn**
**EF**: *Plethodontidae* 1850.ga.f001

***Dermatonotinia* nov.**, DOP.da.f087 • **ky**
**SI**: 528 • **CI**: h421 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Dermatonotinia* • *Hoc loco* • **iT**
**OS**: *Dermatonotus* 1904 • **PD**
**EN**: *Dermatonotinia* DOP.da.f087-00 • **iT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Dermophinae*** Taylor, 1969.ta.f002 • **ky**
**SI**: 286 • **CI**: h201 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Dermophinae* • Taylor 1969.ta: 303 • **bF**
01 • *Dermophiidae* • Laurent 1984.la: 199 • **F**
02 • *Dermophiinae* • Laurent 1984.la: 199 • **bF**
03 • *Dermophiini* • Lescure[+2] 1986.lb: 166 • **T**
04 • *Dermophiinia* • *Hoc loco* • **iT**
05 • *Dermophiinoa* • *Hoc loco* • **hT**
**OS**: *Dermophis* 1880 • **OE**
**EN**: (1) *Dermophiinia* 1969.ta.f002-04 • **iT**
(2) *Dermophiinoa* 1969.ta.f002-05 • **hT**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Derotremata* Schinz, 1833.sa.f001 • **an**
**SI**: 041 • **CI**: n019 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Derotremata* • Schinz 1833.sa: 196 • **F**
**OS**: » 6 **PN**, including: *Siren* 1766 • **PD**
**EN**: *Sirenidae* 1825.gb.f005-00 • **F**
**EF**: *Sirenidae* 1825.gb.f005

*Derotremen* Haeckel, 1866.ha.f001 • **an**
**SI**: 156 • **CI**: n049 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Derotremen* • Haeckel 1866.ha: cxxxi • **F**
01 • *Derotremata* • Zittel 1888.za: 418 • **F**
**OS**: » 2 **PN**, including: *Cryptobranchus* 1821 • **PD**
**EN**: *Cryptobranchidae* 1826.fb.f003-04 • **F**
**EF**: *Cryptobranchidae* 1826.fb.f003

*Derotreta* Van der Hoeven, 1833.va.f001 • **AN**

**SI**: 043 • **CI**: n021 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Derotreta* • Van der Hoeven 1833.va: iii, 302 • **F**

**OS**: » 5 **PN**, including: *Caecilia* 1758 • **PD**

**EN**: (1) *Caecilioidea* 1814.ra.f003-|1825.gb.f008|-19 • **pF**

»»»

(5) *Caeciliina* 1814.ra.f003-|1825.gb.f008|-26 • **bT**

**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Desmognathina*** Gray, 1850.ga.f003 • **KY**

**SI**: 114 • **CI**: h076 • **ST**: 1.10.30

**RL**: INR

**PA**: 00 • *Desmognathina* • Gray 1850.ga: 40 • **UF**

01 • *Desmognathidae* • Cope 1866.ca: 103 • **F**

02 • *Desmognathinae* • Boulenger 1882.bc: viii, 76 • **bF**

03 • *Dismognathinae* • Dunn 1917.da: 399 • **bF**

04 • *Desmognathini* • Dubois 2005.da: 20 • **T**

05 • *Desmognathina* • *Hoc loco* • **bT**

06 • *Desmognathinia* • *Hoc loco* • **iT**

**OS**: *Desmognathus* 1850 • **OE**

**EN**: (1) *Desmognathina* 1850.ga.f003-05 • **bT**

(2) *Desmognathinia* 1850.ga.f003-06 • **iT**

**EF**: *Plethodontidae* 1850.ga.f001

***Diaglenitoes*** **nov.**, DOP.da.f149 • **KY**

**SI**: 590 • **CI**: h483 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Diaglenitoes* • *Hoc loco* • **iCn**

**OS**: *Diaglena* 1887 • **PD**

**EN**: *Diaglenitoes* DOP.da.f149-00 • **iCn**

**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Diasporina*** **nov.**, DOP.da.f148 • **KY**

**SI**: 589 • **CI**: h482 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Diasporina* • *Hoc loco* • **bT**

**OS**: *Diasporus* 2008 • **PD**

**EN**: *Diasporina* DOP.da.f148-05 • **bT**

**EF**: *Brachycephalidae* 1858.gc.f002

*Dicamptodontinae* Tihen, 1958.ta.f001 • **JD**

**SI**: 256 • **CI**: h181 • **ST**: 0.10.40

**RL**: > *Rhyacotritoninae* 1958.ta.f002 • **AI**: Regal 1966.ra: 405

**PA**: 00 • *Dicamptodontinae* • Tihen 1958.ta: 1 • **bF**

01 • *Dicamptodontidae* • Edwards 1976.ea: 325 • **F**

**OS**: *Dicamptodon* 1870 • **OE**

**EN**: *Ambystomatidae* 1850.ga.f002-08 • **F**

**EF**: *Ambystomatidae* 1850.ga.f002

***Dicroglossini*** Dubois, 1987.da.f004 • **US**

**SI**: 336 • **CI**: h244 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Dicroglossini* • Dubois 1987.da: 57 • **T**

01 • *Dicroglissini* • Laurent 1991.la: 4 • **T**

02 • *Dicroglossinae* • Dubois 1992.da: 313 • **bF**

03 • *Dicroglossidae* • Frost[+18] 2006.fa: 7 • **F**

04 • *Dicrglossinae* • Fei[+2] 2010.fa: 12 • **bF**

05 • *Dicroglosseidae* • *Hoc loco* • **aF**

06 • *Dicroglossina* • *Hoc loco* • **bT**

**OS**: *Dicroglossus* 1860 ≈ *Euphlyctis* 1843 • **OD**

**EN**: (1) *Dicroglosseidae* 1987.da.f004-05 • **aF**

(2) *Dicroglossidae* 1987.da.f004-03 • **F**

(3) *Dicroglossinae* 1987.da.f004-02 • **bF**

(4) *Dicroglossini* 1987.da.f004-00 • **T**

(5) *Dicroglossina* 1987.da.f004-06 • **bT**

**EF**: *Dicroglossidae* 1987.da.f004

*Diplasiocoela* Huene, 1948.ha.f005 • **AN**

**SI**: 249 • **CI**: n070 • **ST**: 0.25.50

**RL**: INR

**PA**: 00 • *Diplasiocoela* • Huene 1948.ha: 71 • **F**

**OS**: » **OA**: *Rana* 1758 • **PD**

**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**

»»»

(12) *Ranitoes* 1796.ba.f001-38 • **iCn**

**EF**: *Ranidae* 1796.ba.f001

***Diplopainia*** **nov.**, DOP.da.f104 • **KY**

**SI**: 545 • **CI**: h438 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Diplopainia* • *Hoc loco* • **iT**

**OS**: *Diplopaa* **nov.** 2016 • **PD**

**EN**: *Diplopainia* DOP.da.f104-00 • **iT**

**EF**: *Dicroglossidae* 1987.da.f004

***Discoglossidae*** Günther, 1858.gc.f004 • **UV**

**SI**: 132 • **CI**: h086 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Discoglossidae* • Günther 1858.gc: 346 • **F**

01 • *Discoglossina* • Mivart 1869.ma: 294 • **bF**

02 • *Dicroglossidae* • Anderson 1871.aa: 38 • **F**

03 • *Discoglossidae* • Hoffmann 1878.ha: 613 • **bF**

04 • *Discoglossoidea* • Gill 1884.gb: 621 • **pF**

05 • *Discoglossinae* • Fejérváry 1921.fb: 25 • **bF**

06 • *Discoglossidyae* • Morescalchi 1995.ma: 868 • **F**

07 • *Dicrglossinae* • Fei[+2] 2010.fa: 12 • **bF**

08 • *Dcrglossinae* • Fei[+2] 2010.fa: 17 • **bF**

**OS**: *Discoglossus* 1837 • **OE**

**EN**: *Discoglossidae* 1858.gc.f004-00 • **F**

**EF**: *Discoglossidae* 1858.gc.f004

*Dorsipares* Blainville, 1835.ba.f001 • **AN**

**SI**: 045 • **CI**: n023 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Dorsipares* • Blainville 1835.ba: 276 • **F**

**OS**: *Pipa* 1768 • **OM**

**EN**: (1) *Pipidae* 1825.gb.f003-|1826.fb.f002|-07 • **F**

(2) *Pipinae* 1825.gb.f003-|1826.fb.f002|-13 • **bF**

**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Dryophytae* Fitzinger, 1843.fa.f002 • **JD**

**SI**: 067 • **CI**: h035 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Dryophytae* • Fitzinger 1843.fa: 31 • **F**

**OS**: *Dryophytes* 1843 ≈ *Hyla* 1768 • OE

**EN**: (1) *Hyloidea* 1815.ra.f002-|1825.gb.f001|-20 • **pF**

»»»

(8) *Hylites* 1815.ra.f002-|1825.gb.f001|-26 • **Cn**

**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Dyscophidae*** Boulenger, 1882.bb.f001 • **KY**

**SI**: 185 • **CI**: h127 • **ST**: 0.10.30

**RL**: INR
**PA**: 00 • *Dyscophidae* • Boulenger 1882.bb: x, 179 • **F**
01 • *Dyscophinae* • Gadow 1901.ga: xi, 235 • **bF**
02 • *Discophidae* • Miranda-Ribeiro 1924.ma: 143 • **F**
03 • *Discophynae* • Tatarinov 1964.ta: 133 • **F**
04 • *Dyscophiidinae* • Kuhn 1965.ka: 843 • **F**
05 • *Dyscophini* • *Hoc loco* • **T**
**OS**: *Dyscophus* 1872 • **OE**
**EN**: *Dyscophini* 1882.bb.f001-05 • **T**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

*Ecaudata* Oppel, 1811.oc.f002 • **AN**
**SI**: 086 • **CI**: n033 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Ecaudata* • Oppel 1811.oc: 72 • **F**
**OS**: » 4 **PN**, including: *Rana* 1758 • **PD**
**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**
»»»
(12) *Ranitoes* 1796.ba.f001-38 • **iCn**
**EF**: *Ranidae* 1796.ba.f001

***Echinotritoninia* nov.**, DOP.da.f147 • **KY**
**SI**: 588 • **CI**: h481 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Echinotritoninia* • *Hoc loco* • **iT**
**OS**: *Echinotriton* 1982 • **PD**
**EN**: *Echinotritoninia* DOP.da.f147-00 • **iT**
**EF**: *Salamandridae* 1820.ga.f002

***Ecnomiohylites* nov.**, DOP.da.f058 • **KY**
**SI**: 499 • **CI**: h392 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Ecnomiohylites* • *Hoc loco* • **Cn**
**OS**: *Ecnomiohyla* 2005 • **PD**
**EN**: *Ecnomiohylites* DOP.da.058-00 • **Cn**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Edalorhinina* nov.**, DOP.da.f071 • **KY**
**SI**: 512 • **CI**: h405 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Edalorhinina* • *Hoc loco* • **bT**
**OS**: *Edalorhina* 1870 • **PD**
**EN**: *Edalorhinini* DOP.da.f071-00 • **bT**
**EF**: *Leptodactylidae* |1838.ta.f001|-1896.wa.f001

***Eleutherodactylinae*** Lutz, 1954.la.f001 • **KY**
**SI**: 251 • **CI**: h177 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Eleutherodactylinae* • Lutz 1954.la: 157 • **bF**
01 • *Eleutherodactylynae* • Lutz 1954.lb: 229 • **bF**
02 • *Eleutherodactylini* • Lynch 1969.lb: 3 • **T**
03 • *Eleutherodactylidae* • Hedges[+2] 2008.ha: 47 • **F**
04 • *Eleutherodactyloidia* • Fouquette[+1] 2014.fa: 6 • **eF**
05 • *Eleutherodactylina* *Hoc loco* • **bT**
**OS**: *Eleutherodactylus* 1841 • **OE**
**EN**: (1) *Eleutherodactylinae* 1954.la.f001-00 • **bF**
(2) *Eleutherodactylini* 1954.la.f001-02 • **T**
(3) *Eleutherodactylina* 1954.la.f001-05 • **bT**
**EF**: *Brachycephalidae* 1858.gc.f002

*Eleutherognathinae* Méhely, 1901.ma.f002 • **AN**
**SI**: 196 • **CI**: n058 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Eleutherognathinae* • Méhely 1901.ma: 171 • **bF**
01 • *Eleutherognathidae* • Kuhn 1967.kb: 22 • **F**
**OS**: » 6 **PN**, including: *Sphenophryne* 1878 ≈ *Asterophrys* 1838 • **PD**
**EN**: (1) *Asterophryinae* 1858.gc.f006-05 • **bF**
(2) *Asterophryini* 1858.gc.f006-09 • **T**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

*Ellipsoglossidae* Hallowell, 1856.ha.f001 • **SG**
**SI**: 121 • **CI**: h080 • **ST**: 0.10.44
**RL**: < *Hynobiinae* 1859.cb.f002 • **PS**: Dubois 1984.da: 114
**PA**: 00 • *Ellipsoglossidae* • Hallowell 1856.ha: 11 • **bF**
01 • *Ellipsoglossidae* • Hoffmann 1878.ha: 585 • **F**
**OS**: *Ellipsoglossa* 1854 ≈ *Hynobius* 1838 • **OE**
**EN**: (1) *Hynobiidae* |1856.ha.f001|-1859.cb.f002-01 • **F**
»»»
(6) *Hynobiinoa* |1856.ha.f001|-1859.cb.f002-07 • **hT**
**EF**: *Hynobiidae* |1856.ha.f001|-1859.cb.f002

*Elosiidae* Miranda-Ribeiro, 1923.mb.f001 • **JD**
**SI**: 207 • **CI**: h144 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Elosiidae* • Miranda-Ribeiro 1923.mb: 827 • **F**
01 • *Elosiinae* • Lutz 1930.la: 195 • **bF**
02 • *Elosiini* • Ardila-Robayo 1979.aa: 385 • **T**
**OS**: *Elosia* 1838 ≈ *Hylodes* 1826 • **OE**
**EN**: *Hylodidae* 1858.gc.f010-00 • **F**
**EF**: *Hylodidae* 1858.gc.f010

*Engistomatidae* Methuen[+1], 1913.ma.f001 • **JD**
**SI**: 198 • **CI**: h135 • **ST**: 0.10.52
**RL**: INR
**PA**: 00 • *Engistomatidae* • Methuen[+1] 1913.ma: 58 • **F**
01 • *Engistomatinae* • Methuen[+1] 1913.ma: 58 • **bF**
**OS**: *Engistoma* 1904 ≡ *Elachistocleis* 1927 • **OE**
**EN**: *Engystomatinia* 1850.bb.f009-08• **iT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Engystomidae*** Bonaparte, 1850.bb.f009 • **KY**
**SI**: 101 • **CI**: h063 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Engystomidae* • Bonaparte 1850.bb: pl. • **F**
01 • *Engystomina* • Bonaparte 1850.bb: pl. • **bF**
02 • *Engystomatidae* • Günther 1858.gc: 346 • **F**
03 • *Engystomidae* • Hoffmann 1878.ha: 613 • **bF**
04 • *Engystomitidae* • Hoffmann 1878.ha: 617 • **bF**
05 • *Engystomida* • Knauer 1878.ka: 108 • **F**
06 • *Engystomata* • Peters 1882.pa: xv, 172 • **F**
07 • *Engystomatinae* • Gadow 1901.ga: xi, 225 • **bF**
08 • *Engystomatinia* • *Hoc loco* • **iT**
**OS**: *Engystoma* 1826 • **OE**
**EN**: *Engystomatinia* 1850.bb.f009-08• **iT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Ensatinina*** Gray, 1850.ga.f005 • **KY**
**SI**: 116 • **CI**: h078 • **ST**: 1.10.37
**RL**: ≤ *Plethodontidae* 1850.ga.f001 • **PR**: Dubois[+1] 2012.da: 98
**PA**: 00 • *Ensatinina* • Gray 1850.ga: 48 • **UF**
01 • *Ensatinini* • Vieites[+3] 2011.va: 633 • **T**
02 • *Ensatinina* • *Hoc loco* • **bT**
**OS**: *Ensatina* 1850 • **OE**

**EN**: *Ensatinina* 1850.ga.f005-02 • **bT**

**EF**: *Plethodontidae* 1850.ga.f001

***Eocaeciliaidae*** Jenkins[+1], 1993.ja.f001 ‡ • **KY**

**SI**: 351 • **CI**: h258 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Eocaeciliaidae* • Jenkins[+1] 1993.ja: 246 • **F**

01 • *Eocaecilidae* • Heatwole[+1] 2000.ha: 1468 • **F**

02 • *Eocaecilioidia* • Dubois 2005.da: 22 • **eF**

03 • *Eocaecilioidea* • Dubois 2005.da: 22 • **pF**

04 • *Eocaeciliidae* • Dubois 2005.da: 22 • **F**

**OS**: *Eocaecilia* 1993 ‡ • **OE**

**EN**: *Eocaeciliidae* 1993.ja.f001-04 † • **F**

**EF**: *Eocaeciliidae* 1993.ja.f001 †

*Eopelobatinae* Špinar[+2], 1971.sa.f001 ‡ • **JD**

**SI**: 289 • **CI**: h204 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Eopelobatinae* • Špinar[+2] 1971.sa: 279 • **bF**

01 • *Eopelobatida* • Eiselt 1988.ea: 54 • **F**

02 • *Eopelobatidae* • Gaudant 1997.ga: 435, 443 • **F**

**OS**: *Eopelobates* 1929 ‡ • **OE**

**EN**: (1) *Pelobatoidea* 1850.bb.f004-13 • **pF**

**»»»**

(3) *Pelobatidae* 1850.bb.f004-00 • **F**

**EF**: *Pelobatidae* 1850.bb.f004

*Eoscapherpetontinae* Nessov, 1981.na.f001 ‡ • **JD**

**SI**: 308 • **CI**: h219 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Eoscapherpetontinae* • Nessov 1981.na: 60 • **bF**

01 • *Eoscapherpetinae* • Marjanović[+1] 2014.ma: 543 • **bF**

**OS**: *Eoscapherpeton* 1981 ‡ • **OE**

**EN**: *Cryptobranchidae* 1826.fb.f003-04 • **F**

**EF**: *Cryptobranchidae* 1826.fb.f003

***Eothecini*** **nov.**, DOP.da.f011 • **KY**

**SI**: 452 • **CI**: h345 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Eothecini* • *Hoc loco* • **T**

**OS**: *Eotheca* 2015 • **PD**

**EN**: *Eothecini* DOP.da.f011-00 • **T**

**EF**: *Hemiphractidae* 1862.pa.f001

*Eoxenopoididae* Laurent, 1948.la.f001 ‡ • **JD**

**SI**: 244 • **CI**: h175 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Eoxenopoididae* • Laurent 1948.la: 1 • F

01 • *Eoxenopididae* • Casamiquela 1959.ca: 7 • F

02 • *Eoxenopodidae* • Casamiquela 1960.ca: 20 • F

03 • *Eoxenopoididade* • Casamiquela 1961.ca: 108 • F

**OS**: *Eoxenopoides* 1931 ‡ • **OE**

**EN**: *Pipidae* 1825.gb.f003-|1826.fb.f002|-07 • **F**

**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Epicria* Fitzinger, 1843.fa.f017 • **CI**

**SI**: 082 • **CI**: h050 • **ST**: 1.10.45

**RL**: < *Ichthyophiidae* 1968.ta.f001 • **PP**: Opinion 1749 (Anonymous 1993.aa: 261)

**PA**: 00 • *Epicria* • Fitzinger 1843.fa: 34 • **F**

01 • *Epicrina* • Bonaparte 1845.ba: 378 • **bF**

02 • *Epicriina* • Bonaparte 1850.bb: pl. • **bF**

03 • *Epicriidae* • Dubois 1984.da: 113 • **F**

04 • *Epicrioides* • Lescure[+2] 1986.lb: 154. • **hF**

05 • *Epicrioidea* • Lescure[+2] 1986.lb: 154. • **pF**

06 • *Epicrioidae* • Lescure[+2] 1986.lb: 154. • **eF**

07 • *Epicriinae* • Lescure[+2] 1986.lb: 155. • **bF**

08 • *Epicriilae* • Lescure[+2] 1986.lb: 155. • **iF**

09 • *Epicriumidae* • Anonymous 1993.aa: 261 • **F**

**OS**: *Epicrium* 1828 ≈ *Ichthyophis* 1826 • **OE**

**EN**: (1) *Ichthyophioidea* 1968.ta.f001-04 • **F**

(2) *Ichthyophiidae* 1968.ta.f001-00 • **F**

**EF**: *Ichthyophiidae* 1968.ta.f001

***Epidaleitues*** **nov.**, DOP.da.f023 • **KY**

**SI**: 464 • **CI**: h357 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Epidaleitues* • *Hoc loco* • **hCn**

**OS**: *Epidalea* 1864 • **PD**

**EN**: *Epidaleitues* DOP.da.f023-00 • **hCn**

**EF**: *Bufonidae* 1825.gb.f004

***Epipedobatini*** **nov.**, DOP.da.f003 • **KY**

**SI**: 444 • **CI**: h337 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Epipedobatini* • *Hoc loco* • **T**

**OS**: *Epipedobates* 1987 • **PD**

**EN**: *Epipedobatini* DOP.da.f003-00 • **T**

**EF**: *Dendrobatidae* |1850.bb.f006|-1865.ca.f002

***Ericabatrachidae*** **nov.**, DOP.da.f099 • **KY**

**SI**: 540 • **CI**: h433 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Ericabatrachoidae* • *Hoc loco* • **eF**

01 • *Ericabatrachidae* • *Hoc loco* • **F**

**OS**: *Ericabatrachus* 1991 • **PD**

**EN**: (1) *Ericabatrachoidae* DOP.da.f099-00 • **eF**

(2) *Ericabatrachidae* DOP.da.f099-01 • **F**

**EF**: *Ericabatrachidae* 2017.da.f97

***Eripaina*** **nov.**, DOP.da.f106 • **KY**

**SI**: 547 • **CI**: h440 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Eripaina* • *Hoc loco* • **bT**

**OS**: *Eripaa* 1992 • **PD**

**EN**: *Eripaina* DOP.da.f106-00 • **bT**

**EF**: *Dicroglossidae* 1987.da.f004

***Espadaraninia*** **nov.**, DOP.da.f040 • **KY**

**SI**: 481 • **CI**: h374 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Espadaraninia* • *Hoc loco* • **iT**

01 • *Espadaraninoa* • *Hoc loco* • **hT**

**OS**: *Espadarana* 2009 • **PD**

**EN**: (1) *Espadaraninia* DOP.da.f040-00 • **iT**

(2) *Espadaraninoa* DOP.da.040-01 • **hT**

**EF**: *Centrolenidae* 1951.ta.f001

*Eubaphidae* Bonaparte, 1850.bb.f006• **SG**

**SI**: 098 • **CI**: h060 • **ST**: 0.10.57

**RL**: < *Dendrobatidae* 1865.ca.f002 • **RI**: Dubois 1982.dc: 273

**PA**: 00 • *Eubaphidae* • Bonaparte 1850.bb: pl. • **F**

01 • *Eubaphina* • Bonaparte 1850.bb: pl. • **bF**

**OS**: *Eubaphus* 1831 ≡ *Dendrobates* 1830 • **OE**

EN: (1) *Dendrobatidae* |1850.bb.f006|-1865.ca.f002-00 • **F**
»»»
(4) *Dendrobatina* |1850.bb.f006|-1865.ca.f002-05• **bT**
EF: *Dendrobatidae* |1850.bb.f006|-1865.ca.f002

***Euproctita*** Dubois[+1], 2009.db.f002 • **KY**
**SI**: 386 • **CI**: h286 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Euproctita* • Dubois[+1] 2009.db: 50 • **iT**
01 • *Euproctinia* • *Hoc loco* • **iT**
**OS**: *Euproctus* 1839 • **OD**
**EN**: *Euproctinia* 2009.db.f002-01 • **iT**
**EF**: *Salamandridae* 1820.ga.f002

*Eupsophiinae* Lutz, 1969.la.f003 • **JD**
**SI**: 282 • **CI**: h199 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Eupsophiinae* • Lutz 1969.la: 281 • **bF**
**OS**: *Eupsophus* 1843 • **OE**
**EN**: *Alsodidae* 1869.ma.f005-02 • **F**
**EF**: *Alsodidae* 1869.ma.f005

***Excidobatinia*** **nov.**, DOP.da.f005 • **KY**
**SI**: 446 • **CI**: h339 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Excidobatinia* • *Hoc loco* • **iT**
**OS**: *Excidobates* 2008 • **PD**
**EN**: *Excidobatinia* DOP.da.f005-00 • **iT**
**EF**: *Dendrobatidae* |1850.bb.f006|-1865.ca.f002

*Exobranches* Lataste, 1878.lb.f001 • **AN**
**SI**: 183 • **CI**: n055 • **ST**: 2.25.50
**RL**: ← *Proteina* 1831.ba.f002
**PA**: 00 • *Exobranches* • Lataste 1878.lb: 3 • **F**
**OS**: *Proteus* 1768 • **AN**
**EN**: (1) *Proteoidae* 1831.ba.f002-10 • **eF**
(2) *Proteidae* 1831.ba.f002-02 • **F**
**EF**: *Proteidae* 1831.ba.f002

***Feihylities*** **nov.**, DOP.da.f124 • **KY**
**SI**: 565 • **CI**: h458 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Feihylities* • *Hoc loco* • **Cn**
**OS**: *Feihyla* 2006 • **PD**
**EN**: *Feihylities* DOP.da.f124-00 • **Cn**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Feiraninia*** **nov.**, DOP.da.f105 • **KY**
**SI**: 546 • **CI**: h439 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Feiraninia* • *Hoc loco* • **iT**
**OS**: *Feirana* 1992 • **PD**
**EN**: *Feiraninia* DOP.da.f105-00 • **iT**
**EF**: *Dicroglossidae* 1987.da.f004

***Fejervaryini*** Fei[+2], 2010.fa.f005 • **KY**
**SI**: 396 • **CI**: h296 • **ST**: 0.10.30
**RL**: INR
**PA**: c0 • *Fejervaryini* • Fei[+2] 2010.fa: 17 • **T** • **EEA**: **PD**
i1 • *Fejervayini* • Fei[+2] 2010.fa: 28 • **T**
**OS**: *Fejervarya* 1915 • **OD**
**EN**: *Fejervaryini* 2010.fa.f005-c0 • **T**
**EF**: *Dicroglossidae* 1987.da.f004

***Flectonotinae*** **nov.**, DOP.da.f012 • **KY**
**SI**: 453 • **CI**: h346 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Flectonotinae* • *Hoc loco* • **bF**
**OS**: *Flectonotus* 1926 • **PD**
**EN**: *Flectonotinae* DOP.da.f012-00 • **bF**
**EF**: *Hemiphractidae* 1862.pa.f001

***Fritzianinae*** **nov.**, DOP.da.f013 • **KY**
**SI**: 454 • **CI**: h347 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Fritzianinae* • *Hoc loco* • **bF**
**OS**: *Fritziana* 1937 • **PD**
**EN**: *Fritzianinae* DOP.da.f013-00 • **bF**
**EF**: *Hemiphractidae* 1862.pa.f001

***Frostiini*** **nov.**, DOP.da.f037 • **KY**
**SI**: 478 • **CI**: h371 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Frostiini* • *Hoc loco* • **T**
**OS**: *Frostius* 1986 • **PD**
**EN**: *Frostiini* DOP.da.f037-00 • **T**
**EF**: *Bufonidae* 1825.gb.f004

***Gastrophrynae*** Fitzinger, 1843.fa.f011 • **PK**
**SI**: 076 • **CI**: h044 • **ST**: 0.10.37
**RL**: ≥ *Hylaedactyli* 1843.fa.f009 • **AI**: Parker 1934.pa: 16
< *Microhylidae* 1931.na.f001 • **PS**: Dubois 1983.da: 274
**PA**: 00 • *Gastrophrynae* • Fitzinger 1843.fa: 33 • **F**
01 • *Gastrophrynidae* • Metcalf 1923.ma: 25 • **F**
02 • *Gastrophryninae* • Metcalf 1923.ma: 294 • **bF**
03 • *Gastrophrynini* • Dubois 2005.da: 15 • **T**
04 • *Gastrophrynina* • *Hoc loco* • **bT**
05 • *Gastrophryninia* • *Hoc loco* • **iT**
**OS**: *Gastrophryne* 1843 • **OE**
**EN**: (1) *Gastrophryninae* 1843.fa.f011-02 • **bF**
(2) *Gastrophrynini* 1843.fa.f011-03 • **T**
(3) *Gastrophrynina* 1843.fa.f011-04 • **bT**
(4) *Gastrophryninia* 1843.fa.f011-05 • **iT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Gastrophrynoidini*** **nov.**, DOP.da.f080 • **KY**
**SI**: 521 • **CI**: h414 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Gastrophrynoidini* • *Hoc loco* • **T**
**OS**: *Gastrophrynoides* 1926 • **PD**
**EN**: *Gastrophrynoidini* DOP.da.f080-00 • **T**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Gastrothecinae*** Noble, 1927.na.f001 • **KY**
**SI**: 214 • **CI**: h149 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Gastrothecinae* • Noble 1927.na: 93 • **bF**
01 • *Gastrothecini* • *Hoc loco* • **T**
**OS**: *Gastrotheca* 1843 • **OE**
**EN**: *Gastrothecini* 1927.na.f001-01 • **T**
**EF**: *Hemiphractidae* 1862.pa.f001

*Genyophrynidae* Boulenger, 1890.ba.f001 • **JD**
**SI**: 191 • **CI**: h132 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Genyophrynidae* • Boulenger 1890.ba: 327 • **F**

01 • *Genyophryninae* • Gadow 1901.ga: xi, 236 • **bF**

**OS**: *Genyophryne* 1890 ≈ *Asterophrys* 1838 • **OD**

**EN**: (1) *Asterophryinae* 1858.gc.f006-05 • **bF**

(2) *Asterophryini* 1858.gc.f006-09 • **T**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

*Geotritonidae* Bonaparte, 1850.bb.f016 • **cg**

**SI**: 108 • **CI**: h070 • **ST**: 0.10.62

**RL**: INR

**PA**: 00 • *Geotritonidae* • Bonaparte 1850.bb: pl. • **F**

01 • *Geotritonina* • Bonaparte 1850.bb: pl. • **bF**

**OS**: *Geotriton* 1832 **ci** ≈ *Lissotriton* 1839 • **OE**

**EN**: *Lissotritonita* 2017.da.fe2-00 • **hT**

**EF**: *Salamandridae* 1820.ga.f002

***Geotrypetidae*** Lescure[+2], 1986.lb.f001 • **ky**

**SI**: 320 • **CI**: h228 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Geotrypetidae* • Lescure[+2] 1986.lb: 145 • **F**

01 • *Geotrypetoidae* • Lescure[+2] 1986.lb: 162 • **eF**

02 • *Geotrypetinoa* • *Hoc loco* • **hT**

**OS**: *Geotrypetes* 1880 • **OE**

**EN**: *Geotrypetinoa* 1986.lb.f001-02 • **hT**

**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Geyeriellinae* Brame, 1958.ba.f004 ‡ • **an**

**SI**: 260 • **CI**: n075 • **ST**: 0.28.50

**RL**: INR

**PA**: 00 • *Geyeriellinae* • Brame 1958.ba: 5 • **bF**

**OS**: *Geyeriella* 1950 ‡ • **OE**

**EN**: *Hynobiidae* |1856.ha.f001|-1859.cb.f002-01 • **F**

**EF**: *Hynobiidae* |1856.ha.f001|-1859.cb.f002

***Ghatixalitoes*** **nov.**, DOP.da.f125 • **ky**

**SI**: 566 • **CI**: h459 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Ghatixalitoes* • *Hoc loco* • **iCn**

**OS**: *Ghatixalus* 2008 • **PD**

**EN**: *Ghatixalitoes* DOP.da.f125-00 • **iCn**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Glandiranini*** Fei[+2], 2010.fa.f016 • **ky**

**SI**: 407 • **CI**: h307 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Glandiranini* • Fei[+2] 2010.fa: 18 • **T**

01 • *Glandiraninoa* • *Hoc loco* • **hT**

**OS**: *Glandirana* 1990• **OD**

**EN**: *Glandiraninoa* 2010.fa.f016-01 • **hT**

**EF**: *Ranidae* 1796.ba.f001

***Gobiatidae*** Roček[+1], 1991.ra.f001 ‡ • **ky**

**SI**: 347 • **CI**: h254 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Gobiatidae* • Roček[+1] 1991.ra: 78 • **F**

01 • *Gobiatinae* • Barbadillo[+2] 1997.ba: 55 • **bF**

**OS**: *Gobiates* 1986 ‡ • **OE**

**EN**: *Gobiatidae* 1991.ra.f001-00 † • **bT**

**EF**: *Gobiatidae* 1991.ra.f001 †

***Gracixalinoa*** **nov.**, DOP.da.f117 • **ky**

**SI**: 558 • **CI**: h451 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Gracixalinoa* • *Hoc loco* • **hT**

**OS**: *Gracixalus* 2005 • **PD**

**EN**: *Gracixalinoa* DOP.da.f117-00 • **hT**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Grandisoniilae*** Lescure[+2], 1986.lb.f004 • **ky**

**SI**: 323 • **CI**: h231 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Grandisoniilae* • Lescure[+2] 1986.lb: 163 • **iF**

01 • *Grandisoniina* • *Hoc loco* • **bT**

02 • *Grandisoniinia* • *Hoc loco* • **iT**

**OS**: *Grandisonia* 1968 • **OE**

**EN**: (1) *Grandisoniina* 1986.lb.f004-01 • **bT**

(2) *Grandisoniinia* 1986.lb.f004-02 • **iT**

**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Grillitschiina*** **nov.**, DOP.da.f148 • **ky**

**SI**: 594 • **CI**: h486 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Grillitschiina* • *Hoc loco* • **bT**

**OS**: *Grillitschia* DOP • **PD**

**EN**: *Grillitschiina* DOP.da.f148-00 • **bT**

**EF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Grypiscina* Mivart, 1869.ma.f012 • **jd**

**SI**: 172 • **CI**: h120 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Grypiscina* • Mivart 1869.ma: 295 • **bF**

01 • *Grypiscini* • Lynch 1969.lb: 3 • **T**

02 • *Grypiscinae* • Ardila-Robayo 1979.aa: 455 • **bF**

**OS**: *Grypiscus* 1867 ≈ *Cycloramphus* 1838 • **OE**

**EN**: (1) *Cyclorampheidae* 1850.bb.f003-|1852.ba.f001|-05 • **aF**

(2) *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|-04 • **F**

**EF**: *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|

*Gymnodermia* Rafinesque, 1815.ra.f001 • **an**

**SI**: 006 • **CI**: n003 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Gymnodermia* • Rafinesque 1815.ra: 78 • **F**

**OS**: » 2 **PN**, including: *Cecilia* 1814 ≡ *Caecilia* 1758 • **PD**

**EN**: (1) *Caecilioidea* 1814.ra.f003-|1825.gb.f008|-19 • **pF**

»»»

(5) *Caeciliina* 1814.ra.f003-|1825.gb.f008|-26 • **bT**

**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Gymnophides* Latreille, 1825.la.f001 • **an**

**SI**: 023 • **CI**: n010 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Gymnophides* • Latreille 1825.la: 103 • **F**

**OS**: *Caecilia* 1758 • **OM**

**EN**: (1) *Caecilioidea* 1814.ra.f003-|1825.gb.f008|-19 • **pF**

»»»

(5) *Caeciliina* 1814.ra.f003-|1825.gb.f008|-26 • **bT**

**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Gymnopiilae* Lescure[+2], 1986.lb.f009 • **jd**

**SI**: 328 • **CI**: h236 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Gymnopiilae* • Lescure[+2] 1986.lb: 168 • **iF**

**OS**: *Gymnopis* 1874 • **OE**

**EN**: (1) *Dermophiinia* 1969.ta.f002-04 • **iT**

(2) *Dermophiinoa* 1969.ta.f002-05 • **hT**

**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Gyrinophilita* Dubois, 2008.da.f006 • **an**

**SI**: 379 • **CI**: n096 • **ST**: 0.22.50

**RL**: INR

**PA**: 00 • *Gyrinophilita* • Dubois 2008.da: 74 • **iT**

**OS**: *Gyrinophilus* 1869 • **OE**

**EN**: *Pseudotritonina* 2012.da.f005-00 • **bT**

**EF**: *Plethodontidae* 1850.ga.f001

***Hamptophryninia* nov.**, DOP.da.f088 • **ky**

**SI**: 529 • **CI**: h422 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Hamptophryninia* • *Hoc loco* • **iT**

**OS**: *Hamptophryne* 1954 • **PD**

**EN**: *Hamptophryninia* DOP.da.f088-00 • **iT**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

*Heleioporidae* Bauer, 1986.ba.f001 • **an**

**SI**: 316 • **CI**: n088 • **ST**: 0.28.50

**RL**: INR

**PA**: 00 • *Heleioporidae* • Bauer 1986.ba: 7 • F

**OS**: *Heleioporus* 1841 • PD

**EN**: *Heleioporina* 2017.da.f71-00 • **bT**

**EF**: *Myobatrachidae* 1850.sa.f001

***Heleioporidae*** Bauer, 1987.bc.f002 • **ky**

**SI**: 332 • **CI**: h240 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Heleioporidae* • Bauer 1987.bc: 52 • **F**

01 • *Heleioporina* • *Hoc loco* • **bT**

**OS**: *Heleioporus* 1841 • **PD**

**EN**: *Heleioporina* 1987.bc.f002-01 • **bT**

**EF**: *Myobatrachidae* 1850.sa.f001

***Heleophryninae*** Noble, 1931.na.f004 • **ky**

**SI**: 219 • **CI**: h154 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Heleophryninae* • Noble 1931.na: 498 • **bF**

01 • *Heleophrynidae* • Hoffman 1935.ha: 2 • **F**

02 • *Heleophrynoidea* • Dubois 2005.da: 9 • **pF**

**OS**: *Heleophryne* 1898 • **OE**

**EN**: *Heleophrynidae* 1931.na.f004-01 • **F**

**EF**: *Heleophrynidae* 1931.na.f004

*Heliophrynidae* Heyer, 1975.ha.f001 • **jd**

**SI**: 296 • **CI**: h209 • **ST**: 0.10.52

**RL**: INR

**PA**: 00 • *Heliophrynidae* • Heyer 1975.ha: 48 • **F**

01 • *Heliophryninae* • Laurent 1980.la: 417 • **bF**

**OS**: *Heliophryne* 1975 ≡ *Heleophryne* 1898 • **OE**

**EN**: *Heleophrynidae* 1931.na.f004-01 • **F**

**EF**: *Heleophrynidae* 1931.na.f004

***Hemidactylidae*** Hallowell, 1856.ha.f003 • **ky**

**SI**: 123 • **CI**: h082 • **ST**: 0.10.31

**RL**: ≥ *Bolitoglossidae* 1856.ha.f002 • **AI**: Dubois 2005.da: 5

**PA**: 00 • *Hemidactylidae* • Hallowell 1856.ha: 11 • **bF**

01 • *Hemidactylidae* • Hoffmann 1878.ha: 585 • **F**

02 • *Hemidactyliidae* • Cope 1889.ca: 119 • **bF**

03 • *Hemidactyliini* • Wake 1966.wa: 1 • **T**

04 • *Hemidactylini* • Brame 1967.ba: 13 • **T**

05 • *Hemidactyliinae* • Chippindale[+3] 2004.ca: 2819 • **bF**

**OS**: *Hemidactylium* 1838 • **OE**

**EN**: (1) *Hemidactyliinae* 1856.ha.f003-05 • **bF**

(2) *Hemidactyliini* 1856.ha.f003-03 • **T**

**EF**: *Plethodontidae* 1850.ga.f001

*Hemignathodontinae* Miranda-Ribeiro, 1926.ma.f006 • **an**

**SI**: 213 • **CI**: n061 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Hemignathodontinae* • Miranda-Ribeiro 1926.ma: 65 • **bF**

**OS**: » 5 **PN**, including: *Gastrotheca* 1843 • **PD**

**EN**: *Gastrothecini* 1927.na.f001-01 • **T**

**EF**: *Hemiphractidae* 1862.pa.f001

*Hemimantidae* Hoffmann, 1878.ha.f002 • **ci**

**SI**: 180 • **CI**: h124 • **ST**: 0.10.45

**RL**: < *Phrynobatrachinae* 1941.lb.f001 • **PP**: Opinion 1921 (Anonymous 1999.aa)

**PA**: 00 • *Hemimantidae* • Hoffmann 1878.ha: 613 • **bF**

01 • *Hemimantinae* • Dubois 1982.db: 136 • **bF**

**OS**: *Hemimantis* 1863 ≈ *Phrynobatrachus* 1862 • **OE**

**EN**: (1) *Phrynobatrachoidea* 1941.lb.f001-02 • **pF**

(2) *Phrynobatrachidae* 1941.lb.f001-01 • **F**

**EF**: *Phrynobatrachidae* 1941.lb.f001

***Hemiphractidae*** Peters, 1862.pa.f001 • **ky**

**SI**: 149 • **CI**: h100 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Hemiphractidae* • Peters 1862.pa: 146 • **F**

01 • *Hemiphractina* • Mivart 1869.ma: 294 • **bF**

02 • *Hemiphractina* • Jiménez de la Espada 1870.ja: 62 • **Sc**

03 • *Hemiphractinae* • Gadow 1901.ga: xi, 210 • **bF**

04 • *Hemiphractydae* • Miranda-Ribeiro 1926.ma: 119 • **F**

**OS**: *Hemiphractus* 1828 • **OE**

**EN**: (1) *Hemiphractidae* 1862.pa.f001-00 • **F**

(2) *Hemiphractinae* 1862.pa.f001-03 • **bF**

**EF**: *Hemiphractidae* 1862.pa.f001

*Hemisalamandrae* Goldfuss, 1820.ga.f001 • **an**

**SI**: 011 • **CI**: n007 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Hemisalamandrae* • Goldfuss 1820.ga: x • **F**

01 • *Hemisalamandrae* • Jourdan 1834.ja: 585 • **T**

**OS**: » 2 **PN**, including: *Siren* 1766 • **PD**

**EN**: *Sirenidae* 1825.gb.f005-00 • **F**

**EF**: *Sirenidae* 1825.gb.f005

***Hemisidae*** Cope, 1867.ca.f002 • **ky**

**SI**: 159 • **CI**: h107 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Hemisidae* • Cope 1867.ca: 198 • **F**

01 • *Hemisina* • Mivart 1869.ma: 288 • **bF**

02 • *Hemisotina* • Günther 1870.ga: 119 • **bF**

03 • *Hemisiidae* • Miranda-Ribeiro 1926.ma: 19 • **F**

04 • *Hemisinae* • Noble 1931.na: 540 • **bF**

05 • *Hemisotidae* • Frost[+1] 1987.fa: 24 • **F**

06 • *Hemisotoidae* • Dubois 1992.da: 209 • **eF**

**OS**: *Hemisus* 1859 • **OE**

**EN**: *Hemisotidae* 1867.ca.f002-05 • **F**

**EF**: *Hemisotidae* 1867.ca.f002

***Herpelinae*** Laurent, 1984.la.f001 • **ky**

**SI**: 313 • **CI**: h223 • **ST**: 0.10.30

**RL**: INR
**PA**: 00 • *Herpelinae* • Laurent 1984.la: 199 • **bF**
01 • *Herpeloidi* • Lescure[+2] 1986.lb: 163 • **bT**
02 • *Herpelini* • Lescure[+2] 1986.lb: 163 • **T**
03 • *Herpeliti* • Lescure[+2] 1986.lb: 164 • **iT**
**OS**: *Herpele* 1880 • **OE**
**EN**: (1) *Herpelinae* 1984.la.f001-00 • **bF**
(2) *Herpelini* 1984.la.f001-02 • **T**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Holoadeninae*** Hedges[+2], 2008.ha.f004 • **ky**
**SI**: 384 • **CI**: h284 • **ST**: 0.10.37
**RL**: < *Strabomantidae* 2008.ha.f004 • **PR**: Hedges[+2] 2008: 5
**PA**: 00 • *Holoadeninae* • Hedges[+2] 2008.ha: 5 • **bF**
01 • *Holoadeninia* • *Hoc loco* • **iT**
02 • *Holoadeninoa* • *Hoc loco* • **hT**
**OS**: *Holoaden* 1920 • **OD**
**EN**: (1) *Holoadeninia* 2008.ha.f004-01 • **iT**
(2) *Holoadeninoa* 2008.ha.f004-02 • **hT**
**EF**: *Brachycephalidae* 1858.gc.f002

*Hoplobatrachini* Fei[+2], 2010.fa.f004 • **jd**
**SI**: 395 • **CI**: h295 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Hoplobatrachini* • Fei[+2] 2010.fa: 17 • **T**
**OS**: *Hoplobatrachus* 1863 • **OD**
**EN**: (1) *Dicroglosseidae* 1987.da.f004-03 • **aF**
»»»
(5) *Dicroglossina* 1987.da.f004-04 • **bT**
**EF**: *Dicroglossidae* 1987.da.f004

***Hoplophryninae*** Noble, 1931.na.f016 • **ky**
**SI**: 231 • **CI**: h165 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Hoplophryninae* • Noble 1931.na: 539 • **bF**
01 • *Hoplophrynidae* • Bossuyt[+1] 2009.ba: 358 • **F**
**OS**: *Hoplophryne* 1928 • **OE**
**EN**: *Hoplophryninae* 1931.na.f016-00 • **bF**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Hyalinobatrachinae*** Guayasamin[+5], 2009.ga.f002 • **ky**
**SI**: 390 • **CI**: h290 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Hyalinobatrachinae* • Guayasamin[+5] 2009.ga: 3 • **bF**
**OS**: *Hyalinobatrachium* 1991 • **OD**
**EN**: *Hyalinobatrachinae* 2009.ga.f002-00 • **F**
**EF**: *Centrolenidae* 1951.ta.f001

*Hydromantini* Dubois, 2008.da.f003 • **an**
**SI**: 376 • **CI**: n093 • **ST**: 0.22.50
**RL**: INR
**PA**: 00 • *Hydromantini* • Dubois 2008.da: 72 • **T**
01 • *Hydromantina* • Dubois 2008.da: 74 • **T**
**OS**: *Hydromantes* 1848 • **OE**
**EN**: (1) *Hydromantini* 2012.wa.f003-00 • **T**
(2) *Hydromantina* 2012.wa.f003-01 • **bT**
**EF**: *Plethodontidae* 1850.ga.f001

*Hydromantini* Vieites[+3], 2011.va.f002 • **an**
**SI**: 412 • **CI**: n100 • **ST**: 0.28.50
**RL**: INR
**PA**: 00 • *Hydromantini* • Vieites[+3] 2011.va: 633 • **T**
**OS**: *Hydromantes* 1848 • **OD**
**EN**: (1) *Hydromantini* 2012.wa.f003-00 • **T**
(2) *Hydromantina* 2012.wa.f003-01 • **bT**
**EF**: *Plethodontidae* 1850.ga.f001

***Hydromantini*** Wake, 2012.f003 • **ky**
**SI**: 417 • **CI**: h311 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Hydromantini* • Wake 2012.wa: 80 • **T**
01 • *Hydromantina* • *Hoc loco* • **bT**
**OS**: *Hydromantes* 1848 • **OD**
**EN**: (1) *Hydromantini* 2012.wa.f003-00 • **T**
(2) *Hydromantina* 2012.wa.f003-01 • **bT**
**EF**: *Plethodontidae* 1850.ga.f001

*Hydromantina* Dubois[+1], 2012.da.f009 • **ji**
**SI**: 426 • **CI**: h320 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Hydromantina* • Dubois[+1] 2012.da: 118 • **bT**
**OS**: *Hydromantes* 1848 • **OD**
**EN**: (1) *Hydromantini* 2012.wa.f003-00 • **T**
(2) *Hydromantina* 2012.wa.f003-01 • **bT**
**EF**: *Plethodontidae* 1850.ga.f001

***Hylaedactyli*** Fitzinger, 1843.fa.f009 • **ky**
**SI**: 074 • **CI**: h042 • **ST**: 0.10.37
**RL**: ≤ *Gastrophrynae* 1843.fa.f012 • **AI**: Parker 1934.pa: 16
**PA**: 00 • *Hylaedactyli* • Fitzinger 1843.fa: 33 • **F**
01 • *Hylaedactylidae* • Bonaparte 1850.bb: pl. • **F**
02 • *Hylaedactylina* • Bonaparte 1850.bb: pl. • **bF**
03 • *Hylaedactylidae* • Hoffmann 1878.ha: 614 • **bF**
04 • *Hylaedactylida* • Knauer 1878.ka: 112 • **F**
05 • *Hylaedactylina* • *Hoc loco* • **bT**
06 • *Hylaedactylinia* • *Hoc loco* • **iT**
**OS**: *Hylaedactylus* 1841 ≈ *Kaloula* 1831 • **OE**
**EN**: (1) *Hylaedactylina* 1843.fa.f009-05 • **bT**
(2) *Hylaedactylinia* 1843.fa.f009-06 • **iT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

*Hylaeformes* Duméril[+1], 1841.da.f002 • **an**
**SI**: 061 • **CI**: n028 • **ST**: 2.27.50
**RL**: INR
**PA**: 00 • *Hylaeformes* • Duméril[+1] 1841.da: 50 • **F**
01 • *Hylaeformes* • Desmarest 1857.da: 13 • **F**
**OS**: *Hyla* 1768 • **OE**
**EN**: (1) *Hyloidea* 1815.ra.f002-|1825.gb.f001|-20 • **pF**
»»»
(8) *Hylites* 1815.ra.f002-|1825.gb.f001|-26 • **Cn**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Hylaeobatrachidae*** Lydekker, 1889.la.f001 ‡ • **ky**
**SI**: 190 • **CI**: h131 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Hylaeobatrachidae* • Lydekker 1889.la: 1040 • **F**
01 • *Hyaelobatrachoidea* • Huene 1931.ha: 310 • **pF**
02 • *Hyaelobatrachidae* • Huene 1931.ha: 310 • **F**
03 • *Hylaeobatrachoidea* • Kuhn 1965.ka: 39 • **F**
**OS**: *Hylaeobatrachus* 1884 ‡ • **OE**
**EN**: *Hylaeobatrachidae* 1889.la.f001-00 † • **F**
**EF**: *Hylaeobatrachidae* 1889.la.f001 †

*Hylaplesina* Günther, 1858.gc.f001 • **cg**
**SI**: 129 • **CI**: h083 • **ST**: 0.10.62
**RL**: INR
**PA**: 00 • *Hylaplesina* • Günther 1858.gc: 345 • **Sc**
01 • *Hylaplesidae* • Günther 1858.gc: 341 • **F**
02 • *Hylaplesura* • Wood 1863.wa: 174 • **Sc**
03 • *Hylaplesiina* • Günther 1868.gb: 148 • **UF**
04 • *Hylaplesiidae* • Cope 1875.ca: 8 • **F**
05 • *Hylaplesina* • Hoffmann 1878.ha: 614 • **F**
06 • *Hylaplesidae* • Hoffmann 1878.ha: 614 • **bF**
07 • *Hylaplesiida* • Knauer 1878.ka: 112 • **F**
**OS**: *Hylaplesia* 1826 **ci** ≈ *Boana* 1825 • **OE**
**EN**: (1) *Cophomantinae* 1878.ha.f004-02 • **bF**
»»»
(4) *Cophomantinia* 1878.ha.f004-04 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Hylaranini* Fei[+2], 2010.fa.f012 • **jd**
**SI**: 403 • **CI**: h303 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Hylaranini* • Fei[+2] 2010.fa: 18 • **T**
**OS**: *Hylarana* 1838 • **OD**
**EN**: *Limnodytinoa* 1843.fa.f001-02 • **hT**
**EF**: *Ranidae* 1796.ba.f001

*Hylaranini* Fei[+2], 2010.fa.f012 • **jd**
**SI**: 403 • **CI**: h303 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Hylaranini* • Fei[+2] 2010.fa: 18 • **T**
**OS**: *Hylarana* 1838 • **OD**
**EN**: *Limnodytinoa* 1843.fa.f001-02 • **hT**
**EF**: *Ranidae* 1796.ba.f001

*Hylarinia* Rafinesque, 1815.ra.f002 • **mk**
**SI**: 007 • **CI**: h004 • **ST**: 0.10.58
**RL**: < *Hylina* 1825.gb.f001 • **MK**: Dubois 1983.da: 274
**PA**: 00 • *Hylarinia* • Rafinesque 1815.ra: 78 • **F**
**OS**: *Hylaria* 1814 ≡ *Hyla* 1768 • **OE**
**EN**: (1) *Hyloidea* 1815.ra.f002-|1825.gb.f001|-20 • **pF**
»»»
(8) *Hylites* 1815.ra.f002-|1825.gb.f001|-26 • **Cn**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Hylina*** Gray, 1825.gb.f001 • **mk**
**SI**: 015 • **CI**: h006 • **ST**: 0.10.34
**RL**: > *Hylarinia* 1815.ra.f002 • **MK**: Dubois 1983.da: 274
**PA**: 00 • *Hylina* • Gray 1825.gb: 213 • **UF**
01 • *Hyladae* • Boie 1828.ba: 363 • **F**
02 • *Hylenae* • Gray 1829.ga: 203 • **UF**
03 • *Hylae* • Fitzinger 1832.fa: 327 • **F**
04 • *Hylina* • Jourdan 1834.ja: 621 • **F**
05 • *Hyladina* • Bonaparte 1838.ba: [195] • **bF**
06 • *Iladini* • Bonaparte 1838.ba: [196] • **UF**
07 • *Hyloidea* • Holbrook 1842.ha: 113 • **F**
08 • *Hylaina* • Bonaparte 1845.ba: 378 • **bF**
09 • *Hylidae* • Bonaparte 1850.bb: pl. • **F**
10 • *Hylina* • Bonaparte 1850.bb: pl. • **bF**
11 • *Hytidae* • Bonaparte 1852.ba: 477 • **F**
12 • *Hylina* • Günther 1858.gc: 344 • **Sc**
13 • *Hyloides* • Bruch 1862.ba: 221 • **F**
14 • *Hylaeides* • Gouriet 1868.ga: 206 • **F**
15 • *Hylidae* • Hoffmann 1878.ha: 614 • **bF**
16 • *Hylida* • Knauer 1878.ka: 109 • **F**
17 • *Hylida* • Bayer 1885.ba: 18 • **F**
18 • *Hylidi* • Acloque 1900.aa: 489 • **F**
19 • *Hylinae* • Gadow 1901.ga: xii, 189 • **bF**
20 • *Hyloidea* • Dubois 1983.da: 272 • **pF**
21 • *Hylini* • Faivovich[+5] 2005.fa: 3 • **T**
22 • *Hyloidia* • Fouquette[+1] 2014.fa: 7 • **eF**
23 • *Hylina* • *Hoc loco* • **bT**
24 • *Hylinia* • *Hoc loco* • **iT**
25 • *Hylinoa* • *Hoc loco* • **hT**
26 • *Hylites* • *Hoc loco* • **Cn**
**OS**: *Hyla* 1768 • **OE**
**EN**: (1) *Hyloidea* 1815.ra.f002-|1825.gb.f001|-20 • **pF**
(2) *Hylidae* 1815.ra.f002-|1825.gb.f001|-09 • **F**
(3) *Hylinae* 1815.ra.f002-|1825.gb.f001|-19 • **bF**
(4) *Hylini* 1815.ra.f002-|1825.gb.f001|-21 • **T**
(5) *Hylina* 1815.ra.f002-|1825.gb.f001|-23 • **bT**
(6) *Hylinia* 1815.ra.f002-|1825.gb.f001|-24 • **iT**
(7) *Hylinoa* 1815.ra.f002-|1825.gb.f001|-25 • **hT**
(8) *Hylites* 1815.ra.f002-|1825.gb.f001|-26 • **Cn**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Hyliolinae*** Dubois[+2], 2017.da.f001 • **ky**
**SI**: 439 • **CI**: h332 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Hyliolinae* • Dubois[+2] 2017.da: 55 • **bF**
01 • *Hyliolini* • Dubois[+2] 2017.da: 51 • **T**
02 • *Hyliolinia* • *Hoc loco* • **iT**
**OS**: *Hyliola* 1899 • **OD**
**EN**: *Hyliolinia* 2017.da.f001-02 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Hylodidae*** Günther, 1858.gc.f010 • **ky**
**SI**: 138 • **CI**: h091 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Hylodidae* • Günther 1858.gc: 346 • **F**
01 • *Hylodes* • Cope 1866.ca: 90 • **Gr**
02 • *Hylodina* • Mivart 1869.ma: 293 • **bT**
03 • *Hylodidae* • Hoffmann 1878.ha: 614 • **bF**
04 • *Hylodina* • Knauer 1878.ka: 112 • **bF**
05 • *Heylodidae* • Miranda-Ribeiro 1923.mb: 827 • **F**
06 • *Hylodinae* • Savage 1973.sa: 354 • **bF**
**OS**: *Hylodes* 1826 • **OE**
**EN**: *Hylodinae* 1858.gc.f010-03 • **bF**
**EF**: *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|

***Hyloscirtina*** **nov.**, DOP.da.f051 • **ky**
**SI**: 492 • **CI**: h385 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Hyloscirtina* • *Hoc loco* • **bT**
**OS**: *Hyloscirtus* 1882 • **PD**
**EN**: *Hyloscirtina* DOP.da.f051-00 • **bT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Hyloxalinae*** Grant[+9], 2006.gb.f004 • **ky**
**SI**: 373 • **CI**: h279 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Hyloxalinae* • Grant[+9] 2006.gb: 4 • **F**

**OS**: *Hyloxalus* 1870 • **OD**
**EN**: *Hyloxalinae* 2006.gb.f004-00 • **bF**
**EF**: *Dendrobatidae* |1850.bb.f006|-1865.ca.f002

***Hymenochiridae*** Bolkay, 1919.ba.f001 • **ky**
**SI**: 201 • **CI**: h138 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Hymenochiridae* • Bolkay 1919.ba: 343 • **F**
01 • *Hymenochirini* • Bewick[+3] 2012.ba: 914 • **T**
**OS**: *Hymenochirus* 1896 • **OE**
**EN**: *Hymenochirini* 1919.ba.f001-01 • **T**
**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Hynobiinae*** Cope, 1859.cb.f002 • **sk**
**SI**: 143 • **CI**: h096 • **ST**: 0.10.35
**RL**: > *Ellipsoglossidae* Hallowell, 1856.ha.f001 • **PS**: Dubois 1984.da: 114
**PA**: 00 • *Hynobiinae* • Cope 1859.cb: 125 • **bF**
01 • *Hynobiidae* • Cope 1866.ca: 107 • **F**
02 • *Hynobiinae* • Hoffmann 1878.ha: 585 • **F**
03 • *Hynobidae* • Highton 1940.ha: 40 • **F**
04 • *Hynobiini* • Dubois[+1] 2012.da: 113 • **T**
05 • *Hynobiina* • Dubois[+1] 2012.da: 113 • **bT**
06 • *Hynobiinia* • *Hoc loco* • **iT**
07 • *Hynobiinoa* • *Hoc loco* • **hT**
**OS**: *Hynobius* 1838 • **OE**
**EN**: (1) *Hynobiidae* |1856.ha.f001|-1859.cb.f002-01 • **F**
(2) *Hynobiinae* |1856.ha.f001|-1859.cb.f002-00 • **bF**
(3) *Hynobiini* |1856.ha.f001|-1859.cb.f002-04 • **T**
(4) *Hynobiina* |1856.ha.f001|-1859.cb.f002-05 • **bT**
(5) *Hynobiinia* |1856.ha.f001|-1859.cb.f002-06 • **iT**
(6) *Hynobiinoa* |1856.ha.f001|-1859.cb.f002-07 • **hT**
**EF**: *Hynobiidae* |1856.ha.f001|-1859.cb.f002

***Hyperoliinae*** Laurent, 1943.lb.f001 • **ky**
**SI**: 240 • **CI**: h172 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Hyperoliinae* • Laurent 1943.lb: 16 • **bF**
01 • *Hyperoliidae* • Laurent 1951.la: 116 • **F**
02 • *Hyperolidae* • Casamiquela 1961.ca: 81 • **F**
03 • *Hyperoliini* • Laurent 1972.la: 201 • **T**
04 • *Hyperoliina* • *Hoc loco* • **bT**
**OS**: *Hyperolius* 1842 • **OE**
**EN**: (1) *Hyperoliidae* 1943.lb.f001-01 • **F**
(2) *Hyperoliinae* 1943.lb.f001-00 • **bF**
(3) *Hyperoliini* 1943.lb.f001-03 • **T**
(4) *Hyperoliina* 1943.lb.f001-04 • **bT**
**EF**: *Hyperoliidae* 1943.lb.f001

*Hypochtonina* Bonaparte, 1840.ba.f002 • **ji**
**SI**: 059 • **CI**: h031 • **ST**: 0.10.52
**RL**: INR
**PA**: 00 • *Hypochtonina* • Bonaparte 1840.ba: 287 • **bF**
01 • *Hypochthonina* • Bonaparte 1840.bb: 395 • **bF**
02 • *Hypochthonidae* • Bonaparte 1850.bb: pl. • **F**
**OS**: *Hypochthon* 1820 ≡ *Proteus* 1768 • **OE**
**EN**: (1) *Proteoidae* 1831.ba.f002-10 • **eF**
(2) *Proteidae* 1831.ba.f002-02 • **F**
**EF**: *Proteidae* 1831.ba.f002

***Hypodactylinae*** Heinicke[+4], 2018.ha.f001 • **ky**
**SI**: 440 • **CI**: h333 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Hypodactylinae* • Heinicke[+4] 2018.ha: 152 • **bF**
01 • *Hypodactylinia* • *Hoc loco* • **iT**
**OS**: *Hypodactylus* 2008 • **PD**
**EN**: *Hypodactylinia* 2018.ha.f001-01 • **iT**
**EF**: *Brachycephalidae* 1858.gc.f002

***Hypselotritonites*** **nov.**, DOP.da.f141 • **ky**
**SI**: 582 • **CI**: h475 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Hypselotritonites* • *Hoc loco* • **Cn**
**OS**: *Hypselotriton* 1934 • **PD**
**EN**: *Hypselotritonites* DOP.da.f141-00 • **Cn**
**EF**: *Salamandridae* 1820.ga.f002

***Ichthyophiidae*** Taylor, 1968.ta.f001 • **ck**
**SI**: 277 • **CI**: h194 • **ST**: 0.10.36
**RL**: > *Epicria* 1843.fa.f018 • **PP**: Opinion 1749 (Anonymous 1993.aa: 261)
**PA**: 00 • *Ichthyophiidae* • Taylor 1968.ta: x, 46 • **F**
01 • *Ichthyophidae* • Taylor 1969.ta: 303 • **F**
02 • *Ichthyophiinae* • Nussbaum 1979.na: 13 • **bF**
03 • *Ichthyophidinae* • Wollenberg[+1] 2009.wb: 1050 • **bF**
04 • *Ichthyophioidea* • *Hoc loco* • **pF**
**OS**: *Ichthyophis* 1826 • **OD**
**EN**: (1) *Ichthyophioidea* 1968.ta.f001-04 • **F**
(2) *Ichthyophiidae* 1968.ta.f001-00 • **F**
**EF**: *Ichthyophiidae* 1968.ta.f001

***Ichthyosaurinoa*** **nov.**, DOP.da.f143 • **ky**
**SI**: 584 • **CI**: h477 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Ichthyosaurinoa* • *Hoc loco* • **hT**
**OS**: *Ichthyosaura* 1801 • **PD**
**EN**: *Ichthyosaurinoa* DOP.da.f143-00 • **hT**
**EF**: *Salamandridae* 1820.ga.f002

*Ichtyoida* Latreille, 1825.la.f004 • **an**
**SI**: 026 • **CI**: n013 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Ichtyoida* • Latreille 1825.la: 105 • **F**
01 • *Ichthyoida* • Berthold 1827.ba: 103 • **F**
02 • *Ichthyoidei* • Eichwald 1831.eb: 163 • **F**
03 • *Ichthyodea* • Goldfuss 1832.ga: 325; Wiegmann[+1] 1832.wa: 203 • **F**
04 • *Ichthyodea* • Leunis 1844.la: 129 • **UF**
05 • *Ichthyodea* • Leunis 1860.la: 341 • **T**
06 • *Ichthyoidea* • Wiedersheim 1877.wa: 356 • **F**
07 • *Ichthyoidea* • Huene 1931.ha: 310 • **pF**
**OS**: » 2 **PN**, including: *Siren* 1766• **PD**
**EN**: *Sirenidae* 1825.gb.f005-00 • **F**
**EF**: *Sirenidae* 1825.gb.f005

*Ichthyodea* Goldfuss, 1834.ga.f001 • **an**
**SI**: 044 • **CI**: n022 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Ichthyodea* • Goldfuss 1834.ga: 453 • **F**
**OS**: » 2 **PN**, including: *Amphiuma* 1821 • **PD**
**EN**: (1) *Amphiumoidea* 1825.gb.f007-10 • **pF**

»»»

(4) *Amphiumidae* 1825.gb.f007-00 • **F**

**EF**: *Amphiumidae* 1825.gb.f007

*Ichthyodea* Schreiber, 1875.sa.f001 • **AN**

**SI**: 177 • **CI**: n053 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Ichthyodea* • Schreiber 1875.sa: 8 • **F**

**OS**: *Proteus* 1768 • **OM**

**EN**: (1) *Proteoidae* 1831.ba.f002-10 • **eF**

(2) *Proteidae* 1831.ba.f002-02 • **F**

**EF**: *Proteidae* 1831.ba.f002

***Ikakoginae* nov.**, DOP.da.f047 • **KY**

**SI**: 488 • **CI**: h381 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Ikakoginae* • *Hoc loco* • **bF**

**OS**: *Ikakogi* 2009 • **PD**

**EN**: *Ikakoginae* DOP.da.f047-00 • **bF**

**EF**: *Centrolenidae* 1951.ta.f001

*Indiraninae* Blommers-Schlösser, 1993.ba.f002 • **JD**

**SI**: 352 • **CI**: h259 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Indiraninae* • Blommers-Schlösser 1993.ba: 199 • **bF**

**OS**: *Indirana* 1986 • **OE**

**EN**: (1) *Ranixaleidae* 1987.da.f005-03 • **aF**

(2) *Ranixalidae* 1987.da.f005-02 • **F**

**EF**: *Ranixalidae* 1987.da.f005

***Indotyphlini*** Lescure+2, 1986.lb.f006 • **KY**

**SI**: 325 • **CI**: h233 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Indotyphlini* • Lescure+2 1986.lb: 164 • **T**

01 • *Indotyphlidae* • Wilkinson+3 2011.wa: 43 • **F**

02 • *Indotyphlinia* • *Hoc loco* • **iT**

**OS**: *Indotyphlus* 1960 • **OE**

**EN**: *Indotyphlinia* 1986.lb.f006-02 • **iT**

**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Ingeranini*** Fei+2, 2010.fa.f009 • **KY**

**SI**: 400 • **CI**: h300 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Ingeranini* • Fei+2 2010.fa: 17 • **T**

01 • *Ingeraninae* • *Hoc loco* • **bF**

**OS**: *Ingerana* 1987 • **OD**

**EN**: *Ingeraninae* 2010.fa.f009-01 • **bF**

**EF**: *Occidozygidae* 1990.fa.f002

***Ingerophrynitues* nov.**, DOP.da.f020 • **KY**

**SI**: 461 • **CI**: h354 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Ingerophrynitues* • *Hoc loco* • **hCn**

**OS**: *Ingerophrynus* 2006 • **PD**

**EN**: *Ingerophrynitues* DOP.da.f020-00 • **hCn**

**EF**: *Bufonidae* 1825.gb.f004

***Iranodontina* nov.**, DOP.da.f131 • **KY**

**SI**: 572 • **CI**: h465 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Iranodontina* • *Hoc loco* • **hT**

**OS**: *Iranodon* 2012 • **PD**

**EN**: *Iranodontina* DOP.da.f131-00 • **hT**

**EF**: *Hynobiidae* |1856.ha.f001|-1859.cb.f002

***Isthmohylities* nov.**, DOP.da.f055 • **KY**

**SI**: 496 • **CI**: h389 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Isthmohylities* • *Hoc loco* • **bCn**

**OS**: *Isthmohyla* 2005 • **PD**

**EN**: *Isthmohylities* DOP.da.f055-00 • **bCn**

**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Isthmurinoa* nov.**, DOP.da.f132 • **KY**

**SI**: 573 • **CI**: h466 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Isthmurinoa* • *Hoc loco* • **hT**

01 • *Isthmurites* • *Hoc loco* • **Cn**

**OS**: *Isthmura* 2012 • **PD**

**EN**: (1) *Isthmurinoa* DOP.da.f132-00 • **hT**

(2) *Isthmurites* DOP.da.f132-01 • **Cn**

**EF**: *Plethodontidae* 1850.ga.f001

***Itapotihylina* nov.**, DOP.da.f061 • **KY**

**SI**: 502 • **CI**: h395 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Itapotihylina* • *Hoc loco* • **bT**

**OS**: *Itapotihyla* 2005 • **PD**

**EN**: *Itapotihylina* DOP.da.f061-00 • **bT**

**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Kalophrynina*** Mivart, 1869.ma.f003 • **KY**

**SI**: 163 • **CI**: h111 • **ST**: 1.10.30

**RL**: INR

**PA**: 00 • *Kalophrynina* • Mivart 1869.ma: 289 • **bF**

01 • *Kalophryninae* • Noble 1931.na: 536 • **bF**

02 • *Kalophrynidae* • Bossuyt+1 2009.ba: 358 • **F**

**OS**: *Kalophrynus* 1838 • **OE**

**EN**: *Kalophryninae* 1869.ma.f003-01 • **bF**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

*Kaloulinae* Noble, 1931.na.f014 • **JD**

**SI**: 229 • **CI**: h163 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Kaloulinae* • Noble 1931.na: 538 • **bF**

01 • *Kaloulidae* • Parker 1934.pa: 16 • **F**

**OS**: *Kaloula* 1831 • **OE**

**EN**: (1) *Hylaedactylina* 1843.fa.f009-05 • **bT**

(2) *Hylaedactylinia* 1843.fa.f009-06 • **iT**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Karauridae*** Ivachnenko, 1978.ia.f001 ‡ • **KY**

**SI**: 302 • **CI**: h215 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Karauridae* • Ivachnenko 1978.ia: 85 • **F**

01 • *Karaururidae* • Nessov 1993.na: 30 • **F**

02 • *Karauroidia* • Dubois 2005.da: 19 • **eF**

03 • *Karauroidea* • Dubois 2005.da: 19 • **pF**

**OS**: *Karaurus* 1978 ‡ • **OE**

**EN**: *Karauridae* 1978.ia.f001-00 † • **F**

**EF**: *Karauridae* 1978.ia.f001 †

*Karseniini* Dubois, 2008.da.f004 • **AN**

**SI**: 377 • **CI**: n094 • **ST**: 0.22.50

**RL**: INR

**PA**: 00 • *Karseniini* • Dubois 2008.da: 72 • **T**

01 • *Karseniina* • Dubois 2008.da: 74 • **bT**

**OS**: *Karsenia* 2005 • **OE**

**EN**: *Karseniina* 2012.da.f008-01 • **bT**

**EF**: *Plethodontidae* 1850.ga.f001

***Karseniini*** Dubois[+1], 2012.da.f008 • **KY**

**SI**: 425 • **CI**: h319 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Karseniini* • Dubois[+1] 2012.da: 117 • **T**

01 • *Karseniina* • Dubois[+1] 2012.da: 118 • **bT**

**OS**: *Karsenia* 2005 • **OD**

**EN**: *Karseniina* 2012.da.f008-01 • **bT**

**EF**: *Plethodontidae* 1850.ga.f001

***Kassinini*** Laurent, 1972.la.f001 • **KY**

**SI**: 290 • **CI**: h205 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Kassinini* • Laurent 1972.la: 201 • **T**

01 • *Kassininae* • Dubois 1981.da: 227 • **bF**

**OS**: *Kassina* 1853 • **OE**

**EN**: *Kassinini* 1972.la.f001-00 • **T**

**EF**: *Hyperoliidae* 1943.lb.f001

***Kurixalites* nov.**, DOP.da.f119 • **KY**

**SI**: 560 • **CI**: h453 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Kurixalites* • *Hoc loco* • **Cn**

**OS**: *Kurixalus* 1999 • **PD**

**EN**: *Kurixalites* DOP.da.f119-00 • **Cn**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Laliostominae*** Vences[+1], 2001.va.f002 • **KY**

**SI**: 358 • **CI**: h265 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Laliostominae* • Vences[+1] 2001.va: 85 • **bF**

01 • *Laliostomini* • Dubois 2005.da: 16 • **T**

02 • *Laliostomatinae* • Glaw[+1] 2006.ga: 238 • **bF**

**OS**: *Laliostoma* 1998 • **OD**

**EN**: *Laliostomini* 2001.va.f002-01 • **T**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

*Lankanectinae* Dubois[+1], 2001.da.f001 • **JD**

**SI**: 359 • **CI**: h266 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Lankanectinae* • Dubois[+1] 2001.da: 84 • **bF**

**OS**: *Lankanectes* 2001 • **OD**

**EN**: (1) *Nyctibatracheidae* 1993.ba.f001-02 • **aF**

»»»

(3) *Nyctibatrachinae* 1993.ba.f001-00 • **bF**

**EF**: *Nyctibatrachidae* 1993.ba.f001

*Latoniidae* Špinar, 1979.sa.f001 ‡ • **AN**

**SI**: 305 • **CI**: n084 • **ST**: 0.28.50

**RL**: INR

**PA**: 00 • *Latonidae* • Špinar 1979.sa: 289, 290 • **F**

**OS**: *Latonia* 1843 ‡ • **OE**

**EN**: *Discoglossidae* 1858.gc.f004-00 • **F**

**EF**: *Discoglossidae* 1858.gc.f004

*Lechriodonta* Strauch, 1870.sa.f002 • **AN**

**SI**: 175 • **CI**: n052 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Lechriodonta* • Strauch 1870.sa: 53 • **T**

01 • *Lechriodonta* • Hoffmann 1878.ha: 665 • **bF**

02 • *Lechriodonta* • Leunis 1883.la: 624 • **F**

03 • *Lechriodonta* • Gadow 1901.ga: 95 • **UF**

**OS**: » 11 **PN**, including: *Plethodon* 1838 • **PD**

**EN**: (1) *Plethodontidae* 1850.ga.f001-00 • **F**

»»»

(4) *Plethodontina* 1850.ga.f001-09 • **bT**

**EF**: *Plethodontidae* 1850.ga.f001

*Leiodermes* Bory de Saint-Vincent, 1828.bb.f001 • **AN**

**SI**: 032 • **CI**: n014 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Leiodermes* • Bory de Saint-Vincent 1828.bb: 215 • **F**

**OS**: *Coecilia* 1801 ≡ *Caecilia* 1758 • **OM**

**EN**: (1) *Caecilioidea* 1814.ra.f003-|1825.gb.f008|-19 • **pF**

»»»

(5) *Caeciliina* 1814.ra.f003-|1825.gb.f008|-26 • **bT**

**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Leiopelmidae*** Turbott, 1942.ta.f001 • **CK**

**SI**: 239 • **CI**: h171 • **ST**: 0.10.36

**RL**: > *Liopelmatina* 1869.ma.f007 • **PP**: Opinion 1071 (Melville 1977.ma)

**PA**: 00 • *Leiopelmidae* • Turbott 1942.ta: 247 • **F** • **IG**: Melville 1977.ma

01 • *Leiopelmoidea* • Laurent 1948.la: 1 • **F**

02 • *Leiopelmatidae* • Stephenson 1951.sa: 18 • **F** • **LG**: Melville 1977.ma

03 • *Leiopelmatinae* • Kuhn 1965.ka: 86 • **bF**

04 • *Leiopelmatoidia* • Dubois 2005.da: 8 • **eF**

05 • *Leiopelmatoidea* • Dubois 2005.da : 8 • **pF**

06 • *Leiopelmatoidia* • Fouquette[+1] 2014.fa: 6 • **pF**

**OS**: *Leiopelma* 1861 • **OE**

**EN**: (1) *Leiopelmatidae* 1869.ma.f007-|1942.ta.f001|-02 • **F**

(2) *Leiopelmatinae* 1869.ma.f007-|1942.ta.f001|-03 • **bF**

**EF**: *Leiopelmatidae* 1869.ma.f007-|1942.ta.f001|

***Leiuperina*** Bonaparte, 1850.bb.f010 • **KY**

**SI**: 102 • **CI**: h064 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Leiuperina* • Bonaparte 1850.bb: pl. • **bF**

01 • *Leinperina* • Bonaparte 1852.ba: 478 • **bF**

02 • *Leiuperidae* • Grant[+9] 2006.gb: 4 • **F**

03 • *Leiuperinae* • Pyron[+1] 2011.pa: 574 • **bF**

04 • *Leiuperini* • *Hoc loco* • **T**

**OS**: *Leiuperus* 1841 ≈ *Pleurodema* 1838 • **OE**

**EN**: (1) *Leiuperinae* 1850.bb.f010-03 • **bF**

(2) *Leiuperini* 1850.bb.f010-04 • **T**

**EF**: *Leptodactylidae* |1838.ta.f001|-1896.wa.f001

***Lepidobatrachidae*** Bauer, 1987.ba.f001 • **KY**

**SI**: 330 • **CI**: h238 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Lepidobatrachidae* • Bauer 1987.ba: 5 • **F**

01 • *Lepidobatrachinae* *Hoc loco* • **bF**

**OS**: *Lepidobatrachus* 1899 • **OE**

**EN**: *Lepidobatrachinae* 1987.ba.f001-01 • **bF**

**EF**: *Ceratophryidae* 1838.ta.f002

*Leptobrachiini* Dubois, 1980.da.f001 • **AN**

**SI**: 306 • **CI**: n085 • **ST**: 0.28.50

**RL**: INR
**PA**: 00 • *LEPTOBRACHIINI* • Dubois 1980.da: 471 • **T**
01 • *LEPTOBRACHIINAE* • Dubois 1983.da: 272 • **bF**
**OS**: *Leptobrachium* 1838 • **OE**
**EN**: (1) *LEPTOBRACHIINAE* 1983.db.f001-00 • **bF**
»»»
(3) *LEPTOBRACHIINA* 1983.db.f001-02 • **bT**
**EF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

***LEPTOBRACHIINAE*** Dubois, 1983.db.f001 • **KY**
**SI**: 311 • **CI**: h221 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *LEPTOBRACHIINAE* • Dubois 1983.db: 147 • **bF**
01 • *LEPTOBRACHIINI* • *Hoc loco* • **T**
02 • *LEPTOBRACHIINA* • *Hoc loco* • **bT**
**OS**: *Leptobrachium* 1838 • **OE**
**EN**: (1) *LEPTOBRACHIINAE* 1983.db.f001-00 • **bF**
(2) *LEPTOBRACHIINI* 1983.db.f001-01 • **T**
(3) *LEPTOBRACHIINA* 1983.db.f001-02 • **bT**
**EF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

***LEPTODACTYLIDAE*** Werner, 1896.wa.f001 • **SK**
**SI**: 194 • **CI**: h134 • **ST**: 0.10.35
**RL**: > *CYSTIGNATHI* 1838.ta.f001 • **PS**: Dubois 1983.da: 273
> *PLECTROMANTIDAE* 1869.ma.f002 • **PS**: Dubois 1983.da: 273
**PA**: 00 • *LEPTODACTYLIDAE* • Werner 1896.wa: 357 • **F**
01 • *LEPTODACTYLINAE* • Metcalf 1923.ma: 272 • **bF**
02 • *LEPTODACTYLYDAE* • Lutz 1954.la: 172 • **F**
03 • *LEPTODACTILYDAE* • Cei 1958.ca: 274 • **F**
04 • *LEPTODACTYLOIDEA* • Reig 1972.ra: 29 • **pF**
05 • *LEPTODACYLIDAE* • Melville 1978.ma: 224 • **F**
06 • *LEPTIDACTYLIDAE* • Crespo 2001.ca: 109 • **F**
07 • *LEPTODACTILIDAE* • Crespo 2001.ca: 109 • **F**
08 • *LEPTODACTYLINI* • *Hoc loco* • **T**
**OS**: *Leptodactylus* 1826 • **OE**
**EN**: (1) *LEPTODACTYLOIDEA* |1838.ta.f001|-1896.wa.f001-04 • **pF**
(2) *LEPTODACTYLIDAE* |1838.ta.f001|-1896.wa.f001-00 • **F**
(3) *LEPTODACTYLINAE* |1838.ta.f001|-1896.wa.f001-01 • **bF**
(4) *LEPTODACTYLINI* |1838.ta.f001|-1896.wa.f001-08 • **T**
**EF**: *LEPTODACTYLIDAE* |1838.ta.f001|-1896.wa.f001

***LEPTODACTYLODONTINI*** **nov.**, DOP.da.f092 • **KY**
**SI**: 533 • **CI**: h426 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *LEPTODACTYLODONTINI* • *Hoc loco* • **bT**
**OS**: *Leptodactylodon* 1903 • **PD**
**EN**: *LEPTODACTYLODONTINI* DOP.da.f092-00 • **bT**
**EF**: *ARTHROLEPTIDAE* 1869.ma.f011

***LEPTOLALAGINAE*** Delorme[+3], 2006.da.f001 • **KY**
**SI**: 365 • **CI**: h271 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *LEPTOLALAGINAE* • Delorme[+3] 2006.da: 7 • **bF**
01 • *LEPTOLALAGINI* • *Hoc loco* • **T**
**OS**: *Leptolalax* 1980 • **OD**
**EN**: *LEPTOLALAGINI* 2006.da.f001-01 • **T**
**EF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

***LEPTOPELINI*** Laurent, 1972.la.f002 • **KY**
**SI**: 291 • **CI**: h206 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *LEPTOPELINI* • Laurent 1972.la: 201 • **T**
01 • *LEPTOPELINAE* • Dubois 1981.da: 227 • **bF**
02 • *LEPTOPELIDAE* • Bauer 1986.ba: iii • **F**
**OS**: *Leptopelis* 1859 • **OE**
**EN**: *LEPTOPELINAE* 1972.la.f002-01 • **bF**
**EF**: *ARTHROLEPTIDAE* 1869.ma.f011

***LEPTOPHRYNITUES*** **nov.**, DOP.da.f024 • **KY**
**SI**: 465 • **CI**: h358 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *LEPTOPHRYNITUES* • *Hoc loco* • **hCn**
**OS**: *Leptophryne* 1843 • **PD**
**EN**: *LEPTOPHRYNITUES* DOP.da.f024-00 • **hCn**
**EF**: *BUFONIDAE* 1825.gb.f004

*LIMNODYNASTINI* Lynch, 1969.lb.f001 • **AN**
**SI**: 283 • **CI**: n080 • **ST**: 0.28.50
**RL**: INR
**PA**: 00 • *LIMNODYNASTINI* • Lynch 1969.lb: 3 • **T**
**OS**: *Limnodynastes* 1843 • **OE**
**EN**: (1) *LIMNODYNASTINAE* 1971.la.f001-01 • **bF**
(2) *LIMNODYNASTINI* 1971.la.f001-00 • **T**
(3) *LIMNODYNASTINA* 1971.la.f001-03 • **bT**
**EF**: *MYOBATRACHIDAE* 1850.sa.f001

***LIMNODYNASTINI*** Lynch, 1971.la.f001 • **KY**
**SI**: 287 • **CI**: h202 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *LIMNODYNASTINI* • Lynch 1971.la: 83 • **T**
01 • *LIMNODYNASTINAE* • Heyer[+1] 1976.ha: 5 • **bF**
02 • *LIMNODYNASTIDAE* • Zug[+2] 2001.za: 411 • **F**
03 • *LIMNODYNASTINA* • *Hoc loco* • **bT**
**OS**: *Limnodynastes* 1843 • **OE**
**EN**: (1) *LIMNODYNASTINAE* 1971.la.f001-01 • **bF**
(2) *LIMNODYNASTINI* 1971.la.f001-00 • **T**
(3) *LIMNODYNASTINA* 1971.la.f001-03 • **bT**
**EF**: *MYOBATRACHIDAE* 1850.sa.f001

***LIMNODYTAE*** Fitzinger, 1843.fa.f001 • **KY**
**SI**: 066 • **CI**: h034 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *LIMNODYTAE* • Fitzinger 1843.fa: 31 • **F**
01 • *LIMNODYTINI* • Dubois 1981.da: 231 • **F**
02 • *LIMNODYTINOA* • *Hoc loco* • **hT**
**OS**: *Limnodytes* 1841 ≡ *Hylarana* 1838 • **OE**
**EN**: *LIMNODYTINOA* 1843.fa.f001-02 • **hT**
**EF**: *RANIDAE* 1796.ba.f001

***LIMNOMEDUSINAE*** **nov.**, DOP.da.f049 • **KY**
**SI**: 490 • **CI**: h383 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *LIMNOMEDUSINAE* • *Hoc loco* • **bF**
**OS**: *Limnomedusa* 1843 • **PD**
**EN**: *LIMNOMEDUSINAE* DOP.da.f049-00 • **bF**
**EF**: *CYCLORAMPHIDAE* 1850.bb.f003-|1852.ba.f001|

***LIMNONECTINI*** Dubois, 1992.da.f002 • **KY**
**SI**: 349 • **CI**: h256 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *LIMNONECTINI* • Dubois 1992.da: 315 • **T**
01 • *LIMNONETINAE* • Fei[+2] 2010.fa: 12 • **bF**
02 • *LIMNONECTINAE* • Fei[+2] 2010.fa: 27 • **bF**

**OS**: *Limnonectes* 1843 • **OD**
**EN**: *Limnonectinae* 1992.da.f002-02 • **bF**
**EF**: *Dicroglossidae* 1987.da.f004

*Linguata* Gravenhorst, 1843.ga.f002 • **AN**
**SI**: 085 • **CI**: n032 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Linguata* • Gravenhorst 1843.ga: 393 • **F**
**OS**: » 9 **PN**, including: *Rana* 1758 • **PD**
**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**
»»»
(12) *Ranitoes* 1796.ba.f001-38 • **iCn**
**EF**: *Ranidae* 1796.ba.f001

*Liopelmatina* Mivart, 1869.ma.f007 • **CG**
**SI**: 167 • **CI**: h115 • **ST**: 0.10.61
**RL**: < *Leiopelmidae* 1942.ta.f001 • **PP**: Opinion 1071 (Melville 1977.ma)
**PA**: 00 • *Liopelmatina* • Mivart 1869.ma: 291 • **bF** • **IG**: Melville 1977.ma
01 • *Liopelmidae* • Noble 1924.na: 9 • **F** • **IG**: Melville 1977.ma
02 • *Lipelmidae* • Kuhn 1939.ka: 92 • **F** • **IG**: Melville 1977.ma
03 • *Liopelmoidea* • Laurent 1948.la: 1 • **pF**
**OS**: *Liopelma* 1865 **CI** ≡ *Leiopelma* 1861 • **OE**
**EN**: (1) *Leiopelmatidae* 1869.ma.f007-|1942.ta.f001|-02 • **F**
(2) *Leiopelmatinae* 1869.ma.f007-|1942.ta.f001|-03 • **bF**
**EF**: *Leiopelmatidae* 1869.ma.f007-|1942.ta.f001|

*Lipelucidae* Huene, 1956.ha.f001 ‡ • **AN**
**SI**: 252 • **CI**: n071 • **ST**: 0.25.50
**RL**: INR
**PA**: 00 • *Lipelucidae* • Huene 1956.ha: 113 • **bF**
**OS**: » 5 **PN**, including: *Eobatrachus* 1887 ‡ • **PD**
**EN**: **Anura** Familia *Incertae sedis*
**EF**: **Anura** Familia *Incertae sedis*

*Lipotremen* Haeckel, 1866.ha.f002 • **AN**
**SI**: 157 • **CI**: n050 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Lipotremen* • Haeckel 1866.ha: cxxxii • **F**
**OS**: » [2 **PN**, including: ] *Salamandra* 1768 ≈ *Salamandra* 1764 • **PD**
**EN**: (1) *Salamandroidea* 1820.ga.f002-21 • **pF**
»»»
(4) *Salamandrini* 1820.ga.f002-28 • **T**
**EF**: *Salamandridae* 1820.ga.f002

***Lissotritoninoa*** **nov.**, DOP.da.f144 • **KY**
**SI**: 585 • **CI**: h478 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Lissotritoninoa* • *Hoc loco* • **hT**
**OS**: *Lissotriton* 1839 • **PD**
**EN**: *Lissotritoninoa* DOP.da.f144-00 • **hT**
**EF**: *Salamandridae* 1820.ga.f002 ***Mantellinae*** Laurent, 1946.la.f001

***Lithobatities*** **nov.**, DOP.da.f108 • **KY**
**SI**: 549 • **CI**: h442 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Lithobatities* • *Hoc loco* • **bCn**
**OS**: *Lithobates* 1843 • **PD**
**EN**: *Lithobatities* DOP.da.f108-00 • **bCn**
**EF**: *Ranidae* 1796.ba.f001

*Litoriinae* Dubois[+1], 2016.da.f001 • **JD**
**SI**: 438 • **CI**: h331 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Litoriinae* • Dubois[+1] 2016.da: 19 • **bF**
**OS**: *Litoria* 1838 • **OD**
**EN**: *Pelodryadinae* 1859.ga.f001-01 • **bF**
**EF**: *Phyllomedusidae* 1858.gc.f009

***Liuhuranitoes*** **nov.**, DOP.da.f110 • **KY**
**SI**: 551 • **CI**: h444 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Liuhuranitoes* • *Hoc loco* • **bCn**
**OS**: *Liuhurana* 2010 • **PD**
**EN**: *Liuhuranitoes* DOP.da.f110-00 • **bCn**
**EF**: *Ranidae* 1796.ba.f001

*Liuixalini* Hertwig[+3] 2013.ha.f001 • **AN**
**SI**: 431 • **CI**: n103 • **ST**: 0.22.50, 0.24.50, 0.28.50
**RL**: INR
**PA**: 00 • *Liuixalini* • Hertwig[+3] 2013.ha: 571 • **T**
**OS**: *Liuixalus* 2008 **AN** ≡ *Romeus* **nov.** • **OE**
**EN**: *Romerina* DOP.da.f128-00 • **bT**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Liuraninae*** Fei[+2], 2010.fa.f010 • **KY**
**SI**: 401 • **CI**: h301 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Liuraninae* • Fei[+2] 2010.fa: 12 • **bF**
01 • *Liuranini* • Fei[+2] 2010.fa: 17 • **T**
**OS**: *Liurana* 1987 • **OD**
**EN**: *Liuraninae* 2010.fa.010-00 • **F**
**EF**: *Ceratobatrachidae* 1884.ba.f001

*Lophiohylinae* Miranda-Ribeiro, 1926.ma.f004 • **MK**
**SI**: 211 • **CI**: h147 • **ST**: 0.10.58
**RL**: ≤ *Lophyohylini* 2014.fa.f001 • **MK**: Fouquette[+1] 2014.fa: 368
**PA**: 00 • *Lophiohylinae* • Miranda-Ribeiro 1926.ma: 64 • **F**
01 • *Lophiohylini* • Faivovich[+5] 2005.fa: 4 • **T**
02 • *Lophiohylina* • Faivovich[+5] 2005.fa: 4 • **bT**
03 • *Lophiohylinia* • Faivovich[+5] 2005.fa: 4 • **iT**
**OS**: *Lophiohyla* 1926 ≈ *Phyllodytes* 1830 • **OE**
**EN**: (1) *Lophyohylini* 1926.ma.f004-|2014.fa.f001|-00 • **T**
»»»
(3) *Lophyohylinia* 1926.ma.f004-|2014.fa.f001|-03 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Lophyohylini*** Fouquette[+1], 2014.fa.f001 • **MK**
**SI**: 432 • **CI**: h325 • **ST**: 0.10.34
**RL**: ≥ *Lophiohylinae* 1926.ma.f004 • **MK**: Fouquette[+1] 2014.fa: 368
**PA**: 00 • *Lophyohylini* • Fouquette[+1] 2014.fa: 7 • **T** • **NO**
01 • *Lophyohylinae* • Duellman[+2] 2016.db: 3 • **T** • **NO**
02 • *Lophyohylina* • *Hoc loco* • **bT**
03 • *Lophyohylinia* • *Hoc loco* • **iT**
**OS**: *Lophyohyla* 1923 ≈ *Phyllodytes* 1830 • **OE**
**EN**: (1) *Lophyohylini* 1926.ma.f004-|2014.fa.f001|-00 • **T**
(2) *Lophyohylina* 1926.ma.f004-|2014.fa.f001|-02 • **bT**
(3) *Lophyohylinia* 1926.ma.f004-|2014.fa.f001|-03 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Macrogenioglottidae* Reig, 1972.ra.f001 • **JD**
**SI**: 292 • **CI**: h207 • **ST**: 0.10.40

**RL**: INR
**PA**: 00 • *Macrogenioglottidae* • Reig 1972.ra: 30 • **F**
**OS**: *Macrogenioglottus* 1946 • **OE**
**EN**: (1) *Odontophrynidae* 1971.la.f002-03 • **F**
(2) *Odontophryninae* 1971.la.f002-04 • **bF**
**EF**: *Odontophrynidae* 1971.la.f002

***Mantellinae*** Laurent, 1946.la.f001 • **ky**
**SI**: 242 • **CI**: h173 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Mantellinae* • Laurent 1946.la: 336 • **bF**
01 • *Mantellidae* • Bauer 1985.ba: 3 • **F**
02 • *Mantellini* • Dubois 2005.da: 16 • **T**
03 • *Mantellina* • *Hoc loco* • **bT**
04 • *Mantellinia* • *Hoc loco* • **iT**
**OS**: *Mantella* 1882 • **OE**
**EN**: (1) *Mantellinae* 1946.la.f001-00 • **bF**
(2) *Mantellini* 1946.la.f001-02 • **T**
(3) *Mantellina* 1946.la.f001-03 • **bT**
(4) *Mantellinia* 1946.la.f001-04 • **iT**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Mantidactylina*** **nov.**, DOP.da.f113 • **ky**
**SI**: 554 • **CI**: h447 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Mantidactylina* • *Hoc loco* • **bT**
01 • *Mantidactylinia* • *Hoc loco* • **iT**
02 • *Mantidactylinoa* • *Hoc loco* • **hT**
**OS**: *Mantidactylus* 1895 • **PD**
**EN**: (1) *Mantidactylina* DOP.da.f113-00 • **bT**
(2) *Mantidactylinia* DOP.da.f113-01 • **iT**
(3) *Mantidactylinoa* DOP.da.f113-02 • **hT**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

*Meantia* Rafinesque, 1814.ra.f002 • **an**
**SI**: 004 • **CI**: n002 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Meantia* • Rafinesque 1814.ra: 103 • **F**
**OS**: » Subsequent mention in Rafinesque 1815.ra: 78:
» 3 **PN**, including: *Sirena* 1808 **am** ≡ *Siren* 1766 • **PD**
**EN**: *Sirenidae* 1825.gb.f005-00 • **F**
**EF**: *Sirenidae* 1825.gb.f005

*Mecodonta* Strauch, 1870.sa.f001 • **an**
**SI**: 174 • **CI**: n051 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Mecodonta* • Strauch 1870.sa: 28 • **T**
01 • *Mecodonta* • Hoffmann 1878.ha: 662 • **bF**
02 • *Mecodonta* • Leunis 1883.la: 624 • **F**
03 • *Mecodonta* • Gadow 1901.ga: 95 • **UF**
**OS**: » 6 **PN**, including: *Salamandra* 1768 ≈ *Salamandra* 1764 • **PD**
**EN**: (1) *Salamandroidea* 1820.ga.f002-21 • **pF**
»»»
(4) *Salamandrini* 1820.ga.f002-28 • **T**
**EF**: *Salamandridae* 1820.ga.f002

*Megalobatrachi* Fitzinger, 1843.fa.f014 • **jd**
**SI**: 079 • **CI**: h047 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Megalobatrachi* • Fitzinger 1843.fa: 34 • **F**
01 • *Megalobatrachidae* • Jánossy 1979.ja: 22 • **F**
**OS**: *Megalobatrachus* 1837 ≈ *Andrias* 1837 ‡ • **OE**
**EN**: *Cryptobranchidae* 1826.fb.f003-04 • **F**
**EF**: *Cryptobranchidae* 1826.fb.f003

*Megalophreidina* Bonaparte, 1850.bb.f008 • **mk**
**SI**: 100 • **CI**: h062 • **ST**: 0.10.58
**RL**: ≤ *Pelobatidae* 1850.bb.f004 • **PR**: Dubois 1983.da: 271
≤ *Megophryidae* 1850.bb.f008-|1931.na.f003| • **MK**: Dubois 1983.da: 272
**PA**: 00 • *Megalophreidina* • Bonaparte 1850.bb: pl. • **bF**
01 • *Megalophryinae* • Fejérváry 1921.fb: 25 • **bF**
02 • *Megalophryninae* • Tatarinov 1964.ta: 129 • **bF**
**OS**: *Megalophrys* 1830 ≡ *Megophrys* 1822 • **OE**
**EN**: (1) *Megophryidae* 1850.bb.f008-|1931.na.f003|-04 • **F**
»»»
(3) *Megophryini* 1850.bb.f008-|1931.na.f003|-02 • **T**
**EF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

***Megophryinae*** Noble, 1931.na.f003 • **mk**
**SI**: 218 • **CI**: h153 • **ST**: 0.10.34
**RL**: > *Megalophreidina* 1850.bb.f008 • **MK**: Dubois 1983.da: 272
**PA**: 00 • *Megophryinae* • Noble 1931.na: 492 • **bF**
01 • *Megophrynae* • Casamiquela 1961.ca: 79 • **bF**
02 • *Megophryini* • Dubois 1980.da: 471 • **T**
03 • *Megophrynidae* • Špinar 1983.sa: 55 • **F**
04 • *Megophryidae* • Špinar 1983.sa: 55 • **F**
05 • *Megaphryinae* • Chaimanee[+2] 1993.cb: 46 • **bF**
**OS**: *Megophrys* 1822 • **OE**
**EN**: (1) *Megophryidae* 1850.bb.f008-|1931.na.f003|-04 • **F**
(2) *Megophryinae* 1850.bb.f008-|1931.na.f003|-00 • **bF**
(3) *Megophryini* 1850.bb.f008-|1931.na.f003|-02 • **T**
**EF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

***Melanobatrachinae*** Noble, 1931.na.f015 • **ky**
**SI**: 230 • **CI**: h164 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Melanobatrachinae* • Noble 1931.na: 538 • **bF**
01 • *Megalobatrachinae* • Kuhn 1962.ka: 348 • **bF**
02 • *Megalobatrachidae* • Bossuyt[+1] 2009.ba: 358 • **F**
**OS**: *Melanobatrachus* 1878 • **OE**
**EN**: *Melanobatrachinae* 1931.na.f015-00 • **bF**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Melanophryniscinae*** **nov.**, DOP.da.f038 • **ky**
**SI**: 479 • **CI**: h372 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Melanophryniscinae* • *Hoc loco* • **bF**
**OS**: *Melanophryniscus* 1961 • **PD**
**EN**: *Melanophryniscinae* DOP.da.f038-00 • **bF**
**EF**: *Bufonidae* 1825.gb.f004

*Menobranchidae* Gray, 1842.ga.f002 • **jd**
**SI**: 065 • **CI**: h033 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Menobranchidae* • Gray 1842.ga: 114 • **F**
01 • *Menobranchia* • Lichtenstein[+2] 1856.la: 45 • **F**
02 • *Menobranchida* • Knauer 1878.ka: 96 • **F**
**OS**: *Menobranchus* 1825 ≈ *Necturus* 1819 • **OE**
**EN**: (1) *Proteoidae* 1831.ba.f002-10 • **eF**
(2) *Proteidae* 1831.ba.f002-02 • **F**
**EF**: *Proteidae* 1831.ba.f002

***Menopomatidae*** Hogg 1838.ha.f003 • **JD**

**SI**: 050 • **CI**: h024 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Menopomatidae* • Hogg 1838.ha: 152 • **F**

01 • *Menopomina* • Bonaparte 1839.bf: 16 • **UF**

02 • *Menopomidae* • Baird 1851.ba: 252 • **UF**

03 • *Menopomae* • Duméril 1863.da: 303 • **F**

04 • *Menopomidae* • Claus 1868.cb: 586 • **F**

05 • *Menopomida* • Smith 1877.sa: tab. [10–11], 19, 21 • **UF**

06 • *Menopomida* • Knauer 1878.ka: 96 • **F**

**OS**: *Menopoma* 1825 ≈ *Cryptobranchus* 1821 • **OE**

**EN**: *Cryptobranchidae* 1826.fb.f003-04 • **F**

**EF**: *Cryptobranchidae* 1826.fb.f003

***Mercuranites* nov.**, DOP.da.f120 • **KY**

**SI**: 561 • **CI**: h454 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Mercuranites* • *Hoc loco* • **Cn**

01 • *Mercuranities* • *Hoc loco* • **bCn**

**OS**: *Mercurana* 2013 • **PD**

**EN**: (1) *Mercuranites* DOP.da.f120-00 • **Cn**

(2) *Mercuranities* DOP.da.f120-01 • **bCn**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Meristogenyinae*** Fei[+2], 2010.fa.f003 • **KY**

**SI**: 394 • **CI**: h294 • **ST**: 0.10.32

**RL**: ≥ *Clinotarsini* 2010.fa.f011 • **PR**: *hoc loco*

**PA**: c0 • *Meristogenyinae* • Fei[+2] 2010.fa: 18 • **bF** • **EEA**: **PD**

i1 • *Meristogeninae* • Fei[+2] 2010.fa: 17 • **bF**

02 • *Meristogenyini* • Fei[+2] 2010.fa: 18 • **T**

**OS**: *Meristogenys* 1991 • **OD**

**EN**: *Meristogenyini* 2010.fa.f003-02 • **T**

**EF**: *Ranidae* 1796.ba.f001

***Micrhylina*** Günther, 1858.gc.f003 • **MK**

**SI**: 131 • **CI**: h085 • **ST**: 0.10.58

**RL**: < *Microhylidae* |1843.fa.f012|-1931.na.f001 • **MK**: Dubois 1983.da: 275

**PA**: 00 • *Micrhylina* • Günther 1858.gc: 344 • **Sc**

01 • *Micrhylidae* • Günther 1858.gc: 346 • **F**

02 • *Michrylina* • Mivart 1869.ma: 288 • **bF**

03 • *Michrylina* • Jiménez de la Espada 1870.ja: 65 • **Sc**

04 • *Michrylidae* • Fatio 1872.fa: 230 • **F**

05 • *Micrhylina* • Hoffmann 1878.ha: 614 • **F**

06 • *Micrihylina* • Brocchi 1881.ba: 28 • **Sc**

**OS**: *Micrhyla* 1841 ≡ *Microhyla* 1838 • **OE**

**EN**: (1) *Microhylidae* |1843.fa.f012|-1931.na.f001-01 • **F**

**»»»**

(4) *Microhylina* |1843.fa.f012|-1931.na.f001-08 • **bT**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Micrixalinae*** Bossuyt[+1], 2001.ba.f001 • **AN**

**SI**: 361 • **CI**: n090 • **ST**: 0.28.50

**RL**: INR

**PA**: 00 • *Micrixalinae* • Bossuyt[+1] 2001.ba: 94 • **bF**

**OS**: *Micrixalus* 1888 • **OE**

**EN**: (1) *Micrixaloidae* 2001.db.f001-02 • **eF**

(2) *Micrixalidae* 2001.db.f001-01 • **F**

**EF**: *Micrixalidae* 2001.db.f001

***Micrixalinae*** Dubois[+2], 2001.db.f001 • **KY**

**SI**: 362 • **CI**: h268 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Micrixalinae* • Dubois[+2] 2001.db: 56 • **bF**

01 • *Micrixalidae* • Frost[+18] 2006.fa: 7 • **F**

02 • *Micrixaloidae* • *Hoc loco* • **eF**

**OS**: *Micrixalus* 1888 • **OD**

**EN**: (1) *Micrixaloidae* 2001.db.f001-02 • **eF**

(2) *Micrixalidae* 2001.db.f001-01 • **F**

**EF**: *Micrixalidae* 2001.db.f001

***Microcaeciliinoa* nov.**, DOP.da.f129 • **KY**

**SI**: 570 • **CI**: h463 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Microcaeciliinoa* • *Hoc loco* • **hT**

**OS**: *Microcaecilia* 1968 • **PD**

**EN**: *Microcaeciliinoa* DOP.da.f129-00 • **hT**

**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Microhylinae*** Noble, 1931.na.f001 • **SK**

**SI**: 216 • **CI**: h151 • **ST**: 0.10.35

**RL**: > *Gastrophrynae* 1843.fa.f012 • **PS**: Dubois 1983.da: 274

> *Micrhylina* 1858.gc.f003 • **MK**: Dubois 1983.da: 275

**PA**: 00 • *Microhylinae* • Noble 1931.na: 451 • **bF**

01 • *Microhylidae* • Parker 1934.pa: i • **F**

02 • *Microhyloidea* • Laurent 1948.la: 3 • **bF**

03 • *Microchylidae* • Casamiquela 1961.ca: 81 • **F**

04 • *Microphylidae* • Richards[+4] 1977.ra: 387 • **eF**

05 • *Microhyloidae* • Dubois 1992.da: 309 • **eF**

06 • *Micrihylidae* • Ota 1995.oa: 72 • **F**

07 • *Microhylini* • Dubois 2005.da: 15 • **T**

08 • *Microhylina* • *Hoc loco* • **bT**

**OS**: *Microhyla* 1838 • **OE**

**EN**: (1) *Microhylidae* |1843.fa.f012|-1931.na.f001-01 • **F**

(2) *Microhylinae* |1843.fa.f012|-1931.na.f001-00 • **bF**

(3) *Microhylini* |1843.fa.f012|-1931.na.f001-07• **T**

(4) *Microhylina* |1843.fa.f012|-1931.na.f001-08 • **bT**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Micrylettina* nov.**, DOP.da.f091 • **KY**

**SI**: 532 • **CI**: h425 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Micrylettina* • *Hoc loco* • **bT**

**OS**: *Micryletta* 1987 • **PD**

**EN**: *Micrylettina* DOP.da.f091-00 • **bT**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Mixophyinae* nov.**, DOP.da.f075 • **KY**

**SI**: 516 • **CI**: h409 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Mixophyinae* • *Hoc loco* • **bT**

**OS**: *Mixophyes* 1864 • **PD**

**EN**: *Mixophyinae* DOP.da.f075-00 • **bT**

**EF**: *Myobatrachidae* 1850.sa.f001

***Molgina*** Bonaparte, 1850.bb.f015 • **KY**

**SI**: 107 • **CI**: h069 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Molgina* • Bonaparte 1850.bb: pl. • **bF**

01 • *Molgidae* • Gray 1850.ga: 5, 30 • **F**

02 • *Molgida* • Knauer 1878.ka: 97. • **F**

03 • *Molginae* • Dubois 1985.da: 68 • **bF**
04 • *Molgini* • Dubois[+1] 2009.db: 30 • **T**
05 • *Molgina* • Dubois[+1] 2009.db: 30 • **bT**
06 • *Molgita* • Dubois[+1] 2009.db: 34 • **iT**
07 • *Molginia* • *Hoc loco* • **iT**
08 • *Molginoa* • *Hoc loco* • **hT**
09 • *Molgites* • *Hoc loco* • **Cn**
**OS**: *Molge* 1820 ≡ *Triturus* 1815 • **OE**
**EN**: (1) *Molgini* 1850.bb.f015-04 • **T**
(2) *Molgina* 1850.bb.f015-05 • **bT**
(3) *Molginia* 1850.bb.f015-07 • **iT**
(4) *Molginoa* 1850.bb.f015-08 • **hT**
(5) *Molgites* 1850.bb.f015-09 • **Cn**
**EF**: *Salamandridae* 1820.ga.f002

*Monomorpha* Van der Hoeven, 1833.va.f002 • **an**
**SI**: 042 • **CI**: n020 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Monomorpha* • Van der Hoeven 1833.va: iii, 304 • **F**
**OS**: » 5 **PN**, including: *Siren* 1766 • **PD**
**EN**: *Sirenidae* 1825.gb.f005-00 • **F**
**EF**: *Sirenidae* 1825.gb.f005

*Montsechobatrachidae* Romer, 1945.ra.f001 • **an**
**SI**: 241 • **CI**: n065 • **ST**: 0.28.50
**RL**: INR
**PA**: 00 • *Montsechobatrachidae* • Romer 1945.ra: 591 • **F**
**OS**: *Montsechobatrachus* 1921 (1926) ‡ • **am** ≡ *Monsechobatrachus* 1921 ‡ • **OE**
**EN**: **Anura** Familia *Incertae sedis*
**EF**: **Anura** Familia *Incertae sedis*

*Montsechobatrachidae* Casamiquela, 1961.ca.f001 ‡ • **ap**
**SI**: 264 • **CI**: h185 • **ST**: 0.10.46
**RL**: INR
**PA**: 00 • *Montsechobatrachidae* • Casamiquela 1961.ca: 81, 97 • **F**
**OS**: *Montsechobatrachus* 1926 ‡ • **am** ≡ *Monsechobatrachus* 1921 ‡ • **OE**
**EN**: **Anura** Familia *Incertae sedis*
**EF**: **Anura** Familia *Incertae sedis*

***Morerellina* nov.**, DOP.da.f095 • **ky**
**SI**: 536 • **CI**: h429 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Morerellina* • *Hoc loco* • **bT**
**OS**: *Morerella* 2009 • **PD**
**EN**: *Morerellina* DOP.da.f095-00 • **bT**
**EF**: *Hyperoliidae* 1943.lb.f001

*Muraenopses* Fitzinger, 1843.fa.f016 • **jd**
**SI**: 081 • **CI**: h049 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Muraenopses* • Fitzinger 1843.fa: 34 • **F**
**OS**: *Muraenopsis* 1843 ≈ *Amphiuma* 1821 • **OE**
**EN**: (1) *Amphiumoidea* 1825.gb.f007-10 • **pF**
»»»
(4) *Amphiumidae* 1825.gb.f007-00 • **F**
**EF**: *Amphiumidae* 1825.gb.f007

*Mycetoglossina* Bonaparte, 1850.bb.f017 • **cg**
**SI**: 109 • **CI**: h071 • **ST**: 0.10.61
**RL**: INR
**PA**: 00 • *Mycetoglossina* • Bonaparte 1850.bb: pl. • **bF** • **IG**: Opinion 1873 (Anonymous 1997.aa)
01 • *Mycetoglossini* • Dubois 1984.da: 113 • **bF**
**OS**: *Mycetoglossus* 1839 **ci** ≡ *Pseudotriton* 1838 • **OE**
**EN**: *Pseudotritonina* 2012.da.f006-00 • **bT**
**EF**: *Plethodontidae* 1850.ga.f001

*Myctodera* Lichtenstein[+2], 1856.la.f001 • **an**
**SI**: 125 • **CI**: n041 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Myctodera* • Lichtenstein[+2] 1856.la: 43 • **F**
**OS**: » 11 **PN**, including: *Salamandra* 1768 ≈ *Salamandra* 1764 • **PD**
**EN**: (1) *Salamandroidea* 1820.ga.f002-21 • **pF**
»»»
(4) *Salamandrini* 1820.ga.f002-28 • **T**
**EF**: *Salamandridae* 1820.ga.f002

***Myersiohylini* nov.**, DOP.da.f052 • **ky**
**SI**: 494 • **CI**: h387 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Myersiohylini* • *Hoc loco* • **T**
**OS**: *Myersiohyla* 2005 • **PD**
**EN**: *Myersiohylini* DOP.da.f052-00 • **T**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Myiobatrachidae* Bonaparte, 1850.bb.f001 • **ji**
**SI**: 093 • **CI**: h055 • **ST**: 0.10.52
**RL**: INR
**PA**: 00 • *Myiobatrachidae* • Bonaparte 1850.bb: pl. • **F**
01 • *Myiobatrachina* • Bonaparte 1850.bb: pl. • **bF**
**OS**: *Myiobatrachus* [1850] 1858 ≡ *Myobatrachus* 1850 • **OE**
**EN**: (1) *Myobatrachidae* 1850.sa.f001-00 • **F**
»»»
(6) *Myobatrachinoa* 1850.sa.f001-07 • **hT**
**EF**: *Myobatrachidae* 1850.sa.f001

***Myobatrachidae*** Schlegel, 1850.sa.f001 • **ky**
**SI**: 092 • **CI**: h054 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Myobatrachidae* • Schlegel 1850.sa: 10 • **F**
01 • *Myobatrachida* • Knauer 1878.ka: 104 • **F**
02 • *Myobatrachinae* • Parker 1940.pa: 2 • **bF**
03 • *Myobatrachidaae* • Laurent 1991.la: 6 • **F**
04 • *Myobatrachoidea* • Bossuyt[+1] 2009.ba: 359 • **pF**
05 • *Myobatrachini* • *Hoc loco* • **T**
06 • *Myobatrachina* • *Hoc loco* • **bT**
07 • *Myobatrachinia* • *Hoc loco* • **iT**
08 • *Myobatrachinoa* • *Hoc loco* • **hT**
**OS**: *Myobatrachus* 1850 • **OE**
**EN**: (1) *Myobatrachidae* 1850.sa.f001-00 • **F**
(2) *Myobatrachinae* 1850.sa.f001-02 • **bF**
(3) *Myobatrachini* 1850.sa.f001-05 • **T**
(4) *Myobatrachina* 1850.sa.f001-06 • **bT**
(5) *Myobatrachinia* 1850.sa.f001-07 • **iT**
(6) *Myobatrachinoa* 1850.sa.f001-08 • **hT**
**EF**: *Myobatrachidae* 1850.sa.f001

***Nannophryini*** Fei[+2], 2010.fa.f006 • **ky**
**SI**: 397 • **CI**: h297 • **ST**: 0.10.30
**RL**: INR

**PA**: 00 • *Nannophryini* • Fei[+2] 2010.fa: 17 • **T**
01 • *Nannophryina* • *Hoc loco* • **bT**
**OS**: *Nannophrys* 1869 • **OD**
**EN**: *Nannophryina* 2010.fa.f006-01 • **bT**
**EF**: *Dicroglossidae* 1987.da.f004

***Nannophryninoa*** **nov.**, DOP.da.f034 • **KY**
**SI**: 475 • **CI**: h368 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Nannophryninoa* • *Hoc loco* • **hT**
**OS**: *Nannophryne* 1870 • **PD**
**EN**: *Nannophryninoa* DOP.da.f034-00 • **hT**
**EF**: *Bufonidae* 1825.gb.f004

***Nasikabatrachidae*** Biju[+1], 2003.bb.f001 • **KY**
**SI**: 360 • **CI**: h267 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Nasikabatrachidae* • Biju[+1] 2003.bb: 711 • **F**
**OS**: *Nasikabatrachus* 2003 • **OD**
**EN**: *Nasikabatrachidae* 2003.bb.f001-00 • **F**
**EF**: *Nasikabatrachidae* 2003.bb.f001

***Nasutixalites*** **nov.**, DOP.da.f122 • **KY**
**SI**: 563 • **CI**: h456 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Nasutixalites* • *Hoc loco* • **Cn**
**OS**: *Nasutixalus* 2016 • **PD**
**EN**: *Nasutixalites* DOP.da.f122-00 • **Cn**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Natalobatrachini*** **nov.**, DOP.da.f102 • **KY**
**SI**: 543 • **CI**: h436 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Natalobatrachini* • *Hoc loco* • **T**
**OS**: *Natalobatrachus* 1912 • **PD**
**EN**: *Natalobatrachini* DOP.da.f102-00 • **T**
**EF**: *Cacosternidae* 1931.na.f008

***Nectophrynidae*** Laurent, 1942.la.f001 • **KY**
**SI**: 238 • **CI**: h170 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Nectophrynidae* • Laurent 1942.la: 6 • **F**
01 • *Nectophrynini* • Dubois 1987.da: 27 • **T**
02 • *Nectophrynitoes* • *Hoc loco* • **iCn**
03 • *Nectophrynitues* • *Hoc loco* • **hCn**
**OS**: *Nectophryne* 1875 • **OE**
**EN**: (1) *Nectophrynitoes* 1942.la.f001-02 • **iCn**
(2) *Nectophrynitues* 1942.la.f001-03 • **hCn**
**EF**: *Bufonidae* 1825.gb.f004

*Nectophrynoidini* Dubois, 1982.f001 • **AN**
**SI**: 310 • **CI**: n086 • **ST**: 0.28.50
**RL**: INR
**PA**: 00 • *Nectophrynoidini* • Dubois 1982.da: 50 • **T**
**OS**: *Nectophrynoides* 1926 • **OE**
**EN**: (1) *Tornieriobatitoes* 1926.ma.f001-03 • **iCn**
(2) *Tornieriobatitues* 1926.ma.f001-04 • **hCn**
**EF**: *Bufonidae* 1825.gb.f004

*Necturi* Fitzinger, 1843.fa.f018 • **JD**
**SI**: 083 • **CI**: h051 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Necturi* • Fitzinger 1843.fa: 35 • **F**
01 • *Necturina* • Bonaparte 1845.ba: 378 • **bF**
02 • *Necturidae* • Bonaparte 1850.bb: pl. • **F**
03 • *Necturinae* • Blackburn[+1] 2011.ba: 47 • **bF**
**OS**: *Necturus* 1819 • **OE**
**EN**: (1) *Proteoidae* 1831.ba.f002-10 • **eF**
(2) *Proteidae* 1831.ba.f002-02 • **F**
**EF**: *Proteidae* 1831.ba.f002

***Neobatrachina*** **nov.**, DOP.da.f072 • **KY**
**SI**: 513 • **CI**: h406 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Neobatrachina* • *Hoc loco* • **bT**
**OS**: *Neobatrachus* 1863 • **PD**
**EN**: *Neobatrachina* DOP.da.f072-00 • **bT**
**EF**: *Myobatrachidae* 1850.sa.f001

***Nesorohylini*** **nov.**, DOP.da.f053 • **KY**
**SI**: 493 • **CI**: h386 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Nesorohylini* • *Hoc loco* • **T**
**OS**: *Nesorohyla* 2019 • **PD**
**EN**: *Nesorohylini* DOP.da.f053-00 • **T**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Neurergites*** **nov.**, DOP.da.f145 • **KY**
**SI**: 586 • **CI**: h479 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Neurergites* • *Hoc loco* • **hT**
**OS**: *Neurergus* 1862 • **PD**
**EN**: *Neurergites* DOP.f145-00 • **Cn**
**EF**: *Salamandridae* 1820.ga.f002

***Nidiranini*** Fei[+2], 2010.fa.f013 • **KY**
**SI**: 404 • **CI**: h304 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Nidiranini* • Fei[+2] 2010.fa: 18 • **T**
01 • *Nidiranites* • *Hoc loco* • **Cn**
**OS**: *Nidirana* 1992 • **OD**
**EN**: *Nidiranites* 2010.fa.f013-01 • **Cn**
**EF**: *Ranidae* 1796.ba.f001

***Noblellinoa*** **nov.**, DOP.da.f008 • **KY**
**SI**: 449 • **CI**: h342 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Noblellinoa* • *Hoc loco* • **hT**
**OS**: *Noblella* 1930 • **PD**
**EN**: *Noblellinoa* DOP.da.f008-00 • **hT**
**EF**: *Brachycephalidae* 1858.gc.f002

***Notadenini*** **nov.**, DOP.da.f074 • **KY**
**SI**: 515 • **CI**: h408 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Notadenini* • *Hoc loco* • **bT**
**OS**: *Notaden* 1873 • **PD**
**EN**: *Notadenini* DOP.da.f074-00 • **bT**
**EF**: *Myobatrachidae* 1850.sa.f001

***Noterpetontidae*** Rage[+2], 1993.ra.f001 ‡ • **KY**
**SI**: 353 • **CI**: h260 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Noterpetontidae* • Rage[+2] 1993.ra: 516 • **F**
01 • *Noterpetidae* • Dubois[+1] 2012.da: 102 • **F**
**OS**: *Noterpeton* 1993 ‡ • **OD**

**EN**: *Noterpetidae* 1993.ra.f001-01 † • **F**
**EF**: *Noterpetidae* 1993.ra.f001-01 †

***Notobatrachidae*** Reig *in* Stepanicic[+1], 1956.sa.f001 ‡ • **KY**
**SI**: 253 • **CI**: h178 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Notobatrachidae* • Reig *in* Stipanicic[+1] 1956.sa: 219 • **F**
01 • *Notobatracidae* • Reig 1958.ra: 114 • **F**
02 • *Notobatrachinae* • Barbadillo[+2] 1997.ba: 55 • **bF**
**OS**: *Notobatrachus* 1956 ‡ • **OE**
**EN**: *Notobatrachinae* 1956.sa.f001-02 • **bF**
**EF**: *Leiopelmatidae* 1869.ma.f007-|1942.ta.f001|

***Nototritonities*** **nov.**, DOP.da.f139 • **KY**
**SI**: 580 • **CI**: h473 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Nototritonities* • *Hoc loco* • **bCn**
**OS**: *Nototriton* 1983 • **PD**
**EN**: *Nototritonities* DOP.da.f139-00 • **bCn**
**EF**: *Plethodontidae* 1850.ga.f001

***Nyctanolites*** **nov.**, DOP.da.f140 • **KY**
**SI**: 581 • **CI**: h474 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Nyctanolites* • *Hoc loco* • **Cn**
**OS**: *Nyctanolis* 1983 • **PD**
**EN**: *Nyctanolites* DOP.da.f140-00 • **Cn**
**EF**: *Plethodontidae* 1850.ga.f001

***Nyctibatrachinae*** Blommers-Schlösser, 1993.ba.f001 • **KY**
**SI**: 354 • **CI**: h261 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Nyctibatrachinae* • Blommers-Schlösser 1993.ba: 199 • **bF**
01 • *Nyctibatrachidae* • Frost[+18] 2006.fa: 7 • **F**
02 • *Nyctibatracheidae* • *Hoc loco* • **aF**
**OS**: *Nyctibatrachus* 1882 • **OE**
**EN**: (1) *Nyctibatracheidae* 1993.ba.f001-02 • **aF**
(2) *Nyctibatrachidae* 1993.ba.f001-01 • **F**
**EF**: *Nyctibatrachidae* 1993.ba.f001

***Nyctimantinia*** **nov.**, DOP.da.f066 • **KY**
**SI**: 507 • **CI**: h400 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Nyctimantinia* • *Hoc loco* • **iT**
**OS**: *Nyctimantis* 1882 • **PD**
**EN**: *Nyctimantinia* DOP.da.f066-00 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Nyctimystinae* Laurent, 1975.la.f001 • **JD**
**SI**: 297 • **CI**: h210 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Nyctimystinae* • Laurent 1975.la: 183 • **bF**
**OS**: *Nyctimystes* 1916 • **OE**
**EN**: *Pelodryadinae* 1859.ga.f001-01 • **bF**
**EF**: *Phyllomedusidae* 1858.gc.f009

***Nyctixalini*** Grosjean[+3], 2008.ga.f001 • **KY**
**SI**: 380 • **CI**: h280 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Nyctixalini* • Grosjean[+3] 2008.ga: 174 • **T**
01 • *Nyctixalinia* • *Hoc loco* • **iT**
**OS**: *Nyctixalus* 1882 • **OD**
**EN**: *Nyctixalinia* 2008.ga.f001-01 • **iT**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Nymphargini*** **nov.**, DOP.da.f046 • **KY**
**SI**: 487 • **CI**: h380 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Nymphargini* • *Hoc loco* • **T**
**OS**: *Nymphargus* 2007 • **PD**
**EN**: *Nymphargini* DOP.da.f046-00 • **T**
**EF**: *Centrolenidae* 1951.ta.f001

***Occidozyginae*** Fei[+2], 1990.fa.f002 • **KY**
**SI**: 345 • **CI**: h252 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Occidozyginae* • Fei[+2] 1990.fb: 4, 123 • **bF**
01 • *Occidozyinae* • Ye[+2] 1993.ya: 309 • **bF**
02 • *Occidozygini* • Dubois 2005.da: 16 • **T**
03 • *Occidozygidae* • Borah[+5] 2013.ba: 39 • **F**
**OS**: *Occidozyga* 1822 • **OE**
**EN**: (1) *Occidozygidae* 1990.fa.f002-03 • **F**
(2) *Occidozyginae* 1990.fa.f002-00 • **bF**
**EF**: *Occidozygidae* 1990.fa.f002

***Odontobatrachidae*** Barej[+5], 2014.ba.f001 • **KY**
**SI**: 433 • **CI**: h326 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Odontobatrachidae* • Barej[+5] 2014.ba: 1 • **F**
01 • *Odontobatrachoidea* • *Hoc loco* • **pF**
**OS**: *Odontobatrachus* 2014 • **OD**
**EN**: (1) *Odontobatrachoidea* 2014.ba.f001-01 • **pF**
(2) *Odontobatrachidae* 2014.ba.f001-00 • **F**
**EF**: *Odontobatrachidae* 2014.ba.f001

*Odontophrynini* Lynch, 1969.lb.f002 • **AN**
**SI**: 284 • **CI**: n081 • **ST**: 0.28.50
**RL**: INR
**PA**: 00 • *Odontophrynini* • Lynch 1969.lb: 3 • **T**
**OS**: *Odontophrynus* 1862 • **OE**
**EN**: (1) *Odontophrynidae* 1971.la.f002-03 • **F**
(2) *Odontophryninae* 1971.la.f002-04 • **bF**
**EF**: *Odontophrynidae* 1971.la.f002

***Odontophrynini*** Lynch, 1971.la.f002 • **KY**
**SI**: 288 • **CI**: h203 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Odontophrynini* • Lynch 1971.la: 130 • **T**
01 • *Odontophryini* • Lynch 1973.la: 497 • **T**
02 • *Odontophrynae* • Ardila-Robayo 1979.aa: pl. p. 474–475 • **bF**
03 • *Odontophrynidae* • Pyron[+1] 2011.pa: 543 • **F**
04 • *Odontophryninae* • *Hoc loco* • **F**
**OS**: *Odontophrynus* 1862 • **OE**
**EN**: (1) *Odontophrynidae* 1971.la.f002-03 • **F**
(2) *Odontophryninae* 1971.la.f002-04 • **bF**
**EF**: *Odontophrynidae* 1971.la.f002

***Odorranini*** Fei[+2], 2010.fa.f015 • **KY**
**SI**: 406 • **CI**: h306 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Odorranini* • Fei[+2] 2010.fa: 18 • **T**
01 • *Odorranites* • *Hoc loco* • **Cn**

**OS**: *Odorrana* 1990 • **OD**
**EN**: *ODORRANITES* 2010.fa.f015-01 • **Cn**
**EF**: *RANIDAE* 1796.ba.f001

*OEDIPINA* Gray, 1850.ga.f004 • **JG**
**SI**: 115 • **CI**: h077 • **ST**: 1.10.53
**RL**: INR
**PA**: 00 • *OEDIPINA* • Gray 1850.ga: 42 • **UF**
**OS**: *Oedipus* 1838 **JH** ≈ *Bolitoglossa* 1854 • **OE**
**EN**: (1) *BOLITOGLOSSINI* 1850.ha.f002-03 • **T**
»»»
(4) *BOLITOGLOSSINOA* 1850.ha.f002-06 • **hT**
**EF**: *PLETHODONTIDAE* 1850.ga.f001

***OEDIPINITUES* nov.**, DOP.da.f138 • **KY**
**SI**: 579 • **CI**: h472 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *OEDIPINITUES* • *Hoc loco* • **hCn**
**OS**: *Oedipina* 1868 • **PD**
**EN**: *OEDIPINITUES* DOP.da.f138-00 • **hCn**
**EF**: *PLETHODONTIDAE* 1850.ga.f001

***ONYCHODACTYLINAE*** Dubois[+1], 2012.da.f001 • **KY**
**SI**: 418 • **CI**: h312 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *ONYCHODACTYLINAE* • Dubois[+1] 2012.da: 113 • **bF**
**OS**: *Onychodactylus* 1838 • **OD**
**EN**: *ONYCHODACTYLINAE* 2012.da.f001-00 • **bF**
**EF**: *HYNOBIIDAE* |1856.ha.f001|-1859.cb.f002

*OPHIOSOMES* Duméril, 1839.da.f001 • **AN**
**SI**: 057 • **CI**: n026 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *OPHIOSOMES* • Duméril 1839.da: 581 • **F**
01 • *OPHIOSOMA* • Gray 1850.ga: 56 • **F**
02 • *OPHIOSOMES* • Desmarest 1857.da: 17 • **F**
**OS**: » 4 **PN**, including: *Caecilia* 1758 • **PD**
**EN**: (1) *CAECILIOIDEA* 1814.ra.f003-|1825.gb.f008|-19 • **pF**
»»»
(5) *CAECILIINA* 1814.ra.f003-|1825.gb.f008|-26 • **bT**
**EF**: *CAECILIIDAE* 1814.ra.f003-|1825.gb.f008|

***OPHRYOPHRYNINA* nov.**, DOP.da.f149 • **KY**
**SI**: 595 • **CI**: h487 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *OPHRYOPHRYNINA* • *Hoc loco* • **bT**
**OS**: *Ophryophryne* 1903 • **PD**
**EN**: *OPHRYOPHRYNINA* DOP.da.f149-00 • **bT**
**EF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

*OPISTHOCOELA* Huene, 1948.ha.f002 • **AN**
**SI**: 246 • **CI**: n067 • **ST**: 0.25.50
**RL**: INR
**PA**: 00 • *OPISTHOCOELA* • Huene 1948.ha: 71 • **F**
**OS**: **» OA, PD**: *Bombina* 1816 • **OE**
**EN**: (1) *BOMBINATOROIDEA* 1825.gb.f002-16 • **pF**
(2) *BOMBINATORIDAE* 1825.gb.f002-02 • **F**
**EF**: *BOMBINATORIDAE* 1825.gb.f002

*OPISTHOCOELELLIDAE* Tatarinov, 1964.ta.f001 ‡ • **AN**
**SI**: 268 • **CI**: n077 • **ST**: 0.28.50
**RL**: INR
**PA**: 00 • *OPISTHOCOELELLIDAE* • Tatarinov 1964.ta: 8, 129 • **F**
**OS**: *Opisthocoelellus* 1941 ‡ • **OE**
**EN**: *DISCOGLOSSIDAE* 1858.gc.f004-00 • **F**
**EF**: *DISCOGLOSSIDAE* 1858.gc.f004

*OPISTHODELPHYNAE* Lutz, 1968.la.f001 • **JD**
**SI**: 276 • **CI**: h193 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *OPISTHODELPHYNAE* • Lutz 1968.la: 3, 8, 13 • **bF**
01 • *OPISTHODELPHYINAE* • Lutz 1969.la: 275 • **bF**
**OS**: *Opisthodelphys* 1859 ≈ *Gastrotheca* 1843 • **OE**
**EN**: *GASTROTHECINI* 1927.na.f001-01 • **T**
**EF**: *HEMIPHRACTIDAE* 1862.pa.f001

***OPISTHOTHYLACINA* nov.**, DOP.da.f096 • **KY**
**SI**: 537 • **CI**: h430 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *OPISTHOTHYLACINA* • *Hoc loco* • **bT**
**OS**: *Opisthothylax* 1966 • **PD**
**EN**: *OPISTHOTHYLACINA* DOP.da.f096-00 • **bT**
**EF**: *HYPEROLIIDAE* 1943.lb.f001

***OREOBATINOA* nov.**, DOP.da.f009 • **KY**
**SI**: 450 • **CI**: h343 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *OREOBATINOA* • *Hoc loco* • **hT**
01 • *OREOBATITES* • *Hoc loco* • **Cn**
**OS**: *Oreobates* 1872 • **PD**
**EN**: (1) *OREOBATINOA* DOP.da.f009-00 • **hT**
(2) *OREOBATITES* DOP.da.f009-01 • **Cn**
**EF**: *BRACHYCEPHALIDAE* 1858.gc.f002

***OREOLALAXINAE*** Tian[+1], 1985.ta.f001 • **KY**
**SI**: 315 • **CI**: h224 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *OREOLALAXINAE* • Tian[+1] 1985.ta: 221 • **bF**
01 • *OREOLALAGINAE* • Dubois 1987.db: 173 • **bF**
02 • *OREOLALAGINA* • *Hoc loco* • **bT**
**OS**: *Oreolalax* 1962 • **OE**
**EN**: *OREOLALAGINA* 1985.ta.f001-02 • **bT**
**EF**: *MEGOPHRYIDAE* 1850.bb.f008-|1931.na.f003|

***OREOPHRYNELLINA* nov.**, DOP.da.f035 • **KY**
**SI**: 476 • **CI**: h369 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *OREOPHRYNELLINA* • *Hoc loco* • **bT**
**OS**: *Oreophrynella* 1895 • **PD**
**EN**: *OREOPHRYNELLINA* DOP.da.f035-00 • **bT**
**EF**: *BUFONIDAE* 1825.gb.f004

***ORIXALINOA* nov.**, DOP.da.f118 • **KY**
**SI**: 559 • **CI**: h452 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *ORIXALINOA* • *Hoc loco* • **hT**
**OS**: *Orixalus* **nov.** • **PD**
**EN**: *ORIXALINOA* DOP.da.f118-00 • **hT**
**EF**: *RHACOPHORIDAE* |1858.gc.f012|-1932.ha.f001

*OSCAECILIIDAE* Lescure[+2], 1986.lb.f002 • **JD**
**SI**: 321 • **CI**: h229 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *OSCAECILIIDAE* • Lescure[+2] 1986.lb: 145 • **F**
01 • *OSCAECILIOIDAE* • Lescure[+2] 1986.lb: 167 • **eF**
**OS**: *Oscaecilia* 1968 • **OE**

**EN**: (1) *Caecilioidea* 1814.ra.f003-|1825.gb.f008|-19 • **pF**
»»»
(5) *Caeciliina* 1814.ra.f003-|1825.gb.f008|-26 • **bT**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Osornophrynina* nov.**, DOP.da.f036 • **KY**
**SI**: 477 • **CI**: h370 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Osornophrynina* • *Hoc loco* • **bT**
**OS**: *Osornophryne* 1976 • **PD**
**EN**: *Osornophrynina* DOP.da.f036-00 • **bT**
**EF**: *Bufonidae* 1825.gb.f004

***Osteocephalinia* nov.**, DOP.da.f062 • **KY**
**SI**: 503 • **CI**: h396 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Osteocephalinia* • *Hoc loco* • **iT**
**OS**: *Osteocephalus* 1862 • **PD**
**EN**: *Osteocephalinia* DOP.da.f062-00 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Osteopilinia* nov.**, DOP.da.f063 • **KY**
**SI**: 504 • **CI**: h397 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Osteopilinia* • *Hoc loco* • **iT**
**OS**: *Osteopilus* 1843 • **PD**
**EN**: *Osteopilinia* DOP.da.f063-00 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Otophryninae*** Wassersug[+1], 1987.wa.f001 • **KY**
**SI**: 338 • **CI**: h246 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Otophryninae* • Wassersug[+1] 1987.wa: 137 • **bF**
**OS**: *Otophryne* 1900 • **OE**
**EN**: *Otophryninae* 1987.wa.f001-00 • **bF**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Pachyhynobiini*** Dubois[+1], 2012.da.f002 • **KY**
**SI**: 419 • **CI**: h313 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Pachyhynobiini* • Dubois[+1] 2012.da: 113 • **T**
01 • *Pachyhynobiina* • *Hoc loco* • **bT**
**OS**: *Pachyhynobius* 1983 • **OD**
**EN**: *Pachyhynobiina* 2012.da.f002-01 • **bT**
**EF**: *Hynobiidae* |1856.ha.f001|-1859.cb.f002

***Pachytritonites* nov.**, DOP.da.f142 • **KY**
**SI**: 583 • **CI**: h476 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Pachytritonites* • *Hoc loco* • **Cn**
**OS**: *Pachytriton* 1878 • **PD**
**EN**: *Pachytritonites* DOP.da.f142-00 • **Cn**
**EF**: *Salamandridae* 1820.ga.f002

***Paini*** Dubois, 1992.da.f003 • **KY**
**SI**: 350 • **CI**: h257 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Paini* • Dubois 1992.da: 317 • **T**
01 • *Paininae* • Fei[+2] 2010.fa: 12 • **bF**
02 • *Painae* • Fei[+2] 2010.fa: 17 • **bF**
03 • *Paina* • *Hoc loco* • **bT**
**OS**: *Paa* 1975 • **OD**
**EN**: (1) *Painae* 1992.da.f003-02 • **bF**
(2) *Paini* 1992.da.f003-00 • **T**
(3) *Paina* 1992.da.f003-03 • **bT**
**EF**: *Dicroglossidae* 1987.da.f004

***Palaeobatrachidae*** Cope, 1865.ca.f001 ‡ • **KY**
**SI**: 151 • **CI**: h101 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Palaeobatrachidae* • Cope 1865.ca: 99 • **F**
01 • *Palaeobatrachoidea* • Bolkay 1919.ba: 348 • **Ga**
02 • *Palaeobatrachydae* • Stipanicic[+1] 1956.sa: 216 • **F**
03 • *Paleobatrachidae* • Zweifel 1956.za: 10 • **F**
04 • *Paleobatracidae* • Casamiquela 1959.ca: 6 • **F**
05 • *Palaeobatracidae* • Casamiquela 1961.ca: 111 • **F**
06 • *Palaeobatrachoidea* • Špinar 1972.sa: 33 • **UF**
07 • *Palaeobatrachinae* • Špinar 1976.sa: 286, 287 • **bF**
08 • *Palaeobatrachoidea* • Špinar 1983.sa: 53 • **pF**
09 • *Palaeobatrachia* • Haas 2003.ha: 43 • **UF**
**OS**: *Palaeobatrachus* 1838 ‡ • **OE**
**EN**: *Palaeobatrachidae* 1865.ca.f001-00 † • **F**
**EF**: *Palaeobatrachidae* 1865.ca.f001 †

*Palaeurodelidea* Brame, 1958.ba.f001 ‡ • **AN**
**SI**: 257 • **CI**: n072 • **ST**: 0.25.50, 0.28.50
**RL**: INR
**PA**: 00 • *Palaeurodelidea* • Brame 1958.ba: 2 • **F**
01 • *Palaeurodelidae* • Martín[+2] 2012.ma: 160 • **F**
**OS**: *Hylaeobatrachus* 1884 ‡ • **OM**
**EN**: *Hylaeobatrachidae* 1889.la.f001-00 † • **F**
**EF**: *Hylaeobatrachidae* 1889.la.f001 †

***Paludicolina*** Mivart, 1869.ma.f004 • **KY**
**SI**: 164 • **CI**: h112 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Paludicolina* • Mivart 1869.ma: 290 • **bF**
01 • *Paludicolidae* • Miranda-Ribeiro 1924.ma: 143 • **F**
02 • *Paludicolinae* • Lutz 1929.la: 5 • **bF**
03 • *Paludicolini* • *Hoc loco* • **T**
04 • *Paludicolina* • *Hoc loco* • **bT**
**OS**: *Paludicola* 1830 ≈ *Physalaemus* 1826 • **OE**
**EN**: (1) *Paludicolinae* 1869.ma.f004-02 • **bF**
(2) *Paludicolini* 1869.ma.f004-03 • **T**
(3) *Paludicolina* 1869.ma.f004-04 • **bT**
**EF**: *Leptodactylidae* |1838.ta.f001|-1896.wa.f001

***Paracriniinoa* nov.**, DOP.da.f077 • **KY**
**SI**: 518 • **CI**: h411 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Paracriniinoa* • *Hoc loco* • **bT**
**OS**: *Paracrinia* 1976 • **PD**
**EN**: *Paracriniinoa* DOP.da.f077-00 • **hT**
**EF**: *Myobatrachidae* 1850.sa.f001

*Paratelmatobiinae* Pyron[+1], 2011.pa.f001 • **AN**
**SI**: 409 • **CI**: n097 • **ST**: 0.28.50
**RL**: INR
**PA**: 00 • *Paratelmatobinae* • Pyron[+1] 2011.pa: 547, 579, 580 • **bF**
**OS**: *Paratelmatobius* 1958 • **OD**
**EN**: *Paratelmatobiinae* 2012.oa.f001-00 • **bF**
**EF**: *Leptodactylidae* |1889.ta.f001|-1896.wa.f001

***Paratelmatobiinae*** Ohler[+1], 2012.oa.f001 • **KY**
**SI**: 428 • **CI**: h322 • **ST**: 0.10.30

**RL**: INR
**PA**: 00 • *Paratelmatobiinae* • Ohler[+1] 2012.oa: 165 • **bF**
**OS**: *Paratelmatobius* 1958 • **OD**
**EN**: *Paratelmatobiidae* 2012.oa.f001-00 • **bF**
**EF**: *Leptodactylidae* |1838.ta.f001|-1896.wa.f001

***Parvimolgites*** **nov.**, DOP.da.f133 • **ky**
**SI**: 574 • **CI**: h467 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Parvimolgites* • *Hoc loco* • **Cn**
**OS**: *Parvimolge* 1944 • **PD**
**EN**: *Parvimolgites* DOP.da.f133-00 • **Cn**
**EF**: *Plethodontidae* 1850.ga.f001

***Pedostibitues*** **nov.**, DOP.da.f016 • **ky**
**SI**: 457 • **CI**: h350 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Pedostibitues* • *Hoc loco* • **hCn**
**OS**: *Pedostibes* 1876 • **PD**
**EN**: *Pedostibitues* DOP.da.f016-00 • **hCn**
**EF**: *Bufonidae* 1825.gb.f004

***Pelobatidae*** Bonaparte, 1850.bb.f004 • **ky**
**SI**: 096 • **CI**: h058 • **ST**: 0.10.32
**RL**: ≥ *Megalophreidina* 1850.bb.f008 • **PR**: Dubois 1983.da: 271
≥ *Pelodytina* 1850.bb.f002 • **PR**: Dubois 1983.da: 271
**PA**: 00 • *Pelobatidae* • Bonaparte 1850.bb: pl. • **F**
01 • *Pelobatina* • Bonaparte 1850.bb: pl. • **bF**
02 • *Pelobatoidei* • Lichtenstein[+2] 1856.la: 40 • **F**
03 • *Pelobatoidea* • Stannius 1856.sa: 4 • **F**
04 • *Pelobatides* • Bruch 1862.ba: 221 • **F**
05 • *Pelobatidea* • Huxley 1871.ha: 189 • **UF**
06 • *Pelobatidas* • Knauer 1878.ka: 107 • **F**
07 • *Pelobatida* • Bayer 1885.ba: 3 • **F**
08 • *Pelobatina* • Schulze 1891.sa: 168 • **T**
09 • *Pelobatoidea* • Bolkay 1919.ba: 348 • **Ga**
10 • *Pelobatinae* • Fejérváry 1921.fb: 25 • **bF**
11 • *Pelobatoidea* • Bolkay 1929.ba: 58 • **pF**
12 • *Palobatidae* • Fei[+1] 1990.fa: 420 • **F**
13 • *Pelabatidae* • Fei[+1] 1990.fa: 428 • **F**
14 • *Peelobatidae* • Fei[+3] 1995.fa: 237 • **F**
15 • *Pelobatoidia* • Dubois 2005.da: 8 • **eF**
16 • *Pelobatoidae* • *Hoc loco* • **eF**
**OS**: *Pelobates* 1830 • **OE**
**EN**: (1) *Pelobatoidea* 1850.bb.f004-11 • **pF**
(2) *Pelobatoidae* 1850.bb.f004-16 • **eF**
(3) *Pelobatidae* 1850.bb.f004-00 • **F**
**EF**: *Pelobatidae* 1850.bb.f004

*Pelobatinopsidinae* Špinar, 1976.sa.f001 ‡ • **jd**
**SI**: 299 • **CI**: h212 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Pelobatinopsidinae* • Špinar 1976.sa: 287 • **bF**
01 • *Pelobatinopsinae* • Haubold *in* Krumbiegel[+2] 1983.ka: 122 • **bF**
**OS**: *Pelobatinopsis* 1941 ‡ ≈ *Palaeobatrachus* 1838 ‡ • **OE**
**EN**: *Palaeobatrachidae* 1865.ca.f001-00 † • **F**
**EF**: *Palaeobatrachidae* 1865.ca.f001 †

*Pelobiini* Erichson, 1837.ea.f001 • **za**
**SI**: 047 • **CI**: zh02 • **ST**: 0.10.99
**RL**: INR
**PA**: 00 • *Pelobiini* • Erichson 1837.ea: 182 • **Gr**
**OS**: *Pelobius* 1832 • ● • **OE**
**EN**: ●
**EF**: ●

*Pelobii* Fitzinger, 1843.fa.f004 • **jg-ji**
**SI**: 069 • **CI**: h037 • **ST**: 0.10.53
**RL**: ↓ *Pelobiini* 1837.ea.f001
**PA**: 00 • *Pelobii* • Fitzinger 1843.fa: 31 • **F**
01 • *Pelobiinae* • Duellman[+2] 2016.db: 3 • **bF**
**OS**: *Pelobius* 1843 **jh** ≡ *Litoria* 1838 • **OE**
**EN**: *Pelodryadinae* 1859.ga.f001-01 • **bF**
**EF**: *Phyllomedusidae* 1858.gc.f009

*Pelodryadidae* Günther, 1858.gc.f008 • **an**
**SI**: 136 • **CI**: n045 • **ST**: 0.24.50
**RL**: INR
**PA**: 00 • *Pelodryadidae* • Günther 1858.gc: 346 • **F**
**OS**: *Pelodryas* 1858 **an** ≈ *Ranoidea 1838* • **OE**
**EN**: *Pelodryadinae* 1859.ga.f001-01 • **bF**
**EF**: *Phyllomedusidae* 1858.gc.f009

***Pelodryadidae*** Günther, 1859.ga.f001 • **ky**
**SI**: 144 • **CI**: h097 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Pelodryadidae* • Günther 1859.ga: ix, 119 • **F**
01 • *Pelodryadidae* • Hoffmann 1878.ha: 614 • **bF**
02 • *Pelodryadinae* • Dowling[+1] 1978.da: 37.1 • **bF**
**OS**: *Pelodryas* 1859 ≈ *Ranoidea* 1838 • **OE**
**EN**: *Pelodryadinae* 1859.ga.f001-01 • **bF**
**EF**: *Phyllomedusidae* 1858.gc.f009

***Pelodytina*** Bonaparte, 1850.bb.f002 • **ky**
**SI**: 094 • **CI**: h056 • **ST**: 0.10.37
**RL**: ≤ *Pelobatidae* 1850.bb.f004 • **PR**: Dubois 1983.da: 271
**PA**: 00 • *Pelodytina* • Bonaparte 1850.bb: pl. • **bF**
01 • *Pelodytides* • Bruch 1862.ba: 221 • **F**
02 • *Pelodytidae* • Cope 1866.ca: 68 • **F**
03 • *Pelodytinae* • Fejérváry 1923.fa: 181 • **bF**
04 • *Pelodytoidae* • *Hoc loco* • **eF**
**OS**: *Pelodytes* 1838 • **OE**
**EN**: (1) *Pelodytoidae* 1850.bb.f002-04 • **eF**
(2) *Pelodytidae* 1850.bb.f002-02 • **F**
**EF**: *Pelodytidae* 1850.bb.f002

***Pelophylacinia*** **nov.**, DOP.da.f107 • **ky**
**SI**: 548 • **CI**: h441 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Pelophylacinia* • *Hoc loco* • **bT**
**OS**: *Pelophylax* 1843 • **PD**
**EN**: *Pelophylacinia* DOP.da.f107-00 • **iT**
**EF**: *Ranidae* 1796.ba.f001

***Peltophrynites*** **nov.**, DOP.da.f032 • **ky**
**SI**: 473 • **CI**: h366 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Peltophrynites* • *Hoc loco* • **Cn**
**OS**: *Peltophryne* 1843 • **PD**
**EN**: *Peltophrynites* DOP.da.f032-00 • **Cn**
**EF**: *Bufonidae* 1825.gb.f004

*Perennibranchia* Betta, 1864.ba.f001 • AN

**SI**: 150 • **CI**: n048 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Perennibranchia* • Betta 1864.ba: 505 • **F**

**OS**: » 4 **PN**, including: *Proteus* 1768 • **PD**

**EN**: (1) *Proteoidae* 1831.ba.f002-10 • **eF**

(2) *Proteidae* 1831.ba.f002-02 • **F**

**EF**: *Proteidae* 1831.ba.f002

*Perennibranchiata* Zittel, 1888.za.f001 • AN

**SI**: 188 • **CI**: n056 • **ST**: 2.25.50

**RL**: ↔ *Phanerobranchia* 1827.fa.f001-05

**PA**: 00 • *Perennibranchiata* • Zittel 1888.za: 418 • **F**

**OS**: *Phanerobranchus* 1821 ≈ *Necturus* 1819 • **AN**

**EN**: (1) *Proteoidae* 1831.ba.f002-10 • **eF**

(2) *Proteidae* 1831.ba.f002-02 • **F**

**EF**: *Proteidae* 1831.ba.f002

*Perobranches* Duméril[+2], 1854.da.f001 • AN

**SI**: 118 • **CI**: n037 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Perobranches* • Duméril[+2] 1854.da: xii, xix, 35, 199 • **F**

01 • *Perobranchia* • Betta 1864.ba: 505 • **F**

**OS**: » 2 **PN**, including: *Amphiuma* 1821 • **PD**

**EN**: (1) *Amphiumoidea* 1825.gb.f007-10 • **pF**

»»»

(4) *Amphiumidae* 1825.gb.f007-00 • **F**

**EF**: *Amphiumidae* 1825.gb.f007

***Petropedetinae*** Noble, 1931.na.f006 • KY

**SI**: 221 • **CI**: h156 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Petropedetinae* • Noble 1931.na: 520 • **bF**

01 • *Petropedatinae* • Tatarinov 1964.ta: 132 • **bF**

02 • *Petropedetidae* • Bauer 1985.ba: 3 • **F**

03 • *Petropedetoidae* • *Hoc loco* • **eF**

**OS**: *Petropedetes* 1874 • **OE**

**EN**: (1) *Petropedetoidae* 1931.na.f006-03 • **eF**

(2) *Petropedetidae* 1931.na.f006-02 • **F**

**EF**: *Petropedetidae* 1931.na.f006

*Phaenerobranchoidea* Fitzinger, 1826.fb.f004 • RI

**SI**: 030 • **CI**: h016 • **ST**: 0.10.43

**RL**: < *Proteina* 1831.ba.f002 • **RI**: Dubois[+1] 2015.da: 44

**PA**: 00 • *Phaenerobranchoidea* • Fitzinger 1826.fb: 43 • **F**

**OS**: *Phaenerobranchus* 1826 ≈ *Necturus* 1819 • **OE**

**EN**: (1) *Proteoidae* 1831.ba.f002-10 • **eF**

(2) *Proteidae* 1831.ba.f002-02 • **F**

**EF**: *Proteidae* 1831.ba.f002

*Phanerobranchoidea* Fitzinger, 1827.fa.f001 • RI

**SI**: 031 • **CI**: h017 • **ST**: 0.10.43

**RL**: ← *Phaenerobranchoidea* 1826.fb.f004

< *Proteina* 1831.ba.f002 • **RI**: Dubois[+1] 2015.da: 44

**PA**: 00 • *Phanerobranchoidea* • Fitzinger 1827.fa: 264 • **F**

01 • *Phanerobranchideae* • Gray 1850.ga: 64 • **F**

02 • *Phanerobranchoides* • Duméril[+2] 1854.da: 22 • **F**

03 • *Phanerobranchiata* • Wied 1865.wa: viii, 138 • **F**

04 • *Phanerobranchioides* • Hoffmann 1878.ha: 582 • **F**

05 • *Phanerobranchia* • Zittel 1888.za: 418 • **F**

06 • *Phanerobranchoida* • Cope 1889.ca: 18 • **F**

07 • *Phanerobranchidae* • Huene 1931.ha: 310 • **F**

08 • *Phanerobranchinae* • Dubois[+1] 2012.da: 118, 146 • **bF**

**OS**: *Phanerobranchus* 1821 ≈ *Necturus* 1819 • **OE**

**EN**: (1) *Proteoidae* 1831.ba.f002-10 • **eF**

(2) *Proteidae* 1831.ba.f002-02 • **F**

**EF**: *Proteidae* 1831.ba.f002

*Phanerobranchiata* Wiedersheim, 1877.wa.f001 • AN

**SI**: 178 • **CI**: n054 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Phanerobranchiata* • Wiedersheim 1877.wa: 356 • **UF**

**OS**: » 3 **PN**, including: *Proteus* 1768 • **PD**

**EN**: (1) *Proteoidae* 1831.ba.f002-10 • **eF**

(2) *Proteidae* 1831.ba.f002-02 • **F**

**EF**: *Proteidae* 1831.ba.f002

*Phaneroglossa* Huene, 1931.ha.f001 • AN

**SI**: 232 • **CI**: n063 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Phaneroglossa* • Huene 1931.ha: 311 • **pF**

**OS**: » 17 **PN**, including: *Rana* 1758 • **PD**

**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**

»»»

(12) *Ranitoes* 1796.ba.f001-38 • **iCn**

**EF**: *Ranidae* 1796.ba.f001

***Phasmahylina*** **nov.**, DOP.da.f070 • KY

**SI**: 511 • **CI**: h404 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Phasmahylina* • *Hoc loco* • **bT**

**OS**: *Phasmahyla* 1991 • **PD**

**EN**: *Phasmahylina* DOP.da.f070-00 • **bT**

**EF**: *Phyllomedusidae* 1858.gc.f009

***Philautinae*** Dubois, 1981.da.f001 • KY

**SI**: 307 • **CI**: h218 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Philautinae* • Dubois 1981.da: 227 • **bF**

01 • *Philautini* • Dubois 1987.da: 69 • **T**

02 • *Philautinoa* • *Hoc loco* • **hT**

03 • *Philautites* • *Hoc loco* • **Cn**

**OS**: *Philautus* 1848 • **OE**

**EN**: (1) *Philautinoa* 1981.da.f001-02 • **hT**

(2) *Philautites* 1981.da.f001-03 • **Cn**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

*Phrynacinia* Rafinesque, 1815.ra.f004 • AN

**SI**: 009 • **CI**: n005 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Phrynacinia* • Rafinesque 1815.ra: 78 • **bF**

**OS**: *Phrynacius* 1815 AN ≡ *Bufo* 1764 • **OE**

**EN**: (1) *Bufonoidea* 1825.gb.f004-20 • **pF**

»»»

(10) *Bufonitoes* 1825.gb.f004-33 • **iCn**

**EF**: *Bufonidae* 1825.gb.f004

***Phrynellinia*** **nov.**, DOP.da.f090 • KY

**SI**: 531 • **CI**: h424 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Phrynellinia* • *Hoc loco* • **iT**

**OS**: *Phrynella* 1887 • **PD**

**EN**: *Phrynellinia* DOP.da.f090-00 • **iT**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Phryniscidae*** Günther, 1858.gc.f005 • **ky**

**SI**: 133 • **CI**: h087 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Phryniscidae* • Günther 1858.gc: 346 • **F**

01 • *Phryniscina* • Mivart 1869.ma: 288 • **bF**

02 • *Phryniseidae* • Hoffmann 1878.ha: 591 • **F**

03 • *Phryniscidae* • Hoffmann 1878.ha: 613 • **bF**

04 • *Phryniscities* • *Hoc loco* • **bCn**

05 • *Phryniscitoes* • *Hoc loco* • **bCn**

**OS**: *Phryniscus* 1834 ≈ *Rhinella* 1826 • **OE**

**EN**: (1) *Phryniscities* 1858.gc.f005-04 • **bCn**: F.11.01.04

(2) *Phryniscitoes* 1858.gc.f005-05 • **iCn**: F.12.02.05

**EF**: *Bufonidae* 1825.gb.f004

*Phrynobatrachinae* Laurent, 1941.la.f001 • **an**

**SI**: 236 • **CI**: n064 • **ST**: 0.28.50

**RL**: INR

**PA**: 00 • *Phrynobatrachinae* • Laurent 1941.la: 79 • **bF**

**OS**: *Phrynobatrachus* 1862 • **OE**

**EN**: (1) *Phrynobatrachoidea* 1941.lb.f001-02 • **pF**

(2) *Phrynobatrachidae* 1941.lb.f001-01 • **F**

**EF**: *Phrynobatrachidae* 1941.lb.f001

***Phrynobatrachinae*** Laurent, 1941.lb.f001 • **ck**

**SI**: 237 • **CI**: h169 • **ST**: 0.10.36

**RL**: > *Hemimantidae* 1878.ha.f002 • **PP**: Opinion 1921 (Anonymous 1999.aa)

**PA**: 00 • *Phrynobatrachinae* • Laurent 1941.lb: 192 • **bF**

01 • *Phrynobatrachidae* • Dubois 1992.da: 309 • **F**

02 • *Phrynobatrachoidea* • *Hoc loco* • **pF**

**OS**: *Phrynobatrachus* 1862 • **OE**

**EN**: (1) *Phrynobatrachoidea* 1941.lb.f001-02 • **pF**

(2) *Phrynobatrachidae* 1941.lb.f001-01 • **F**

**EF**: *Phrynobatrachidae* 1941.lb.f001

*Phrynomantini* Burton, 1986.bb.f002 • **jd**

**SI**: 318 • **CI**: h226 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Phrynomantini* • Burton 1986.bb: 444 • **T**

**OS**: *Phrynomantis* 1867 • **OE**

**EN**: *Phrynomeridae* 1931.na.f013-01 • **F**

**EF**: *Phrynomeridae* 1931.na.f013

***Phrynomedusini*** **nov.**, DOP.da.f069 • **ky**

**SI**: 510 • **CI**: h403 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Phrynomedusini* • *Hoc loco* • **T**

**OS**: *Phrynomedusa* 1923 • **PD**

**EN**: *Phrynomedusini* DOP.da.f069-00 • **T**

**EF**: *Phyllomedusidae* 1858.gc.f009

***Phrynomerinae*** Noble, 1931.na.f013 • **ky**

**SI**: 228 • **CI**: h162 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Phrynomerinae* • Noble 1931.na: 538 • **bF**

01 • *Phrynomeridae* • Parker 1934.pa: 9 • **F**

**OS**: *Phrynomerus* 1926 ≡ *Phrynomantis* 1867 • **OE**

**EN**: *Phrynomeridae* 1931.na.f013-01 • **F**

**EF**: *Phrynomeridae* 1931.na.f013

***Phrynopodites*** **nov.**, DOP.da.f010 • **ky**

**SI**: 451 • **CI**: h344 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Phrynopodites* • *Hoc loco* • **Cn**

**OS**: *Phrynopus* 1873 • **PD**

**EN**: *Phrynopodites* DOP.da.f010-00 • **Cn**

**EF**: *Brachycephalidae* 1858.gc.f002

*Phrynopsinae* Noble, 1931.na.f005 • **jg**

**SI**: 220 • **CI**: h155 • **ST**: 0.10.53

**RL**: INR

**PA**: 00 • *Phrynopsinae* • Noble 1931.na: 518 • **bF**

01 • *Phrynospinae* • Tatarinov 1964.ta: 132 • **bF**

**OS**: *Phrynopsis* 1893 **jh** ≈ *Pyxicephalus* 1838 • **OE**

**EN**: (1) *Pyxicephaloidae* 1850.bb.f005-04 • **eF**

(2) *Pyxicephalidae* 1850.bb.f005-03 • **F**

**EF**: *Pyxicephalidae* 1850.bb.f005

***Phyllobatae*** Fitzinger, 1843.fa.f007 • **pk**

**SI**: 072 • **CI**: h040 • **ST**: 0.10.37

**RL**: < *Dendrobatidae* 1865.ca.f002 • **PP**: Opinion 2223 (Anonymous 2009.aa: 104)

**PA**: 00 • *Phyllobatae* • Fitzinger 1843.fa: 32 • **F**

01 • *Phyllobatidae* • Parker 1933.pa: 12 • **F**

02 • *Phyllobatinae* • Ardila-Robayo 1979.aa: 385 • **bF**

03 • *Phyllobatini* • *Hoc loco* • **T**

**OS**: *Phyllobates* 1841 • **OE**

**EN**: *Phyllobatini* 1843.fa.f007.03 • **T**

**EF**: *Dendrobatidae* |1850.bb.f006|-1865.ca.f002

***Phyllomedusidae*** Günther, 1858.gc.f009 • **ky**

**SI**: 137 • **CI**: h090 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Phyllomedusidae* • Günther 1858.gc: 346 • **F**

01 • *Phyllomedusidae* • Hoffmann 1878.ha: 614 • **bF**

02 • *Phyllomedusida* • Knauer 1878.ka: 113 • **F**

03 • *Phyllomedusinae* • Miranda-Ribeiro 1926.ma: 64 • **bF**

04 • *Phyllomedusini* • *Hoc loco* • **T**

05 • *Phyllomedusina* • *Hoc loco* • **bT**

06 • *Phyllomedusinia* • *Hoc loco* • **iT**

**OS**: *Phyllomedusa* 1830 • **OE**

**EN**: (1) *Phyllomedusidae* 1858.gc.f009-00 • **F**

(2) *Phyllomedusinae* 1858.gc.f009-03 • **bF**

(3) *Phyllomedusini* 1858.gc.f009-04 • **T**

(4) *Phyllomedusina* 1858.gc.f009-05 • **bT**

(3) *Phyllomedusinia* 1858.gc.f009-06 • **iT**

**EF**: *Phyllomedusidae* 1858.gc.f009

***Phytotriadina*** **nov.**, DOP.da.f064 • **ky**

**SI**: 505 • **CI**: h398 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Phytotriadina* • *Hoc loco* • **bT**

**OS**: *Phytodriades* 2009 • **PD**

**EN**: *Phytotriadina* DOP.da.f064-00 • **bT**

**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Phyzelaphryninae*** Hedges[+2], 2008.ha.f002 • **ky**

**SI**: 382 • **CI**: h282 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Phyzelaphryninae* • Hedges[+2] 2008.ha: 5 • **bF**

01 • *Phyzelaphrynini* • *Hoc loco* • **T**

**OS**: *Phyzelaphryne* 1977 • **OD**
**EN**: *Phyzelaphrynini* 2008.ha.f002-01 • **T**
**EF**: *Brachycephalidae* 1858.gc.f002

*Pipaeformes* Duméril[+1], 1841.da.f004 • **AN**
**SI**: 063 • **CI**: n030 • **ST**: 2.27.50
**RL**: INR
**PA**: 00 • *Pipaeformes* • Duméril[+1] 1841.da: 49 • **F**
01 • *Pipaeformes* • Desmarest 1856.da: 19 • **F**
**OS**: *Pipa* 1768 • **OE**
**EN**: (1) *Pipidae* 1825.gb.f003-|1826.fb.f002|-07 • F
(2) *Pipinae* 1825.gb.f003-|1826.fb.f002|-13 • **bF**
**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Pipoidea*** Fitzinger, 1826.fb.f002 • **MK**
**SI**: 028 • **CI**: h014 • **ST**: 0.10.34
**RL**: > *Piprina* 1825.gb.f003 • **MK**
**PA**: 00 • *Pipoidea* • Fitzinger 1826.fb: 37 • **F**
01 • *Piparia* • Hemprich 1829.ha: xix, 373 • **F**
02 • *Pipina* • Gray 1829.ga: 203 • **UF**
03 • *Pipae* • Goldfuss 1832.ga: 330 • **Zt**
04 • *Pipina* • Bonaparte 1838.ba: [195] • **bF**
05 • *Pipae* • Tschudi 1838.ta: 26 • **F**
06 • *Pipini* • Bonaparte 1839.bc: [225] • **bF**
07 • *Pipidae* • Swainson 1839.sa: 88 • **F**
08 • *Pipae* • Bronn 1849.ba: 684• **UF**
09 • *Pipadae* • Hallowell 1858.ha: 65 • **F**
10 • *Pipoides* • Bruch 1862.ba: 221 • **F**
11 • *Pipaeides* • Gouriet 1868.ga: 206 • **F**
12 • *Pipida* • Knauer 1878.ka: 103 • **F**
13 • *Pipinae* • Metcalf 1923.ma: 3 • **bF**
14 • *Pipoidea* • Laurent 1948.la: 1 • **pF**
15 • *Pipoidia* • Dubois 2005.da: 8 • **eF**
**OS**: *Pipa* 1768 • **OE**
**EN**: (1) *Pipidae* 1825.gb.f003-|1826.fb.f002|-07 • **F**
(2) *Pipinae* 1825.gb.f003-|1826.fb.f002|-13 • **bF**
**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Piprina* Gray, 1825.gb.f003 • **MK**
**SI**: 017 • **CI**: h008 • **ST**: 0.10.53
**RL**: < *Pipoidea* 1826.fb.f002 • **MK**
**PA**: 00 • *Piprina* • Gray 1825.gb: 214 • **UC**
01 • *Pipridae* • Gray 1842.ga: 112 • **F**
**OS**: *Pipra* 1825 **JH** ≡ *Pipa* 1768 • **OE**
**EN**: (1) *Pipidae* 1825.gb.f003-|1826.fb.f002|-07 • **F**
(2) *Pipinae* 1825.gb.f003-|1826.fb.f002|-13 • **bF**
**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Pithecopinae*** Lutz, 1969.la.f001 • **KY**
**SI**: 280 • **CI**: h197 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Pithecopinae* • Lutz 1969.la: 274 • **bF**
01 • *Pithecopodinia* • *Hoc loco* • **iT**
**OS**: *Pithecopus* 1866 • **OE**
**EN**: *Pithecopodinia* 1969.la.f001-01 • **iT**
**EF**: *Phyllomedusidae* 1858.gc.f009

*Platosphinae* Fejérváry, 1917.fa.f001 † • **JD**
**SI**: 199 • **CI**: h136 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Platosphinae* • Fejérváry 1917.fa: 151 • **bF**
**OS**: *Platosphus* 1877 † ≈ *Bufo* 1764 • **OE**
**EN**: (1) *Bufonoidea* 1825.gb.f004-20 • **pF**
»»»
(10) *Bufonitoes* 1825.gb.f004-33 • **iCn**
**EF**: *Bufonidae* 1825.gb.f004

*Platymantinae* Savage, 1973.sa.f001 • **AN**
**SI**: 293 • **CI**: n082 • **ST**: 0.28.50
**RL**: INR
**PA**: 00 • *Platymantinae* • Savage 1973.sa: 354 • **bF**
**OS**: *Platymantis* 1859 • **OE**
**EN**: (1) *Ceratobatracheidae* 1884.ba.f001-04 • **aF**
(2) *Ceratobatrachidae* 1884.ba.f001-00 • **F**
**EF**: *Ceratobatrachidae* 1884.ba.f001

*Platymantinae* Bauer, 1985.ba.f001 • **AN**
**SI**: 314 • **CI**: n087 • **ST**: 0.28.50
**RL**: INR
**PA**: 00 • *Platymantinae* • Bauer 1985.ba: 3 • **bF**
**OS**: *Platymantis* 1859 • **OE**
**EN**: (1) *Ceratobatracheidae* 1884.ba.f001-04 • **aF**
(2) *Ceratobatrachidae* 1884.ba.f001-00 • **F**
**EF**: *Ceratobatrachidae* 1884.ba.f001

*Platymantini* Laurent, 1986.la.f001 • **JD**
**SI**: 319 • **CI**: h227 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Platymantini* • Laurent 1986.la: 760 • **T**
**OS**: *Platymantis* 1859 • **OE**
**EN**: (1) *Ceratobatracheidae* 1884.ba.f001-04 • **aF**
(2) *Ceratobatrachidae* 1884.ba.f001-00 • **F**
**EF**: *Ceratobatrachidae* 1884.ba.f001

***Platypelina* nov.**, DOP.da.f082 • **KY**
**SI**: 523 • **CI**: h416 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Platypelina* • *Hoc loco* • **bT**
**OS**: *Platypelis* 1882 • **PD**
**EN**: *Platypelina* DOP.da.f082-00 • **bT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Platyplectrina* nov.**, DOP.da.f073 • **KY**
**SI**: 514 • **CI**: h407 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Platyplectrina* • *Hoc loco* • **bT**
**OS**: *Platyplectrum* 1863 • **PD**
**EN**: *Platyplectrina* DOP.da.f073-00 • **bT**
**EF**: *Myobatrachidae* 1850.sa.f001

***Plectrohylinia* nov.**, DOP.da.f060 • **KY**
**SI**: 501 • **CI**: h394 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Plectrohylinia* • *Hoc loco* • **iT**
**OS**: *Plectrohyla* 1877 • **PD**
**EN**: *Plectrohylinia* DOP.da.f060-00 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Plectromantidae* Mivart, 1869.ma.f002 • **SG**
**SI**: 162 • **CI**: h110 • **ST**: 0.10.44
**RL**: < *Leptodactylidae* |1838.ta.f001|-1896.wa.f001 • **PS**: Dubois 1983.da: 273
**PA**: 00 • *Plectromantidae* • Mivart 1869.ma: 286 • **F**
01 • *Plectromantidae* • Hoffmann 1878.ha: 614 • **bF**

**OS**: *Plectromantis* 1862 ≈ *Leptodactylus* 1826 • **OE**

**EN**: (1) *Leptodactyloidea* |1838.ta.f001|-1896.wa.f001-03 • **pF**

»»»

(3) *Leptodactylinae* |1838.ta.f001|-1896.wa.f001-01 • **bF**

**EF**: *Leptodactylidae* |1838.ta.f001|-1896.wa.f001

***Plethodontidae*** Gray, 1850.ga.f001 • **KY**

**SI**: 112 • **CI**: h074 • **ST**: 0.10.32

**RL**: ≥ *Ensatinina* 1850.ga.f007 • **PR**: Dubois[+1] 2012: 98

**PA**: 00 • *Plethodontidae* • Gray 1850.ga: 5, 31 • **F**

01 • *Plethodontina* • Gray 1850.ga: 38 • **UF**

02 • *Plethodontidae* • Hallowell 1856.ha: 10 • **bF**

03 • *Plethodontae* • Cope 1859.cb: 124 • **UF**

04 • *Plethodontida* • Knauer 1878.ka: 97 • **F**

05 • *Plethodontinae* • Boulenger 1882.bc: vii, 51 • **bF**

06 • *Plethodontina* • Schulze 1891.sa: 5 • **T**

07 • *Plethodontini* • Wake 1966.wa: 1 • **T**

08 • *Plethodontoidea* • Milner 2000.ma: 1429 • **pF**

09 • *Plethodontina* • *Hoc loco* • **bT**

**OS**: *Plethodon* 1838 • **OE**

**EN**: (1) *Plethodontidae* 1850.ga.f001-00 • **F**

(2) *Plethodontinae* 1850.ga.f001-05 • **bF**

(3) *Plethodontini* 1850.ga.f001-07 • **T**

(4) *Plethodontina* 1850.ga.f001-09 • **bT**

**EF**: *Plethodontidae* 1850.ga.f001

***Pleurodeles*** Tschudi 1838.ta.f005 • **KY**

**SI**: 055 • **CI**: h028 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Pleurodeles* • Tschudi 1838.ta: 56 • **F**

01 • *Pleurodelina* • Bonaparte 1838.bd: 125 • **bF**

02 • *Pleurodelidina* • Bonaparte 1840.ba: 287 • **bF**

03 • *Pleurodelae* • Fitzinger 1843.fa: 33 • **F**

04 • *Pleurodelidae* • Bonaparte 1850.bb: pl. • **F**

05 • *Pleurodelidae* • Hallowell 1856.ha: 10 • **bF**

06 • *Pleurodelae* • Cope 1859.cb: 125 • **UF**

07 • *Pleurodelidae* • Cope 1859.cb: 125 • **UF**

08 • *Pleurodelinae* • Brame 1957.ba: 2 • **bF**

09 • *Pleurodelini* • Dubois[+1] 2009.db: 30 • **T**

10 • *Pleurodelina* • *Hoc loco* • **bT**

**OS**: *Pleurodeles* 1830 • **OE**

**EN**: (1) *Pleurodelinae* 1838.ta.f005-08 • **bF**

(2) *Pleurodelini* 1838.ta.f005-09 • **T**

(3) *Pleurodelina* 1838.ta.f005-10 • **bT**

**EF**: *Salamandridae* 1820.ga.f002

*Pleurodemae* Cope, 1866.ca.f002 • **JD**

**SI**: 155 • **CI**: h105 • **ST**: 0.10.52

**RL**: INR

**PA**: 00 • *Pleurodemae* • Cope 1866.ca: 90 • **Gr**

01 • *Pleurodemae* • Cope 1869.ca: 312 • **T**

**OS**: *Pleurodema* 1838 • **OE**

**EN**: (1) *Leiuperidae* 1850.bb.f010-02 • **F**

(2) *Leiuperinae* 1850.bb.f010-03 • **bF**

**EF**: *Leiuperidae* 1850.bb.f010

***Polypedatidae*** Günther, 1858.gc.f012 • **PK**

**SI**: 140 • **CI**: h093 • **ST**: 0.10.37

**RL**: < *Rhacophoridae* 1932.ha.f001 • **PS**: Dubois 1983.da: 276

**PA**: 00 • *Polypedatidae* • Günther 1858.gc: 346 • **F**

01 • *Polypedatydae* • Krefft 1865.ka: 18 • **F**

02 • *Polypedatina* • Mivart 1869.ma: 292 • **bF**

03 • *Polypedatidae* • Hoffmann 1878.ha: 614 • **bF**

04 • *Polypedatinae* • Boulenger 1888.ba: 205 • **bF**

05 • *Polypedatities* • *Hoc loco* • **bCn**

06 • *Polypedatitoes* • *Hoc loco* • **iCn**

**OS**: *Polypedates* 1838

**EN**: (1) *Polypedatities* 1858.gc.f012-05 • **bCn**

(2) *Polypedatitoes* 1858.gc.f012-06 • **iCn**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

*Polypedetidae* Whitney, 1890.wa.f001 • **JI**

**SI**: 192 • **CI**: h133 • **ST**: 0.10.52

**RL**: INR

**PA**: 00 • *Polypedetidae* • Whitney 1890.wa: 4606 • **F**

**OS**: *Polypedetes* 1890 ≡ *Polypedates* 1890

**EN**: (1) *Polypedatities* 1858.gc.f012-04 • **bCn**

(2) *Polypedatitoes* 1858.gc.f012-05 • **iCn**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

*Polysemiaden* Meyer, 1860.mb.f001 † • **AN**

**SI**: 146 • **CI**: n047 • **ST**: 0.23.50

**RL**: INR

**PA**: 00 • *Polysemiaden* • Meyer 1860.mb: 559 • **F**

01 • *Polysemiidae* • Martín[+2] 2012.ma: 174 • **F**

**OS**: *Polysemia* 1860 † ≈ *Chelotriton* 1853 † • **OE**

**EN**: (1) *Pleurodelinae* 1838.ta.f005-08 • **bF**

»»»

(3) *Pleurodelina* 1838.ta.f005-10 • **bT**

**EF**: *Salamandridae* 1820.ga.f002

*Potamotyphlidae* Lescure[+2], 1986.lb.f003 • **JD**

**SI**: 322 • **CI**: h230 • **ST**: 0.10.40

**RL**: INR

**PA**: c0 • *Potamotyphlidae* • Lescure[+2] 1986.lb: 145 • **F** • **EEA**: *Hoc loco*

i1 • *Potamotyphilidae* • Lescure[+2] 1986.lb: 160 • **F**

02 • *Potamotyphloidae* • Lescure[+2] 1986.lb: 169 • **eF**

03 • *Potamotyphlinae* • Lescure[+2] 1986.lb: 169 • **bF**

04 • *Potamotyphlilae* • Lescure[+2] 1986.lb: 169 • **iF**

05 • *Potamotyphlini* • Lescure[+2] 1986.lb: 170 • **T**

**OS**: *Potamotyphlus* 1968 • **OE**

**EN**: *Typhlonectina* 1968.ta.f002-09 • **bT**

**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Poyntoniina* nov.**, DOP.da.f101 • **KY**

**SI**: 542 • **CI**: h435 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Poyntoniina* • *Hoc loco* • **bT**

**OS**: *Poyntonia* 1989 • **PD**

**EN**: *Poyntoniina* DOP.da.f101-00 • **bT**

**EF**: *Cacosternidae* 1931.na.f008

*Pristimantinae* Pyron[+1], 2011.pa.f002 • **AN**

**SI**: 410 • **CI**: n098 • **ST**: 0.28.50

**RL**: INR

**PA**: 00 • *Pristimantinae* • Pyron[+1] 2011.pa: 547, 579, 580 • **bF**

**OS**: *Pristimantis* 1870 • **OD**

**EN**: (1) *Pristimantina* 2012.oa.f002-01 • **bT**

(2) *Pristimantinia* 2012.oa.f002-02 • **iT**

(3) *Pristimantinoa* 2012.oa.f002-03 • **hT**

EF: *Brachycephalidae* 1858.gc.f002

***Pristimantinae*** Ohler[+1], 2012.oa.f002 • **KY**

**SI**: 429 • **CI**: h323 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Pristimantinae* • Ohler[+1] 2012.oa: 165 • **bF**

01 • *Pristimantina* • *Hoc loco* • **bT**

02 • *Pristimantinia* • *Hoc loco* • **iT**

03 • *Pristimantinoa* • *Hoc loco* • **hT**

**OS**: *Pristimantis* 1870 • **OD**

**EN**: (1) *Pristimantina* 2012.oa.f002-01 • **bT**

(2) *Pristimantinia* 2012.oa.f002-02 • **iT**

(3) *Pristimantinoa* 2012.oa.f002-03 • **hT**

**EF**: *Brachycephalidae* 1858.gc.f002

***Proceratophryinae* nov.**, DOP.da.f039 • **KY**

**SI**: 480 • **CI**: h373 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Proceratophryinae* • *Hoc loco* • **bF**

**OS**: *Proceratophrys* 1920 • **PD**

**EN**: *Proceratophryinae* DOP.da.f039-00 • **bF**

**EF**: *Odontophrynidae* 1971.la.f002

*Procoela* Huene, 1948.ha.f004 • **AN**

**SI**: 248 • **CI**: n069 • **ST**: 0.25.50

**RL**: INR

**PA**: 00 • *Procoela* • Huene 1948.ha: 71 • **F**

**OS**: » **OA, PD**: *Bufo* 1764 • **OE**

**EN**: (1) *Bufonoidea* 1825.gb.f004-20 • **pF**

»»»

(10) *Bufonitoes* 1825.gb.f004-33 • **iCn**

**EF**: *Bufonidae* 1825.gb.f004

*Prosalamandridea* Stefano, 1903.sa.f001 • **AN**

**SI**: 197 • **CI**: n059 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Prosalamandridea* • Stefano 1903.sa: 49 • **F**

01 • *Prosalamandridae* • Martín[+2] 2012.ma: 174 • **F**

**OS**: » 2 **PN**, including: *Heteroclitotriton* 1903 † ≈ *Salamandra* 1764 • **PD**

**EN**: (1) *Salamandroidea* 1820.ga.f002-21 • **pF**

»»»

(4) *Salamandrini* 1820.ga.f002-28 • **T**

**EF**: *Salamandridae* 1820.ga.f002

***Prosaliridae*** Shubin[+1], 1995.sa.f001 † • **KY**

**SI**: 355 • **CI**: h262 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Prosaliridae* • Shubin[+1] 1995.sa: 49 • **F**

**OS**: *Prosalirus* 1995 † • **OE**

**EN**: *Prosaliridae* 1995.sa.f001-00 † • **F**

**EF**: *Prosaliridae* 1995.sa.f001 †

***Prosirenidae*** Estes, 1969.ea.f001 † • **KY**

**SI**: 279 • **CI**: h196 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Prosirenidae* • Estes 1969.ea: 87 • **F**

01 • *Prosirinidae* • Rowe[+3] 1992.ra: 492 • **F**

02 • *Protosirenidae* • Vorobyeva[+1] 1996.va: 69 • **F**

**OS**: *Prosiren* 1958 † • **OE**

**EN**: *Prosirenidae* 1969.ea.f001-00 † • **F**

**EF**: *Prosirenidae* 1969.ea.f001 †

*Proteina* Gray, 1825.gb.f006 • **AN**

**SI**: 020 • **CI**: n009 • **ST**: 2.26.50

**RL**: INR

**PA**: 00 • *Proteina* • Gray 1825.gb: 215 • **UF**

**OS**: » 2 **PN**, including: *Hypochthon* 1820 ≡ *Proteus* 1768 • **PD**

**EN**: (1) *Proteoidae* 1831.ba.f002-10 • **eF**

(2) *Proteidae* 1831.ba.f002-02 • **F**

**EF**: *Proteidae* 1831.ba.f002

***Proteina*** Bonaparte, 1831.ba.f002 • **RK**

**SI**: 036 • **CI**: h019 • **ST**: 0.10.33

**RL**: > *Phaenerobranchoidea* 1826.fb.f004• **RI**: Dubois[+1] 2015.da: 44

> *Phanerobranchoidea* 1827.fa.f001• **RI**: Dubois[+1] 2015.da: 44

**PA**: 00 • *Proteina* • Bonaparte 1831.ba: 78 • **UF**

01 • *Proteidea* • Goldfuss 1832.ga: 323 • **F**

02 • *Proteidae* • Hogg 1838.ha: 152 • **F**

03 • *Proteides* • Duméril[+1] 1841.da: 52 • **F**

04 • *Proteida* • Jan 1857.ja: 55 • **F**

05 • *Proteidea* • Huxley 1871.ha: 173 • **UF**

06 • *Protoidea* • Stefano 1903.sa: 47 • **F**

07 • *Protaeidae* • Laurent 1948.lb: 3 • **F**

08 • *Proteoidea* • Dubois 2005.da: 20 • **pF**

09 • *Proteinae* • Blackburn[+1] 2011.ba: 46 • **bF**

10 • *Proteoidae* • Dubois[+1] 2012.da: 98 • **eF**

**OS**: *Proteus* 1768 • **OE**

**EN**: (1) *Proteoidae* 1831.ba.f002-10 • **eF**

(2) *Proteidae* 1831.ba.f002-02 • **F**

**EF**: *Proteidae* 1831.ba.f002

*Protobatrachidae* Kuhn, 1941.ka.f001 † • **JI**

**SI**: 235 • **CI**: h168 • **ST**: 0.10.53

**RL**: INR

**PA**: 00 • *Protobatrachidae* • Kuhn 1941.ka: 346 • **F**

01 • *Protobatrachiidae* • Tatarinov 1964.ta: 127 • **F**

**OS**: *Protobatrachus* 1936 † • **JH** ≡ *Triadobatrachus* 1962 † • **OE**

**EN**: *Triadobatrachidae* 1962.ka.f001-00 † • **F**

**EF**: *Triadobatrachidae* 1962.ka.f001 †

***Protohynobiinae*** Fei[+1], 2000.fa.f001 • **KY**

**SI**: 356 • **CI**: h263 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Protohynobiinae* • Fei[+1] 2000.fa: 64 • **F**

01 • *Protohynobiina* • Dubois[+1] 2012.da: 113 • **bT**

02 • *Protohynobiinia* • *Hoc loco* • **iT**

**OS**: *Protohynobius* 2000 ≈ *Pseudohynobius* 1983 • **OD**

**EN**: *Protohynobiinia* 2000.fa.f001-02 • **iT**

**EF**: *Hynobiidae* |1856.ha.f001|-1859.cb.f002

*Protonopsidina* Bonaparte, 1840.ba.f001 • **JD**

**SI**: 058 • **CI**: h030 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Protonopsidina* • Bonaparte 1840.ba: 287 • **bF**

01 • *Protonopsina* • Bonaparte 1845.ba: 378 • **bF**

02 • *Protonopsidae* • Gray 1850.ga: 6, 52 • **F**

03 • *Protonopseidae* • Bonaparte 1850.bb: pl. • **F**

04 • *Protonopseina* • Bonaparte 1850.bb: pl. • **bF**

**OS**: *Protonopsis* 1824 ≈ *Cryptobranchus* 1821 • **OE**

**EN**: *Cryptobranchidae* 1826.fb.f003-04 • **F**

**EF**: *Cryptobranchidae* 1826.fb.f003

*Protopelobatidae* Fejérváry, 1921.fb.f001 † • **JD**
**SI**: 204 • **CI**: h141 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Protopelobatidae* • Fejérváry 1921.fb: 24 • **F**
**OS**: *Protopelobates* 1881 † ≈ *Palaeobatrachus* 1838 † • **OE**
**EN**: *Palaeobatrachidae* 1865.ca.f001-00 † • **F**
**EF**: *Palaeobatrachidae* 1865.ca.f001 †

***Pseudae*** Fitzinger, 1843.fa.f010 • **KY**
**SI**: 075 • **CI**: h043 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Pseudae* • Fitzinger 1843.fa: 33 • **F**
01 • *Pseudes* • Cope 1866.ca: 89 • **Gr**
02 • *Pseudinae* • Noble 1931.na: 496 • **bF**
03 • *Pseudidae* • Savage[+1] 1953.sa: 198 • **F**
04 • *Pseudina* • *Hoc loco* • **bT**
**OS**: *Pseudis* 1830 • **OE**
**EN**: *Pseudina* 1843.fa.f010-04 • **bT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Pseudoeuryceites* nov.**, DOP.da.f134 • **KY**
**SI**: 575 • **CI**: h468 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Pseudoeuryceites* • *Hoc loco* • **Cn**
**OS**: *Pseudoeurycea* 1944 • **PD**
**EN**: *Pseudoeuryceites* DOP.da.f134-00 • **Cn**
**EF**: *Plethodontidae* 1850.ga.f001

*Pseudohemisiinae* Tatarinov, 1964.ta.f002 • **AN**
**SI**: 269 • **CI**: n078 • **ST**: 0.28.50
**RL**: INR
**PA**: 00 • *Pseudohemisiinae* • Tatarinov 1964.ta: 132 • **F**
**OS**: *Pseudohemisus* 1895 ≈ *Scaphiophryne* 1882 • **OE**
**EN**: *Scaphiophrynini* Laurent, 1946.la.f002-03 • **T**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Pseudopaludicolinae*** Gallardo, 1965.ga.f003 • **KY**
**SI**: 271 • **CI**: h189 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Pseudopaludicolinae* • Gallardo 1965.ga: 84 • **bF**
**OS**: *Pseudopaludicola* 1926 • **OE**
**EN**: *Pseudopaludicolinae* 1965.ga.f003-00 • **bF**
**EF**: *Leptodactylidae* |1838.ta.f001|-1896.wa.f001

***Pseudophrynoidea*** Bauer, 1987.bc.f001 • **KY**
**SI**: 331 • **CI**: h239 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Pseudophrynoidea* • Bauer 1987.bc: 51 • **pF**
01 • *Pseudophryninoa* • *Hoc loco* • **hT**
**OS**: *Pseudophryne* 1843 • **PD**
**EN**: *Pseudophryninoa* 1987.bc.f001-01 • **pF**
**EF**: *Myobatrachidae* 1850.sa.f001

***Pseudoranities* nov.**, DOP.da.f109 • **KY**
**SI**: 550 • **CI**: h443 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Pseudoranities* • *Hoc loco* • **bCn**
**OS**: *Pseudorana* 1990 • **PD**
**EN**: *Pseudoranities* DOP.da.f109-00 • **bCn**
**EF**: *Ranidae* 1796.ba.f001

*Pseudosiphonopiti* Lescure[+2], 1986.lb.f007 • **JD**
**SI**: 326 • **CI**: h234 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Pseudosiphonopiti* • Lescure[+2] 1986.lb: 166 • **bT**
01 • *Pseudosiphonopili* • Lescure[+2] 1986.lb: 166 • **iT**
**OS**: *Pseudosiphonops* 1968 ≈ *Mimosiphonops* 1968 • **OE**
**EN**: (1) *Siphonopini* 1850.bb.f017-08 • **T**
»»»
(4) *Siphonopinoa* 1850.bb.f017-12 • **hT**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Pseudotritonina* Dubois, 2008.da.f005 • **AN**
**SI**: 378 • **CI**: n095 • **ST**: 0.22.50
**RL**: INR
**PA**: 00 • *Pseudotritionina* • Dubois 2008.da: 73 • **bT**
01 • *Pseudotritonita* • Dubois 2008.da: 74 • **iT**
**OS**: *Pseudotriton* 1838 • **OE**
**EN**: *Pseudotritonina* 2012.da.f006-00 • **bT**
**EF**: *Plethodontidae* 1850.ga.f001

***Pseudotritonina*** Dubois[+1], 2012.da.f006 • **KY**
**SI**: 423 • **CI**: h317 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Pseudotritonina* • Dubois[+1] 2012.da: 115 • **bT**
**OS**: *Pseudotriton* 1838 • **OD**
**EN**: *Pseudotritonina* 2012.da.f006-00 • **bT**
**EF**: *Plethodontidae* 1850.ga.f001

*Pseudotyphlonectini* Lescure[+2], 1986.lb.f010 • **JD**
**SI**: 329 • **CI**: h237 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Pseudotyphlonectini* • Lescure[+2] 1986.lb: 170 • **T**
**OS**: *Pseudotyphlonectes* 1986 ≈ *Typhlonectes* 1880 • **OE**
**EN**: *Typhlonectina* 1968.ta.f002-09 • **bT**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Pteroranini* Fei[+2], 2010.fa.f014 • **AP**
**SI**: 405 • **CI**: h305 • **ST**: 0.10.46
**RL**: INR
**PA**: 00 • *Pteroranini* • Fei[+2] 2010.fa: 18 • **T**
**OS**: *Pterorana* 1986 • **OD**
**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**
»»»
(5) *Raninae* 1796.ba.f001-23 • **bF**
**EF**: *Ranidae* 1796.ba.f001

***Ptychadenini*** Dubois, 1987.da.f002 • **KY**
**SI**: 334 • **CI**: h242 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Ptychadenini* • Dubois 1987.da: 55 • **T**
01 • *Ptychadeninae* • Dubois 1992.da: 316 • **bF**
02 • *Ptychadenidae* • Frost[+18] 2006.fa: 7 • **F**
**OS**: *Ptychadena* 1917 • **OD**
**EN**: *Ptychadenidae* 1987.da.f002-02 • **F**
**EF**: *Ptychadenidae* 1987.da.f002

***Ptychohylites* nov.**, DOP.da.f059 • **KY**
**SI**: 500 • **CI**: h393 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Ptychohylites* • *Hoc loco* • **Cn**
**OS**: *Ptychohyla* 1944 • **PD**
**EN**: *Ptychohylites* DOP.da.f059-00 • **Cn**

**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Pyxicephalina*** Bonaparte, 1850.bb.f005 • **ky**

**SI**: 097 • **CI**: h059 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Pyxicephalina* • Bonaparte 1850.bb: pl. • **bF**

01 • *Pyxicephalini* • Dubois 1987.da: 66 • **T**

02 • *Pyxicephalinae* • Dubois 1992.da: 317 • **bF**

03 • *Pyxicephalidae* • Roelants[+7] 2007.ra: 889 • **F**

04 • *Pyxicephaloidae* • *Hoc loco* • **eF**

**OS**: *Pyxicephalus* 1838 • **OE**

**EN**: (1) *Pyxicephaloidae* 1850.bb.f005-04 • **eF**

(2) *Pyxicephalidae* 1850.bb.f005-03 • **F**

**EF**: *Pyxicephalidae* 1850.bb.f005

***Quasipaini*** Fei[+2], 2010.fa.f007 • **ky**

**SI**: 398 • **CI**: h298 • **ST**: 0.10.31

**RL**: ≥ *Annandiini* 2010.fa.f008 • **AI**: *hoc loco*

**PA**: 00 • *Quasipaini* • Fei[+2] 2010.fa: 17 • **T**

01 • *Quasipaina* • *Hoc loco* • **bT**

**OS**: *Quasipaa* 1992 • **OD**

**EN**: (1) *Quasipaini* 2010.fa.f007-00 • **T**

(2) *Quasipaina* 2010.fa.f007-01 • **bT**

**EF**: *Dicroglossidae* 1987.da.f004

*Racophoridae* Hellmich, 1957.ha.f001 • **jd**

**SI**: 254 • **CI**: h179 • **ST**: 0.10.52

**RL**: INR

**PA**: 00 • *Racophoridae* • Hellmich 1957.ha: 28 • **F**

**OS**: *Racophorus* 1826 ≡ *Rhacophorus* 1822 • OE

**EN**: (1) *Racophoridae* |1858.gc.f012|-1932.ha.f001-00 • **F**

»»»

(8) *Rhacophorities* |1858.gc.f012|-1932.ha.f001-09 • **bCn**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

*Ranaridia* Rafinesque, 1814.ra.f001 • **ji**

**SI**: 003 • **CI**: h002 • **ST**: 0.10.52

**RL**: INR

**PA**: 00 • *Ranaridia* • Rafinesque 1814.ra: 102 • **F**

01 • *Ranarinia* • Rafinesque 1815.ra: 78 • **F**

**OS**: *Ranaria* 1814 ≡ *Rana* 1758 • **OE**

**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**

»»»

(12) *Ranitoes* 1796.ba.f001-38 • **iCn**

**EF**: *Ranidae* 1796.ba.f001

*Ranavinae* Fejérváry, 1921.fa.f001 † • **jd**

**SI**: 202 • **CI**: h139 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Ranavidae* • Fejérváry 1921.fa: 29 • **F**

01 • *Ranavinae* • Fejérváry 1921.fa: 29 • **bF**

**OS**: *Ranavus* 1885 † • **OE**

**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**

»»»

(6) *Ranini* 1796.ba.f001-30 • **T**

**EF**: *Ranidae* 1796.ba.f001

*Raniformes* Duméril[+1], 1841.da.f001 • **an**

**SI**: 060 • **CI**: n027 • **ST**: 2.27.50

**RL**: INR

**PA**: 00 • *Raniformes* • Duméril[+1] 1841.da: 50 • **F**

01 • *Raniformes* • Desmarest 1857.da: 21 • **F**

02 • *Raniformia* • Cope 1864.ca: 51 • **F**

**OS**: *Rana* 1758 • **OE**

**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**

»»»

(12) *Ranitoes* 1796.ba.f001-38 • **iCn**

**EF**: *Ranidae* 1796.ba.f001

***Ranina*** Batsch, 1796.ba.f001 • **ky**

**SI**: 002 • **CI**: h001 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Ranina* • Batsch 1796.ba: 179 • **F**

01 • *Ranae* • Goldfuss 1820.ga: xi • **F**

02 • *Ranadae* • Gray 1825.gb: 213 • **F**

03 • *Ranina* • Gray 1825.gb: 214 • **UF**

04 • *Ranoidea* • Fitzinger 1826.fb: 37 • **F**

05 • *Ranidae* • Boie 1828.ba: 363 • **F**

06 • *Rana* • Wilbrand 1829.wa: 273 • **F**

07 • *Ranaria* • Hemprich 1829.ha: xix, 373 • **F**

08 • *Raniadae* • Smith 1831.sa: 18 • **F**

09 • *Ranoidea* • Fitzinger 1832.fa: 328 • **Gr**

10 • *Ranae* • Goldfuss 1832.ga: 336 • **Zt**

11 • *Ranadea* • Jourdan 1834.jb: 356 • **F**

12 • *Ranina* • Bonaparte 1838.ba: [195] • **bF**

13 • *Ramidae* • Hogg 1838.ha: 152 • **F**

14 • *Ranina* • Gravenhorst 1843.ga: 393 • **L**

15 • *Ranae* • Leunis 1844.la: 128 • **UF**

16 • *Ranini* • Bronn 1849.ba: 684 • **UF**

17 • *Ranina* • Günther 1858.gc: 344 • **Sc**

18 • *Ranae* • Leunis 1860.la: 336 • **T**

19 • *Ranoides* • Bruch 1862.ba: 221 • **F**

20 • *Ranida* • Haeckel 1866.ha: cxxxii • **F**

21 • *Ranides* • Gouriet 1868.ga: 206 • **F**

22 • *Ranidae* • Hoffmann 1878.ha: 613 • **bF**

23 • *Raninae* • Boulenger 1888.ba: 205 • **bF**

24 • *Ranidi* • Acloque 1900.aa: 489 • **F**

25 • *Ranoiidea* • Gill 1903.ga: 71 • **F**

26 • *Ranoidea* • Bolkay 1919.ba: 345 • **Ga**

27 • *Ranoida* • Bolkay 1919.ba: 345 • **Ga**

28 • *Ranoidea* • Bolkay 1929.ba: 58 • **pF**

29 • *Ranoidae* • Dubois 1992.da: 309 • **eF**

30 • *Ranini* • Dubois 1992.da: 320 • **T**

31 • *Ranoidia* • Dubois 2005.da: 3 • **eF**

32 • *Raneidae* • *Hoc loco* • **aF**

33 • *Ranina* • *Hoc loco* • **bT**

34 • *Raninia* • *Hoc loco* • **iT**

35 • *Raninoa* • *Hoc loco* • **hT**

36 • *Ranites* • *Hoc loco* • **Cn**

37 • *Ranities* • *Hoc loco* • **bCn**

38 • *Ranitoes* • *Hoc loco* • **iCn**

**OS**: *Rana* 1758 • **OE**

**EN**: (1) *Ranoidea* 1796.ba.f001-28 • **pF**

(2) *Ranoidae* 1796.ba.f001-29 • **eF**

(3) *Raneidae* 1796.ba.f001-32 • **aF**

(4) *Ranidae* 1796.ba.f001-05 • **F**

(5) *Raninae* 1796.ba.f001-23 • **bF**

(6) *Ranini* 1796.ba.f001-30 • **T**

(7) *Ranina* 1796.ba.f001-33 • **bT**

(8) *Raninia* 1796.ba.f001-34 • **iT**
(9) *Raninoa* 1796.ba.f001-35 • **hT**
(10) *Ranites* 1796.ba.f001-36 • **Cn**
(11) *Ranities* 1796.ba.f001-37 • **bCn**
(12) *Ranitoes* 1796.ba.f001-38 • **iCn**
**EF**: *Ranidae* 1796.ba.f001

***Ranixalini*** Dubois, 1987.da.f005 • **ky**
**SI**: 337 • **CI**: h245 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Ranixalini* • Dubois 1987.da: 66 • **T**
01 • *Ranixalinae* • Dubois 1992.da: 334 • **bF**
02 • *Ranixalidae* • Van Bocxlaer[+4] 2006.va: 2 • **F**
03 • *Ranixaleidae* • *Hoc loco* • **aF**
**OS**: *Ranixalus* 1986 ≈ *Indirana* 1986 • **OD**
**EN**: (1) *Ranixaleidae* 1987.da.f005-03 • **aF**
(2) *Ranixalidae* 1987.da.f005-02 • **F**
**EF**: *Ranixalidae* 1987.da.f005

***Ranodontidae*** Thorn, 1966.ta.f001 • **ky**
**SI**: 275 • **CI**: h192 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Ranodontidae* • Thorn 1966.ta: 108 • **F**
01 • *Ranodontini* • *Hoc loco* • **bT**
02 • *Ranodontina* • *Hoc loco* • **bT**
**OS**: *Ranodon* 1866 • **OE**
**EN**: (1) *Ranodontini* 1966.ta.f001-01 • **T**
(2) *Ranodontina* 1966.ta.f001-02 • **bT**
**EF**: *Hynobiidae* |1856.ha.f001|-1859.cb.f002

***Ranodontini*** Dubois[+1], 2012.da.f003 • **ji**
**SI**: 420 • **CI**: h314 • **ST**: 0.10.52
**RL**: INR
**PA**: 00 • *Ranodontini* • Dubois[+1] 2012.da: 113 • **T**
**OS**: *Ranodon* 1866 • **OE**
**EN**: (1) *Ranodontini* 1966.ta.f001-01 • **T**
(2) *Ranodontina* 1966.ta.f001-02 • **bT**
**EF**: *Hynobiidae* |1856.ha.f001|-1859.cb.f002

***Rentapiitues*** **nov.**, DOP.da.f021 • **ky**
**SI**: 462 • **CI**: h355 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Rentapiitues* • *Hoc loco* • **hCn**
**OS**: *Rentapia* 2016 • **PD**
**EN**: *Rentapiitues* DOP.da.f021-00 • **hCn**
**EF**: *Bufonidae* 1825.gb.f004

***Rhacophoridae*** Hoffman, 1932.ha.f001 • **sk**
**SI**: 233 • **CI**: h166 • **ST**: 0.10.35
**RL**: > *Polypedatidae* 1858.gc.f012 • **PS**: Dubois 1983.da: 276
**PA**: 00 • *Rhacophoridae* • Hoffman 1932.ha: 562 • **F**
01 • *Rhacophorinae* • Laurent 1943.la: 16 • **bF**
02 • *Rhacophridae* • Fei[+2] 1990.fa: 170 • **F**
03 • *Rhacophorini* • Dubois 1992.da: 336 • **T**
04 • *Rhcophoridae* • Fei[+4] 2005.fb: 256 • **F**
05 • *Rhacophorina* • *Hoc loco* • **bT**
06 • *Rhacophorinia* • *Hoc loco* • **iT**
07 • *Rhacophorinoa* • *Hoc loco* • **hT**
08 • *Rhacophorites* • *Hoc loco* • **Cn**
09 • *Rhacophorities* • *Hoc loco* • **bCn**
**OS**: *Rhacophorus* 1822 • **OE**
**EN**: (1) *Rhacophoridae* |1858.gc.f012|-1932.ha.f001-00 • **F**
(2) *Rhacophorinae* |1858.gc.f012|-1932.ha.f001-01 • **bF**
(3) *Rhacophorini* |1858.gc.f012|-1932.ha.f001-03 • **T**
(4) *Rhacophorina* |1858.gc.f012|-1932.ha.f001-05 • **bT**
(5) *Rhacophorinia* |1858.gc.f012|-1932.ha.f001-06 • **iT**
(6) *Rhacophorinoa* |1858.gc.f012|-1932.ha.f001-07 • **hT**
(7) *Rhacophorites* |1858.gc.f012|-1932.ha.f001-08 • **Cn**
(8) *Rhacophorities* |1858.gc.f012|-1932.ha.f001-09 • **bCn**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Rhaeboites*** **nov.**, DOP.da.f033 • **ky**
**SI**: 474 • **CI**: h367 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Rhaeboites* • *Hoc loco* • **Cn**
**OS**: *Rhaebo* 1862 • **PD**
**EN**: *Rhaeboites* DOP.da.f033-00 • **Cn**
**EF**: *Bufonidae* 1825.gb.f004

***Rhinodermina*** Bonaparte, 1850.bb.f011 • **ky**
**SI**: 103 • **CI**: h065 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Rhinodermina* • Bonaparte 1850.bb: pl. • **bF**
01 • *Rhinodermatidae* • Günther 1858.gc: 346 • **bF**
02 • *Rhinodermatinae* • Noble 1931.na: 506 • **bF**
**OS**: *Rhinoderma* 1841 • **OE**
**EN**: *Rhinodermatidae* 1850.bb.f011-01 • **F**
**EF**: *Rhinodermatidae* 1850.bb.f011

***Rheobatrachinae*** Heyer[+1], 1976.ha.f001 • **ky**
**SI**: 298 • **CI**: h211 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Rheobatrachinae* • Heyer[+1] 1976.ha: 11 • **bF**
01 • *Rheobatrachidae* • Laurent 1980.la: 401 • **F**
**OS**: *Rheobatrachus* 1973 • **OE**
**EN**: *Rheobatrachinae* 1976.ha.f001-00 • **F**
**EF**: *Myobatrachidae* 1850.sa.f001

***Rheohylinoa*** **nov.**, DOP.da.f057 • **ky**
**SI**: 498 • **CI**: h391 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Rheohylinoa* • *Hoc loco* • **hT**
01 • *Rheohylites* • *Hoc loco* • **Cn**
**OS**: *Rheohyla* 2016 • **PD**
**EN**: (1) *Rheohylinoa* DOP.da.f057-00 • **hT**
(2) *Rheohylites* DOP.da.057-01 • **Cn**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Rhinatrematidae*** Nussbaum, 1977.na.f001 • **ky**
**SI**: 300 • **CI**: h213 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Rhinatrematidae* • Nussbaum 1977.na: 1 • **F**
01 • *Rhinatremidae* • Laurent 1984.la: 199 • **F**
02 • *Rhinatrematoides* • Lescure[+2] 1986.lb: 158 • **hF**
03 • *Rhinatrematoidea* • Lescure[+2] 1986.lb: 158 • **pF**
04 • *Rhinatrematoidae* • Lescure[+2] 1986.lb: 158 • **eF**
**OS**: *Rhinatrema* 1841 • **OE**
**EN**: *Rhinatrematidae* 1977.na.f001-00 • **F**
**EF**: *Rhinatrematidae* 1977.na.f001

***Rhinophrynidae*** Günther, 1858.gc.f013 • **ky**
**SI**: 141 • **CI**: h094 • **ST**: 0.10.30
**RL**: INR

**PA**: 00 • *Rhinophrynidae* • Günther 1858.gc: 348 • **F**
01 • *Rhinophrynina* • Günther 1859.ga: xiv • **Sc**
02 • *Rhinophrynida* • Knauer 1878.ka: 108 • **F**
03 • *Rhinophryninae* • Noble 1931.na: 500 • **bF**
04 • *Rhynophrynidae* • Casamiquela 1961.ca: 79 • **F**
**OS**: *Rhinophrynus* 1841 • **OD**
**EN**: *Rhinophrynidae* 1858.gc.f013-00 • **F**
**EF**: *Rhinophrynidae* 1858.gc.f013

***Rhombophryninae*** Noble, 1931.na.f009 • **ky**
**SI**: 224 • **CI**: h159 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Rhombophryninae* • Noble 1931.na: 529 • **bF**
01 • *Rhombophrynina* • *Hoc loco* • **bT**
**OS**: *Rhombophryne* 1880 • **OE**
**EN**: *Rhombophrynina* 1931.na.f009-01 • **bT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Rhyacotritoninae*** Tihen, 1958.ta.f002 • **ky**
**SI**: 261 • **CI**: h182 • **ST**: 0.10.30
**RL**: < *Dicamptodontinae* 1958.ta.f001 • **AI**: Regal 1966.ra: 405
**PA**: 00 • *Rhyacotritoninae* • Tihen 1958.ta: 1 • **bF**
01 • *Rhyacotritonidae* • Good[+1] 1992.ga: v, xi, 1, 13 • **F**
02 • *Rhyacotritonoidea* • Dubois 2005.da: 20 • **pF**
03 • *Rhyacotritoneidae* • *Hoc loco* • **aF**
**OS**: *Rhyacotriton* 1920 • **OE**
**EN**: (1) *Rhyacotritoneidae* 1958.ta.f002-03 • **aF**
(2) *Rhyacotritonidae* 1958.ta.f002-01 • **F**
**EF**: *Rhyacotritonidae* 1958.ta.f002

***Romerina*** **nov.**, DOP.da.f128 • **ky**
**SI**: 569 • **CI**: h462 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Romerina* • *Hoc loco* • **bT**
**OS**: *Romerus* **nov.** • **PD**
**EN**: *Romerina* DOP.da.f128-00 • **bT**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Rugosinoa*** **nov.**, DOP.da.f111 • **ky**
**SI**: 552 • **CI**: h445 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Rugosinoa* • *Hoc loco* • **bCn**
**OS**: *Rugosa* 1990 • **PD**
**EN**: *Rugosinoa* DOP.da.f111-00 • **bCn**
**EF**: *Ranidae* 1796.ba.f001

***Rulyraninoa*** **nov.**, DOP.da.f042 • **ky**
**SI**: 483 • **CI**: h376 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Rulyraninoa* • *Hoc loco* • **hT**
01 • *Rulyranites* • *Hoc loco* • **Cn**
**OS**: *Rulyrana* 2009 • **PD**
**EN**: (1) *Rulyraninoa* DOP.da.f042-00 • **hT**
(2) *Rulyranites* DOP.da.f042-01 • **Cn**
**EF**: *Centrolenidae* 1951.ta.f001

***Sabahphrynitoes*** **nov.**, DOP.da.f025 • **ky**
**SI**: 466 • **CI**: h359 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Sabahphrynitoes* • *Hoc loco* • **iCn**
**OS**: *Sabahphrynus* 2007 • **PD**
**EN**: *Sabahphrynitoes* DOP.da.f025-00 • **iCn**
**EF**: *Bufonidae* 1825.gb.f004

***Salamandrae*** Goldfuss, 1820.ga.f002 • **ky**
**SI**: 012 • **CI**: h005 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Salamandrae* • Goldfuss 1820.ga: xi • **F**
01 • *Salamandridae* • Gray 1825.gb: 215 • **F**
02 • *Salamandroidea* • Fitzinger 1826.fb: 37 • **F**
03 • *Salamandrina* • Hemprich 1829.ha: xix, 373 • **F**
04 • *Salamandroidea* • Fitzinger 1832.fa: 329 • **Gr**
05 • *Salamandrina* • Bonaparte 1839.bd: [259] • **bF**
06 • *Salmandridae* • Bonaparte 1839.be: 272 • **F**
07 • *Salamandroides* • Duméril[+1] 1841.da: 52 • **F**
08 • *Salamandrides* • Duméril[+1] 1841.da: table after page 53 • **F**
09 • *Salamandrina* • Leunis 1844.la: 129 • **UC**
10 • *Salamandrinae* • Bronn 1849.ba: 683 • **UF**
11 • *Salamandridae* • Bronn 1849.ba: 683 • **UF**
12 • *Salamandrinae* • Baird 1851.ba: 253 • **F**
13 • *Salamandrines* • Desmarest 1856.da: 152 • **F**
14 • *Salamandrida* • Jan 1857.ja: 54 • **F**
15 • *Salamandrinae* • Cope 1859.cb: 125 • **bF**
16 • *Salamandrae* • Cope 1859.cb: 125 • **UC**
17 • *Salamandrina* • Leunis 1860.la: 339 • **T**
18 • *Salamandrae* • Betta 1864.ba: 512 • **bF**
19 • *Salamandridea* • Huxley 1871.ha: 173 • **UF**
20 • *Salamandriae* • Hoffmann 1878.ha: 583 • **F**
21 • *Salamandroidea* • Garman 1884.ga: 37 • **pF**
22 • *Salamandridi* • Acloque 1900.aa: 494 • **F**
23 • *Salamandridea* • Stefano 1903.sa: 42 • **F**
24 • *Salamandroideae* • Stejneger 1907.sa: 3 • **pF**
25 • *Salamandroidae* • Hay 1929.ha: 848 • **pF**
26 • *Salamandrina* • Huene 1931.ha: 311 • **pF**
27 • *Salamandroidia* • Dubois 2005.da: 19 • **eF**
28 • *Salamandrini* • Dubois[+1] 2009.db: 60 • **T**
29 • *Salamandroidae* • Dubois[+1] 2012.da: 148 • **eF**
**OS**: *Salamandra* 1768 ≈ *Salamandra* 1764 • **OE**
**EN**: (1) *Salamandroidea* 1820.ga.f002-21 • **pF**
(2) *Salamandridae* 1820.ga.f002-01 • **F**
(3) *Salamandrinae* 1820.ga.f002-15 • **bF**
(4) *Salamandrini* 1820.ga.f002-28 • **T**
**EF**: *Salamandridae* 1820.ga.f002

***Salamandrellina*** Dubois[+1], 2012.da.f004 • **ky**
**SI**: 421 • **CI**: h315 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Salamandrellina* • Dubois[+1] 2012.da: 113 • **bT**
**OS**: *Salamandrella* 1870 • **OD**
**EN**: *Salamandrellina* 2012.da.f004-00 • **bT**
**EF**: *Hynobiidae* |1856.ha.f001|-1859.cb.f002

***Salamandrinae*** Fitzinger, 1843.fa.f013 • **ky**
**SI**: 078 • **CI**: h046 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Salamandrinae* • Fitzinger 1843.fa: 33 • **F**
01 • *Salamandrininae* • Dubois[+1] 2009.db: 29 • **bF**
**OS**: *Salamandrina* 1826 • **OE**
**EN**: *Salamandrininae* 1843.fa.f013-01 • **bF**
**EF**: *Salamandridae* 1820.ga.f002

*Salamandropes* Fitzinger, 1843.fa.f015 • **JD**

**SI**: 080 • **CI**: h048 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Salamandropes* • Fitzinger 1843.fa: 34 • **F**

**OS**: *Salamandrops* 1830 ≈ *Cryptobranchus* 1821 • **OE**

**EN**: *Cryptobranchidae* 1826.fb.f003-04 • **F**

**EF**: *Cryptobranchidae* 1826.fb.f003

*Salteniidae* Kuhn, 1965.ka.f002 † • **AN**

**SI**: 274 • **CI**: n079 • **ST**: 0.29.50

**RL**: INR

**PA**: 00 • *Salteniidae* • Kuhn 1965.ka: 88 • **F**

**OS**: *Saltenia* 1959 † • **OE**

**EN**: *Salteniinae* DOP.da.f148-00 †

**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Salteniinae* **nov.**, DOP.da.f148 †• **KY**

**SI**: 593 • **CI**: n104 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Salteniinae* • *Hoc loco* • bF

**OS**: *Saltenia* 1959 † • **PD**

**EN**: *Salteniinae* DOP.da.f148-00 †

**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

***Sanguiranini*** Fei[+2], 2010.fa.f017 • **KY**

**SI**: 408 • **CI**: h308 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Sanguiranini* • Fei[+2] 2010.fa: 18 • **T**

01 • *Sanguiraninoa* • *Hoc loco* • **hT**

**OS**: *Sanguirana* 1992 • **OD**

**EN**: *Sanguiraninoa* 2010.fa.f017-01 • **hT**

**EF**: *Ranidae* 1796.ba.f001

***Satobiinoa*** **nov.**, DOP.da.f130 • **KY**

**SI**: 571 • **CI**: h464 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Satobiinoa* • *Hoc loco* • **hT**

**OS**: *Satobius* 1990 • **PD**

**EN**: *Satobiinoa* DOP.da.f130-00 • **hT**

**EF**: *Hynobiidae* |1856.ha.f001|-1859.cb.f002

***Scapherpetonidae*** Auffenberg[+1], 1959.aa.f001 † • **KY**

**SI**: 262 • **CI**: h183 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Scapherpetonidae* • Auffenberg[+1] 1959.aa: 5 • **F**

01 • *Scapherpetontidae* • Estes 1965.ea: 321 • **F**

02 • *Scapherpetontinae* • Edwards 1976.ea: 325 • **bF**

03 • *Scapherpetoninae* • Brame[+3] 1978.ba: 45 • **bF**

04 • *Scapherpetodontidae* • Vorobyeva[+1] 1996.va: 69 • **F**

05 • *Scapherpetidae* • Skutschas 2009.sa: 663 • **F**

**OS**: *Scapherpeton* 1877 † ≈ *Hedronchus* 1877 † • **OE**

**EN**: *Scapherpetidae* 1959.aa.f001-05 † • **F**

**EF**: *Scapherpetidae* 1959.aa.f001 †

***Scaphiophryninae*** Laurent, 1946.la.f002 • **KY**

**SI**: 243 • **CI**: h174 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Scaphiophryninae* • Laurent 1946.la: 337 • **bF**

01 • *Scaphiophrynidae* • Kuhn 1967.kb: 37 • **F**

02 • *Scaphiophryniinae* • Guibé 1978.gb: 8 • **bF**

03 • *Scaphiophrynini* • *Hoc loco* • **T**

**OS**: *Scaphiophryne* Boulenger, 1882 • **OE**

**EN**: *Scaphiophrynini* 1946.la.f002-03 • **T**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Scaphiopodidae*** Cope, 1865.ca.f003 • **KY**

**SI**: 153 • **CI**: h103 • **ST**: 0.10.30

**RL**: INR

**PA**: c0 • *Scaphiopodidae* • Cope 1865.ca: 104 • **F** • **IIA**: Cope 1866.ca: 68

i1 • *Scaphiopidae* • Cope 1865.ca: 107 • **F**

02 • *Scaphiopodina* • Mivart 1869.ma: 291 • **bF**

03 • *Scaphiopinae* • Špinar[+2] 1971.sa: 284 • **bF**

04 • *Scaphiopodinae* • Dubois 1983.da: 271 • **bF**

05 • *Scaphiopodoidea* • *Hoc loco* • **pF**

**OS**: *Scaphiopus* 1836 • **OE**

**EN**: (1) *Scaphiopodoidea* 1865.ca.f003-05 • **pF**

(2) *Scaphiopodidae* 1865.ca.f003-c0 • **F**

**EF**: *Scaphiopodidae* 1865.ca.f003

***Schismadermatitues*** **nov.**, DOP.da.f027 • **KY**

**SI**: 468 • **CI**: h361 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Schismadermatitues* • *Hoc loco* • **hCn**

**OS**: *Schismaderma* 1849 • **PD**

**EN**: *Schismadermatitues* DOP.da.f027-00 • **hCn**

**EF**: *Bufonidae* 1825.gb.f004

***Scinaxinae*** Duellman[+2], 2016.db.f002 • **KY**

**SI**: 437 • **CI**: h330 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Scinaxinae* • Duellman[+2] 2016.db: 3, 25 • **bF**

01 • *Scinaginae* • Dubois[+1] 2019.db: 125 • **bF**

02 • *Scinaxini* • *Hoc loco* • **T**

03 • *Scinaxina* • *Hoc loco* • **bT**

04 • *Scinacinae* • *Hoc loco* • **bF**

**OS**: *Scinax* 1830 • **PD**

**EN**: (1) *Scinaxini* 2016.db.f002-02 • **T**

(2) *Scinaxina* 2016.db.f002-03 • **bT**

**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Sclerophryitoes*** **nov.**, DOP.da.f030 • **KY**

**SI**: 471 • **CI**: h364 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Sclerophryitoes* • *Hoc loco* • **iCn**

**OS**: *Sclerophrys* 1838 • **PD**

**EN**: *Sclerophryitoes* DOP.da.f030-00 • **iCn**

**EF**: *Bufonidae* 1825.gb.f004

***Scolecomorphidae*** Taylor, 1969.ta.f001 • **KY**

**SI**: 285 • **CI**: h200 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Scolecomorphidae* • Taylor 1969.ta: 297 • **F**

01 • *Scolecomorphoides* • Lescure[+2] 1986.lb: 159 • **hF**

02 • *Scolecomorphoidea* • Lescure[+2] 1986.lb: 159 • **pF**

03 • *Scolecomorphoidae* • Lescure[+2] 1986.lb: 159 • **eF**

04 • *Scolecomorphinae* • Lescure[+2] 1986.lb: 159 • **bF**

**OS**: *Scolecomorphus* 1883 • **OD**

**EN**: *Scolecomorphidae* 1969.ta.f001-00 • **F**

**EF**: *Scolecomorphidae* 1969.ta.f001

*Seiranotina* Bonaparte, 1850.bb.f014 • **JD**

**SI**: 106 • **CI**: h068 • **ST**: 1.10.40

**RL**: INR

**PA**: 00 • *Seiranotina* • Bonaparte 1850.bb: pl. • **F**
01 • *Seiranotina* • Gray 1850.ga: 29 • **UF**
02 • *Seiranotidae* • Hallowell 1856.ha: 10. • **bF**
03 • *Seiranotidae* • Gray 1858.gb: 137 • **F**
04 • *Siranotidae* • Cope 1866.ca: 108 • **F**
05 • *Seiranodontidae* • Kuhn 1967.kb: 38 • **F**
**OS**: *Seiranota* 1826 ≈ *Salamandrina* 1826 • **OE**
**EN**: *Salamandrininae* 1843.fa.f013-01 • **bF**
**EF**: *Salamandridae* 1820.ga.f002

*Sieboldiidae* Bonaparte, 1850.bb.f017 • **JD**
**SI**: 110 • **CI**: h072 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Sieboldiidae* • Bonaparte 1850.bb: pl. • **F**
01 • *Sieboldiina* • Bonaparte 1850.bb: pl. • **bF**
**OS**: *Sieboldia* 1838 ≈ *Andrias* 1837 † • **OE**
**EN**: *Cryptobranchidae* 1826.fb.f003-04 • **F**
**EF**: *Cryptobranchidae* 1826.fb.f003

*Siluraninae* Cannatella[+1], 1988.ca.f001 • **JD**
**SI**: 340 • **CI**: h248 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Siluraninae* • Cannatella[+1] 1988.ca: 1 • **bF**
**OS**: *Silurana* 1864 • **OE**
**EN**: (1) *Dactylethrinae* 1838.ha.f001-04 • **bF**
(2) *Dactylethrini* 1838.ha.f001-05 • **T**
**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002

***Siphonopina*** Bonaparte, 1850.bb.f019 • **KY**
**SI**: 111 • **CI**: h073 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Siphonopina* • Bonaparte 1850.bb: pl. • **bF**
01 • *Siphonopidae* • Dubois 1984.da: 113 • **F**
02 • *Siphonopinae* • Dubois 1984.da: 113 • **bF**
03 • *Siphonopoides* • Lescure[+2] 1986.lb: 162 • **hF**
04 • *Siphonopoidea* • Lescure[+2] 1986.lb: 162 • **pF**
05 • *Siphonopoidae* • Lescure[+2] 1986.lb: 163 • **pF**
06 • *Siphonopilae* • Lescure[+2] 1986.lb: 162 • **iF**
07 • *Siphonopoidi* • Lescure[+2] 1986.lb: 166 • **pT**
08 • *Siphonopini* • Lescure[+2] 1986.lb: 166 • **T**
09 • *Siphonopiti* • Lescure[+2] 1986.lb: 167 • **bT**
10 • *Siphonopina* • *Hoc loco* • **bT**
11 • *Siphonopinia* • *Hoc loco* • **iT**
12 • *Siphonopinoa* • *Hoc loco* • **hT**
**OS**: *Siphonops* 1828 • **OE**
**EN**: (1) *Siphonopini* 1850.bb.f019-08 • **T**
(2) *Siphonopina* 1850.bb.f019-10 • **bT**
(3) *Siphonopinia* 1850.bb.f019-11 • **iT**
(4) *Siphonopinoa* 1850.bb.f019-12 • **hT**
**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

*Siredonidae* Gray, 1842.ga.f001 • **CG**
**SI**: 064 • **CI**: h032 • **ST**: 0.10.62
**RL**: INR
**PA**: 00 • *Siredonidae* • Gray 1842.ga: 114 • **F**
01 • *Siredontidae* • Bonaparte 1850.bb: pl. • **F**
02 • *Siredontina* • Bonaparte 1850.bb: pl. • **bF**
**OS**: *Siredon* 1829 CI ≈ *Ambystoma* 1838 • **OE**
**EN**: *Ambystomatidae* 1850.ga.f002-08 • **F**
**EF**: *Ambystomatidae* 1850.ga.f002

***Sirenidae*** Gray, 1825.gb.f005 • **KY**
**SI**: 019 • **CI**: h010 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Sirenidae* • Gray 1825.gb: 215 • **F**
01 • *Serenina* • Gray 1825.gb: 216 • **UF**
02 • *Sirenea* • Hemprich 1829.ha: xix, 373 • **F**
03 • *Sirenina* • Gray 1829.ga: 205 • **UF**
04 • *Sirenidea* • Jourdan 1834.jb: 438 • **F**
05 • *Sirena* • Blainville 1835.ba: 282 • **F**
06 • *Sirenina* • Bonaparte 1838.bc: 393 • **bF**
07 • *Sirenes* • Fitzinger 1843.fa: 35 • **F**
08 • *Sirenoidei* • Bronn 1849.ba: 682• **UF**
09 • *Sirenides* • Gouriet 1868.ga: 206 • **F**
10 • *Sirenida* • Knauer 1878.ka: 95 • **F**
11 • *Sirenoidae* • Hay 1929.ha: 842 • **pF**
12 • *Sirenoidea* • Milner 2000.ma: 1412 • **pF**
13 • *Sirenoidia* • Dubois 2005.da: 21 • **eF**
**OS**: *Siren* 1766 • **OE**
**EN**: *Sirenidae* 1825.gb.f005-00 • **F**
**EF**: *Sirenidae* 1825.gb.f005

***Smiliscitoes* nov.**, DOP.da.f150 • **KY**
**SI**: 591 • **CI**: h484 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Smiliscitoes* • *Hoc loco* • **iCn**
**OS**: *Smilisca* 1865 • **PD**
**EN**: *Smiliscitoes* DOP.da.f150-00 • **iCn**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Sooglossinae*** Noble, 1931.na.f002 • **KY**
**SI**: 217 • **CI**: h152 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Sooglossinae* • Noble 1931.na: 492 • **bF**
01 • *Sooglossidae* • Griffiths 1963.ga: 273 • **F**
02 • *Sooglossoidea* • Dubois 2005.da: 17 • **pF**
**OS**: *Sooglossus* 1906 • **OE**
**EN**: *Sooglossidae* 1931.na.f002-01 • **F**
**EF**: *Sooglossidae* 1931.na.f002

*Speidae* Špinar, 1983.sa.f001 • **JD**
**SI**: 312 • **CI**: h222 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Speidae* • Špinar 1983.sa: 55 • **F**
**OS**: *Spea* 1866 • **OE**
**EN**: (1) *Scaphiopodoidea* 1865.ca.f003-05 • **pF**
(2) *Scaphiopodidae* 1865.ca.f003-c0 • **F**
**EF**: *Scaphiopodidae* 1865.ca.f003

***Spelerpinae*** Cope, 1859.cb.f001 • **KY**
**SI**: 142 • **CI**: h095 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Spelerpinae* • Cope 1859.cb: 123 • **bF**
01 • *Spelerpeae* • Cope 1859.cb: 124 • **UF**
02 • *Spelerpine* • Cope 1863.ca: 343 • **UF**
03 • *Spelerpinae* • Hoffmann 1878.ha: 585 • **F**
04 • *Spelerpes* • Cope 1889.ca: 121 • **UF**
05 • *Spelerpesidi* • Acloque 1900.aa: 493 • **F**
06 • *Spelerpini* • Dubois 2005.da: 20 • **T**
07 • *Spelerpina* • *Hoc loco* • **bT**
**OS**: *Spelerpes* 1832 ≡ *Eurycea* 1822 • **OE**

**EN**: (1) *Spelerpini* 1859.cb.f001-06 • **T**
(2) *Spelerpina* 1859.cb.f001-07 • **bT**
**EF**: *Plethodontidae* 1850.ga.f001

***Sphaenorhynchina*** Faivovich+15, 2018.fa.f001 • **jd**
**SI**: 441 • **CI**: h334 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Sphaenorhynchina* • Faivovich+15 2018.fa: 25 • **bT**
01 • *Sphaenorhynchini* • Araujo-Vieira+3 2020.aa: 81 • T
**OS**: *Sphaenorhynchus* 1838 • **PD**
**EN**: *Sphaenorhynchina* • Faivovich+15 2018.fa 00 • **bT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Sphenophryninae* Noble, 1931.na.f010 • **jd**
**SI**: 225 • **CI**: h160 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Sphenophryninae* • Noble 1931.na: 531 • **bF**
01 • *Sphaenophryninae* • Tatarinov 1964.ta: 133 • **bF**
**OS**: *Sphenophryne* 1878 ≈ *Asterophrys* 1838 • **OE**
**EN**: (1) *Asterophryinae* 1858.gc.f006-05 • **bF**
(2) *Asterophryini* 1858.gc.f006-09 • **T**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Spicospininia*** **nov.**, DOP.da.f078 • **ky**
**SI**: 519 • **CI**: h412 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Spicospininia* • *Hoc loco* • **iT**
**OS**: *Spicospina* 1997 • **PD**
**EN**: *Spicospininia* DOP.da.f078-00 • **iT**
**EF**: *Myobatrachidae* 1850.sa.f001

***Spinomantinia*** **nov.**, DOP.da.f115 • **ky**
**SI**: 556 • **CI**: h449 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Spinomantinia* • *Hoc loco* • **iT**
**OS**: *Spinomantis* 1992 • **PD**
**EN**: *Spinomantinia* DOP.da.f115-00 • **iT**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Stauroini*** Dubois, 2005.da.f001 • **ky**
**SI**: 363 • **CI**: h269 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Stauroini* • Dubois 2005.da: 5 • **T**
01 • *Stauroinae* • *Hoc loco* • **bF**
**OS**: *Staurois* 1865 • **OD**
**EN**: *Stauroinae* 2005.da.f001-01 • **F**
**EF**: *Ranidae* 1796.ba.f001

*Stauroinae* • Fei+2, 2010.fa.f002 • **jd**
**SI**: 393 • **CI**: h293 • **ST**: 0.10.52
**RL**: INR
**PA**: 00 • *Stauroinae* • Fei+2 2010.fa: 17 • **bF**
**OS**: *Staurois* 1865 • **OD**
**EN**: *Stauroinae* 2005.da.f001-01 • **F**
**EF**: *Ranidae* 1796.ba.f001

***Stefaniinae*** **nov.**, DOP.da.f014 • **ky**
**SI**: 455 • **CI**: h348 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Stefaniinae* • *Hoc loco* • **bF**
**OS**: *Stefania* 1968 • **PD**
**EN**: *Stefaniinae* DOP.da.f014-00 • **bF**
**EF**: *Hemiphractidae* 1862.pa.f001

***Stephopaedini*** Dubois, 1987.da.f001 • **ky**
**SI**: 333 • **CI**: h241 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Stephopaedini* • Dubois 1987.da: 27 • **T**
01 • *Stephopaedities* • *Hoc loco* • **bCn**
02 • *Stephopaeditoes* • *Hoc loco* • **iCn**
**OS**: *Stephopaedes* 1979 ≈ *Mertensophryne* 1960 • **OD**
**EN**: (1) *Stephopaedities* 1987.da.f001-01 • **bCn**
(2) *Stephopaeditoes* 1987.da.f001-02 • **iCn**
**EF**: *Bufonidae* 1825.gb.f004

***Stereocyclopina*** **nov.**, DOP.da.f089 • **ky**
**SI**: 530 • **CI**: h423 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Stereocyclopina* • *Hoc loco* • **bT**
**OS**: *Stereocyclops* 1870 • **PD**
**EN**: *Stereocyclopina* DOP.da.f089-00 • **bT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Stombinae*** Gallardo, 1965.ga.f001 • **jd**
**SI**: 272 • **CI**: h190 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Stombinae* • Gallardo 1965.ga: 82 • **bF**
**OS**: *Stombus* 1825 ≈ *Ceratophrys* 1824 • **OE**
**EN**: *Stombinae* 1965.ga.f001-00
**EF**: *Ceratophryidae* 1838.ta.f002

***Strabomantidae*** Hedges+2, 2008.ha.f003 • **pk**
**SI**: 383 • **CI**: h283 • **ST**: 0.10.37
**RL**: ≤ *Craugastoridae* 2008.ha.f001 • **AI**: Padial+2 2014.pa: 52
≥ *Holoadeninae* 2008.ha.f004 • **PR**: Hedges+2 2008: 5
**PA**: 00 • *Strabomantidae* • Hedges+2 2008.ha: 5 • **F**
01 • *Strabomantinae* • Hedges+2 2008.ha: 5 • **bF**
02 • *Strabomantini* • *Hoc loco* • **T**
03 • *Strabomantina* • *Hoc loco* • **bT**
04 • *Strabomantinia* • *Hoc loco* • **iT**
**OS**: *Strabomantis* 1863 • **OD**
**EN**: (1) *Strabomantini* 2008.ha.f003-02 • **T**
(2) *Strabomantina* 2008.ha.f003-03 • **bT**
(3) *Strabomantinia* 2008.ha.f003-04 • **iT**
**EF**: *Brachycephalidae* 1858.gc.f002

***Strauchbufonitoes*** **nov.**, DOP.da.f026 • **ky**
**SI**: 467 • **CI**: h360 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Strauchbufonitoes* • *Hoc loco* • **iCn**
**OS**: *Strauchbufo* 2012 • **PD**
**EN**: *Strauchbufonitoes* DOP.da.f026-00 • **iCn**
**EF**: *Bufonidae* 1825.gb.f004

***Strongylopinae*** Scott, 2005.sa.f001 • **ky**
**SI**: 364 • **CI**: h270 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Strongylopinae* • Scott 2005.sa: 507 • **bF**
01 • *Strongylopini* • *Hoc loco* • **T**
**OS**: *Strongylopus* 1838 • **OD**
**EN**: *Strongylopini* 2005.sa.f001-01 • **F**
**EF**: *Cacosternidae* 1931.na.f008

*Symphygnathinae* Méhely, 1901.ma.f001 • **an**
**SI**: 195 • **CI**: n057 • **ST**: 2.25.50
**RL**: INR

**PA**: 00 • *Symphygnathinae* • Méhely 1901.ma: 171 • **bF**
**OS**: » 3 **PN**, including: *Xenorhina* 1863 • **PD**
**EN**: (1) *Asterophryinae* 1858.gc.f006-05 • **bF**
(2) *Asterophryini* 1858.gc.f006-09 • **T**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

*Symphygnathinae* Noble, 1931.na.f012 • **an**
**SI**: 227 • **CI**: n062 • **ST**: 0.25.50
**RL**: INR
**PA**: 00 • *Symphygnathinae* • Noble 1931.na: 534 • **bF**
**OS**: » 5 **PN**, including: *Glyphoglossus* 1869 • **PD**
**EN**: (1) *Microhylidae* |1843.fa.f012|-1931.na.f001-01 • **F**
»»»
(4) *Microhylina* |1843.fa.f012|-1931.na.f001-08 • **bT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

*Syreniadae* Brookes, 1828.bc.f001 • **ji**
**SI**: 033 • **CI**: h018 • **ST**: 0.10.52
**RL**: ← *Sirenidae* 1825.gb.f005
**PA**: 00 • *Syreniadae* • Brookes 1828.bc: 15 • **F**
**OS**: *Syren* 1807 ≡ *Siren* 1766 • **OE**
**EN**: *Sirenidae* 1825.gb.f005-00 • **F**
**EF**: *Sirenidae* 1825.gb.f005

*Systomata* Stannius, 1856.sa.f003 • **an**
**SI**: 128 • **CI**: n044 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Systomata* • Stannius 1856.sa: 5 • **F**
**OS**: *Systoma* 1830 ≡ *Engystoma* 1826 • **OM**
**EN**: *Engystomatinia* 1850.bb.f009-08 • **iT**
**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

***Tachycneminae*** Channing, 1989.ca.f001 • **ky**
**SI**: 342 • **CI**: h249 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Tachycneminae* • Channing 1989.ca: 116 • **bF**
01 • *Tachycnemina* • *Hoc loco* • **bT**
02 • *Tachycneminia* • *Hoc loco* • **iT**
**OS**: *Tachycnemis* 1843 • **OE**
**EN**: (1) *Tachycnemina* 1989.ca.f001-01 • **bT**
(2) *Tachycneminia* 1989.ca.f001-02 • **iT**
**EF**: *Hyperoliidae* 1943.lb.f001

***Tamixalities*** **nov.**, DOP.da.f126 • **ky**
**SI**: 567 • **CI**: h460 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Tamixalities* • *Hoc loco* • **bCn**
**OS**: *Tamixalus* **nov.** • **PD**
**EN**: *Tamixalities* DOP.da.f126-00 • **bCn**
**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Tarichina*** Dubois[+1], 2009.db.f003 • **ky**
**SI**: 387 • **CI**: h287 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Tarichina* • Dubois[+1] 2009.db: 57 • **bT**
01 • *Tarichini* • Litvinchuk[+1] 2009.la: 464 • **T**
**OS**: *Taricha* 1850 • **OD**
**EN**: *Tarichina* 2009.db.f003-00 • **bT**
**EF**: *Salamandridae* 1820.ga.f002

***Taudactylini*** **nov.**, DOP.da.f079 • **ky**
**SI**: 520 • **CI**: h413 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Taudactylini* • *Hoc loco* • **T**
**OS**: *Taudactylus* 1966 • **PD**
**EN**: *Taudactylini* DOP.da.f079-00 • **T**
**EF**: *Myobatrachidae* 1850.sa.f001

***Telmatobii*** Fitzinger, 1843.fa.f006 • **ky**
**SI**: 071 • **CI**: h039 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Telmatobii* • Fitzinger 1843.fa: 32 • **F**
01 • *Telmatobiidae* • Miranda-Ribeiro 1920.ma: 320 • **F**
02 • *Telmatobiinae* • Vellard 1951.va: 3 • **bF**
03 • *Telmatobiini* • Lynch 1969.lb: 3 • **T**
04 • *Telmatobioidae* • *Hoc loco* • **eF**
05 • *Telmatobieidae* • *Hoc loco* • **aF**
**OS**: *Telmatobius* 1834 • **OE**
**EN**: (1) *Telmatobioidae* 1843.fa.f006-04 • **eF**
(2) *Telmatobieidae* 1843.fa.f006-05 • **aF**
(3) *Telmatobiidae* 1843.fa.f006-01 • **F**
**EF**: *Telmatobiidae* 1843.fa.f006

***Teratohylina*** **nov.**, DOP.da.f044 • **ky**
**SI**: 485 • **CI**: h378 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Teratohylina* • *Hoc loco* • **bT**
**OS**: *Teratohyla* 1951 • **PD**
**EN**: *Teratohylina* DOP.da.f044-00 • **bT**
**EF**: *Centrolenidae* 1951.ta.f001

***Thoriidae*** Cope, 1869.cb.f001 • **ky**
**SI**: 160 • **CI**: h108 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Thoriidae* • Cope 1869.cb: 110 • **F**
01 • *Thoriinae* • Hay 1892.ha: 489 • **bF**
02 • *Thoriinia* • *Hoc loco* • **iT**
03 • *Thoriinoa* • *Hoc loco* • **hT**
**OS**: *Thorius* 1869 • **OE**
**EN**: (1) *Thoriinia* 1869.cb.f001-02 • **iT**
(2) *Thoriinoa* 1869.cb.f001-03 • **hT**
**EF**: *Plethodontidae* 1850.ga.f001

***Thornellinoa*** **nov.**, DOP.da.f135 • **ky**
**SI**: 576 • **CI**: h469 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Thornellinoa* • *Hoc loco* • **hT**
01 • *Thornellites* • *Hoc loco* • **Cn**
02 • *Thornellities* • *Hoc loco* • **bCn**
03 • *Thornellitoes* • *Hoc loco* • **iCn**
04 • *Thornellitues* • *Hoc loco* • **hCn**
**OS**: *Thornella* **nov.** • **PD**
**EN**: (1) *Thornellinoa* DOP.da.f135-00 • **hT**
(2) *Thornellites* DOP.da.f135-01 • **Cn**
(3) *Thornellties* DOP.da.f135-02 • **bCn**
(4) *Thornellitoes* DOP.da.f135-03 • **iCn**
(5) *Thornellitues* DOP.da.f135-04 • **hCn**
**EF**: *Plethodontidae* 1850.ga.f001

*Thoropidae* Frost[+18], 2006.fa.f002 • **jd**
**SI**: 368 • **CI**: h274 • **ST**: 0.10.40
**RL**: INR
**PA**: 00 • *Thoropidae* • Frost[+18] 2006.fa: 7 • **F**
**OS**: *Thoropa* 1865 • **OD**

**EN**: (1) *Cycloramphеidae* 1850.bb.f003-|1852.ba.f001|-05 • **aF**
(2) *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|-04 • **F**
**EF**: *Cycloramphidae* 1850.bb.f003-|1852.ba.f001|

***Tlalocohylities*** **nov.**, DOP.da.f056 • **KY**
**SI**: 497 • **CI**: h390 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Tlalocohylities* • *Hoc loco* • **bCn**
**OS**: *Tlalocohyla* 2005 • **PD**
**EN**: *Tlalocohylities* DOP.da.f056-00 • **bCn**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

***Tomopternini*** Dubois, 1987.da.f003 • **KY**
**SI**: 335 • **CI**: h243 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Tomopternini* • Dubois 1987.da: 56 • **T**
01 • *Tomopterninae* • Dubois 1992.da: 336 • **bF**
**OS**: *Tomopterna* 1841 • **OD**
**EN**: *Tomopterninae* 1987.da.f003-01 • **bF**
**EF**: *Cacosternidae* 1931.na.f008

***Tornieriobatidae*** Miranda-Ribeiro, 1926.ma.f001 • **KY**
**SI**: 208 • **CI**: h145 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Tornieriobatidae* • Miranda-Ribeiro 1926.ma: 19 • **F**
01 • *Tornieriobatinae* • Dubois 1983.da: 273 • **bF**
02 • *Tornieriobatini* • Dubois 1987.da: 25 • **T**
03 • *Tornieriobatitoes* • *Hoc loco* • **iCn**
04 • *Tornieriobatitues* • *Hoc loco* • **hCn**
**OS**: *Tornieriobates* 1926 ≈ *Nectophrynoides* 1926 • **OE**
**EN**: (1) *Tornieriobatitoes* 1926.ma.f001-03 • **iCn**
(2) *Tornieriobatitues* 1926.ma.f001-04 • **hCn**
**EF**: *Bufonidae* 1825.gb.f004

*Tornierobatidae* Frost[+18], 2006.fa.f003 • **JD**
**SI**: 369 • **CI**: h275 • **ST**: 0.10.52
**RL**: INR
**PA**: 00 • *Tornierobatidae* • Frost[+18] 2006.fa: 213• **F**
**OS**: *Tornierobates* 1940 ≈ *Nectophrynoides* 1926 • **OE**
**EN**: (1) *Tornieriobatitoes* 1926.ma.f001-03 • **iCn**
(2) *Tornieriobatitues* 1926.ma.f001-04 • **hCn**
**EF**: *Bufonidae* 1825.gb.f004

***Trachycephalinae*** Lutz, 1969.la.f002 • **KY**
**SI**: 281 • **CI**: h198 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Trachycephalinae* • Lutz 1969.la: 275 • **bF**
01 • *Trachycephalina* • *Hoc loco* • **bT**
02 • *Trachycephalinia* • *Hoc loco* • **iT**
**OS**: *Trachycephalus* 1838 • **OE**
**EN**: (1) *Trachycephalina* 1969.la.f002-01 • **bT**
(2) *Trachycephalinia* 1969.la.f002-02 • **iT**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Trachystomata* Stannius, 1856.sa.f002 • **AN**
**SI**: 127 • **CI**: n043 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Trachystomata* • Stannius 1856.sa: 4 • **F**
**OS**: *Siren* 1766 • **OM**
**EN**: *Sirenidae* 1825.gb.f005-00 • **F**
**EF**: *Sirenidae* 1825.gb.f005

***Tregobatrachidae*** Holman, 1975.hb.f001 † • **KY**
**SI**: 295 • **CI**: h208 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Tregobatrachidae* • Holman 1975.hb: 50, 54 • **F**
**OS**: *Tregobatrachus* 1975 † • **OE**
**EN**: *Tregobatrachidae* 1975.hb.f001-00 † • **F**
**EF**: *Tregobatrachidae* 1975.hb.f001 †

*Trematodera* Lichtenstein[+2], 1856.la.f002 • **AN**
**SI**: 124 • **CI**: n040 • **ST**: 2.25.50
**RL**: INR
**PA**: 00 • *Trematodera* • Lichtenstein[+2] 1856.la: 45 • **F**
**OS**: » 2 **PN**, including: *Amphiuma* 1821 • **PD**
**EN**: (1) *Amphiumoidea* 1825.gb.f007-10 • **pF**
»»»
(4) *Amphiumidae* 1825.gb.f007-00 • **F**
**EF**: *Amphiumidae* 1825.gb.f007

***Triadobatrachidae*** Kuhn, 1962.ka.f001 † • **KY**
**SI**: 267 • **CI**: h187 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Triadobatrachidae* • Kuhn 1962.ka: 328 • **F**
01 • *Triadobatradidae* • Rage[+1] 1989.ra: 4 • **F**
02 • *Triadobatrachoidia* • Dubois 2005.da: 18 • **eF**
03 • *Triadobatrachoidea* • Dubois 2005.da: 18 • **pF**
**OS**: *Triadobatrachus* 1962 † • **OE**
**EN**: *Triadobatrachidae* 1962.ka.f001-00 † • **F**
**EF**: *Triadobatrachidae* 1962.ka.f001 †

***Triassuridae*** Ivachnenko, 1978.ia.f002 † • **KY**
**SI**: 303 • **CI**: h216 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Triassuridae* • Ivachnenko 1978.ia: 87 • **F**
**OS**: *Triassurus* 1978 † • **OE**
**EN**: *Triassuridae* 1978.ia.f002-00 † • **F**
**EF**: *Triassuridae* 1978.ia.f002 †

***Triprioninae*** Miranda-Ribeiro, 1926.ma.f005 • **KY**
**SI**: 212 • **CI**: h148 • **ST**: 0.10.30
**RL**: INR
**PA**: 00 • *Triprioninae* • Miranda-Ribeiro 1926.ma: 64 • **F**
01 • *Triprionites* • *Hoc loco* • **Cn**
02 • *Triprionities* • *Hoc loco* • **bCn**
03 • *Triprionitoies* • *Hoc loco* • **iCn**
**OS**: *Triprion* 1866 • **OE**
**EN**: (1) *Triprionites* 1926.ma.f005-01 • **Cn**
(2) *Triprionities* 1926.ma.f005-02 • **bCn**
(3) *Triprionitoes* 1926.ma.f005-03 • **oCn**
**EF**: *Hylidae* 1815.ra.f002-|1825.gb.f001|

*Tritonia* Rafinesque, 1815.ra.f005 • **AN**
**SI**: 010 • **CI**: n006 • **ST**: 2.26.50
**RL**: INR
**PA**: 00 • *Tritonia* • Rafinesque 1815.ra: 78 • **F**
01 • *Tritonidae* • Boie 1828.ba: 363 • **F**
**OS**: » 5 **PN**, including: *Triturus* 1815 ≡ *Triton* 1768 **JH** • **PD**
**EN**: (1) *Molgini* 1850.ga.f001-04 • **T**
»»»
(5) *Molgites* 1850.ga.f001-09 • **Cn**
**EF**: *Salamandridae* 1820.ga.f002

***Tritones*** Tschudi, 1838.ta.f003 • **jg**

**SI**: 053 • **CI**: h027 • **ST**: 0.10.53

**RL**: INR

**PA**: 00 • *Tritones* • Tschudi 1838.ta: 26 • **F**

01 • *Tritones* • Bronn 1849.ba: 683 • **UF**

02 • *Tritonina* • Bonaparte 1850.bb: pl. • **bF**

03 • *Tritonidae* • Hallowell 1856.ha: 10 • **bF**

04 • *Tritoninae* • Cope 1863.ca: 343 • **bF**

05 • *Tritones* • Betta 1864.ba: 513 • **bF**

06 • *Tritonidae* • Claus 1868.cb: 587 • **F**

07 • *Tritonina* • Fatio 1872.fa: 486 • **T**

08 • *Tritonidi* • Acloque 1900.aa: 494 • **F**

**OS**: *Triton* 1768 **jh** ≡ *Triturus* 1815 • **OE**

**EN**: (1) *Molgini* 1850.ga.f001-04 • **T**

»»»

(5) *Molgites* 1850.ga.f001-09 • **Cn**

**EF**: *Salamandridae* 1820.ga.f002

*Tritonides* Tschudi, 1838.ta.f004 • **an**

**SI**: 054 • **CI**: n025 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Tritonides* • Tschudi 1838.ta: 26 • **F**

01 • *Tritonides* • Bronn 1849.ba: 683 • **UF**

**OS**: » 3 **PN**, including: *Menopoma* 1825 ≈ *Cryptobranchus* 1821 • **PD**

**EN**: *Cryptobranchidae* 1826.fb.f003-04 • **F**

**EF**: *Cryptobranchidae* 1826.fb.f003

*Triturinae* Brame, 1958.ba.f003 • **an**

**SI**: 259 • **CI**: n074 • **ST**: 0.28.50

**RL**: INR

**PA**: 00 • *Triturinae* • Brame 1958.ba: 4 • **bF**

**OS**: *Triturus* 1815 • **OE**

**EN**: (1) *Molgini* 1850.ga.f001-04 • **T**

»»»

(5) *Molgites* 1850.ga.f001-09 • **Cn**

**EF**: *Salamandridae* 1820.ga.f002

*Triturinae* Kuhn, 1965.ka.f001 • **jd**

**SI**: 273 • **CI**: h191 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Triturinae* • Kuhn 1965.ka: 37 • **F**

**OS**: *Triturus* 1815 • **OE**

**EN**: (1) *Molgini* 1850.ga.f001-04 • **T**

»»»

(5) *Molgites* 1850.ga.f001-09 • **Cn**

**EF**: *Salamandridae* 1820.ga.f002

***Tsingymantini* nov.**, DOP.da.f116 • **ky**

**SI**: 557 • **CI**: h450 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Tsingymantini* • *Hoc loco* • **T**

**OS**: *Tsingymantis* 2006 • **PD**

**EN**: *Tsingymantini* DOP.da.f116-00 • **T**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Tylototritonina* nov.**, DOP.da.f146 • **ky**

**SI**: 587 • **CI**: h480 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Tylototritonina* • *Hoc loco* • **hT**

01 • *Tylototritoninia* • *Hoc loco* • **iT**

**OS**: *Tylototriton* 1871 • **PD**

**EN**: (1) *Tylototritonina* DOP.da.f146-00 • **hT**

(2) *Tylototritoninia* DOP.da.f146-01 • **iT**

**EF**: *Salamandridae* 1820.ga.f002

*Typhlomolgidae* Stejneger[+1], 1917.sa.f001 • **jd**

**SI**: 200 • **CI**: h137 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Typhlomolgidae* • Stejneger[+1] 1917.sa: 6 • **F**

**OS**: *Typhlomolge* 1896 ≈ *Eurycea* 1822 • **OE**

**EN**: (1) *Spelerpini* 1859.cb.f001-06 • **T**

(2) *Spelerpina* 1859.cb.f001-07 • **bT**

**EF**: *Plethodontidae* 1850.ga.f001

***Typhlonectidae*** Taylor, 1968.ta.f002 • **ky**

**SI**: 278 • **CI**: h195 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Typhlonectidae* • Taylor 1968.ta: xi, 231 • **F**

01 • *Typhlonectoides* • Lescure[+2] 1986.lb: 169 • **hF**

02 • *Typhlonectoidea* • Lescure[+2] 1986.lb: 169 • **pF**

03 • *Typhlonectoidae* • Lescure[+2] 1986.lb: 170 • **eF**

04 • *Typhlonectinae* • Lescure[+2] 1986.lb: 170 • **bF**

05 • *Typhlonectilae* • Lescure[+2] 1986.lb: 170 • **iF**

06 • *Typhlonectoidi* • Lescure[+2] 1986.lb: 170 • **pT**

07 • *Typhlonectini* • Lescure[+2] 1986.lb: 171 • **T**

08 • *Typhlonectectidae* • Hoff[+1] 2001.ha: 3, 31 • **F**

09 • *Typhlonectina* • *Hoc loco* • **bT**

**OS**: *Typhlonectes* 1880 • **OD**

**EN**: *Typhlonectina* 1968.ta.f002-09 • **bT**

**EF**: *Caeciliidae* 1814.ra.f003-|1825.gb.f008|

***Uperoliidae*** Günther, 1858.gc.f007 • **ky**

**SI**: 135 • **CI**: h089 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Uperoliidae* • Günther 1858.gc: 346 • **F**

01 • *Uperoleiidae* • Krefft 1865.ka: 17 • **F**

02 • *Uperoleiidae* • Keferstein 1867.ka: 349 • **F**

03 • *Uperoliina* • Mivart 1869.ma: 291 • **bF**

04 • *Uperoliidae* • Hoffmann 1878.ha: 613 • **bF**

05 • *Uperoleiinia* • *Hoc loco* • **iT**

**OS**: *Uperoleia* 1841 • **OE**

**EN**: *Uperoleiinia* 1858.gc.f007-04 • **iT**

**EF**: *Myobatrachidae* 1850.sa.f001

***Uraeotyphlinae*** Nussbaum, 1979.na.f001 • **ky**

**SI**: 304 • **CI**: h217 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Uraeotyphlinae* • Nussbaum 1979.na: 14 • **bF**

01 • *Uraeotyphlidae* • Lescure[+2] 1986.lb: 145 • **F**

02 • *Uraeotyphlilae* • Lescure[+2] 1986.lb: 158 • **iF**

03 • *Uraeotyphlidinae* • Wollenberg[+1] 2009.wb: 1050 • **bF**

**OS**: *Uraeotyphlus* 1880 • **OE**

**EN**: *Uraeotyphlidae* 1979.na.f001-01 • **F**

**EF**: *Uraeotyphlidae* 1979.na.f001

*Urodela* Latreille, 1825.la.f003 • **an**

**SI**: 025 • **CI**: n012 • **ST**: 2.25.50

**RL**: INR

**PA**: 00 • *Urodela* • Latreille 1825.la: 105 • **F**

01 • *Urodeli* • Eichwald 1831.eb: 164 • **F**

**OS**: » 3 **PN**, including: *Salamandra* 1768 ≈ *Salamandra* 1764 • **PD**

**EN**: (1) *Salamandroidea* 1820.ga.f002-21 • **pF**

»»»

(4) *Salamandrini* 1820.ga.f002-28 • **T**

**EF**: *Salamandridae* 1820.ga.f002

***Vampyriinoa*** **nov.**, DOP.da.f127 • **ky**

**SI**: 568 • **CI**: h461 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Vampyriinoa* • *Hoc loco* • **hT**

**OS**: *Vampyrius* **nov.** • **PD**

**EN**: *Vampyriinoa* DOP.da.f127-00 • **hT**

**EF**: *Rhacophoridae* |1858.gc.f012|-1932.ha.f001

***Vandijkophrynitoes*** **nov.**, DOP.da.f031 • **ky**

**SI**: 472 • **CI**: h365 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Vandijkophrynitoes* • *Hoc loco* • **iCn**

**OS**: *Vandijkophrynus* 2006 • **PD**

**EN**: *Vandijkophrynitoes* DOP.da.f031-00 • **iCn**

**EF**: *Bufonidae* 1825.gb.f004

*Vieraellidae* Reig, 1961.ra.f001 † • **an**

**SI**: 265 • **CI**: n076 • **ST**: 0.29.50

**RL**: INR

**PA**: 00 • *Vieraellidae* • Reig 1961.ra: 77 • **F**

**OS**: *Vieraella* 1961 † • **OE**

**EN**: **Anura** Familia *Incertae sedis*

**EF**: **Anura** Familia *Incertae sedis*

***Vitreoranina*** **nov.**, DOP.da.f045 • **ky**

**SI**: 486 • **CI**: h379 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Vitreoranina* • *Hoc loco* • **bT**

**OS**: *Vitreorana* 2009 • **PD**

**EN**: *Vitreoranina* DOP.da.f045-00 • **bT**

**EF**: *Centrolenidae* 1951.ta.f001

*Voigtiellinae* Brame, 1958.ba.f002 † • **an**

**SI**: 258 • **CI**: n073 • **ST**: 0.28.50

**RL**: INR

**PA**: 00 • *Voigtiellinae* • Brame 1958.ba: 4 • **bF**

**OS**: *Voigtiella* 1949 † ≈ *Salamandra* 1764 • **OE**

**EN**: (1) *Salamandroidea* 1820.ga.f002-21 • **pF**

»»»

(4) *Salamandrini* 1820.ga.f002-28 • **T**

**EF**: *Salamandridae* 1820.ga.f002

***Xenophryini*** Delorme[+3], 2006.da.f002 • **ky**

**SI**: 366 • **CI**: h272 • **ST**: 0.10.30

**RL**: INR

**PA**: 00 • *Xenophryini* • Delorme[+3] 2006.da: 7 • **T**

01 • *Xenophryina* • *Hoc loco* • **bT**

**OS**: *Xenophrys* 1864 • **OD**

**EN**: (1) *Xenophryini* 2006.da.f002-00 • **T**

(2) *Xenophryina* 2006.da.f002-01 • **bT**

**EF**: *Megophryidae* 1850.bb.f008-|1931.na.f003|

*Xenopoda* Fitzinger, 1843.fa.f012 • **jd**

**SI**: 077 • **CI**: h045 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Xenopoda* • Fitzinger 1843.fa: 33 • **F**

01 • *Xenopodes* • Fitzinger 1861.fa: 416 • UF

02 • *Xenopidae* • Cope 1889.ca: 253 • **F**

03 • *Xenopodidae* • Abel 1919.aa: xii, 322; Bolkay 1919.ba: 277 • **F**

04 • *Xenopodinae* • Metcalf 1923.ma: 3 • **bF**

05 • *Xenopinae* • Noble 1931.na: 489 • **bF**

**OS**: *Xenopus* 1827 • **OE**

**EN**: (1) *Dactylethrinae* 1838.ha.f001-04 • **bF**

(2) *Dactylethrini* 1838.ha.f001-05 • **T**

**EF**: *Pipidae* 1825.gb.f003-|1826.fb.f002|

*Xenorhinidae* Mivart, 1869.ma.f001 • **jd**

**SI**: 161 • **CI**: h109 • **ST**: 0.10.40

**RL**: INR

**PA**: 00 • *Xenorhinidae* • Mivart 1869.ma: 286 • **F**

01 • *Xenorhinini* • Burton 1986.bb: 444 • **T**

**OS**: *Xenorhina* 1863 ≈ *Asterophrys* 1838 • **OE**

**EN**: (1) *Asterophryinae* 1858.gc.f006-05 • **bF**

(2) *Asterophryini* 1858.gc.f006-09 • **T**

**EF**: *Microhylidae* |1843.fa.f012|-1931.na.f001

## **Appendix A7.NCS.** Class-series nomina and taxa of **Lissamphibia**.

The table provides all CS nomina of **Lissamphibia** published from 1758 to 31 October 2020, and some of their non-lissamphibian senior homonyms (in all cases where there exist several such homonyms, only that which was first published is mentioned in this table, as it is enough to make all its junior homonyms invalid under DONS Criteria). All nomina are listed by alphabetical order of their eugraph as defined by DONS Criteria. Then in the second line their serial and category identifier and the status of the nomen are indicated. For each of the nomina the protograph and the paronyms are given. In the following lines, if relevant, its relationships (such as neonymy or homonymy) with other nomina, its getendonyms, getexonyms and its eunym with status and rank are listed. Technical terms employed here are defined in Appendix **A1.GLO**.

**EUG • Eugraph of protonym of CS nomen.**

**SI, Serial identifier of CS nomen** ($n$ = 443)**; CI, Category identifier of CS nomen; ST, Status of CS nomen (A.U.T.V.C.): allocation, usage, availability validity & correctness of nomen.**

c001, c002, etc. • Numbers of class-series hoplonyms designating recent amphibians taxa (**Lissamphibia**) and two of their angiotaxa (**Amphibia**, **Vertebrata**) ($n$ = 404), including valid ones ($n$ = 37) and invalid ones ($n$ = 367).

cn01, cn02, etc. • Numbers of class-series anoplonyms designating recent amphibian taxa (**Lissamphibia**) and their getangiotaxon (**Amphibia**) ($n$ = 7).

mc01, mc02, etc. • Numbers of class-series hoplonyms designating taxa including both recent amphibian taxa (**Lissamphibia**) and taxa not belonging in them ($n$ = 9).

zh01, zh02, etc. • Numbers of class-series hoplonyms designating taxa not including lissamphibians ($n$ = 22).

zn01 • Number of class-series anoplonym designating taxon not including lissamphibians ($n$ = 1).

**ST • Status of CS nomen (A.U.T.V.C.): A, allocation; U, usage; T, availability; V, validity; C, correctness of nomen.**

**A** • Criterion of assignment to the class-series (see **T.ASN**):

- **1** • Explicit class-series allocation [CS1].
- **2** • Implicit class-series allocation through consistent arhizonymy, pseudorhizonymy or quasirhizonymy [CS2].
- **3** • Implicit class-series allocation through rank superordination or parordination to a rank of the class-series [CS3].
- **4** • Implicit class-series allocation through rank superordination to the rank family before 1858 [CS4].
- **5** • Implicit class-series allocation through neonymy or allelonymy for a class-series nomen [CS5].

**U** • Category of nomen regarding usage:

- **D** • Distagmonym.
- **N** • Nothosozonym.
- **S** • Sozodiaphonym.
- **U** • Unknown and irrelevant here (non-lissamphibian nomen, mentioned here only for purposes of homonymy).

**T** • Category of nomen regarding system of taxonomic allocation in the ergotaxonomy adopted:

**Sozonymorphs:**

- **E** • Nesonym being a sozonymorph epomallelonym of a distagmonym, taxonomically allocated through its metronym only.
- **G** • Gephyronym being a sozonymorph, taxonomically unallocated because of presence of intragenera in the metrotaxon.
- **O** • Choronym being a sozonymorph, taxonomically allocated through both its metronym and its oronym.
- **R** • Nesonym being a sozonymorph ellitonym (missing an oronym), taxonomically allocated through its metronym only.

**Distagmonyms:**

- **A** • Choronym being a distagmonym, allelonym or neonym of a sozonymorph, taxonomically allocated through both its metronym and its oronym.
- **M** • Nesonym being a distagmonym, taxonomically allocated through its metronym only.

**Others:**

- **U** • Unknown and irrelevant here (non-lissamphibian nomen, mentioned here only for purposes of homonymy).

**V** • Category of nomen regarding availability, taxonomic allocation and validity in *CLAD*:

**Anoplonym, anaptonym or hypnokyronym:**

- **00** • Gymnonym: anoplonym (unavailable nomen) under the *Code*, for missing an indication, description, definition or diagnosis in words of the taxon for which the new nomen is proposed.
- **02** • Hoplonym (available nomen) and sozonymorph but anaptonym (taxonomically unallocated nomen) under DONS Rules because of presence of intragenera in taxon **T** designated by **N** in the frame of *CLAD*.
- **03** • Hoplonym (available nomen) and aptonym (taxonomically allocated nomen) under DONS Rules but hypnokyronym (invalid nomen in *CLAD*) because of absence of taxon **T** designated by **N** in the frame of *CLAD*.
- **04** • Anoplonym (agnostonym), for missing after 1999 the express mention that the nomen is introduced as a new scientific name (Article 16.1).

**Kyronym (nomen available and valid):**

**10** • Valid nomen through sozodiaphonymy.

**11** • Valid nomen among distagmonyms through publication priority over junior homonyms and/or synonyms.

**12** • Valid nomen among distagmonyms through airesy (first-reviser action) over synchronous homonyms and/or synonyms, and if relevant through publication priority over other junior homonyms and/or synonyms.

**Akyronym (nomen available but non valid) for being an invalid homonym:**

**20** • Invalid nomen for being a (senior or junior) homonym of a sozodiaphonym.

**21** • Invalid junior homonym through publication priority among distagmonyms.

**Akyronym (nomen available but non valid) for being an invalid synonym:**

**30** • Invalid nomen for being a (senior or junior) synonym of a sozodiaphonym.

**31** • Invalid junior synonym through publication priority among distagmonyms.

**32** • Invalid junior synonym through airesy (first-reviser action) among distagmonyms.

**Akyronym (nomen available but non valid) for being both an invalid homonym and an invalid synonym:**

**40** • Invalid nomen for being both a (senior or junior) homonym or synonym of a sozodiaphonym and a (senior or junior) homonym or synonym of another nomen.

**41** • Invalid junior homonym and synonym through publication priority among distagmonyms.

**42** • Invalid junior homonym and synonym through publication priority and/or airesy (first-reviser action) and/or proedry (rank precedence) among distagmonyms.

**99** • Hoplonym, nomenclatural status regarding validity not explored here, being irrelevant for this study.

**C** • Category of nomen regarding correctness of spelling (see **T.RHI** and **T. LEG**):

**A** • Auxorhizonym: correct under DONS Criteria with one of the standard endings –**IFORMIA** or –**OMORPHA**.

**C** • Cenorhizonym: correct under DONS Criteria with the standard ending –**ACEI**.

**E** • Arhizonym with incorrect original ending or spelling under DONS Criteria, corrected (apograph) with an ending or spelling following the usage of other nomina having the same ending (legethograph) or spelling (eunomograph).

**K** • Khoristarhizonym: correct under DONS Criteria with one of the standard endings –**IFORMIES** or –**OMORPHIES**.

**O** • Arhizonym with correct original spelling (protograph) under DONS Criteria.

**R** • Rhizonym: nomen correct under DONS Criteria, if valid, with the standard ending in –**ACEA**.

**X** • Xenorhizonym: correct under DONS Criteria with one of the standard endings –**IFORMI** or –**OMORPHI**.

## PN • Protonym of CS nomen N of taxon T with its auctor and date

**Note: The auctorship 'DOP.da' designates nomina established as new in the present work.**

**AK** • Hoplonym but akyronym (invalid nomen) in *CLAD*.

**AN** • CS anoplonym (unavailable nomen) of lissamphibian taxon for failing to comply with the criteria of availability of publications of the *Code* or of the DONS criteria of availability of CS nomina.

**AP** • Anaptonym (nomenclaturally available but taxonomically unallocated lissamphibian nomen).

**HK** • Hypnokyronym: akyronym in this work, but potentially valid class-series nomen in *CLAD* following the potential resolution of a polytomy.

**KY** • Kyronym: valid class-series nomen of an ergotaxon in *CLAD*.

**ZA** • Available (hoplonym) CS nomen established for a taxon including both lissamphibian and non-lissamphibian species/taxa and being homonym of a lissamphibian CS nomen.

**ZZ** • Available (hoplonym) CS nomen established for a taxon including only non-lissamphibian species/taxa and being homonym of a lissamphibian CS nomen.

## PA • Paronyms of CS nomen N • Scriptor, reference & page • Rank

For each nomen, paronyms are given in chronological order of their publication, followed by their original rank.

They are given followed by their original rank (for the meaning of abbreviations of ranks, see **Table A.RNK**) or of one of the following abbreviations for emended spellings proposed here to comply with DONS Criteria:

**EA** • Aponym with standard ending (in –**IFORMIA** or –**OMORPHA**) introduced for an auxorhizonym.

**EC** • Aponym with standard ending (in –**ACEI**) introduced for a cenorhizonym in order to avoid confusion with FS nomina with standard FS endings (in *–IDAE*, *–INAE*, *–INA*, *–INI* and *–OIDEA*) .

**EE** • Aponym with modified ending or spelling under DONS Criteria, corrected here in order to be consistent with usage in other CS arhizonyms based on the same etymology and using the same ending (see **Table T.ENZ**) or spelling, introduced for sake of homogeneity.

**EK** • Aponym with standard ending (in –**IFORMIES** or –**OMORPHIES**) introduced here for a khoristarhizonym.

**EQ** • Aponym with standard ending (in –**IFORMES** or –**OMORPHES**) introduced for a quasirhizonym.

**ER** • Aponym with standard ending (in –**ACEA**) introduced for a rhizonym in order to avoid confusion with FS nomina with standard FS endings (in *–IDAE*, *–INAE*, *–INA*, *–INI* and *–OIDEA*).

**EX** • Aponym with standard ending (in –**IFORMI** or –**OMORPHI**) introduced for a xenorhizonym.

Information is also given in this column, when appropriate, for the resolution of conflicts of zygoidy among symprotographs

**EEA** • Explicit external airesy.

**IIA** • Implicit internal airesy.

**Identifiers of nomina and paronyms**

1758.la., 1801.sa., etc. • Identifier of publication (see 6. References).

.c01, .c02, etc. • Identifier of CS nomen in publication.

-00 • Protonym of nomen.

-01, -02, etc. • Aponyms of nomen (by order of publication).

-c0. • Lectoprotograph of nomen.

-i1, -i2, etc. • Leipoprotographs of nomen (by order of appearance in publication).

**RL • Relationships of neonymy, allelonymy, homonymy and precedence** (other than publication priority) of nomen **N** with other nomina, indicated if relevant.

|↔ Archeoallelonym of

↔| Neoallelonym of

↔ Parallelonym of

¡↔ Agoallelonym of

↔! Epomallelonym of

↓ Junior homonym of (only earliest one is cited in case of multiple senior homonyms)

← Neonym of

> Given precedence over synchronous synonym or homonym • Reference

< Given subservience under synchronous synonym or homonym • Reference

**AI** • Precedence established through airesy (first-reviser action).

**PR** • Precedence established through proedry (rank precedence).

**GN • Nomen/nomina of CS getendonyms of taxon T** (including all its conucleogenera).

**GZ** • If the CS nomen **N** is a sozomorph in *CLAD*, one of the two following possibilities:

**GX** • The nomen/nomina of the CS getexonyms (based on their getextragenera).

**GI** • Intranyms (based on their intragenera) of taxon **T** (including all its conucleogenera).

**EN • Eunym of CS taxon used in *CLAD*** if it exists under DONS Rules, or mention that the nomen **N** is an anaptonym.

**ANAPTONYM** • Anaptonym in *CLAD*.

**HYP.** • Hypnokyronym of taxon in *CLAD*.

**KYR.** • Kyronym of taxon in *CLAD*.

**TEO.** • Teokyronym of taxon in *CLAD*.

**Various abbreviations and conventions found in several columns**:

DOP. • Part of the identifier of a nomen established as new in the present work (‘Dubois, Ohler & Pyron’).

**HL** • *Hoc loco* (present designation or airesy).

**INR** • Information not relevant here (item does not exist).

**OA** • Original aphory (no included taxon mentioned in original work).

**SD** • Subsequent designation, followed by its reference.

**NL** • Nomen designating a taxon containing at least one non-recent lissamphibian species/taxon: detailed information on this nomen was not sought, not being necessary for the present work.

† • Nomen designating an all-fossil taxon.

ABLEPHARA Miranda Ribeiro, 1937
**SI**: 359 • **CI**: c329 • **ST**: 2.D.M.31.O
**PN**: **ABLEPHARA** Miranda Ribeiro, 1937.ma.c02 • **AK**
**PA**: 00 • **ABLEPHARA** • Miranda Ribeiro 1937.ma: 56 • **UC**
**RL**: INR
**GN**: **DORSIPARES** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **DORSIPARES** Blainville, 1816. ba.c06-02

ABRANCHIA Schaeffer, 1760
**SI**: 003 • **CI**: zn01 • **ST**: 1.U.U.00.E
**PN**: **ABRANCHIALES** Schaeffer, 1760.sa.c01 • **AN-ZZ**
**PA**: 00 • **ABRANCHIALES** • Schaeffer 1760.sa: 14 • **C**
01 • **ABRANCHIA** • *Hoc loco* • **EE**
**RL**, **GN, GZ**, **EN**: ●

ABRANCHIA Cuvier, 1816
**SI**: 047 • **CI**: zh12 • **ST**: 1.U.U.99.E
**PN**: **ABRANCHES** Cuvier, 1816.ca.c02 • **ZZ**
**PA**: 00 • **ABRANCHES** • Cuvier 1816.ca: 527 • **O**
01 • **ABRANCHIA** • Jourdan 1834.ja: 4 • **O**
01 • **ABRANCHIAE** • Agassiz 1843.aa: 1 • **UC**
**RL**, **GN, GZ**, **EN**: ●

ABRANCHIA Wagler, 1830
**SI**: 107 • **CI**: c088 • **ST**: 2.D.M.42.E
**PN**: **ABRANCHIALES** Wagler, 1830.wa.c06 • **AK**
**PA**: c0 • **ABRANCHIALES** • Wagler 1828.wa: 131 • **'T'** • **EEA**: **HL**
i1 • **EBRANCHIALES** • Wagler 1830.wa: 131 • **'T'**
02 • **ABRANCHIA** • Bell 1836.ba: 91 • **O**
**RL**: ↓ **ABRANCHES** 1816.ca.c02
< **HEDRAEOGLOSSI** 1830.wa.c05 • **PR**
< **BRANCHIALES** 1830.wa.c07 • **AI**: **HL**
**GN**: **IMPERFECTIBRANCHIA** 1838.ha.c03
**PSEUDOSAURIA** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12
[**HYP.** Subordo **NULLIBRANCHIA** Bonaparte**,** 1831.ba.c01-01]

ABRANCHIA Hogg, 1838
**SI**: 129 • **CI**: c109 • **ST**: 1.D.M.41.O
**PN**: **ABRANCHIA** Hogg, 1838.ha.c02 • **AK**
**PA**: 00 • **ABRANCHIA** • Hogg 1838.ha: 152 • **O**
**RL**: ↓ **ABRANCHES** 1816.ca.c02
**GN**: **PSEUDOPHIONA** 1816.ba.c11
**GZ**: INR
**EN**: **KYR.** C.05.04. Subordo **PSEUDOPHIONA** Blainville, 1816. ba.c11-06

ACERCI Wagler, 1828
**SI**: 100 • **CI**: c081 • **ST**: 3.D.M.31.O
**PN**: **ACERCI** Wagler, 1828.wb.c07 • **AK**
**PA**: 00 • **ACERCI** • Wagler 1828.wb: 859 • **'F'**
**RL**: INR
**GN**: **PHANERANURA** DOP.da.c02
**SCOPTANURA** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **AQUIPARES** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **AQUIPARES** Blainville, 1816.ba.c07-03]

ACHELATA Fischer, 1808
**SI**: 025 • **CI**: c014 • **ST**: 2.D.A.30.O
**PN**: **ACHELATA** Fischer, 1808.fa.c02 • **AK**
**PA**: 00 • **ACHELATA** • Fischer 1808.fa: [25] • **UC**
**RL**: ← **BATRACIENS** 1800.ba.c01
**GN**: **ANURA** 1805.da.c01
**URODELA** 1805.da.c02
**GZ**: » **GI**:
**GYMNOPHIONA** 1814.ra.c01
**EN**: **ANAPTONYM**
[**HYP.** Superordo **BATRACHIA** Brongniart**,** 1800.ba.c01-14]

ACOSMANURA Starrett, 1973
**SI**: 399 • **CI**: c359 • **ST**: 1.D.M.31.O
**PN**: **ACOSMANURA** Starrett, 1973.sb.c04 • **AK**
**PA**: 00 • **ACOSMANURA** • Starrett 1973.sb: 251 • **UC**
01 • **ACOSMANURA** • Savage 1973.sa: 354 • **bO**
**RL**: INR
**GN**: **ARCHAEOSALIENTIA** 1981.ra.c01
**RANOMORPHA** 1921.fb.c08
**GZ**: INR
**EN**: **KYR.** C.07.02. Hypoordo **LAEVOGYRINIA** Lataste, 1878. la.c01-04

AEIBRANCHIA Leuckart, 1840
**SI**: 148 • **CI**: c126 • **ST**: 2.D.M.31.E
**PN**: **AEIBRANCHIATA** Leuckart, 1840.la.c01 • **AK**
**PA**: 00 • **AEIBRANCHIATA** • Leuckart 1840.la: 19 • **'F'**
01 • **AEIBRANCHIATA** • Leuckart 1841.la: 29 • **UC**
02 • **AEIBRANCHIA** • *Hoc loco* • **EE**
**RL**: INR
**GN**: **MEANTES** 1767.la.c01
**PSEUDOSAURIA** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12
[**HYP.** Subordo **PNEUMOBRANCHIA** Sonnini[+1], 1801.sa.c01-02]

AGLOSSA Wagler, 1830
**SI**: 103 • **CI**: c084 • **ST**: 2.D.M.31.E
**PN**: **AGLOSSAE** Wagler, 1830.wa.c02 • **AK**
**PA**: 00 • **AGLOSSAE** • Wagler 1830.wa: 131 • **'F'**
01 • **AGLOSSAE** • Holbrook 1842.ha: 74 • **Sc**
02 • **AGLOSSA** • Gravenhorst 1845.ga: 43 • **UC**
03 • **AGLOSSA** • Stannius 1856.sa: 4 • **bO**
04 • **AGLOSSAE** • Günther 1858.gc: 339 • **Gr**
05 • **AGLOSSA** • Günther 1858.gc: 339 • **Gr**
06 • **AGLOSSA** • Hoffmann 1878.ha: 582 • **'F'**
07 • **AGLOSSA** • Lataste 1879.lb: 339 • **'T'**
08 • **AGLOSSA** • Haeckel 1902.ha: 640 • **O**
09 • **AGLOSSA** • Casamiquela 1961.ca: 81 • **bO**
**RL**: INR
**GN**: **DORSIPARES** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **DORSIPARES** Blainville, 1816. ba.c06-02

AGLOSSA Knauer, 1878
**SI**: 267 • **CI**: c241 • **ST**: 1.D.M.41.O
**PN**: **AGLOSSA** Knauer, 1878.ka.c03 • **AK**
**PA**: 00 • **AGLOSSA** • Knauer 1878.ka: 103 • **bO**

**RL**: ↓ **Aglossae** 1830.wa.c02
**GN**: **Dorsipares** 1816.ba.c06
**Laevogyrinia** 1878.la.c01
**GZ**: INR
**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

**Allocaudata** Fox[+1], 1982
**SI**: 408 • **CI**: c368 • **ST**: 1.D.M.11.O
**PN**: **Allocaudata** Fox[+1], 1982.fa.c01
**PA**: 00 • **Allocaudata** • Fox[+1] 1982.fa: 120 • **O**
01 • **Allocaudata** • Dubois 2005.da: 6 • **pO**
**RL**: INR
**GN**: **Allocaudata** 1982.fa.c01
**GZ**: INR
**EN**: **KYR.** C.04.†01. Ordo **Allocaudata** Fox[+1], 1982.fa.c01-00

Amblystomatacea Romer, 1933
**SI**: 356 • **CI**: c403 • **ST**: 1.D.M.00.R
**PN**: **Amblystomoidea** Romer, 1933.ra.c02 • **an**
**PA**: 00 • **Amblystomoidea** • Romer 1933.ra: 437 • **bO**
01 • **Amblystomatacea** • *Hoc loco* • **ER**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Amblystomatacea Romer, 1945
**SI**: 362 • **CI**: c404 • **ST**: 1.D.M.00.R
**PN**: **Amblystomoidea** Romer, 1945.ra.c01 • **an**
**PA**: 00 • **Amblystomoidea** • Romer 1945.ra: 592 • **bO**
01 • **Amblystomoidaes** • Pearse 1948.pa: 20 • **bO**
02 • **Amblystomatacea** • *Hoc loco* • **ER**
**RL**: < **Salamandroidea** 1945.ra.c02 • **AI**: **HL**
> **Proteida** 1945.ra.c03 • **AI**: **HL**
**GN**: **Pseudosauria** 1816.ba.c08
|**Urodela incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Ambystomatacea Noble, 1931
**SI**: 352 • **CI**: c325 • **ST**: 1.D.M.31.R
**PN**: **Ambystomoidea** Noble, 1931.na.c02 • **ak**
**PA**: 00 • **Ambystomoidea** • Noble 1931.na: 471 • **bO**
01 • **Ambystomina** • Pearse 1936.pa: 20 • **bO**
02 • **Ambystomatoidea** • Tihen 1958.ta: 1 • **bO**
03 • **Ambystomatoidei** • Dubois 1983.da: 113 • **bO**
04 • **Ambystomatacea** • *Hoc loco* • **ER**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Ambystomatacea Tatarinov, 1964
**SI**: 388 • **CI**: c348 • **ST**: 1.D.M.40.R
**PN**: **Ambystomatoidei** Tatarinov, 1964.tb.c01 • **ak**
**PA**: 00 • **Ambystomatoidei** • Tatarinov 1964.tb: 9, 161 • **bO**
01 • **Ambystomatoidea** • Dowling[+1] 1978.da: 4.1, 14.1 • **bO**
02 • **Ambystomatacea** • *Hoc loco* • **ER**
**RL**: ↓ **Ambystomoidea** 1931.na.c02
< **Salamandroidei** 1964.tb.c02 • **AI**: **HL**
**GN**: **Pseudosauria** 1816.ba.c08
|**Urodela incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Ambystomatacea Kuhn, 1965
**SI**: 391 • **CI**: c351 • **ST**: 1.D.M.41.R
**PN**: **Ambystomatoidea** Kuhn, 1965.ka.c02 • **ak**
**PA**: 00 • **Ambystomatoidea** • Kuhn 1965.ka: 35 • **bO**
01 • **Ambystomatacea** • *Hoc loco* • **ER**
**RL**: ↓ **Ambystomoidea** 1931.na.c02
> **Plethodontoidea** 1965.ka.c04 • **AI**: **HL**
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte**,** 1831.ba.c01-01]

Ambystomatacea Estes, 1981
**SI**: 404 • **CI**: c364 • **ST**: 1.D.M.40.R
**PN**: **Ambystomatoidea** Estes, 1981.ea.c03 • **ak**
**PA**: 00 • **Ambystomatoidea** • Estes 1981.ea: xiv, 45 • **bO**
01 • **Ambystomatacea** • *Hoc loco* • **ER**
**RL**: ↓ **Ambystomoidea** 1931.na.c02
> **Karauroidea** 1981.ea.c01 • **AI**: **HL**
< **Salamandroidea** 1981.ea.c04 • **AI**: **HL**
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
|**Urodela incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Amphibia Linnaeus, 1758
**SI**: 001 • **CI**: mc01 • **ST**: 1.N.G.02.O
**PN**: **Amphibia** Linnaeus, 1758.la.c01 • **ap-za**
**PA**: 00 • **Amphibia** • Linnaeus 1758.la: 12 • **C**
**RL**: INR
**GN**: **Amphibia** 1816.ba.c02
|**Amniota**|
|**Pisces**|
**GZ**: » **GI**:
|**Amniota**|
|**Pisces**|
**EN**: **ANAPTONYM**

Amphibia Garsault, 1764
**SI**: 004 • **CI**: mc02 • **ST**: 1.N.G.02.E
**PN**: **Amphibies** Garsault, 1764.ga.c01 • **ap-za**
**PA**: 00 • **Amphibies** • Garsault 1764.ga: 18 • **UC**
01 • **Amphibia** • Batsch 1788.ba: 88 • **C**
**RL**: ↓ **Amphibia** 1758.la.c01
**GN**: **Amphibia** 1816.ba.c02
|**Amniota**|
**GZ**: » **GI**:
|**Amniota**|
**EN**: **ANAPTONYM**

Amphibia Latreille, 1806
**SI**: 022 • **CI**: c012 • **ST**: 1.N.O.40.O

**PN**: **AMPHIBIA** Latreille, 1806.la.c01 • **AK**

**PA**: 00 • **AMPHIBIA** • Latreille 1806.la: 2; Latreille 1825.la: 103 • **C**

01 • **AMPHIBIES** • Latreille 1824.la: 9 • **C**

02 • **AMPHIBIA** • Bonaparte 1831.ba: 66 • **bC**

**RL**: ↓ **AMPHIBIA** 1758.la.c01

**GN**: **» OA, SD**: Latreille 1825.la: 103:

**ANURA** 1805.da.c01

**URODELA** 1805.da.c02

**GZ**: » **GI**:

**» OA, SD**: Latreille 1825.la: 103:

**GYMNOPHIONA** 1814.ra.c01

**EN**: **ANAPTONYM**

[**HYP.** Superordo **BATRACHIA** Brongniart, 1800.ba.c01-14]

**AMPHIBIA** Blainville, 1816

**SI**: 034 • **CI**: c021 • **ST**: 1.S.O.10.E

**PN**: **AMPHYBIENS** Blainville, 1816.ba.c02

**PA**: 00 • **AMPHYBIENS** • Blainville 1816.ba: '107' [115] • **C**

01 • **AMPHIBIENS** • Blainville 1816.bb: 246 • **C**

02 • **AMPHIBIEN** • Blainville 1818.ba: 1368 • **C**

03 • **AMPHIBIA** • Macleay 1821.ma: 275 • **C**

04 • **AMPHIBIA** • Bonaparte 1831.ba: 66 • **bC**

05 • **AMPHIBII** • Jourdan 1834.ja: 59 • **C**

06 • **AMPHIBII** • Desmarest 1856.da: 150 • **O**

07 • **AMPHIBEA** • Pearse 1936.pa: 20 • **C**

08 • **AMPHYBIA** • Moreno[+1] 1978.mb: 93 • **C**

09 • **AMPHIBIA** • Gardiner 1982.ga: 228 • **D**

10 • **AMPHIBA** • Borkin[+1] 2013.bb: 501 • **C**

**RL**: ↓ **AMPHIBIA** 1758.la.c01

↔ > **NUDIPELLIFERES** 1816.ba.c01 • **AI**: **HL**

↔ > **ICTYOIDES** 1816.ba.c03 • **AI**: **HL**

↔ > **NUDS** 1816.ba.c04 • **AI**: **HL**

**GN**: **ANURA** 1805.da.c01

**GYMNOPHIONA** 1814.ra.c01

**URODELA** 1805.da.c02

**GZ**: » **GX**:

|**AMNIOTA**|

|**PISCES**|

**EN**: **KYR.** C.02.01. Classis **AMPHIBIA** Blainville, 1816.ba.c02-03

AMPHIBIA Blainville, 1816

**SI**: 042 • **CI**: c029 • **ST**: 1.N.G.02.E

**PN**: **AMPHIBIENS** Blainville, 1816.ba.c10 • **AP**

**PA**: 00 • **AMPHIBIENS** • Blainville 1816.ba: '111' [119] • **O**

01 • **AMPHIBIANS** • Kirby 1835.ka: 415 • **O**

02 • **AMPHIBIA** • *Hoc loco* • **EE**

**RL**: ↓ **AMPHIBIA** 1758.la.c01

**GN**: **MEANTES** 1767.la.c01

**PSEUDOSAURIA** 1816.ba.c08

**GZ**: » **GI**:

**PSEUDOSAURIA** 1816.ba.c08

**EN**: **ANAPTONYM**

AMPHICOELA Meyer, 1860

**SI**: 216 • **CI**: c193 • **ST**: 2.D.M.31.E

**PN**: **AMPHICOELI** Meyer, 1860.mb.c04 • **AK**

**PA**: 00 • **AMPHICOELI** • Meyer 1860.mb: 559 • **UC**

01 • **AMPHICOELA** • *Hoc loco* • **EE**

**RL**: INR

**GN**: **IMPERFECTIBRANCHIA** 1838.ha.c03

**GZ**: INR

**EN**: **KYR.** C.05.05. Subordo **IMPERFECTIBRANCHIA** Hogg, 1838.ha.c03-02

AMPHICOELA Owen, 1860

**SI**: 217 • **CI**: zh19 • **ST**: 1.U.U.99.E

**PN**: **AMPHICOELIA** Owen, 1860.oa.c01 • **ZZ**

**PA**: 00 • **AMPHICOELIA** • Owen 1860.oa: x, 271 • **bO**

01 • **AMPHICOELA** • *Hoc loco* • **EE**

**RL**: ↓ **AMPHICOELI** 1860.mb.c04

**GN, GZ**, **EN**: ●

AMPHICOELA Noble, 1931

**SI**: 353 • **CI**: c326 • **ST**: 1.D.M.21.O

**PN**: **AMPHICOELA** Noble, 1931.na.c03 • **AK**

**PA**: 00 • **AMPHICOELA** • Noble 1931.na: 485 • **bO**

01 • **AMPHICOELINA** • Pearse 1936.pa: 20 • **bO**

02 • **AMPHICOELIA** • Kuhn 1939.ka: 92 • **bO**

**RL**: ↓ **AMPHICOELI** 1860.mb.c04

**GN**: **ANGUSTICOELA** 1958.ra.c01

**GZ**: INR

**EN**: **KYR.** C.05.01. Subordo **ANGUSTICOELA** Reig, 1958.ra.c01-00

AMPHICOELA Romer, 1933

**SI**: 357 • **CI**: mc06 • **ST**: 1.D.M.00.O

**PN**: **AMPHICOELA** Romer, 1933.ra.c03 • **AN**

**PA**: 00 • **AMPHICOELA** • Romer 1933.ra: 437 • **bO**

**RL**: ↓ **AMPHICOELI** 1860.mb.c04

**GN**: **ANGUSTICOELA** 1958.ra.c01

|**ANURA INCERTAE SEDIS**|

**GZ**: INR

**EN**: **KYR.** C.04.01. Ordo **ANURA** Duméril, 1805.da.c01-07

AMPHICOELA Kuhn, 1961

**SI**: 379 • **CI**: mc09 • **ST**: 1.D.M.99.O

**PN**: **AMPHICOELA** Kuhn, 1961.ka.c05 • **ZA**

**PA**: 00 • **AMPHICOELA** • Kuhn 1961.ka: 23 • **bO**

**RL**: ↓ **AMPHICOELI** 1860.mb.c04

**GN**: **AMPHIBIA** 1816.ba.c02

|**AMNIOTA**|

**GZ**: INR

**EN**: ●

AMPHICOELA Kuhn, 1962

**SI**: 380 • **CI**: c340 • **ST**: 1.D.M.40.O

**PN**: **AMPHICOELA** Kuhn, 1962.ka.c01 • **AK**

**PA**: 00 • **AMPHICOELA** • Kuhn 1962.ka: 329 • **bO**

**RL**: ↓ **AMPHICOELI** 1860.mb.c04

< **ARCHAEOBATRACHIA** 1962.ka.c02 • **AI**: **HL**

< **NEOBATRACHIA** 1962.ka.c03 • **AI**: **HL**

**GN**: **ANGUSTICOELA** 1958.ra.c01

|**ANURA INCERTAE SEDIS**|

**GZ**: INR

**EN**: **KYR.** C.04.01. Ordo **ANURA** Duméril, 1805.da.c01-07

AMPHIGYRINIA Blanchard, 1885

**SI**: 285 • **CI**: c259 • **ST**: 1.D.M.30.E

**PN**: **AMPHIGYRINIDES** Blanchard, 1885.bb.c01 • **AK**

**PA**: 00 • **AMPHIGYRINIDES** • Blanchard 1885.bb: 587 • **UC**

01 • **AMPHIGYRINIDAE** • Lataste 1888.la: 240 • **UC**

02 • **AMPHIGYRINIA** • *Hoc loco* • **EE**

**RL**: INR

**GN**: **Dorsipares** 1816.ba.c06

**GZ**: INR

**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Amphipneusta Merrem, 1820

**SI**: 053 • **CI**: c035 • **ST**: 2.D.M.31.O

**PN**: **Amphipneusta** Merrem, 1820.ma.c04 • **ak**

**PA**: c0 • **Amphipneusta** • Merrem 1820.ma: 163 • **'T'** • **IIA**: Merrem 1822.ma: 695

i1 • **Amphypneusta** • Merrem 1820.ma: 166 • **'T'**

02 • **Amphipneusta** • Bonaparte 1831.ba: 67 • **O**

03 • **Amphipneusta** • Bonaparte 1831.bb: 135; Gray 1831.ga: 107 • **Sc**

04 • **Amphipneurta** • Swainson 1839.sa: 86, 95 • **O**

05 • **Amphipneura** • Swainson 1839.sa: 339 • **O**

**RL**: INR

**GN**: **Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Amphisacralia Bolkay, 1919

**SI**: 310 • **CI**: c283 • **ST**: 1.D.M.31.O

**PN**: **Amphisacralia** Bolkay, 1919.ba.c01 • **ak**

**PA**: 00 • **Amphisacralia** • Bolkay 1919.ba: 348 • **bO**

**RL**: INR

**GN**: **Geobatrachia** 1828.ra.c18

**Mediogyrinia** 1878.la.c02

**GZ**: INR

**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Amphiumacea Duméril[+1], 1841

**SI**: 158 • **CI**: c135 • **ST**: 4.D.M.31.R

**PN**: **Amphiumoides** • Duméril[+1], 1841.da.c05 • **ak**

**PA**: 00 • **Amphiumoides** • Duméril[+1] 1841.da: 52 • **Gr/Sc/'T'**

01 • **Amphiumoidea** • Cope 1888.ca: 464 • **UC**

02 • **Amphiumoidea** • Regal 1966.ra: 405 • **bO**

03 • **Amphiumacea** • *Hoc loco* • **ER**

**RL**: **< Atretoderes** 1841.da.c03 • **AI**: **HL**

↔ > **Perobranches** 1841.da.c04 • **AI**: **HL**

> **Exobranches** 1841.da.c06 • **AI**: **HL**

> **Trematoderes** 1841.da.c08 • **AI**: **HL**

**GN**: **Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Anguiformi Hogg, 1839

**SI**: 139 • **CI**: c117 • **ST**: 1.D.M.41.X

**PN**: **Anguiformia** Hogg, 1839.ha.c04 • **ak**

**PA**: 00 • **Anguiformia** • Hogg 1839.ha: 271 • **O**

01 • **Anguiformes** • Dubois 2015.da: 54 • **EX**

02 • **Anguiformi** • *Hoc loco* • **EX**

**RL**: ↓ **Anguiformia** 1811.oa.c03

**< Urophora** 1839.ha.c01 • **AI**: **HL**

**> Tetrapoda** 1839.ha.c03 • **AI**: **HL**

**GN**: **Gymnophiona** 1814.ra.c01

**Urodela** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

[**HYP.** Superordo **Derotreta** Van der Hoeven, 1833.va.c01-01]

Anguiformi Gouriet, 1868

**SI**: 252 • **CI**: c226 • **ST**: 1.D.M.41.X

**PN**: **Anguiformes** Gouriet, 1868.ga.c07 • **ak**

**PA**: 00 • **Anguiformes** • Gouriet 1868.ga: 210 • **bSr**

01 • **Anguiformi** • *Hoc loco* • **EX**

**RL**: ↓ **Anguiformia** 1811.oa.c03

**GN**: **Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Anguiformia Oppel, 1811

**SI**: 028 • **CI**: zh08 • **ST**: 1.U.U.99.A

**PN**: **Anguiformes** Oppel, 1811.oa.c03 • **zz**

**PA**: 00 • **Anguiformes** • Oppel 1811.oa: 264 • **C**

01 • **Anguiformia** • Dubois 2015.da: 54 • **C**

**RL**, **GN**, **GZ**, **EN**: ●

Anguinacei Wiegmann[+1], 1832

**SI**: 117 • **CI**: c097 • **ST**: 1.D.M.31.C

**PN**: **Anguinea** Wiegmann[+1], 1832.wa.c01 • **ak**

**PA**: 00 • **Anguinea** • Wiegmann[+1] 1832.wa: 199 • **O**

01 • **Anguinea** • Leunis 1844.la: 149 • **'F'**

02 • **Anguinacei** • Dubois 2015.da: 90 • **EC**

**RL**: INR

**GN**: **Pseudophiona** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.05.04. Subordo **Pseudophiona** Blainville, 1816.ba.c11-06

**Angusticoela** Reig, 1958

**SI**: 366 • **CI**: c333 • **ST**: 1.D.M.11.O

**PN**: **Angusticoela** Reig, 1958.ra.c01

**PA**: 00 • **Angusticoela** • Reig 1958.ra: 111 • **bO**

**RL**: ↔| **Amphicoela** 1931.na.c03

**GN**: **Angusticoela** 1958.ra.c01

**GZ**: INR

**EN**: **KYR.** C.05.01. Subordo **Angusticoela** Reig, 1958.ra.c01-00

Anisobatrachia Fejérváry, 1921

**SI**: 316 • **CI**: c289 • **ST**: 1.D.M.30.E

**PN**: **Anisobatrachoidea** Fejérváry, 1921.fb.c04 • **ak**

**PA**: 00 • **Anisobatrachoidea** • Fejérváry 1921.fb: 24 • **bO**

01 • **Anisobatrachia** • Dubois 2015.da: 106 • **EE**

**RL**: > **Pelobatomorpha** 1921.fb.c05 • **PR**

> **Cystignathomorpha** 1921.fb.c07 • **PR**

**GN**: **Angusticoela** 1958.ra.c01

**Hydrobatrachia** 1828.ra.c14

**GZ**: INR

**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Anomocoela Nicholls, 1916

**SI**: 303 • **CI**: c276 • **ST**: 1.D.M.31.O

**PN**: **Anomocoela** Nicholls, 1916.na.c02 • **ak**
**PA**: 00 • **Anomocoela** • Nicholls 1916.na: 86 • **'T'**
01 • **Anomocoelina** • Pearse 1936.pa: 20 • **bO**
02 • **Anomocoela** • Tatarinov 1964.ta: 129 • **bO**
**RL**: INR
**GN**: **Dorsipares** 1816.ba.c06
**Laevogyrinia** 1878.la.c01
**GZ**: INR
**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Anomocoela Noble, 1922
**SI**: 322 • **CI**: c295 • **ST**: 1.D.M.21.O
**PN**: **Anomocoela** Noble, 1922.na.c01 • **ak**
**PA**: 00 • **Anomocoela** • Noble 1922.na: 22 • **bO**
**RL**: ↓ **Anomocoela** 1916.na.c02
**GN**: **Archaeosalientia** 1981.ra.c01
**GZ**: INR
**EN**: **KYR.** C.08.01. Superphalanx **Archaeosalientia** Roček, 1981.ra.c01-01

Anomocoela Noble, 1931
**SI**: 354 • **CI**: c327 • **ST**: 1.D.M.41.O
**PN**: **Anomocoela** Noble, 1931.na.c04 • **ak**
**PA**: 00 • **Anomocoela** • Noble 1931.na: 491 • **bO**
**RL**: ↓ **Anomocoela** 1916.na.c02
**GN**: **Archaeosalientia** 1981.ra.c01
**Ranomorpha** 1921.fb.c08
**GZ**: INR
**EN**: **KYR.** C.07.02. Hypoordo **Laevogyrinia** Lataste, 1878.la.c01-04

Anomocoela Tatarinov, 1964
**SI**: 386 • **CI**: c346 • **ST**: 1.D.M.41.O
**PN**: **Anomocoela** Tatarinov, 1964.ta.c01 • **ak**
**PA**: 00 • **Anomocoela** • Tatarinov 1964.ta: 8, 126 • **bO**
**RL**: ↓ **Anomocoela** 1916.na.c02
< **Procoela** 1964.ta.c02 • **AI**: **HL**
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Anonyxia Miranda-Ribeiro, 1924
**SI**: 329 • **CI**: c302 • **ST**: 2.D.M.30.O
**PN**: **Anonyxia** Miranda-Ribeiro, 1924.ma.c04 • **ak**
**PA**: 00 • **Anonyxia** • Miranda-Ribeiro 1924.ma: 141 • **UC**
**RL**: < **Gymnobatrachia** 1924.ma.c02 • **PR**
> **Thoracechmia** 1924.ma.c05 • **PR**
< **Protosternia** 1924.ma.c08 • **PR**
↔ > **Therosternia** 1924.ma.c09 • **AI**: **HL**
**GN**: **Angusticoela** 1958.ra.c01
**Hydrobatrachia** 1828.ra.c14
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

**Anura** Duméril, 1805
**SI**: 017 • **CI**: c008 • **ST**: 2.S.O.10.E
**PN**: **Anoures** Duméril, 1805.da.c01
**PA**: 00 • **Anoures** • Duméril 1805.da: 91 • **'F'**
01 • **Anuren** • Meckel *in* Cuvier 1810.ca: pl. 3 • **UC**
02 • **Anuri** • Fischer 1813.fa: 58 • **UC**
03 • **Anuria** • Rafinesque 1815.ra: 78 • **bO**
04 • **Anoura** • Gray 1825.ga: 213 • **O**
05 • **Anura** • Ficinus[+1] 1826.fa: pl. • **UC**
06 • **Anoura** • Bell 1836.ba: 91 • **O**
07 • **Anura** • Hogg 1839.ha: 270 • **O**
08 • **Anoures** • Gray 1842.ga: 111 • **O**
09 • **Anouri** • Mayer 1849.ma: 198 • **bO**
10 • **Anuri** • Massalongo 1854.ma: 421 • **UC**
11 • **Anoures** • Desmarest 1857.da: 2 • **bO**
12 • **Anura** • Girard 1858.ga: vii • **'T'**
13 • **Anoura** • Cooper 1859.ca: 303 • **'T'**
14 • **Anura** • Haeckel 1889.ha: 625 • **L**
15 • **Anura** • Abel 1919.aa: xii, 311 • **bC**
16 • **Anura** • Milner 1988.ma: 82 • **cO**
17 • **Anuran** • Sarania[+4] 2015.sa: 413 • **O**
**RL**: ↔ > **Ecaudati** 1805.da.c03 • **AI**
**GN**: **Anura** 1805.da.c01
**GZ**: » **GX**:
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Aphanobranchia Leuckart, 1840
**SI**: 149 • **CI**: c127 • **ST**: 2.D.M.30.E
**PN**: **Aphanobranchiata** Leuckart, 1840.la.c02 • **ak**
**PA**: 00 • **Aphanobranchiata** • Leuckart 1840.la: 20 • **UC**
01 • **Aphanerobranchiata** • Kuhn 1967.kb: 13 • **UC**
02 • **Aphanobranchia** • Dubois 2015.da: 107 • **EE**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Apneuma Brookes, 1828
**SI**: 073 • **CI**: c055 • **ST**: 1.D.M.31.O
**PN**: **Apneuma** Brookes, 1828.bc.c01 • **ak**
**PA**: 00 • **Apneuma** • Brookes 1828.bc: 16 • **O**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Apoda Linnaeus, 1758
**SI**: 002 • **CI**: zh01 • **ST**: 1.U.U.99.E
**PN**: **Apodes** Linnaeus, 1758.la.c02 • **zz**
**PA**: 00 • **Apodes** • Linnaeus 1758.la: 241 • **O**
01 • **Apoda** • *Hoc loco* • **EE**
**RL**, **GN**, **GZ**, **EN**: ●

Apoda Oppel, 1811
**SI**: 029 • **CI**: c017 • **ST**: 2.S.O.40.O
**PN**: **Apoda** Oppel, 1811.ob.c01 • **ak**
**PA**: 00 • **Apoda** • Oppel 1811.ob: 409 • **'F'**
01 • **Apoda** • Merrem 1820.ma: 163 • **O**

02 • **Apoda** • Gravenhorst 1843.ga: 393 • **Zt**
03 • **Apoda** • Gravenhorst 1845.ga: 433 • **UC**
04 • **Apodida** • Pearse 1936.pa: 20 • **O**
05 • **Apoad** • Fei[+2] 1990.fb: 1, 5 • **O**
**RL**: ↓ **Apodes** 1758.la.c02
**GN**: **Gymnophiona** 1814.ra.c01
**GZ**: » **GX**:
**Anura** 1805.da.c01
**Urodela** 1805.da.c02
**EN**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814.ra.c01-02

**Aquipares** Blainville, 1816
**SI**: 039 • **CI**: c026 • **ST**: 1.D.M.11.O
**PN**: **Aquipares** Blainville, 1816.ba.c07
**PA**: 00 • **Aquipares** • Blainville 1816.ba: "111" [119] • **bO**
01 • **Aquiparia** • Jourdan 1834.ja: 102 • **D**
02 • **Aquipares** • *Hoc loco* • **eP**
03 • **Aquipares** • *Hoc loco* • **P**
**RL**: INR
**GN**: **» OA, SD**: Ducrotay Blainville 1822.da: 5:
**Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Aralobatrachia Bauer, 1987
**SI**: 420 • **CI**: c380 • **ST**: 1.D.M.30.O
**PN**: **Aralobatrachia** Bauer, 1987.bc.c05 • **ak**
**PA**: 00 • **Aralobatrachia** • Bauer 1987.bc: 52 • **UC**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Archaeobatrachia Reig, 1958
**SI**: 367 • **CI**: c334 • **ST**: 1.D.M.31.O
**PN**: **Archaeobatrachia** Reig, 1958.ra.c02 • **ak**
**PA**: 00 • **Archaeobatrachia** • Reig 1958.ra: 113 • **bO**
01 • **Archeobatrachia** • Casamiquela 1961.ca: 95 • **bO**
**RL**: INR
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Archaeobatrachia Kuhn, 1962
**SI**: 381 • **CI**: c341 • **ST**: 1.D.M.40.O
**PN**: **Archaeobatrachia** Kuhn, 1962.ka.c02 • **ak**
**PA**: 00 • **Archaeobatrachia** • Kuhn 1962.ka: 334 • **bO**
**RL**: ↓ **Archaeobatrachia** 1958.ra.c02
> **Amphicoela** 1962.ka.c01 • **AI**: **HL**
< **Neobatrachia** 1962.ka.c03 • **AI**: **HL**
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
|**Anura Incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Archaeobatrachia Laurent, 1967
**SI**: 395 • **CI**: c355 • **ST**: 1.D.M.40.O
**PN**: **Archaeobatrachia** Laurent, 1967.la.c01 • **ak**
**PA**: 00 • **Archaeobatrachia** • Laurent 1967.la: 209 • **bO**
**RL**: ↓ **Archaeobatrachia** 1958.ra.c02
**GN**: **Angusticoela** 1958.ra.c01
**Hydrobatrachia** 1828.ra.c14
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Archaeocoela Kuhn, 1967
**SI**: 394 • **CI**: c354 • **ST**: 1.D.M.31.O
**PN**: **Archaeocoela** Kuhn, 1967.ka.c01 • **ak**
**PA**: 00 • **Archaeocoela** • Kuhn 1967.ka: 186 • **bO**
**RL**: ↔| **Amphicoela** 1931.na.c03
**GN**: **Angusticoela** 1958.ra.c01
**GZ**: INR
**EN**: **KYR.** C.05.01. Subordo **Angusticoela** Reig, 1958.ra.c01-00

**Archaeosalientia** Roček, 1981
**SI**: 406 • **CI**: c366 • **ST**: 1.D.M.11.O
**PN**: **Archaeosalientia** Roček, 1981.ra.c01
**PA**: 00 • **Archaeosalientia** • Roček 1981.ra: 1 • **O**
01 • **Archaeosalientia** • *Hoc loco* • **pP**
**RL**: INR
**GN**: **Archaeosalientia** 1981.ra.c01
**GZ**: INR
**EN**: **KYR.** C.08.01. Superphalanx **Archaeosalientia** Roček, 1981.ra.c01-01

Arcifera Cope, 1864
**SI**: 230 • **CI**: c204 • **ST**: 1.D.M.31.E
**PN**: **Arciferi** Cope, 1864.cb.c02 • **ak**
**PA**: 00 • **Arciferi** • Cope 1864.cb: 182 • **bO**
01 • **Arcifera** • Cope 1865.ca: 97 • **bO**
02 • **Arciformia** • Mivart 1869.ma: 281 • **Sr**
03 • **Arciferi** • Hoffmann 1878.ha: 598 • **UC**
04 • **Arcifera** • Boulenger 1882.bb: vii, 183 • **Sr**
05 • **Arcifera** • Zittel 1888.za: 429 • **UC**
06 • **Arcifera** • Goodrich 1930.ga: xxi • **Sc**
**RL**: INR
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Arcifera Cope, 1889
**SI**: 292 • **CI**: c265 • **ST**: 2.D.M.40.O
**PN**: **Arcifera** Cope, 1889.ca.c02 • **ak**
**PA**: 00 • **Arcifera** • Cope 1889.ca: 246 • **'T'/bO**
01 • **Arcifera** • Abel 1919.aa: xii, 246 • **R**
02 • **Arcifera** • Miranda-Ribeiro 1924.ma: 139 • **UC**
**RL**: ↓ **Arciferi** 1864.cb.c02
**GN**: **Angusticoela** 1958.ra.c01
**Hydrobatrachia** 1828.ra.c14
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Arcucadentia Hogg, 1839

**SI**: 146 • **CI**: c124 • **ST**: 1.D.M.30.O
**PN**: **Arcucadentia** Hogg, 1839.hb.c03 • **ak**
**PA**: 00 • **Arcucadentia** • Hogg 1839.hb: 376 • **'T'**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Arcumanentia Hogg, 1839

**SI**: 147 • **CI**: c125 • **ST**: 1.D.M.32.O
**PN**: **Arcumanentia** Hogg, 1839.hb.c04 • **ak**
**PA**: 00 • **Arcumanentia** • Hogg 1839.hb: 376 • **'T'**
**RL**: < **Internibranchia** 1839.hb.c01 • **AI**: **HL**
**GN**: **Imperfectibranchia** 1838.ha.c03
**GZ**: INR
**EN**: **KYR.** C.05.05. Subordo **Imperfectibranchia** Hogg, 1838.ha.c03-02

Ascaphacea

**SI**: 369 • **CI**: cn01 • **ST**: 1.D.M.00.R
**PN**: **Ascaphoidea** Laurent *in* Fuhn, 1960.fa.c01 • **an**
**PA**: 00 • **Ascaphoidea •** Laurent *in* Fuhn 1960.fa: 163 • **bO**
01 • **Ascaphacea** • *Hoc loco* • **ER**
**RL**: INR
**GN**: **Angusticoela** 1958.ra.c01
**GZ**: INR
**EN**: **KYR.** C.05.01. Subordo **Angusticoela** Reig, 1958.ra.c01-00

Astatodipnoa Laurent *in* Fuhn, 1960

**SI**: 098 • **CI**: c079 • **ST**: 3.D.M.30.O
**PN**: **Astatodipnoa** Wagler, 1828.wb.c05 • **ak**
**PA**: 00 • **Astatodipnoa** • Wagler 1828.wb: 859 • **'T'**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Asterophryomorpha Fejérváry, 1923

**SI**: 325 • **CI**: c298 • **ST**: 2.D.M.30.A
**PN**: **Asterophryomorpha** Fejérváry, 1923.fa.c01 • **ak**
**PA**: 00 • **Asterophryomorpha** • Fejérváry 1923.fa: 180 • **Gs**
01 • **Asterophrynomorpha** • Kuhn 1967.ka: 14 • **UC**
**RL**: ← **Pelobatomorpha** 1921.fb.c05
**GN**: **Angusticoela** 1958.ra.c01
**Hydrobatrachia** 1828.ra.c14
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Atarsata Meyer, 1860

**SI**: 215 • **CI**: c192 • **ST**: 2.D.M.31.E
**PN**: **Atarsiden** Meyer, 1860.mb.c03 • **ak**
**PA**: 00 • **Atarsiden** • Meyer 1860.mb: 559 • **UC**
01 • **Atarsata** • *Hoc loco* • **EE**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Atarsata Meyer, 1863

**SI**: 227 • **CI**: c201 • **ST**: 2.D.M.41.E
**PN**: **Atarsiden** Meyer, 1863.mb.c01 • **ak**
**PA**: 00 • **Atarsiden** • Meyer 1863.mb: 296 • **UC**
01 • **Atarsata** • *Hoc loco* • **EE**
**RL**: INR
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte**,** 1831.ba.c01-01]

Atretodera Duméril+1, 1841

**SI**: 156 • **CI**: c133 • **ST**: 2.D.M.31.E
**PN**: **Atretoderes** Duméril+1, 1841.da.c03 • **ak**
**PA**: 00 • **Atretoderes** • Duméril$^{+1}$ 1841.da: 52 • **Gr/Sc/'T'**
01 • **Atretodera** • Baird 1850.ba: 281 • **Gr**
02 • **Atretodera** • Baird 1851.ba: 250 • **bO**
03 • **Aletroderes** • Desmarest 1856.da: 152 • **Gr**
04 • **Atretodeira** • Girard 1858.ga: vii • **'T'**
05 • **Aretoderes** • Cope 1859.cb: 122 • **UC**
**RL**: ↔| **Salamandres** 1816.ba.c09
> **Perobranches** 1841.da.c04 • **AI**: **HL**
**> Amphiumoides** 1841.da.c05 • **AI**: **HL**
> **Exobranches** 1841.da.c06 • **AI**: **HL**
> **Trematoderes** 1841.da.c08 • **AI**: **HL**
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Atretodera Gouriet, 1868

**SI**: 250 • **CI**: c224 • **ST**: 2.D.M.40.E
**PN**: **Atretoderes** Gouriet, 1868.ga.c05 • **ak**
**PA**: 00 • **Atretoderes** • Gouriet 1868.ga: 206 • **UC**
01 • **Atretodera** • Dubois 2015.da: 107 • **EE**
**RL**: ↓ **Atretoderes** 1841.da.c03
**< Pulmones** 1868.ga.c01 • **PR**
< **Eubatraciens** 1868.ga.c02 • **AI**: **HL**
**GN**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Atretodera Brocchi, 1881

**SI**: 283 • **CI**: c257 • **ST**: 2.D.M.41.E
**PN**: **Atretoderes** Brocchi, 1881.ba.c05 • **ak**
**PA**: 00 • **Atretoderes** • Brocchi 1881.ba: 102 • **UC**
01 • **Atretodera** • *Hoc loco* • **EE**
**RL**: ↓ **Atretoderes** 1841.da.c03
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte**,** 1831.ba.c01-01]

Australobatrachia Bauer, 1987

**SI**: 419 • **CI**: c379 • **ST**: 1.D.M.30.O
**PN**: **Australobatrachia** Bauer, 1987.bc.c04 • **ak**
**PA**: 00 • **Australobatrachia** • Bauer 1987.bc: 52 • **UC**
**RL**: INR
**GN**: **Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

**Bainanura nov.**

**SI**: 436 • **CI**: c395 • **ST**: 1.D.M.11.O
**PN**: **Bainanura nov.**, DOP.da.c03
**PA**: 00 • **Bainanura** • *Hoc loco* • **bP**
**RL**: INR
**GN**: **Bainanura** DOP.da.c03
**GZ**: INR
**EN**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00

Batrachia Brongniart, 1800

**SI**: 014 • **CI**: c005 • **ST**: 1.S.O.03.E
**PN**: **Batraciens** Brongniart, 1800.ba.c01 • **hk**
**PA**: 00 • **Batraciens** • Brongniart 1800.ba: 82 • **O**
01 • **Batrachiens** • Latreille 1800.la: xxxvii • **O**
02 • **Batrachii** • Latreille 1800.la: xxxvii • **O**
03 • **Batrachia** • Macartney *in* Cuvier 1802.ca: pl. 3 • **UC**
04 • **Batracii** • Duméril 1805.da: 90 • **O**
05 • **Batrachia** • Rafinesque 1814.ra: 102 • **O**
06 • **Batrachia** • Leuckart 1821.la: 258 • **'F'**
07 • **Batrachi** • Wagler 1828.wb: 859 • **O**
08 • **Batrachia** • Bonaparte 1831.bb: 135 • **bC**
09 • **Batrachia** • Carus 1834.ca: 25 • **bO**
10 • **Batrachii** • Bronn 1849.ba: 683 • **O**
11 • **Batrachia** • Giebel 1852.ga: 239, 301 • **Kr**
12 • **Batraciani** • Massalongo 1854.ma: 421 • **O**
13 • **Batraci** • Betta 1857.ba: 22 • **O**
14 • **Batrachia** • Dubois 2005.da: 6 • **pO**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**GZ**: » **GI**:
**Gymnophiona** 1814.ra.c01
**EN**: **ANAPTONYM**
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Batrachia Oppel, 1811

**SI**: 027 • **CI**: c016 • **ST**: 1.S.E.20.E
**PN**: **Batraciens** Oppel, 1811.oa.c02 • **ak**
**PA**: 00 • **Batraciens** • Oppel 1811.oa: 260 • **O**
01 • **Batracii** • Oppel 1811.ob: 394 • **O**
02 • **Batrachia** • Merrem 1820.ma: 4 • **C**
03 • **Batracha** • Brookes 1828.bc: 15 • **O**
04 • **Batrachii** • Bonaparte 1838.ba: [193] • **bC**
05 • **Batrachia** • Bonaparte 1838.bd: 124 • **Sc**
06 • **Batrachians** • Gray 1842.ga: 111 • **UC**
07 • **Batrachoidea** • Van der Hoeven 1864.va: 288 • **O**
08 • **Batrachia** • Milner 1988.ma: 82 • **pO**
**RL**: ↓ **Batraciens** 1800.ba.c01 • **SD**
↔! < **Nuda** 1811.oa.c01 • **AI**: **HL**
**GN**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Batrachia Blainville, 1816

**SI**: 037 • **CI**: c024 • **ST**: 1.N.O.40.E
**PN**: **Batraciens** Blainville, 1816.ba.c05 • **ak**
**PA**: 00 • **Batraciens** • Blainville 1816.ba: "111" [119] • **O**
01 • **Batrachii** • Ritgen 1828.ra: 278 • **He**
02 • **Batrachia** • Müller 1831.ma: 711 • **O**
03 • **Batracia** • Swainson 1839.sa: 86 • **O**
04 • **Batrachii** • Mayer 1849.ma: 198 • **bO**
05 • **Batrachii** • Van der Hoeven 1855.va: x, 468 • **O**
06 • **Batrachia** • Stannius 1856.sa: 4 • **O**
07 • **Batrachia** • Huxley 1871.ha: 173 • **UC**
08 • **Batrachia** • Haeckel 1889.ha: 625 • **L**
**RL**: ↓ **Batraciens** 1800.ba.c01
**GN**: **Anura** 1805.da.c01
**GZ**: » **GX**:
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Batrachia Meyer, 1832

**SI**: 116 • **CI**: mc04 • **ST**: 2.N.G.02.E
**PN**: **Batrachier** von Meyer, 1832.ma.c01 • **ap-za**
**PA**: 00 • **Batrachier** • von Meyer 1832.ma: 101 • **UC**
01 • **Batrachia** • *Hoc loco* • **EE**
**RL**: ↓ **Batraciens** 1800.ba.c01
**GN**: **Lissamphibia** 1898.ga.c01
|Non-**Lissamphibian Amphibia**|
**GZ**: » **GI**:
|Non-**Lissamphibian Amphibia**|
|**Amniota**|
**EN**: **ANAPTONYM**

Batrachoidei Leuckart, 1840

**SI**: 150 • **CI**: c128 • **ST**: 1.N.G.02.E
**PN**: **Batrachoidea** Leuckart, 1840.la.c03 • **ap**
**PA**: 00 • **Batrachoidea** • Leuckart 1840.la: 20 • **'F'**
01 • **Batrachi** • Leuckart 1841.la: 2 • **UC**
02 • **Batrachia** • Leuckart 1841.la: 30 • **UC**
03 • **Batrachoidei** • *Hoc loco* • **EE**
**RL**: ↓ **Batraciens** 1800.ba.c01
**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**GZ**: » **GI**:
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**EN**: **ANAPTONYM**

Batrachia Owen, 1841

**SI**: 166 • **CI**: c143 • **ST**: 1.S.O.40.O

**PN**: **Batrachia** Owen, 1841.oa.c01 • **ak**

**PA**: 00 • **Batrachia** • Owen 1841.oa: 179 • **O**

01 • **Batrachia** • Goodrich 1930.ga: xxi • **C**

**RL**: ↓ **Batraciens** 1800.ba.c01

**GN**: **Amphibia** 1816.ba.c02

**GZ**: » **GX**:

|**Amniota**|

**EN**: **KYR.** C.02.01. Classis **Amphibia** Blainville, 1816.ba.c02-03

Batrachia Mayer, 1849

**SI**: 183 • **CI**: c160 • **ST**: 1.N.O.40.E

**PN**: **Batrachoidei** Mayer, 1849.ma.c02 • **ak**

**PA**: 00 • **Batrachoidei** • Mayer 1849.ma: 198 • **bO**

01 • **Batrachia** • Dubois 2015.da: 107 • **EE**

**RL**: ↓ **Batraciens** 1800.ba.c01

↔| **Urodeles** 1805.da.c02

> **Holodactyli** 1849.ma.c03 • **PR**

> **Colobodactyli** 1849.ma.c04 • **PR**

**GN**: **Urodela** 1805.da.c02

**GZ**: » **GX**:

**Anura** 1805.da.c01

**Gymnophiona** 1814.ra.c01

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Batrachophiona Latreille, 1825

**SI**: 069 • **CI**: c051 • **ST**: 3.D.M.31.E

**PN**: **Batrachophides** Latreille, 1825.la.c01 • **ak**

**PA**: 00 • **Batrachophides** • Latreille 1825.la: 102 • **Sc**

01 • **Batrachophidii** • Bonaparte 1831.bb: 134 • **O**

02 • **Batrachopidii** • Bonaparte 1839.bf: 16 • **O**

03 • **Batracophidii** • Bonaparte 1852.ba: 480 • **O**

04 • **Batrachophidiens** • Gouriet 1868.ga: 204 • **UC**

05 • **Batrachophidia** • Hoffmann 1878.ha: 583 • **O**

06 • **Batrachophidia** • Miranda-Ribeiro 1924.ma: 137 • **UC**

07 • **Batrachophiona** • *Hoc loco* • **EE**

**RL**: INR

**GN**: **Pseudophiona** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.05.04. Subordo **Pseudophiona** Blainville, 1816.ba.c11-06

Batrachophiona Gray, 1842

**SI**: 168 • **CI**: c145 • **ST**: 3.D.M.40.E

**PN**: **Batrachophilia** Gray, 1842.ga.c02 • **ak**

**PA**: 00 • **Batrachophilia**: Gray 1842.ga: 113 • **O**

01 • **Batrachophiona** • Dubois 2015.da: 107 • **EE**

**RL**: ↓ **Batrachophides** 1825.la.c01

**GN**: **Plesiophiona** DOP.da.c10

**Pseudophiona** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814.ra.c01-02

Batrachosauria Miranda-Ribeiro, 1924

**SI**: 328 • **CI**: c301 • **ST**: 2.D.M.31.O

**PN**: **Batrachosauria** Miranda-Ribeiro, 1924.ma.c03 • **ak**

**PA**: 00 • **Batrachosauria** • Miranda-Ribeiro 1924.ma: 138 • **UC**

**RL**: > **Branchipulmonados** 1924.ma.c01 • **AI**: **HL**

**GN**: **Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Batrachosauroidacea Kuhn, 1961

**SI**: 376 • **CI**: c337 • **ST**: 1.D.M.30.R

**PN**: **Batrachosauroidoidea** Kuhn, 1961.ka.c02 † • **ak**

**PA**: 00 • **Batrachosauroidoidea** • Kuhn 1961.ka: 13 • **bO**

01 • **Batrachosauroidacea** • *Hoc loco* • **ER**

**RL**: < **Cryptobranchoidea** 1961.ka.c01 • **AI**: **HL**

< **Proteida** 1961.ka.c03 • **AI**: **HL**

< **Meantes** 1961.ka.c04 • **AI**: **HL**

**GN**: |**Urodela Incertae sedis**|

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Bdalsipodobatrachia Ritgen, 1828

**SI**: 089 • **CI**: c070 • **ST**: 2.D.M.32.E

**PN**: **Bdalsipodobatrachi** Ritgen, 1828.ra.c15 • **ak**

**PA**: 00 • **Bdalsipodobatrachi** • Ritgen 1828.ra: 278 • **'F'**

01 • **Bdallipodobatrachi** • Jourdan 1834.ja: 149 • **'F'**

02 • **Bdalsipodobatrachia** • *Hoc loco* • **EE**

**RL**: ↔ < **Hylobatrachi** 1828.ra.c16 • **AI**: **HL**

**GN**: **Hylobatrachia** 1828.ra.c16

**GZ**: INR

**EN**: **KYR.** C.13.03. Hypophalanx **Hylobatrachia** Ritgen, 1828.ra.c16-01

Blepharosa Miranda Ribeiro, 1937

**SI**: 358 • **CI**: c328 • **ST**: 2.D.M.31.O

**PN**: **Blepharosa** Miranda Ribeiro, 1937.ma.c01 • **ak**

**PA**: 00 • **Blepharosa** • Miranda Ribeiro 1937.ma: 55 • **UC**

**RL**: INR

**GN**: **Phaneranura** DOP.da.c02

**Scoptanura** 1973.sb.c02

**GZ**: INR

**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02

[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Brachycephalomorpha Fejérváry, 1921

**SI**: 321 • **CI**: c294 • **ST**: 2.D.M.31.A

**PN**: **Brachycephalomorpha** Fejérváry, 1921.fb.c09 • **ak**

**PA**: 00 • **Brachycephalomorpha** • Fejérváry 1921.fb: 28 • **Gs**

**RL**: INR

**GN**: **Phaneranura** DOP.da.c02

**Scoptanura** 1973.sb.c02

**GZ**: INR

**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02

[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Branchiata Pallas, 1814

**SI**: 030 • **CI**: zh09 • **ST**: 1.U.U.99.O

**PN**: **Branchiata** Pallas, 1814.pa.c01 • **zz**

**PA**: 00 • **Branchiata** • Pallas 1814.pa: 70 • **O**

**RL, GN, GZ, EN**: ●

Branchiata Jarocki, 1822

**SI**: 061 • **CI**: c043 • **ST**: 2.D.M.41.E

**PN**: **Branchiata** Jarocki, 1822.ja.c04 • **ak**

**PA**: 00 • **Branchiata** • Jarocki 1822.ja: 137 • **O**
01 • **Branchiales** • Wagler 1830.wa: 131 • **'T'**
02 • **Branchiata** • Carus 1834.ca: 25 • **bO**
03 • **Branchiata** • Fitzinger 1843.fa: 35 • **Sc**
**RL**: ↓ **Branchiata** 1814.pa.c01
< **Hedraeoglossi** 1830.wa.c05 • **PR**
> **Abranchiales** 1830.wa.c06 • **AI**: **HL**
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Branchiata Ficinus[+1], 1826
**SI**: 070 • **CI**: c052 • **ST**: 2.D.M.41.O
**PN**: **Branchiata** Ficinus[+1], 1826.fa.c01 • **ak**
**PA**: 00 • **Branchiata** • Ficinus[+1] 1826.fa: pl. • **UC**
**RL**: ↓ **Branchiata** 1814.pa.c01
**GN**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Branchipulmonata Miranda-Ribeiro, 1924
**SI**: 326 • **CI**: c299 • **ST**: 2.D.M.31.E
**PN**: **Branchipulmonados** Miranda-Ribeiro, 1924.ma.c01 • **ak**
**PA**: 00 • **Branchipulmonados** • Miranda-Ribeiro 1924.ma: 137 • **UC**
01 • **Branchipulmonata** • *Hoc loco* • **EE**
**RL**: < **Batrachosauria** 1924.ma.c03 • **AI**: **HL**
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Branchiuromolgae Ritgen, 1828
**SI**: 078 • **CI**: c059 • **ST**: 2.D.M.31.E
**PN**: **Branchiuromolgaei** Ritgen, 1828.ra.c04 • **ak**
**PA**: c0 • **Branchiuromolgaei** • Ritgen 1828.ra: 274 • **Zg** • **EEA**: **HL**
i1 • **Branchiuromalgaei** • Ritgen 1828.ra: 277 • **Zg**
02 • **Branchiuromolgae** • *Hoc loco* • **EE**
**RL**: ↔ < **Dysmolgae** 1828.ra.c05 • **AI**: **HL**
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Bufonacea Haeckel, 1889
**SI**: 294 • **CI**: c267 • **ST**: 1.D.M.31.R
**PN**: **Bufonacea** Haeckel, 1889.ha.c01 • **ak**
**PA**: 00 • **Bufonacea** • Haeckel 1889.ha: 640 • **O**
**RL**: INR
**GN**: **Hylobatrachia** 1828.ra.c16
**GZ**: INR
**EN**: **KYR.** C.13.03. Hypophalanx **Hylobatrachia** Ritgen, 1828.ra.c16-01

Bufonacea Laurent *in* Fuhn, 1960
**SI**: 373 • **CI**: cn05 • **ST**: 1.D.M.00.R
**PN**: **Bufonoidea** Laurent *in* Fuhn, 1960.fa.c05 • **an**
**PA**: 00 • **Bufonoidea** • Laurent *in* Fuhn 1960.fa: 163 • **bO**
01 • **Bufonacea** • *Hoc loco* • **ER**
**RL**: ↓ **Bufonacea** 1889.ha.c01
**GN**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05
**GZ**: INR
**EN**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00

Bufoniformia Cope, 1864
**SI**: 231 • **CI**: c205 • **ST**: 1.D.M.31.A
**PN**: **Bufoniformes** Cope, 1864.cb.c03 • **ak**
**PA**: 00 • **Bufoniformes** • Cope 1864.cb: 182 • **bO**
01 • **Bufoniformia** • Cope 1865.ca: 97 • **bO**
02 • **Bufoniformes** • Brocchi 1881.ba: 9 • **UC**
03 • **Bufoniformes** • Boulenger 1882.ba: 12 • **UC**
**RL**: INR
**GN**: **Dorsipares** 1816.ba.c06
**Laevogyrinia** 1878.la.c01
**GZ**: INR
**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Bufoniformia Steindachner, 1867
**SI**: 244 • **CI**: c218 • **ST**: 1.D.M.41.A
**PN**: **Bufoniformia** Steindachner, 1867.sa.c02 • **ak**
**PA**: 00 • **Bufoniformia** • Steindachner 1867.sa: 34 • **Sc**
01 • **Bufoniformes** • Philippi 1902.pa: ix • **UC**
**RL**: ↓ **Bufoniformia** 1864.cb.c03
**< Hylaplesiformia** 1867.sa.c03 • **AI**: **HL**
**GN**: **Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Bufoniformia Hay, 1929
**SI**: 349 • **CI**: c322 • **ST**: 1.D.M.40.A
**PN**: **Bufoniformes** Hay, 1929.ha.c06 • **ak**
**PA**: 00 • **Bufoniformes** • Hay 1929.ha: 521, 852 • **bO**
01 • **Bufoniformia** • Dubois 2015.da: 105 • **EA**
**RL**: ↓ **Bufoniformia** 1864.cb.c03
**GN**: **Lissamphibia** 1898.ga.c01
|**Temnospondyli**|
**GZ**: INR
**EN**: **KYR.** C.02.01. Classis **Amphibia** Blainville, 1816.ba.c02-03

Bufonomorpha Fejérváry, 1921
**SI**: 318 • **CI**: c291 • **ST**: 2.D.M.31.A
**PN**: **Bufonimorpha** Fejérváry, 1921.fb.c06 • **ak**
**PA**: 00 • **Bufonimorpha** • Fejérváry 1921.fb: 24 • **Gs**
01 • **Bufonomorpha** • Dubois 2015.da: 90 • **EA**
**RL**: INR
**GN**: **Dorsipares** 1816.ba.c06
**Laevogyrinia** 1878.la.c01
**GZ**: INR

**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Caducibranchia Latreille 1824

**SI**: 062 • **CI**: c044 • **ST**: 1.D.M.30.E

**PN**: **Caducibranches** Latreille 1824.la.c01 • **ak**

**PA**: 00 • **Caducibranches** • Latreille 1824.la: 9 • **O**
01 • **Caducibranchia** • Latreille 1825.la: 104 • **O**
02 • **Caducibranchiata** • Owen 1835.oa: 214 • **UC**
03 • **Cadnabranchia** • Hogg 1838.ha: 152 • **O**
04 • **Caducibranchiata** • Cope 1859.cb: 122 • **O**

**RL**: INR

**GN**: **» OA, SD**: Latreille 1825.la: 104–105:
**Anura** 1805.da.c01
**Urodela** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Caducibranchia Betta, 1864

**SI**: 228 • **CI**: c202 • **ST**: 1.D.M.41.O

**PN**: **Caducibranchia** Betta, 1864.ba.c01 • **ak**

**PA**: 00 • **Caducibranchia** • Betta 1864.ba: 512 • **bO**
01 • **Caducibranchia** • Haeckel 1889.ha: 625 • **O**

**RL**: ↓ **Caducibranches** 1824.la.c01

**GN**: **Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Caducibranchia Cope, 1866

**SI**: 234 • **CI**: c208 • **ST**: 1.D.M.41.E

**PN**: **Caducibranchiata** Cope, 1866.ca.c03 • **ak**

**PA**: 00 • **Caducibranchiata** • Cope 1866.ca: 97 • **bO**
01 • **Caducibranchiates** • Cope 1866.ca: 98 • **bO**
02 • **Caducibranches** • Lataste 1878.lb: 3 • **Sc**
03 • **Caducibranchia** • Goodrich 1930.ga: xxi • **bO**

**RL**: ↓ **Caducibranches** 1824.la.c01

**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte**,** 1831.ba.c01-01]

Caeciliacea Wagler, 1830

**SI**: 102 • **CI**: c083 • **ST**: 1.D.M.31.R

**PN**: **Caeciliae** Wagler, 1830.wa.c01 • **ak**

**PA**: 00 • **Caeciliae** • Wagler 1830.wa: 131 • **O**
01 • **Caecilioidei** • Lescure+2 1986.lb: 145 • **bO**
02 • **Caeciliidei** • Lescure+2 1986.lb: 145 • **iO**
03 • **Caeciliaoidei** • Lescure+1 1988.la: 20 • **bO**
04 • **Caeciliaidea** • Lescure+1 1988.la: 20 • **iO**
05 • **Caeciliacea** • *Hoc loco* • **ER**

**RL**: INR

**GN**: **Pseudophiona** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.05.04. Subordo **Pseudophiona** Blainville, 1816.ba.c11-06

Caeciliacea Sarasin+1, 1890

**SI**: 299 • **CI**: c272 • **ST**: 1.D.M.41.R

**PN**: **Caeciloidea** Sarasin+1, 1890.sa.c03 • **ak**

**PA**: 00 • **Caeciloidea** • Sarasin+1 1890.sa: 245 • **bO**
01 • **Caeciliacea** • Dubois 2015.da: 106 • **ER**

**RL**: ↓ **Caeciliae** 1830.wa.c01
< **Neobatrachi** 1890.sa.c01 • **PR**

**GN**: **Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Derotreta** Van der Hoeven, 1833.va.c01-01]

Calamitacei Link, 1807

**SI**: 023 • **CI**: c013 • **ST**: 1.D.M.30.C

**PN**: **Calamitae** Link, 1807.la.c01 • **ak**

**PA**: 00 • **Calamitae** • Link 1807.la: 53 • **O**
01 • **Calamitacei** • Dubois 2015.da: 90 • **EC**

**RL**: INR

**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Callulacea Haeckel, 1889

**SI**: 295 • **CI**: c268 • **ST**: 1.D.M.31.R

**PN**: **Callulacea** Haeckel, 1889.ha.c02 • **ak**

**PA**: 00 • **Callulacea** • Haeckel 1866.ha: 640 • **O**

**RL**: INR

**GN**: **Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02

**GZ**: INR

**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Cathetura Duméril+1, 1839

**SI**: 134 • **CI**: zh16 • **ST**: 2.U.U.99.E

**PN**: **Cathetures** Duméril+1, 1839.db.c01 • **zz**

**PA**: 00 • **Cathetures** • Duméril+1 1839.db: 18 • **Gr/T**
01 • **Cathetura** • *Hoc loco* • **EE**

**RL**: ↔ **Compressicaudes** 1839.db.c02

**GN, GZ**, **EN**: ●

Cathetura Duméril+2, 1854

**SI**: 196 • **CI**: c173 • **ST**: 2.D.M.41.E

**PN**: **Cathetures** Duméril+2, 1854.da.c02 • **ak**

**PA**: 00 • **Cathetures** • Duméril+2 1854.da: 38 • **UC**
01 • **Cathetura** • *Hoc loco* • **EE**

**RL**: ↓ **Cathetures** 1839.db.c01
↔ > **Compressicaudes** 1854.da.c01 • **AI**: **HL**

**GN**: **Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

CAUDATA Scopoli, 1777

**SI**: 009 • **CI**: zh03 • **ST**: 2.N.O.99.O

**PN**: **CAUDATA** Scopoli, 1777.sa.c02 • **ZZ**

**PA**: 00 • **CAUDATA** • Scopoli 1777.sa: 411 • **Gs**

**RL**: ↓ > **CAUDATA** 1777.sa.c02 • **PR**

**GN, GZ, EN**: ●

CAUDATA Scopoli, 1777

**SI**: 012 • **CI**: c003 • **ST**: 1.N.G.02.O

**PN**: **CAUDATA** Scopoli, 1777.sa.c05 • **AP-ZA**

**PA**: 00 • **CAUDATA** • Scopoli 1777.sa: 463 • **O**

**RL**: ↓ < **CAUDATA** 1777.sa.c02 • **PR**

**GN**: **AMPHIBIA** 1816.ba.c02

|**AMNIOTA**|

**GZ**: » **GI**:

**AMPHIBIA** 1816.ba.c02

|**AMNIOTA**|

**EN**: **ANAPTONYM**

CAUDATA Duméril 1805

**SI**: 020 • **CI**: c011 • **ST**: 2.S.O.40.E

**PN**: **CAUDATI** Duméril, 1805.da.c04 • **AK**

**PA**: 00 • **CAUDATI** • Duméril 1805.da: 94 • **'F'**

01 • **CAUDATA** • Oppel 1811.ob: 409 • **'F'**

02 • **CAUDATA** • Leuckart 1821.la: 260 • **UC**

03 • **CAUDATA** • Hemprich 1829.ha: xix, 373 • **Fo**

04 • **CAUDATA** • Wiegmann+1 1832.wa: 198 • **bO**

05 • **CAUDATA** • Gravenhorst 1843.ga: 393 • **Zt**

06 • **CAUDATA** • Hoffmann 1878.ha: 615 • **UC**

07 • **CAUDATA** • Boulenger 1882.bc: vii, 1 • **O**

08 • **CAUDATA** • Haeckel 1889.ha: 625 • **L**

09 • **CAUDATA** • Gill 1903.ga: 72 • **'F'**

10 • **CAUDATIDA** • Pearse 1936.pa: 20 • **O**

**RL**: ↓ **CAUDATA** 1777.sa.c02

↔ < **URODELES** 1805.da.c02 • **AI**: Zittel, 1888.za: 412

**GN**: **URODELA** 1805.da.c02

**GZ**: » **GX**:

**ANURA** 1805.da.c01

**GYMNOPHIONA** 1814.ra.c01

**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12

CAUDATA Leuckart, 1821

**SI**: 056 • **CI**: c038 • **ST**: 2.N.G.02.O

**PN**: **CAUDATA** Leuckart, 1821.la.c03 • **AP**

**PA**: 00 • **CAUDATA** • Leuckart 1821.la: 260 • **UC**

01 • **CAUDATAE** • Wagler 1830.wa: 131 • **D**

**RL**: ↓ **CAUDATA** 1777.sa.c02

**GN**: **PSEUDOSAURIA** 1816.ba.c08

**GZ**: » **GI**:

**PSEUDOSAURIA** 1816.ba.c08

**EN**: **ANAPTONYM**

CAUDATA Leuckart, 1840

**SI**: 151 • **CI**: c129 • **ST**: 2.N.G.02.O

**PN**: **CAUDATA** Leuckart, 1840.la.c04 • **AP**

**PA**: 00 • **CAUDATA** • Leuckart 1840.la: 20 • **'bF'**

**RL**: ↓ **CAUDATA** 1777.sa.c02

**GN**: **IMPERFECTIBRANCHIA** 1838.ha.c03

**PSEUDOSAURIA** 1816.ba.c08

**GZ**: » **GI**:

**IMPERFECTIBRANCHIA** 1838.ha.c03

**MEANTES** 1767.la.c01

**PSEUDOSAURIA** 1816.ba.c08

**EN**: **ANAPTONYM**

CAUDATA Haeckel, 1866

**SI**: 238 • **CI**: c212 • **ST**: 1.N.E.40.O

**PN**: **CAUDATA** Haeckel, 1866.ha.c04 • **AK**

**PA**: 00 • **CAUDATA** • Haeckel 1866.ha: cxxxi • **O**

**RL**: ↓ **CAUDATA** 1777.sa.c02

< **SOZOBRANCHIA** 1866.ha.c02 • **AI**: **HL**

↔! < **SOZURA** 1866.ha.c03 • **AI**: **HL**

**GN**: **IMPERFECTIBRANCHIA** 1838.ha.c03

**PSEUDOSAURIA** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12

[**HYP.** Subordo **NULLIBRANCHIA** Bonaparte**,** 1831.ba.c01-01]

CAUDATA Goodrich, 1930

**SI**: 340 • **CI**: c313 • **ST**: 1.N.G.02.O

**PN**: **CAUDATA** Goodrich, 1930.ga.c02 • **AP**

**PA**: 00 • **CAUDATA** • Goodrich 1930.ga: xxi • **bO**

**RL**: ↓ **CAUDATA** 1777.sa.c02

**GN**: **URODELA** 1805.da.c02

|Non-**LISSAMPHIBIAN AMPHIBIA**|

**GZ**: » **GI**:

|Non-**LISSAMPHIBIAN AMPHIBIA**|

**EN**: **ANAPTONYM**

CAUDATA Hay, 1929

**SI**: 345 • **CI**: c318 • **ST**: 1.N.G.02.E

**PN**: **CAUDATI** Hay, 1929.ha.c02 • **AP**

**PA**: 00 • **CAUDATI** • Hay 1929.ha: 521, 839 • **bO**

01 • **CAUDATA** • *Hoc loco* • **EE**

**RL**: INR

**GN**: **URODELA** 1805.da.c02

|Non-**LISSAMPHIBIAN AMPHIBIA**|

**GZ**: » **GI**:

|Non-**LISSAMPHIBIAN AMPHIBIA**|

**EN**: **ANAPTONYM**

CAUDATA Trueb+1, 1991

**SI**: 425 • **CI**: c385 • **ST**: 1.N.G.02.O

**PN**: **CAUDATA** Trueb+1, 1991.ta.c01 • **AP**

**PA**: 00 • **CAUDATA** • Trueb+1 1991.ta: 233 • **O**

**RL**: ↓ **CAUDATA** 1777.sa.c02

**GN**: **URODELA** 1805.da.c02

**GZ**: » **GI**:

**URODELA** 1805.da.c02

**EN**: **ANAPTONYM**

CECILIACEA Fatio, 1872

**SI**: 254 • **CI**: c228 • **ST**: 1.D.M.30.R

**PN**: **CECILIDES** Fatio, 1872.fa.c01 • **AK**

**PA**: 00 • **CECILIDES** • Fatio 1872.fa: 7 • **O**

01 • **CECILIACEA** • Dubois 2015.da: 107 • **ER**

**RL**: ↔| **OPHIOMORPHI** 1855.va.c02

**GN**: **PLESIOPHIONA** DOP.da.c10

**PSEUDOPHIONA** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.04.02. Ordo **GYMNOPHIONA** Rafinesque, 1814.ra.c01-02

CELATIBRANCHIA Hogg, 1841

**SI**: 162 • **CI**: c139 • **ST**: 1.D.M.31.O

**PN**: **CELATIBRANCHIA** Hogg, 1841.ha.c01 • **AK**

**PA**: 00 • **CELATIBRANCHIA** • Hogg 1841.ha: 357 • **'T'**

**RL**: INR

**GN**: **PSEUDOPHIONA** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.05.04. Subordo **PSEUDOPHIONA** Blainville, 1816.ba.c11-06

CERCOPI Wagler, 1828

**SI**: 099 • **CI**: c080 • **ST**: 3.D.M.31.O

**PN**: **CERCOPI** Wagler, 1828.wb.c06 • **AK**

**PA**: 00 • **CERCOPI** • Wagler 1828.wb: 859 • **'F'**

**RL**: INR

**GN**: **PSEUDOSAURIA** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.05.07. Subordo **PSEUDOSAURIA** Blainville, 1816.ba.c08-07

CHERSOBATAE Fitzinger, 1843

**SI**: 172 • **CI**: c149 • **ST**: 2.D.M.31.O

**PN**: **CHERSOBATAE** Fitzinger, 1843.fa.c04 • **AK**

**PA**: 00 • **CHERSOBATAE** • Fitzinger 1843.fa: 32 • **Sc**

01 • **CHERSOBATES** • Tschudi 1845.tb: 69 • **Sc**

**RL**: **< HYDRONECTAE** 1843.fa.c03 • **AI**: **HL**

**GN**: **GEOBATRACHIA** 1828.ra.c18

**MEDIOGYRINIA** 1878.la.c02

**GZ**: INR

**EN**: **KYR.** C.05.02. Subordo **HYDROBATRACHIA** Ritgen, 1828.ra.c14-01

CHIRODYSMOLGAE Ritgen, 1828

**SI**: 080 • **CI**: c061 • **ST**: 2.D.M.31.O

**PN**: **CHIRODYSMOLGAE** Ritgen, 1828.ra.c06 • **AK**

**PA**: 00 • **CHIRODYSMOLGAE** • Ritgen 1828.ra: 277 • **'F'**

01 • **CHIRODYSMOLGAE** • Dubois 2020.dra: 32 • b**O**

**RL**: INR

**GN**: **MEANTES** 1767.la.c01

**GZ**: INR

**EN**: **KYR.** C.05.06. Subordo **MEANTES** Linné, 1767.la.c01-01

COECILIACEA Blainville, 1816

**SI**: 044 • **CI**: c031 • **ST**: 1.D.M.32.R

**PN**: **COECILIES** Blainville, 1816.ba.c12 • **AK**

**PA**: 00 • **COECILIES** • Blainville 1816.ba: "111" [119] • **O**

01 • **COECILIAE** • Wagler 1828.wa: 736 • **UC**

02 • **COECILIAE** • Müller 1831.ma: 711 • **O**

03 • **COECILIA** • Kuhn 1939.ka: 18 • **O**

04 • **COECILIACEA** • *Hoc loco* • **ER**

**RL**: ↔ < **PSEUDOPHYDIENS** 1816.ba.c11 • **AI**: **HL**

**GN**: **PSEUDOPHIONA** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.05.04. Subordo **PSEUDOPHIONA** Blainville, 1816.ba.c11-06

COECILIACEA Knauer, 1878

**SI**: 265 • **CI**: c239 • **ST**: 1.D.M.40.R

**PN**: **COECILIOIDEA** Knauer, 1878.ka.c01 • **AK**

**PA**: 00 • **COECILIOIDEA** • Knauer 1878.ka: 91 • **O**

01 • **COECILIAE** • Goodrich 1930.ga: xxi • **bC**

02 • **COECILIAE** • Goodrich 1930.ga: xxi • **O**

03 • **COECILIACEA** • Dubois 2015.da: 107 • **ER**

**RL**: ↓ **COECILIES** 1816.ba.c12

**GN**: **PLESIOPHIONA** DOP.da.c10

**PSEUDOPHIONA** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.04.02. Ordo **GYMNOPHIONA** Rafinesque, 1814.ra.c01-02

COECILIFORMIA Zagorodniuk, 2004

**SI**: 431 • **CI**: c391 • **ST**: 5.D.N.30.A

**PN**: **COECILIFORMES** Zagorodniuk, 2004.za.c01 • **AK**

**PA**: 00 • **COECILIFORMES** • Zagorodniuk 2004.za: 70 • **O**

01 • **COECILIFORMIA** • Dubois 2015.da: 107 • **EA**

**RL**: ↓ **APODES** 1758.la.c02

← **APODA** 1811.ob.c01

**GN**: **GYMNOPHIONA** 1814.ra.c01

**GZ**: **ANURA** 1805.da.c01

**URODELA** 1805.da.c02

**EN**: **KYR.** C.04.02. Ordo **GYMNOPHIONA** Rafinesque, 1814.ra.c01-02

COLOBODACTYLA Mayer, 1849

**SI**: 185 • **CI**: c162 • **ST**: 2.N.O.31.E

**PN**: **COLOBODACTYLI** Mayer, 1849.ma.c04 • **AK**

**PA**: 00 • **COLOBODACTYLI** • Mayer 1849.ma: 198 • **UC**

01 • **COLOBODACTYLA** • *Hoc loco* • **EU**

**RL**: < **MALACOPODA** 1849.ma.c01 • **PR**

< **HOLODACTYLI** 1849.ma.c03 • **PR**

**GN**: **MEANTES** 1767.la.c01

**PSEUDOSAURIA** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12 [**HYP.** Subordo **PNEUMOBRANCHIA** Sonnini$^{+1}$, 1801.sa.c01-02]

COMPRESSICAUDATA Duméril$^{+1}$, 1839

**SI**: 135 • **CI**: zh17 • **ST**: 2.U.U.99.E

**PN**: **COMPRESSICAUDES** Duméril$^{+1}$, 1839.db.c02 • **ZZ**

**PA**: 00 • **COMPRESSICAUDES** • Duméril$^{+1}$ 1839.db: 40 • **Gr/T**

01 • **COMPRESSICAUDATA** • *Hoc loco* • **EE**

**RL**: ↔ **CATHETURES** 1839.db.c01

**GN, GZ, EN**: ●

COMPRESSICAUDATA Duméril$^{+2}$, 1854

**SI**: 195 • **CI**: c172 • **ST**: 2.D.M.41.E

**PN**: **COMPRESSICAUDES** Duméril$^{+2}$, 1854.da.c01 • **AK**

**PA**: 00 • **COMPRESSICAUDES** • Duméril$^{+2}$ 1854.da: 38 • **UC**

01 • **COMPRESSICAUDATA** • *Hoc loco* • **EE**

**RL**: ↓ **COMPRESSICAUDES** 1839.db.c02

↔ < **CATHETURES** 1854.da.c02 • **AI**: **HL**

**GN**: **PSEUDOSAURIA** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.05.07. Subordo **PSEUDOSAURIA** Blainville, 1816.ba.c08-07

COSTATA Müller, 1840

**SI**: 153 • **CI**: zh18 • **ST**: 1.U.U.99.O

**PN**: **COSTATA** Müller, 1840.ma.c01 • **ZZ**

**PA**: 00 • **COSTATA** • Müller 1840.ma: 25 • **'F'**

**RL, GN, GZ, EN**: ●

COSTATA Lataste, 1878
**SI**: 272 • **CI**: c246 • **ST**: 1.D.M.41.E
**PN**: **COSTATI** Lataste, 1878.lb.c02 • **AK**
**PA**: 00 • **COSTATI** • Lataste 1879.lb: 339 • **'bT'**
01 • **COSTATA** • Stejneger 1907.sa: v, 50 • **bO**
**RL**: ↓ **COSTATA** 1840.ma.c01
**GN**: **MEDIOGYRINIA** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.06.02. Infraordo **MEDIOGYRINIA** Lataste, 1878.la.c02-02

COSTATA Stejneger[+1], 1917
**SI**: 306 • **CI**: c279 • **ST**: 1.D.M.41.O
**PN**: **COSTATA** Stejneger[+1], 1917.sa.c01 • **AK**
**PA**: 00 • **COSTATA** • Stejneger[+1] 1917.sa: 25 • **bO**
**RL**: ↓ **COSTATA** 1840.ma.c01
**GN**: **ANGUSTICOELA** 1958.ra.c01
**HYDROBATRACHIA** 1828.ra.c14
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **ANURA** Duméril, 1805.da.c01-07

CRYPTOBRANCHACEA Noble, 1931
**SI**: 351 • **CI**: c324 • **ST**: 1.D.M.41.R
**PN**: **CRYPTOBRANCHOIDEA** Noble, 1931.na.c01 • **AK**
**PA**: 00 • **CRYPTOBRANCHOIDEA** • Noble 1931.na: 465 • **bO**
01 • **CRYPTOBRANCHINA** • Pearse 1936.pa: 20 • **bO**
02 • **CRYPTOBRANCHOIDEI** • Tatarinov 1964.ta: 9, 159 • **bO**
03 • **CRYPTOBRANCHACEA** • *Hoc loco* • **ER**
**RL**: ↓ **CRYPTOBRANCHES** 1805.da.c05
**GN**: **IMPERFECTIBRANCHIA** 1838.ha.c03
**GZ**: INR
**EN**: **KYR.** C.05.05. Subordo **IMPERFECTIBRANCHIA** Hogg, 1838.ha.c03-02

CRYPTOBRANCHACEA Romer, 1933
**SI**: 355 • **CI**: mc05 • **ST**: 1.D.M.00.R
**PN**: **CRYPTOBRANCHOIDEA** Romer, 1933.ra.c01 • **AN**
**PA**: 00 • **CRYPTOBRANCHOIDEA** • Romer 1933.ra: 437 • **bO**
01 • **CRYPTOBRANCHACEA** • *Hoc loco* • **ER**
**RL**: ↓ **CRYPTOBRANCHES** 1805.da.c05
**GN**: **IMPERFECTIBRANCHIA** 1838.ha.c03
|**URODELA INCERTAE SEDIS**|
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12

CRYPTOBRANCHACEA Kuhn, 1961
**SI**: 375 • **CI**: c336 • **ST**: 1.D.M.40.R
**PN**: **CRYPTOBRANCHOIDEA** Kuhn, 1961.ka.c01 • **AK**
**PA**: 00 • **CRYPTOBRANCHOIDEA** • Kuhn 1961.ka: 12 • **bO**
01 • **CRYPTOBRANCHACEA** • Dubois 2015.da: 107 • **ER**
**RL**: ↓ **CRYPTOBRANCHES** 1805.da.c05
> **BATRACHOSAUROIDOIDEA** 1961.ka.c02 • **AI**: **HL**
> **PROTEIDA** 1961.ka.c03 • **AI**: **HL**
< **MEANTES** 1961.ka.c04 • **AI**: **HL**
**GN**: **IMPERFECTIBRANCHIA** 1838.ha.c03
|**URODELA INCERTAE SEDIS**|
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12

CRYPTOBRANCHACEA Kuhn, 1965
**SI**: 390 • **CI**: c350 • **ST**: 1.D.M.40.R
**PN**: **CRYPTOBRANCHOIDEA** Kuhn, 1965.ka.c01 • **AK**
**PA**: 00 • **CRYPTOBRANCHOIDEA** • Kuhn 1965.ka: 33 • **bO**
01 • **CRYPTOBRANCHACEA** • Dubois 2015.da: 105 • **ER**
**RL**: ↓ **CRYPTOBRANCHES** 1805.da.c05
**GN**: **URODELA** 1805.da.c02
|**AMPHIBIA INCERTAE SEDIS**|
**GZ**: INR
**EN**: **KYR.** C.02.01. Classis **AMPHIBIA** Blainville, 1816.ba.c02-03

CRYPTOBRANCHIA Duméril, 1805
**SI**: 021 • **CI**: zh06 • **ST**: 1.U.U.99.E
**PN**: **CRYPTOBRANCHES** Duméril, 1805.da.c05 • **ZZ**
**PA**: 00 • **CRYPTOBRANCHES** • Duméril 1805.da: 97 • **O**
01 • **CRYPTOBRANCHIA** • Jourdan 1834.ja: 340 • **O**
02 • **CRYPTOBRANCHIATA** • Jourdan 1834.ja: 340 • **O**
**RL**, **GN, GZ, EN**: ●

CRYPTOBRANCHIA Wagler, 1828
**SI**: 097 • **CI**: c078 • **ST**: 3.D.M.41.E
**PN**: **CRYPTOBRANCHI** Wagler, 1828.wb.c04 • **AK**
**PA**: 00 • **CRYPTOBRANCHI** • Wagler 1828.wb: 859 • **'F'**
01 • **CRYPTOBRANCHIA** • *Hoc loco* • **EE**
**RL**: ↓ **CRYPTOBRANCHES** 1805.da.c05
**GN**: **PSEUDOSAURIA** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **PSEUDOSAURIA** Blainville, 1816.ba.c08-07

CRYPTOBRANCHIA Bonaparte, 1831
**SI**: 110 • **CI**: c091 • **ST**: 1.D.M.40.O
**PN**: **CRYPTOBRANCHIA** Bonaparte, 1831.bb.c01 • **AK**
**PA**: 00 • **CRYPTOBRANCHIA** • Bonaparte 1831.bb: 136 • **O**
01 • **CRYPTOBRANCHIAE** • Gray 1842.ga: 113 • **O**
**RL**: ↓ **CRYPTOBRANCHES** 1805.da.c05
**GN**: **IMPERFECTIBRANCHIA** 1838.ha.c03
**PSEUDOSAURIA** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12
[**HYP.** Subordo **NULLIBRANCHIA** Bonaparte**,** 1831.ba.c01-01]

CRYPTOBRANCHIFORMIA Milner, 2000
**SI**: 429 • **CI**: c389 • **ST**: 1.D.M.30.A
**PN**: **CRYPTOBRANCHIFORMES** Milner, 2000.ma.c02 • **AK**
**PA**: 00 • **CRYPTOBRANCHIFORMES** • Milner 2000.ma: 1412 • **iO**
01 • **CRYPTOBRANCHIFORMIA** • *Hoc loco* • **EA**
**RL**: INR
**GN**: **IMPERFECTIBRANCHIA** 1838.ha.c03
**GZ**: INR
**EN**: **KYR.** C.05.05. Subordo **IMPERFECTIBRANCHIA** Hogg, 1838.ha.c03-02

CRYPTOPLEURAE Fitzinger, 1843
**SI**: 175 • **CI**: c152 • **ST**: 2.D.M.31.O
**PN**: **CRYPTOPLEURAE** Fitzinger, 1843.fa.c07 • **AK**
**PA**: 00 • **CRYPTOPLEURAE** • Fitzinger 1843.fa: 33 • **Sc**
01 • **CRYPTOPLEURA** • Gray 1850.ga: 14, 15, 70 • **UC**
**RL**: **> PHAENEROPLEURAE** 1843.fa.c06 • **AI**: **HL**
**GN**: **PSEUDOSAURIA** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **PSEUDOSAURIA** Blainville, 1816.ba.c08-07

CYCLOGLENA Bruch, 1862

**SI**: 221 • **CI**: c195 • **ST**: 2.D.M.31.E

**PN**: **CYCLOGLENIDES** Bruch, 1862.ba.c01 • **AK**

**PA**: 00 • **CYCLOGLENIDES** • Bruch 1862.ba: 221 • **'F'**

01 • **CYCLOGLENA** • *Hoc loco* • **EE**

**RL**: > **PLAGIOGLENIDES** 1862.ba.c02 • **AI**: **HL**

> **PLAGIOGLENA** 1862.ba.c03 • **AI**: **HL**

**GN**: **PHANERANURA** DOP.da.c02

**SCOPTANURA** 1973.sb.c02

**GZ**: INR

**EN**: **TEO.** C.09.01. Epiphalanx **AQUIPARES** Blainville, 1816.ba.c07-02

[**HYP.** Phalanx **AQUIPARES** Blainville, 1816.ba.c07-03]

CYSTIGNATHOMORPHA Fejérváry, 1921

**SI**: 319 • **CI**: c292 • **ST**: 2.D.M.30.A

**PN**: **CYSTIGNATHOMORPHA** Fejérváry, 1921.fb.c07 • **AK**

**PA**: 00 • **CYSTIGNATHOMORPHA** • Fejérváry 1921.fb: 26 • **Gs**

**RL**: < **ANISOBATRACHOIDEA** 1921.fb.c04 • **PR**

< **PELOBATOMORPHA** 1921.fb.c05 • **AI**: **HL**

**GN**: **ANGUSTICOELA** 1958.ra.c01

**HYDROBATRACHIA** 1828.ra.c14

**GZ**: INR

**EN**: **KYR.** C.04.01. Ordo **ANURA** Duméril, 1805.da.c01-07

DACTYLETHRIFORMIA Brocchi, 1881

**SI**: 281 • **CI**: c255 • **ST**: 2.D.M.31.A

**PN**: **DACTYLERIFORMES** Brocchi, 1881.ba.c03 • **AK**

**PA**: 00 • **DACTYLERIFORMES** • Brocchi 1881.ba: 9 • **UC**

01 • **DACTYLETHRIFORMES** • Boulenger 1882.ba: 12 • **UC**

02 • **DACTYLETHRIFORMIA** • *Hoc loco* • **EA**

**RL**: INR

**GN**: **DORSIPARES** 1816.ba.c06

**GZ**: INR

**EN**: **KYR.** C.07.01. Hypoordo **DORSIPARES** Blainville, 1816.ba.c06-02

DELESURA Jan, 1857

**SI**: 204 • **CI**: c181 • **ST**: 1.D.A.30.O

**PN**: **DELESURA** Jan, 1857.ja.c01 • **AK**

**PA**: 00 • **DELESURA** • Jan 1857.ja: 54 • **O**

**RL**: ↔| **URODELES** 1805.da.c02

**GN**: **URODELA** 1805.da.c02

**GZ**: » **GX**:

**ANURA** 1805.da.c01

**GYMNOPHIONA** 1814.ra.c01

**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12

DENTATA Scopoli, 1777

**SI**: 011 • **CI**: zh05 • **ST**: 2.D.M.99.E

**PN**: **DENTATI** Scopoli, 1777.sa.c04 • **ZZ**

**PA**: 00 • **DENTATI** • Scopoli 1777.sa: 452 • **D**

01 • **DENTATA** • *Hoc loco* • **EE**

**RL**, **GN**, **GZ**, **EN**: ●

DENTATA Fatio, 1872

**SI**: 255 • **CI**: c229 • **ST**: 1.D.M.31.O

**PN**: **DENTATA** Fatio, 1872.fa.c02 • **AK**

**PA**: 00 • **DENTATA** • Fatio 1872.fa: 230, 293 • **D**

**RL**: ↓ < **DENTATA** 1777.sa.c04 • **AI**: **HL**

> **DENTATA** 1872.fa.c04 • **AI**: **HL**

**GN**: **GEOBATRACHIA** 1828.ra.c18

**MEDIOGYRINIA** 1878.la.c02

**GZ**: INR

**EN**: **KYR.** C.05.02. Subordo **HYDROBATRACHIA** Ritgen, 1828.ra.c14-01

DENTATA Fatio, 1872

**SI**: 257 • **CI**: c231 • **ST**: 1.D.M.41.O

**PN**: **DENTATA** Fatio, 1872.fa.c04 • **AK**

**PA**: 00 • **DENTATA** • Fatio 1872.fa: 230 • **D**

**RL**: ↓ < **DENTATA** 1777.sa.c04 • **AI**: **HL**

> **EDENTATA** 1872.fa.c03 • **AI**: **HL**

**GN**: **PHANERANURA** DOP.da.c02

**SCOPTANURA** 1973.sb.c02

**GZ**: INR

**EN**: **TEO.** C.09.01. Epiphalanx **AQUIPARES** Blainville, 1816.ba.c07-02

[**HYP.** Phalanx **AQUIPARES** Blainville, 1816.ba.c07-03]

DERMATOPHIONA Ritgen, 1828

**SI**: 075 • **CI**: c056 • **ST**: 2.D.M.31.E

**PN**: **DERMATOPHIDES** Ritgen, 1828.ra.c01 • **AK**

**PA**: 00 • **DERMATOPHIDES** • Ritgen 1828.ra: 258 • **He**

01 • [**DERMATO**]**PHES** • Agassiz 1847.aa: 346 • **UC**

02 • **DERMATOPHIONA** • *Hoc loco* • **EE**

**RL**: ↔ < **SCOLECODES** 1828.ra.c02 • **AI**: **HL**

↔ > **STOLIDOPHIDES** 1828.ra.c03 • **PR**

**GN**: **PSEUDOPHIONA** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.05.04. Subordo **PSEUDOPHIONA** Blainville, 1816.ba.c11-06

DEROTREMATA Müller, 1831

**SI**: 112 • **CI**: c093 • **ST**: 1.D.M.32.O

**PN**: **DEROTREMATA** Müller, 1831.ma.c01 • **AK**

**PA**: 00 • **DEROTREMATA** • Müller 1831.ma: 711 • **O**

01 • **DEIRETREMATA** • Leuckart 1840.la: 19 • **'F'**

02 • **DEIRETREMATA** • Leuckart 1841.la: 30 • **UC**

03 • **DEROTREMATA** • Fitzinger 1843.fa: 34 • **Sc**

04 • **DEROTREMATA** • Stannius 1856.sa: 4 • **bO**

05 • **DEROTERMATA** • Meyer 1860.ma: 50 • **O**

06 • **DEROTREMA** • Claus 1868.cb: 585 • **bO**

07 • **DEROTREMA** • Knauer 1878.ka: 96 • **UC**

**RL**: < **NULLIBRANCHIA** 1831.ba.c01 • **AI**: Dubois 2015: 49

**GN**: **IMPERFECTIBRANCHIA** 1838.ha.c03

**PSEUDOSAURIA** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12

[**HYP.** Subordo **NULLIBRANCHIA** Bonaparte**,** 1831.ba.c01-01]

DEROTRETA Van der Hoeven, 1833

**SI**: 118 • **CI**: c098 • **ST**: 1.D.M.03.O

**PN**: **DEROTRETA** Van der Hoeven, 1833.va.c01 • **HK**

**PA**: 00 • **DEROTRETA** • Van der Hoeven 1833.va: iii, 302 • **O**

01 • **DEROTRETA** • Dubois 2015.da: 51 • **pO**

**RL**: INR

**GN**: **GYMNOPHIONA** 1814.ra.c01

**URODELA** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **LISSAMPHIBIA** Gadow, 1898.ga.c01-00

[**HYP.** Superordo **Derotreta** Van der Hoeven, 1833.va.c01-01]

Diadactylobatrachia Ritgen, 1828

**SI**: 091 • **CI**: c072 • **ST**: 2.D.M.32.E

**PN**: **Diadactylobatrachi** Ritgen, 1828.ra.c17 • **ak**

**PA**: 00 • **Diadactylobatrachi** • Ritgen 1828.ra: 278 • **'F'**

01 • **Diadactylobatrachia** • *Hoc loco* • **EE**

**RL**: ↔ < **Geobatrachi** 1828.ra.c18 • **AI**: **HL**

**GN**: **Dorsipares** 1816.ba.c06

**Laevogyrinia** 1878.la.c01

**GZ**: INR

**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Dimela Gouriet, 1868

**SI**: 248 • **CI**: c222 • **ST**: 1.D.M.31.E

**PN**: **Dimeles** Gouriet, 1868.ga.c03 • **ak**

**PA**: 00 • **Dimeles** • Gouriet 1868.ga: 206 • **UC**

01 • **Dimela** • *Hoc loco* • **EE**

**RL**: INR

**GN**: **Meantes** 1767.la.c01

**GZ**: INR

**EN**: **KYR.** C.05.06. Subordo **Meantes** Linné, 1767.la.c01-01

Diplasiocoela Nicholls, 1916

**SI**: 305 • **CI**: c278 • **ST**: 1.D.M.31.O

**PN**: **Diplasiocoela** Nicholls, 1916.na.c04 • **ak**

**PA**: 00 • **Diplasiocoela** • Nicholls 1916.na: 87 • **'T'**

01 • **Diplasiocoelina** • Pearse 1936.pa: 20 • **bO**

**RL**: INR

**GN**: **Phaneranura** DOP.da.c02

**Scoptanura** 1973.sb.c02

**GZ**: INR

**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02

[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Diplasiocoela Noble 1922

**SI**: 324 • **CI**: c297 • **ST**: 1.D.M.21.O

**PN**: **Diplasiocoela** Noble 1922.na.c03 • **ak**

**PA**: 00 • **Diplasiocoela** • Noble 1922.na: 22 • **bO**

**RL**: ↓ **Diplasiocoela** 1916.na.c04

**GN**: **Gastrechmia** 1867.ca.c02

**Pananura** DOP.da.c07

**GZ**: INR

**EN**: **TEO.** C.10.03. Phalanx **Scoptanura** Starrett, 1973.sb.c02-02

[**HYP.** Subphalanx unnamed]

Diplasiocoela Ahl, 1930

**SI**: 338 • **CI**: c311 • **ST**: 1.D.M.21.O

**PN**: **Diplasiocoela** Ahl, 1930.aa.c03 • **ak**

**PA**: 00 • **Diplasiocoela** • Ahl 1930.aa: 85 • **bO**

01 • **Displaciocoela** • Casamiquela 1961.ca: 77, 80 • **bO**

**RL**: ↓ **Diplasiocoela** 1916.na.c04

**GN**: **Ecostata** 1879.lb.c04

**Gastrechmia** 1867.ca.c02

**Pananura** DOP.da.c07

**GZ**: INR

**EN**: **TEO.** C.10.03. Phalanx **Scoptanura** Starrett, 1973.sb.c02-02

Diplopneuma Hogg, 1838

**SI**: 131 • **CI**: c111 • **ST**: 1.D.M.31.E

**PN**: **Diplopneumena** Hogg, 1838.ha.c04 • **ak**

**PA**: 00 • **Diplopneumena** • Hogg 1838.ha: 152 • **bC**

01 • **Diplopneumona** • Agassiz 1847.aa: 363 • **UC**

02 • **Diplopneuma** • *Hoc loco* • **EE**

**RL**: > **Manentibranchia** 1838.ha.c06 • **PR**

**GN**: **Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Diplopneuma Hogg, 1838

**SI**: 143 • **CI**: c121 • **ST**: 1.D.M.40.E

**PN**: **Diplopneumena** Hogg, 1839.ha.c08 • **ak**

**PA**: 00 • **Diplopneumena** • Hogg 1839.ha: 274 • **bC**

01 • **Diplopneumona** • Agassiz 1847.aa: 363 • **bC**

02 • **Diplopneuma** • Duméril 1863.da: 301 • **bC**

**RL**: ↓ **Diplopneumena** 1838.ha.c05

> **Lacertiformi** 1839.ha.c06 • **PR**

**GN**: **Imperfectibranchia** 1838.ha.c03

**Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Diplopnoa Bonaparte, 1838

**SI**: 127 • **CI**: c107 • **ST**: 1.D.M.30.O

**PN**: **Diplopnoa** Bonaparte, 1838.bd.c02 • **ak**

**PA**: 00 • **Diplopnoa** • Bonaparte 1838.bd: 124 • **bC**

01 • **Diplopnoa** • Van der Hoeven 1864.va: 288 • **Sc**

**RL**: ↔! < **Dipnoa** 1838.bd.c01

**GN**: **Anura** 1805.da.c01

**Gymnophiona** 1814.ra.c01

**Urodela** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

**Diplosiphona** Günther, 1859

**SI**: 212 • **CI**: c189 • **ST**: 2.D.M.11.O

**PN**: **Diplosiphona** Günther, 1859.ga.c02

**PA**: 00 • **Diplosiphona** • Günther 1859.ga: vii, 3 • **Sr**

01 • **Diplosiphona** • *Hoc loco* • **bP**

**RL**: INR

**GN**: **Diplosiphona** 1859.ga.c02

**GZ**: INR

**EN**: **KYR.** C.11.02. Subphalanx **Diplosiphona** Günther, 1859.ga.c02-01

Dipnoa Leuckart, 1821

**SI**: 055 • **CI**: c037 • **ST**: 1.D.M.30.O

**PN**: **Dipnoa** Leuckart, 1821.la.c02 • **ak**

**PA**: 00 • **Dipnoa** • Leuckart 1821.la: 258 • **O**

01 • **Dipnoa** • Van der Hoeven 1833.va: iii, 302 • **Sc**

02 • **Dipnoa** • Leuckart 1840.la: 19 • **D**

03 • **Dipnoa** • Stannius 1856.sa: 3 • **bC**

**RL**: INR

**GN**: **Anura** 1805.da.c01

**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Dipnoa Wagler, 1828
**SI**: 094 • **CI**: c075 • **ST**: 3.D.M.41.O
**PN**: **Dipnoa** Wagler, 1828.wb.c01 • **ak**
**PA**: 00 • **Dipnoa** • Wagler 1828.wb: 859 • **'T'**
**RL**: ↓ **Dipnoa** 1821.la.c02
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Dipnoa Bonaparte, 1838
**SI**: 126 • **CI**: c106 • **ST**: 1.D.M.40.O
**PN**: **Dipnoa** Bonaparte, 1838.bd.c01 • **ak**
**PA**: 00 • **Dipnoa** • Bonaparte 1838.bd: 124 • **bC**
01 • **Dipnoa** • Leuckart 1840.la: 20 • **Ab**
02 • **Dipnoa** • Fitzinger 1843.fa: 12 • **O**
03 • **Dipnoa** • Tschudi 1845.ta: 167 • **Sr**
04 • **Dipnoa** • Van der Hoeven 1855.va: x, 459 • **Sc**
**RL**: ↓ **Dipnoa** 1821.la.c02
¡↔ > **Diplopnoa** 1837.ba.c02
**GN**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Dipoda Blainville, 1816
**SI**: 045 • **CI**: zh10 • **ST**: 1.U.U.99.E
**PN**: **Dipodes** Blainville, 1816.da.c13 • **zz**
**PA**: 00 • **Dipodes** • Blainville 1816.ba: "112" [120] • **O**
01 • **Dipoda** • Jourdan 1834.ja: 397 • **UC**
**RL**, **GN**, **GZ**, **EN**: ●

Dipoda Hogg, 1839
**SI**: 137 • **CI**: c115 • **ST**: 1.D.M.41.O
**PN**: **Dipoda** Hogg, 1839.ha.c02 • **ak**
**PA**: 00 • **Dipoda** • Hogg 1839.ha: 271 • **O**
**RL**: ↓ **Dipodes** 1816.da.c13
**GN**: **Meantes** 1767.la.c01
**GZ**: INR
**EN**: **KYR.** C.05.06. Subordo **Meantes** Linné, 1767.la.c01-01

Discodactyla Knauer, 1878
**SI**: 268 • **CI**: c242 • **ST**: 1.D.M.31.E
**PN**: **Discodactylia** Knauer, 1878.ka.c04 • **ak**
**PA**: 00 • **Discodactylia** • Knauer 1878.ka: 109 • **Gr**
01 • **Discodactyla** • *Hoc loco* • **EE**
**RL**: INR
**GN**: **Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Discodactyla Blanchard, 1885
**SI**: 286 • **CI**: c260 • **ST**: 1.D.M.40.E
**PN**: **Discodactyles** Blanchard, 1885.bb.c02 • **ak**
**PA**: 00 • **Discodactyles** • Blanchard 1885.bb: 588 • **UC**
01 • **Discodactyla** • *Hoc loco* • **EE**
**RL**: ↓ **Discodactyla** 1878.ka.c04
**GN**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05
**GZ**: INR
**EN**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00

Discoglossacea Laurent *in* Fuhn, 1960
**SI**: 370 • **CI**: cn02 • **ST**: 1.D.M.00.R
**PN**: **Discoglossoidea** Laurent *in* Fuhn, 1960.fa.c02 • **an**
**PA**: 00 • **Discoglossoidea** • Laurent *in* Fuhn 1960.fa: 163 • **bO**
01 • **Discoglossacea** • *Hoc loco* • **ER**
**RL**: INR
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Discoglossacea Sokol, 1977
**SI**: 400 • **CI**: c360 • **ST**: 1.D.M.30.R
**PN**: **Discoglossoidei** Sokol, 1977.sa.c01 • **ak**
**PA**: 00 • **Discoglossoidei** • Sokol 1977.sa: 505 • **bO**
01 • **Discoglossacea** • Dubois 2015.da: 106 • **ER**
**RL**: INR
**GN**: **Angusticoela** 1958.ra.c01
**Hydrobatrachia** 1828.ra.c14
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

**Dorsipares** Blainville, 1816
**SI**: 038 • **CI**: c025 • **ST**: 1.D.M.11.O
**PN**: **Dorsipares** Blainville, 1816.ba.c06
**PA**: 00 • **Dorsipares** • Blainville 1816.ba: '111' [119] • **bO**
01 • **Dorsipari** • Jourdan 1834.ja: 409 • **bO**
02 • **Dorsipares** • *Hoc loco* • **hO**
**RL**: INR
**GN**: **» OA, SD**: Ducrotay Blainville 1822.da: 5: **Dorsipares** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Duplogyrinia Lataste, 1888
**SI**: 288 • **CI**: c262 • **ST**: 1.D.M.30.E
**PN**: **Duplogyrinidae** Lataste, 1888.la.c01 • **ak**
**PA**: c0 • **Duplogyrinidae** • Lataste 1888.la: 240 • **UC**
i1• **Duplogyrinides** • Lataste 1888.la: 240 • **UC**
02 • **Duplogyrinia** • *Hoc loco* • **EE**
**RL**: ← **Amphigyrinia** 1885.bb.c01
**GN**: **Dorsipares** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Dysmolgae Ritgen, 1828
**SI**: 079 • **CI**: c060 • **ST**: 2.D.M.31.O

**PN**: **Dysmolgae** Ritgen, 1828.ra.c05 • **ak**

**PA**: 00 • **Dysmolgae** • Ritgen 1828.ra: 277 • **Zg**

**RL**: ↔ > **Branchiuromolgaei** 1828.ra.c04 • **AI**: **HL**

**GN**: **Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

**Ecaudata** Scopoli, 1777

**SI**: 013 • **CI**: c004 • **ST**: 1.D.M.11.O

**PN**: **Ecaudata** Scopoli, 1777.sa.c06

**PA**: 00 • **Ecaudata** • Scopoli 1777.sa: 464 • **O**

01 • **Ecaudata** • *Hoc loco* • **iP**

**RL**: INR

**GN**: **Ecaudata** 1777.sa.c06

**GZ**: INR

**EN**: **KYR.** C.12.03. Infraphalanx **Ecaudata** Scopoli, 1777.sa.c06-01

Ecaudata Duméril, 1805

**SI**: 019 • **CI**: c010 • **ST**: 2.D.A.40.E

**PN**: **Ecaudati** Duméril, 1805.da.c03 • **ak**

**PA**: 00 • **Ecaudati** • Duméril 1805.da: 929 • **'F'**

01 • **Ecaudata** • Oppel 1811.ob: 409 • **'F'**

02 • **Ecaudata** • Leuckart 1821.la: 259 • **UC**

03 • **Ecaudata** • Hemprich 1829.ha: xix, 373 • **Fo**

04 • **Ecaudata** • Wiegmann[+1] 1832.wa: 198 • **bO**

05 • **Ecaudata** • Gravenhorst 1843.ga: 393 • **Zt**

06 • **Ecaudata** • Haeckel 1866.ha: cxxxii • **O**

07 • **Exaudata** • Zittel 1888.za: 421 • **O**

08 • **Ecaudata** • Haeckel 1889.ha: 625 • **L**

09 • **Eucaudata** • Tilak[+1] 1977.ta: 196 • **bC**

**RL**: ↓ **Ecaudata** 1777.sa.c06

↔ < **Anoures** 1805.da.c01 • **SD**

**GN**: **Anura** 1805.da.c01

**GZ**: » **GX**:

**Gymnophiona** 1814.ra.c01

**Urodela** 1805.da.c02

**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Ecaudata Jarocki, 1822

**SI**: 059 • **CI**: c041 • **ST**: 1.D.M.41.E

**PN**: **Ecaudata** Jarocki, 1822.ja.c02 • **ak**

**PA**: 00 • **Ecaudata** • Jarocki 1822.ja: 137 • **O**

**RL**: ↓ **Ecaudata** 1777.sa.c06

**GN**: **Dorsipares** 1816.ba.c06

**Laevogyrinia** 1878.la.c01

**GZ**: INR

**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Ecaudata Van der Hoeven, 1828

**SI**: 093 • **CI**: c074 • **ST**: 3.D.M.41.E

**PN**: **Ecaudati** Van der Hoeven, 1828.va.c01 • **ak**

**PA**: 00 • **Ecaudati** • Van der Hoeven 1828.va: pl. • **'F'**

01 • **Ecaudata** • *Hoc loco* • **EE**

**RL**: ↓ **Ecaudata** 1777.sa.c06

**GN**: **Phaneranura** DOP.da.c02

**Scoptanura** 1973.sb.c02

**GZ**: INR

**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02

[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Ecaudata Wagler, 1830

**SI**: 105 • **CI**: c086 • **ST**: 2.D.M.41.E

**PN**: **Ecaudatae** Wagler, 1830.wa.c04 • **ak**

**PA**: 00 • **Ecaudatae** • Wagler 1830.wa: 131 • **D**

01 • **Ecaudata** • Leunis 1844.la: 144 • **'F'**

02 • **Acaudata** • Knauer 1878.ka: 100 • **O**

03 • **Ecaudata** • Lataste 1879.la: 339 • **O**

**RL**: ↓ **Ecaudata** 1777.sa.c06

**GN**: **Geobatrachia** 1828.ra.c18

**Mediogyrinia** 1878.la.c02

**GZ**: INR

**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Ecaudata Hoffmann, 1878

**SI**: 261 • **CI**: c235 • **ST**: 1.D.M.41.O

**PN**: **Ecaudata** Hoffmann, 1878.ha.c01 • **ak**

**PA**: 00 • **Ecaudata** • Hoffmann 1878.ha: 615 • **O**

**RL**: ↓ **Ecaudata** 1777.sa.c06

< **Theriomorphi** 1878.ha.c02 • **AI**: **HL**

**GN**: **Angusticoela** 1958.ra.c01

**Hydrobatrachia** 1828.ra.c14

**GZ**: INR

**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

**Ecostata** Lataste, 1879

**SI**: 278 • **CI**: c252 • **ST**: 1.D.M.11.E

**PN**: **Ecostati** Lataste, 1879.lb.c04

**PA**: 00 • **Ecostati** • Lataste 1879.lb: 339 • **'bT'**

01 • **Ecostata** • Dubois[+2] 2016.da: 49 • **EE**

02 • **Ecostata** • *Hoc loco* • **bP**

**RL**: INR

**GN**: **Ecostata** 1879.lb.c04

**GZ**: INR

**EN**: **KYR.** C.11.03. Subphalanx **Ecostata** Lataste, 1879.lb.c04-02

Edentata Scopoli, 1777

**SI**: 010 • **CI**: zh04 • **ST**: 2.D.M.99.E

**PN**: **Edentati** Scopoli, 1777.sa.c03 • **zz**

**PA**: 00 • **Edentati** • Scopoli 1777.sa: 452 • **D**

01 • **Edentata** • *Hoc loco* • **EE**

**RL, GN, GZ, EN**: ●

Edentata Fatio, 1872

**SI**: 256 • **CI**: c230 • **ST**: 1.D.M.41.O

**PN**: **Edentata** Fatio, 1872.fa.c03 • **ak**

**PA**: 00 • **Edentata** • Fatio 1872.fa: 230 • **D**

**RL**: ↓ **Edentati** 1777.sa.c03

< **Dentata** 1872.fa.c04 • **AI**: **HL**

< **Edentata** 1872.fa.c05 • **AI**: **HL**

**GN**: **Phaneranura** DOP.da.c02

**Scoptanura** 1973.sb.c02

**GZ**: INR

**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02

[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

EDENTATA Fatio, 1872
**SI**: 258 • **CI**: c232 • **ST**: 1.D.M.41.O
**PN**: **EDENTATA** Fatio, 1872.fa.c05 • **AK**
**PA**: 00 • **EDENTATA** • Fatio 1872.fa: 230, 417 • **D**
**RL**: ↓ **EDENTATI** 1777.sa.c03
> **EDENTATA** 1872.fa.c03 • **AI**: **HL**
**GN**: **HYLOBATRACHIA** 1828.ra.c16
**GZ**: INR
**EN**: **KYR.** C.13.03. Hypophalanx **HYLOBATRACHIA** Ritgen, 1828.ra.c16-01

EOAPODA Duellman$^{+1}$, 2007
**SI**: 432 • **CI**: c392 • **ST**: 1.D.M.31.O
**PN**: **EOAPODA** Duellman$^{+1}$, 2007.da.c01 • **AK**
**PA**: 00 • **EOAPODA** • Duellman$^{+1}$ 2007.da: 2129 • **bO**
**RL**: INR
**GN**: **|GYMNOPHIONA INCERTAE SEDIS|**
**GZ**: INR
**EN**: **KYR.** C.04.02. Ordo **GYMNOPHIONA** Rafinesque, 1814.ra.c01-02

EPICRIACEA Lescure$^{+2}$, 1986
**SI**: 414 • **CI**: c374 • **ST**: 1.D.M.31.R
**PN**: **EPICRIIDEI** Lescure$^{+2}$, 1986.lb.c02 • **AK**
**PA**: 00 • **EPICRIIDEI** • Lescure$^{+2}$ 1986.lb: 152 • **iO**
01 • **EPICRIACEA** • *Hoc loco* • **ER**
**RL**: INR
**GN**: **PSEUDOPHIONA** 1816.ba.c11
**GZ**: INR
**EN**: **KYR.** C.05.04. Subordo **PSEUDOPHIONA** Blainville, 1816.ba.c11-06

EUAMPHIBIA Goodrich, 1930
**SI**: 343 • **CI**: c316 • **ST**: 3.D.M.30.O
**PN**: **EUAMPHIBIA** Goodrich, 1930.ga.c05 • **AK**
**PA**: 00 • **EUAMPHIBIA** • Goodrich 1930.ga: 319 • **UC**
**RL**: INR
**GN**: **ANURA** 1805.da.c01
**GYMNOPHIONA** 1814.ra.c01
**URODELA** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **LISSAMPHIBIA** Gadow, 1898.ga.c01-00

EUANURA Piveteau, 1937
**SI**: 360 • **CI**: c330 • **ST**: 1.D.A.31.E
**PN**: **EUANOURA** Piveteau, 1937.pa.c01 • **AK**
**PA**: 00 • **EUANOURA** • Piveteau 1937.pa: 169 • **bO/O**
01 • **EU-ANURA** • Kuhn 1939.ka: 18 • **bO**
02 • **EUANURA** • Kuhn 1939.ka: 91 • **bO**
03 • **EOANURA** • Pearse 1948.pa: 20 • **O**
**RL**: ← **ANOURES** 1805.da.c01
> **PROANOURA** 1937.pa.c02 • **AI**: **HL**
**GN**: **ANURA** 1805.da.c01
**GZ**: » **GX**:
**GYMNOPHIONA** 1814.ra.c01
**URODELA** 1805.da.c02
**EN**: **KYR.** C.04.01. Ordo **ANURA** Duméril, 1805.da.c01-07

EUBATRACHIA Gouriet, 1868
**SI**: 247 • **CI**: c221 • **ST**: 1.D.M.30.E
**PN**: **EUBATRACIENS** Gouriet, 1868.ga.c02 • **AK**
**PA**: 00 • **EUBATRACIENS** • Gouriet 1868.ga: 204 • **Sr**
01 • **EUBATRACHIA** • Miranda-Ribeiro 1924.ma: 137 • **UC**
**RL**: > **PULMONES** 1868.ga.c01 • **AI**: **HL**
> **ATRETODERES** 1868.ga.c05 • **AI**: **HL**
**GN**: **ANURA** 1805.da.c01
**GYMNOPHIONA** 1814.ra.c01
**URODELA** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **LISSAMPHIBIA** Gadow, 1898.ga.c01-00

EUGLOSSA Bauer, 1987
**SI**: 418 • **CI**: c378 • **ST**: 1.D.M.30.O
**PN**: **EUGLOSSA** Bauer, 1987.bc.c03 • **AK**
**PA**: 00 • **EUGLOSSA** • Bauer 1987.bc: 52 • **UC**
**RL**: INR
**GN**: **DORSIPARES** 1816.ba.c06
**LAEVOGYRINIA** 1878.la.c01
**GZ**: INR
**EN**: **KYR.** C.06.01. Infraordo **GEOBATRACHIA** Ritgen, 1828.ra.c18-02

EXOBRANCHIA Duméril$^{+1}$, 1841
**SI**: 159 • **CI**: c136 • **ST**: 2.D.M.31.E
**PN**: **EXOBRANCHES** Duméril$^{+1}$, 1841.da.c06 • **AK**
**PA**: 00 • **EXOBRANCHES** • Duméril$^{+1}$ 1841.da: 52 • **Gr/Sc/‘T’**
01 • **EXOBRANCHIA** • *Hoc loco* • **EE**
**RL**: < **ATRETODERES** 1841.da.c03 • **AI**: **HL**
> **PEROBRANCHES** 1841.da.c04 • **AI**: **HL**
< **AMPHIUMOIDES** 1841.da.c05 • **AI**: **HL**
< **TREMATODERES** 1841.da.c08 • **AI**: **HL**
**GN**: **PSEUDOSAURIA** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **PSEUDOSAURIA** Blainville, 1816.ba.c08-07

EXTERNIBRANCHIA Hogg, 1839
**SI**: 145 • **CI**: c123 • **ST**: 1.D.M.31.O
**PN**: **EXTERNIBRANCHIA** Hogg, 1839.hb.c02 • **AK**
**PA**: 00 • **EXTERNIBRANCHIA** • Hogg 1839.hb: 375 • **‘T’**
**RL**: INR
**GN**: **MEANTES** 1767.la.c01
**PSEUDOSAURIA** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12
[**HYP.** Subordo **PNEUMOBRANCHIA** Sonnini$^{+1}$, 1801.sa.c01-02]

FIRMISTERNIA Cope, 1875
**SI**: 259 • **CI**: c233 • **ST**: 1.D.M.31.O
**PN**: **FIRMISTERNIA** Cope, 1875.ca.c01 • **AK**
**PA**: 00 • **FIRMISTERNIA** • Cope 1875.ca: 8 • **bO**
01 • **FIRMISTERNIA** • Boulenger 1882.bb: vii, 2 • **Sr**
02 • **FIRMISTERNIA** • Zittel 1888.za: 428 • **UC**
03 • **FIRMISTERNIA** • Cope 1889.ca: 246 • **‘pF’**
**RL**: INR
**GN**: **PHANERANURA** DOP.da.c02
**SCOPTANURA** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **AQUIPARES** Blainville,

1816.ba.c07-02

[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Firmisternia Zittel, 1888

**SI**: 290 • **CI**: c263 • **ST**: 2.D.M.41.O

**PN**: **Firmisternia** Zittel, 1888.za.c02 • **ak**

**PA**: 00 • **Firmisternia** • Zittel 1888.za: viii, 428 • **UC**

**RL**: ↓ **Firmisternia** 1875.ca.c01

**GN**: **Ecaudata** 1777.sa.c06

|**Hydrobatrachia incertae sedis**|

**GZ**: INR

**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Firmisternia Abel, 1919

**SI**: 308 • **CI**: c281 • **ST**: 2.D.M.21.O

**PN**: **Firmisternia** Abel, 1919.aa.c01 • **ak**

**PA**: 00 • **Firmisternia** • Abel 1919.aa: xii, 324 • **R**

**RL**: ↓ **Firmisternia** 1875.ca.c01

**GN**: **Ecostata** 1879.lb.c04

**Pananura** DOP.da.c07

**GZ**: INR

**EN**: **TEO.** C.10.03. Phalanx **Scoptanura** Starrett, 1973.sb.c02-02

[**HYP.** Subphalanx unnamed]

Firmisternia Goodrich, 1930

**SI**: 339 • **CI**: c312 • **ST**: 2.D.M.41.O

**PN**: **Firmisternia** Goodrich, 1930.ga.c01 • **ak**

**PA**: 00 • **Firmisternia** • Goodrich 1930.ga: xxi • **Sc**

**RL**: ↓ **Firmisternia** 1875.ca.c01

**GN**: **Dorsipares** 1816.ba.c06

**Laevogyrinia** 1878.la.c01

**GZ**: INR

**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

**Gaianura nov.**

**SI**: 439 • **CI**: c398 • **ST**: 1.D.M.11.O

**PN**: **Gaianura nov.**, DOP.da.c06

**PA**: 00 • **Gaianura** • *Hoc loco* • **hP**

**RL**: INR

**GN**: **Gaianura** DOP.da.c06

**GZ**: INR

**EN**: **KYR.** C.13.01. Hypophalanx **Gaianura nov.**, DOP.da.c06-00

**Gastrechmia** Cope, 1867

**SI**: 242 • **CI**: c216 • **ST**: 1.D.M.11.O

**PN**: **Gastrechmia** Cope, 1867.ca.c02

**PA**: 00 • **Gastrechmia** • Cope 1867.ca: 190 • **bO**

01 • **Gastrechmia** • Hoffmann 1878.ha: 598 • **UC**

02 • **Gastrechmia** • Cope 1889.ca: 246 • **'pF'**

03 • **Gastrechmia** • *Hoc loco* • **bP**

**RL**: INR

**GN**: **Gastrechmia** 1867.ca.c02

**GZ**: INR

**EN**: **KYR.** C.11.04. Subphalanx **Gastrechmia** Cope, 1867.ca.c02-03

Gastrechmia Miranda-Ribeiro, 1924

**SI**: 331 • **CI**: c304 • **ST**: 2.D.M.21.O

**PN**: **Gastrechmia** Miranda-Ribeiro, 1924.ma.c06 • **ak**

**PA**: 00 • **Gastrechmia** • Miranda-Ribeiro 1924.ma: 143 • **UC**

**RL**: ↓ **Gastrechmia** 1867.ca.c02

**GN**: **Ecostata** 1879.lb.c04

**Gastrechmia** 1867.ca.c02

**GZ**: INR

**EN**: **TEO.** C.10.03. Phalanx **Scoptanura** Starrett, 1973.sb.c02-02

[**HYP.** Subphalanx **Scoptanura** Starrett, 1973.sb.c02-02]

**Geobatrachia** Ritgen, 1828

**SI**: 092 • **CI**: c073 • **ST**: 2.D.M.12.E

**PN**: **Geobatrachi** Ritgen, 1828.ra.c18

**PA**: 00 • **Geobatrachi** • Ritgen 1828.ra: 278 • **'F'**

01 • **Geobatrachia** • Dubois[+2] 2016.db: 49 • **EE**

02 • **Geobatrachia** • *Hoc loco* • **iO**

**RL**: ↔ > **Diadactylobatrachi** 1828.ra.c17 • **AI**: **HL**

**GN**: **Dorsipares** 1816.ba.c06

**Laevogyrinia** 1878.la.c01

**GZ**: INR

**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Geodytae Fitzinger, 1843

**SI**: 173 • **CI**: c150 • **ST**: 2.D.M.31.O

**PN**: **Geodytae** Fitzinger, 1843.fa.c05 • **ak**

**PA**: 00 • **Geodytae** • Fitzinger 1843.fa: 33 • **Sc**

01 • **Geoditae** • Tschudi 1845.tb: 78 • **Sc**

**RL**: INR

**GN**: **Dorsipares** 1816.ba.c06

**Laevogyrinia** 1878.la.c01

**GZ**: INR

**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Geomolgae Ritgen, 1828

**SI**: 085 • **CI**: c066 • **ST**: 2.D.M.31.O

**PN**: **Geomolgae** Ritgen, 1828.ra.c11 • **ak**

**PA**: 00 • **Geomolgae** • Ritgen 1828.ra: 279 • **'F'**

**RL**: > **Pododysmolgae** 1828.ra.c07 • **AI**: **HL**

< **Morphiuromolgaei** 1828.ra.c08 • **PR**

< **Molgae** 1828.ra.c09 • **AI**: **HL**

> **Hydromolgae** 1828.ra.c10 • **AI**: **HL**

**GN**: **Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Geophili Menke, 1828

**SI**: 074 • **CI**: zh15 • **ST**: 1.U.U.99.E

**PN**: **Geophilae** Menke, 1828.ma.c01 • **zz**

**PA**: 00 • **Geophilae** • Menke 1828.ma: 7 • **bO**

01 • **Geophila** • Jourdan 1834.ja: 542 • **UC**

02 • **Geophili** • *Hoc loco* • **EE**

**RL**, **GN**, **GZ**, **EN**: ●

Geophili Fitzinger, 1843

**SI**: 176 • **CI**: c153 • **ST**: 2.D.M.40.E

**PN**: **Geophili** Fitzinger, 1843.fa.c08 • **ak**

**PA**: 00 • **Geophili** • Fitzinger 1843.fa: 33 • **Sc**

01 • **Elophile** • Gray 1850.ga: 14, 70 • **UC**

**RL**: ↓ **Geophila** 1828.ma.c01

**> Hydrophili** 1843.fa.c09 • **AI**: **HL**

**GN**: **Imperfectibranchia** 1838.ha.c03

**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte, 1831.ba.c01-01]

**Gondwanura nov.**
**SI**: 434 • **CI**: c393 • **ST**: 1.D.M.11.O
**PN**: **Gondwanura nov.**, DOP.da.c01
**PA**: 00 • **Gondwanura** • *Hoc loco* • **P**
**RL**: INR
**GN**: **Gondwanura** DOP.da.c01
**GZ**: INR
**EN**: **KYR.** C.10.01. Phalanx **Gondwanura nov.**, DOP.da.c01-00

Gongylura Duméril[+2], 1854
**SI**: 198 • **CI**: c175 • **ST**: 2.D.M.31.E
**PN**: **Gongylures** Duméril[+2], 1854.da.c04 • **ak**
**PA**: 00 • **Gongylures** • Duméril[+2] 1854.da: 38 • **UC**
01 • **Gongylura** • *Hoc loco* • **EE**
**RL**: ↔ > **Rotondicaudes** 1854.da.c03 • **AI**: **HL**
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Gradientia Laurenti, 1768
**SI**: 007 • **CI**: mc03 • **ST**: 1.D.M.99.O
**PN**: **Gradientia** Laurenti, 1768.la.c02 • **za**
**PA**: 00 • **Gradientia** • Laurenti 1768.la: 36 • **O**
**RL**: INR
**GN**: **Amphibia** 1816.ba.c02
|**Amniota**|
**GZ**: INR
**EN**: ●

Gradientia Merrem, 1820
**SI**: 051 • **CI**: c033 • **ST**: 1.D.M.41.O
**PN**: **Gradientia** Merrem, 1820.ma.c02 • **ak**
**PA**: 00 • **Gradientia** • Merrem 1820.ma: 163 • **O**
**RL**: ↓ **Gradientia** 1768.la.c02
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Gradientia Gray, 1850
**SI**: 189 • **CI**: c166 • **ST**: 1.D.M.40.O
**PN**: **Gradientia** Gray, 1850.ga.c01 • **ak**
**PA**: 00 • **Gradientia** • Gray 1850.ga: 5, 13 • **bO**
**RL**: ↓ **Gradientia** 1768.la.c02
< **Pseudosauria** 1850.ga.c02 • **PR**
< **Meantia** 1850.ga.c04 • **PR**
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte, 1831.ba.c01-01]

Gymnobatrachia Miranda-Ribeiro, 1924
**SI**: 327 • **CI**: C300 • **ST**: 2.D.O.31.O
**PN**: **Gymnobatrachia** Miranda-Ribeiro, 1924.ma.c02 • **ak**
**PA**: 00 • **Gymnobatrachia** • Miranda-Ribeiro 1924.ma: 138 • **UC**
**RL**: ↔| **Anoures** 1805.da.c01
> **Anonyxia** 1924.ma.c04 • **PR**
> **Thoracechmia** 1924.ma.c05 • **PR**
↔ > **Protosternia** 1924.ma.c08 • **AI**: **HL**
> **Therosternia** 1924.ma.c09 • **PR**
**GN**: **Anura** 1805.da.c01
**GZ**: » **GX**:
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Gymnoderma Rüppell, 1845
**SI**: 180 • **CI**: c157 • **ST**: 1.D.M.30.O
**PN**: **Gymnoderma** Rüppell, 1845.ra.c01 • **ak**
**PA**: 00 • **Gymnoderma** • Rüppell 1845.ra: 313 • **O**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

**Gymnophiona** Rafinesque, 1814
**SI**: 031 • **CI**: c018 • **ST**: 1.S.O.10.E
**PN**: **Gymnophia** Rafinesque, 1814.ra.c01
**PA**: 00 • **Gymnophia** • Rafinesque 1814.ra: 104 • **O**
01 • **Gymnophidia** • Müller 1831.ma: 711 • **O**
02 • **Gymnophiona** • Müller 1832.mb: 198 • **O**
03 • **Gymnophiona** • Huxley 1871.ha: 173 • **UC**
04 • **Gymnophiona** • Abel 1919.aa: xii, 332 • **bC**
05 • **Gymnophiones** • Goodrich 1930.ga: xxi • **bC**
06 • **Gymnophiones** • Goodrich 1930.ga: xxi • **O**
07 • **Gymnophiona** • Von Huene 1948.ha: 66 • **bO**
08 • **Gymnophiona** • Milner 1988.ma: 82 • **pO**
09 • **Gymonophiona** • Dubois[+1] 2005.db: 356 • **O**
10 • **Gymnophona** • Wilkinson[+2] 2009.wa: 413 • **O**
**RL**: INR
**GN**: **Gymnophiona** 1814.ra.c01
**GZ**: » **GX**:
**Anura** 1805.da.c01
**Urodela** 1805.da.c02
**EN**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814.ra.c01-02

Haplosiphona Günther, 1859
**SI**: 211 • **CI**: c188 • **ST**: 2.D.M.31.O
**PN**: **Haplosiphona** Günther, 1859.ga.c01 • **ak**
**PA**: 00 • **Haplosiphona** • Günther 1859.ga: vii, 1 • **Sr**
**RL**: INR
**GN**: **Dorsipares** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Hedraeoglossa Wagler, 1828
**SI**: 101 • **CI**: c082 • **ST**: 3.D.M.31.E
**PN**: **Hedraeoglossi** Wagler, 1828.wb.c08 • **ak**
**PA**: 00 • **Hedraeoglossi** • Wagler 1828.wb: 859 • **'F'**

01 • **Hedraeoglossae** • Wagler 1830.wa: 131 • **'F'**
02 • **Hedraeoglossa** • *Hoc loco* • **EE**
**RL**: INR
**GN**: **Pseudophiona** 1816.ba.c11
**GZ**: INR
**EN**: **KYR.** C.05.04. Subordo **Pseudophiona** Blainville, 1816.ba.c11-06

Hedraeoglossa Wagler, 1830
**SI**: 106 • **CI**: c087 • **ST**: 2.D.M.40.E
**PN**: **Hedraeoglossi** Wagler, 1830.wa.c05 • **ak**
**PA**: 00 • **Hedraeoglossi** • Wagler 1830.wa: 131 • **'F'**
01 • **Hedraeoglossa** • Dubois 2015.da: 107 • **EE**
**RL**: ↓ **Hedraeoglossi** 1828.wb.c08
> **Abranchiales** 1830.wa.c06 • **PR**
> **Branchiales** 1830.wa.c07 • **PR**
**GN**: **Imperfectibranchia** 1838.ha.c03
**Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

**Helanura nov.**
**SI**: 442 • **CI**: c401 • **ST**: 1.D.M.11.O
**PN**: **Helanura nov.**, DOP.da.c09
**PA**: 00 • **Helanura** • *Hoc loco* • **eP**
**RL**: INR
**GN**: **Helanura** DOP.da.c09
**GZ**: INR
**EN**: **KYR.** C.09.02. Epiphalanx **Helanura nov.**, DOP.da.c09-00

Hemibatrachia Fitzinger, 1843
**SI**: 169 • **CI**: c146 • **ST**: 1.D.M.30.O
**PN**: **Hemibatrachia** Fitzinger, 1843.fa.c01 • **ak**
**PA**: 00 • **Hemibatrachia** • Fitzinger 1843.fa: 12 • **O**
**RL**: INR
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte, 1831.ba.c01-01]

**Hemiphractiformia** Brocchi, 1881
**SI**: 279 • **CI**: c253 • **ST**: 2.D.M.11.A
**PN**: **Hemiphractiformes** Brocchi, 1881.ba.c01
**PA**: 00 • **Hemiphractiformes** • Brocchi 1881.ba: 9 • **UC**
01 • **Hemiphractiformia** • *Hoc loco* • **hP**
**RL**: INR
**GN**: **Hemiphractiformia** 1881.ba.c01
**GZ**: INR
**EN**: **KYR.** C.13.02. Hypophalanx **Hemiphractiformia** Brocchi, 1881.ba.c01-01

Hemisalamandrae Fitzinger, 1843
**SI**: 178 • **CI**: c155 • **ST**: 2.D.M.31.O
**PN**: **Hemisalamandrae** Fitzinger, 1843.fa.c10 • **ak**
**PA**: 00 • **Hemisalamandrae** • Fitzinger 1843.fa: 34 • **Sc**
**RL**: INR
**GN**: **Imperfectibranchia** 1838.ha.c03
**GZ**: INR
**EN**: **KYR.** C.05.05. Subordo **Imperfectibranchia** Hogg, 1838.ha.c03-02

Heteromorphies Hübner, 1816
**SI**: 048 • **CI**: zh13 • **ST**: 1.U.U.99.K
**PN**: **Heteromorphae** Hübner, 1816.ha.c01 • **zz**
**PA**: 00 • **Heteromorphae** • Hübner 1816.ha: 193 • **St**
01 • **Heteromorphies** • *Hoc loco* • **EK**
**RL**, **GN, GZ**, **EN**: ●

Heteromorphies Fitzinger, 1832
**SI**: 114 • **CI**: c095 • **ST**: 2.D.M.41.K
**PN**: **Heteromorpha** Fitzinger, 1832.fa.c01 • **ak**
**PA**: 00 • **Heteromorpha** • Fitzinger 1832.fa: 327 • **Ab**
01 • **Heteromorpha** • Fitzinger 1835.fa: 107 • **bO**
02 • **Heteromorphies** • *Hoc loco* • **EK**
**RL**: ↓ **Heteromorphies** 1816.ha.c01
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Holodactyla Mayer, 1849
**SI**: 184 • **CI**: c161 • **ST**: 2.N.O.30.E
**PN**: **Holodactyli** Mayer, 1849.ma.c03 • **ak**
**PA**: 00 • **Holodactyli** • Mayer 1849.ma: 198 • **UC**
01 • **Holodactyla** • *Hoc loco* • **EU**
**RL**: < **Malacopoda** 1849.ma.c01 • **PR**
> **Colobodactyli** 1849.ma.c04 • **PR**
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte, 1831.ba.c01-01]

Homomorphies Fitzinger, 1832
**SI**: 115 • **CI**: c096 • **ST**: 2.D.M.41.K
**PN**: **Homomorpha** Fitzinger, 1832.fa.c02 • **ak**
**PA**: 00 • **Homomorpha** • Fitzinger 1832.fa: 329 • **Ab**
01 • **Homomorphae** • Dubois 2015.da: 106 • **EK**
02 • **Homomorphies** • *Hoc loco* • **EK**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Homomorphies Fitzinger, 1835
**SI**: 124 • **CI**: c104 • **ST**: 1.D.M.31.K
**PN**: **Homomorpha** Fitzinger, 1835.fa.c02 • **ak**
**PA**: 00 • **Homomorpha** • Fitzinger 1835.fa: 107 • **bO**
01 • **Homomorphies** • *Hoc loco* • **EK**
**RL**: ↓ **Homomorphies** 1832.fa.c02
**GN**: » [**OA**, **SD**: **HL**]
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Derotreta** Van der Hoeven, 1833.va.c01-01]

Horizontalia Bauer, 1987
**SI**: 416 • **CI**: c376 • **ST**: 1.D.M.30.O
**PN**: **Horizontalia** Bauer, 1987.bc.c01 • **ak**
**PA**: 00 • **Horizontalia** • Bauer 1987.bc: 49 • **UC**
**RL**: INR
**GN**: **Gondwanura** DOP.da.c01
**Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Epiphalanx **Horizontalia** Bauer, 1987.bc.c01]

**Hydrobatrachia** Ritgen, 1828
**SI**: 088 • **CI**: c069 • **ST**: 2.D.M.12.E
**PN**: **Hydrobatrachi** Ritgen, 1828.ra.c14
**PA**: 00 • **Hydrobatrachi** • Ritgen 1828.ra: 278 • **'F'**
01 • **Hydrobatrachia** • *Hoc loco* • **bO**
**RL**: ↔ > **Phyllopodobatrachi** 1828.ra.c13 • **AI**: **HL**
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Hydromolgae Ritgen, 1828
**SI**: 084 • **CI**: c065 • **ST**: 2.D.M.31.O
**PN**: **Hydromolgae** Ritgen, 1828.ra.c10 • **ak**
**PA**: 00 • **Hydromolgae** • Ritgen 1828.ra: 279 • **'F'**
**RL**: > **Pododysmolgae** 1828.ra.c07 • **AI**: **HL**
< **Morphiuromolgaei** 1828.ra.c08 • **PR**
< **Molgae** 1828.ra.c09 • **AI**: **HL**
< **Geomolgae** 1828.ra.c11 • **AI**: **HL**
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Hydronectae Fitzinger, 1843
**SI**: 171 • **CI**: c148 • **ST**: 2.D.M.31.O
**PN**: **Hydronectae** Fitzinger, 1843.fa.c03 • **ak**
**PA**: 00 • **Hydronectae** • Fitzinger 1843.fa: 30 • **Sc**
**RL**: **> Chersobatae** 1843.fa.c04 • **AI**: **HL**
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Hydronectae Fitzinger, 1861
**SI**: 220 • **CI**: c194 • **ST**: 2.D.M.41.O
**PN**: **Hydronectae** Fitzinger, 1861.fb.c01 • **ak**
**PA**: 00 • **Hydronectae** • Fitzinger 1861.fb: 217 • **bO**
**RL**: ↓ **Hydronectae** 1843.fa.c03
**GN**: **Angusticoela** 1958.ra.c01
**Hydrobatrachia** 1828.ra.c14
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Hydrophili Fitzinger, 1861
**SI**: 177 • **CI**: c154 • **ST**: 2.D.M.30.O
**PN**: **Hydrophili** Fitzinger, 1843.fa.c09 • **ak**
**PA**: 00 • **Hydrophili** • Fitzinger 1843.fa: 33 • **Sc**
**RL**: **< Geophili** 1843.fa.c08 • **AI**: **HL**
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte**,** 1831.ba.c01-01]

Hylacea Haeckel, 1889
**SI**: 296 • **CI**: c269 • **ST**: 1.D.M.41.R
**PN**: **Hylacea** Haeckel, 1889.ha.c03 • **ak**
**PA**: 00 • **Hylacea** • Haeckel 1866.ha: 640 • **O**
**RL**: ↓ **Hylaeae** 1816.ha.c02
**GN**: **Hylobatrachia** 1828.ra.c16
**GZ**: INR
**EN**: **KYR.** C.13.03. Hypophalanx **Hylobatrachia** Ritgen, 1828.ra.c16-01

Hylacei Hübner, 1816
**SI**: 049 • **CI**: zh14 • **ST**: 1.U.U.99.C
**PN**: **Hylaeae** Hübner, 1816.ha.c02 • **zz**
**PA**: 00 • **Hylaeae** • Hübner 1816.ha: 283 • **St**
01 • **Hylacei** • *Hoc loco* • **EC**
**RL**, **GN**, **GZ**, **EN**: ●

Hylaeobatrachiacea Goodrich, 1930
**SI**: 341 • **CI**: c314 • **ST**: 1.D.M.30.R
**PN**: **Hylaeobatrachia** Goodrich, 1930.ga.c03 • **ak**
**PA**: 00 • **Hylaeobatrachia** • Goodrich 1930.ga: xxi • **bO**
01 • **Hylaeobatrachiacea** • Dubois 2015.da: 107 • **ER**
**RL**: INR
**GN**: **|Urodela Incertae sedis|**
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Hylaplesiformia Steindachner, 1867
**SI**: 245 • **CI**: c219 • **ST**: 1.D.M.31.A
**PN**: **Hylaplesiformia** Steindachner, 1867.sa.c03 • **ak**
**PA**: 00 • **Hylaplesiformia** • Steindachner 1867.sa: 68 • **Sc**
**RL**: **> Bufoniformia** 1867.sa.c02 • **AI**: **HL**
**GN**: **Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Hylaplesiformia Brocchi, 1881
**SI**: 280 • **CI**: c254 • **ST**: 2.D.M.41.A
**PN**: **Hylaplesiformes** Brocchi, 1881.ba.c02 • **ak**
**PA**: 00 • **Hylaplesiformes** • Brocchi 1881.ba: 9 • **UC**
01 • **Hylaplesiformia** • *Hoc loco* • **EA**
**RL**: ↓ **Hylaplesiformia** 1867.sa.c03
**GN**: **Hylobatrachia** 1828.ra.c16
**GZ**: INR
**EN**: **KYR.** C.13.03. Hypophalanx **Hylobatrachia** Ritgen, 1828.ra.c16-01

Hyliformia Cope, 1863
**SI**: 226 • **CI**: c200 • **ST**: 2.D.M.31.A
**PN**: **Hylaeformia** Cope, 1863.cb.c01 • **ak**

**PA**: 00 • **Hylaeformia** • Cope 1863.cb: 352 • **Sr**
01 • **Hylaeformia** • Steindachner 1867.sa: 47 • **Sc**
02 • **Hylaeformes** • Brocchi 1881.ba: 9 • **UC**
03 • **Hyliformes** • Boulenger 1882.ba: 12 • **UC**
04 • **Hyliformia** • Dubois 2015.da: 90 • **EA**
**RL**: ← **Platydactyla** 1858.gc.c04
**GN**: **Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

**Hylobatrachia** Ritgen, 1828
**SI**: 090 • **CI**: c071 • **ST**: 2.D.M.12.E
**PN**: **Hylobatrachi** Ritgen, 1828.ra.c16
**PA**: 00 • **Hylobatrachi** • Ritgen 1828.ra: 278 • **'F'**
01 • **Hylobatrachia** • *Hoc loco* • **hP**
**RL**: ↔ > **Bdalsipodobatrachi** 1828.ra.c15 • **AI**: **HL**
**GN**: **Hylobatrachia** 1828.ra.c16
**GZ**: INR
**EN**: **KYR.** C.13.03. Hypophalanx **Hylobatrachia** Ritgen, 1828.ra.c16-01

Hypsibatae Fitzinger, 1843
**SI**: 170 • **CI**: c147 • **ST**: 2.D.M.31.O
**PN**: **Hypsibatae** Fitzinger, 1843.fa.c02 • **ak**
**PA**: 00 • **Hypsibatae** • Fitzinger 1843.fa: 30 • **Sc**
**RL**: INR
**GN**: **Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Ichthyodi Blainville, 1816
**SI**: 035 • **CI**: c022 • **ST**: 1.D.A.32.E
**PN**: **Ictyoides** Blainville, 1816.ba.c03 • **ak**
**PA**: 00 • **Ictyoides** • Blainville 1816.ba: "111" [119] • **bC**
01 • **Icthyoides** • Blainville 1816.bb: 254 • **bC**
02 • **Ichthyoides** • Ducrotay Blainville 1821.da: 10 • **C**
03 • **Icthyoides** • Macleay 1821.ma: 262 • **C**
04 • **Ichthyodes** • Hallowell 1856.ha: 6 • **bC**
05 • **Ichthyodi** • Dubois 2015.da: 105 • **EE**
**RL**: ↔ < **Nudipelliferes** 1816.ba.c01 • **AI**: **HL**
↔ < **Amphybiens** 1816.ba.c02 • **AI**: **HL**
↔ > **Nuds** 1816.ba.c04 • **AI**: **HL**
**GN**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**GZ**: » **GX**:
|**Amniota**|
|**Pisces**|
**EN**: **KYR.** C.02.01. Classis **Amphibia** Blainville, 1816.ba.c02-03

Ichthyodi Leuckart, 1821
**SI**: 054 • **CI**: c036 • **ST**: 2.D.M.40.E
**PN**: **Ichthyoidea** Leuckart, 1821.la.c01 • **ak**
**PA**: 00 • **Ichthyoidea** • Leuckart 1821.la: 258 • **'F'**
01 • **Ichthyodi** • Wagler 1830.wa: 131 • **O**
02 • **Ichthyoidea** • Leuckart 1840.la: 19 • **bAb**
03 • **Ichthyodes** • Duméril[+2] 1854.da: 199 • **O**
04 • **Ichthyodi** • Wied 1865.wa: viii, 132 • **UC**
05 • **Ichthyoidea** • Dubois[+1] 2012.da: 78 • **bO**
**RL**: ↓ **Ictyoides** 1816.ba.c03
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte**,** 1831.ba.c01-01]

Ichthyodi Wagler, 1828
**SI**: 095 • **CI**: c076 • **ST**: 3.D.M.41.O
**PN**: **Ichthyodi** Wagler, 1828.wb.c02 • **ak**
**PA**: 00 • **Ichthyodi** • Wagler 1828.wb: 859 • **O**
**RL**: ↓ **Ictyoides** 1816.ba.c03
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Ichthyodi Bonaparte, 1831
**SI**: 109 • **CI**: c090 • **ST**: 1.D.M.41.E
**PN**: **Ichtyoida** Bonaparte, 1831.ba.c02 • **ak**
**PA**: 00 • **Ichtyoida** • Bonaparte 1831.ba: 78 • **O**
01 • **Ichthyoidi** • Bonaparte 1838.bc: 393 • **O**
02 • **Ichthyodi** • Bonaparte 1838.bd: 657 • **O**
03 • **Ichthyoidea** • Bonaparte 1838.bd: 125 • **O**
04 • **Ichthyodea** • Bonaparte 1839.bf: 16 • **O**
05 • **Ichthyodei** • Bonaparte 1840.ba: 287 • **O**
06 • **Ichthyodea** • Claus 1868.cb: 584 • **bO**
07 • **Ichthyodea** • Gadow 1901.ga: 95 • **UC**
**RL**: ↓ **Ictyoides** 1816.ba.c03
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Ichthyodi Hoffmann, 1878
**SI**: 264 • **CI**: c238 • **ST**: 2.D.M.40.E
**PN**: **Ichthyoidea** Hoffmann, 1878.ha.c04 • **ak**
**PA**: 00 • **Ichthyoidea** • Hoffmann 1878.ha: 674 • **UC**
01 • **Ichthyodea** • Knauer 1878.ka: 95 • **bO**
02 • **Ichthyoidea** • Zittel 1888.za: viii, 418 • **bO**
03 • **Ichthyodi** • Dubois 2015.da: 107 • **EE**
**RL**: ↓ **Ictyoides** 1816.ba.c03
< **Ichthyomorphi** 1866.oa.c01 • **PR**
**GN**: **Imperfectibranchia** 1838.ha.c03
**Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Ichthyomorphi Owen, 1866
**SI**: 239 • **CI**: c213 • **ST**: 1.D.M.31.X
**PN**: **Ichthyomorpha** Owen, 1866.oa.c01 • **ak**
**PA**: 00 • **Ichthyomorpha** • Owen 1866.oa: 15 • **bO**
01 • **Ichthyomorphi** • Dubois 2015.da: 90 • **EX**

**RL**: INR
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Ichthyomorphi Hoffmann, 1878
**SI**: 263 • **CI**: c237 • **ST**: 1.D.M.40.X
**PN**: **Ichthyomorpha** Hoffmann, 1878.ha.c03 • **ak**
**PA**: 00 • **Ichthyomorpha** • Hoffmann 1878.ha: 661 • **O**
01 • **Ichthyomorphi** • *Hoc loco* • **EK**
**RL**: ↓ **Ichthyomorphi** 1866.oa.c01
> **Ichthyoidea** 1878.ha.c04 • **PR**
**GN**: **Imperfectibranchia** 1838.ha.c03
**Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Ichthyosternia Miranda-Ribeiro, 1924
**SI**: 335 • **CI**: c308 • **ST**: 2.D.M.31.O
**PN**: **Ichthyosternia** Miranda-Ribeiro, 1924.ma.c10 • **ak**
**PA**: 00 • **Ichthyosternia** • Miranda-Ribeiro 1924.ma: 12 • **UC**
**RL**: ↔ < **Protonyxia** 1924.ma.c07 • **AI**: **HL**
**GN**: **Dorsipares** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Immutabilia Haworth, 1825
**SI**: 068 • **CI**: c050 • **ST**: 3.D.M.31.O
**PN**: **Immutabilia** Haworth, 1825.ha.c02 • **ak**
**PA**: 00 • **Immutabilia** • Haworth 1825.ha: 372 • **UC**
01 • **Immutabilia** • Fitzinger 1826.fb: 36 • **'T'**
02 • **Immutabilia** • Bonaparte 1831.bb: 135 • **Sc**
**RL**: INR
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Immutabilia Gray, 1842
**SI**: 167 • **CI**: c144 • **ST**: 1.D.M.40.O
**PN**: **Immutabilia** Gray, 1842.ga.c01 • **ak**
**PA**: 00 • **Immutabilia** • Gray 1842.ga: 113 • **Sc**
01 • **Immutabilia** • Gill 1903.ga: 73 • **T**
**RL**: ↓ **Immutabilia** 1825.ha.c02
**GN**: **Imperfectibranchia** 1838.ha.c03
**Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

**Imperfectibranchia** Hogg, 1838
**SI**: 130 • **CI**: c110 • **ST**: 1.D.M.11.O
**PN**: **Imperfectibranchia** Hogg, 1838.ha.c03
**PA**: 00 • **Imperfectibranchia** • Hogg 1838.ha: 152 • **O**
01 • **Imperfectibranchia** • Dubois[+1] 2012.da: 78 • **iO**
02 • **Imperfectibranchia** • Dubois 2015.da: 49 • **bO**
**RL**: INR
**GN**: **Imperfectibranchia** 1838.ha.c03
**GZ**: INR
**EN**: **KYR.** C.05.05. Subordo **Imperfectibranchia** Hogg, 1838.ha.c03-02

Internibranchia Hogg, 1839
**SI**: 144 • **CI**: c122 • **ST**: 1.D.M.31.O
**PN**: **Internibranchia** Hogg, 1839.hb.c01 • **ak**
**PA**: 00 • **Internibranchia** • Hogg 1839.hb: 375 • **'T'**
**RL**: > **Arcumanentia** 1839.hb.c04 • **AI**: **HL**
**GN**: **Imperfectibranchia** 1838.ha.c03
**GZ**: INR
**EN**: **KYR.** C.05.05. Subordo **Imperfectibranchia** Hogg, 1838.ha.c03-02

Karauracea Estes, 1981
**SI**: 402 • **CI**: c362 • **ST**: 1.D.M.30.R
**PN**: **Karauroidea** Estes, 1981.ea.c01 † • **ak**
**PA**: 00 • **Karauroidea** • Estes 1981.ea: xiii, 10 •**bO**
01 • **Karauracea** • Dubois 2015.da: 107 • **ER**
**RL**: < **Ambystomatoidea** 1981.ea.c03 • **AI**: **HL**
< **Salamandroidea** 1981.ea.c04 • **AI**: **HL**
**GN**: |**Urodela Incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Lacertacei Gray, 1850
**SI**: 194 • **CI**: c171 • **ST**: 1.D.M.30.C
**PN**: **Lacertini** Gray, 1850.ga.c06 • **ak**
**PA**: 00 • **Lacertini** • Gray 1850.ga: 10 • **bC**
01 • **Lacertacei** • Dubois 2015.da: 90 • **EC**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Lacertiformi Jarocki, 1822
**SI**: 060 • **CI**: c042 • **ST**: 1.D.M.30.X
**PN**: **Lacertiformia** Jarocki, 1822.ja.c03 • **ak**
**PA**: 00 • **Lacertiformia** • Jarocki 1822.ja: 137 • **O**
01 • **Lacertiformi** • *Hoc loco* • **EX**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Lacertiformi Hogg, 1839
**SI**: 141 • **CI**: c119 • **ST**: 1.D.M.30.X
**PN**: **Lacertiformia** Hogg, 1839.ha.c06 • **ak**
**PA**: 00 • **Lacertiformia** • Hogg 1839.ha: 271 • **O**
01 • **Lacertiniformia** • Gray 1850.ga: 51, 71 • **O**
02 • **Lacertiformes** • Dubois 2015.da: 90 • **EX**
03 • **Lacertiformi** • *Hoc loco* • **EX**
**RL**: ↓ **Lacertiformi** 1822.ja.c03
**< Diplopneumena** 1839.ha.c08 • **PR**
**GN**: **Imperfectibranchia** 1838.ha.c03

**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte, 1831.ba.c01-01]

**Laevogyrinia** Lataste, 1878
**SI**: 269 • **CI**: c243 • **ST**: 2.D.M.11.E
**PN**: **Laevogyrinidae** Lataste, 1878.la.c01
**PA**: 00 • **Laevogyrinidae** • Lataste 1878.la: 491 • **UC**
01 • **Laevogyrinides** • Lataste 1879.la: 984 • **bO**
02 • **Laevogyrinidae** • Lataste 1879.lb: 339 • **bO**
03 • **Laevogyrinia** • Dubois[+2] 2016.db: 49 • **EE**
04 • **Laevogyrinia** • *Hoc loco* • **hO**
**RL**: INR
**GN**: **Archaeosalientia** 1981.ra.c01
**Ranomorpha** 1921.fb.c08
**GZ**: INR
**EN**: **KYR.** C.07.02. Hypoordo **Laevogyrinia** Lataste, 1878.la.c01-04

Lemmanura Starrett, 1973
**SI**: 398 • **CI**: c358 • **ST**: 1.D.M.31.O
**PN**: **Lemmanura** Starrett, 1973.sb.c03 • **ak**
**PA**: 00 • **Lemmanura** • Starrett 1973.sb: 251 • **UC**
01 • **Lemmanura** • Savage 1973.sa: 354 • **bO**
**RL**: INR
**GN**: **Angusticoela** 1958.ra.c01
**Hydrobatrachia** 1828.ra.c14
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Linguata Gravenhorst, 1845
**SI**: 179 • **CI**: c156 • **ST**: 4.D.M.31.O
**PN**: **Linguata** Gravenhorst, 1845.ga.c01 • **ak**
**PA**: 00 • **Linguata** • Gravenhorst 1845.ga: 43 • **UC**
01 • **Linguata** • Stejneger 1907.sa: v, 54 • **bO**
**RL**: INR
**GN**: **Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Linguata Stejneger[+1], 1917
**SI**: 307 • **CI**: c280 • **ST**: 1.D.M.41.O
**PN**: **Linguata** Stejneger[+1], 1917.sa.c02 • **ak**
**PA**: 00 • **Linguata** • Stejneger[+1] 1917.sa: 25 • **bO**
**RL**: INR
**GN**: **Archaeosalientia** 1981.ra.c01
**Ranomorpha** 1921.fb.c08
**GZ**: INR
**EN**: **KYR.** C.07.02. Hypoordo **Laevogyrinia** Lataste, 1878.la.c01-04

Lipobranchia Haeckel, 1879
**SI**: 273 • **CI**: c247 • **ST**: 1.D.M.31.O
**PN**: **Lipobranchia** Haeckel, 1879.ha.c01 • **ak**
**PA**: 00 • **Lipobranchia** • Haeckel 1879.ha: 539 • **UC**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Lissamphibia Haeckel, 1866
**SI**: 235 • **CI**: c209 • **ST**: 1.N.O.30.O
**PN**: **Lissamphibia** Haeckel, 1866.ha.c01 • **ak**
**PA**: 00 • **Lissamphibia** • Haeckel 1866.ha: x, cxxxi • **bC**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**GZ**: » **GI**:
**Gymnophiona** 1814.ra.c01
|Non-**Lissamphibian Amphibia**|
**EN**: **ANAPTONYM**
[**HYP.** Superordo **Batrachia** Brongniart, 1800.ba.c01-14]

**Lissamphibia** Gadow, 1898
**SI**: 300 • **CI**: c273 • **ST**: 1.S.O.10.O
**PN**: **Lissamphibia** Gadow, 1898.ga.c01
**PA**: 00 • **Lissamphibia** • Gadow 1898.ga: xii, 13 • **bC**
01 • **Lissamphibia** • Gardiner 1982.ga: 228 • **bD**
02 • **Lissamphibia** • Milner 1988.ma: 82 • **cD**
**RL**: ↓ **Lissamphibia** 1866.ha.c01
**GN**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**GZ**: » **GX**:
|Non-**Lissamphibian Amphibia**|
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Lissamphibia Hay, 1929
**SI**: 344 • **CI**: c317 • **ST**: 1.N.G.02.O
**PN**: **Lissamphibia** Hay, 1929.ha.c01 • **ap**
**PA**: 00 • **Lissamphibia** • Hay 1929.ha: 521, 839 • **bC**
**RL**: ↓ **Lissamphibia** 1866.ha.c01
**GN**: **Lissamphibia** 1901.ga.c01
|Non-**Lissamphibian Amphibia**|
**GZ**: » **GI**:
|Non-**Lissamphibian Amphibia**|
**EN**: **ANAPTONYM**

Malacoderma Kirby, 1835
**SI**: 125 • **CI**: c105 • **ST**: 1.D.M.30.O
**PN**: **Malacoderma** Kirby, 1835.ka.c01 • **ak**
**PA**: 00 • **Malacoderma** • Kirby 1835.ka: 414 • **bC**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart, 1800.ba.c01-14]

Malacopoda Mayer, 1849
**SI**: 182 • **CI**: c159 • **ST**: 1.D.A.30.O
**PN**: **Malacopoda** Mayer, 1849.ma.c01 • **ak**
**PA**: 00 • **Malacopoda** • Mayer 1849.ma: 198 • **O**
**RL**: ↔| **Batraciens** 1800.ba.c01
**GN**: **Anura** 1805.da.c01

**Urodela** 1805.da.c02
**GZ**: » **GI**:
**Gymnophiona** 1814.ra.c01
**EN**: **ANAPTONYM**
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Manentibranchia Hogg, 1838
**SI**: 132 • **CI**: c112 • **ST**: 1.D.M.31.O
**PN**: **Manentibranchia** Hogg, 1838.ha.c05 • **ak**
**PA**: 00 • **Manentibranchia** • Hogg 1838.ha: 152 • **O**
01 • **Mancabranchia** • Gray 1850.ga: 51, 71 • **UC**
**RL**: **< Diplopneumena** 1838.ha.c05 • **PR**
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

**Meantes** Linnaeus, 1767
**SI**: 005 • **CI**: c001 • **ST**: 1.D.M.11.O
**PN**: **Meantes** Linnaeus, 1767.la.c01
**PA**: 00 • **Meantes** • Linné 1767.la: unnumbered additional page • **O**
01 • **Meantes** • Stejneger[+1] 1917.sa: 24 • **bO**
02 • **Meantina** • Pearse 1936.pa: 20 • **bO**
03 • **Meantes** • Dubois 2015.da: 49 • **iO**
**RL**: INR
**GN**: **Meantes** 1767.la.c01
**GZ**: INR
**EN**: **KYR.** C.05.06. Subordo **Meantes** Linné, 1767.la.c01-01

Meantes Gray, 1850
**SI**: 192 • **CI**: c169 • **ST**: 1.D.M.41.E
**PN**: **Meantia** Gray, 1850.ga.c04 • **ak**
**PA**: 00 • **Meantia** • Gray 1850.ga: 6, 63 • **O**
01 • **Meantes** • *Hoc loco* • **EE**
**RL**: ↓ **Meantes** 1767.la.c01
> **Gradientia** 1850.ga.c01 • **PR**
< **Pseudosauria** 1850.ga.c02 • **AI**: **HL**
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Meantes Kuhn, 1961
**SI**: 378 • **CI**: c339 • **ST**: 1.D.M.40.O
**PN**: **Meantes** Kuhn, 1961.ka.c04 • **ak**
**PA**: 00 • **Meantes** • Kuhn 1961.ka: 14 • **bO**
**RL**: ↓ **Meantes** 1767.la.c01
> **Cryptobranchoidea** 1961.ka.c01 • **AI**: **HL**
> **Batrachosauroidoidea** 1961.ka.c02 • **AI**: **HL**
> **Proteida** 1961.ka.c03 • **AI**: **HL**
**GN**: **Meantes** 1767.la.c01
**|Urodela Incertae sedis|**
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

**Mediogyrinia** Lataste, 1878
**SI**: 270 • **CI**: c244 • **ST**: 2.D.M.11.E
**PN**: **Mediogyrinidae** Lataste, 1878.la.c02
**PA**: 00 • **Mediogyrinidae** • Lataste 1878.la: 491 • **UC**
01 • **Mediogyrinia** • Dubois 2015.da: 12 • **EE**
02 • **Mediogyrinia** • *Hoc loco* • **iO**
**RL**: INR
**GN**: **Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.06.02. Infraordo **Mediogyrinia** Lataste, 1878.la.c02-02

Mediogyrinia Lataste, 1879
**SI**: 274 • **CI**: c248 • **ST**: 1.D.M.41.E
**PN**: **Mediogyrinides** Lataste, 1879.la.c01 • **ak**
**PA**: 00 • **Mediogyrinides** • Lataste 1879.la: 984 • **bO**
01 • **Mediogyrinidae** • Lataste 1879.lb: 339 • **bO**
02 • **Mediogyrinia** • *Hoc loco* • **EE**
**RL**: ↓ **Mediogyrinidae** 1878.la.c02
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Mesobatrachia Laurent, 1980
**SI**: 401 • **CI**: c361 • **ST**: 1.D.M.31.O
**PN**: **Mesobatrachia** Laurent, 1980.la.c01 • **ak**
**PA**: 00 • **Mesobatrachia** • Laurent 1980.la: 398 • **bO**
**RL**: INR
**GN**: **Dorsipares** 1816.ba.c06
**Laevogyrinia** 1878.la.c01
**GZ**: INR
**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Miura Van der Hoeven, 1833
**SI**: 120 • **CI**: c100 • **ST**: 1.D.M.31.O
**PN**: **Miura** Van der Hoeven, 1833.va.c03 • **ak**
**PA**: 00 • **Miura** • Van der Hoeven 1833.va: iii, 307 • **O**
**RL**: INR
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Molgacea Ritgen, 1828
**SI**: 083 • **CI**: c064 • **ST**: 4.D.M.31.R
**PN**: **Molgae** Ritgen, 1828.ra.c09 • **ak**
**PA**: 00 • **Molgae** • Ritgen 1828.ra: 277 • **Zg**
01 • **Molgaei** • Jourdan 1834.jb: 100 • **O**
02 • **Molgacea** • *Hoc loco* • **ER**
**RL**: > **Pododysmolgae** 1828.ra.c07 • **PR**
↔ < **Morphiuromolgaei** 1828.ra.c08 • **AI**: **HL**
> **Hydromolgae** 1828.ra.c10 • **PR**
> **Geomolgae** 1828.ra.c11 • **PR**
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Monopneuma Hogg, 1838
**SI**: 128 • **CI**: c108 • **ST**: 1.D.M.31.E
**PN**: **Monopneumena** Hogg, 1838.ha.c01 • **ak**

**PA**: 00 • **Monopneumena** • Hogg 1838.ha: 152 • **bC**
01 • **Monopneuma** • Duméril 1863.da: 300 • **bC**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Monosacralia Bolkay, 1919
**SI**: 311 • **CI**: c284 • **ST**: 1.D.M.31.O
**PN**: **Monosacralia** Bolkay, 1919.ba.c02 • **ak**
**PA**: 00 • **Monosacralia** • Bolkay 1919.ba: 348 • **bO**
**RL**: INR
**GN**: **Angusticoela** 1958.ra.c01
**Hydrobatrachia** 1828.ra.c14
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Morphiuromolgae Ritgen, 1828
**SI**: 082 • **CI**: c063 • **ST**: 2.D.M.31.E
**PN**: **Morphiuromolgaei** Ritgen, 1828.ra.c08 • **ak**
**PA**: c0 • **Morphiuromolgaei** • Ritgen 1828.ra: 274 • **Zg** • **EEA**: **HL**
i1 • **Morphuromolgaei** • Ritgen 1828.ra: 274 • **Zg**
02 • **Morphuromolgaei** • Jourdan 1834.jb: 112 • **Sc**
03 • **Morphiuromolgae** • *Hoc loco* • **EE**
**RL**: > **Pododysmolgae** 1828.ra.c07 • **PR**
↔ > **Molgae** 1828.ra.c09 • **AI**: **HL**
> **Hydromolgae** 1828.ra.c10 • **PR**
> **Geomolgae** 1828.ra.c11 • **PR**
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Mutabilia Merrem, 1820
**SI**: 052 • **CI**: c034 • **ST**: 2.D.M.31.O
**PN**: **Mutabilia** Merrem, 1820.ma.c03 • **ak**
**PA**: 00 • **Mutabilia** • Merrem 1820.ma: 163 • **'T'**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Mutabilia Fitzinger, 1826
**SI**: 072 • **CI**: c054 • **ST**: 2.D.M.30.O
**PN**: **Mutabilia** Fitzinger, 1826.fb.c02 • **ak**
**PA**: 00 • **Mutabilia** • Fitzinger 1826.fb: 36 • **'T'**
01 • **Mutabilia** • Gray 1831.ga: 99 • **O**
02 • **Mutabilia** • Fitzinger 1832.fa: 327 • **Zt**
03 • **Mutabilia** • Gray 1842.ga: 111 • **Sc**
**RL**: ↓ **Mutabilia** 1820.ma.c03
**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart, 1800.ba.c01-14]

Mutabilia Hay, 1929
**SI**: 348 • **CI**: c321 • **ST**: 1.D.M.40.O
**PN**: **Mutabilia** Hay, 1929.ha.c05 • **ak**
**PA**: 00 • **Mutabilia** • Hay 1929.ha: 521, 839 • ***O***
**RL**: ↓ **Mutabilia** 1820.ma.c03
**GN**: **Lissamphibia** 1901.ga.c01
|**Lepospondyli**|
**GZ**: INR
**EN**: **KYR.** C.02.01. Classis **Amphibia** Blainville, 1816.ba.c02-03

Myctodera Stannius, 1856
**SI**: 203 • **CI**: c180 • **ST**: 1.D.M.31.O
**PN**: **Myctodera** Stannius, 1856.sa.c01 • **ak**
**PA**: 00 • **Myctodera** • Stannius 1856.sa: 4 • **bO**
01 • **Myctodera** • Cope 1888.ca: 464 • **UC**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Neobatrachia Sarasin[+1], 1890
**SI**: 297 • **CI**: c270 • **ST**: 1.D.M.30.E
**PN**: **Neobatrachi** Sarasin[+1], 1890.sa.c01 • **ak**
**PA**: 00 • **Neobatrachi** • Sarasin[+1] 1890.sa: 245 • **bC**
01 • **Neobatrachia** • Dubois 2015.da: 107 • **EE**
**RL**: > **Caeciloidea** 1890.sa.c03 • **PR**
**GN**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Neobatrachia Reig, 1958
**SI**: 368 • **CI**: c335 • **ST**: 1.D.M.41.O
**PN**: **Neobatrachia** Reig, 1958.ra.c03 • **ak**
**PA**: 00 • **Neobatrachia** • Reig 1958.ra: 114 • **bO**
**RL**: ↓ **Neobatrachi** 1890.sa.c01
**GN**: **Aquipares** 1816.ba.c07
**Helanura** DOP.da.c09
**GZ**: INR
**EN**: **KYR.** C.08.02. Superphalanx **Ranomorpha** Fejérváry, 1921.fb.c08-01

Neobatrachia Kuhn, 1962
**SI**: 382 • **CI**: c342 • **ST**: 1.D.M.41.O
**PN**: **Neobatrachia** Kuhn, 1962.ka.c03 • **ak**
**PA**: 00 • **Neobatrachia** • Kuhn 1962.ka: 341 • **bO**
**RL**: ↓ **Neobatrachi** 1890.sa.c01
> **Amphicoela** 1962.ka.c01 • **AI**: **HL**
> **Archaeobatrachia** 1962.ka.c02 • **AI**: **HL**
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
|**Anura Incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Neobatrachia Kuhn, 1965
**SI**: 392 • **CI**: c352 • **ST**: 1.D.M.41.O

**PN**: **Neobatrachia** Kuhn, 1965.ka.c03 • **ak**

**PA**: 00 • **Neobatrachia** • Kuhn 1965.ka: 92 • **bO**

**RL**: ↓ **Neobatrachi** 1890.sa.c01

**GN**: **Dorsipares** 1816.ba.c06

**Laevogyrinia** 1878.la.c01

**GZ**: INR

**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Neocaudata Milner, 2000

**SI**: 428 • **CI**: c388 • **ST**: 1.D.M.30.O

**PN**: **Neocaudata** Milner, 2000.ma.c01 • **ak**

**PA**: 00 • **Neocaudata** • Milner 2000.ma: 1412 • **bO**

**RL**: INR

**GN**: **Imperfectibranchia** 1838.ha.c03

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

[**HYP.** Subordo **Nullibranchia** Bonaparte**,** 1831.ba.c01-01]

Neonamphibia Haeckel, 1902

**SI**: 301 • **CI**: c274 • **ST**: 1.D.A.30.O

**PN**: **Neonamphibia** Haeckel, 1902.ha.c01 • **ak**

**PA**: 00 • **Neonamphibia** • Haeckel 1866.ha: 640 • **bC**

**RL**: ↔| **Lissamphibia** 1866.ha.c01

**GN**: **Anura** 1805.da.c01

**Urodela** 1805.da.c02

**GZ**: » **GI**:

**Gymnophiona** 1814.ra.c01

|Non-**Lissamphibian Amphibia**|

**EN**: **ANAPTONYM**

[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Neosalientia Roček, 1981

**SI**: 407 • **CI**: c367 • **ST**: 1.D.M.31.O

**PN**: **Neosalientia** Roček, 1981.ra.c02 • **ak**

**PA**: 00 • **Neosalientia** • Roček 1981.ra: 1 • **O**

**RL**: INR

**GN**: **Angusticoela** 1958.ra.c01

**Hydrobatrachia** 1828.ra.c14

|**Anura Incertae sedis**|

**GZ**: INR

**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Notocentrophora von Huene, 1920

**SI**: 312 • **CI**: c285 • **ST**: 2.D.A.31.E

**PN**: **Notocentrophori** von Huene, 1920.ha.c01 • **ak**

**PA**: 00 • **Notocentrophori** • Von Huene 1920.ha: 211 • **Ga**

01 • **Notocentrophori** • Von Huene 1931.ha: 302 • **UC**

02 • **Notocentrophori** • Von Huene 1956.ha: 110 • **O**

03 • **Notocentrophora** • Dubois 2015.da: 106 • **EE**

**RL**: ↔! **Anoures** 1805.da.c01

**GN**: **Anura** 1805.da.c01

**GZ**: » **GX**:

**Gymnophiona** 1814.ra.c01

**Urodela** 1805.da.c02

**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Nuda Scopoli, 1777

**SI**: 008 • **CI**: zh02 • **ST**: 2.D.M.99.O

**PN**: **Nuda** Scopoli, 1777.sa.c01 • **zz**

**PA**: 00 • **Nuda** • Scopoli 1777.sa: 381 • **Gs**

**RL**, **GN**, **GZ**, **EN**: ●

Nuda Oppel, 1811

**SI**: 026 • **CI**: c015 • **ST**: 1.D.M.20.O

**PN**: **Nuda** Oppel, 1811.oa.c01 • **ak**

**PA**: 00 • **Nuda** • Oppel 1811.oa: 260 • **O**

01 • **Nuda** • Bonaparte 1838.bd: 124 • **Sc**

02 • **Nuda** • Leunis 1851.la: 101 • **bC**

**RL**: ↓ **Nuda** 1777.sa.c01

¡↔ > **Batraciens** 1811.oa.c02 • **AI**: **HL**

**GN**: » [The conucleogenera of **Batraciens** 1800.ba.c01 + *Caecilia* 1758.la]:

**Anura** 1805.da.c01

**Gymnophiona** 1814.ra.c01

**Urodela** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Nuda Blainville, 1816

**SI**: 036 • **CI**: c023 • **ST**: 1.D.A.40.S

**PN**: **Nuds** Blainville, 1816.ba.c04 • **ak**

**PA**: 00 • **Nuds** • Blainville 1816.ba: '111' [119] • **bC**

01 • **Nuda** • Dubois 2015.da: 105 • **EE**

**RL**: ↓ **Nuda** 1777.sa.c01

↔ **Nudipelliferes** 1816.ba.c01 • **AI**: **HL**

↔ < **Amphybiens** 1816.ba.c02 • **SD**

↔ < **Ictyoides** 1816.ba.c03 • **AI**: **HL**

**GN**: **Anura** 1805.da.c01

**Gymnophiona** 1814.ra.c01

**Urodela** 1805.da.c02

**GZ**: » **GX**:

|**Amniota**|

|**Pisces|**

**EN**: **KYR.** C.02.01. Classis **Amphibia** Blainville, 1816.ba.c02-03

Nuda Blainville, 1816

**SI**: 071 • **CI**: c053 • **ST**: 2.D.M.41.O

**PN**: **Nuda** Fitzinger, 1826.fb.c01 • **ak**

**PA**: 00 • **Nuda** • Fitzinger 1826.fb: 4 • **'T'**

01 • **Nuda** • Bonaparte 1831.bb: 134 • **O**

**RL**: ↓ **Nuda** 1777.sa.c01

**GN**: **Pseudophiona** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.05.04. Subordo **Pseudophiona** Blainville, 1816.ba.c11-06

Nuda Leuckart, 1841

**SI**: 165 • **CI**: c142 • **ST**: 2.D.M.40.O

**PN**: **Nuda** Leuckart, 1841.la.c01 • **ak**

**PA**: 00 • **Nuda** • Leuckart 1841.la: 30 • **UC**

**RL**: ↓ **Nuda** 1777.sa.c01

**GN**: **Imperfectibranchia** 1838.ha.c03

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

[**HYP.** Subordo **Nullibranchia** Bonaparte**,** 1831.ba.c01-01]

Nudipellifera Blainville, 1816

**SI**: 033 • **CI**: c020 • **ST**: 1.D.A.32.E

**PN**: **Nudipelliferes** Blainville, 1816.ba.c01 • **ak**
**PA**: 00 • **Nudipelliferes** • Blainville 1816.ba: "107" [115] • **C**
01 • **Nudipellifera** • Jourdan 1834.jb: 151 • **C**
02 • **Nudipelliferes** • Hallowell 1856.ha: 6 • **bC**
**RL**: ↔ < **Amphybiens** 1816.ba.c02 • **SD**
↔ > **Ictyoides** 1816.ba.c03 • **AI**: **HL**
↔ > **Nuds** 1816.ba.c04 • **AI**: **HL**
**GN**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**GZ**: » **GX**:
|**Amniota**|
|**Pisces**|
**EN**: **KYR.** C.02.01. Classis **Amphibia** Blainville, 1816.ba.c02-03

Nullibranchia Bonaparte, 1831
**SI**: 108 • **CI**: c089 • **ST**: 1.D.M.03.O
**PN**: **Nullibranchia** Bonaparte, 1831.ba.c01 • **hk**
**PA**: 00 • **Nullibranchia** • Bonaparte 1831.ba: 67 • **O**
01 • **Nullibranchia** • Dubois 2015.da: 49 • **bO**
**RL**: > **Derotremata** 1831.ma.c01 • **AI**: Dubois 2015: 49
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte, 1831.ba.c01-02]

Odontoglossa Cope, 1875
**SI**: 260 • **CI**: c234 • **ST**: 1.D.M.31.O
**PN**: **Odontaglossa** Cope, 1875.ca.c02 • **ak**
**PA**: 00 • **Odontaglossa** • Cope 1875.ca: 8 • **bO**
**RL**: INR
**GN**: **Dorsipares** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Ophidiobatrachia Duvernoy, 1849
**SI**: 181 • **CI**: c158 • **ST**: 1.D.M.31.E
**PN**: **Ophidio-Batraciens** Duvernoy, 1849.da.c01 • **ak**
**PA**: c0 • **Ophidio-Batraciens** • Duvernoy 1849.da: 186, 189 • **O** • **EEA**: **HL**
i1 • **Ophodio-Batraciens** • Duvernoy 1849.da: 185 • **O**
02 • **Ophidiobatrachia** • *Hoc loco* • **EE**
**RL**: INR
**GN**: **Pseudophiona** 1816.ba.c11
**GZ**: INR
**EN**: **KYR.** C.05.04. Subordo **Pseudophiona** Blainville, 1816.ba.c11-06

Ophiomorphi Van der Hoeven, 1855
**SI**: 200 • **CI**: c177 • **ST**: 1.D.M.30.X
**PN**: **Ophiomorpha** Van der Hoeven, 1855.va.c02 • **ak**
**PA**: 00 • **Ophiomorpha** • Van der Hoeven 1855.va: x, 460 • **O**
01 • **Ophiomorpha** • Huxley 1863.ha: 68 • **UC**
02 • **Ophiomorpha** • Owen 1866.oa: 15 • **bO**
03 • **Ophiomorphes** • Fatio 1872.fa: 7 • **O**
04 • **Ophiomorphi** • Dubois 2015.da: 90 • **EX**
**RL**: ↔| **Peromeles** 1839.da.c01
**GN**: **Plesiophiona** DOP.da.c10
**Pseudophiona** 1816.ba.c11
**GZ**: INR
**EN**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814.ra.c01-02

Ophiosoma Duméril[+1], 1841
**SI**: 160 • **CI**: c137 • **ST**: 2.D.M.30.E
**PN**: **Ophiosomes** Duméril[+1], 1841.da.c07 • **ak**
**PA**: 00 • **Ophiosomes** • Duméril[+1] 1841.da: plate after page 53 • **Gr/Sc/'T'**
01 • **Ophiosoma** • Lichtenstein[+2] 1856.la: 35 • **O**
02 • **Ophiosoma** • Jan 1857.ja: 52 • **UC**
**RL**: INR
**GN**: **Plesiophiona** DOP.da.c10
**Pseudophiona** 1816.ba.c11
**GZ**: INR
**EN**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814.ra.c01-02

Opisthocoela Meyer, 1860
**SI**: 213 • **CI**: c190 • **ST**: 2.D.M.31.E
**PN**: **Opisthocoeli** Meyer, 1860.mb.c01 • **ak**
**PA**: 00 • **Opisthocoeli** • Meyer 1860.mb: 559 • **UC**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Opisthocoela Owen, 1860
**SI**: 218 • **CI**: zh20 • **ST**: 1.U.U.99.E
**PN**: **Opisthocoelia** Owen, 1860.oa.c02 • **zz**
**PA**: 00 • **Opisthocoelia** • Owen 1860.oa: x, 272 • **bO**
01 • **Opithocoela** • *Hoc loco* • **EE**
**RL**: ↓ **Opisthocoeli** 1860.mb.c01
**GN, GZ, EN**: ●

Opisthocoela Lataste, 1879
**SI**: 277 • **CI**: c251 • **ST**: 1.D.M.41.E
**PN**: **Opisthocoelidae** Lataste, 1879.lb.c03 • **ak**
**PA**: 00 • **Opisthocoelidae** • Lataste 1879.lb: 339 • **bO**
01 • **Opisthocoela** • Noble 1922.na: 21 • **bO**
02 • **Opisthocoelia** • Kuhn 1939.ka: 92 • **bO**
04 • **Opistocoela** • Casamiquela 1961.ca: 77 • **bO**
03 • **Opisthocalidae** • Kuhn 1967.kb: 31 • **UC**
**RL**: ↓ **Opisthocoeli** 1860.mb.c01
↔| **Mediogyrinides** 1879.la.c01
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Opisthocoela Nicholls, 1916
**SI**: 302 • **CI**: c275 • **ST**: 1.D.M.41.O
**PN**: **Opisthocoela** Nicholls, 1916.na.c01 • **ak**
**PA**: 00 • **Opisthocoela** • Nicholls 1916.na: 86 • **'T'**
01 • **Opisthocoelina** • Pearse 1936.pa: 20 • **bO**
02 • **Opisthocoela** • Fei[+1] 2016.fa: ix • **bO**
**RL**: ↓ **Opisthocoeli** 1860.mb.c01
↔| **Mediogyrinidae** 1878.la.c02

**GN**: **Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.06.02. Infraordo **Mediogyrinia** Lataste, 1878.la.c02-02

Opisthocoela Ahl, 1930
**SI**: 336 • **CI**: c309 • **ST**: 1.D.M.41.O
**PN**: **Opisthocoela** Ahl, 1930.aa.c01 • **ak**
**PA**: 00 • **Opisthocoela** • Ahl 1930.aa: 83 • **bO**
**RL**: ↓ **Opisthocoeli** 1860.mb.c01
**GN**: **Angusticoela** 1958.ra.c01
**Hydrobatrachia** 1828.ra.c14
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Opisthoglossa Günther, 1858
**SI**: 205 • **CI**: c182 • **ST**: 2.D.M.31.O
**PN**: **Opisthoglossa** Günther, 1858.gc.c01 • **ak**
**PA**: 00 • **Opisthoglossa** • Günther 1858.gc: 339 • **Gr**
01 • **Opistoglossa** • Fatio 1872.fa: 232 • **UC**
02 • **Opisthoglossa** • Hoffmann 1878.ha: 616 • **UC**
03 • **Opisthoglosses** • Lataste 1879.lb: 276 • **UC**
04 • **Opisthoglossa** • Lataste 1879.lb: 339 • **'T'**
05 • **Ophistoglosses** • Brocchi 1881.ba: 5 • **Sc**
**RL**: **> Oxydactyla** 1858.gc.c03 • **PR**
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Orthoglena Bruch, 1862
**SI**: 224 • **CI**: c198 • **ST**: 2.D.M.41.O
**PN**: **Orthoglenides** Bruch, 1862.ba.c04 • **ak**
**PA**: 00 • **Orthoglenides** • Bruch 1862.ba: 221 • **'F'**
01 • **Orthoglena** • *Hoc loco* • **EU**
**RL**: ↔ < **Orthoglena** 1862.ba.c05 • **AI**: **HL**
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Orthoglena Bruch, 1862
**SI**: 225 • **CI**: c199 • **ST**: 2.D.M.31.O
**PN**: **Orthoglena** Bruch, 1862.ba.c05 • **ak**
**PA**: 00 • **Orthoglena** • Bruch 1862.ba: 221 • **'F'**
**RL**: ↔ > **Orthoglenides** 1862.ba.c04 • **AI**: **HL**
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Oxydactyla Günther, 1858
**SI**: 207 • **CI**: c184 • **ST**: 2.D.M.31.O
**PN**: **Oxydactyla** Günther, 1858.gc.c03 • **ak**
**PA**: 00 • **Oxydactyla** • Günther 1858.gc: 341 • **Sr**
01 • **Oxydactila** • Hoffmann 1878.ha: 616 • **UC**
02 • **Oxydactylia** • Knauer 1878.ka: 104 • **Gr**
03 • **Oxydactyles** • Lataste 1879.lb: 276 • **UC**
04 • **Oxydactyles** • Brocchi 1881.ba: 5 • **Gr**
**RL**: **< Opisthoglossa** 1858.gc.c01 • **PR**
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Palaeobatrachacea Fejérváry, 1921
**SI**: 313 • **CI**: c286 • **ST**: 2.D.M.31.R
**PN**: **Palaeobatrachoidea** Fejérváry, 1921.fb.c01 • **ak**
**PA**: 00 • **Palaeobatrachoidea** • Fejérváry 1921.fb: 16 • **bO**
01 • **Palaeobatrachacea** • *Hoc loco* • **ER**
**RL**: > **Pipomorpha** 1921.fb.c02 • **PR**
> **Palaeobatrachomorpha** 1921.fb.c03 • **PR**
**GN**: **Dorsipares** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Palaeobatrachacea Bauer, 1987
**SI**: 417 • **CI**: c377 • **ST**: 1.D.M.41.R
**PN**: **Palaeobatrachia** Bauer, 1987.bc.c02 • **ak**
**PA**: 00 • **Palaeobatrachia** • Bauer 1987.bc: 52 • **UC**
01 • **Palaeobatrachacea** • *Hoc loco* • **ER**
**RL**: ↓ **Palaeobatrachoidea** 1987.bc.c06
**GN**: **Dorsipares** 1816.ba.c06
**Laevogyrinia** 1878.la.c01
**GZ**: INR
**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Palaeobatrachomorpha Fejérváry, 1921
**SI**: 315 • **CI**: c288 • **ST**: 2.D.M.31.A
**PN**: **Palaeobatrachomorpha** Fejérváry, 1921.fb.c03 • **ak**
**PA**: 00 • **Palaeobatrachomorpha** † Fejérváry 1921.fb: 24 • **Gs**
**RL**: < **Palaeobatrachoidea** 1921.fb.c01 • **PR**
< **Pipomorpha** 1921.fb.c02 • **AI**: **HL**
**GN**: **Dorsipares** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

**Pananura nov.**
**SI**: 440 • **CI**: c399 • **ST**: 1.D.M.11.O
**PN**: **Pananura nov.**, DOP.da.c07
**PA**: 00 • **Pananura** • *Hoc loco* • **bP**
**RL**: INR
**GN**: **Pananura** DOP.da.c07
**GZ**: INR
**EN**: **KYR.** C.11.05. Subphalanx **Pananura nov.**, DOP.da.c07-00

Parotoidia Gardiner, 1982
**SI**: 409 • **CI**: c369 • **ST**: 1.D.M.30.O
**PN**: **Parotoidia** Gardiner, 1982.ga.c01 • **ak**
**PA**: 00 • **Parotoidia** • Gardiner 1982.ga: 228 • **pO**
01 • **Paratoidea** • Milner 1988.ma: 74 • **pO**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Pedata Haworth, 1825
**SI**: 067 **• CI**: c049 **• ST**: 2.D.M.30.O
**PN**: **Pedata** Haworth, 1825.ha.c01 • **ak**
**PA**: 00 • **Pedata** • Haworth 1825.ha: 372 • **UC**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Pelobatacea Laurent *in* Fuhn, 1960
**SI**: 372 **• CI**: cn04 **• ST**: 1.D.M.00.R
**PN**: **Pelobatoidea** Laurent *in* Fuhn, 1960.fa.c04 • **an**
**PA**: 00 • **Pelobatoidea •** Laurent *in* Fuhn 1960.fa: 163 • **bO**
01 • **Pelobatacea •** *Hoc loco* • **ER**
**RL**: INR
**GN**: **Archaeosalientia** 1981.ra.c01
**GZ**: INR
**EN**: **KYR.** C.08.01. Superphalanx **Archaeosalientia** Roček, 1981.ra.c01-01

Pelobatomorpha Fejérváry, 1921
**SI**: 317 **• CI**: c290 **• ST**: 1.D.M.31.A
**PN**: **Pelobatomorpha** Fejérváry, 1921.fb.c05 • **ak**
**PA**: 00 • **Pelobatomorpha •** Fejérváry 1921.fb: 24 • **Gs**
**RL**: < **Anisobatrachoidea** 1921.fb.c04 • **PR**
> **Cystignathomorpha** 1921.fb.c07 • **AI**: **HL**
**GN**: **Angusticoela** 1958.ra.c01
**Hydrobatrachia** 1828.ra.c14
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Perennibranchia Latreille 1824
**SI**: 063 **• CI**: c045 **• ST**: 1.D.M.31.E
**PN**: **Perennibranches** Latreille 1824.la.c02 • **ak**
**PA**: 00 • **Perennibranches** • Latreille 1824.la: 9 • **O**
01 • **Perennibranchia** • Latreille 1825.la: 105 • **O**
02 • **Perennibranchiata** • Jourdan 1834.jb: 234 • **Gr**
03 • **Perennibranchiata** • Jones 1841.ja: 589 • **UC**
04 • **Perennibrachiae** • Gray 1842.ga: 113 • **O**
05 • **Perennobrachia** • Gray 1842.ga: 114 • **O**
06 • **Perennibranchiata** • Stannius 1856.sa: 4 • **bO**
07 • **Perennibranchiata** • Haeckel 1866.ha: cxxxi • **O**
**RL**: INR
**GN**: **» OA, SD**: Latreille 1825.la: 105:
**Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Perennibranchia Hunter, 1834
**SI**: 121 **• CI**: c101 **• ST**: 1.D.M.21.E
**PN**: **Perennibranchiata** Hunter, 1834.ha.c01 • **ak**
**PA**: 00 • **Perennibranchiata** • Hunter 1834.ha: 145 • **UC**
01 • **Perennibranchia** • *Hoc loco* • **EE**
**RL**: ↓ **Perennibranches** 1824.la.c02
**GN**: **Imperfectibranchia** 1838.ha.c03
**Meantes** 1767.la.c01
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pseudosalamandrae** Bonaparte, 1850.bb.c02-02]

Perennibranchia Lataste, 1878
**SI**: 271 **• CI**: c245 **• ST**: 2.D.M.41.E
**PN**: **Perennibranches** Lataste, 1878.lb.c01 • **ak**
**PA**: 00 • **Perennibranches** • Lataste 1878.lb: 3 • **Sc**
01 • **Perennibranchia** • Goodrich 1930.ga: xxi • **bO**
**RL**: ↓ **Perennibranches** 1824.la.c02
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Perobranchia Duméril[+1], 1841
**SI**: 157 **• CI**: c134 **• ST**: 2.D.M.31.E
**PN**: **Perobranches** Duméril[+1], 1841.da.c04 • **ak**
**PA**: 00 • **Perobranches** • Duméril[+1] 1841.da: 52 • **Gr/Sc/'T'**
01 • **Perobranchia** • Dubois 2016.da: 9 • **iO**
02 • **Perobranchia** • Dubois 2016.da: 9 • **hO**
**RL**: **< Atretoderes** 1841.da.c03 • **AI**: **HL**
↔ < **Amphiumoides** 1841.da.c05 • **AI**: **HL**
< **Exobranches** 1841.da.c06 • **AI**: **HL**
< **Trematoderes** 1841.da.c08 • **AI**: **HL**
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Peromela Duméril, 1839
**SI**: 133 **• CI**: c113 **• ST**: 1.D.M.30.E
**PN**: **Peromeles** Duméril, 1839.da.c01 • **ak**
**PA**: 00 • **Peromeles** • Duméril 1839.da: 583 • **bO**
01 • **Peromeles** • Baird 1851.ba: 249, 261 • **O**
02 • **Peromela** • Van der Hoeven 1855.va: 460 • **O**
**RL**: INR
**GN**: **Plesiophiona** DOP.da.c10
**Pseudophiona** 1816.ba.c11
**GZ**: INR
**EN**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814.ra.c01-02

Peromela Gouriet, 1868
**SI**: 251 **• CI**: c225 **• ST**: 1.D.M.41.E
**PN**: **Peromeles** Gouriet, 1868.ga.c06 • **ak**
**PA**: 00 • **Peromeles** • Gouriet 1868.ga: 206 • UC
01 • **Peromela** • *Hoc loco* • **EE**
**RL**: ↓ **Peromeles** 1839.da.c01
**GN**: **Pseudophiona** 1816.ba.c11
**GZ**: INR
**EN**: **KYR.** C.05.04. Subordo **Pseudophiona** Blainville, 1816.ba.c11-06

Phaeneropleurae Fitzinger, 1843
**SI**: 174 **• CI**: c151 **• ST**: 2.D.M.31.O

**PN**: **Phaeneropleurae** Fitzinger, 1843.fa.c06 • **ak**

**PA**: 00 • **Phaeneropleurae** • Fitzinger 1843.fa: 33 • **Sc**

01 • **Phaeneropleura** • Gray 1850.ga: 15, 71 • **UC**

02 • **Phaneropleurae** • Kuhn 1967.kb: 33 • **UC**

**RL**: **< Cryptopleurae** 1843.fa.c07 • **AI**: **HL**

**GN**: **Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

**Phaneranura nov.**

**SI**: 435 • **CI**: c394 • **ST**: 1.D.M.11.O

**PN**: **Phaneranura nov.**, DOP.da.c02

**PA**: 00 • **Phaneranura** • *Hoc loco* • **P**

**RL**: INR

**GN**: **Phaneranura** DOP.da.c02

**GZ**: INR

**EN**: **KYR.** C.10.02. Phalanx **Phaneranura nov.**, DOP.da.c02-00

Phanerobranchia Wagler, 1828

**SI**: 096 • **CI**: c077 • **ST**: 3.D.M.31.E

**PN**: **Phanerobranchi** Wagler, 1828.wb.c03 • **ak**

**PA**: 00 • **Phanerobranchi** • Wagler 1828.wb: 859 • **'F'**

01 • **Phanerobranchia** • *Hoc loco* • **EE**

**RL**: INR

**GN**: **Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Phanerobranchia Bonaparte, 1831

**SI**: 111 • **CI**: c092 • **ST**: 1.D.M.41.O

**PN**: **Phanerobranchia** Bonaparte, 1831.bb.c02 • **ak**

**PA**: 00 • **Phanerobranchia** • Bonaparte 1831.bb: 136 • **O**

01 • **Phanaerobranchia** • Bonaparte 1838.ba: [194] • **O**

02 • **Phanerobanchia** • Gray 1850.ga: 64 • **O**

**RL**: ↓ **Phanerobranchi** 1828.wb.c03

**GN**: **Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Phaneroglossa Wagler, 1830

**SI**: 104 • **CI**: c085 • **ST**: 2.D.M.30.E

**PN**: **Phaneroglossae** Wagler, 1830.wa.c03 • **ak**

**PA**: 00 • **Phaneroglossae** • Wagler 1830.wa: 131 • **'F'**

01 • **Phaneroglossa** • Hoffmann 1878.ha: 582 • **'F'**

**RL**: INR

**GN**: **Anura** 1805.da.c01

**Urodela** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Phaneroglossa Duméril[+1], 1841

**SI**: 154 • **CI**: c131 • **ST**: 2.D.M.41.E

**PN**: **Phaneroglosses** Duméril[+1], 1841.da.c01 • **ak**

**PA**: 00 • **Phaneroglosses** • Duméril[+1] 1841.da: 49 • **Gr/Sc/'T'**

01 • **Phaneroglossae** • Gray 1842.ga: 112 • **Sc**

02 • **Phaneroylossae** • Holbrook 1842.ha: 74 • **Sc**

03 • **Phaneroglossa** • Gervais 1847.ga: 721 • **Gr**

04 • **Phaneroglossa** • Baird 1851.ba: 257 • **bO**

05 • **Phaneroglosses** • Desmarest 1857.da: 19 • **'T'**

06 • **Phaneroglossae** • Günther 1858.gc: 339 • **Gr**

07 • **Phaneroglosses** • Blanchard 1885.bb: 588 • **UC**

08 • **Phaneroglossa** • Nicholls 1916.na: 81 • **UC**

**RL**: ↓ **Phaneroglossae** 1830.wa.c03

**GN**: **Geobatrachia** 1828.ra.c18

**Mediogyrinia** 1878.la.c02

**GZ**: INR

**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Phaneroglossa Boulenger, 1882

**SI**: 284 • **CI**: c258 • **ST**: 1.D.M.41.O

**PN**: **Phaneroglossa** Boulenger, 1882.bb.c01 c **ak**

**PA**: 00 • **Phaneroglossa** • Boulenger 1882.bb: vii, 1 • **bO**

01 • **Phaneroglossa** • Abel 1919.aa: xii, 322 • **O**

**RL**: ↓ **Phaneroglossae** 1830.wa.c03

**GN**: **Angusticoela** 1958.ra.c01

**Hydrobatrachia** 1828.ra.c14

**GZ**: INR

**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

**Phoranura nov.**

**SI**: 437 • **CI**: c396 • **ST**: 1.D.M.11.O

**PN**: **Phoranura nov.**, DOP.da.c04

**PA**: 00 • **Phoranura** • *Hoc loco* • **iP**

**RL**: INR

**GN**: **Phoranura** DOP.da.c04

**GZ**: INR

**EN**: **KYR.** C.12.01. Infraphalanx **Phoranura nov.**, DOP.da.c04-00

**Phrynanura nov.**

**SI**: 438 • **CI**: c397 • **ST**: 1.D.M.11.O

**PN**: **Phrynanura nov.**, DOP.da.c05

**PA**: 00 • **Phrynanura** • *Hoc loco* • **iP**

**RL**: INR

**GN**: **Phrynanura** DOP.da.c05

**GZ**: INR

**EN**: **KYR.** C.12.02. Infraphalanx **Phrynanura nov.**, DOP.da.c05-00

Phrynia Bauer, 1986

**SI**: 412 • **CI**: c372 • **ST**: 2.D.M.31.O

**PN**: **Phrynia** Bauer, 1986.ba.c02 • **ak**

**PA**: 00 • **Phrynia** • Bauer 1986.ba: 6 • **UC**

**RL**: INR

**GN**: **Phaneranura** DOP.da.c02

**Scoptanura** 1973.sb.c02

**GZ**: INR

**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02

[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Phrynobatrachia Bauer, 1987

**SI**: 421 • **CI**: c381 • **ST**: 1.D.M.30.O

**PN**: **Phrynobatrachia** Bauer, 1987.bc.c06 • **ak**

**PA**: 00 • **Phrynobatrachia** • Bauer 1987.bc: 52 • **UC**

**RL**: INR

**GN**: **Aquipares** 1816.ba.c07
**Helanura** DOP.da.c09
**GZ**: INR
**EN**: **KYR.** C.08.02. Superphalanx **Ranomorpha** Fejérváry, 1921.fb.c08-01

Phrynobatrachia Bauer, 1988
**SI**: 424 • **CI**: c384 • **ST**: 1.D.M.30.O
**PN**: **Phrynobatrachia** Bauer, 1988.ba.c01 • **ak**
**PA**: 00 • **Phrynobatrachia** • Bauer 1988.ba: E 2 • **UC**
**RL**: ↓ **Phrynobatrachia** 1987.bc.c06
**GN**: **Aquipares** 1816.ba.c07
**Helanura** DOP.da.c09
**GZ**: INR
**EN**: **KYR.** C.08.02. Superphalanx **Ranomorpha** Fejérváry, 1921.fb.c08-01

Phrynoglossa Duméril[+1], 1841
**SI**: 155 • **CI**: c132 • **ST**: 2.D.M.31.E
**PN**: **Phrynaglosses** Duméril[+1], 1841.da.c02 • **ak**
**PA**: 00 • **Phrynaglosses** • Duméril[+1] 1841.da: 49 • **Gr/Sc/'T'**
01 • **Phrynaglossae** • Gray 1842.ga: 112 • **Sc**
02 • **Phrynoglossae** • Agassiz 1847.aa: 830 • **UC**
03 • **Phrynaglossa** • Baird 1851.ba: 257 • **bO**
04 • **Phrynaglosses** • Desmarest 1856.da: 156 • **'T'**
05 • **Phrynoglosses** • Desmarest 1857.da: 19 • **'T'**
06 • **Phrynoglossa** • *Hoc loco* • **ER**
**RL**: ← **Aglossae** 1830.wa.c02
**GN**: **Dorsipares** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Phyllopodobatrachia Ritgen, 1828
**SI**: 087 • **CI**: c068 • **ST**: 2.D.M.32.E
**PN**: **Phyllopodobatrachi** Ritgen, 1828.ra.c13 • **ak**
**PA**: 00 • **Phyllopodobatrachi** • Ritgen 1828.ra: 278 • **'F'**
01 • **Phyllopodobatrachia** • *Hoc loco* • **EE**
**RL**: ↔ < **Hydrobatrachi** 1828.ra.c14 • **AI**: **HL**
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Pipacea Laurent *in* Fuhn, 1960
**SI**: 371 • **CI**: cn03 • **ST**: 1.D.M.00.R
**PN**: **Pipoidea** Laurent *in* Fuhn, 1960.fa.c03 • **an**
**PA**: 00 • **Pipoidea** • Laurent *in* Fuhn 1960.fa: 163 • **bO**
01 • **Pipacea** • *Hoc loco* • **ER**
**RL**: INR
**GN**: **Dorsipares** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Pipacea Dubois, 1983
**SI**: 410 • **CI**: c370 • **ST**: 1.D.M.31.R
**PN**: **Pipoidei** Dubois, 1983.da.c01 • **ak**
**PA**: 00 • **Pipoidei** • Dubois 1983.da: 271 • **bO**
01 • **Pipacea** • Dubois 2015.da: 90 • **ER**
**RL**: ← **Mesobatrachia** 1980.la.c01
**GN**: **Dorsipares** 1816.ba.c06
**Laevogyrinia** 1878.la.c01
**GZ**: INR
**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Pipiformia Brocchi, 1881
**SI**: 282 • **CI**: c256 • **ST**: 2.D.M.31.A
**PN**: **Pipaeformes** Brocchi, 1881.ba.c04 • **ak**
**PA**: 00 • **Pipaeformes** • Brocchi 1881.ba: 9 • **UC**
01 • **Pipiformes** • Boulenger 1882.ba: 12 • **UC**
02 • **Pipiformia** • Dubois 2015.da: 90 • **UC**
**RL**: INR
**GN**: **Dorsipares** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Pipomorpha Fejérváry, 1921
**SI**: 314 • **CI**: c287 • **ST**: 2.D.M.31.A
**PN**: **Pipaemorpha** Fejérváry, 1921.fb.c02 • **ak**
**PA**: 00 • **Pipaemorpha** • Fejérváry 1921.fb: 16 • **Gs**
01 • **Pipomorpha** • Dubois 2015.da: 90 • **EA**
**RL**: < **Palaeobatrachoidea** 1921.fb.c01 • **PR**
> **Palaeobatrachomorpha** 1921.fb.c03 • **AI**: **HL**
**GN**: **Dorsipares** 1816.ba.c06
**GZ**: INR
**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Pisciformi Hogg, 1839
**SI**: 142 • **CI**: c120 • **ST**: 1.D.M.31.X
**PN**: **Pisciformia** Hogg, 1839.ha.c07 • **ak**
**PA**: 00 • **Pisciformia** • Hogg 1839.ha: 271 • **O**
01 • **Pisciformes** • Dubois 2015.da: 90 • **EX**
02 • **Pisciformi** • *Hoc loco* • **EX**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Plagioglena Bruch, 1862
**SI**: 222 • **CI**: c196 • **ST**: 2.D.M.31.O
**PN**: **Plagioglenides** Bruch, 1862.ba.c02 • **ak**
**PA**: 00 • **Plagioglenides** • Bruch 1862.ba: 221 • **'F'**
01 • **Plagioglena** • *Hoc loco* • **EE**
**RL**: < **Cycloglenides** 1862.ba.c01 • **AI**: **HL**
> **Plagioglena** 1862.ba.c03 • **AI**: **HL**
**GN**: **Hylobatrachia** 1828.ra.c16
**GZ**: INR
**EN**: **KYR.** C.13.03. Hypophalanx **Hylobatrachia** Ritgen, 1828.ra.c16-01

Plagioglena Bruch, 1862
**SI**: 223 • **CI**: c197 • **ST**: 2.D.M.31.O
**PN**: **Plagioglena** Bruch, 1862.ba.c03 • **ak**
**PA**: 00 • **Plagioglena** • Bruch 1862.ba: 221 • **'F'**
**RL**: < **Cycloglenides** 1862.ba.c01 • **AI**: **HL**
> **Plagioglenides** 1862.ba.c02 • **AI**: **HL**

**GN**: **Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Platydactyla Günther, 1858
**SI**: 208 • **CI**: c185 • **ST**: 2.D.M.31.O
**PN**: **Platydactyla** Günther, 1858.gc.c04 • **ak**
**PA**: 00 • **Platydactyla** • Günther 1858.gc: 341 • **Sr**
01 • **Platydactyla** • Hoffmann 1878.ha: 645 • **UC**
02 • **Platydactyles** • Brocchi 1881.ba: 5 • **Gr**
**RL**: INR
**GN**: **Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Platydactyla Lataste, 1879
**SI**: 275 • **CI**: c249 • **ST**: 2.D.M.41.E
**PN**: **Platydactyles** Lataste, 1879.lb.c01 • **ak**
**PA**: 00 • **Platydactyles** • Lataste 1879.lb: 276 • **UC**
01 • **Platydactyla** • *Hoc loco* • **EE**
**RL**: ↓ **Platydactyla** 1858.gc.c04
**GN**: **Hylobatrachia** 1828.ra.c16
**GZ**: INR
**EN**: **KYR.** C.13.03. Hypophalanx **Hylobatrachia** Ritgen, 1828.ra.c16-01

**Plesiophiona nov.**
**SI**: 443 • **CI**: c402 • **ST**: 1.D.M.11.O
**PN**: **Plesiophiona nov.**, DOP.da.c10
**PA**: 00 • **Plesiophiona** • *Hoc loco* • **bO**
**RL**: INR
**GN**: **Plesiophiona** DOP.da.c10
**GZ**: INR
**EN**: **KYR.** C.05.03. Subordo **Plesiophiona nov.**, DOP.da.c10-00

Plethodontacea Smith[+1], 1948
**SI**: 365 • **CI**: c332 • **ST**: 1.D.M.31.R
**PN**: **Plethodontoidea** Smith[+1], 1948.sa.c01 • **ak**
**PA**: 00 • **Plethodontoidea** • Smith[+1] 1948.sa: iii, 16 • **bO**
01 • **Plethodontacea** • *Hoc loco* • **ER**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Plethodontacea Kuhn, 1962
**SI**: 384 • **CI**: c344 • **ST**: 1.D.M.40.R
**PN**: **Plethodontoidea** Kuhn, 1962.ka.c05 • **ak**
**PA**: 1962.ka.c05.00 • **Plethodontoidea** • Kuhn 1962.ka: 363 • **bO**
01 • **Plethodontacea** • *Hoc loco* • **ER**
**RL**: ↓ **Plethodontoidea** 1948.sa.c01
< **Salamandroidea** 1962.ka.c04 • **AI**: **HL**
< **Proteida** 1962.ka.c06 • **AI**: **HL**
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte, 1831.ba.c01-01]

Plethodontacea Kuhn, 1965
**SI**: 393 • **CI**: c353 • **ST**: 1.D.M.40.R
**PN**: **Plethodontoidea** Kuhn, 1965.ka.c04 • **ak**
**PA**: 00 • **Plethodontoidea** • Kuhn 1965.ka: 38 • **bO**
01 • **Plethodontacea** • Dubois 2015.da: 107 • **ER**
**RL**: ↓ **Plethodontoidea** 1948.sa.c01
< **Ambystomatoidea** 1965.ka.c02 • **AI**: **HL**
**GN**: **Pseudosauria** 1816.ba.c08
|**Urodela Incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Pneumobranchia Sonnini[+1], 1801
**SI**: 016 • **CI**: c007 • **ST**: 1.D.M.03.E
**PN**: **Pneumobranchiens** Sonnini[+1], 1801.sa.c01 • **hk**
**PA**: 00 • **Pneumobranchiens** • Sonnini[+1] 1801.sa: 309 • **O**
01 • **Pneumobranches** • Bory de Saint-Vincent 1828.bb: 218 • **O**
02 • **Pneumobranchia** • Dubois 2015.da: 49 • **bO**
03 • **Pneumobranchia** • Dubois 2016.da: 9 • **iO**
**RL**: INR
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Pneumobranchia Hunter, 1834
**SI**: 122 • **CI**: c102 • **ST**: 1.D.M.41.E
**PN**: **Pneumobranchiata** Hunter, 1834.ha.c02 • **ak**
**PA**: 00 • **Pneumobranchiata** • Hunter 1834.ha: 145 • **UC**
01 • **Pneumobranchia** • Owen 1835.oa: 214 • **UC**
**RL**: ← **Perennibranchiata** 1834.ha.c01
**GN**: **Imperfectibranchia** 1838.ha.c03
**Meantes** 1767.la.c01
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pseudosalamandrae** Bonaparte, 1850.bb.c02-02]

Pododysmolgae Ritgen, 1828
**SI**: 081 • **CI**: c062 • **ST**: 2.D.M.31.O
**PN**: **Pododysmolgae** Ritgen, 1828.ra.c07 • **ak**
**PA**: 00 • **Pododysmolgae** • Ritgen 1828.ra: 277 • **'F'**
**RL**: < **Morphiuromolgaei** 1828.ra.c08 • **PR**
< **Molgae** 1828.ra.c09 • **PR**
< **Hydromolgae** 1828.ra.c10 • **AI**: **HL**
< **Geomolgae** 1828.ra.c11 • **AI**: **HL**
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Proanura Piveteau, 1937
**SI**: 361 • **CI**: c331 • **ST**: 1.D.M.31.E
**PN**: **Proanoura** Piveteau, 1937.pa.c02 † • **ak**

PA: 00 • **Proanoura** • Piveteau 1937.pa: 169 • **bO/O**
01 • **Proanura** • Kuhn 1939.ka: 18 • **bO**
02 • **Proanura** • Romer 1945.ra: 591 • **O**
03 • **Proanoura** • Kuhn 1961.ka: 23 • **O**
04 • **Proanupa** • Romer 1966.rb: 364 • **O**
**RL**: < **Euanoura** 1937.pa.c01 • **AI**: **HL**
**GN**: |**Anura Incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Procera Feller[+1], 1998
**SI**: 427 • **CI**: c387 • **ST**: 1.D.M.30.O
**PN**: **Procera** Feller+1, 1998.fa.c01 • **ak**
**PA**: 00 • **Procera** • Feller[+1] 1998.fa: 511 • **pO**
**RL**: INR
**GN**: **Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
|**Lissamphibia incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Procoela Owen, 1860
**SI**: 219 • **CI**: zh21 • **ST**: 1.U.U.99.E
**PN**: **Procoelia** Owen, 1860.oa.c03 • **zz**
**PA**: 00 • **Procoelia** • Owen 1860.oa: x, 273 • **bO**
01 • **Procoela** • *Hoc loco* • **EE**
**RL**, **GN, GZ**, **EN**: ●

Procoela Lataste, 1879
**SI**: 276 • **CI**: c250 • **ST**: 1.D.M.41.E
**PN**: **Procoelidae** Lataste, 1879.lb.c02 • **ak**
**PA**: 00 • **Procoelidae** • Lataste 1879.lb: 339 • **bO**
01 • **Procoela** • *Hoc loco* • **EE**
**RL**: ↓ **Procoelia** 1860.oa.c03
↔| **Laevogyrinidae** 1878.la.c01
**GN**: **Archaeosalientia** 1981.ra.c01
**Ranomorpha** 1921.fb.c08
**GZ**: INR
**EN**: **KYR.** C.07.02. Hypoordo **Laevogyrinia** Lataste, 1878.la.c01-04

Procoela Nicholls, 1916
**SI**: 304 • **CI**: c277 • **ST**: 1.D.M.21.O
**PN**: **Procoela** Nicholls, 1916.na.c03 • **ak**
**PA**: 00 • **Procoela** • Nicholls 1916.na: 87 • **'T'**
01 • **Procoelina** • Pearse 1936.pa: 20 • **bO**
02 • **Procela** • Pearse 1949.pa: 20 • **bO**
**RL**: ↓ **Procoelia** 1860.oa.c03
**GN**: **Bainanura** DOP.da.c03
**Diplosiphona** 1859.ga.c02
**GZ**: INR
**EN**: **KYR.** C.12.02. Infraphalanx **Phrynanura nov.**, DOP.da.c05-00
**[HYP.** Unnamed]

Procoela Noble, 1922
**SI**: 323 • **CI**: c296 • **ST**: 1.D.M.21.O
**PN**: **Procoela** Noble, 1922.na.c02 • **ak**
**PA**: 00 • **Procoela** • Noble 1922.na: 22 • **bO**
**RL**: ↓ **Procoelia** 1860.oa.c03
**GN**: **Gaianura** DOP.da.c06
**Hylobatrachia** 1828.ra.c16
**GZ**: INR
**EN**: **KYR.** C.12.02. Infraphalanx **Phrynanura nov.**, DOP.da.c05-00

Procoela Ahl, 1930
**SI**: 337 • **CI**: c310 • **ST**: 1.D.M.41.O
**PN**: **Procoela** Ahl, 1930.aa.c02 • **ak**
**PA**: 00 • **Procoela** • Ahl 1930.aa: 84 • **bO**
**RL**: ↓ **Procoelia** 1860.oa.c03
**GN**: **Dorsipares** 1816.ba.c06
**Laevogyrinia** 1878.la.c01
**GZ**: INR
**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Procoela Tatarinov, 1964
**SI**: 387 • **CI**: c347 • **ST**: 1.D.M.41.O
**PN**: **Procoela** Tatarinov, 1964.ta.c02 • **ak**
**PA**: 00 • **Procoela** • Tatarinov 1964.ta: 8, 126 • **bO**
**RL**: ↓ **Procoelia** 1860.oa.c03
> **Anomocoela** 1964.ta.c01 • **AI**: **HL**
**GN**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**GZ**: INR
**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Procoela Fei [+1] 2016
**SI**: 433 • **CI**: cn07 • **ST**: 1.D.M.00-04.O
**PN**: **Procoela** Fei [+1] 2016.fa.c01• **an**
**PA**: 00 • **Procoela** • Fei[+1] 2016.fa: xii • **bO**
**RL**: INR
**GN**: **Hylobatrachia** 1828.ra.c16
**GZ**: INR
**EN**: **KYR.** C.13.03. Hypophalanx **Hylobatrachia** Ritgen, 1828.ra.c16-01

Prolatibranchia Hogg, 1841
**SI**: 163 • **CI**: c140 • **ST**: 1.D.M.30.O
**PN**: **Prolatibranchia** Hogg, 1841.ha.c02 • **ak**
**PA**: 00 • **Prolatibranchia** • Hogg 1841.ha: 357 • **'T'**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Prosirenacea Estes, 1981
**SI**: 403 • **CI**: c363 • **ST**: 1.D.M.30.R
**PN**: **Prosirenoidea** Estes, 1981.ea.c02 † • **ak**
**PA**: 00 • **Prosirenoidea** • Estes 1981.ea: xiii, 18 •**bO**
01 • **Prosirenacea** • Dubois 2015.da: 107 • **ER**
**RL**: INR
**GN**: |**Urodela incertae sedis**|
|**Lissamphibia incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow,

1898.ga.c01-00

Proteacea Müller, 1831

**SI**: 113 • **CI**: c094 • **ST**: 1.D.M.31.R

**PN**: **Proteidea** Müller, 1831.ma.c02 • **ak**

**PA**: 00 • **Proteidea** • Müller 1831.ma: 711 • **O**

01 • **Proteideae** • Tschudi 1838.ta: 26 • **O**

02 • **Protei** • Bonaparte 1850.bb: pl. • **O**

03 • **Proteacea** • Dubois 2015.da: 90 • **ER**

**RL**: INR

**GN**: **Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Proteacea Cope 1866

**SI**: 233 • **CI**: c207 • **ST**: 1.D.M.41.R

**PN**: **Proteida** Cope, 1866.ca.c02 • **ak**

**PA**: 00 • **Proteida** • Cope 1866.ca: 102 • **bO**

01 • **Proteida** • Cope 1868.ca: 208 • **O**

02 • **Proteina** • Pearse 1936.pa: 20 • **bO**

03 • **Proteidea** • Boettger 1952.ba: 279 • **bO**

04 • **Proteoidea** • Edwards 1976.ea: 325 • **bO**

05 • **Proteoidei** • Dubois 1983.da: 113 • **bO**

06 • **Proteacea** • *Hoc loco* • **ER**

**RL**: ↓ **Proteidea** 1831.ma.c02

**GN**: **Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Proteacea Huxley, 1871

**SI**: 253 • **CI**: c227 • **ST**: 1.D.M.40.R

**PN**: **Proteidea** Huxley, 1871.ha.c01 • **ak**

**PA**: 00 • **Proteidea** • Huxley 1871.ha: 173 • **bO**

01 • **Proteida** • Knauer 1878.ka: 95 • **bO**

02 • **Proteacea** • Dubois 2015.da: 107 • **ER**

**RL**: ↓ **Proteidea** 1831.ma.c02

**GN**: **Imperfectibranchia** 1838.ha.c03

**Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Proteacea Hay, 1929

**SI**: 347 • **CI**: c320 • **ST**: 1.D.M.40.R

**PN**: **Proteida** Hay, 1929.ha.c04 • **ak**

**PA**: 00 • **Proteida** • Hay 1929.ha: 521, 841 • **O**

01 • **Proteacea** • *Hoc loco* • **ER**

**RL**: ↓ **Proteidea** 1831.ma.c02

**GN**: **Lissamphibia** 1898.ga.c01

|**Lepospondyli**|

|**Amphibia incertae sedis**|

**GZ**: INR

**EN**: **KYR.** C.02.01. Classis **Amphibia** Blainville, 1816.ba.c02-03

Proteacea Romer, 1945

**SI**: 364 • **CI**: mc08 • **ST**: 1.D.M.00.R

**PN**: **Proteida** Romer, 1945.ra.c03 • **an**

**PA**: 00 • **Proteida** • Romer 1945.ra: 592 • **bO**

01 • **Proteacea** • *Hoc loco* • **ER**

**RL**: ↓ **Proteidea** 1831.ma.c02

< **Amblystomatoidea** 1945.ra.c01 • **AI**: **HL**

< **Salamandroidea** 1945.ra.c02 • **AI**: **HL**

**GN**: **Pseudosauria** 1816.ba.c08

|**Urodela Incertae sedis**|

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Proteacea Kuhn, 1961

**SI**: 377 • **CI**: c338 • **ST**: 1.D.M.40.R

**PN**: **Proteida** Kuhn, 1961.ka.c03 • **ak**

**PA**: 00 • **Proteida** • Kuhn 1961.ka: 13 • **bO**

01 • **Proteoidea** • Estes 1981.ea: xiii, 26 • **bO**

02 • **Proteacea** • Dubois 2015.da: 107 • **ER**

**RL**: ↓ **Proteidea** 1831.ma.c02

< **Cryptobranchoidea** 1961.ka.c01 • **AI**: **HL**

> **Batrachosauroidoidea** 1961.ka.c02 • **AI**: **HL**

< **Meantes** 1961.ka.c04 • **AI**: **HL**

**GN**: **Pseudosauria** 1816.ba.c08

|**Urodela Incertae sedis**|

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Proteacea Kuhn, 1962

**SI**: 385 • **CI**: c345 • **ST**: 1.D.M.40.R

**PN**: **Proteida** Kuhn, 1962.ka.c06 • **ak**

**PA**: 00 • **Proteida** • Kuhn 1962.ka: 366 • **bO**

01 • **Proteacea** • Dubois 2015.da: 107 • **ER**

**RL**: ↓ **Proteidea** 1831.ma.c02

< **Salamandroidea** 1962.ka.c04 • **AI**: **HL**

> **Plethodontoidea** 1962.ka.c05 • **AI**: **HL**

**GN**: **Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

|**Urodela Incertae sedis**|

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Proteroglossa Günther, 1858

**SI**: 206 • **CI**: c183 • **ST**: 2.D.M.31.O

**PN**: **Proteroglossa** Günther, 1858.gc.c02 • **ak**

**PA**: 00 • **Proteroglossa** • Günther 1858.gc: 339 • **Gr**

01 • **Proteroglossa** • Fatio 1872.fa: 232 • **UC**

02 • **Proteroglosses** • Brocchi 1881.ba: 5 • **Sc**

**RL**: INR

**GN**: **Dorsipares** 1816.ba.c06

**GZ**: INR

**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Protonyxia Miranda-Ribeiro, 1924

**SI**: 332 • **CI**: c305 • **ST**: 2.D.M.31.O

**PN**: **Protonyxia** Miranda-Ribeiro, 1924.ma.c07 • **ak**

**PA**: 00 • **Protonyxia** • Miranda-Ribeiro 1924.ma: 12 • **UC**

**RL**: ↔ > **Ichthyosternia** 1924.ma.c10 • **AI**: **HL**

**GN**: **Dorsipares** 1816.ba.c06

**GZ**: INR

**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

PROTOSTERNIA Miranda-Ribeiro, 1924
**SI**: 333 • **CI**: c306 • **ST**: 2.D.O.31.O
**PN**: **PROTOSTERNIA** Miranda-Ribeiro, 1924.ma.c08 • **AK**
**PA**: 00 • **PROTOSTERNIA** • Miranda-Ribeiro 1924.ma: 143 • **UC**
**RL**: ↔| **ANOURES** 1805.da.c01
↔ **<** **GYMNOBATRACHIA** 1924.ma.c02 • **AI**: **HL**
\> **ANONYXIA** 1924.ma.c04 • **PR**
\> **THORACECHMIA** 1924.ma.c05 • **PR**
\> **THEROSTERNIA** 1924.ma.c09 • **PR**
**GN**: **ANURA** 1805.da.c01
**GZ**: » **GX**:
**GYMNOPHIONA** 1814.ra.c01
**URODELA** 1805.da.c02
**EN**: **KYR.** C.04.01. Ordo **ANURA** Duméril, 1805.da.c01-07

**PSEUDOPHIONA** Blainville, 1816
**SI**: 043 • **CI**: c030 • **ST**: 1.D.M.12.E
**PN**: **PSEUDOPHYDIENS** Blainville, 1816.ba.c11
**PA**: 00 • **PSEUDOPHYDIENS** • Blainville 1816.ba: "111" [119] • **O**
01 • **PSEUDOPHIDIENS** • Blainville 1816.bb: 254 • **O**
02 • **PSEUDOPHIDII** • Gray 1825.ga: 217 • **O**
03 • **PSEUDO-PHIDIA** • Blainville 1835.ba: 282 • **O**
04 • **PSEUDOPHIDIA** • Blainville 1839.bb: 673 • **O**
05 • **PSEUDOPHIDIA** • Gervais 1848.ga: 61 • **UC**
06 • **PSEUDOPHIONA** • *Hoc loco* • **bO**
**RL**: ↔ **>** **COECILIES** 1816.ba.c12 • **AI**: **HL**
**GN**: **PSEUDOPHIONA** 1816.ba.c11
**GZ**: INR
**EN**: **KYR.** C.05.04. Subordo **PSEUDOPHIONA** Blainville, 1816.ba.c11-06

PSEUDOPHIONA Gray, 1850
**SI**: 191 • **CI**: c168 • **ST**: 1.D.M.40.E
**PN**: **PSEUDOPHIDIA** Gray, 1850.ga.c03 • **AK**
**PA**: 00 • **PSEUDOPHIDIA** • Gray 1850.ga: 6, 56 • **O**
01 • **PSEUDOPHIONA** • Dubois 2015.da: 107 • **EE**
**RL**: ↓ **PSEUDOPHYDIENS** 1816.ba.c11
**GN**: **PLESIOPHIONA** DOP.da.c10
**PSEUDOPHIONA** 1816.ba.c11
**GZ**: INR
**EN**: **KYR.** C.04.02. Ordo **GYMNOPHIONA** Rafinesque, 1814.ra.c01-02

PSEUDOPHRYNIA Bauer, 1987
**SI**: 422 • **CI**: c382 • **ST**: 1.D.M.30.O
**PN**: **PSEUDOPHRYNIA** Bauer, 1987.bc.c07 • **AK**
**PA**: 00 • **PSEUDOPHRYNIA** • Bauer 1987.bc: 52 • **UC**
**RL**: INR
**GN**: **AQUIPARES** 1816.ba.c07
**HELANURA** DOP.da.c09
**GZ**: INR
**EN**: **KYR.** C.08.02. Superphalanx **RANOMORPHA** Fejérváry, 1921.fb.c08-01

PSEUDOSALAMANDRAE Bonaparte, 1850
**SI**: 188 • **CI**: c165 • **ST**: 1.D.M.03.E
**PN**: **PSEUDO-SALAMANDRAE** Bonaparte, 1850.bb.c02 • **HK**
**PA**: 00 • **PSEUDO-SALAMANDRAE** • Bonaparte 1850.bb: pl. • **O**
01 • **PSEUDOSALAMANDRAE** • Duméril 1863.da: 302 • **O**
02 • **PSEUDOSALAMANDRAE** • Dubois 2015.da: 49 • **bO**
**RL**: INR
**GN**: **IMPERFECTIBRANCHIA** 1838.ha.c03
**MEANTES** 1767.la.c01
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12
[**HYP.** Subordo **PSEUDOSALAMANDRAE** Bonaparte, 1850.bb.c02-02]

**PSEUDOSAURIA** Blainville, 1816
**SI**: 040 • **CI**: c027 • **ST**: 1.D.M.12.E
**PN**: **PSEUDO SAURIENS** Blainville, 1816.ba.c08
**PA**: 00 • **PSEUDO SAURIENS** • Blainville 1816.ba: "111" [119] • **O**
01 • **PSEUDO-SAURIENS** • Blainville 1816.bb: 254 • **O**
02 • **PSEUDOSAURIENS** • Ducrotay Blainville 1822.da: tab. 5 • **O**
03 • **PSEUDOSAURII** • Gray 1825.ga: 215 • **O**
04 • **PSEUDO-SAURIA** • Blainville 1835.ba: 280 • **O**
05 • **PSEUDOSAURIA** • Gervais 1848.ga: 61 • **UC**
06 • **PSEUDOSAURIA** • Dubois$^{+1}$ 2012.da: 78 • **iO**
07 • **PSEUDOSAURIA** • Dubois 2016.da: 9 • **bO**
08 • **PSEUDOSAURIA** • Dubois 2016.da: 9 • **hO**
**RL**: ↔ **>** **SALAMANDRES** 1816.ba.c09 • **AI**: **HL**
**GN**: **PSEUDOSAURIA** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **PSEUDOSAURIA** Blainville, 1816.ba.c08-07

PSEUDOSAURIA Gray, 1850
**SI**: 190 • **CI**: c167 • **ST**: 1.D.M.40.O
**PN**: **PSEUDOSAURIA** Gray, 1850.ga.c02 • **AK**
**PA**: 00 • **PSEUDOSAURIA** • Gray 1850.ga: 6, 51 • **O**
**RL**: ↓ **PSEUDO SAURIENS** 1816.ba.c08
\> **GRADIENTIA** 1850.ga.c01 • **PR**
\> **MEANTIA** 1850.ga.c04 • **AI**: **HL**
**GN**: **IMPERFECTIBRANCHIA** 1838.ha.c03
**PSEUDOSAURIA** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12
[**HYP.** Subordo **NULLIBRANCHIA** Bonaparte**,** 1831.ba.c01-01]

PSEUDOSAURIA Cope, 1889
**SI**: 293 • **CI**: c266 • **ST**: 1.D.M.41.O
**PN**: **PSEUDOSAURIA** Cope, 1889.cb.c01 • **AK**
**PA**: 00 • **PSEUDOSAURIA** • Cope 1889.cb: 861 • **O**
**RL**: ↓ **PSEUDO SAURIENS** 1816.ba.c08
**GN**: **GYMNOPHIONA** 1814.ra.c01
**URODELA** 1805.da.c02
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **LISSAMPHIBIA** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **DEROTRETA** Van der Hoeven, 1833.va.c01-01]

PSILODERMA Van der Hoeven, 1855
**SI**: 199 • **CI**: c176 • **ST**: 3.D.M.30.O
**PN**: **PSILODERMA** Van der Hoeven, 1855.va.c01 • **AK**
**PA**: 00 • **PSILODERMA** • Van der Hoeven 1855.va: 459 • **Sc**
**RL**: ↔| **DIPNOA** 1838.bd.c01
**GN**: **ANURA** 1805.da.c01
**GYMNOPHIONA** 1814.ra.c01
**URODELA** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Pulmonata Cuvier, 1816

**SI**: 046 • **CI**: zh11 • **ST**: 1.U.U.99.E

**PN**: **Pulmones** Cuvier, 1816.ca.c01 • **zz**

**PA**: 00 • **Pulmones** • Cuvier 1816.ca: 387 • **O**

01 • **Pulmonea** • Bonaparte 1831.ba: 63 • **bC**

02 • **Pulmonata** • Ehrenberg 1831.ea: [85] • **O**

03 • **Pulmonea** • Jourdan 1834.jb: 332 • **O**

**RL**, **GN**, **GZ**, **EN**: ●

Pulmonata Gouriet, 1868

**SI**: 246 • **CI**: c220 • **ST**: 1.D.M.40.E

**PN**: **Pulmones** Gouriet, 1868.ga.c01 • **ak**

**PA**: 00 • **Pulmones** • Gouriet 1868.ga: 203 • **UC**

01 • **Pulmonados** • Miranda-Ribeiro 1924.ma: 137 • **UC**

02 • **Pulmonata** • Dubois 2015.da: 107 • **EE**

**RL**: ↓ **Pulmonata** 1816.ca.c01

> **Atretoderes** 1868.ga.c05 • **PR**

< **Eubatraciens** 1868.ga.c02 • **AI**: **HL**

**GN**: **Anura** 1805.da.c01

**Gymnophiona** 1814.ra.c01

**Urodela** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Pygomolgae Ritgen, 1828

**SI**: 086 • **CI**: c067 • **ST**: 2.D.A.31.E

**PN**: **Pygomolgaei** Ritgen, 1828.ra.c12 • **ak**

**PA**: 00 • **Pygomolgaei** • Ritgen 1828.ra: 278 • **He**

01 • **Pygomolgaei** • Jourdan 1834.jb: 335 • **bO**

02 • **Pygomolgae** • Dubois 2015.da: 106 • **EE**

**RL**: ↔| **Batraciens** 1816.ba.c05

**GN**: **Anura** 1805.da.c01

**GZ**: » **GX**:

**Gymnophiona** 1814.ra.c01

**Urodela** 1805.da.c02

**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Ramibranchia Hogg, 1841

**SI**: 164 • **CI**: c141 • **ST**: 1.D.M.31.O

**PN**: **Ramibranchia** Hogg, 1841.ha.c03 • **ak**

**PA**: 00 • **Ramibranchia** • Hogg 1841.ha: 361 • **'T'**

**RL**: INR

**GN**: **Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Ranacea Wilbrand, 1814

**SI**: 032 • **CI**: c019 • **ST**: 1.D.M.30.R

**PN**: **Ranacea** Wilbrand, 1814.wa.c01 • **ak**

**PA**: 00 • **Ranacea** • Wilbrand 1814.wa: 117 • **O**

01 • **Ranina** • Gravenhorst 1817.ga: pl. 9 • **O**

02 • **Ranae** • Bonaparte 1838.bc: 392 • **O**

**RL**: INR

**GN**: **Anura** 1805.da.c01

**Urodela** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

[**HYP.** Superordo **Batrachia** Brongniart, 1800.ba.c01-14]

Ranacea Spix, 1824

**SI**: 064 • **CI**: c046 • **ST**: 1.D.M.41.R

**PN**: **Ranae** Spix, 1824.sa.c01 • **ak**

**PA**: 00 • **Ranae** • Spix 1824.sa: 25 • **O**

01 • **Ranoidei** • Sokol 1977.sa: 505 • **bO**

02 • **Ranacea** • *Hoc loco* • **ER**

**RL**: ↓ **Ranacea** 1814.wa.c01

**GN**: **Dorsipares** 1816.ba.c06

**Laevogyrinia** 1878.la.c01

**GZ**: INR

**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Ranacea Bonaparte, 1850

**SI**: 187 • **CI**: c164 • **ST**: 1.D.M.41.R

**PN**: **Ranae** Bonaparte, 1850.bb.c01 • **ak**

**PA**: 00 • **Ranae** • Bonaparte 1850.bb: pl. • **O**

01 • **Ranacea** • Haeckel 1889.ha: 625. • **O**

**RL**: ↓ **Ranacea** 1814.wa.c01

**GN**: **Geobatrachia** 1828.ra.c18

**Mediogyrinia** 1878.la.c02

**GZ**: INR

**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Ranacea Laurent *in* Fuhn, 1960

**SI**: 374 • **CI**: cn06 • **ST**: 1.D.M.00.R

**PN**: **Ranoidea** Laurent *in* Fuhn, 1960.fa.c06 • **an**

**PA**: 00 • **Ranoidea** • Laurent *in* Fuhn 1960.fa: 163 • **bO**

01 • **Ranacea** • *Hoc loco* • **ER**

**RL**: ↓ **Ranacea** 1814.wa.c01

**GN**: **Ecostata** 1879.lb.c04

**Pananura** DOP.da.c07

**GZ**: INR

**EN**: **TEO.** C.10.03. Phalanx **Scoptanura** Starrett, 1973.sb.c02-02

[**HYP.** Subphalanx unnamed]

Raniformia Hogg, 1839

**SI**: 140 • **CI**: c118 • **ST**: 1.D.M.31.A

**PN**: **Raniformia** Hogg, 1839.ha.c05 • **ak**

**PA**: 00 • **Raniformia** • Hogg 1839.ha: 271 • **O**

01 • **Raniformes** • Brocchi 1881.ba: 9 • **UC**

02 • **Raniformes** • Boulenger 1882.ba: 12 • **UC**

**RL**: INR

**GN**: **Geobatrachia** 1828.ra.c18

**Mediogyrinia** 1878.la.c02

**GZ**: INR

**EN**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

Raniformia Cope, 1864

**SI**: 229 • **CI**: c203 • **ST**: 1.D.M.41.A

**PN**: **Raniformia** Cope, 1864.cb.c01 • **ak**

**PA**: c0 • **Raniformia** • Cope 1864.cb: 183 • **bO** • **IIA**: Cope 1865.ca: 114

i1 • **Raniformes** • Cope 1864.cb: 181 • **bO**
02 • **Raniformia** • Mivart 1869.ma: 281 • **Sr**
**RL**: ↓ **Raniformia** 1839.ha.c05
**GN**: **Gastrechmia** 1867.ca.c02
**Pananura** DOP.da.c07
**GZ**: INR
**EN**: **TEO.** C.10.03. Phalanx **Scoptanura** Starrett, 1973.sb.c02-02
[**HYP.** Subphalanx unnamed]

Raniformia Cope, 1867
**SI**: 241 • **CI**: c215 • **ST**: 1.D.M.41.A
**PN**: **Raniformia** Cope, 1867.ca.c01 • **ak**
**PA**: 00 • **Raniformia** • Cope 1867.ca: 189 • **bO**
01 • **Raniformia** • Hoffmann 1878.ha: 608 • **UC**
02 • **Raniformes** • Philippi 1902.pa: x • **UC**
**RL**: ↓ **Raniformia** 1839.ha.c05
**GN**: **Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**GZ**: INR
**EN**: **TEO.** C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02
[**HYP.** Phalanx **Aquipares** Blainville, 1816.ba.c07-03]

Raniformia Steindachner, 1867
**SI**: 243 • **CI**: c217 • **ST**: 1.D.M.41.A
**PN**: **Raniformia** Steindachner, 1867.sa.c01 • **ak**
**PA**: 00 • **Raniformia** • Steindachner 1867.sa: 6 • **Sc**
**RL**: ↓ **Raniformia** 1839.ha.c05
**GN**: **Angusticoela** 1958.ra.c01
**Hydrobatrachia** 1828.ra.c14
**GZ**: INR
**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Raniformia Hay, 1929
**SI**: 350 • **CI**: c323 • **ST**: 1.D.M.41.A
**PN**: **Raniformes** Hay, 1929.ha.c07 • **ak**
**PA**: 00 • **Raniformes** • Hay 1929.ha: 521, 854 • **O**
01 • **Raniformia** • *Hoc loco* • **EA**
**RL**: ↓ **Raniformia** 1839.ha.c05
**GN**: **Ecaudata** 1777.sa.c06
**GZ**: INR
**EN**: **KYR.** C.12.03. Infraphalanx **Ecaudata** Scopoli, 1777.sa.c06-01

**Ranomorpha** Fejérváry, 1921
**SI**: 320 • **CI**: c293 • **ST**: 1.D.M.11.A
**PN**: **Ranomorpha** Fejérváry, 1921.fb.c08
**PA**: 00 • **Ranomorpha** • Fejérváry 1921.fb: 16 • **Gs**
**RL**: INR
**GN**: **Aquipares** 1816.ba.c07
**Helanura** DOP.da.c09
**GZ**: INR
**EN**: **KYR.** C.08.02. Superphalanx **Ranomorpha** Fejérváry, 1921.fb.c08-01

Rhinatrematacea Lescure$^{+2}$, 1986
**SI**: 413 • **CI**: c373 • **ST**: 1.D.M.30.R
**PN**: **Rhinatrematoidei** Lescure$^{+2}$, 1986.lb.c01 • **ak**
**PA**: 00 • **Rhinatrematoidei** • Lescure$^{+2}$ 1986.lb: 145 • **bO**
01 • **Rhinatrematidei** • Lescure$^{+2}$ 1986.lb: 152 • **iO**
02 • **Rhinatrematacea** • Dubois 2015.da: 107 • **ER**
**RL**: INR
**GN**: **Plesiophiona** DOP.da.c10
**Pseudophiona** 1816.ba.c11
**GZ**: INR
**EN**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814.ra.c01-02

Rotondicaudata Duméril$^{+2}$, 1854
**SI**: 197 • **CI**: c174 • **ST**: 2.D.M.31.E
**PN**: **Rotondicaudes** Duméril$^{+2}$, 1854.da.c03 • **ak**
**PA**: 00 • **Rotondicaudes** • Duméril$^{+2}$ 1854.da: 38 • **UC**
01 • **Rotondicaudata** • *Hoc loco* • **EE**
**RL**: ↔ < **Gongylures** 1854.da.c04 • **AI**: **HL**
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Salamandracea Blainville, 1816
**SI**: 041 • **CI**: c028 • **ST**: 1.D.M.32.R
**PN**: **Salamandres** Blainville, 1816.ba.c09 • **ak**
**PA**: 00 • **Salamandres** • Blainville 1816.ba: “111” [119] • **O**
01 • **Salamandrina** • Müller 1831.ma: 711 • **O**
02 • **Salamandrinae** • Tschudi 1838.ta: 26 • **O**
03 • **Salamandroides** • Duméril$^{+1}$ 1841.da: 52 • **Gr/Sc/’T’**
04 • **Salamandrae** • Bonaparte 1850.bb: pl. • **O**
05 • **Salamandrina** • Claus 1868.cb: 586 • **bO**
06 • **Salamandridea** • Huxley 1871.ha: 173 • **bO**.
07 • **Salamandroidea** • Noble 1931.na: 473 • **bO**
08 • **Salamandriodae** • Pearse 1948.pa: 20 • **bO**
09 • **Salamandriodea** • Pearse 1949.pa: 20 • **bO**
10 • **Salamandroidei** • Dubois 1983.da: 113 • **bO**
11 • **Salamandracea** • *Hoc loco* • **ER**
**RL**: ↔ < **Pseudo Sauriens** 1816.ba.c08 • **AI**: **HL**
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Salamandracea Knauer, 1878
**SI**: 266 • **CI**: c240 • **ST**: 1.D.M.40.R
**PN**: **Salamandrina** Knauer, 1878.ka.c02 • **ak**
**PA**: 00 • **Salamandrina** • Knauer 1878.ka: 96 • **bO**
01 • **Salamandrines** • Brocchi 1881.ba: 102 • **UC**
02 • **Salamandracea** • *Hoc loco* • **ER**
**RL**: ↓ **Salamandres** 1816.ba.c09
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte**,** 1831.ba.c01-01]

Salamandracea Sarasin$^{+1}$, 1887
**SI**: 287 • **CI**: c261 • **ST**: 2.D.M.41.R
**PN**: **Salamandrina** Sarasin$^{+1}$, 1887.sa.c01 • **ak**
**PA**: 00 • **Salamandrina** • Sarasin$^{+1}$ 1887.sa: 29 • **UC**
01 • **Salamandracea** • Dubois 2015.da: 106 • **ER**
**RL**: ↓ **Salamandres** 1816.ba.c09
**GN**: **Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02

**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Derotreta** Van der Hoeven, 1833.va.c01-01]

Salamandracea Sarasin[+1], 1890
**SI**: 298 • **CI**: c271 • **ST**: 1.D.M.40.R
**PN**: **Salamandroidea** Sarasin[+1], 1890.sa.c02 • **ak**
**PA**: 00 • **Salamandroidea** • Sarasin[+1] 1890.sa: 245 • **bO**
01 • **Salamandracea** • Dubois 2015.da: 107 • **ER**
**RL**: ↓ **Salamandres** 1816.ba.c09
**GN**: **Imperfectibranchia** 1838.ha.c03
**Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Salamandracea Romer, 1945
**SI**: 363 • **CI**: mc07 • **ST**: 1.D.M.00.R
**PN**: **Salamandroidea** Romer, 1945.ra.c02 • **an**
**PA**: 00 • **Salamandroidea** • Romer 1945.ra: 592 • **bO**
01 • **Salamandracea** • *Hoc loco* • **ER**
**RL**: ↓ **Salamandres** 1816.ba.c09
> **Amblystomatoidea** 1945.ra.c01 • **AI**: **HL**
> **Proteida** 1945.ra.c03 • **AI**: **HL**
**GN**: **Pseudosauria** 1816.ba.c08
|**Urodela Incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Salamandracea Kuhn, 1962
**SI**: 383 • **CI**: c343 • **ST**: 1.D.M.40.R
**PN**: **Salamandroidea** Kuhn, 1962.ka.c04 • **ak**
**PA**: 00 • **Salamandroidea** • Kuhn 1962.ka: 356 • **bO**
01 • **Salamandridea** • Kuhn 1965.ka: 37 • **bO**
02 • **Salamandracea** • Dubois 2015.da: 107 • **ER**
**RL**: ↓ **Salamandres** 1816.ba.c09
> **Plethodontoidea** 1962.ka.c05 • **AI**: **HL**
> **Proteida** 1962.ka.c06 • **AI**: **HL**
**GN**: **Pseudosauria** 1816.ba.c08
|**Urodela Incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Salamandracea Tatarinov, 1964
**SI**: 389 • **CI**: c349 • **ST**: 1.D.M.40.R
**PN**: **Salamandroidei** Tatarinov, 1964.tb.c02 • **ak**
**PA**: 00 • **Salamandroidei** • Tatarinov 1964.tb: 9, 161 • **bO**
01 • **Salamandracea** • Dubois 2015.da: 107 • **ER**
**RL**: ↓ **Salamandres** 1816.ba.c09
> **Ambystomatoidei** 1964.tb.c01 • **AI**: **HL**
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
|**Urodela Incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Salamandracea Estes, 1981
**SI**: 405 • **CI**: c365 • **ST**: 1.D.M.41.R
**PN**: **Salamandroidea** Estes, 1981.ea.c04 • **ak**
**PA**: 00 • **Salamandroidea** • [Naylor 1978.na: 607]; Estes 1981.ea: xiv, 63 • **bO**
01 • **Salamandracea** • *Hoc loco* • **ER**
**RL**: ↓ **Salamandres** 1816.ba.c09
> **Karauroidea** 1981.ea.c01 • **AI**: **HL**
> **Ambystomatoidea** 1981.ea.c03 • **AI**: **HL**
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Salamandracea Trueb[+1], 1991
**SI**: 426 • **CI**: c386 • **ST**: 1.D.M.40.R
**PN**: **Salamandroidea** Trueb[+1], 1991.ta.c02 • **ak**
**PA**: 00 • **Salamandroidea** • Trueb[+1] 1991.ta: 233 •**bO**
01 • **Salamandracea** • Dubois 2015.da: 107 • **ER**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
|**Lissamphibia Incertae sedis**|
**GZ**: INR
**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

Salamandriformia Milner, 2000
**SI**: 430 • **CI**: c390 • **ST**: 1.D.M.30.A
**PN**: **Salamandriformes** Milner, 2000.ma.c03 • **ak**
**PA**: 00 • **Salamandriformes** • Milner 2000.ma: 1412 • **iO**
01 • **Salamandriformia** • Dubois 2016.da: 9 • **iO**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Salientia Laurenti, 1768
**SI**: 006 • **CI**: c002 • **ST**: 1.N.G.02.O
**PN**: **Salientia** Laurenti, 1768.la.c01 • **ap**
**PA**: 00 • **Salientia** • Laurenti 1768.la: 24 • **O**
**RL**: INR
**GN**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**GZ**: » **GI**:
**Urodela** 1805.da.c02
**EN**: **ANAPTONYM**

Salientia Merrem, 1820
**SI**: 050 • **CI**: c032 • **ST**: 1.S.O.41.O
**PN**: **Salientia** Merrem, 1820.ma.c01 • **ak**
**PA**: 00 • **Salientia** • Merrem 1820.ma: 163 • **O**
01 • **Salientia** • Gray 1850.ga: 5 • **bO**
02 • **Salientia** • Goodrich 1930.ga: xxi • **bC**
03 • **Salientida** • Pearse 1936.pa: 20 • **O**
04 • **Salientia** • Romer 1945.ra: 591 • **pO**
05 • **Salentia** • Anonymous 1976.aa: 128 • **UC**
**RL**: ↓ **Salientia** 1768.la.c01
**GN**: **Anura** 1805.da.c01
**GZ**: » **GX**:
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02

**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Salientia Hay, 1929

**SI**: 346 • **CI**: c319 • **ST**: 1.N.G.02.O

**PN**: **Salientia** Hay, 1929.ha.c03 • **ap**

**PA**: 00 • **Salientia** • Hay 1929.ha: 521, 850 • **O**

**RL**: ↓ **Salientia** 1768.la.c01

**GN**: **Lissamphibia** 1898.ga.c01-00

|Non-**Lissamphibian Amphibia**|

**GZ**: » **GI**:

|Non-**Lissamphibian Amphibia**|

**EN**: **ANAPTONYM**

Saurichthyodi Jourdan, 1834

**SI**: 123 • **CI**: c103 • **ST**: 1.D.M.31.O

**PN**: **Saurichthyi** Jourdan, 1834.jb.c01 • **ak**

**PA**: c0 • **Saurichthyi** • Jourdan 1834.jb: 398 • **O** • **EEA**: **HL**

i1 • **Saurichtyens** • Jourdan 1834.jb: 398 • **O**

01 • **Saurichtyodi** • *Hoc loco* • **EE**

**RL**: INR

**GN**: **Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Saurobatrachia Van der Hoeven, 1855

**SI**: 201 • **CI**: c178 • **ST**: 1.D.M.30.E

**PN**: **Saurobatrachi** Van der Hoeven, 1855.va.c03 • **ak**

**PA**: 00 • **Saurobatrachi** • Van der Hoeven 1855.va: x, 461 • **O**

01 • **Saurobatrachia** • Huxley 1863.ha: 66 • **UC**

02 • **Saurobatrachia** • Van der Hoeven 1864.va: 288 • **O**

03 • **Saurobatrachii** • Fatio 1872.fa: 7 • **O**

04 • **Saurabatrachia** • Noble 1931.na: 465 • **O**

**RL**: ↔ > **Sozura** 1855.va.c04 • **AI**: **HL**

**GN**: **Imperfectibranchia** 1838.ha.c03

**Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

**Savanura nov.**

**SI**: 441 • **CI**: c400 • **ST**: 1.D.M.11.O

**PN**: **Savanura nov.**, DOP.da.c08

**PA**: 00 • **Savanura** • *Hoc loco* • **iP**

**RL**: INR

**GN**: **Savanura** .DOP.da.c08

**GZ**: INR

**EN**: **KYR.** C.12.04. Infraphalanx **Savanura nov.**, DOP.da.c08-00

Scolecodes Ritgen, 1828

**SI**: 076 • **CI**: c057 • **ST**: 2.D.M.31.O

**PN**: **Scolecodes** Ritgen, 1828.ra.c02 • **ak**

**PA**: 00 • **Scolecodes** • Ritgen 1828.ra: 263 • **He**

01 • **Scolecodes** • Jourdan 1834.jb: 405 • **bO**

**RL**: ↔ > **Dermatophides** 1828.ra.c01 • **AI**: **HL**

↔ > **Stolidophides** 1828.ra.c03 • **PR**

**GN**: **Pseudophiona** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.05.04. Subordo **Pseudophiona** Blainville, 1816.ba.c11-06

**Scoptanura** Starrett, 1973

**SI**: 397 • **CI**: c357 • **ST**: 1.D.M.11.O

**PN**: **Scoptanura** Starrett, 1973.sb.c02

**PA**: 00 • **Scoptanura** • Starrett 1973.sb: 251 • **UC**

01 • **Scoptanura** • Savage 1973.sa: 353 • **bO**

02 • **Scoptanura** • *Hoc loco* • **P**

03 • **Scoptanura** • *Hoc loco* • **bP**

**RL**: INR

**GN**: **Ecostata** 1879.lb.c04

**Gastrechmia** 1867.ca.c02

**GZ**: INR

**EN**: **TEO.** C.10.03. Phalanx **Scoptanura** Starrett, 1973.sb.c02-02

[**HYP.** Subphalanx **Scoptanura** Starrett, 1973.sb.c02-02]

Serpentiformi Leuckart, 1840

**SI**: 152 • **CI**: c130 • **ST**: 2.D.M.31.X

**PN**: **Serpentiformia** Leuckart, 1840.la.c05 • **ak**

**PA**: 00 • **Serpentiformia** • Leuckart 1840.la: 20 • ‘**F**’

01 • **Serpentiformia** • Leuckart 1841.la: 30 • **UC**

02 • **Serpentiformes** • Dubois 2015.da: 90 • **EX**

03 • **Serpentiformi** • *Hoc loco* • **EX**

**RL**: INR

**GN**: **Pseudophiona** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.05.04. Subordo **Pseudophiona** Blainville, 1816.ba.c11-06

Siphonopacea Lescure[+2], 1986

**SI**: 415 • **CI**: c375 • **ST**: 1.D.M.31.R

**PN**: **Siphonopidei** Lescure[+2], 1986.lb.c03 • **ak**

**PA**: 00 • **Siphonopidei** • Lescure[+2] 1986.lb: 152 • **iO**

01 • **Siphonopacea** • *Hoc loco* • **ER**

**RL**: < **Epicriidei** 1986.lb.c02 • **PR**

**GN**: **Pseudophiona** 1816.ba.c11

**GZ**: INR

**EN**: **KYR.** C.05.04. Subordo **Pseudophiona** Blainville, 1816.ba.c11-06

Sirenacea Jarocki, 1822

**SI**: 058 • **CI**: c040 • **ST**: 1.D.M.30.R

**PN**: **Sirenia** Jarocki, 1822.ja.c01 • **ak**

**PA**: 00 • **Sirenia** • Jarocki 1822.ja: 135 • **C**

01 • **Sirenacea** • *Hoc loco* • **ER**

**RL**: INR

**GN**: **Anura** 1805.da.c01

**Urodela** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]

Sirenacea Gray, 1825

**SI**: 066 • **CI**: c048 • **ST**: 1.D.M.31.R

**PN**: **Sirenes** Gray, 1825.ga.c02 • **ak**

**PA**: 00 • **Sirenes** • Gray 1825.ga: 215 • **O**

01 • **Sirenacea** • *Hoc loco* • **ER**

**RL**: ↓ **Sirenia** 1822.ja.c01

**GN**: **Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Sirenacea Goodrich, 1930
**SI**: 342 • **CI**: c315 • **ST**: 1.D.M.41.R
**PN**: **Sirenoidea** Goodrich, 1930.ga.c04 • **ak**
**PA**: 00 • **Sirenoidea** • Goodrich 1930.ga: xxi • **bO**
01 • **Sirenoidei** • Dubois 1983.da: 113 • **bO**
02 • **Sirenacea** • *Hoc loco* • **ER**
**RL**: ↓ **Sirenia** 1822.ja.c01
↔| **Meantes** 1767.la.c01
**GN**: **Meantes** 1767.la.c01
**GZ**: INR
**EN**: **KYR.** C.05.06. Subordo **Meantes** Linné, 1767.la.c01-01

Sozobranchia Haeckel, 1866
**SI**: 236 • **CI**: c210 • **ST**: 1.D.M.41.O
**PN**: **Sozobranchia** Haeckel, 1866.ha.c02 • **ak**
**PA**: 00 • **Sozobranchia** • Haeckel 1866.ha: cxxxi • **O**
01 • **Socobranchia** • Kuhn 1967.kb: 38 • **UC**
**RL**: ↔| **Perennibranches** 1824.la.c02
> **Sozura** 1866.ba.c03 • **AI**: **HL**
> **Caudata** 1866.ha.c04 • **AI**: **HL**
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Sozura Van der Hoeven, 1833
**SI**: 119 • **CI**: c099 • **ST**: 1.D.M.31.O
**PN**: **Sozura** Van der Hoeven, 1833.va.c02 • **ak**
**PA**: 00 • **Sozura** • Van der Hoeven 1833.va: iii, 304 • **O**
**RL**: INR
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Sozura Van der Hoeven, 1855
**SI**: 202 • **CI**: c179 • **ST**: 1.D.M.30.O
**PN**: **Sozura** Van der Hoeven, 1855.va.c04 • **ak**
**PA**: 00 • **Sozura** • Van der Hoeven 1855.va: 461 • **O**
**RL**: ↓ **Sozura** 1833.va.c02
↔ < **Saurobatrachi** 1855.va.c03 • **AI**: **HL**
**GN**: **Imperfectibranchia** 1838.ha.c03
**Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Sozura Haeckel, 1866
**SI**: 237 • **CI**: c211 • **ST**: 1.D.M.40.O
**PN**: **Sozura** Haeckel, 1866.ha.c03 • **ak**
**PA**: 00 • **Sozura** • Haeckel 1866.ha: cxxxi • **O**
**RL**: ↓ **Sozura** 1833.va.c02
< **Sozobranchia** 1866.ha.c02 • **AI**: **HL**
¡↔ > **Caudata** 1866.ha.c04 • **AI**: **HL**
**GN**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Nullibranchia** Bonaparte, 1831.ba.c01-01]

Stolidophiona Ritgen, 1828
**SI**: 077 • **CI**: c058 • **ST**: 2.D.M.31.E
**PN**: **Stolidophides** Ritgen, 1828.ra.c03 • **ak**
**PA**: 00 • **Stolidophides** • Ritgen 1828.ra: 258 • **'F'**
01 • **Stolidophiona** • *Hoc loco* • **EE**
**RL**: ↔ < **Dermatophides** 1828.ra.c01 • **PR**
↔ < **Scolecodes** 1828.ra.c02 • **PR**
**GN**: **Pseudophiona** 1816.ba.c11
**GZ**: INR
**EN**: **KYR.** C.05.04. Subordo **Pseudophiona** Blainville, 1816.ba.c11-06

Subichthyodi Ducrotay Blainville, 1822
**SI**: 057 • **CI**: c039 • **ST**: 1.D.M.31.E
**PN**: **Subichthyens** Ducrotay Blainville, 1822.da.c01 • **ak**
**PA**: 00 • **Subichthyens** • Ducrotay Blainville 1822.da: t.ab. 5 • **O**
01 • **Subichthyi** • Jourdan 1834.jb: 486 • **O**
02 • **Subichthiens** • Gray 1850.ga: 64 • **O**
03 • **Subichthyodi** • *Hoc loco* • **EE**
**RL**: INR
**GN**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Subordo **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

Tarsata Meyer, 1860
**SI**: 214 • **CI**: c191 • **ST**: 2.D.M.31.E
**PN**: **Tarsiden** Meyer, 1860.mb.c02 • **ak**
**PA**: 00 • **Tarsiden** • Meyer 1860.mb: 559 • **UC**
01 • **Tarsata** • *Hoc loco* • **EE**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Temnospondyli Zittel, 1888
**SI**: 289 • **CI**: zh22 • **ST**: 1.U.U.99.O
**PN**: **Temnospondyli** Zittel, 1888.za.c01 • **zz**
**PA**: 00 • **Temnospondyli** • Zittel 1888.za: viii, 384 • **bO**
**RL**, **GN**, **GZ**, **EN**: ●

Tetramela Gouriet, 1868
**SI**: 249 • **CI**: c223 • **ST**: 2.D.M.31.E
**PN**: **Tetrameles** Gouriet, 1868.ga.c04 • **ak**
**PA**: 00 • **Tetrameles** • Gouriet 1868.ga: 206 • **UC**
01 • **Tetramela** • *Hoc loco* • **EE**
**RL**: INR
**GN**: **Pseudosauria** 1816.ba.c08
**GZ**: INR
**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Tetrapoda Fischer, 1808
**SI**: 024 • **CI**: zh07 • **ST**: 1.U.U.99.E
**PN**: **Tetrapodes** Fischer, 1808.fa.c01 • **zz**
**PA**: 00 • **Tetrapodes** • Fischer 1808.fa: [13] • **UC**

01 • **Tetrapoda** • *Hoc loco* • **EE**

**RL**, **GN, GZ, EN**: ●

Tetrapoda Hogg, 1839

**SI**: 138 • **CI**: c116 • **ST**: 1.D.M.40.O

**PN**: **Tetrapoda** Hogg, 1839.ha.c03 • **ak**

**PA**: 00 • **Tetrapoda** • Hogg 1839.ha: 271 • **O**

**RL**: ↓ **Tetrapodes**1808.fa.c01

< **Urophora** 1839.ha.c01 • **AI**: **HL**

> **Anguiformi** 1839.ha.c04 • **AI**: **HL**

**GN**: **Anura** 1805.da.c01

**Urodela** 1805.da.c02

**GZ**: INR

**EN**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

[**HYP.** Superordo **Batrachia** Brongniart, 1800.ba.c01-14]

Theriomorphi Owen, 1866

**SI**: 240 • **CI**: c214 • **ST**: 1.D.M.31.X

**PN**: **Theriomorpha** Owen, 1866.oa.c02 • **ak**

**PA**: 00 • **Theriomorpha** • Owen 1866.oa: 15 • **bO**

01 • **Theriomorphi** • Dubois 2015.da: 90 • **EX**

**RL**: INR

**GN**: **Dorsipares** 1816.ba.c06

**Laevogyrinia** 1878.la.c01

**GZ**: INR

**EN**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-02

Theriomorphi Hoffmann, 1878

**SI**: 262 • **CI**: c236 • **ST**: 1.D.M.41.X

**PN**: **Theriomorpha** Hoffmann, 1878.ha.c02 • **ak**

**PA**: 00 • **Theriomorpha** • Hoffmann 1878.ha: 615 • **O**

01 • **Theriomorphi** • Dubois 2015.da: 90 • **EX**

**RL**: ↓ **Theriomorphi** 1866.oa.c02 • **bO**

> **Ecaudata** 1878.ha.c01 • **AI**: **HL**

**GN**: **Angusticoela** 1958.ra.c01

**Hydrobatrachia** 1828.ra.c14

**GZ**: INR

**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Therosternia Miranda-Ribeiro, 1924

**SI**: 334 • **CI**: c307 • **ST**: 2.D.M.31.O

**PN**: **Therosternia** Miranda-Ribeiro, 1924.ma.c09 • **ak**

**PA**: 00 • **Therosternia** • Miranda-Ribeiro 1924.ma: 143 • **UC**

**RL**: < **Gymnobatrachia** 1924.ma.c02 • **PR**

↔ < **Anonyxia** 1924.ma.c04 • **AI**: **HL**

> **Thoracechmia** 1924.ma.c05 • **PR**

< **Protosternia** 1924.ma.c08 • **PR**

**GN**: **Angusticoela** 1958.ra.c01

**Hydrobatrachia** 1828.ra.c14

**GZ**: INR

**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Thoracechmia Miranda-Ribeiro, 1924

**SI**: 330 • **CI**: c303 • **ST**: 2.D.M.31.O

**PN**: **Thoracechmia** Miranda-Ribeiro, 1924.ma.c05 • **ak**

**PA**: 00 • **Thoracechmia** • Miranda-Ribeiro 1924.ma: 141 • **UC**

**RL**: INR

**GN**: **Angusticoela** 1958.ra.c01

**Hydrobatrachia** 1828.ra.c14

**GZ**: INR

**EN**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07

Trachystomata Cope, 1866

**SI**: 232 • **CI**: c206 • **ST**: 1.D.M.31.O

**PN**: **Trachystomata** Cope, 1866.ca.c01 • **ak**

**PA**: 00 • **Trachystomata** • Cope 1866.ca: 102 • **bO**

01 • **Trachystomata** • Cope 1868.ca: 208 • **O**

**RL**: INR

**GN**: **Meantes** 1767.la.c01

**GZ**: INR

**EN**: **KYR.** C.05.06. Subordo **Meantes** Linné, 1767.la.c01-01

Trematodera Duméril$^{+1}$, 1841

**SI**: 161 • **CI**: c138 • **ST**: 2.D.M.31.E

**PN**: **Trematoderes** Duméril$^{+1}$, 1841.da.c08 • **ak**

**PA**: 00 • **Trematoderes** • Duméril$^{+1}$ 1841.da: plate after page 53 • **Gr/Sc/'T'**

01 • **Trematoderes** • Gouriet 1868.ga: 206 • **UC**

02 • **Trematodera** • Dubois 2016.da: 9 • **bO**

03 • **Trematodera** • Dubois 2016.da: 9 • **iO**

**RL**: < **Atretoderes** 1841.da.c03 • **AI**: **HL**

> **Perobranches** 1841.da.c04 • **AI**: **HL**

< **Amphiumoides** 1841.da.c05 • **AI**: **HL**

> **Exobranches** 1841.da.c06 • **AI**: **HL**

**GN**: **Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.05.07. Subordo **Pseudosauria** Blainville, 1816.ba.c08-07

Trematodera Baird, 1850

**SI**: 186 • **CI**: c163 • **ST**: 2.D.M.40.O

**PN**: **Trematodera** Baird, 1850.ba.c01 • **ak**

**PA**: 00 • **Trematodera** • Baird 1850.ba: 289 • **Gr**

01 • **Trematodera** • Baird 1851.ba: 250 • **bO**

02 • **Thrematoderes** • Desmarest 1856.da: 25 • **Gr**

03 • **Trematodeira** • Girard 1858.ga: vii • **UC**

**RL**: ↓ **Trematoderes** 1841.da.c08

**GN**: **Imperfectibranchia** 1838.ha.c03

**Meantes** 1767.la.c01

**Pseudosauria** 1816.ba.c08

**GZ**: INR

**EN**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Trematodera Cope, 1859

**SI**: 210 • **CI**: c187 • **ST**: 2.D.M.41.E

**PN**: **Trematoderes** Cope, 1859.cb.c02 • **ak**

**PA**: 00 • **Trematoderes** • Cope 1859.cb: 122 • **UC**

01 • **Trematodera** • Cope 1888.ca: 464 • **UC**

**RL**: ↓ **Trematoderes** 1841.da.c08

**GN**: **Imperfectibranchia** 1838.ha.c03

**GZ**: INR

**EN**: **KYR.** C.05.05. Subordo **Imperfectibranchia** Hogg, 1838.ha.c03-02

Tritonacea Gray, 1850

**SI**: 193 • **CI**: c170 • **ST**: 3.D.M.30.R

**PN**: **Tritones** Gray, 1850.ga.c05 • **ak**

**PA**: 00 • **Tritones** • Gray 1850.ga: 10 • **UC**

01 • **Tritonacea** • Dubois 2015.da: 107 • **ER**

**RL**: INR

GN: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
GZ: INR
EN: KYR. C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00

**Urodela** Duméril, 1805
SI: 018 • CI: c009 • ST: 2.S.O.10.E
PN: **Urodeles** Duméril, 1805.da.c02
PA: 00 • **Urodeles** • Duméril 1805.da: 91 • 'F'
01 • **Urodelen** • Meckel *in* Cuvier 1810.ca: pl. 3 • UC
02 • **Urodeli** • Fischer 1813.fa: 58 • UC
03 • **Urodelia** • Rafinesque 1815.ra: 78 • bO
04 • **Urodeles** • Duméril[+1] 1841.da: 4 • bO
05 • **Urodeles** • Gray 1842.ga: 111 • O
06 • **Urodeli** • Mayer 1849.ma: 198 • bO
07 • **Urodeli** • Massalongo 1854.ma: 430 • UC
08 • **Urodela** • Girard 1858.ga: vii • 'T'
09 • **Urodelae** • Günther 1858.gc: 344 • 'T'
10 • **Urodela** • Huxley 1871.ha: 172 • UC
11 • **Urodelia** • Fatio 1872.fa: 7 • O
12 • **Urodela** • Knauer 1878.ka: 93 • O
13 • **Urodela** • Haeckel 1889.ha: 625 • L
14 • **Urodela** • Säve-Söderbergh 1935.sa: 202 • C
15 • **Urodela** • Von Huene 1948.ha: 66 • bO
16 • **Urodela** • Milner 1988.ma: 82 • cO
17 • **Urodela** • Trueb[+1] 1991.ta: 233 • pO
RL: ↔ > **Caudati** 1805.da.c04 • AI: Zittel, 1888.za: 412
GN: **Urodela** 1805.da.c02
GZ: » GX:
**Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
EN: KYR. C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12

Urodela Gray, 1825
SI: 065 • CI: c047 • ST: 1.N.G.02.O
PN: **Urodela** Gray, 1825.ga.c01 • ap
PA: 00 • **Urodela** • Gray 1825.ga: 215 • O
01 • **Urodela** • Ficinus[+1] 1826.fa: pl. • UC
02 • **Urodela** • Bell 1836.ba: 91 • O
03 • **Urodeles** • Gray 1842.ga: 113 • O
04 • **Uradela** • Cooper 1859.ca: 305 • 'T'
RL: ↓ **Urodeles** 1805.da.c02
GN: **Pseudosauria** 1816.ba.c08
GZ: » GI:
**Pseudosauria** 1816.ba.c08
EN: ANAPTONYM

Urodela Cope, 1859
SI: 209 • CI: c186 • ST: 1.N.R.40.E
PN: **Urodela** Cope, 1859.cb.c01 • ak
PA: 00 • **Urodela** • Cope 1859.cb: 122 • bO
01 • **Urodela** • Cope 1875.ca: 11 • O
RL: ↓ **Urodeles** 1805.da.c02
GN: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
GZ: INR
EN: KYR. C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[HYP. Subordo **Nullibranchia** Bonaparte, 1831.ba.c01-01]

Urodela Cope, 1889
SI: 291 • CI: c264 • ST: 1.N.G.02.O
PN: **Urodela** Cope, 1889.ca.c01 • ap
PA: 00 • **Urodela** • Cope 1889.ca: 5 • O
RL: ↓ **Urodeles** 1805.da.c02
GN: **Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
GZ: » GI:
**Urodela** 1805.da.c02
EN: ANAPTONYM

Urodela Abel, 1919
SI: 309 • CI: c282 • ST: 1.N.G.02.O
PN: **Urodela** Abel, 1919.aa.c02 • ap
PA: 00 • **Urodela** • Abel 1919.aa: xii, 324 • bC
01 • **Urodela** • Goodrich 1930.ga: xxi, • O
02 • **Urodela** • Von Huene 1952.ha: 7 • bO
RL: ↓ **Urodeles** 1805.da.c02
GN: **Urodela** 1805.da.c02
|Non-**Lissamphibian Amphibia**||
GZ: » GI:
**Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
|Non-**Lissamphibian Amphibia**|
EN: ANAPTONYM

Urophora Hogg, 1839
SI: 136 • CI: c114 • ST: 1.D.M.31.O
PN: **Urophora** Hogg, 1839.ha.c01 • ak
PA: 00 • **Urophora** • Hogg 1839.ha: 270 • O
RL: > **Tetrapoda** 1839.ha.c03 • AI: HL
> **Anguiformi** 1839.ha.c04 • AI: HL
GN: **Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
GZ: INR
EN: KYR. C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[HYP. Superordo **Derotreta** Van der Hoeven, 1833.va.c01-01]

**Vertebrata** Cuvier, 1800
SI: 015 • CI: c006 • ST: 1.S.O.10.E
PN: **Vertébrés** Cuvier, 1800.ca.c01
PA: 00 • **Vertebres** • Cuvier 1800.ca: first unnumbered table • UC
01 • **Vertebrata** • Cuvier 1816.ca: 58 • UC
02 • **Vertebrata** • Ruggiero[+8] 2015.ra: 50 • bPm
RL: INR
GN: **Vertebrata** 1800.ca.c01
GZ: » GX:
|**Ascidiacea**|
EN: KYR. C.01.01. Subphylum **Vertebrata** Cuvier, 1800.ca.c01-02

Verticalia Bauer, 1986
SI: 411 • CI: c371 • ST: 1.D.M.31.O
PN: **Verticalia** Bauer, 1986.ba.c01 • ak
PA: 00 • **Verticalia** • Bauer 1986.ba: 2 • UC
RL: INR
GN: **Archaeosalientia** 1981.ra.c01

**Ranomorpha** 1921.fb.c08

**GZ**: INR

**EN**: **KYR.** C.07.02. Hypoordo **Laevogyrinia** Lataste, 1878.la.c01-04

Xenoanura Starrett, 1973

**SI**: 396 • **CI**: c356 • **ST**: 1.D.M.31.O

**PN**: **Xenoanura** Starrett, 1973.sb.c01 • **ak**

**PA**: 00 • **Xenoanura** • Starrett 1973.sb: 251 • **UC**

01 • **Xenoanura** • Savage 1973.sa: 353 • **bO**

**RL**: INR

**GN**: **Dorsipares** 1816.ba.c06

**GZ**: INR

**EN**: **KYR.** C.07.01. Hypoordo **Dorsipares** Blainville, 1816.ba.c06-02

Xenobatrachia Bauer, 1987

**SI**: 423 • **CI**: c383 • **ST**: 1.D.M.31.O

**PN**: **Xenobatrachia** Bauer, 1987.bc.c08 • **ak**

**PA**: 00 • **Xenobatrachia** • Bauer 1987.bc: 53 • **UC**

**RL**: INR

**GN**: **Ecostata** 1879.lb.c04

**GZ**: INR

**EN**: **KYR.** C.11.03. Subphalanx **Ecostata** Lataste, 1879.lb.c04-02

## APPENDIX A8.ECT. Ectonyms of LISSAMPHIBIA.

This Table provides all ectonyms (names proposed under an unranked or pseudoranked nomenclatural system such as the *Phylocode*) for lissamphibian taxa published from 1992 to 31 October 2020.

The name is presented under its protonym and with the reason for considering it an ectonym, its author and date, and the kind of diagnoses used to validate the taxon. For each of the ectonyms, a serial identifier is attributed by date of publication, and its hemihomonyms among available zoological nomina, its getendotaxa and synotaxa are provided. Reference to justification and category of ectonym are given if relevant. Abbreviations used are given below. See Glossary for onymological terms and definition of unusual technical terms.

**Protonym of ectonym**

«XXX» • Nomen expressly proposed as unranked (anhypsonym).

<YYY> • Nomen expressly proposed as following the *International Code for Phylogenetic Nomenclature* (Cantino & Queiroz 2020) (notharchonym).

**DI** • Nomen for which a diagnosis based on characters was provided.

**ND** • Nomen for which a 'phylogenetic definition' (cladognosis) but no diagnosis based on characters was provided.

**SI • Serial identifier of ectonym**

**PA • Ectonym, its author and the taxonomic category to which it was originally referred**

**Cd** • Clade.

**Tx** • Taxon.

**UU** • Unspecified (or discussed) rank in unspecified (or discussed) nominal-series

**HH • If relevant, older senior hemihomonym of ectonym in the zoological class-series or/and family-series**

**GT • Getendotaxa of ectonym in *CLAD***

***n* G†.** • Number of all-fossil genus or genera, not listed here.

**SY • Synotaxa of ectonym in *CLAD***

**HYP** • Hypnokyronym.

**KYR** • Kyronym.

**TEO** • Teokyronym.

**JU • Statement in the original work justifying the treatment of this nomen as an ectonym**

**C • Category of ectonym**

**AH** • Anhypsonym.

**NH** • Notharchonym.

**Various abbreviations and conventions found in several columns**

**INR** • Information not relevant here (item does not exist).

«Acosmanura» Frost[+18], 2006.fa.e16 • **di**

**SI**: 040

**PA**: 00 • Acosmanura • Frost[+18] 2006.fa: 6, 185 • **Tx**

**HH**: **INR**

**GT**: **Archaeosalientia** 1981.ra.c01
**Ranomorpha** 1921.fb.c08

**SY**: **KYR.** C.07.02. Hypoordo **Laevogyrinia** Lataste, 1878.la.c01-03

**JU**: Nomen presented expressly (p. 141 sq., 185) as unranked

**C**: **AH**

«Africanura» Frost[+18], 2006.fa.e42 • **di**

**SI**: 066

**PA**: 00 • Africanura • Frost[+18] 2006.fa: 7, 237 • **Tx**

**HH**: **INR**

**GT**: **Ecaudata** 1777.sa.c06

**SY**: **KYR.** C.12.03. Infraphalanx **Ecaudata** Scopoli, 1777. sa.c06-01

**JU**: Nomen presented expressly (p. 141 sq., 237) as unranked

**C**: **AH**

«Afrobatrachia» Frost[+18], 2006.fa.e35 • **di**

**SI**: 059

**PA**: 00 • Afrobatrachia • Frost[+18] 2006.fa: 7, 231 • **Tx**

**HH**: **INR**

**GT**: **Gastrechmia** 1867.ca.c02

**SY**: **KYR.** C.11.04. Subphalanx **Gastrechmia** Cope, 1867. ca.c02-03

**JU**: Nomen presented expressly (p. 141 sq., 231) as unranked

**C**: **AH**

«Agastorophrynia» Frost[+18], 2006.fa.e32 • **di**

**SI**: 056

**PA**: 00 • Agastorophrynia • Frost[+18] 2006.fa: 6, 210 • **Tx**

**HH**: **INR**

**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05

**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP. da.c03-00

**JU**: Nomen presented expressly (p. 141 sq., 210) as unranked

**C**: **AH**

«Aglaioanura» Frost[+18], 2006.fa.e44 • **di**

**SI**: 068

**PA**: 00 • Aglaioanura • Frost[+18] 2006.fa: 7, 243 • **Tx**

**HH**: **INR**

**GT**: *Ranoidae* 1796.ba.f001

**SY**: **KYR.** F.15.10. Epifamilia *Ranoidae* Batsch, 1796. ba.f001-29

**JU**: Nomen presented expressly (p. 141 sq., 243) as unranked

**C**: **AH**

«Allocentroleniae» Guayasamin[+5], 2009.ga.e01 • **di**

**SI**: 079

**PA**: 00 • Allocentroleniae • Guayasamin[+5] 2009.ga: 3 • **Tx**

**HH**: **INR**

**GT**: *Centrolenoidea* 1951.ta.f001

**SY**: **KYR.** F.14.04. Superfamilia *Centrolenoidea* Taylor, 1951.ta.f001-02

**JU**: Nomen presented expressly (p. 19–20) as unranked

**C**: **AH**

«Allodapanura» Frost[+18], 2006.fa.e34 • **di**

**SI**: 057

**PA**: 00 • Allodapanura • Frost[+18] 2006.fa: 7, 224 • **Tx**

**HH**: **INR**

**GT**: **Ecostata** 1879.lb.c04
**Gastrechmia** 1867.ca.c02

**SY**: **TEO.** C.10.03. Phalanx **Scoptanura** Starrett, 1973. sb.c02-02
[**HYP.** Infraphalanx unnamed]

**JU**: Nomen presented expressly (p. 141 sq., 224) as unranked

**C**: **AH**

«Amazorana» Streicher[+7], 2018.sa.e03 • **di**

**SI**: 089

**PA**: 00 • Amazorana • Streicher[+7] 2018.sa: 139, 142 • **Cd**

**HH**: **INR**

**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05

**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP. da.c03-00

**JU**: Nomen presented expressly (p. 139, 142) as unranked

**C**: **AH**

«Ametrobatrachia» Frost[+18], 2006.fa.e41 • **di**

**SI**: 065

**PA**: 00 • Ametrobatrachia • Frost[+18] 2006.fa: 7, 237 • **Tx**

**HH**: **INR**

**GT**: **Ecaudata** 1777.sa.c06

**SY**: **KYR.** C.12.03. Infraphalanx **Ecaudata** Scopoli, 1777. sa.c06-01

**JU**: Nomen presented expressly (p. 141 sq., 237) as unranked

**C**: **AH**

«Amphibia» Queiroz[+1], 1992.qa.e02 • **nd**

**SI**: 002

**PA**: 00 • Amphibia • Queiroz[+1] 1992.qa: 474 • **Cd**

**HH**: **Amphibia** Blainville, 1816.ba.c02

**GT**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02

**SY**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898. ga.c01-00

**JU**: Unranked nomen presented expressly (p. 475) as a "node-based name"

**C**: **AH**

<Amphibia> Laurin[+12] *in* Queiroz[+2], 2020.qa.e01 • **di**

**SI**: 093

**PA**: 00 • Amphibia • Laurin[+12] 2020.ga: 765 • **Cd**

**HH**: **Amphibia** Blainville, 1816.ba.c02

**GT**: **Lissamphibia** 1898.ga.c01

Non-lissamphibian **Amphibia** 1816.ba.c02
**SY**: **KYR.** C.02.01. Classis **Amphibia** Blainville, 1816. ba.c02-03
**JU**: Unranked nomen adopted (p. 764) as a "converted clade name" for a "total clade" under the *Phylocode*
**C**: **NH**

«Anomocoela» Frost[+18], 2006.fa.e17 • **di**
**SI**: 041
**PA**: 00 • Anomocoela • Frost[+18] 2006.fa: 6, 186 • **Tx**
**HH**: **Anomocoela** Nicholls, 1916.na.c02
**GT**: **Archaeosalientia** 1981.ra.c01
**SY**: **KYR.** C.08.01. Superphalanx **Archaeosalientia** Roček, 1981.ra.c01-01
**JU**: Nomen presented expressly (p. 141 sq., 186) as unranked
**C**: **AH**

«Anura» Queiroz[+1], 1992.qa.e01 • **nd**
**SI**: 010
**PA**: 00 • Anura • De Queiroz[+1] 1992.qa: 474 • **Cd**
**HH**: **Anoures** Duméril, 1805.da.c01
**GT**: **Anura** 1805.da.c01
**SY**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07
**JU**: Unranked nomen presented expressly (p. 475) as a "node-based name"
**C**: **AH**

«Anura» Ford[+1], 1993.fa.e01 • **di**
**SI**: 013
**PA**: 00 • Anura • Ford[+1] 1993.fa: 94 • **Cd**
**HH**: **Anoures** Duméril, 1805.da.c01
**GT**: **Anura** 1805.da.c01
**SY**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07
**JU**: Unranked nomen presented expressly (p. 99) as a "node-based name"
**C**: **AH**

«Apoda» Queiroz[+1], 1992.qa.e03 • **nd**
**SI**: 003
**PA**: 00 • Apoda • Queiroz[+1] 1992.qa: 474 • **Cd**
**HH**: **Apodes** Linnaeus, 1758.la.c02
**GT**: **Gymnophiona** 1814.ra.c01
**SY**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814. ra.c01-02
**JU**: Unranked nomen presented expressly (p. 475) as a "stem-based name"
**C**: **AH**

«Arboranae» Duellman[+2], 2016.db.e01 • **di**
**SI**: 086
**PA**: 00 • Arboranae • Duellman[+2] 2016.db: 1, 7 • **Tx**
**HH**: **INR**
**GT**: ***Hyloidea*** 1815.ra.f002-|1825.gb.f001|
**SY**: **KYR.** F.14.06. Superfamilia ***Hyloidea*** Rafinesque, 1815.ra.f002-|Gray, 1825.gb.f001|-20
**JU**: Nomen presented expressly (p. 1, 7) as unranked
**C**: **AH**

«Athesphatanura» Frost[+18], 2006.fa.e27 • **di**
**SI**: 051
**PA**: 00 • Athesphatanura • Frost[+18] 2006.fa: 6, 202 • **Tx**
**HH**: **INR**
**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05
**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP. da.c03-00
**JU**: Nomen presented expressly (p. 141 sq., 202) as unranked
**C**: **AH**

«Atlanticanura» Frazão[+2], 2015.fa.e01 • **di**
**SI**: 084
**PA**: 00 • Atlanticanura • Frazão[+2] 2015.fa: 1, 10 • **Cd**
**HH**: **INR**
**GT**: **Aquipares** 1816.ba.c07
**Helanura** DOP.da.c09
**SY**: **KYR.** C.08.02. Superphalanx **Ranomorpha** Fejérváry, 1921.fb.c08-01
**JU**: Nomen presented expressly (p. 1, 6) as unranked
**C**: **AH**

«Australobatrachia» Frost[+18], 2006.fa.e22 • **di**
**SI**: 046
**PA**: 00 • Australobatrachia • Frost[+18] 2006.fa: 6, 193 • **Tx**
**HH**: **Diplosiphona** Günther, 1859.ga.c02
**GT**: **Diplosiphona** 1859.ga.c02
**SY**: **KYR.** C.11.02. Subphalanx **Diplosiphona** Günther, 1859.ga.c02-01
**JU**: Nomen presented expressly (p. 141 sq., 193) as unranked
**C**: **AH**

«Batrachia» de Queiroz[+1], 1992.qa.e01 • **nd**
**SI**: 006
**PA**: 00 • Batrachia • De Queiroz[+1] 1992.qa: 474 • **Cd**
**HH**: **Batraciens** Brongniart, 1800.ba.c01
**GT**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**SY**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898. ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]
**JU**: Unranked nomen presented expressly (p. 475) as a "node-based name"
**C**: **AH**

«Batrachia» Frost[+18], 2006.fa.e03 • **di**
**SI**: 027
**PA**: 00 • Batrachia • Frost[+18] 2006.fa: 5, 168 • **Tx**
**HH**: **Batraciens** Brongniart, 1800.ba.c01
**GT**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**SY**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898. ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]
**JU**: Nomen presented expressly (p. 141 sq., 168) as unranked
**C**: **AH**

«Bombinanura» Ford[+1], 1993.fa.e03 • **di**
**SI**: 015

**PA**: 00 • Bombinanura • Ford[+1] 1993.fa: 94 • **Cd**
**HH**: **INR**
**GT**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**SY**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01
**JU**: Unranked nomen presented expressly (p. 101) as a "node-based name"
**C**: **AH**

«Calamitophrynia» Grant[+9], 2006.gb.e02 • **di**
**SI**: 071
**PA**: 00 • Calamitophrynia • Grant[+9] 2006.gb: 4, 154 • **Tx**
**HH**: **INR**
**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05
**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00
**JU**: Nomen presented expressly (p. 146 sq., 154) as unranked
**C**: **AH**

«Caudata» de Queiroz[+1], 1992.qa.e01 • **nd**
**SI**: 008
**PA**: 00 • Caudata • De Queiroz[+1] 1992.qa: 474 • **Cd**
**HH**: **Caudata** Scopoli, 1777.sa.c02
**GT**: **Urodela** 1805.da.c02
**SY**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
**JU**: Unranked nomen presented expressly (p. 475) as a "node-based name"
**C**: **AH**

«Caudata» Frost[+18], 2006.fa.e04 • **di**
**SI**: 028
**PA**: 00 • Caudata • Frost[+18] 2006.fa: 5, 169 • **Tx**
**HH**: **Caudata** Scopoli, 1777.sa.c02
**GT**: **Urodela** 1805.da.c02
**SY**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
**JU**: Nomen presented expressly (p. 141 sq., 169) as unranked
**C**: **AH**

<Caudata> D. Wake *in* Queiroz[+2], 2020.qa.e04 • **nd**
**SI**: 094
**PA**: 00 • Caudata • D. Wake *in* Queiroz[+2], 2020.qa.e04: 785 • **Cd**
**HH**: **Caudata** Scopoli, 1777.sa.c02
**GT**: **Urodela** 1805.da.c02
**SY**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
**JU**: Unranked nomen adopted as a "converted clade name" for a "crown clade" under the *Phylocode*
**C**: **NH**

«Ceratobatrachia» Brown[+4], 2015.ba.e01 • **di**
**SI**: 083
**PA**: 00 • Pancryptobrancha • Brown[+4] 2015.ba: 138 • **Cd**
**HH**: **INR**
**GT**: *Ceratobatracheidae* 1884.ba.f001
**SY**: **KYR.** F.16.03. Apofamilia *Ceratobatracheidae* Boulenger, 1884.ba.f001-04
**JU**: Unranked nomen presented expressly (p. 138) as a "node-based name"
**C**: **AH**

«Chthonobatrachia» Frost[+18], 2006.fa.e30 • **di**
**SI**: 054
**PA**: 00 • Chthonobatrachia • Frost[+18] 2006.fa: 6, 208 • **Tx**
**HH**: **INR**
**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05
**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00
**JU**: Nomen presented expressly (p. 141 sq., 208) as unranked
**C**: **AH**

«Cladophrynia» Frost[+18], 2006.fa.e25 • **di**
**SI**: 049
**PA**: 00 • Cladophrynia • Frost[+18] 2006.fa: 6, 201 • **Tx**
**HH**: **INR**
**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05
**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00
**JU**: Nomen presented expressly (p. 141 sq., 201) as unranked
**C**: **AH**

«Commutabirana» Streicher[+7], 2018.sa.e04 • **di**
**SI**: 090
**PA**: 00 • Commutabirana • Streicher[+7] 2018.sa: 139, 142 • **Cd**
**HH**: **INR**
**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05
**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00
**JU**: Nomen presented expressly (p. 139, 142) as unranked
**C**: **AH**

«Cornucopirana» Streicher[+7], 2018.sa.e02 • **di**
**SI**: 088
**PA**: 00 • Cornucopirana • Streicher[+7] 2018.sa: 139, 142 • **Cd**
**HH**: **INR**
**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05
**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00
**JU**: Nomen presented expressly (p. 139, 142) as unranked
**C**: **AH**

«Costata» Frost[+18], 2006.fa.e15 • **di**
**SI**: 039
**PA**: 00 • Costata • Frost[+18] 2006.fa: 6, 184 • **Tx**
**HH**: **Costata** Müller, 1840.ma.c01
**GT**: **Mediogyrinia** 1878.la.c02
**SY**: **KYR.** C.06.02. Infraordo **Mediogyrinia** Lataste, 1878.la.c02-01

**JU**: Nomen presented expressly (p. 141 sq., 184) as unranked

**C**: **AH**

«Cruciabatrachia» Grant[+9], 2006.gb.e01 • **di**

**SI**: 070

**PA**: 00 • Cruciabatrachia • Grant[+9] 2006.gb: 4, 151 • **Tx**

**HH**: **INR**

**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05

**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00

**JU**: Nomen presented expressly (p. 146 sq., 151) as unranked

**C**: **AH**

«Cryptobranchoidei» Frost[+18], 2006.fa.e05 • **di**

**SI**: 029

**PA**: 00 • Cryptobranchoidei • Frost[+18] 2006.fa: 5, 170 • **Tx**

**HH**: **Cryptobranches** Duméril, 1805.da.c05

**GT**: **Imperfectibranchia** 1838.ha.c03

**SY**: **KYR.** C.05.05. Subordo **Imperfectibranchia** Hogg, 1838.ha.c03-02

**JU**: Nomen presented expressly (p. 141 sq., 170) as unranked

**C**: **AH**

«Diadectosalamandroidei» Frost[+18], 2006.fa.e06 • **di**

**SI**: 030

**PA**: 00 • Diadectosalamandroidei • Frost[+18] 2006.fa: 5, 171 • **Tx**

**HH**: **INR**

**GT**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08

**SY**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Phalanx **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]

**JU**: Nomen presented expressly (p. 141 sq., 171) as unranked

**C**: **AH**

«Diatriata» Wilkinson[+1], 2006.wa.e02 • **di**

**SI**: 074

**PA**: 00 • Diatriata • Wilkinson[+1] 2006.wa: 46 • **Tx**

**HH**: **INR**

**GT**: *Ichthyophioidea* 1968.ta.f001

**SY**: **KYR.** F.14.16. Superfamilia *Ichthyophioidea* Taylor, 1968.ta.f001-04

**JU**: Nomen presented expressly (p. 46) as unranked

**C**: **AH**

«Diphyabatrachia» Frost[+18], 2006.fa.e29 • **di**

**SI**: 053

**PA**: 00 • Diphyabatrachia • Frost[+18] 2006.fa: 6, 205 • **Tx**

**HH**: **INR**

**GT**: **Hylobatrachia** 1828.ra.c16

**SY**: **KYR.** C.13.03. Hypophalanx **Hylobatrachia** Ritgen, 1828.ra.c16-01

**JU**: Nomen presented expressly (p. 141 sq., 205) as unranked

**C**: **AH**

«Discoglossanura» Ford[+1], 1993.fa.e04 • **di**

**SI**: 016

**PA**: 00 • Discoglossanura • Ford[+1] 1993.fa: 94 • **Cd**

**HH**: **INR**

**GT**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02

**SY**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01

**JU**: Unranked nomen presented expressly (p. 101) as a “node-based name”

**C**: **AH**

«Gymnophiona» Queiroz[+1], 1992.qa.e04 • **nd**

**SI**: 004

**PA**: 00 • Gymnophiona • Queiroz[+1] 1992.qa: 474 • **Cd**

**HH**: **Gymnophia** Rafinesque, 1814.ra.c01

**GT**: **Gymnophiona** 1814.ra.c01

**SY**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814.ra.c01-02

**JU**: Unranked nomen presented expressly (p. 475) as a “node-based name”

**C**: **AH**

«Gymnophiona» Frost[+18], 2006.fa.e01 • **di**

**SI**: 025

**PA**: 00 • Gymnophiona • Frost[+18] 2006.fa: 5, 165 • **Tx**

**HH**: **Gymnophia** Rafinesque, 1814.ra.c01

**GT**: **Gymnophiona** 1814.ra.c01

**SY**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814.ra.c01-02

**JU**: Nomen presented expressly (p. 141 sq., 165) as unranked

**C**: **AH**

<Gymnophiona> M. H. Wake *in* Queiroz[+2], 2020.qa.e03 • **nd**

**SI**: 095

**PA**: 00 • Gymnophiona • M. H. Wake *in* Queiroz[+2], 2020.qa.e02: 779 • **Cd**

**HH**: **Gymnophia** Rafinesque, 1814.ra.c01

**GT**: **Gymnophiona** 1814.ra.c01

**SY**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814.ra.c01-02

**JU**: Unranked nomen adopted as a “converted clade name” for a “crown clade” under the *Phylocode*

**C**: **NH**

<Gymnophioniformes> Marjanović[+1], 2008.ma.e01 • **di**

**SI**: 077

**PA**: 00 • Gymnophioniformes • Marjanović[+1] 2008.ma: 152 • **Tx**

**HH**: **INR**

**GT**: **Gymnophiona** 1814.ra.c01

**SY**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814.ra.c01-02

**JU**: Nomen presented expressly (p. 152) as following the *International Code for Phylogenetic*

*Nomenclature*

**C**: **NH**

<GYMNOPHIONOMORPHA> Marjanović[+1], 2008.ma.e02 • **DI**

**SI**: 078

**PA**: 00 • GYMNOPHIONOMORPHA • Marjanović[+1] 2008.ma: 152 • **Tx**

**HH**: **INR**

**GT**: **GYMNOPHIONA** 1814.ra.c01

**SY**: **KYR.** C.04.02. Ordo **GYMNOPHIONA** Rafinesque, 1814. ra.c01-02

**JU**: Nomen presented expressly (p. 152) as following the *International Code for Phylogenetic Nomenclature*

**C**: **NH**

«HESTICOBATRACHIA» Frost[+18], 2006.fa.e31 • **DI**

**SI**: 055

**PA**: 00 • HESTICOBATRACHIA • Frost[+18] 2006.fa: 6, 209 • **Tx**

**HH**: **INR**

**GT**: **PHORANURA** DOP.da.c04
**PHRYNANURA** DOP.da.c05

**SY**: **KYR.** C.11.01. Subphalanx **BAINANURA nov.**, DOP. da.c03-00

**JU**: Nomen presented expressly (p. 141 sq., 209) as unranked

**C**: **AH**

«HYDATINOSALAMANDROIDEI» Frost[+18], 2006.fa.e07 • **DI**

**SI**: 031

**PA**: 00 • HYDATINOSALAMANDROIDEI • Frost[+18] 2006.fa: 5, 171 • **Tx**

**HH**: **INR**

**GT**: **MEANTES** 1767.la.c01
**PSEUDOSAURIA** 1816.ba.c08

**SY**: **KYR.** C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12
[**HYP.** Phalanx **PNEUMOBRANCHIA** Sonnini[+1], 1801. sa.c01-02]

**JU**: Nomen presented expressly (p. 141 sq., 171) as unranked

**C**: **AH**

«HYLOIDES» Frost[+18], 2006.fa.e20 • **DI**

**SI**: 044

**PA**: 00 • HYLOIDES • Frost[+18] 2006.fa: 6, 191 • **Tx**

**HH**: **HYLAEAE** Hübner, 1816.ha.c02
*HYLINA* Gray, 1825.gb.f001

**GT**: **GONDWANURA** DOP.da.c01
**PHANERANURA** DOP.da.c02

**SY**: **TEO.** C.09.01. Epiphalanx **AQUIPARES** de Blainville, 1816.ba.c07-02
[**HYP.** Phalanx unnamed]

**JU**: Nomen presented expressly (p. 141 sq., 191) as unranked

**C**: **AH**

«INDIANURA» Frazão[+2], 2015.fa.e02 • **DI**

**SI**: 085

**PA**: 00 • INDIANURA • Frazão[+2] 2015.fa: 1, 6 • **Cd**

**HH**: **INR**

**GT**: **ECOSTATA** 1879.lb.c04
**GASTRECHMIA** 1867.ca.c02
**PANANURA** DOP.da.c07

**SY**: **TEO.** C.10.03. Phalanx **SCOPTANURA** Starrett, 1973. sb.c02-02

**JU**: Nomen presented expressly (p. 1, 6) as unranked

**C**: **AH**

«LALAGOBATRACHIA» Frost[+18], 2006.fa.e12 • **DI**

**SI**: 036

**PA**: 00 • LALAGOBATRACHIA • Frost[+18] 2006.fa:6, 180 • **Tx**

**HH**: **INR**

**GT**: **GEOBATRACHIA** 1828.ra.c18
**MEDIOGYRINIA** 1878.la.c02

**SY**: **KYR.** C.05.02. Subordo **HYDROBATRACHIA** Ritgen, 1828.ra.c14-01

**JU**: Nomen presented expressly (p. 141 sq., 180) as unranked

**C**: **AH**

«LAURENTOBATRACHIA» Frost[+18], 2006.fa.e37 • **DI**

**SI**: 061

**PA**: 00 • LAURENTOBATRACHIA • Frost[+18] 2006.fa: 7, 232 • **Tx**

**HH**: **INR**

**GT**: *ARTHROLEPTOIDEA* 1869.ma.f011

**SY**: **KYR.** F.14.08. Superfamilia *ARTHROLEPTOIDEA* Mivart, 1869.ma.f011-05

**JU**: Nomen presented expressly (p. 141 sq., 232) as unranked

**C**: **AH**

«LEIOPELMATANURA» Ford[+1], 1993.fa.e02 • **DI**

**SI**: 014

**PA**: 00 • LEIOPELMATANURA • Ford[+1] 1993.fa: 94 • **Cd**

**HH**: **INR**

**GT**: **ANGUSTICOELA** 1958.ra.c01
**HYDROBATRACHIA** 1828.ra.c14

**SY**: **KYR.** C.04.01. Ordo **ANURA** Duméril, 1805.da.c01-07

**JU**: Unranked nomen presented expressly (p. 100) as a “node-based name”

**C**: **AH**

«LEPTODACTYLIFORMES» Frost[+18], 2006.fa.e28 • **DI**

**SI**: 052

**PA**: 00 • LEPTODACTYLIFORMES • Frost[+18] 2006.fa: 6, 205 • **Tx**

**HH**: **INR**

**GT**: **PHORANURA** DOP.da.c04
**PHRYNANURA** DOP.da.c05

**SY**: **KYR.** C.11.01. Subphalanx **BAINANURA nov.**, DOP. da.c03-00

**JU**: Nomen presented expressly (p. 141 sq., 205) as unranked

**C**: **AH**

<LISSAMPHIBIA> Laurin[+12] *in* Queiroz[+2], 2020.qa.e02 • **ND**

**SI**: 096

**PA**: 00 • LISSAMPHIBIA • Laurin[+12] *in* Queiroz[+2], 2020.qa.e02:

773 • **Cd**
**HH**: **Lissamphibia** Gadow, 1898.ga.c01
**GT**: **Anura** 1805.da.c01
**Gymnophiona** 1814.ra.c01
**Urodela** 1805.da.c02
**SY**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
**JU**: Unranked nomen adopted (p. 773) as a "converted clade name" for a "crown clade" under the *Phylocode*
**C**: **NH**

«Meridianura» Frost[+18], 2006.fa.e24 • **di**
**SI**: 048
**PA**: 00 • Meridianura • Frost[+18] 2006.fa: 6, 196 • **Tx**
**HH**: **INR**
**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05
**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00
**JU**: Nomen presented expressly (p. 141 sq., 196) as unranked
**C**: **AH**

«Mesobatrachia» Ford[+1], 1993.fa.e06 • **di**
**SI**: 018
**PA**: 00 • Mesobatrachia • Ford[+1] 1993.fa: 94 • **Cd**
**HH**: **Mesobatrachia** Laurent, 1980.la.c01
**GT**: **Dorsipares** 1816.ba.c06
**Laevogyrinia** 1878.la.c01
**SY**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-01
**JU**: Unranked nomen presented expressly (p. 102) as a "node-based name"
**C**: **AH**

«Natatanura» Frost[+18], 2006.fa.e38 • **di**
**SI**: 062
**PA**: 00 • Natatanura • Frost[+18] 2006.fa: 7, 234 • **Tx**
**HH**: **INR**
**GT**: **Ecaudata** 1777.sa.c06
**Savanura** DOP.db.c08
**SY**: **KYR.** C.11.05. Subphalanx **Pananura nov.**, DOP.da.c07-00
**JU**: Nomen presented expressly (p. 141 sq., 234) as unranked
**C**: **AH**

«Neoaustrarana» Streicher[+7], 2018.sa.e01 • **di**
**SI**: 087
**PA**: 00 • Neoaustrarana • Streicher[+7] 2018.sa: 139, 142 \ • **Cd**
**HH**: **INR**
**GT**: *Cyclorampheidae* 1850.bb.f002-|1852.ba.f001|
**SY**: **KYR.** F.16.01. Apofamilia *Cyclorampheidae* Bonaparte, 1850.bb.f002-|Bonaparte, 1852.ba.f001|-05
**JU**: Nomen presented expressly (p. 139, 142) as unranked
**C**: **AH**

«Neobatrachia» Ford[+1], 1993.fa.e08 • **di**
**SI**: 020
**PA**: 00 • Neobatrachia • Ford[+1] 1993.fa: 94 • **Cd**
**HH**: **Neobatrachi** Sarasin[+1], 1890.sa.c01
**GT**: **Aquipares** 1816.ba.c07
**Helanura** DOP.da.c09
**SY**: **KYR.** C.08.02. Superphalanx **Ranomorpha** Fejérváry, 1921.fb.c08-01
**JU**: Unranked nomen presented expressly (p. 102) as a "node-based name"
**C**: **AH**

«Neobatrachia» Frost[+18], 2006.fa.e18 • **di**
**SI**: 042
**PA**: 00 • Neobatrachia • Frost[+18] 2006.fa: 6, 189 • **Tx**
**HH**: **Neobatrachi** Sarasin[+1], 1890.sa.c01
**GT**: **Aquipares** 1816.ba.c07
**Helanura** DOP.da.c09
**SY**: **KYR.** C.08.02. Superphalanx **Ranomorpha** Fejérváry, 1921.fb.c08-01
**JU**: Nomen presented expressly (p. 141 sq., 189) as unranked
**C**: **AH**

«Neocaecilia» Wilkinson[+1], 2006.wa.e01 • **di**
**SI**: 073
**PA**: 00 • Neocaecilia • Wilkinson[+1] 2006.wa: 44 • **Tx**
**HH**: **INR**
**GT**: **Pseudophiona** 1816.ba.c11
**SY**: **KYR.** C.05.04. Subordo **Pseudophiona** de Blainville, 1816.ba.c11-06
**JU**: Nomen presented expressly (p. 44) as unranked
**C**: **AH**

«Neocaudata» Cannatella[+1], 1993.ca.e01 • **nd**
**SI**: 011
**PA**: 00 • Neocaudata • Cannatella[+1] 1993.ca: 2 • **Cd**
**HH**: **Neocaudata** Milner, 2000.ma.c01
**GT**: **Imperfectibranchia** 1838.ha.c03
**Pseudosauria** 1816.ba.c08
**SY**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Infraordo **Nullibranchia** Bonaparte**,** 1831.ba.c01-01]
**JU**: Unranked nomen presented expressly (p. 2) as a "node-based name"
**C**: **AH**

«Nobleobatia» Grant[+9], 2006.gb.e03 • **di**
**SI**: 072
**PA**: 00 • Nobleobatia • Grant[+9] 2006.gb: 4, 155 • **Tx**
**HH**: **INR**
**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05
**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00
**JU**: Nomen presented expressly (p. 146 sq., 155) as unranked
**C**: **AH**

«Nobleobatrachia» Frost[+18], 2006.fa.e23 • **di**
**SI**: 047
**PA**: 00 • Nobleobatrachia • Frost[+18] 2006.fa: 6, 196 • **Tx**

**HH**: **INR**
**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05
**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00
**JU**: Nomen presented expressly (p. 141 sq., 196) as unranked
**C**: **AH**

«Notogaeanura» Frost[+18], 2006.fa.e21 • **di**
**SI**: 045
**PA**: 00 • Notogaeanura • Frost[+18] 2006.fa: 6, 192 • **Tx**
**HH**: **INR**
**GT**: **Bainanura** DOP.da.c03
**Diplosiphona** 1859.ga.c02
**SY**: **KYR.** C.10.02. Phalanx **Phaneranura nov.**, DOP.da.c02-00
**JU**: Nomen presented expressly (p. 141 sq., 192) as unranked
**C**: **AH**

«Orthobatrachia» Heinicke[+5], 2009.ha.e02 • **di**
**SI**: 081
**PA**: 00 • Orthobatrachia • Heinicke[+5] 2009.ha: 1, 24 • **Tx**
**HH**: **INR**
**GT**: **Gaianura** DOP.da.c06
**Hemiphractiformia** 1881.bd.c01
**SY**: **TEO.** C.12.02. Infraphalanx **Phrynanura nov.**, DOP.da.c05-00
[**HYP.** Catophalanx unnamed]
**JU**: Nomen presented expressly (p. 24) as unranked
**C**: **AH**

«Pancryptobrancha» Vasilyan[+4], 2013.va.e01 • **di**
**SI**: 082
**PA**: 00 • Pancryptobrancha • Vasilyan[+4] 2013.va: 301 • **Cd**
**HH**: **INR**
**GT**: *Cryptobranchidae* 1826.fb.f003
**SY**: **KYR.** F.17.69. Familia *Cryptobranchidae* Fitzinger, 1826.fb.f003-04
**JU**: Unranked nomen presented expressly (p. 301) as a "stem-based name"
**C**: **AH**

«Panpipidae» Aranciaga Rolando[+2], 2019.aa.e01 • **di**
**SI**: 091
**PA**: 00 • Panpipidae • Aranciaga Rolando[+2] 2019.aa: 725 • **Cd**
**HH**: **INR**
**GT**: *Dactylethrinae* 1838.ha.f001
*Pipinae* 1825.ga.f003-|1826.fb.f002|
*Salteniinae* DOP.da.f148
**SY**: **KYR.** F.17.69. Familia *Pipidae* 1825.ga.f003-|1826.fb.f002|
**JU**: Unranked nomen presented expressly (p. 727) as the nomen of a "stem-based clade"
**C**: **AH**

«Parabatrachia» Frost[+18], 2006.fa.e45 • **di**
**SI**: 069
**PA**: 00 • Parabatrachia • Frost[+18] 2006.fa: 356 • **Tx**
**HH**: **INR**
**GT**: **Gymnophiona** 1814.ra.c01
**SY**: **KYR.** C.04.02. Ordo **Gymnophiona** Rafinesque, 1814.ra.c01-02
**JU**: Nomen presented expressly (p. 141 sq., 356) as unranked
**C**: **AH**

«Paratoidea» Queiroz[+1], 1992.qa.e01 • **nd**
**SI**: 005
**PA**: 00 • Paratoidea • Queiroz[+1] 1992.qa: 474 • **Cd**
**HH**: **Parotoidia** Gardiner, 1982.ga.c01
**GT**: **Anura** 1805.da.c01
**Urodela** 1805.da.c02
**SY**: **KYR.** C.03.01. Subclassis **Lissamphibia** Gadow, 1898.ga.c01-00
[**HYP.** Superordo **Batrachia** Brongniart**,** 1800.ba.c01-14]
**JU**: Unranked nomen presented expressly (p. 475) as a "stem-based name"
**C**: **AH**

«Perennibranchia» Frost[+18], 2006.fa.e08 • **di**
**SI**: 032
**PA**: 00 • Perennibranchia • Frost[+18] 2006.fa: 5, 172 • **Tx**
**HH**: **Pérennibranches** Latreille 1824.la.c02
**GT**: **Meantes** 1767.la.c01
**Pseudosauria** 1816.ba.c08
**SY**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
[**HYP.** Phalanx **Pneumobranchia** Sonnini[+1], 1801.sa.c01-02]
**JU**: Nomen presented expressly (p. 141 sq., 172) as unranked
**C**: **AH**

«Phthanobatrachia» Frost[+18], 2006.fa.e19 • **di**
**SI**: 043
**PA**: 00 • Phthanobatrachia • Frost[+18] 2006.fa: 6, 190 • **Tx**
**HH**: **INR**
**GT**: **Gondwanura** DOP.da.c01
**Phaneranura** DOP.da.c02
**Scoptanura** 1973.sb.c02
**SY**: **TEO.** C.09.01. Epiphalanx **Aquipares** de Blainville, 1816.ba.c07-02
**JU**: Nomen presented expressly (p. 141 sq., 190) as unranked
**C**: **AH**

«Pipanura» Ford[+1], 1993.fa.e05 • **di**
**SI**: 017
**PA**: 00 • Pipanura • Ford[+1] 1993.fa: 94 • **Cd**
**HH**: **INR**
**GT**: **Dorsipares** 1816.ba.c06
**Laevogyrinia** 1878.la.c01
**SY**: **KYR.** C.06.01. Infraordo **Geobatrachia** Ritgen, 1828.ra.c18-01
**JU**: Unranked nomen presented expressly (p. 102) as a "node-based name"
**C**: **AH**

«Pipimorpha» Ford[+1], 1993.fa.e07 • **nd**

**SI**: 019
**PA**: 00 • Pipimorpha • Ford[+1] 1993.fa: 94 • **Cd**
**HH**: **INR**
**GT**: **Dorsipares** 1816.ba.c06
**SY**: **KYR.** C.07.01. Hypoordo **Dorsipares** de Blainville, 1816.ba.c06-02
**JU**: Unranked nomen presented expressly (p. 99) as a "stem-based name"
**C**: **AH**

«Pipinomorpha» Báez[+1], 2003.ba.e01 • **nd**

**SI**: 023
**PA**: 00 • Pipinomorpha • Báez[+1] 2003.ba: 454 • **Cd**
**HH**: **INR**
**GT**: *Dactylethrinae* 1838.ha.f001
*Pipinae* 1825.gb.f003-|1826.fb.f002|
**SY**: **KYR.** F.17.03. *Pipidae* Gray, 1825.gb.f003-|Fitzinger, 1826.fb.f002|-07
**JU**: Unranked nomen presented expressly (p. 454) as a "stem-based name"
**C**: **AH**

«Plethosalamandroidei» Frost[+18], 2006.fa.e10 • **di**

**SI**: 034
**PA**: 00 • Plethosalamandroidei • Frost[+18] 2006.fa: 5, 175 • **Tx**
**HH**: **INR**
**GT**: *Amphiumeidae* 1825.gb.f007
*Rhyacotritoneidae* 1958.ta.f002
**SY**: **KYR.** F.15.11. Epifamilia *Amphiumoidae* Gray, 1825.gb.f007-13
**JU**: Nomen presented expressly (p. 141 sq., 175) as unranked
**C**: **AH**

«Ranoides» Frost[+18], 2006.fa.e33 • **di**

**SI**: 058
**PA**: 00 • Ranoides • Frost[+18] 2006.fa: 7, 223 • **Tx**
**HH**: **Ranacea** Wilbrand, 1814.wa.c01
*Ranina* Batsch, 1796.ba.f001
**GT**: **Ecostata** 1879.lb.c04
**Gastrechmia** 1867.ca.c02
**Pananura** DOP.da.c07
**SY**: **TEO.** C.10.03. Phalanx **Scoptanura** Starrett, 1973.sb.c02-02
**JU**: Nomen presented expressly (p. 141 sq., 223) as unranked
**C**: **AH**

«Salientia» de Queiroz[+1], 1992.qa.e01 • **nd**

**SI**: 009
**PA**: 00 • Salientia • De Queiroz[+1] 1992.qa: 474 • **Cd**
**HH**: **Salientia** Laurenti, 1768.la.c01
**GT**: **Anura** 1805.da.c01
**SY**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07
**JU**: Unranked nomen presented expressly (p. 475) as a "stem-based name"
**C**: **AH**

«Salientia» Ford[+1], 1993.fa.e10 • **di**

**SI**: 022
**PA**: 00 • Salientia • Ford[+1] 1993.fa: 94 • **Cd**
**HH**: **Salientia** Laurenti, 1768.la.c01
**GT**: **Anura** 1805.da.c01
**SY**: **KYR.** C.04.01. Ordo **Anura** Duméril, 1805.da.c01-07
**JU**: Unranked nomen presented expressly (p. 99) as a "stem-based name"
**C**: **AH**

«Saukrobatrachia» Frost[+18], 2006.fa.e43 • **di**

**SI**: 067
**PA**: 00 • Saukrobatrachia • Frost[+18] 2006.fa: 7, 241 • **Tx**
**HH**: **INR**
**GT**: *Ranoidae* 1796.ba.f001
**SY**: **KYR.** F.15.10. Epifamilia *Ranoidae* Batsch, 1796.ba.f001-29
**JU**: Nomen presented expressly (p. 141 sq., 241) as unranked
**C**: **AH**

«Scoptanura» Ford[+1], 1993.fa.e09 • **di**

**SI**: 021
**PA**: 00 • Scoptanura • Ford[+1] 1993.fa: 94 • **Cd**
**HH**: **Scoptanura** Starrett, 1973.sb.c02
**GT**: **Ecostata** 1879.lb.c04
**SY**: **KYR.** C.11.03. Subphalanx **Ecostata** Lataste, 1879.lb.c04-01
**JU**: Unranked nomen presented expressly (p. 114) as a "stem-based name"
**C**: **AH**

«Shelaniinae» Aranciaga Rolando[+2], 2019.aa.e01 • **di**

**SI**: 092
**PA**: 00 • Shelaniinae • Aranciaga Rolando[+2] 2019.aa: 727 • **Cd**
**HH**: **INR**
**GT**: 4 **G†**
**SY**: *Salteniinae* DOP.da.f148 †
**JU**: Unranked nomen presented expressly (p. 727) as the nomen of a "stem-based clade"
**C**: **AH**

«Sokolanura» Frost[+18], 2006.fa.e14 • **di**

**SI**: 038
**PA**: 00 • Sokolanura • Frost[+18] 2006.fa: 6, 183 • **Tx**
**HH**: **INR**
**GT**: **Geobatrachia** 1828.ra.c18
**Mediogyrinia** 1878.la.c02
**SY**: **KYR.** C.05.02. Subordo **Hydrobatrachia** Ritgen, 1828.ra.c14-01
**JU**: Nomen presented expressly (p. 141 sq., 183) as unranked
**C**: **AH**

«Stegokrotaphia» Cannatella[+1], 1993.ca.e02 • **nd**

**SI**: 012
**PA**: 00 • Stegokrotaphia • Cannatella[+1] 1993.ca: 2 • **Cd**
**HH**: **INR**
**GT**: **Pseudophiona** 1816.ba.c11
**SY**: **KYR.** C.05.04. Subordo **Pseudophiona** de Blainville,

1816.ba.c11-06
**JU**: Unranked nomen presented expressly (p. 2) as a "node-based name"
**C**: **AH**

«Stegokrotaphia» Frost[+18], 2006.fa.e02 • **di**
**SI**: 026
**PA**: 00 • Stegokrotaphia • Frost[+18] 2006.fa: 5, 166 • **Tx**
**HH**: **INR**
**GT**: **Pseudophiona** 1816.ba.c11
**SY**: **KYR.** C.05.04. Subordo **Pseudophiona** de Blainville, 1816.ba.c11-06
**JU**: Nomen presented expressly (p. 141 sq., 166) as unranked
**C**: **AH**

«Telmatobatrachia» Frost[+18], 2006.fa.e40 • **di**
**SI**: 064
**PA**: 00 • Telmatobatrachia • Frost[+18] 2006.fa: 7, 236 • **Tx**
**HH**: **INR**
**GT**: **Ecaudata** 1777.sa.c06
**SY**: **KYR.** C.12.03. Infraphalanx **Ecaudata** Scopoli, 1777.sa.c06-01
**JU**: Nomen presented expressly (p. 141 sq., 236) as unranked
**C**: **AH**

«Temnospondyli» Queiroz[+1], 1992.qa.e01 • **nd**
**SI**: 001
**PA**: 00 • Temnospondyli • Queiroz[+1] 1992.qa: 474 • **Cd**
**HH**: **Temnospondyli** Zittel, 1888.za.c01
**GT**: **Amphibia** 1816.ba.c02
**SY**: **KYR.** C.02.01. Classis **Amphibia** Blainville, 1816.ba.c02-03
**JU**: Unranked nomen presented expressly (p. 475) as a "stem-based name"
**C**: **AH**

«Teresomata» Wilkinson[+1], 2006.wa.e03 • **di**
**SI**: 075
**PA**: 00 • Teresomata • Wilkinson[+1] 2006.wa: 46 • **Tx**
**HH**: **INR**
**GT**: *Caecilioidea* Rafinesque, 1814.ra.f003-|Gray, 1825.gb.f008|
**SY**: **KYR.** F.14.15. Superfamilia *Caecilioidea* Rafinesque, 1814.ra.f003-|Gray, 1825.gb.f008|-18
**JU**: Nomen presented expressly (p. 47) as unranked
**C**: **AH**

«Terrarana» Hedges[+2], 2008.ha.e01 • **di**
**SI**: 076
**PA**: 00 • Terrarana • Hedges[+2] 2008.ha: 1 • **Tx**
01 • Terraranae • Dubois 2009.da: 171 • **UU**
02 • Terranae • Dubois 2009.da: 171 • **UU**
**HH**: **INR**
**GT**: **Gaianura** DOP.da.c06
**SY**: **KYR.** C.13.01. Hypophalanx **Gaianura nov.**, DOP.da.c06-00
**JU**: Nomen presented expressly (p. 11, 21) as unranked
**C**: **AH**

«Terrarana» Heinicke[+5], 2009.ha.e01 • **di**
**SI**: 080
**PA**: 00 • Terrarana • Heinicke[+5] 2009.ha: 1, 5 • **Tx**
01 • Terraranae • Duellman[+2] 2016.db: 8 • **Tx**
**HH**: «Terrarana» Hedges[+2], 2008.ha.e01
**GT**: **Gaianura** DOP.da.c06
**SY**: **KYR.** C.13.01. Hypophalanx **Gaianura nov.**, DOP.da.c06-00
**JU**: Nomen presented expressly (p. 5) as unranked, with an etymology different from that of «Terrarana» Hedges[+2], 2008.ha.e01, therefore resulting in the introduction of a new nomen, junior homonym of the latter
**C**: **AH**

«Tinctanura» Frost[+18], 2006.fa.e26 • **di**
**SI**: 050
**PA**: 00 • Tinctanura • Frost[+18] 2006.fa: 6, 201 • **Tx**
**HH**: **INR**
**GT**: **Phoranura** DOP.da.c04
**Phrynanura** DOP.da.c05
**SY**: **KYR.** C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00
**JU**: Nomen presented expressly (p. 141 sq., 201) as unranked
**C**: **AH**

«Treptobranchia» Frost[+18], 2006.fa.e09 • **di**
**SI**: 033
**PA**: 00 • Treptobranchia • Frost[+18] 2006.fa: 5, 173 • **Tx**
**HH**: **INR**
**GT**: *Salamandroidea* 1820.ga.f002
**SY**: **KYR.** F.14.18. Superfamilia *Salamandroidea* Goldfuss, 1820.ga.f002-21
**JU**: Nomen presented expressly (p. 141 sq., 173) as unranked
**C**: **AH**

«Urodela» de Queiroz[+1], 1992.qa.e01 • **nd**
**SI**: 007
**PA**: 00 • Urodela • De Queiroz[+1] 1992.qa: 474 • **Cd**
**HH**: **Urodèles** Duméril, 1805.da.c02
**GT**: **Urodela** 1805.da.c02
**SY**: **KYR.** C.04.03. Ordo **Urodela** Duméril, 1805.da.c02-12
**JU**: Unranked nomen presented expressly (p. 475) as a "stem-based name"
**C**: **AH**

«Victoranura» Frost[+18], 2006.fa.e39 • **di**
**SI**: 063
**PA**: 00 • Victoranura • Frost[+18] 2006.fa: 7, 235 • **Tx**
**HH**: **INR**
**GT**: **Ecaudata** 1777.sa.c06
**SY**: **KYR.** C.12.03. Infraphalanx **Ecaudata** Scopoli, 1777.sa.c06-01
**JU**: Nomen presented expressly (p. 141 sq., 235) as unranked
**C**: **AH**

«Xenoanura» Frost[+18], 2006.fa.e13 • **di**

**SI**: 037

**PA**: 00 • Xenoanura • Frost[+18] 2006.fa: 6, 181 • **Tx**

**HH**: **Xenoanura** Starrett, 1973.sb.c01

**GT**: **Dorsipares** 1816.ba.c06

**SY**: **KYR.** C.07.01. Hypoordo **Dorsipares** de Blainville, 1816.ba.c06-02

**JU**: Nomen presented expressly (p. 141 sq., 181) as unranked

**C**: **AH**

«Xenopodinomorpha» Báez[+1], 2003.ba.e02 • **nd**

**SI**: 024

**PA**: 00 • *Xenopodinomorpha* • Báez[+1] 2003.ba: 454 • **Cd**

**HH**: **INR**

**GT**: *Dactylethrini* 1838.ha.f001

**SY**: **KYR.** F.19.01. Tribus *Dactylethrini* Hogg, 1838.ha.f001-05

**JU**: Unranked nomen presented expressly (p. 464) as a "stem-based name"

**C**: **AH**

«Xenosalamandroidei» Frost[+18], 2006.fa.e11 • **di**

**SI**: 035

**PA**: 00 • Xenosalamandroidei • Frost[+18] 2006.fa:5, 176 • **Tx**

**HH**: **INR**

**GT**: *Amphiumidae* 1825.gb.f007
*Plethodontidae* 1850.ga.f001

**SY**: **KYR.** F.16.08. Apofamilia *Amphiumeidae* Gray, 1825.gb.f007-13

**JU**: Nomen presented expressly (p. 141 sq., 176) as unranked

**C**: **AH**

«Xenosyneunitanura» Frost[+18], 2006.fa.e36 • **di**

**SI**: 060

**PA**: 00 • Xenosyneunitanura • Frost[+18] 2006.fa: 7, 231 • **Tx**

**HH**: **INR**

**GT**: *Brevicipitoidea* 1850.bb.f012

**SY**: **KYR.** F.14.09. Superfamilia *Brevicipitoidea* Bonaparte, 1850.bb.f012-09

**JU**: Nomen presented expressly (p. 141 sq., 231) as unranked

**C**: **AH**

## **Appendix A9.CLAD-1.** Complete cladonomy and nomenclature of **Lissamphibia** proposed here

Hierarchy adopted in this taxonomy:

C.01. **bPm. Subphylum** (1)
_ C.02. **C. <u>Classis</u>** (1)
_ _ C.03. **bC. Subclassis** (1)
_ _ _ C.04. **O. <u>Ordo</u>** (3 + 1 †)
_ _ _ _ C.05. **bO. Subordo** (7)
_ _ _ _ _C.06. **iO. Infraordo** (2)
_ _ _ _ _ _ C.07. **hO. Hypoordo** (2)
_ _ _ _ _ _ _ C.08. **pP. Superphalanx** (2)
_ _ _ _ _ _ _ _ C.09. **eP. Epiphalanx** (2)
_ _ _ _ _ _ _ _ _ C.10. **P. Phalanx** (3)
_ _ _ _ _ _ _ _ _ _C.11. **bP. Subphalanx** (5)
_ _ _ _ _ _ _ _ _ _ _ C.12. **iP. Infraphalanx** (4)
_ _ _ _ _ _ _ _ _ _ _ _ C.13. **hP. Hypophalanx** (3)
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14. **pF.** *Superfamilia* [-*oidea*] (18)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15. **eF.** *Epifamilia* [-*oidae*] (12)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _F.16. **aF.** *Apofamilia* [-*eidae*] (9)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17. **F.** *<u>Familia</u>* [-*idae*] (69 + 13 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18. **bF.** *Subfamilia* [-*inae*] (87+ 2 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19. **T.** *Tribus* [-*ini*] (89)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20. **bT.** *Subtribus* [-*ina*] (92)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21. **iT.** *Infratribus* [-*inia*] (65)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.22. **hT.** *Hypotribus* [-*inoa*] (44)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.23. **Cn.** *Clanus* [-*ites*] (32)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.24. **bCn.** *Subclanus* [-*ities*] (17)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.25. **iCn.** *Infraclanus* [-*itoes*] (23)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.26. **hCn.** *Hypoclanus* [-*itues*] (14)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.27. **cCn.** *Catoclanus* [-*ityes*] (2)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28. **G.** *<u>Genus</u>* (579 + 199 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.29. b**G.** *Subgenus* (3)

Nomina are numbered sequentially in each rank, in the order of their appearance in this table. Each rank is designated by a letter and a number, as above. The number of each all-fossil taxon is preceded by the sign †. The numbers of taxa referred to only by anoplonyms or anecdidonyms but for which no hoplonyms were ever proposed are immediately followed by the sign §.

Two kinds of identifiers are used below, for taxa and for nomina:
[1] Identifiers of taxa recognised as valid in this work (e.g. C.01.01) precede the nomina of the taxa. They start with capital letters referring to the nominal-series at stake (C, class-series; F, family-series; G, genus-series), followed by two numbers: the first one designates the rank (see hierarchy above) and the second one the sequential number (by order of appearance in the document). Two distinct sequences of numbers are used, one for all-fossil taxa (preceded by **†)** and one for taxa that include at least one recent species (without †).
[2] Identifiers of nomina (e.g. 1816.ba.c02-03) follow the authors of the nomina of the taxa. They start with an identifier of the publication where they were established (see our section 'References'), followed by the sequential number of the paronym at stake (see respectively Apendices **A7.NCS**, **A6.NFS** and **A5.NGS**).

Taxa are presented below strictly by alphabetical order within ranks.

Nomina <u>underlined</u> are nomina used at mandatory suprageneric ranks (classis, ordo, familia).

**Criteria for assignment of a taxon to the rank familia, indicated between brackets after the valid nominal-complex of the family:**

[M] 'Mandatory Rank Criterion', which imposes the use of this rank for this taxon even if this makes it redundant with its superordinate taxon.

[N] 'Non-Redundancy Criterion'.

[P] 'Conflict of Precedence Criterion'.

[Q] 'Upper Quartile Criterion'. [Q+] 'Upper Quartile Criterion' with > 90 % usage after 1999. [Q–] 'Upper Quartile Criterion' with 0 % usage after 1999.

[S] 'Sister-Taxa Criterion'.

[T] 'Nomenclatural Thrift Criterion'.

All taxa recognised here on the basis of our molecular *TREE* have a SHL-aLRT support value of 90 % or more. Taxa including a single getendotaxon (taxon of just lower rank) have no support, but are recognised if they are parordinate (sister-taxa) to taxa having a support of **{90}** or more. All-fossil taxa have no support but are recognised on the basis of the literature of the groups at stake, just like some recent taxa that have no representative in *TREE*.

Generic nomina listed are those considered valid in this work. They are followed by their nucleospecies (type species) between parentheses, then by their synonyms, including unavailable ones, followed by their nucleospecies between parentheses, and finally by their support in *TREE*, in bold between braces, e.g. **{97}**. However the list does not mention most generic apographs (subsequent spellings) that do not clearly qualify as autoneonyms (see Tables **T7.NS-1** and **T8.NS-2**, and Appendix **A5.NGS**), i.e. ameletographs (incorrect subsequent spellings), except when the latter have been used as nucleogenera of FS nomina or conucleogenera of CS nomina.

Indications regarding species-series nomina:

* The nucleospecies (nominal type species) of the genus is represented in *TREE*: *Rana temporaria**.

° The nucleospecies of the genus is not represented in *TREE*: *Leptobrachella mjobergi*°.

Indications regarding genus-series nomina:

* The genus is represented in *TREE* by its nucleospecies or an isonym (objective synonym) of the latter: *Rana**.

[1] The genus is represented in *TREE* by a doxisonym (subjective synonym) of its nucleospecies: *Pipa*[1].

[2] The genus is represented in *TREE* by the nucleospecies of a generic nomen being its doxisonym: *Leptobrachella*[2].

[3] The genus is represented in *TREE* but only by species that include neither its nucleospecies, nor a doxisonym of the latter, nor the nucleospecies of a doxisonym of the generic nomen at stake: *Latonia*[3].

° The genus is not represented in *TREE*: *Adelastes*°.

Generic nomina which are invalid synonyms are presented after the valid nomen of the genus:

[1] preceded by the sign ≡ if they are isonyms (objective synonyms): *Rana* 1758 ≡ *Ranaria* 1814;

[2] preceded by the sign ≈ if they are doxisonyms (subjective synonyms): *Alytes* 1829 ≈ *Baleaphryne* 1979.

Nomina of nucleospecies which are invalid synonyms are followed by their valid nomen:

[1] preceded by the sign ≡ if they are isonyms (objective synonyms): *Hemiphractus* 1828 (*spixii* 1828 ≡ *scutatus** 1824);

[2] preceded by the sign ≈ if they are doxisonyms (subjective synonyms): *Ichthyosaura* 1801 (*tritonius* 1768 ≈ *alpestris** 1768).

Two genus-series isonyms have by definition the same nucleospecies, so in this table the latter is not mentioned again after the nomen of the junior isonym.

The abbreviation NINS means 'no included nominal species'.

Generic and specific nomina followed by **AN** are **anoplonyms** (unavailable nomina).

Generic and specific nomina followed by **AM** are **anecdidonyms** (taxonomically unassigned available nomina).

Generic and specific nomina followed by **CI** are archakyronyms (resulting from action of the Commission) under *CLAD*.

Generic and specific nomina followed by **RI** are lethakyronyms.

Generic nomina followed by **JH** are preoccupied by senior homonyms.

**AM** • Unavailable GS ameletograph (incorrect subsequent spelling) of lissamphibian taxon resulting from unvolontary change of spelling of original protograph.

**AN** • Unavailable GS nomen (anoplonym) of lissamphibian taxon for failing to comply with the criteria of availability of publications or of nomina of the *Code*.

**LT** • GS lectoprotograph (correct original spelling) of an available lissamphibian GS nomen, resulting from an airesy (first reviser action) among symprotographs (multiple original spellings).

**LP** • Unvailable GS leipoprotograph (incorrect original spelling) of an available lissamphibian GS nomen resulting from an airesy (first reviser action) among symprotographs (multiple original spellings).

C.01.01. Subphylum **VERTEBRATA** Cuvier, 1800.ca.c01-02
_ C.02.01. Classis **AMPHIBIA** Blainville, 1816.ba.c02-03
_ _ C.03.01. Subclassis **LISSAMPHIBIA** Gadow, 1898.ga.c01-00
_ _ _ C.04.†00. Ordo *INCERTAE SEDIS*
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†001§. *Archaeoovulus*° 2013 † (*palenae*° 2013 †) **AM**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.001§. *Cephaloloxes*° 1848 **NT-AN-AP** (NINS) ≡ *Cosmus*° 1848 **AN-AP-JH**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.002§. *Gryphius*° 1848 **NT-AN-AP** (NINS) ≡ *Scotobius*° 1848 **AN-AP-JH**
_ _ _ C.04.†01. Ordo **ALLOCAUDATA** Fox[+1], 1982.fa.c01-00 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†01. Familia ***ALBANERPETIDAE*** Fox[+1], 1982.fa.f001-04 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†002. *Albanerpeton*° 1976 † (*inexpectatum*° 1976 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†003. *Anoualerpeton*° 2003 † (*unicus*° 2003 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†004. *Celtedens*° 1995 † (*megacephalus*° 1864 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†005. *Nukusurus*° 1981 † (*insuetus*° 1981 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†006. *Shirerpeton*° 2018 † (*isajii*° 2018 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†007. *Wesserpeton*° 2013 † (*evansae*° 2013 †)
_ _ _ C.04.01. Ordo **ANURA** Duméril, 1805.da.c01-07 **{100}**
_ _ _ _ C.05.†0a. Subordo *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0a. Familia *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†008. *Altanulia*° 1993 † (*alifanovi*° 1993 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†009§. *Amphirana*° 1856 † **AN** (*palustris*° 1856 † **AN**)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†010. *Aralobatrachus*° 1981 † (*robustus*° 1981 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†011. *Arariphrynus*° 2006 † (*placidoi*° 2006 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†012§. *Archipelobates*° 1970 † **AN** (*giganteum*° 1970 † **AN**)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†013. *Aygroua*° 2003 † (*anoualensis*° 2003 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†014§. *Baranophrys*° 1956 † **UN** (*discoglossoides*° 1956 † **AN**)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†015. *Batrachulina*° 1962 † (*lemanensis*° 1853 †) ≡ *Batrachus* 1853 **JH**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†016. *Comobatrachus*° 1960 † (*aenigmatis*° 1960 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†017. *Cratia*° 2009 † (*gracilis*° 2009 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†018. *Czatkobatrachus*° 1998 † (*polonicus*° 1998 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†019. *Eobatrachus*° 1887 † (*agilis*°1887 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†020. *Eorubeta*° 1960 † (*nevadensis*° 1960 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†021. *Estesiella*° 1995 † (*boliviensis*° 1991 †) ≡ *Estesius* 1991 **JH**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†022. *Estesina*° 1993 † (*elegans*° 1993 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†023. *Eurycephalella*° 2009 † (*alcinae*° 2009 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†024. *Gobiatoides*° 1993 † (*parvus*° 1993 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†025. *Hatzegobatrachus*° 2003 † (*grigorescui*° 2003 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†026. *Hensonbatrachus*° 2015 † (*kermiti*° 2015 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†027. *Iberobatrachus*° 2013 † (*angelae*° 2013 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†028. *Itemirella*° 1981 † (*cretacea*° 1981 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†029. *Liaobatrachus*° 1998 † (*grabaui*° 1998 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†030. *Liventsovkia*° 1993 † (*jucunda*° 1993 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†031. *Lutetiobatrachus*° 1998 † (*gracilis*° 1998 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†032. *Mengbatrachus*° 2018 † (*moqi*° 2018 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†033. MESOPHRYNE° 2001 † (BEIPIAOENSIS° 2001 †) ≈ DALIANBATRACHUS 2004 (MENGI 2004 ≈ BEIPIAOENSIS° 2001 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†034. *Monsechobatrachus*° 1921 † (*gaudryi*° 1902 †) ≡ *Montsechobatrachus* 1926 **AM**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†035. *Negatchevkia*° 1993 † (*donensis*° 1993 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†036. *Novooskolia*° 1993 † (*cristata*° 1993 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†037. *Procerobatrachus*° 1993 † (*paulus*° 1993 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†038§. *Protophrynus*° 1853 † **AN-AP** (*arethusae*° 1853 † **AN**) ≡ *Protophrynos* 1888 **NT-AP**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†039. *Ranipes*° 2014 † (*laci*° 2014 †) ≡ *Ranapes* 2014 AN
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†040. *Ranomorphus*° 1993 † (*similis*° 1993 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†041. *Saevesoederberghia*° 1993 † (*egredia*° 1993 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†042. *Scotiophryne*° 1969 † (*pustulosa*° 1969 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†043§. *Spondylophryne*° 1956 † AN (*vilanyensis*° 1856 † AN)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†044. *Sunnybatrachus*° 2002 † (*purbeckensis*° 2002 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†045. *Thaumastosaurus*° 1904 † (*bottii*° 1904 †) ≡ *Enigmatosaurus* 1908
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†046. *Theatonius*° 1976 † (*lancensis*° 1976 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†047. *Tyrrellbatrachus*° 2015 † (*brinkmani*° 2015 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†048. *Uberabatrachus*° 2012 † (*carvalhoi*° 2012 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†049. *Varibatrachus*° 2015 † (*abraczinskasae*° 2015 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†050. *Vieraella*° 1961 † (*herbstii*° 1961 †) ≡ *Vierella* 1962 AM ≡ *Vierella* 2015
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†051. *Yizhoubatrachus*° 2004 † (*macilentus*° 2004 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.003§. *Sciaphos*° 1845 AN-AP (NINS)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†02. Familia PROSALIRIDAE Shubin[+1], 1995.sa.f001-00 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†052. *Prosalirus*° 1995 † (*bitis*° 1995 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†03. Familia TREGOBATRACHIDAE Holman, 1975.hb.f001-00 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†053. *Tregobatrachus*° 1975 † (*hibbardi*° 1974 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†04. Familia TRIADOBATRACHIDAE Kuhn, 1962.ka.f001-00 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†054. *Triadobatrachus*° 1962 † (*massinoti*° 1936 †) ≡ *Protobatrachus* 1936 JH
_ _ _ _ C.05.01. Subordo **ANGUSTICOELA** Reig, 1958.ra.c01-00 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.01. Familia ASCAPHIDAE Fejérváry, 1923.fa.f001-00 **{100}** [S] [N]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.004. *Ascaphus** 1899 (*truei** 1899)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.02. Familia LEIOPELMATIDAE Mivart, 1869.ma.f007-|Turbott, 1942.ta.f001|-02 **{100}** [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.†01. Subfamilia *NOTOBATRACHINAE* Reig *in* Stipanicic[+1], 1956.sa.f001-02 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†055. *Notobatrachus*° 1956 † (*degiustoi*° 1956 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.01. Subfamilia *LEIOPELMATINAE* Mivart, 1869.ma.f007-|Turbott, 1942.ta.f001|-03 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.005. *Leioaspetos** 1985 (*hamiltoni** 1919)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.006. *Leiopelma** 1861 (*hochstetteri** 1861) ≡ *Liopelma* 1865 AM ≡ *Liopelma* 1869 NC-CI
_ _ _ _ C.05.02. Subordo **HYDROBATRACHIA** Ritgen, 1828.ra.c14-01 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0b. Familia *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†056. *Hyogobatrachus*° 2016 † (*wadai*° 2016 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†057. *Kururubatrachus*° 2020*b* † (*gondwanicus*° 2020*b* †) ≡ *Kururubatrachus* 2020*a* AN
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†058. *Tambabatrachus*° 2016 † (*kawazu*° 2016 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†059. *Wealdenbatrachus*° 1988 † (*jucarensis*° 1988 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.007§. *Ranina*° 1839 (NINS) AM
_ _ _ _ _ C.06.01. Infraordo **GEOBATRACHIA** Ritgen, 1828.ra.c18-02 **{98}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0c. Familia *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†060. *Genibatrachus*° 2017 † (*baoshanensis*° 2017 †)
_ _ _ _ _ _ C.07.01. Hypoordo **DORSIPARES** Blainville, 1816.ba.c06-02 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0d. Familia *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†061. *Avitabatrachus*° 2000 † (*uliana*° 2000 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†062. *Gracilibatrachus*° 2013 † (*avallei*° 2013 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†063. *Neusibatrachus*° 1972 † (*wilferti*° 1972 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†064. *Nevobatrachus*° 2019 † (*gracilis*° 1968 †) ≡ *Cordicephalus* 1968 JH
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†065. *Shomronella*° 1978 † (*jordanica*° 1978 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†066. *Thoraciliacus*° 1968 † (*rostriceps*° 1968 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†067. *Vulcanobatrachus*° 2005 † (*mandelai*° 2005 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†05. Familia PALAEOBATRACHIDAE Cope, 1865.ca.f001-00 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†068. *Albionbatrachus*° 1984 † (*wightensis*° 1984 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†069. *Palaeobatrachus*° 1838 † (*goldfussii* 1838 ≈ *diluviana*° 1831 †) ≡ *Borborocoites* 1848 ≈ *Protopelobates* 1881 (*gracilis* 1881 ≈ *laubei*° 1881 †) ≈ *Pliobatrachus* 1917 (*langhae*° 1917 †) ≈ *Lithobatrachus* 1929 (*europaea* 1929 ≈ *diluviana*° 1831 †) ≈ *Bufonopsis* 1941 (*dentatus* 1941 ≈ *hinschei*° 1941 †) ≈ *Pelobatinopsis* 1941 (*hinschei*° 1941 †) ≈ *Quinquevertebron* 1941 (*germanicum* 1941 ≈ *hinschei*° 1941 †) ≈ *Hekatobatrachus* 1972 (*grandipes*° 1851 †) ≈ *Suleobatrachus* 1972 (*laubei*° 1881 †) ≈ *Messelobatrachus* 1988 (*tobieni*° 1988 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†070. *Probatrachus*° 1878 † (*vicetinus*° 1877 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.03. Familia *PIPIDAE* Gray, 1825.ga.f003-|Fitzinger, 1826.fb.f002|-07 **{100}** [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.†0a. Subfamilia *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†071. *Cratopipa*° 2019*b* † (*novaolindensis*° 2019*b* †) ≡ *Cratopipa* 2019*a* AN
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†072. *Eoxenopoides*° 1931 † (*reuningi*°1931 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†073. *Llankibatrachus*° 2003 † (*truebae*° 2003 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†074. *Oumtkoutia*° 2008 † (*anae*° 2008 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†075. *Pachycentrata*° 2004 † (*taqueti*° 1998 †) ≡ *Pachybatrachus* 1998 JH
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†076. *Singidella*° 2005 † (*latecostata*° 2005 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.†02. Subfamilia *SALTENIINAE* **nov.**, DOP.da.f148-00 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†077. *Kuruleufemia*° 2016 † (*xenopoides*° 2016 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†078. *Patagopipa*° 2019 † (*corsolinii*° 2019 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†079. *Saltenia*° 1959 † (*ibanezi*° 1959 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†080. *Shelania*° 1960 † (*pascuali*° 1960 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.02. Subfamilia *DACTYLETHRINAE* Hogg, 1838.ha.f001-04 **{92}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.01. Tribus *DACTYLETHRINI* Hogg, 1838.ha.f001-05 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.008. *Silurana** 1864 (*tropicalis** 1864) **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.009. *Xenopus*[1] 1827 (*boiei* 1827 ≈ *laevis** 1827) ≈ *Pseudopipa* 1828 (*laevis** 1827) ≡ *Dactylethra* 1829 ≡ *Rhaphidochir* 1833 ≡ *Dactyletra* 1878 ≡ *Doctylethra* 1878 AM ≡ *Doctyletra* 1878 AM ≈ *Tremeropugus* 1831 (*typicus* 1831 ≈ *laevis** 1827) ≈ *Libycus* 1980 (*hasaunus*° 1980 †) **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.02. Tribus *HYMENOCHIRINI* Bolkay, 1919.ba.f001-01 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.010. *Hymenochirus** 1896 (*boettgeri** 1896)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.011. *Pseudhymenochirus** 1920 (*merlini** 1920)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.03. Subfamilia *PIPINAE* Gray, 1825.ga.f003-|Fitzinger, 1826.fb.f002|-13 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.012. *Pipa*[1] 1768 (*americana* 1768 ≈ *pipa** 1758) ≡ *Piparius* 1815 ≡ *Pipra* 1825 JH ≡ *Asterodactylus* 1827 ≡ *Astrodactylus* [1838] 1839 ≡ *Leptopus* 1835 JH ≈ *Protopipa* 1925 (*aspera*° 1924) ≈ *Hemipipa* 1937 (*carvalhoi** 1937)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.04. Familia *RHINOPHRYNIDAE* Günther, 1858.gc.f013-00 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†081. *Chelomophrynus*° 1991 † (*bayi*° 1991 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†082. *Eorhinophrynus*° 1959 † (*septentrionalis*° 1959 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†083. *Rhadinosteus*° 1998 † (*parvus*° 1998 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.013. *Rhinophrynus** 1841 (*dorsalis** 1841)
_ _ _ _ _ _ C.07.02. Hypoordo **LAEVOGYRINIA** Lataste, 1878.la.c01-04 **{100}**
_ _ _ _ _ _ _ C.08.0a. Superphalanx *INCERTAE SEDIS*
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0e. Familia *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†084§. *Protopelobates*° 1986 † AN-AP (NINS)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.014. *Colodactylus*° 1845 (*coerulescens*° 1845)
_ _ _ _ _ _ _ C.08.01. Superphalanx **ARCHAEOSALIENTIA** Roček, 1981.ra.c01-01 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.†0a. Superfamilia *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0f. Familia *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†085. *Elkobatrachus*° 2006 † (*brocki*° 2006 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†086. *Macropelobates*° 1924 † (*osborni*° 1924 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†087. *Tephrodytes*° 1994 † (*brassicarvalis*° 1994 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†088. *Uldzinia*° 1996 † (*kurochkini*° 1996 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.01. Superfamilia *PELOBATOIDEA* Bonaparte, 1850.bb.f004-11 **{98}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.01. Epifamilia *PELOBATOIDAE* Bonaparte, 1850.bb.f004-16 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0g. Familia *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†089. *Sanshuibatrachus*° 2017 † (*sinensis*° 2017 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.05. Familia *MEGOPHRYIDAE* Bonaparte, 1850.bb.f008-|Noble, 1931.na.f003|-04 **{100}** [Q+] [S]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.04. Subfamilia *LEPTOBRACHIINAE* Dubois, 1983.db.f001-00 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.03. Tribus *LEPTOBRACHIINI* Dubois, 1983.db.f001-01 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.01. Subtribus *LEPTOBRACHIINA* Dubois, 1983.db.f001-02 **{92}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.015. *Leptobrachium** 1838 (*hasseltii** 1838) ≡ *Septobrachium* 1838 AN ≈ *Nireus* 1880 JH (*pulcherrimus* 1880 ≈ *hasseltii** 1838) ≈ *Vibrissaphora* 1945 (*boringii** 1945)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.02. Subtribus *OREOLALAGINA* Tian[+1], 1985.ta.f001-02 **{97}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.016. *Oreolalax** 1962 (*pingii** 1943) ≈ *Aelurolalax* 1987 (*weigoldi*° 1924) ≈ *Atympanolalax* 2016

(*rugosa** 1943) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.017. *Scutiger*[2] 1868 (*sikimmensis*° 1854) ≡ *Cophophryne* 1887 ≡ *Cofofryne* 1898 ≈ *Aelurophryne* 1919 (*mammatus** 1896) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.04. Tribus *Leptolalagini* Delorme[+3], 2006.da.f001-01 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.018. *Leptobrachella*[2] 1925 (*mjobergi*° 1925) ≈ *Nesobia* 1923 **jh** (*natunae*° 1895) ≈ *Paramegophrys* 1964 **an** (*pelodytoides** 1893) ≈ *Carpophrys* 1976 **an** (*oshanensis** 1950) ≈ *Leptolalax* 1980 (*gracile** 1872) ≈ *Lalax* 2006 **jh** (*bourreti** 1983) ≡ *Lalos* 2010

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.05. Subfamilia *Megophryinae* Bonaparte, 1850.bb.f008-|Noble, 1931.na.f003|-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.05. Tribus *Atympanophryini* **nov.**, DOP.da.f001-00 **{97}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.019. *Atympanophrys** 1983 (*shapingensis** 1950) ≈ *Borealophrys* 2016 (*nankiangensis** 1966) ≈ *Gigantophrys* 2016 (*giganticus*° 1960)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.06. Tribus *Brachytarsophryini* **nov.**, DOP.da.f002-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.020. *Brachytarsophrys** 1983 (*carinensis** 1899)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.07. Tribus *Megophryini* Bonaparte, 1850.bb.f008-|Noble, 1931.na.f003|-02 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.021. *Megophrys*[2] 1822 **lt** (*montana*° 1822) ≡ *Mogophrys* 1822 **lp** ≡ *Megalophrys* 1830 ≡ *Phrynophrys* 1839 **an** ≡ *Megalophys* 1842 **am** ≡ *Megalofrys* 1898 ≈ *Ceratophryne* 1859 **jh** (*nasuta** 1858) ≡ *Pelobatrachus* 1908 ≈ *Borneophrys* 2006 (*edwardinae*° 1989)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.08. Tribus *Xenophryini* Delorme[+3], 2006.da.f002-00 **{90}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.03. Subtribus *Grillitschiina* **nov.** DOP.da.f148-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.022. *Grillitschia** **nov.** (*longipes** 1886)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.04. Subtribus *Ophryophrynina* **nov.** DOP.da.f149-00 **{95}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.023. *Boulenophrys** 2016 (*boettgeri** 1899) ≈ *Panophrys** 1997 **jh** (*omeimontis** 1950) ≈ *Tianophrys* 2016 (*shuichengensis*° 2000) **{90}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.024. *Ophryophryne** 1903 (*microstoma** 1903) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.05. Subtribus *Xenophryina* Delorme[+3], 2006.da.f002-01 **{97}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.025. *Xenophrys*[3] 1864 (*monticola*° 1864) ≈ *Liuophrys* 2016 (*glandulosa*° 1990)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.06. Familia *Pelobatidae* Bonaparte, 1850.bb.f004-00 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†090. *Eopelobates*° 1929 † (*anthracinus*° 1929 †) ≈ *Propelodytes* 1938 (*wagneri*° 1938 †) ≈ *Amphignathodontoides* 1941 (*eocenicus* 1941 ≈ *hinschei*° 1941 †) ≈ *Archaeopelobates* 1941 (*efremovi* 1941 ≈ *hinschei*° 1941 †) ≈ *Eobufella* 1941 (*parvula* 1941 ≈ *hinschei*° 1941 †) ≈ *Halleobatrachus* 1941 (*hinschei*° 1941 †) ≈ *Palaeopelobates* 1941 (*geiseltalensis* 1941 ≈ *hinschei*° 1941 †) ≈ *Parabufella* 1941 (*longipes* 1941 ≈ *hinschei*° 1941 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.026. *Pelobates** 1830 (*fuscus** 1768) ≈ *Cultripes* 1832 (*cultripes** 1829) ≈ *Arethusa* 1838 **an-jh** (*marmorata* 1828 ≈ *fuscus** 1768) ≈ *Didocus* 1866 (*calcarata* 1830 ≈ *cultripes** 1829) ≈ *Zaphrissa* 1866 (*eurypelis* 1866 ≈ *decheni*° 1861 †) ≈ *Pseudopelobates* 1958 (*transcaucasicus* 1928 ≈ *syriacus** 1889) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.02. Epifamilia *Pelodytoidae* Bonaparte, 1850.bb.f002-04 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.07. Familia *Pelodytidae* Bonaparte, 1850.bb.f002-02 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†091. *Aerugoamnis*° 2013 † (*paulus*° 2013 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†092. *Miopelodytes*° 1941 † (*gilmorei*° 1941 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.027. *Pelodytes** 1838 (*punctata** 1802)≡ *Arethusa* 1841 **an-jh** **{99}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.028. *Pelodytopsis** 1896 (*caucasicus** 1896)

_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.02. Superfamilia *Scaphiopodoidea* Cope, 1865.ca.f003-05 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.08. Familia *Scaphiopodidae* Cope, 1865.ca.f003-c0 **{100}** [M]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†093. *Prospea*° 2016 † **an** (*holoserisca*° † 1863 **an**)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.029. *Scaphiopus*[1] 1836 (*solitarius* 1836 ≈ *holbrookii** 1835) ≡ *Scafiopus* 1898 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.030. *Spea** 1866 (*bombifrons** 1863) ≈ *Neoscaphiopus* 1942 (*noblei*° 1941 †) **{100}**

_ _ _ _ _ _ _ C.08.02. Superphalanx **Ranomorpha** Fejérváry, 1921.fb.c08-01 **{100}**

_ _ _ _ _ _ _ _ C.09.01. Epiphalanx **Aquipares** Blainville, 1816.ba.c07-02 **{100}**

_ _ _ _ _ _ _ _ _ C.10.01. Phalanx **Gondwanura** **nov.**, DOP.da.c01-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.09. Familia *Nasikabatrachidae* Biju[+1], 2003.bb.f001-00 [S] [N]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.031. *Nasikabatrachus** 2003 (*sahyadrensis** 2003)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.10. Familia *Sooglossidae* Noble, 1931.na.f002-01 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.032. *Sechellophryne** 2007 (*gardineri** 1911) ≡ *Leptosooglossus* 2007 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.033. *Sooglossus** 1906 (*sechellensis** 1896) ≈ *Nesomantis* 1909 (*thomasseti** 1909) **{98}**

_ _ _ _ _ _ _ _ _ C.10.02. Phalanx **Phaneranura** **nov.**, DOP.da.c02-00 **{100}**

_ _ _ _ _ _ _ _ _ _ C.11.01. Subphalanx **Bainanura nov.**, DOP.da.c03-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ C.12.01. Infraphalanx **Phoranura nov.**, DOP.da.c04-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.11. Familia *Aromobatidae* Grant[+9], 2006.gb.f001-00 **{100}** [S] [N]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.06. Subfamilia *Allobatinae* Grant[+9], 2006.gb.f006-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.034. *Allobates** 1988 (*femoralis** 1884)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.07. Subfamilia *Anomaloglossinae* Grant[+9], 2006.gb.f002-00 **{98}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.035. *Anomaloglossus** 2006 (*beebei** 1923) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.036. *Rheobates** 2006 (*palmatus** 1899)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.08. Subfamilia *Aromobatinae* Grant[+9], 2006.gb.f001-01 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.037. *Aromobates** 1991 (*nocturnus** 1991) ≈ *Nephelobates* 1994 (*alboguttatus*° 1903) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.038. *Mannophryne** 1992 (*yustizi** 1989) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.12. Familia *Dendrobatidae* ||Bonaparte, 1850.bb.f006||-Cope, 1865.ca.f002-00 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.09. Subfamilia *Colostethinae* Cope, 1867.ca.f001-01 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.09. Tribus *Colostethini* Cope, 1867.ca.f001-02 **{98}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.039. *Ameerega** 1986 (*trivittata** 1824) ≡ *Paraphyllobates* 1994 an ≈ *Pseudendrobates* 1987 (*silverstonei** 1979) ≡ *Phobobates* 1988 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.040. *Colostethus** 1866 (*latinasus** 1863) ≡ *Calostethus* 1869 ≡ *Colosthetus* 1901 ≈ *Prostherapis* 1868 (*inguinalis** 1868) ≡ *Prostheraspis* 1877 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.041. *Leucostethus** 2017 (*argyrogaster** 1993) **{99}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.10. Tribus *Epipedobatini* **nov.**, DOP.da.f003-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.042. *Epipedobates** 1987 (*tricolor** 1899) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.043. *Silverstoneia** 2006 (*nubicola** 1924) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.10. Subfamilia *Dendrobatinae* ||Bonaparte, 1850.bb.f006||-Cope, 1865.ca.f002-01 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.11. Tribus *Dendrobatini* ||Bonaparte, 1850.bb.f006||-Cope, 1865.ca.f002-04 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.06. Subtribus *Andinobatina* **nov.**, DOP.da.f004-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21.01. Infratribus *Andinobatinia* **nov.**, DOP.da.f004-01 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.044. *Andinobates** 2011 (*bombetes** 1980) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.045. *Ranitomeya** 1985 (*reticulatus** 1884) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21.02. Infratribus *Excidobatinia* **nov.**, DOP.da.f005-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.046. *Excidobates** 2008 (*mysteriosus** 1982)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.07. Subtribus *Dendrobatina* ||Bonaparte, 1850.bb.f006||-Cope, 1865.ca.f002-05 **{91}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.047. *Adelphobates** 2006 (*castaneoticus** 1990) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.048. *Dendrobates** 1830 (*tinctoria** 1797) ≡ *Eubaphus* 1831 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.049. *Minyobates** 1987 (*steyermarki** 1971)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.050. *Oophaga** 1994 (*pumilio** 1857) ≡ *Stemobates* 1994 an **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.12. Tribus *Phyllobatini* Fitzinger, 1843.fa.f007-03 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.051. *Phyllobates** 1841 (*bicolor** 1841)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.11. Subfamilia *Hyloxalinae* Grant[+9], 2006.gb.f004-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.052. *Ectopoglossus*° 2017 (*saxatilis*° 2017)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.053. *Hyloxalus*[2] 1870 (*fuliginosus*° 1870) ≡ *Hylixalus* 1882 ≈ *Phyllodromus* 1875 (*pulchellum** 1875) ≈ *Cryptophyllobates* 2000 (*azureiventris** 1985)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.054. *Paruwrobates*° 1994 (*andinus*° 1987)

_ _ _ _ _ _ _ _ _ _ _ C.12.02. Infraphalanx **Phrynanura nov.**, DOP.da.c05-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ C.13.01. Hypophalanx **Gaianura nov.**, DOP.da.c06-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.13. Familia *Brachycephalidae* Günther, 1858.gc.f002-01 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.0a. Subfamilia *Incertae sedis*

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.055. *Atopophrynus*° 1982 (*syntomopus*° 1982)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.056. *Geobatrachus*° 1915 (*walkeri*° 1915)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.12. Subfamilia *Brachycephalinae* Günther, 1858.gc.f002-04 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.057. *Brachycephalus** 1826 (*ephippium** 1825) ≡ *Ephippipher* 1835 ≡ *Ephippifer* 1844 ≡ *Ephippiger* 1845 an ≈ *Psyllophryne* 1971 (*didactyla** 1971) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.058. *Ischnocnema** 1862 (*verrusosus** 1862) ≈ *Basanitia* 1923 (*lactea** 1923) ≈ *Phrynanodus* 1933 (*nanus* 1933 ≈ *parvus** 1853) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.13. Subfamilia *Craugastorinae* Hedges[+2], 2008.ha.f001-01 **{99}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.13. Tribus *Craugastorini* Hedges[+2], 2008.ha.f001-02 **{100}**

G.28.059. *Craugastor** 1862 (*fitzingeri** 1857) ≈ *Leiyla* 1868 (*guentherii* 1868 ≈ *fitzingeri** 1857) ≡ *Lihyla* 1887 AM ≡ *Liohyla* 1900 AM ≡ *Liyla* 1870 AM ≈ *Microbatrachylus* 1939 (*hobartsmithi*° 1936) ≈ *Hylactophryne* 1968 (*augusti** 1879) ≈ *Campbellius* 2008 (*stadelmani*° 1936) **{100}**

G.28.060. *Haddadus** 2008 (*binotata** 1824) **{100}**

F.19.14. Tribus *Strabomantini* Hedges[+2], 2008.ha.f003-02 **{92}**

F.20.08. Subtribus *Strabomantina* Hedges[+2], 2008.ha.f003-03 **{94}**

F.21.03. Infratribus *Holoadeninia* Hedges[+2], 2008.ha.f005-01 **{100}**

F.22.0a. Hypotribus *Incertae sedis*

G.28.061. *Niceforonia*° 1963 (*nana*° 1963)

G.28.062. *Tachiramantis*° 2015 (*prolixodiscus*° 1978)

F.22.01. Hypotribus *Barycholinoa* **nov.**, DOP.da.f006-00 **{100}**

G.28.063. *Bahius** **nov.** (*bilineatus** 1975)

G.28.064. *Barycholos** 1969 (*pulcher** 1898) **{100}**

G.28.065. *Phyllonastes** 1977 (*myrmecoides** 1976) **{99}**

F.22.02. Hypotribus *Bryophryninoa* **nov.**, DOP.da.f007-00-

G.28.066. *Bryophryne** 2008 (*cophites** 1975)

F.22.03. Hypotribus *Holoadeninoa* Hedges[+2], 2008.ha.f005-02 **{100}**

G.28.067. *Euparkerella** 1959 (*brasiliensis** 1925) **{100}**

G.28.068. *Holoaden** 1920 (*luederwaldti** 1920) **{100}**

F.22.04. Hypotribus *Noblellinoa* **nov.**, DOP.da.f008-00 **{100}**

G.28.069. *Microkayla*[3] 2017 (*teqta*° 2014) **{100}**

G.28.070. *Noblella** 1930 (*peruvianus** 1921)

G.28.071. *Psychrophrynella*° 2008 (*bagrecito*° 1986)

G.28.072. *Qosqophryne*° 2020 (*gymnotis*° 2020)

F.21.04. Infratribus *Strabomantinia* Hedges[+2], 2008.ha.f003-04 **{100}**

G.28.073. *Strabomantis** 1863 (*biporcatus** 1863) ≈ *Limnophys* 1870 (*cornutus*° 1870) ≡ *Ctenocranius* 1941 ≈ *Amblyphrynus* 1961 (*ingeri*° 1961)

F.20.09. Subtribus *Pristimantina* Ohler[+1], 2012.oa.f002-01 **{90}**

F.21.05. Infratribus *Hypodactylinia* Heinicke[+4], 2018.f001-01 **{96}**

G.28.074. *Hypodactylus** 2008 (*elassodiscus** 1973) ≡ *Isodactylus* 2008 JH

F.21.06. Infratribus *Pristimantinia* Ohler[+1], 2012.oa.f002-02 **{98}**

F.22.05. Hypotribus *Oreobatinoa* **nov.**, DOP.da.f009-00 **{100}**

F.23.01. Clanus *Oreobatites* **nov.**, DOP.da.f009-01 **{94}**

G.28.075. *Lynchius** 2008 (*parkeri** 1975) **{100}**

G.28.076. *Oreobates** 1872 (*quixensis** 1872) ≈ *Teletrema* 1937 (*heterodactylum** 1937) **{100}**

F.23.02. Clanus *Phrynopodites* **nov.**, DOP.da.f010-00 **{100}**

G.28.077. *Phrynopus*[3] 1873 (*peruanus*° 1873)

F.22.06. Hypotribus *Pristimantinoa* Ohler[+1], 2012.oa.f002-03 **{99}**

G.28.078. *Pristimantis** 1870 (*galdi** 1870) ≈ *Cyclocephalus* 1875 JH (*lacrimosus*° 1875) ≈ *Hypodictyon* 1885 (*ridens** 1866) ≈ *Pseudohyla* 1946 (*nigrogrisea*° 1946) ≈ *Trachyphrynus* 1963 (*myersi*° 1963) ≈ *Mucubatrachus* 2007 (*briceni*° 1903) ≈ *Paramophrynella* 2007 ≈ *Huicundomantis* 2019 (*phoxocephalus** 1979) **{100}**

G.28.079. *Yunganastes** 2007 (*pluvicanorus** 1997) **{100}**

F.18.14. Subfamilia *Eleutherodactylinae* Lutz, 1954.la.f001-00 **{100}**

F.19.15. Tribus *Eleutherodactylini* Lutz, 1954.la.f001-02 **{100}**

F.20.10. Subtribus *Diasporina* **nov.**, DOP.da.f148-00 **{100}**

G.28.080. *Diasporus** 2008 (*diastema** 1875)

F.20.11. Subtribus *Eleutherodactylina* Lutz, 1954.la.f001-05 **{100**

G.28.081. *Eleutherodactylus** 1841 (*martinicensis** 1838) ≈ *Ladailadne* 1987 (*jasperi*° 1976) ≈ *Pelorius* 1989 (*inoptatus** 1914) ≈ *Schwartzius* 2008 (*counouspeus** 1964) **{100}**

G.28.082. *Euhyas** 1843 (*ricordii** 1841) ≈ *Epirhexis* 1866 (*longipes*° 1859) CI ≈ *Syrrhophus* 1878 (*marnockii** 1878) ≡ *Syrrhopus* 1888 ≡ *Syrrhaphus* 1900 ≡ *Syrrophus* 1907 ≈ *Malachylodes* 1879 (*guttilatus*° 1879) ≈ *Tomodactylus* 1900 (*amulae* 1900 ≈ *nitidus** 1870) ≈ *Sminthillus* 1920 (*limbatus** 1862) **{100}**

F.19.16. Tribus *Phyzelaphryini* Hedges[+2], 2008.ha.f002-01 **{100}**

G.28.083. *Adelophryne** 1984 (*adiastola** 1984) **{100}**

G.28.084. *Phyzelaphryne** 1977 (*miriamae** 1977)
F.17.14. Familia *CEUTHOMANTIDAE* Heinicke[+5], 2009.ha.f001-00 [S] [N]
G.28.085. *Ceuthomantis** 2009 (*smaragdinus** 2009)
G.28.086. *Dischidodactylus*° 1979 (*duidensis*° 1968)
C.13.02. Hypophalanx **HEMIPHRACTIFORMIA** Brocchi, 1881.ba.c01-01 **{100}**
F.17.15. Familia *HEMIPHRACTIDAE* Peters, 1862.pa.f001-00 **{100}** [Q] [T]
F.18.15. Subfamilia *AMPHIGNATHODONTINAE* Boulenger, 1882.bb.f002-01 **{100}**
F.19.17. Tribus *AMPHIGNATHODONTINI* Boulenger, 1882.bb.f002-02 **{99}**
G.28.087. *Amphignathodon** 1882 (*guentheri** 1882) ≡ *Amfignathodon* 1898 **{98}**
G.28.088. *Cryptotheca** 2015 (*walkeri** 1980)
F.19.18. Tribus *EOTHECINI* **nov.**, DOP.da.f011-00 **{92}**
G.28.089. *Eotheca** 2015 (*fissipes** 1888)
F.19.19. Tribus *GASTROTHECINI* Noble, 1927.na.f001-01 **{93}**
G.28.090. *Alainia** 2018 (*microdiscus** 1910) ≡ *Australotheca* 2015 **JH** **{99}**
G.28.091. *Gastrotheca** 1843 (*marsupiata** 1841) ≡ *Nototrema* 1859 **JH** ≈ *Notodelphys* 1854 **JH** (*ovifera** 1854) ≡ *Opisthodelphys* 1859 ≡ *Notodelphis* 1878 ≡ *Opisthodelphis* 1881 ≈ *Duellmania* 1987 (*argenteovirens** 1892) ≈ *Edaphotheca* 2015 (*galeata** 1978) **{100}**
F.18.16. Subfamilia *CRYPTOBATRACHINAE* Frost[+18], 2006.fa.f001-02
G.28.092. *Cryptobatrachus** 1916 (*boulengeri** 1916)
F.18.17. Subfamilia *FLECTONOTINAE* **nov.**, DOP.da.f012-00 **{100}**
G.28.093. *Flectonotus** 1926 (*pygmaeum** 1893)
F.18.18. Subfamilia *FRITZIANINAE* **nov.**, DOP.da.f013-00 **{100}**
G.28.094. *Fritziana** 1937 (*goeldii** 1895) ≡ *Fritzia* 1920 **JH** ≈ *Coelonotus* 1920 **JH** (*fissilis** 1920) ≡ *Nototheca* 1950
F.18.19. Subfamilia *HEMIPHRACTINAE* Peters, 1862.pa.f001-03 **{96}**
G.28.095. *Hemiphractus*[1] 1828 (*spixii* 1828 ≡ *scutata** 1824) ≈ *Cerathyla* 1870 (*bubalus** 1870) ≡ *Ceratohyla* 1882
F.18.20. Subfamilia *STEFANIINAE* **nov.**, DOP.da.f014-00 **{100}**
G.28.096. *Stefania** 1968 (*evansi** 1904)
C.13.03. Hypophalanx **HYLOBATRACHIA** Ritgen, 1828.ra.c16-01 **{100}**
F.14.0a. Superfamilia *INCERTAE SEDIS*
G.28.097. *Ancudia*° 1902 (*concolor*° 1902)
F.14.03. Superfamilia *BUFONOIDEA* Gray, 1825.ga.f004-20 **{97}**
F.17.16. Familia *BUFONIDAE* Gray, 1825.ga.f004-08 **{100}** [Q]
F.18.21. Subfamilia *BUFONINAE* Gray, 1825.ga.f004-23 **{99}**
F.19.20. Tribus *BUFONINI* Gray, 1825.ga.f004-27 **{93}**
F.20.0a. Subtribus *INCERTAE SEDIS*
G.28.098. *Metaphryniscus*° 1994 (*sosai*° 1994)
G.28.099. *Truebella*° 1995 (*skoptes*° 1995)
F.20.12. Subtribus *ATELOPODINA* Fitzinger, 1843.fa.f005-07 **{100}**
G.28.100. *Atelopus** 1841 (*flavescens** 1841) ≡ *Ateleopus* 1847 ≈ *Phrynidium* 1856 (*varium** 1856) ≈ *Hylaemorphus* 1857*a* (*dumerilii* 1857 ≈ *varium** 1856) ≈ *Hylaemorphus* 1857*b* **AN** (*pluto* 1858 ≈ *varium** 1856) ≈ *Phirix* 1857 (*pachydermus*° 1857) ≈ *Physalus* 1857 **AN-JH** (*ignescens** 1849)
F.20.13. Subtribus *BUFONINA* Gray, 1825.ga.f004-28 **{100}**
F.21.07. Infratribus *AMAZOPHRYNELLINIA* **nov.**, DOP.da.f015-00 **{100}**
G.28.101. *Amazophrynella** 2012 (*minuta** 1941) ≡ *Amazonella* 2012 **JH**
F.21.08. Infratribus *BUFONINIA* Gray, 1825.ga.f004-29 **{99}**
F.22.07. Hypotribus *BUFONINOA* Gray, 1825.ga.f004-30 **{100}**
F.23.03. Clanus *BUFONITES* Gray, 1825.ga.f004-31 **{99}**
F.24.01. Subclanus *BUFONITIES* Gray, 1825.ga.f004-32 **{99}**
F.25.0a. Infraclanus *INCERTAE SEDIS*
G.28.†094. *Palaeophrynos*° 1838 † (*gessneri*° 1838 †) ≡ *Palaeophryne* 1843 **AM** ≡ *Palaeophrynus* 1844 ≡ *Troglobates* 1848
G.28.102. *Altiphrynoides*° 1987 (*malcolmi*° 1978) ≈ *Spinophrynoides* 1987 (*osgoodi*° 1932)
G.28.103. *Parapelophryne*° 2003 (*scalptus*° 1973)
F.25.01. Infraclanus *ADENOMITOES* Cope, 1861.ca.f001-03 **{100}**

F.26.01. Hypoclanus *Adenomitues* Cope, 1861.ca.f001-04 **{94}**

F.27.01. Catoclanus *Adenomityes* Cope, 1861.ca.f001-04

G.28.104. *Adenomus*[1] 1861 (*badioflavus* 1860 ≈ *kelaartii** 1858)

F.27.02. Catoclanus *Bedukityes* **nov.** **{91}**

G.28.105. *Beduka** **nov.** (*koynayensis** 1963) ≡ *Xanthophryne* 2009 **AN**

G.28.106. *Blythophryne*° 2016 (*beryet*° 2016)

G.28.107. *Bufoides*° 1973 (*meghalayana*° 1971)

G.28.108. *Duttaphrynus** 2006 (*melanostictus** 1799) **{100}**

G.28.109. *Firouzophrynus*[3] 2020 (*olivaceus*° 1874) **{100}**

F.26.02. Hypoclanus *Pedostibitues* **nov.**, DOP.da.f016-00

G.28.110. *Pedostibes** 1876 (*tuberculosus** 1876)

F.25.02. Infraclanus *Ansoniitoes* **nov.**, DOP.da.f017-00 **{97}**

F.26.0a. Hypoclanus *Incertae sedis*

G.28.111. *Pseudobufo*° 1838 (*subasper*° 1838) ≡ *Pyleus* 1848 ≡ *Nectes* 1865 ≈ *Nectes* 1857 **AN** (*pleurotaenia* 1857 ≈ *subasper*° 1838)

G.28.112. *Sigalegalephrynus*° 2017 (*mandailinguensis*° 2017)

F.26.03. Hypoclanus *Ansoniitues* **nov.**, DOP.da.f017-01 **{99}**

G.28.113. *Ansonia** 1870 (*penangensis** 1870) **{100}**

G.28.114. *Pelophryne*[3] 1938 (*albotaeniata*° 1938)

F.26.04. Hypoclanus *Barbarophrynitues* **nov.**, DOP.da.f018-00

G.28.115. *Barbarophryne** 2013 (*brongersmai** 1972)

F.26.05. Hypoclanus *Blairitues* **nov.**, DOP.da.f019-00

G.28.116. *Blaira** **nov.** (*ornata** 1876) ≡ *Ghatophryne* 2009 **AN**

F.26.06. Hypoclanus *Ingerophrynitues* **nov.**, DOP.da.f020-00 **{100}**

G.28.117. *Ingerophrynus** 2006 (*biporcatus** 1829) ≈ *Qiongbufo* 2012 (*ledongensis*° 2009) ≡ *Qiongobufo* 2016

F.26.07. Hypoclanus *Rentapiitues* **nov.**, DOP.da.f021-00 **{100}**

G.28.118. *Phrynoidis** 1842 (*asper** 1829) **{100}**

G.28.119. *Rentapia** 2016 (*hosii** 1892)

F.25.03. Infraclanus *Bufonitoes* Gray, 1825.ga.f004-33 **{100}**

G.28.120. *Bufo** 1764 (*bufo** 1758) ≡ *Bufo* 1758*a* **AN** ≡ *Bufo* 1758*b* **AN** ≡ *Phrynacius* 1815 **AN** ≡ *Phrynocerus* 1815 **AN** ≡ *Phrynotes* 1815 **AN** ≡ *Phryne* 1816 **CI** ≡ *Pegaeus* 1868 ≈ *Phryne* 1843 **JH** (*vulgaris* 1768 ≈ *bufo** 1758) ≡ *Neobufo* 1919 ≈ *Platosphus* 1877 (*gervaisii* 1877 ‡ ≈ *bufo** 1758) ≈ *Bufavus* 1885 (*meneghinii* 1885 ‡ ≈ *bufo** 1758) ≈ *Torrentophryne* 1994 **AN** (*aspinia** 1994) ≡ *Torrentophryne* 1996 ≈ *Schmibufo* 2016 (*stejnegeri** 1931)

F.25.04. Infraclanus *Bufotitoes* **nov.**, DOP.da.f022-00 **{100}**

G.28.121. *Bufotes** 1815 (*viridis** 1768) ≡ *Bufo* 1768 **JH** ≡ *Buffo* 1788 **CI** ≡ *Batrachus* 1814 **JH** ≡ *Pseudepidalea* 2006 ≈ *Calliopersa* 2020 (*surdus*° 1931)

F.25.05. Infraclanus *Nectophrynitoes* Laurent, 1942.la.f001-02 **{100}**

F.26.08. Hypoclanus *Epidaleitues* **nov.**, DOP.da.f023-00

G.28.122. *Epidalea** 1864 (*calamita** 1768) ≡ *Calamitus* 1815 **AN** ≡ *Calamita* 1816 **CI** ≡ *Rubeta* 1872

F.26.09. Hypoclanus *Leptophrynitues* **nov.**, DOP.da.f024-00

G.28.123. *Leptophryne*[2] 1843 (*cruentatus*° 1838) ≈ *Cacophryne* 1935 (*borbonica** 1838)

F.26.10. Hypoclanus *Nectophrynitues* Laurent, 1942.la.f001-03 **{100}**

G.28.124. *Didynamipus** 1903 (*sjostedti** 1903) ≈ *Atelophryne* 1906 (*minuta* 1906 ≈ *sjostedti** 1903)

G.28.125. *Laurentophryne*° 1960 (*parkeri*° 1950)

G.28.126. *Mo** **nov.** (*bambutensis** 1972)

G.28.127. *Nectophryne** 1875 (*afra** 1875) ≡ *Nectofryne* 1898 **{100}**

G.28.128. *Nimbaphrynoides** 1987 (*occidentalis** 1943)

G.28.129. *Werneria*[3] 1903 (*fulva* 1903 ≈ *preussi*° 1893) ≡ *Stenoglossa* **JH** 1903 **{100}**

G.28.130. *Wolterstorffina** 1939 (*parvipalmata** 1898)

F.25.06. Infraclanus *Sabahphrynitoes* **nov.**, DOP.da.f025-00

G.28.131. *Sabahphrynus** 2007 (*maculata** 1890)

F.25.07. Infraclanus *Strauchbufonitoes* **nov.**, DOP.da.f026-00

G.28.132. *Strauchbufo** 2012 (*raddei** 1876) ≡ *Strauchophryne* 2013 ≡ *Strauchibufo* 2016

F.25.08. Infraclanus *Tornieriobatitoes* Miranda-Ribeiro, 1926.ma.f001-03 **{94}**

F.26.11. Hypoclanus *Schismadermatitues* **nov.**, DOP.da.f027-00

G.28.133. *Schismaderma*[1] 1849 (*lateralis* 1849 ≈ *carens** 1848)

F.26.12. Hypoclanus *Tornieriobatitues* Miranda-Ribeiro, 1926.ma.f001-04 **{100}**

G.28.134. *Churamiti** 2002 (*maridadi** 2002)

G.28.135. *Nectophrynoides** 1926 (*tornieri** 1906) ≈ *Tornieriobates* 1926 (*vivipara** 1905) ≡ *Tornierobates* 1940 **AM** ≡ *Tornierobates* 2006 **{100}**

F.24.02. Subclanus *Phryniscities* Günther, 1858.gc.f005-04 **{99}**

F.25.09. Infraclanus *Anaxyritoes* **nov.**, DOP.da.f028-00 **{100}**

G.28.136. *Anaxyrus*[3] 1845 (*melancholicus* 1845 ≈ *compactilis*° 1833) ≈ *Dromoplectrus* 1879 (*anomalus* 1858 ≈ *compactilis*° 1833) **{100}**

G.28.137. *Incilius** 1863 (*coniferus** 1862) ≈ *Cranopsis* 1875 **JH** (*fastidiosus** 1875) ≡ *Cranophryne* 1889 ≈ *Crepidius* 1875 **JH** (*epioticus*° 1875) ≡ *Crepidophryne* 1889 ≈ *Ollotis* 1875 (*coerulescens* 1875 ≈ *fastidiosus** 1875) **{97}**

F.25.10. Infraclanus *Phryniscitoes* Günther, 1858.gc.f005-05 **{100}**

G.28.138. *Rhinella*[2] 1826 (*proboscideus*° 1824) ≡ *Rhinellus* 1831 ≡ *Eurhina* 1843 ≈ *Oxyrhynchus* 1824 **JH** (*granulosus** 1824) ≡ *Oxyrhinchus* 1841 **AM** ≈ *Chascax* 1828 (*horridus* 1802 ≈ *spinulosus** 1768) ≈ *Chaunus* 1828 (*marmoratus* 1828 ≈ *granulosus** 1824) ≈ *Otilophes* 1829 **AN** (*margaritifera** 1768) ≡ *Otilophis* 1831 ≡ *Otilopha* 1831 ≡ *Otilophus* 1832 ≡ *Merothaelacium* 1833 ≡ *Atilophus* 1840 ≡ *Otolophus* 1843 ≡ *Otylophus* 1953 **AM** ≈ *Macrothaelacion* 1833 (*nasutus* 1799 ≈ *margaritifera** 1768) ≈ *Phryniscus* 1834 (*nigricans* 1834 ≈ *spinulosus** 1834) ≡ *Phreniscus* 1841 **AM** ≈ *Chilophryne* 1843 (*dorbignyi*° 1841) ≈ *Docidophryne* 1843 (*agua* 1802 ≈ *ictericus** 1824) ≈ *Trachycara* 1845 (*fusca* 1845 ≈ *margaritifera** 1768) ≈ *Aruncus* 1899 **AN** (*valdivianus* 1902 ≈ *spinulosus** 1834) ≡ *Aruncus* 1902 ≈ *Stenodactylus* 1902 **JH** (*ventralis* 1902 ≈ *spinulosus** 1834) ≈ *Palaeobufo** 1919 (*marina** 1758) ≈ *Rhamphophryne* 1971 (*acrolopha*° 1971) ≈ *Atelophryniscus* 1989 (*chrysophorus*° 1989)

F.24.03. Subclanus *Stephopaedities* Dubois, 1987.da.f001-01 **{100}**

F.25.11. Infraclanus *Capensibufonitoes* **nov.**, DOP.da.f029-00 **{100}**

G.28.139. *Capensibufo** 1980 (*tradouwi** 1926)

F.25.12. Infraclanus *Sclerophrytoes* **nov.**, DOP.da.f030-00 **{100}**

G.28.140. *Sclerophrys** 1838 (*capensis** 1838) ≈ *Amietophrynus* 2006 (*regularis** 1833)

F.25.13. Infraclanus *Stephopaeditoes* Dubois, 1987.da.f001-02 **{98}**

G.28.141. *Mertensophryne*[1] 1960 (*rondoensis* 1942 ≈ *micranotis** 1925) ≈ *Stephopaedes* 1979 (*anotis** 1907) **{99}**

G.28.142. *Poyntonophrynus*[3] 2006 (*vertebralis*° 1848) **{92}**

F.25.14. Infraclanus *Vandijkophrynitoes* **nov.**, DOP.da.f031-00 **{100}**

G.28.143. *Vandijkophrynus** 2006 (*angusticeps** 1848)

F.23.04. Clanus *Peltophrynites* **nov.**, DOP.da.f032-00 **{100}**

G.28.144. *Peltophryne** 1843 (*peltocephala** 1838) ≈ *Otaspis* 1869 (*empusa** 1862)

F.23.05. Clanus *Rhaeboites* **nov.**, DOP.da.f033-00 **{98}**

G.28.145. *Rhaebo** 1862 (*haematiticus** 1862) ≡ *Rhaeba* 1882 **AM** ≈ *Phrynomorphus* 1843 **JH** (*leschenaulti* 1841 ≈ *guttatus** 1799) ≈ *Andinophryne* 1985 (*colomai*° 1985)

F.22.08. Hypotribus *Nannophryninoa* **nov.**, DOP.da.f034-00 **{99}**

G.28.146. *Nannophryne** 1870 (*variegata** 1870)

F.21.09. Infratribus *Dendrophryniscinia* Jiménez de la Espada, 1870.ja.f001-03 **{100}**

G.28.147. *Dendrophryniscus** 1870 (*brevipollicatus** 1870)

F.20.14. Subtribus *Oreophrynellina* **nov.**, DOP.da.f035-00 **{100}**

G.28.148. *Oreophrynella** 1895 (*quelchii** 1895) ≡ *Oreophryne* 1895 **JH**

F.20.15. Subtribus *Osornophrynina* **nov.**, DOP.da.f036-00 **{100}**

G.28.149. *Osornophryne** 1976 (*percrassa** 1976)

F.19.21. Tribus *Frostiini* **nov.**, DOP.da.f037-00

G.28.150. *Frostius*[3] 1986 (*pernambucensis*° 1962)

F.18.22. Subfamilia *Melanophryniscinae* **nov.**, DOP.da.f038-00 **{100}**

G.28.151. *Melanophryniscus** 1961 (*stelzneri** 1875)

F.17.17. Familia *Odontophrynidae* Lynch, 1971.la.f002-03 **{100}** [S] [N]

F.18.†0b. Subfamilia *Incertae sedis* †

G.28.†095. *Chachaiphrynus*° 2017 † (*lynchi*° 2017 †)

F.18.23. Subfamilia *Odontophryninae* Lynch, 1971.la.f002-04 **{100}**

G.28.152. *Macrogenioglottus** 1946 (*alipioi** 1946)
G.28.153. *Odontophrynus** 1862 (*cultripes** 1862) **{100}**
F.18.24. Subfamilia *Proceratophryinae* **nov.**, DOP.da.f039-00 **{99}**
G.28.154. *Proceratophrys** 1920 (*bigibbosa** 1872)
F.14.04. Superfamilia *Centrolenoidea* Taylor, 1951.ta.f001-02 **{100}**
F.17.18. Familia *Allophrynidae* Goin[+2], 1978.ga.f001-00 **{100}** [S] [N]
G.28.155. *Allophryne** 1926 (*ruthveni** 1926)
F.17.19. Familia *Centrolenidae* Taylor, 1951.ta.f001-00 **{100}** [Q]
F.18.25. Subfamilia *Centroleninae* Taylor, 1951.ta.f001-01 **{100}**
F.19.22. Tribus *Centrolenini* Taylor, 1951.ta.f001-03 **{100}**
G.28.156. *Centrolene** 1872 (*geckoideum** 1872) ≈ *Centrolenella* 1920 (*antioquiensis** 1920)
F.19.23. Tribus *Cochranellini* Guayasamin[+5], 2009.ga.f001-00 **{100}**
F.20.16. Subtribus *Cochranellina* Guayasamin[+5], 2009.ga.f001-01 **{99}**
F.21.10. Infratribus *Cochranellinia* Guayasamin[+5], 2009.ga.f001-02 **{100}**
G.28.157. *Cochranella** 1951 (*granulosa** 1949)
F.21.11. Infratribus *Espadaraninia* **nov.**, DOP.da.f040-00 **{90}**
F.22.09. Hypotribus *Chimerellinoa* **nov.**, DOP.da.f041-00
G.28.158. *Chimerella** 2009 (*mariaelenae** 2006)
F.22.10. Hypotribus *Espadaraninoa* **nov.**, DOP.da.f040-01 **{100}**
G.28.159. *Espadarana** 2009 (*andina** 1968)
F.22.11. Hypotribus *Rulyraninoa* **nov.**, DOP.da.f042-00 **{90}**
F.23.06. Clanus *Audaciellites* **nov.**, DOP.da.f043-00 **{100}**
G.28.160. *Audaciella** **nov.** (*audax** 1973)
F.23.07. Clanus *Rulyranites* **nov.**, DOP.da.f042-01 **{92}**
G.28.161. *Rulyrana** 2009 (*flavopunctata** 1973) **{100}**
G.28.162. *Sachatamia** 2009 (*albomaculata** 1949) **{100}**
F.20.17. Subtribus *Teratohylina* **nov.**, DOP.da.f044-00 **{91}**
G.28.163. *Teratohyla** 1951 (*spinosa** 1949)
F.20.18. Subtribus *Vitreoranina* **nov.**, DOP.da.f045-00 **{100}**
G.28.164. *Vitreorana** 2009 (*antisthenesi** 1963)
F.19.24. Tribus *Nymphargini* **nov.**, DOP.da.f046-00 **{100}**
G.28.165. *Nymphargus** 2007 (*cochranae** 1961)
F.18.26. Subfamilia *Hyalinobatrachinae* Guayasamin[+5], 2009.ga.f002-00 **{100}**
G.28.166. *Celsiella** 2009 (*revocata** 1985) **{100}**
G.28.167. *Hyalinobatrachium** 1991 (*fleischmanni** 1893) **{98}**
F.18.27. Subfamilia *Ikakoginae* **nov.**, DOP.da.f047-00
G.28.168. *Ikakogi** 2009 (*tayrona** 1991)
F.14.05. Superfamilia *Ceratophryoidea* Tschudi, 1838.ta.f002-14 **{99}**
F.15.03. Epifamilia *Ceratophryoidae* Tschudi, 1838.ta.f002-15 **{100}**
F.17.20. Familia *Ceratophryidae* Tschudi, 1838.ta.f002-05 **{100}** [M]
F.18.28. Subfamilia *Ceratophryinae* Tschudi, 1838.ta.f002-06 **{100}**
G.28.†096. *Beelzebufo*° 2008 † (*ampinga*° 2008 †)
G.28.169. *Ceratophrys*[3] 1824 (*varius* 1824 ≈ *auritus*° 1823) ≡ *Ceratophris* 1829 ≡ *Ceratophryne* 1858 ≈ *Phrynoceros* 1838 (*vaillanti* 1838 ≈ *cornuta** 1758) ≡ *Phrynocerus* 1862 ≈ *Trigonophrys* 1857 (*rugiceps* 1857 ≈ *ornatum** 1843)
F.18.29. Subfamilia *Lepidobatrachinae* Bauer, 1987.ba.f001-01 **{97}**
G.28.†097. *Baurubatrachus*° 1990 † (*pricei*° 1990 †)
G.28.170. *Chacophrys** 1963 (*pierottii** 1948)
G.28.171. *Lepidobatrachus*[3] 1899 (*asper*° 1899)
F.18.30. Subfamilia *Stombinae* Gallardo 1965.ga.f001-00
G.28.172. *Stombus** 1825 (*cornuta** 1758) ≡ *Strombus* 1831 AM
F.15.04. Epifamilia *Telmatobioidae* Fitzinger, 1843.fa.f006-04 **{91}**
F.16.01. Apofamilia *Cyclorampheidae* Bonaparte, 1850.bb.f003-|Bonaparte, 1852.ba.f001|-05 **{99}** [T]
F.17.21. Familia *Cycloramphidae* Bonaparte, 1850.bb.f003-|Bonaparte, 1852.ba.f001|-04 **{100}** [N] [M] [T]
F.18.31. Subfamilia *Alsodinae* Mivart, 1869.ma.f005-02 **{100}** [N] [M]
G.28.173. *Alsodes** 1843 (*monticola** 1843) ≈ *Hammatodactylus* 1843 (*nodosus** 1841) ≡ *Eusophus*

1865 ≡ Esophus 1870 AM ≈ *Cacotus* 1869 (*maculatus* 1869 ≈ *nodosus** 1841) ≈ *Telmalsodes* 1989 (*montanus*° 1902) ≡ *Talmalsodes* 1992 **{100}**

G.28.174. *Eupsophus** 1843 (*roseus** 1841) ≡ *Eusophis* 1940 ≈ *Borborocoetes* 1843 JH (*grayii* 1843 ≈ *roseus** 1841) ≡ *Borborocoetea* 1928 **{100}**

F.18.32. Subfamilia *Batrachylinae* Gallardo, 1965.ga.f002-02 **{100}** [N] [M] [T]

F.19.25. Tribus *Atelognathini* **nov.**, DOP.da.f048-00 **{100}**

G.28.175. *Atelognathus** 1978 (*patagonicus** 1962) **{100}**

G.28.176. *Chaltenobatrachus*° 2011 (*grandisonae*° 1975)

F.19.26. Tribus *Batrachylini* Gallardo, 1965.ga.f002-00 **{99}**

G.28.177. *Batrachyla** 1843 (*leptopus** 1843) **{90}**

G.28.178. *Hylorina** 1843 (*sylvatica** 1843) ≡ *Hylorhina* 1847

F.18.33. Subfamilia *Cycloramphinae* Bonaparte, 1850.bb.f003-|Bonaparte, 1852.ba.f001|-04 **{100}** [N] [M] [T]

G.28.179. *Cycloramphus** 1838 LT (*fulginosus* 1838 ≡ *fuliginosus** 1838) ≡ *Cycloramphos* 1838 LP ≡ *Pithecopsis* 1841 ≡ *Cycloramphos* 1847 ≡ *Cyclorhamphus* 1847 ≈ *Zachaenus* 1866 (*parvulus** 1853) ≈ *Grypiscus* 1867 (*umbrinus* 1866 ≈ *fuliginosus** 1838) ≈ *Oocormus* 1905 (*microps* 1905 ≈ *parvulus** 1853) ≈ *Iliodiscus* 1920 (*dubius*° 1920) ≈ *Craspedoglossa* 1922 (*santaecatharinae* 1922 ≈ *bolitoglossus*° 1897) ≈ *Niedenia* 1924 (*spinulifer* 1923 ≈ *asper*° 1899) **{100}**

G.28.180. *Thoropa*[1] 1865 (*missiessii* 1842 ≈ *miliaris** 1824) **{100}**

F.18.34. Subfamilia *Hylodinae* Günther, 1858.gc.f010-00 **{100}** [N] [M] [T]

G.28.181. *Crossodactylus*[3] 1841 (*gaudichaudii*° 1841) ≡ *Limnocharis* 1843 JH ≡ *Crossodactyle* 1879 AM ≈ *Tarsopterus* 1862 (*trachystomus*° 1930) ≈ *Calamobates* 1930 (*boulengeri*° 1930) **{100}**

G.28.182. *Hylodes*[1] 1826 (*ranoides* 1824 ≈ *nasus** 1823) ≡ *Enydrobius* 1830 ≈ *Elosia* 1838 (*nasus** 1823) ≡ *Scinacodes* 1843 ≈ *Megaelosia*[1] 1923 (*bufonium* 1923 ≈ *nasus** 1823) ≡ *Magaelosia* 1923 **{100}**

F.18.35. Subfamilia *Limnomedusinae* **nov.**, DOP.da.f049-00 [N] [M] [T]

G.28.183. *Limnomedusa** 1843 (*macroglossus** 1841) ≈ *Litopleura* 1875 (*maritimum* 1875 ≈ *macroglossus** 1841)

F.16.02. Apofamilia *Telmatobieidae* Fitzinger, 1843.fa.f006-05 **{99}**

F.17.22. Familia <u>*Rhinodermatidae*</u> Bonaparte, 1850.bb.f011-01 **{99}** [Q]

G.28.184. *Insuetophrynus** 1970 (*acarpicus** 1970)

G.28.185. *Rhinoderma** 1841 (*darwinii** 1841) ≈ *Heminectes* 1902 (*rufus*° 1902)

F.17.23. Familia <u>*Telmatobiidae*</u> Fitzinger, 1843.fa.f006-01 **{100}** [S] [P]

G.28.†098. *Neoprocoela*° 1949 † (*edentata*° 1949 †)

G.28.186. *Telmatobius*[3] 1834 (*peruvianus*° 1834) ≡ *Cophaeus* 1889 ≈ *Batrachophrynus* 1873 (*macrostomus*° 1873) ≈ *Pseudobatrachus* 1873 (*jelskii*° 1873) ≈ *Lynchophrys* 1983 (*brachydactylus*° 1873)

F.14.06. Superfamilia *Hyloidea* Rafinesque, 1815.ra.f002-|Gray, 1825.ga.f001|-20 **{100}**

F.17.24. Familia <u>*Hylidae*</u> Rafinesque, 1815.ra.f002-|Gray, 1825.ga.f001|-09 **{100}** [Q]

F.18.†0c. Subfamilia *Incertae sedis* †

G.28.†099. *Etnabatrachus*° 2003 † (*maximus*° 2003 †)

G.28.†100. *Geophryne*° 2014 † (*nordensis*° 1964 †)

G.28.†101. *Proacris*° 1961 † (*mintoni*° 1961 †)

F.18.36. Subfamilia *Cophomantinae* Hoffmann, 1878.ha.f004-02 **{100}**

F.19.27. Tribus *Cophomantini* Hoffmann, 1878.ha.f004-01 **{99}**

F.20.19. Subtribus *Cophomantina* Hoffmann, 1878.ha.f004-03 **{100}**

F.21.12. Infratribus *Bokermannohylina* **nov.**, DOP.da.f050-00 **{100}**

G.28.187. *Bokermannohyla** 2005 (*circumdata** 1871)

F.21.13. Infratribus *Cophomantinia* Hoffmann, 1878.ha.f004-04 **{96}**

G.28.188. *Aplastodiscus** 1950 (*perviridis** 1950) **{100}**

G.28.189. *Boana** 1825 (*boans** 1758) ≡ *Auletris* 1830 ≡ *Hyla* 1856 JH ≈ *Hysaplesia* 1826a CI (*punctatus** 1799) ≡ *Hylaplesia* 1826b CI ≡ *Hylaplesia* 1828 ≡ *Hyloplesia* 1846 ≡ *Dendromedusa* 1848 ≡ *Hylapesia* 2007 AM ≈ *Hypsiboas* 1830 (*palmata* 1789 ≈ *boans** 1758) ≡ *Lobipes* 1843 JH ≈ *Hypsipsophus* 1843 (*xerophilla* 1841 ≈ *crepitans** 1824) ≈ *Phyllobius* 1843 JH (*albomarginata** 1824) ≈ *Centrotelma* 1856 (*infulata* 1824 ≈ *albomarginata** 1824) ≈ *Hylomedusa* 1856 (*crepitans** 1824) ≈ *Cinclidium* 1867 JH (*granulatum* 1867 ≈ *boans** 1758) ≡ *Cincloscopus* 1871 ≈ *Cophomantis* 1870 (*punctillata* 1870 ≈ *semilineata** 1824) **{100}**

F.20.20. Subtribus *Hyloscirtina* **nov.**, DOP.da.f051-00 **{100}**

G.28.190. *Colomascirtus** 2016 (*larynopigion** 1973) **{99}**

G.28.191. *Hyloscirtus*[3] 1882 (*bogotensis*° 1882) ≡ *Hylonomus* 1882 JH **{100}**

F.19.28. Tribus *Myersiohylini* **nov.**, DOP.da.f052-00

G.28.192. *Myersiohyla** 2005 (*inparquesi** 1994)

F.19.29. Tribus *Nesorohylini* **nov.**, DOP.da.f053-00

G.28.193. *Nesorohyla** 2019 (*kanaima** 1969)

F.18.37. Subfamilia *Hylinae* Rafinesque, 1815.ra.f002-|Gray, 1825.ga.f001|-19 **{100}**

F.19.30. Tribus *Dendropsophini* Fitzinger, 1843.fa.f003-01 **{100}**

F.20.21. Subtribus *Dendropsophina* Fitzinger, 1843.fa.f003-02 **{100}**

G.28.194. *Dendropsophus*[1] 1843 (*frontalis* 1800 ≈ *leucophyllata** 1783) ≈ *Lophopus* 1838 JH (*marmoratus** 1768) ≡ *Quinzhyla* 2005 ≈ *Hylella* 1862 (*tenera* 1862 ≈ *bipunctata** 1824) ≈ *Guentheria* 1926 JH (*dasynota* 1869 ≈ *senicula** 1868) **{99}**

G.28.195. *Xenohyla** 1998 (*truncata** 1959)

F.20.22. Subtribus *Pseudina* Fitzinger, 1843.fa.f010-04 **{100}**

G.28.196. *Pseudis** 1830 (*paradoxa** 1758) ≡ *Pseudes* 1844 ≡ *Batrachychthis* 1876 LT ≡ *Batrachychthys* 1876 LP ≡ *Batrachchythis* 1877 AM ≡ *Batrachichthys* 1877 AM ≈ *Lysapsus* 1862 (*limellum** 1862) ≡ *Lisapsus* 1867 ≡ *Lysapus* 1878 ≡ *Podonectes* 1864 AN **{100}**

G.28.197. *Scarthyla*[1] 1988 (*ostinodactyla* 1988 ≈ *goinorum** 1962)

F.19.31. Tribus *Hylini* Rafinesque, 1815.ra.f002-|Gray, 1825.ga.f001|-21 **{100}**

F.20.23. Subtribus *Acrisina* Mivart, 1869.ma.f008-05 **{100}**

F.21.14. Infratribus *Acrisinia* Mivart, 1869.ma.f008-06 **{100}**

G.28.198. *Acris** 1841 (*gryllus** 1825)

F.21.15. Infratribus *Hyliolinia* Dubois[+2], 2017.da.f001-02 **{99}**

G.28.199. *Hyliola** 1899 (*regilla** 1852) **{100}**

G.28.200. *Pseudacris** 1843 (*nigrita** 1825) ≡ *Chorophilus* 1854 ≡ *Chlorofilus* 1898 ≈ *Helocaetes* 1854 (*triseriata** 1838) ≡ *Heloecetes* 1859 ≈ *Limnaoedus* 1953 (*ocularis** 1801) ≈ *Parapseudacris* 1986 (*crucifer** 1838) ≈ *Pycnacris* 2014 (*ornata** 1836) **{100}**

F.20.24. Subtribus *Hylina* Rafinesque, 1815.ra.f002-|Gray, 1825.ga.f001|-23 **{93}**

F.21.16. Infratribus *Hylinia* Rafinesque, 1815.ra.f002-|Gray, 1825.ga.f001|-24 **{100}**

F.22.12. Hypotribus *Charadrahylinoa* **nov.**, DOP.da.f054-00 **{98}**

G.28.201. *Charadrahyla** 2005 (*taeniopus** 1901) **{100}**

G.28.202. *Megastomatohyla** 2005 (*mixe** 1965)

F.22.13. Hypotribus *Hylinoa* Rafinesque, 1815.ra.f002-|Gray, 1825.ga.f001|-25 **{100}**

F.23.08. Clanus *Hylites* Rafinesque, 1815.ra.f002-|Gray, 1825.ga.f001|-26 **{97}**

G.28.203. *Dryophytes** 1843 (*versicolor** 1825) ≈ *Epedaphus* 1885 (*gratiosa** 1825) **{100}**

G.28.204. *Hyla** 1768 (*viridis* 1768 ≡ *arborea** 1758) ≡ *Hylaria* 1814 ≡ *Ranetta* 1764 LT-RI (*arborea** 1758) ≡ *Ranella* 1764 LP ≡ *Calamita* 1799 ≡ *Hydryla* 1815 AN ≡ *Hylanus* 1815 AN ≡ *Hylesinus* 1815 AN ≡ *Hylopsis* 1815 AN ≡ *Hyas* 1830 ≡ *Dendrohyas* 1830 ≡ *Discodactylus* 1833 **{100}**

F.23.09. Clanus *Triprionites* Miranda-Ribeiro, 1926.ma.f005-01 **{100}**

F.24.04. Subclanus *Isthmohylities* **nov.**, DOP.da.f055-00 **{96}**

G.28.205. *Isthmohyla** 2005 (*pseudopuma** 1901)

F.24.05. Subclanus *Tlalocohylities* **nov.**, DOP.da.f056-00 **{100}**

G.28.206. *Tlalocohyla** 2005 (*smithii** 1902)

F.24.06. Subclanus *Triprionities* Miranda-Ribeiro, 1926.ma.f005-02 **{100}**

F.25.15. Infraclanus *Diaglenitoes* **nov.**, DOP.da.f149-000 **{96}**

G.28.207. *Diaglena** 1887 (*spatulatus** 1882)

F.25.16. Infraclanus *Smiliscitoes* **nov.**, DOP.da.f150-000 **{96}**

G.28.208. *Smilisca*[1] 1865 (*daulinia* 1865 ≈ *baudinii** 1841) ≈ *Pternohyla* 1882 (*fodiens** 1882) **{100}**

F.25.17. Infraclanus *Triprionitoes* Miranda-Ribeiro, 1926.ma.f005-03 **{96}**

G.28.209. *Anotheca*[1] 1939 (*coronata* 1911 ≈ *spinosa** 1864)

G.28.210. *Triprion** 1866 (*petasatus** 1865) ≡ *Pharyngodon* 1865 JH

F.22.14. Hypotribus *Rheohylinoa* **nov.**, DOP.da.f057-00 **{100}**

F.23.10. Clanus *Ecnomiohylites* **nov.**, DOP.da.f058-00 **{97}**

G.28.211. *Ecnomiohyla** 2005 (*miliarius** 1886)

F.23.11. Clanus *Ptychohylites* **nov.**, DOP.da.f059-00**{100}**

G.28.212. *Atlantihyla** 2018 (*spinipollex** 1936)

G.28.213. *Bromeliohyla** 2005 (*bromeliacea** 1933)

G.28.214. *Duellmanohyla** 1992 (*uranochroa** 1875) **{98}**

G.28.215. *Ptychohyla*[1] 1944 (*adipoventris* 1944 ≈ *leonardschultzei** 1934) **{100}**

G.28.216. *Quilticohyla*° 2018 (*sanctaecrucis*° 1922)

F.23.12. Clanus *Rheohylites* **nov.**, DOP.da.f057-01

G.28.217. *Rheohyla** 2016 (*miotympanum** 1863)

F.21.17. Infratribus *Plectrohylinia* **nov.**, DOP.da.f060-00 **{100}**

G.28.218. *Exerodonta** 1879 (*sumichrasti** 1879) **{100}**

G.28.219. *Plectrohyla** 1877 (*guatemalensis** 1877) ≡ *Cauphias* 1877 ≈ *Sarcohyla* 2016 (*crassus*° 1877) **{100}**

F.19.32. Tribus *Lophyohylini* Miranda-Ribeiro, 1926.ma.f004-|Fouquette[+1], 2014.fa.f001|-00 **{100}**

F.20.25. Subtribus *Itapotihylina* **nov.**, DOP.da.f061-00

G.28.220. *Itapotihyla** 2005 (*langsdorffii** 1841)

F.20.26. Subtribus *Lophyohylina* Miranda-Ribeiro, 1926.ma.f004-|Fouquette[+1], 2014.fa.f001|-02 **{94}**

F.21.18. Infratribus *Lophyohylinia* Miranda-Ribeiro, 1926.ma.f004-|Fouquette[+1], 2014.fa.f001|-03

G.28.221. *Phyllodytes** 1830 (*luteola** 1824) ≈ *Amphodus* 1873 (*wuchereri*° 1873) ≈ *Lophyohyla* 1923 LT (*piperata* 1923 ≈ *luteola** 1824) ≡ *Lophyohila* 1926 LP ≡ *Lophiohyla* 1926

F.21.19. Infratribus *Osteocephalinia* **nov.**, DOP.da.f062-00 **{99}**

G.28.222. *Dryaderces*° 2013 (*pearsoni*° 1929)

G.28.223. *Osteocephalus** 1862 (*taurinus** 1862) ≡ *Osteocephalus* 1843 AN **{100}**

G.28.224. *Tepuihyla** 1993 (*rodriguezi** 1968) **{100}**

F.21.20. Infratribus *Osteopilinia* **nov.**, DOP.da.f063-00 **{100}**

G.28.225. *Osteopilus*[1] 1843 (*marmoratus* 1841 ≈ *septentrionalis** 1841) ≈ *Calyptahyla* 1974 (*lichenatus* 1851 ≈ *crucialis** 1826)

F.20.27. Subtribus *Phytotryadina* **nov.**, DOP.da.f064-00

G.28.226. *Phytotriades** 2009 (*auratus** 1917)

F.20.28. Subtribus *Trachycephalina* Lutz, 1969.la.f002-01 **{90}**

F.21.21. Infratribus *Corythomantinia* **nov.**, DOP.da.f065-00

G.28.227. *Corythomantis** 1896 (*greeningi** 1896)

F.21.22. Infratribus *Nyctimantinia* **nov.**, DOP.da.f066-00 **{100}**

G.28.228. *Aparasphenodon** 1920 (*brunoi** 1920)

G.28.229. *Argenteohyla** 1970 (*siemersi** 1937)

G.28.230. *Nyctimantis** 1882 (*rugiceps** 1882)

F.21.23. Infratribus *Trachycephalinia* Lutz, 1969.la.f002-02 **{100}**

G.28.231. *Trachycephalus** 1838 (*nigromaculatus** 1838) ≈ *Osilophus* 1838 (*typhonia** 1758) ≡ *Otilophus* 1859 JH ≈ *Acrodytes* 1843 CI (*venulosa* 1768 ≈ *typhonia** 1758) ≈ *Cephalophractus* 1843 AN (*galeatus*° 1843 AN ≈ *nigromaculatus** 1758) ≈ *Phrynohyas* 1843 (*zonata* 1824 ≈ *typhonia** 1758) ≈ *Scytopis* 1862 (*hebes* 1862 ≈ *typhonia** 1758) ≡ *Scytopsis* 1878 ≈ *Tetraprion* 1891 (*jordani** 1891)

F.19.33. Tribus *Scinaxini* Duellman[+2], 2016.db.f002-01 **{98}**

F.20.29. Subtribus *Scinaxina* Duellman[+2], 2016.db.f002-03 **{100}**

G.28.232. *Scinax*[2] 1830 (*aurata*° 1821) ≈ *Ololygon* 1843 (*strigilata*° 1824) ≡ *Ologigon* 1923 AM ≡ *Ololigon* 1923 AM ≈ *Garbeana* 1926 (*garbei** 1926) ≈ *Julianus** 2016 (*uruguaya** 1877) **{100}**

F.20.30. Subtribus *Sphaenorhynchina* Faivovich[+15], 2018.fa.f001-00

G.28.233. *Gabohyla*° 2020 (*pauloalvini*° 2020)

G.28.234. *Sphaenorhynchus** 1838 (*lactea** 1800) ≡ *Dryomelictes* 1843 ≈ *Dryomelictes* 1865 JH (*aurantiaca* 1802 ≈ *lactea** 1800) ≡ *Sphaenorynchus* 1923 ≡ *Sphoenohyla* 1938 ≈ *Hylopsis* 1894 (*platycephalus*° 1894) **{100}**

F.17.25. Familia ***Phyllomedusidae*** Günther, 1858.gc.f009-00 **{100}** [S] [N]

F.18.38. Subfamilia *Pelodryadinae* Günther, 1859.ga.f001-01 **{100}**

G.28.†102. *Australobatrachus*° 1976 † (*ilius*° 1976 †)

G.28.235. *Litoria** 1838 (*freycineti** 1838) ≡ *Lepthyla* 1841 AN ≡ *Pelobius* 1843 JH ≈ *Hylomantis* 1880 JH (*fallax** 1880) ≡ *Drymomantis* 1882 ≈ *Coggerdonia* 1985 (*adelaidensis** 1841) ≈ *Colleeneremia* 1985 (*rubella** 1842) ≈ *Llewellynura* 1985 (*microbelos** 1966) ≈ *Mahonabatrachus* 1985 (*meiriana** 1969) ≈ *Pengilleyia* 1985 (*tyleri** 1979) ≈ *Rawlinsonia* 1985 (*ewingi** 1841) ≈ *Saganura* 1985 (*burrowsi** 1942) **{100}**

G.28.236. *Nyctimystes** 1916 (*papua** 1897) ≈ *Sandyrana* 1985 (*infrafrenata** 1867) **{100}**

G.28.237. *Ranoidea*[1] 1838 **LT** (*jacksoniensis* 1838 ≈ *aurea** 1829) ≡ *Ranoides* 1838 **LP** ≡ *Polyphone* 1848 ≈ *Calamita* 1826 **JH** (*caerulea** 1790) ≡ *Calamites* 1830 **JH** ≡ *Pelodryas* 1858 **AN** ≡ *Pelodryas* 1859 ≈ *Dryopsophus* 1843 (*citropa** 1807) ≈ *Euscelis* 1843 (*lesueurii** 1841) ≈ *Chiroleptes* 1859 (*australis** 1842) ≈ *Chirodryas* 1867 (*raniformis** 1867) ≈ *Cyclorana* 1867 (*novaehollandiae** 1867) ≈ *Phractops* 1867 (*alutaceus* 1867 ≈ *novaehollandiae** 1867) ≈ *Mitrolysis* 1889 (*alboguttatus** 1867) ≡ *Brendanura* 1985 ≈ *Fanchonia* 1893 (*elegans* 1893 ≈ *aurea** 1829) ≈ *Mosleyia* 1985 (*nannotis** 1916) ≈ *Neophractops* 1985 (*platycephalus** 1873) **{100}**

F.18.39. Subfamilia *PHYLLOMEDUSINAE* Günther, 1858.gc.f009-03 **{100}**

F.19.34. Tribus *AGALYCHNINI* **nov.**, DOP.da.f067-00 **{100}**

G.28.238. *Agalychnis** 1864 (*callidryas** 1862) ≈ *Pachymedusa* 1968 (*dacnicolor** 1864) **{98}**

G.28.239. *Hylomantis** 1873 (*aspera** 1873) **{100}**

F.19.35. Tribus *CRUZIOHYLINI* **nov.**, DOP.da.f068-00

G.28.240. *Cruziohyla** 2005 (*calcarifer** 1902)

F.19.36. Tribus *PHRYNOMEDUSINI* **nov.**, DOP.da.f069-00

G.28.241. *Phrynomedusa*[3] 1923 (*fimbriata*° 1923)

F.19.37. Tribus *PHYLLOMEDUSINI* Günther, 1858.gc.f009-04 **{96}**

F.20.31. Subtribus *PHASMAHYLINA* **nov.**, DOP.da.f070-00 **{100}**

G.28.242. *Phasmahyla** 1991 (*guttata** 1924)

F.20.32. Subtribus *PHYLLOMEDUSINA* Günther, 1858.gc.f009-05 **{100}**

F.21.24. Infratribus *PHYLLOMEDUSINIA* Günther, 1858.gc.f009-06 **{100}**

G.28.243. *Phyllomedusa** 1830 (*bicolor** 1772) ≡ *Hyla* 1828 **JH**

F.21.25. Infratribus *PITHECOPODINIA* Lutz, 1969.la.f001-01 **{100}**

G.28.244. *Callimedusa** 2016 (*perinesos** 1973) **{99}**

G.28.245. *Pithecopus** 1866 (*azurea** 1862) ≈ *Bradymedusa* 1926 (*moschata* 1926 ≈ *rohdei** 1926) **{100}**

F.14.07. Superfamilia *LEPTODACTYLOIDEA* ||Tschudi, 1838.ta.f001||-Werner, 1896.wa.f001-03 **{100}**

F.17.26. Familia *LEPTODACTYLIDAE* ||Tschudi, 1838.ta.f001||-Werner, 1896.wa.f001-00 **{100}** [Q] [T]

F.18.40. Subfamilia *LEIUPERINAE* Bonaparte, 1850.bb.f010-02 **{100}** [T]

F.19.38. Tribus *LEIUPERINI* Bonaparte, 1850.bb.f010-03 **{100}**

G.28.246. *Pleurodema** 1838 **LT** (*bibroni** 1838) ≡ *Pleuroderma* 1838 **LP** ≈ *Leiuperus* 1841 (*marmoratus** 1841) ≈ *Chianopelas* 1845a **AN** (*viridis* 1845 ≈ *marmoratus** 1841) ≡ *Chionopelas* 1845b **AN** ≡ *Liyperus* 1847 ≡ *Liuperus* 1861 ≡ *Lihyperus* 1875 ≈ *Metaeus* 1853 (*timidus** 1853) ≈ *Physodes* 1857 **AN** (*brachyops** 1869) ≡ *Lystris* 1869 ≈ *Somuncuria* 1978 (*somuncurensis** 1969)

F.19.39. Tribus *PALUDICOLINI* Mivart, 1869.ma.f004-02 **{100}**

F.20.33. Subtribus *EDALORHININA* **nov.**, DOP.da.f071-00

G.28.247. *Edalorhina** 1870 (*perezi** 1870) ≈ *Bubonias* 1874 (*plicifrons* 1874 ≈ *perezi** 1870)

F.20.34. Subtribus *PALUDICOLINA* Mivart, 1869.ma.f004-03 **{99}**

G.28.248. *Engystomops** 1872 (*petersi** 1872) ≈ *Microphryne* 1873 (*pustulosa** 1864) ≈ *Peralaimos* 1875 (*stentor* 1872 ≈ *pustulosa** 1864) **{100}**

G.28.249. *Eupemphix** 1863 (*nattereri** 1863) ≡ *Eupodion* 1857 **AN** ≡ *Eupomplyx* 1857 **AN** ≡ *Eupemfix* 1898 **{100}**

G.28.250. *Physalaemus** 1826 (*cuvieri** 1826) ≡ *Physalamis* 1831 **AM** ≡ *Physolaemus* 1846 ≈ *Paludicola* 1830 (*albifrons*° 1824) ≈ *Hyobates* 1857 **AN** (*fuscomaculatus* 1864 ≈ *biligonigerus** 1861) ≈ *Gomphobates* 1862 (*notatus* 1862 ≈ *cuvieri** 1826) ≈ *Nattereria* 1864 (*lateristriga*° 1864) ≈ *Sphagepodium* 1864 **AN** (*albonotatus** 1864) **{92}**

F.18.41. Subfamilia *LEPTODACTYLINAE* ||Tschudi, 1838.ta.f001||-Werner, 1896.wa.f001-00 **{100}** [Q] [T]

F.19.40. Tribus *ADENOMERINI* Hoffmann, 1878.ha.f003-01 **{100}**

G.28.251. *Adenomera*[3] 1867 (*marmorata*° 1867) ≡ *Adenomera* 1861 **AN** ≈ *Parvulus* 1930 (*nanus*° 1922) **{100}**

G.28.252. *Lithodytes** 1843 (*lineata** 1799) ≈ *Rana* 1828 **JH** (*schneideri* 1820 ≈ *lineata** 1799)

F.19.41. Tribus *LEPTODACTYLINI* ||Tschudi, 1838.ta.f001||-Werner, 1896.wa.f001-01 **{92}**

G.28.253. *Leptodactylus*[1] 1826 (*typhonius* 1801 ≈ *fuscus** 1799) ≈ *Cystignathus* 1830 (*pachypus* 1824 ≈ *latrans** 1815) ≡ *Doryphoros* 1835 ≈ *Gnathophysa* 1843 (*labyrinthica** 1824) ≈ *Sibilatrix* 1843 (*gracilis** 1841) ≈ *Plectromantis* 1862 (*wagneri** 1862) ≈ *Entomoglossus* 1870 (*pustulatus*° 1870) ≈ *Cavicola* 1930 **JH** (*mystacea** 1824) ≈ *Pachypus* 1930 **JH** (*pentadactyla** 1768) ≈ *Hydrolaetare* 1963 (*schmidti*° 1959) ≈ *Vanzolinius* 1974 (*discodactylus** 1883) **{99}**

_ _ _ _ = _ _ _ _ = _ _ _ _ _ _ F.18.42. Subfamilia *Paratelmatobiinae* Ohler[+1], 2012.oa.f001-01 **{99}** [T]

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.254. *Crossodactylodes*[2] 1938 (*pintoi*° 1938) ≈ *Paratelmatobius* 1958 (*lutzii*° 1958) ≈ *Scythrophrys* 1971 (*sawayae** 1953) **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.255. *Rupirana** 1999 (*cardosoi** 1999)

_ _ _ _ = _ _ _ _ = _ _ _ _ _ _ F.18.43. Subfamilia *Pseudopaludicolinae* Gallardo, 1965.ga.f003-01 **{98}** [T]

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.256. *Pseudopaludicola** 1926 (*falcipes** 1867)

_ _ _ _ = _ _ _ _ _ C.11.02. Subphalanx **Diplosiphona** Günther, 1859.ga.c02-01 **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ _ F.17.27. Familia *Calyptocephalellidae* Reig, 1960.ra.f001-02 **{100}** [S] [N]

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.257. *Calyptocephalella** 1928 (*gayi** 1841) ≡ *Calyptocephalus* 1841 **JH** ≡ *Cephalopeltis* 1841 **AN** ≡ *Cephalopeltis* 1875 ≡ *Calyptocephala* 1923 **JH** ≡ *Peltocephalus* 1838 **JH** (*quoyi* 1838 ≡ *gayi** 1841) ≈ *Teracophrys* 1901 **AN** (*rugata*° 1901 **AN** ‡) ≈ *Eophractus* 1949 (*casamayorensis*° ‡ 1949) ≈ *Gigantobatrachus* 1958 (*parodii*° 1958 ‡) ≈ *Wawelia*° 1959 (*gerholdi*° 1959 ‡)

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.258. *Telmatobufo** 1952 (*bullocki** 1952) **{98}**

_ _ _ _ = _ _ _ _ = _ _ _ _ _ F.17.28. Familia *Myobatrachidae* Schlegel, 1850.sa.f001-00 **{100}** [Q]

_ _ _ _ = _ _ _ _ = _ _ _ _ _ _ F.18.†0d. Subfamilia *Incertae sedis* †

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.†103. *Indobatrachus*° 1930 † (*pusilla*° 1847 †)

_ _ _ _ = _ _ _ _ = _ _ _ _ _ _ F.18.44. Subfamilia *Limnodynastinae* Lynch, 1971.la.f001-01 **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.19.42. Tribus *Limnodynastini* Lynch, 1971.la.f001-00 **{97}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ F.20.35. Subtribus *Heleioporina* Bauer, 1987.bc.f002-01

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.259. *Heleioporus*[2] 1841*a* (*albopunctatus*° 1841) ≡ *Helioporus* 1841*b* **AM** ≡ *Heleioforus* 1865 ≈ *Perialia* 1845 (*eyrei*° 1845) ≈ *Philocryphus* 1894 (*flavoguttatus* 1894 ≈ *australiaca** 1795) ≈ *Paraheleioporus* 2019 (*barycragus*° 1967)

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ F.20.36. Subtribus *Limnodynastina* Lynch, 1971.la.f001-03 **{95}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.260. *Adelotus** 1907 (*brevis** 1863) ≡ *Cryptotis* 1863 **JH**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.261. *Limnodynastes** 1843 (*peronii** 1841) ≡ *Wagleria* 1853 ≈ *Heliorana* 1867 (*grayi* 1867 ≈ *dumerilii** 1863) ≈ *Ranaster* 1878 (*canvexiusculus** 1878) ≈ *Megistolotis* 1979 (*lignarius** 1979) **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.262. *Philoria*[2] 1901 (*frosti*° 1901) ≈ *Kyarranus* 1959 (*sphagnicolus** 1958) ≈ *Coplandia* 1985 (*kundagungan*° 1958)

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ F.20.37. Subtribus *Neobatrachina* **nov.**, DOP.da.f072-00 **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.263. *Neobatrachus** 1863 (*pictus** 1863) ≈ *Neoruinosus* 1985 (*sudelli** 1911)

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ F.20.38. Subtribus *Platyplectrina* **nov.**, DOP.da.f073-00 **{99}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.264. *Platyplectrum*[1] 1863 (*marmoratum* 1863 ≈ *ornatus** 1842) ≡ *Platyplectron* 1863 **AM** ≈ *Opisthodon* 1867 (*frauenfeldi* 1867 ≈ *ornatus** 1842) ≈ *Batrachopsis* 1882 **JH** (*melanopyga** 1882) ≡ *Lechriodus* 1882 ≈ *Phanerotis* 1890 (*fletcheri** 1890)

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.19.43. Tribus *Notadenini* **nov.**, DOP.da.f074-00 **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.265. *Notaden** 1873 (*bennettii** 1873)

_ _ _ _ = _ _ _ _ = _ _ _ _ _ _ F.18.45. Subfamilia *Mixophyinae* **nov.**, DOP.da.f075-00 **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.266. *Mixophyes** 1864 (*fasciolatus** 1864) ≡ *Myxophyes* 1865 ≡ *Mixophys* 1993

_ _ _ _ = _ _ _ _ = _ _ _ _ _ _ F.18.46. Subfamilia *Myobatrachinae* Schlegel, 1850.sa.f001-02 **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.19.44. Tribus *Myobatrachini* Schlegel, 1850.sa.f001-05 **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ F.20.39. Subtribus *Criniina* Cope, 1866.ca.f001-02 **{98}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ F.21.26. Infratribus *Assinia* **nov.**, DOP.da.f076-00 **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = F.22.15. Hypotribus *Assinoa* **nov.**, DOP.da.f076-01 **{93}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.267. *Assa** 1972 (*darlingtoni** 1933)

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.268. *Geocrinia*[3] 1973 (*laevis*° 1864) ≈ *Hesperocrinia* 1985 (*leai*° 1898)

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = F.22.16. Hypotribus *Paracriniinoa* **nov.**, DOP.da.f077-00

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.269. *Paracrinia** 1976 (*haswelli** 1894)

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ F.21.27. Infratribus *Criniinia* Cope, 1866.ca.f001-03 **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ _ _ G.28.270. *Crinia** 1838 (*georgiana** 1838) ≈ *Ranidella* 1853 (*signifera** 1853) ≈ *Camariolius* 1863 (*varius* 1863 ≈ *signifera** 1853) ≈ *Pterophrynus* 1864 (*verrucosus* 1864 ≈ *signifera** 1853) ≈ *Australocrinia* 1976 (*tasmaniensis** 1864) ≈ *Littlejohnophryne* 1985 (*riparia** 1965) ≈ *Tylerdella* 1985 (*remota** 1974) ≈ *Bryobatrachus* 1994 (*nimbus** 1994)

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ F.20.40. Subtribus *Myobatrachina* Schlegel, 1850.sa.f001-06 **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ F.21.28. Infratribus *Myobatrachinia* Schlegel, 1850.sa.f001-07 **{100}**

F.22.17. Hypotribus *Myobatrachinoa* Schlegel, 1850.sa.f001-08 **{100}**

G.28.271. *Arenophryne** 1976 (*rotunda** 1976)

G.28.272. *Metacrinia** 1940 (*nichollsi** 1927)

G.28.273. *Myobatrachus*[1] 1850 (*paradoxus* 1850 ≈ *gouldii** 1841) ≡ *Myiobatrachus* [1850] 1858 ≈ *Chelydobatrachus* 1859 (*gouldii** 1841)

F.22.18. Hypotribus *Pseudophryninoa* Bauer, 1987.bc.f001-01 **{100}**

G.28.274. *Pseudophryne*[3] 1843 (*australis*° 1835) ≡ *Bufonella* 1853 ≡ *Pseudofryne* 1898 ≈ *Kankanophryne* 1976 (*occidentalis*° 1940) ≈ *Gradwellia* 1985 (*major*° 1940)

F.21.29. Infratribus *Spicospininia* **nov.**, DOP.da.f078-00

G.28.275. *Spicospina** 1997 (*flammocaerulea** 1997)

F.21.30. Infratribus *Uperoleiinia* Günther 1858.gc.f007-04 **{100}**

G.28.276. *Uperoleia*[2] 1841 (*marmorata*° 1841) ≡ Uperoleja 1841 am ≡ *Hyperolia* 1847 ≡ *Hyperolius* 1882 am ≈ *Glauertia* 1933 (*russelli** 1933) ≈ *Hosmeria* 1985 (*laevigata** 1867) ≈ *Prohartia* 1985 (*fimbrianus* 1926 ≈ *rugosa** 1916)

F.19.45. Tribus *Taudactylini* **nov.**, DOP.da.f079-00

G.28.277. *Taudactylus*[3] 1966 (*diurnus*° 1966)

F.18.47. Subfamilia *Rheobatrachinae* Heyer[+1], 1976.ha.f001-00

G.28.278. *Rheobatrachus** 1973 (*silus** 1973)

C.10.03. Phalanx **Scoptanura** Starrett, 1973.sb.c02-02 **{100}**

C.11.†0a. Subphalanx *Incertae sedis*

G.28.†104. *Hungarobatrachus*° 2010 † (*szukacsi*° 2010 †)

C.11.03. Subphalanx **Ecostata** Lataste, 1879.lb.c04-02 **{100}**

F.17.29. Familia *Microhylidae* ||Fitzinger, 1843.fa.f012||-Noble, 1931.na.f001-01 **{100}** [Q]

F.18.48. Subfamilia *Adelastinae* Peloso[+10], 2016.pa.f001-00

G.28.279. *Adelastes*° 1986 (*hylonomos*° 1986)

F.18.49. Subfamilia *Asterophryinae* Günther, 1858.gc.f006-05 **{100}**

F.19.46. Tribus *Asterophryini* Günther, 1858.gc.f006-09 **{99}**

G.28.280. *Asterophrys** 1838 (*turpicola** 1837) ≡ *Asterofrys* 1898 ≈ *Xenorhina* 1863 (*oxycephalus** 1858) ≈ *Hylophorbus* 1878 (*rufescens** 1878) ≈ *Sphenophryne* 1878 (*cornuta** 1878) ≈ *Xenobatrachus* 1878 (*ophiodon*° 1878) ≡ *Stenofryne* 1898 ≈ *Callulops* 1888 (*doriae** 1888) ≈ *Genyophryne* 1890 (*thomsoni** 1890) ≡ *Genyofryne* 1898 ≈ *Cophixalus* 1892 (*verrucosa*° 1898) ≈ *Oreophryne* 1895 (*senckengergiana* 1895 ≈ *moluccensis*° 1878) ≈ *Phrynixalus* 1895 (*montanus*° 1895) ≈ *Liophryne* 1897 (*rhododactyla** 1897) ≈ *Mantophryne* 1897 (*lateralis** 1897) ≈ *Choanacantha* 1898 (*rostrata*° 1898) ≈ *Copiula* 1901 (*oxyrhinus** 1898) ≈ *Gnathophryne* 1901 (*robusta** 1889) ≈ *Metopostira* 1901 (*ocellata* 1901 ≈ *rufescens** 1878) ≈ *Microbatrachus* 1910 (*pusillus*° 1910) ≈ *Pomatops* 1910 (*valvifera*° 1910) ≈ *Mehelyia* 1911 (*lineata* 1911 ≈ *biroi*° 1897) ≈ *Austrochaperina* 1912 (*robusta*° 1912) ≈ *Oxydactyla* 1913 (*brevicrus*° 1913) ≈ *Choerophryne* 1914 (*proboscidea*° 1914) ≈ *Aphantophryne* 1917 (*pansa** 1917) ≈ *Pseudengystoma* 1930 (*bouwensi** 1930) ≈ *Barygenys* 1936 (*cheesmanae*° 1936) ≈ *Pherohapsis* 1972 (*menziesi** 1972) ≈ *Albericus* 1995 (*darlingtoni*° 1948) ≈ *Metamagnusia* 2009 (*marani** 2009) ≈ *Pseudocallulops* 2009 (*pullifer** 2009) ≈ *Oninia* 2010 (*senglaubi** 2010) ≈ *Paedophryne* 2010 (*kathismaphlox*° 2010) **{99}**

F.19.47. Tribus *Gastrophrynoidini* **nov.**, DOP.da.080-00

G.28.281. *Gastrophrynoides*[3] 1926 (*borneense*° 1897)

G.28.282. *Siamophryne*° 2018 (*troglodytes*° 2018)

G.28.283. *Vietnamophryne*° 2018 (*inexpectata*° 2018)

F.18.50. Subfamilia *Cophylinae* Cope, 1889.ca.f001-01 **{99}**

F.19.48. Tribus *Cophylini* Cope, 1889.ca.f001-02 **{100}**

F.20.0b. Subtribus *Incertae sedis*

G.28.284. *Madecassophryne*° 1974 (*truebae*° 1974)

F.20.41. Subtribus *Anodonthylina* **nov.**, DOP.da.f081-00 **{100}**

G.28.285. *Anodonthyla** 1892 (*boulengerii** 1892) ≡ *Anodontohyla* 1901

F.20.42. Subtribus *Cophylina* Cope, 1889.ca.f001-03 **{91}**

G.28.286. *Cophyla** 1880 (*phyllodactyla** 1880) ≈ *Plethodontohyla* 1882 (*notosticta** 1877) ≈ *Anilany** 2016 (*helenae** 2000) ≈ *Mini*° 2019 (*mum*° 2019)**{100}**

G.28.287. *Mantipus*[1] 1883 (*hildebrandti* 1833 ≈ *inguinalis** 1882) ≈ *Phrynocara* 1883 (*tuberatum** 1883) **{96}**

F.20.43. Subtribus *Platypelina* **nov.**, DOP.da.f082-00 **{100}**

G.28.288. *Platypelis*[2] 1882 (*cowanii*° 1882) ≈ *Platyhyla* 1889 (*grandis** 1889) ≈ *Paracophyla* 1951 (*tuberculata* 1951 ≈ *barbouri** 1940)

F.20.44. Subtribus *Rhombophrynina* Noble, 1931.na.f009-01 **{100}**

G.28.289. *Rhombophryne** 1880 (*testudo** 1880) ≡ *Rhombofryne* 1898 ≈ *Stumpffia* 1881 (*psologlossa** 1881) ≈ *Mantiphrys* 1895 (*laevipes** 1895) ≡ *Mantophrys* 1909

F.19.49. Tribus *Scaphiophrynini* Laurent, 1946.la.f002-03 **{99}**

G.28.290. *Paradoxophyla** 1991 (*palmata** 1974) **{100}**

G.28.291. *Scaphiophryne** 1882 (*marmorata** 1882) ≡ *Scafiorhina* 1898 ≈ *Pseudohemisus*° 1895 (*obscurus*° 1895) **{100}**

F.18.51. Subfamilia *Gastrophryninae* Fitzinger, 1843.fa.f011-02 **{100}**

F.19.50. Tribus *Chiasmocleini* **nov.**, DOP.da.f083-00 **{100}**

G.28.292. *Chiasmocleis** 1904 (*albopunctatum** 1885) ≈ *Nectodactylus* 1924 (*spinulosus* 1924 ≈ *leucosticta** 1888)

G.29.001. *Chiasmocleis** 1904 (*albopunctatum** 1885) ≈ *Nectodactylus* 1924 (*spinulosus* 1924 ≈ *leucosticta** 1888) **{93}**

G.29.002. *Relictocleis*° **nov.** (*gnoma*° 2004) ≡ *Relictus* 2018 **AN** ≡ *Relictus* 2019 **AN** ≡ *Unicus* 2019*a* **AN** ≡ *Unicus* 2019*b* **AN**

G.29.003. *Syncope** 1973 (*antenori** 1973) **{93}**

F.19.51. Tribus *Ctenophrynini* **nov.**, DOP.da.f084-00 **{100}**

G.28.293. *Ctenophryne** 1904 (*geayi** 1904) ≈ *Glossostoma* 1901 **JH** (*aterrimum*° 1900) ≡ *Nelsonophryne* 1987 ≈ *Melanophryne* 2007 (*carpish*° 2002)

F.19.52. Tribus *Gastrophrynini* Fitzinger, 1843.fa.f011-03 **{100}**

F.20.45. Subtribus *Dasypopina* **nov.**, DOP.da.f085-00 **{100}**

G.28.294. *Dasypops** 1924 (*schirchi** 1924)

G.28.295. *Myersiella*[1] 1954 (*subnigrum* 1920 ≈ *microps** 1841)

F.20.46. Subtribus *Gastrophrynina* Fitzinger, 1843.fa.f011-04 **{99}**

F.21.31. Infratribus *Arcovomerinia* **nov.**, DOP.da.f086-00

G.28.296. *Arcovomer** 1954 (*passarellii** 1954)

F.21.32. Infratribus *Dermatonotinia* **nov.**, DOP.da.f087-00

G.28.297. *Dermatonotus** 1904 (*muelleri** 1885)

F.21.33. Infratribus *Engystomatinia* Bonaparte, 1850.bb.f009-08 **{100}**

G.28.298. *Engystoma** 1826 (*ovalis** 1799) ≡ *Systoma* 1830 ≡ *Engistoma* 1904 **AM** ≡ *Elachistocleis* 1927 ≈ *Microps* 1828 **JH** (*unicolor* 1828 ≈ *ovalis** 1799) ≡ *Stenocephalus* 1838 **JH** ≈ *Relictivomer* 1954 (*pearsei*° 1914)

F.21.34. Infratribus *Gastrophrynina* Fitzinger, 1843.fa.f011-05 **{100}**

G.28.299. *Gastrophryne*[1] 1843 (*rugosum* 1841 ≈ *carolinense** 1836) **{99}**

G.28.300. *Hypopachus** 1867 (*seebachii* 1867 ≈ *variolosum** 1866) **{91}**

F.21.35. Infratribus *Hamptophrynina* **nov.**, DOP.da.f088-00

G.28.301. *Hamptophryne** 1954 (*boliviana** 1927) ≈ *Altigius*° 1995 (*alios*° 1995)

F.20.47. Subtribus *Stereocyclopina* **nov.**, DOP.da.f089-00

G.28.302. *Stereocyclops** 1870 (*incrassatus** 1870) ≈ *Emydops* 1920 **JH** (*hypomelas* 1920 ≈ *incrassatus** 1870) ≡ *Ribeirina* 1934 ≈ *Hyophryne* 1954 (*histrio*° 1954)

F.18.52. Subfamilia *Hoplophryninae* Noble, 1931.na.f016-00 **{100}**

G.28.303. *Hoplophryne** 1928 (*uluguruensis** 1928) **{100}**

G.28.304. *Parhoplophryne*° 1928 (*usambarica*° 1928)

F.18.53. Subfamilia *Kalophryninae* Mivart, 1869.ma.f003-01 **{100}**

G.28.305. *Kalophrynus** 1838 (*pleurostigma** 1838) ≡ *Calophryne* 1843 ≡ *Calliphryne* 1847 ≡ *Calophrynus* 1863 ≡ *Calofrynus* 1898 ≈ *Berdmorea* 1872 (*interlineatum** 1855)

F.18.54. Subfamilia *Melanobatrachinae* Noble, 1931.na.f015-00

G.28.306. *Melanobatrachus** 1878 (*indicus** 1878)

F.18.55. Subfamilia *Microhylinae* ||Fitzinger, 1843.fa.f012||-Noble, 1931.na.f001-00 **{100}**

F.19.53. Tribus *Dyscophini* Boulenger, 1882.bb.f001-05 **{100}**

G.28.307. *Dyscophus** 1872 (*insularis** 1872)

F.19.54. Tribus *Microhylini* ||Fitzinger, 1843.fa.f012||-Noble, 1931.na.f001-07 **{100}**

F.20.48. Subtribus *Chaperinina* Peloso[+10], 2016.pa.f002-01

G.28.308. *Chaperina** 1892 (*fusca** 1892)

F.20.49. Subtribus *Hylaedactylina* Fitzinger, 1843.fa.f009-05 **{100}**

F.21.36. Infratribus *Cacopinia* Noble, 1931.na.f011-01 **{99}**

G.28.309. *Uperodon*[1] 1841 (*marmoratum* 1837 ≈ *systoma** 1799) ≡ *Hyperodon* 1847 ≡ *Cacopus* 1864 ≡ *Hyperoodon* 1902 ≡ *Hiperoodon* 1902 **AN** ≈ *Pachybatrachus* 1868 (*petersii* 1868 ≈ *systoma** 1799) ≈ *Ramanella* 1925 (*symbioitica* 1925 ≈ *variegata** 1872)

F.21.37. Infratribus *Hylaedactylinia* Fitzinger, 1843.fa.f009-06 **{100}**

G.28.310. *Kaloula** 1831 (*pulchra** 1831) ≡ *Calohyla* 1863 ≡ *Callula* 1864 ≡ *Kalooula* 1895 **AM** ≈ *Hyladactylus* 1838 **LT** (*baleatus** 1836) ≡ *Hyladactyla* 1838 **LP** ≡ *Hylaedactylus* 1841 ≡ *Hylaedactyla* 1841 **AN** ≡ *Hylodactylus* 1847 ≡ *Pelida* 1848 ≈ *Plectropus* 1841 (*pictus** 1841) ≈ *Holonectes* 1863 (*conjunctus** 1863) ≡ *Hylophryne* 1864 **AN** ≡ *Hyledactylus* 1895 ≈ *Cacopoides* 1908 (*borealis** 1908)

F.21.38. Infratribus *Phrynellinia* **nov.**, DOP.da.f090-00 **{100}**

G.28.311. *Metaphrynella** 1934 (*pollicaris** 1890) **{100}**

G.28.312. *Phrynella** 1887 (*pulchra** 1887)

F.20.50. Subtribus *Microhylina* ||Fitzinger, 1843.fa.f012||-Noble, 1931.na.f001-08 **{100}**

G.28.313. *Glyphoglossus** 1869 (*molossus** 1869) ≡ *Glyfoglossus* 1898 ≈ *Calluella* 1872 (*guttulata** 1856) ≈ *Colpoglossus* 1904 (*brooksii*° 1904) ≈ *Dyscophina* 1905 (*volzi*° 1905) ≈ *Calliglutus* 1916 (*smithi*° 1916) **{100}**

G.28.314. *Microhyla** 1838 (*achatina** 1838) ≡ *Micrhyla* 1841 ≡ *Dendromanes* 1848 ≡ *Mycrohyla* 1895 ≈ *Siphneus* 1843 **JH** (*ornatum** 1841) ≡ *Diplopelma* 1859 ≈ *Scaptophryne* 1861 **AN** (*pulchrum** 1861) ≈ *Copea* 1864 (*fulva* 1864 ≈ *rubrum** 1853) ≈ *Ranina* 1872 (*symetrica* 1872 ≈ *pulchrum** 1861) **{96}**

F.20.51. Subtribus *Micrylettina* **nov.**, DOP.da.f091-00 **{100}**

G.28.315. *Micryletta** 1987 (*inornata** 1890)

G.28.316. *Mysticellus*° 2019 (*franki*° 2019)

F.18.56. Subfamilia *Otophryninae* Wassersug[+1], 1987.wa.f001-00 **{98}**

G.28.317. *Otophryne** 1900 (*robusta** 1900) **{100}**

G.28.318. *Synapturanus** 1954 (*mirandaribeiroi** 1975) **{100}**

F.17.30. Familia *Phrynomeridae* Noble, 1931.na.f013-01 **{100}** [S] [N]

G.28.319. *Phrynomantis** 1867 (*bifasciatus** 1847) ≡ *Brachymerus* 1847 **JH** ≡ *Phrynomerus* 1926 ≈ *Fichteria* 1941 (*somalica*° 1941)

C.11.04. Subphalanx **Gastrechmia** Cope, 1867.ca.c02-03 **{100}**

F.14.08. Superfamilia *Arthroleptoidea* Mivart, 1869.ma.f011-05 **{100}**

F.17.31. Familia *Arthroleptidae* Mivart, 1869.ma.f011-02 **{100}** [S] [P]

F.18.57. Subfamilia *Arthroleptinae* Mivart, 1869.ma.f011-01 **{100}**

G.28.320. *Arthroleptis** 1849 (*wahlbergii** 1849) ≈ *Cardioglossa* 1900 (*gracilis** 1900) ≈ *Schoutedenella* 1921 (*globosa* 1921 ≈ *xenochirus*° 1905) ≈ *Abroscaphus* 1941 (*adolfifriederici** 1911) ≈ *Arthroleptulus* 1941 (*xenodactylus** 1909) ≈ *Coracodichus* 1941 (*whytii* 1897 ≈ *stenodactylus** 1893)

F.18.58. Subfamilia *Astylosterninae* Noble, 1927.f002-00 **{92}**

F.19.55. Tribus *Astylosternini* Noble, 1927.f002-03 **{95}**

G.28.321. *Astylosternus** 1898 (*diadematus** 1898) ≈ *Dilobates* 1900 (*platycephalus* 1900 ≈ *batesi** 1900) ≈ *Gampsosteonyx* 1900 (*batesi** 1900) ≈ *Trichobatrachus* 1900 (*robustus** 1900) **{96}**

G.28.322. *Nyctibates** 1904 (*corrugatus** 1904)

G.28.323. *Scotobleps** 1900 (*gabonicus** 1900)

F.19.56. Tribus *Leptodactylodontini* **nov.**, DOP.da.f092-00 **{100}**

G.28.324. *Leptodactylodon*[3] 1903 (*ovatus*° 1903) ≈ *Bulua* 1904 (*ventrimarmorata*° 1904)

F.18.59. Subfamilia *Leptopelinae* Laurent, 1972.la.f002-01 **{100}**

G.28.325. *Leptopelis*[2] 1859 (*aubryi*° 1856) ≈ *Pseudocassina* 1924 (*ocellata* 1923 ≈ *gramineus*° 1898) ≈ *Elaphromantis* 1941 (*notatus*° 1875) ≈ *Heteropelis* 1941 (*parkeri*° 1928) ≈ *Taphriomantis* 1941 (*bocagii** 1865) ≈ *Habrahyla* 1961 (*eiselti* 1961 ≈ *notatus*° 1875) ≈ *Pelopeltis* 1986 (*bufonides*° 1967)

F.17.32. Familia *Hyperoliidae* Laurent, 1943.lb.f001-01 **{100}** [Q]

F.18.0b. Subfamilia *Incertae sedis*

G.28.326. *Arlequinus*° 1988 (*krebsi*° 1938)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.327. *Callixalus*° 1950 (*pictus*° 1950)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.328. *Chrysobatrachus*° 1951 (*cupreonitens*° 1951)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.60. Subfamilia *CRYPTOTHYLACINAE* **nov.**, DOP.da.f093-00
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.329. *Cryptothylax** 1950 (*greshoffii** 1889)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.61. Subfamilia *HYPEROLIINAE* Laurent, 1943.lb.f001-00 **{99}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.57. Tribus *ACANTHIXALINI* **nov.**, DOP.da.f094-00 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.330. *Acanthixalus** 1944 (*spinosus** 1875)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.58. Tribus *HYPEROLIINI* Laurent, 1943.lb.f001-03 **{96}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.52. Subtribus *HYPEROLIINA* Laurent, 1943.lb.f001-04 **{94}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.331. *Hyperolius** 1842 (*horstockii** 1837) ≡ *Eucnemis* 1838 **JH** ≡ *Epipole* 1848 ≡ *Rappia* 1865 ≈ *Crumenifera* 1862 (*pusilla** 1862) ≈ *Eubates* 1864 **AN** (*heuglini* 1864 ≈ *pusilla** 1862) ≈ *Nesionixalus* 1976 (*thomensis** 1886) ≈ *Alexteroon* 1988 (*obstetricans** 1931) ≈ *Chlorolius* 1988 (*koehleri*° 1931)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.53. Subtribus *MORERELLINA* **nov.**, DOP.da.f095-00
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.332. *Morerella** 2009 (*cyanophthalma** 2009)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.54. Subtribus *OPISTHOTHYLACINA* **nov.**, DOP.da.f096-00
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.333. *Opisthothylax** 1966 (*immaculatus** 1903) ≡ *Opisthothylax* 1962 **AN**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.55. Subtribus *TACHYCNEMINA* Channing, 1989.ca.f001-01 **{99}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21.39. Infratribus *AFRIXALINIA* **nov.**, DOP.da.f097-00 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.334. *Afrixalus** 1944 (*fornasinii** 1849) ≈ *Laurentixalus* 2012 (*laevis** 1930)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21.40. Infratribus *TACHYCNEMINIA* Channing, 1989.ca.f001-02 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.335. *Heterixalus** 1944 (*madagascariensis** 1841) **{97}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.336. *Tachycnemis** 1843 (*seychellensis** 1841) ≈ *Megalixalus* 1869 (*infrarufus* 1869 ≈ *seychellensis** 1841)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.59. Tribus *KASSININI* Laurent, 1972.la.f001-00 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.337. *Hylambates** 1853 (*maculatus** 1853) ≈ *Phlyctimantis* 1950 (*leonardi** 1906) **{92}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.338. *Kassina** 1853 (*senegalensis** 1841) ≡ *Eremiophilus* 1843 **CI** ≡ *Cassina* 1864 **AN** ≡ *Cassina* 1882 ≈ *Cassiniopsis* 1937 (*kuvangensis*° 1937) **{98}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.339. *Kassinula*° 1940 (*wittei*° 1940)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.340. *Paracassina*° 1907 (*obscura*° 1895) ≈ *Rothschildia* 1905 **LT-JH** (*kounhiensis*° 1905) ≡ *Rotschildia* 1905 **LP** ≡ *Tornierella* 1924 ≡ *Mocquardia* 1931
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.341. *Semnodactylus*[1] 1939 (*thabanchuensis* 1939 ≈ *wealii** 1882) ≈ *Notokassina* 1985 (*wealii** 1882)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.14.09. Superfamilia *BREVICIPITOIDEA* Bonaparte, 1850.bb.f012-10 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.33. Familia *BREVICIPITIDAE* Bonaparte, 1850.bb.f012-01 **{100}** [S] [P]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.62. Subfamilia *BREVICIPITINAE* Bonaparte, 1850.bb.f012-02 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.342. *Breviceps*[3] 1820 (*gibbosa*° 1758)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.63. Subfamilia *CALLULININAE* **nov.**, DOP.da.f098-00 **{97}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.343. *Balebreviceps** 1989 (*hillmani** 1989)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.344. *Callulina** 1911 (*kreffti** 1911) **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.345. *Probreviceps** 1931 (*macrodactylus** 1926) **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.346. *Spelaeophryne** 1924 (*methneri** 1924)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.34. Familia *HEMISOTIDAE* Cope, 1867.ca.f002-05 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.347. *Hemisus*[2] 1859 (*guttatum*° 1842) ≈ *Kakophrynus* 1863 (*sudanensis* 1863 ≈ *marmoratum** 1854) ≡ *Cacophrynus* 1867
_ _ _ _ _ _ _ _ _ _ _ C.11.05. Subphalanx **PANANURA** **nov.**, DOP.da.c07-00 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ C.12.03. Infraphalanx **ECAUDATA** Scopoli, 1777.sa.c06-01 **{92}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.14.10. Superfamilia *ODONTOBATRACHOIDEA* Barej[+5], 2014.ba.f001-01
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.35. Familia *ODONTOBATRACHIDAE* Barej[+5], 2014.ba.f001-00 [M]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.348. *Odontobatrachus** 2014 (*natator** 1905)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.14.11. Superfamilia *PHRYNOBATRACHOIDEA* Laurent, 1941.lb.f001-02 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.36. Familia *PHRYNOBATRACHIDAE* Laurent, 1941.lb.f001-01 [M]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.349. *Phrynodon** 1935 (*sandersoni** 1935) **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.350. *Phrynobatrachus*[1] 1862 (*natalensis* 1862 ≈ *natalensis** 1849) ≈ *Stenorhynchus* 1849 **JH** (*natalensis** 1849) ≡ *Leptoparius* 1863 ≈ *Heteroglossa* 1858 **JH** (*africana** 1858) ≡ *Dimorphognathus* 1906 ≈ *Hemimantis* 1863 (*calcaratus** 1863) ≡ *Pseudarthroleptis* 1938 ≈ *Hylarthroleptis* 1925 (*accraensis** 1925) ≈ *Pararthroleptis* 1925 (*nanus*° 1925) ≈ *Micrarthroleptis* 1938 (*pygmaeus*°

1925) **{100}**

F.14.12. Superfamilia *Ranoidea* Batsch, 1796.ba.f001-28 **{92}**

F.15.05. Epifamilia *Conrauoidae* Dubois, 1992.da.f001-03 **{100}**

F.17.37. Familia *Conrauidae* Dubois, 1992.da.f001-02 **{100}** [M]

G.28.351. *Conraua** 1908 (*robusta** 1908) ≡ *Conrana* 1910 ≈ *Pseudoxenopus* 1927 (*alleni** 1927) ≈ *Gigantorana* 1931 (*goliath** 1906) ≈ *Paleorana* 1931 AN (*beccarii°* 1911) ≡ *Hydrobatrachus* 1962

F.15.06. Epifamilia *Ericabatrachoidae* **nov.**, DOP.da.f099-00

F.17.38. Familia *Ericabatrachidae* **nov.**, DOP.da.f099-01 [M]

G.28.352. *Ericabatrachus** 1991 (*baleensis** 1991)

F.15.07. Epifamilia *Micrixaloidae* Dubois[+2], 2001.db.f001-02 **{100}**

F.17.39. Familia *Micrixalidae* Dubois[+2], 2001.db.f001-01 [M]

G.28.353. *Micrixalus** 1888 (*fuscus** 1882)

F.15.08. Epifamilia *Petropedetoidae* Noble, 1931.na.f006-03 **{100}**

F.17.40. Familia *Petropedetidae* Noble, 1931.na.f006-02 [M]

G.28.354. *Arthroleptides** 1911 (*martiensseni** 1911) **{100}**

G.28.355. *Petropedetes** 1874 (*cameronensis** 1874) ≈ *Tympanoceros* 1895 (*newtoni* 1895 ≈ *johnstoni** 1888) **{100}**

F.15.09. Epifamilia *Pyxicephaloidae* Bonaparte, 1850.bb.f005-04 **{100}**

F.17.41. Familia *Cacosternidae* Noble, 1931.na.f008-01 **{100}** [N] [M]

F.18.64. Subfamilia *Anhydrophryninae* **nov.**, DOP.da.f100-00

G.28.356. *Anhydrophryne** 1919 (*rattrayi** 1919)

F.18.65. Subfamilia *Cacosterninae* Noble, 1931.na.f008-00 **{92}**

F.19.60. Tribus *Cacosternini* Noble, 1931.na.f008-02 **{93}**

F.20.56. Subtribus *Cacosternina* Noble, 1931.na.f008-03 **{100}**

G.28.357. *Cacosternum** 1887 (*nanum** 1887) **{92}**

G.28.358. *Microbatrachella** 1926 (*capensis** 1910) ≡ *Microbatrachus* 1926 JH **{100}**

F.20.57. Subtribus *Poyntonina* **nov.**, DOP.da.f101-00

G.28.359. *Poyntonia** 1989 (*paludicola** 1989)

F.19.61. Tribus *Natalobatrachini* **nov.**, DOP.da.f102-00 **{99}**

G.28.360. *Arthroleptella** 1926 (*lightfooti** 1910) **{100}**

G.28.361. *Natalobatrachus** 1912 (*bonebergi** 1912)

F.19.62. Tribus *Strongylopini* Scott, 2005.sa.f001-01 **{98}**

G.28.362. *Amietia** 1987 (*vertebralis** 1927) ≈ *Afrana* 1992 (*fuscigula** 1841) **{100}**

G.28.363. *Strongylopus** 1838 (*fasciata** 1849) **{91}**

F.18.66. Subfamilia *Tomopterninae* Dubois, 1987.da.f003-01 **{100}**

G.28.364. *Nothophryne°* 1963 (*broadleyi°* 1963)

G.28.365. *Tomopterna** 1841 (*delalandii** 1838) **{100}**

F.17.42. Familia *Pyxicephalidae* Bonaparte, 1850.bb.f005-03 **{100}** [M]

G.28.366. *Aubria** 1917 (*subsigillata** 1856) ≡ *Aubrya* 1964 AM

G.28.367. *Pyxicephalus** 1838 (*adspersus** 1838) ≈ *Maltzania* 1881 (*bufonia* 1881 ≈ *edulis** 1854) ≈ *Phrynopsis* 1893 JH (*boulengerii* 1893 ≈ *edulis** 1854) **{99}**

F.15.10. Epifamilia *Ranoidae* Batsch, 1796.ba.f001-29 **{93}**

F.16.03. Apofamilia *Ceratobatracheidae* Boulenger, 1884.ba.f001-04 **{100}**

F.17.43. Familia *Ceratobatrachidae* Boulenger, 1884.ba.f001-00 **{100}** [N] [M] [T]

F.18.67. Subfamilia *Alcalinae* Brown[+4], 2015.ba.f002-01 [N] [M] [T]

G.28.368. *Alcalus*[3] 2015 (*mariae°* 1954)

F.18.68. Subfamilia *Ceratobatrachinae* Boulenger, 1884.ba.f001-00 **{100}** [N] [M] [T]

G.28.369. *Cornufer** 1838 (*vitiensis** 1853) ≡ *Phyllodytes* 1848 JH ≡ *Halophila* 1853 JH ≈ *Batrachylodes* 1887 (*vertebralis** 1887) ≈ *Ceratobatrachus* 1884 (*guentheri** 1884) ≈ *Discodeles* 1918 (*guppyi** 1884) ≈ *Palmatorappia* 1927 (*solomonis* 1920 ≈ *heffernani°* 1928) ≈ *Hypsirana* 1928 (*heffernani°* 1928) ≈ *Aenigmanura* 2015 (*schmidti°* 1968) ≈ *Potamorana* 2015 (*bufoniformis°* 1884) **{100}**

G.28.370. *Platymantis*[1] 1859 (*plicifera* 1858 ≈ *corrugatus** 1853) ≈ *Platymantis* 1858 AN (*corrugatus** 1853) ≈ *Lahatnanguri* 2015 (*levigatus°* 1974) ≈ *Lupacolus* 2015 (*dorsalis** 1853) ≈ *Tahananpuno* 2015 (*guentheri** 1882) ≈ *Tirahanulap* 2015 (*hazelae** 1920) **{100}**

F.18.69. Subfamilia *Liuraninae* Fei[+2], 2010.ma.f010-02 [N] [M] [T]

G.28.371. *Liurana*° 1987 (*xizangensis*° 1977)

F.16.04. Apofamilia *Dicroglosseidae* Dubois, 1987.da.f004-05 **{100}**

F.17.44. Familia *Dicroglossidae* Dubois, 1987.da.f004-03 **{100}** [N] [M]

F.18.0c. Subfamilia *Incertae sedis*

G.28.372. *Chrysopaa*° 2006 (*sternosignata*° 1885)

F.18.70. Subfamilia *Dicroglossinae* Dubois, 1987.da.f004-02 **{100}**

F.19.63. Tribus *Dicroglossini* Dubois, 1987.da.f004-00 **{100}**

F.20.58. Subtribus *Dicroglossina* Dubois, 1987.da.f004-06 **{99}**

G.28.373. *Euphlyctis*[1] 1843 (*leschenaultii* 1841 ≈ *cyanophlyctis** 1799) ≈ *Dicroglossus* 1860 (*adolfi* 1860 ≈ *cyanophlyctis** 1799) **{100}**

G.28.374. *Hoplobatrachus*[1] 1863 (*ceylanicus* 1863 ≡ *crassus** 1853) ≡ *Hoplobactrachus* 1868 AM ≈ *Hydrostentor* 1861 AN (*pantherina* 1867 ≈ *chinensis** 1765) ≈ *Ranosoma* 1924 (*schereri* 1924 ≈ *occipitalis** 1859) ≈ *Tigrina* 1990 JH (*tigerina** 1802) **{100}**

G.28.375. *Phrynoderma*[1] 1843 (*cutipora* 1841 ≈ *hexadactyla** 1834) **{100}**

F.20.59. Subtribus *Nannophryina* Fei[+2], 2010.fa.f006-01 **{100}**

G.28.376. *Nannophrys** 1869 (*ceylonensis** 1869) ≡ *Nannofrys* 1898 ≈ *Trachucephalus* 1874 (*ceylanicus* 1874 ≈ *ceylonensis** 1869) ≡ *Trachycephalus* 1875 JH ≡ *Fergusonia* 1878

F.19.64. Tribus *Fejervaryini* Fei[+2], 2010.fa.f005-c0 **{100}**

G.28.377. *Fejervarya** 1915 (*limnocharis** 1829) **{100}**

G.28.378. *Minervarya** 2001 (*sahyadris** 2001) ≈ *Zakerana* 2011 (*syhadrensis** 1919) **{100}**

G.28.379. *Sphaerotheca*[1] 1859 (*strigata* 1859 ≈ *breviceps** 1799) ≡ *Sphaeroteca* 1987 **{100}**

F.18.71. Subfamilia *Limnonectinae* Dubois, 1992.da.f002-02 **{100}**

G.28.380. *Limnonectes** 1843 (*kuhlii** 1838) ≈ *Elachyglossa* 1916 (*gyldenstolpei** 1916) ≈ *Bourretia* 1987 (*toumanoffi* 1941 ≈ *dabana** 1922) ≈ *Taylorana* 1987 (*hascheanus** 1870)

F.18.72. Subfamilia *Painae* Dubois, 1992.da.f003-02 **{100}**

F.19.0a. Tribus *Incertae sedis*

G.28.381. *Allopaa*° 2006 (*hazarensis*° 1979)

F.19.65. Tribus *Paini* Dubois, 1992.da.f003-00 **{100}**

F.20.60. Subtribus *Chaparanina* **nov.**, DOP.da.f103-00 **{96}**

F.21.0a. Infratribus *Incertae sedis*

G.28.382. *Ombropaa*° **nov.** (*gammii*° 1871)

F.21.41. Infratribus *Chaparaninia* **nov.**, DOP.da.f103-01 **{93}**

G.28.383. *Chaparana*[1] 1939 (*fansipani* 1939 ≈ *aenea** 1922) ≈ *Unculuana* 1990 (*unculuanus** 1960) **{96}**

G.28.384. *Gynandropaa** 1992 (*yunnanensis** 1870)

F.21.42. Infratribus *Diplopainia* **nov.**, DOP.da.f104-00 **{98}**

G.28.385. *Diplopaa** **nov.** (*taihangnicus** 2002)

F.21.43. Infratribus *Feiraninia* **nov.**, DOP.da.f105-00

G.28.386. *Feirana** 1992 (*quadranus** 1960) ≡ *Quadrana* 1990 JH

F.20.61. Subtribus *Paina* Dubois, 1992.da.f003-03 **{94}**

G.28.387. *Nanorana** 1896 (*pleskei** 1896) ≈ *Montorana* 1924 (*ahli* 1924 ≈ *pleskei** 1896) ≈ *Altirana* 1927 (*parkeri** 1927) **{100}**

G.28.388. *Paa** 1975 (*liebigii** 1860) ≈ *Ombrana* 1992 (*sikimensis*° 1870) ≈ *Maculopaa* 2010 (*maculosa** 1960) **{100}**

F.19.66. Tribus *Quasipaini* Fei[+2], 2010.fa.f007-00 **{98}**

F.20.62. Subtribus *Annandiina* Fei[+2], 2010.fa.f008-01

G.28.389. *Annandia** 1992 (*delacouri** 1928)

F.20.63. Subtribus *Eripaina* **nov.**, DOP.da.f106-00

G.28.390. *Eripaa** 1992 (*fasciculispina** 1970)

F.20.64. Subtribus *Quasipaina* Fei[+2], 2010.fa.f007-01 **{100}**

G.28.391. *Quasipaa** 1992 (*boulengeri** 1889) **{90}**

G.28.392. *Yerana** 2006 (*yei** 2002)

F.17.45. Familia *Occidozygidae* Fei[+2], 1990.fa.f002-03 **{100}** [N] [M]

F.18.73. Subfamilia *Ingeraninae* Fei[+2], 2010.fa.f009-01 **{100}**

G.28.393. *Ingerana** 1987 (*tenasserimensis** 1892)

F.18.74. Subfamilia *Occidozyginae* Fei[+2], 1990.fa.f002-00 **{98}**

G.28.394. *Frethia** **nov.** (*laevis** 1859) ≡ *Oxyrhachis** 1916 AN

G.28.395. *Occidozyga** 1822*a* (*lima** 1829) ≡ *Ooeidozyga* 1822*b* ≡ *Oxyglossus* 1838 JH ≡ *Rhomboglossus* 1841 AN ≈ *Houlema* 1831 (*obscura* 1831 ≈ *lima** 1829) ≈ *Osteosternum* 1929 (*amoyense* 1929 ≈ *lima** 1829)

G.28.396. *Oreobatrachus** 1896 (*baluensis** 1896)

G.28.397. *Phrynoglossus** 1867 (*martensii** 1867) ≈ *Microdiscopus* 1877 (*sumatranus*° 1877) **{100}**

F.16.05. Apofamilia *Nyctibatracheidae* Blommers-Schlösser, 1993.ba.f001-02 **{97}**

F.17.46. Familia *Astrobatrachidae* Vijayakumar[+8], 2019.va.f001-00 [N] [M]

G.28.398. *Astrobatrachus*° 2019 (*kurichiyana*° 2019)

F.17.47. Familia *Nyctibatrachidae* Blommers-Schlösser, 1993.ba.f001-01 [N] [M]

G.28.399. *Lankanectes** 2001 (*corrugata** 1863)

G.28.400. *Nyctibatrachus** 1882 (*major** 1882) ≈ *Nannobatrachus* 1882 (*beddomii** 1882) **{100}**

F.16.06. Apofamilia *Raneidae* Batsch, 1796.ba.f001-32 **{97}**

F.17.48. Familia *Ranidae* Batsch, 1796.ba.f001-05 **{100}** [Q]

F.18.75. Subfamilia *Raninae* Batsch, 1796.ba.f001-23 **{100}**

F.19.0b. Tribus *Incertae sedis*

G.28.401. *Pterorana*° 1986 (*khare*° 1986)

F.19.67. Tribus *Meristogenyini* Fei[+2], 2010.fa.f003-02 **{100}**

G.28.402. *Clinotarsus*[1] 1869 (*robustus* 1869 ≈ *curtipes** 1853) ≡ *Pachybatrachus* 1869 JH ≈ *Nasirana* 1992 (*alticola** 1882) **{100}**

G.28.403. *Meristogenys** 1991 (*jerboa** 1872) ≈ *Huia* 1991 (*cavitympanum** 1893) **{100}**

G.28.404. *Sumaterana*° 2018 (*crassiovis*° 1920)

F.19.68. Tribus *Ranini* Batsch, 1796.ba.f001-30 **{99}**

F.20.†0a. Subtribus *Incertae sedis* †

G.28.†105. *Ranavus*° 1885 † (*scarabellii*° 1885 †)

F.20.65. Subtribus *Amolopina* Fei[+2], 1990.fa.f001-03 **{100}**

G.28.405. *Amolops*[2] 1865 (*afghana*° 1859) ≈ *Amo* 1992 (*larutensis** 1899)

F.20.66. Subtribus *Ranina* Batsch, 1796.ba.f001-33 **{95}**

F.21.44. Infratribus *Pelophylacinia* **nov.**, DOP.da.f107-00 **{100}**

G.28.406. *Pelophylax** 1843 (*esculenta** 1758) ≈ *Asphaerion* 1847 (*reussi*° 1847 ‡) ≈ *Baliopygus* 1891 (*ridibunda** 1771) ≡ *Bilaterana* 1985

F.21.45. Infratribus *Raninia* Batsch, 1796.ba.f001-34 **{98}**

F.22.19. Hypotribus *Glandiraninoa* Fei[+2], 2010.fa.f016-01

G.28.407. *Glandirana** 1990 (*minima** 1979)

F.22.20. Hypotribus *Limnodytinoa* Fitzinger, 1843.fa.f001-02 **{97}**

G.28.408. *Abavorana** 2015 (*luctuosus** 1871)

G.28.409. *Hylarana** 1838 (*erythraea** 1827) ≡ *Limnodytes* 1841 ≡ *Zoodioctes* 1848 ≡ *Ranhyla* 1858 AN ≡ *Hylorana* 1864 ≈ *Hydrophylax* 1843 (*malabarica** 1838) ≈ *Tenuirana* 1990 (*taipehensis** 1909) ≈ *Amnirana* 1992 (*amnicola*° 1977) ≈ *Chalcorana* 1992 (*chaconota** 1837) ≈ *Humerana* 1992 (*humeralis*° 1887) ≈ *Papurana* 1992 (*papua** 1830) ≈ *Pulchrana* 1992 (*signatus** 1872) ≈ *Sylvirana* 1992 (*nigrovittatus** 1856) ≈ *Tylerana* 1992 (*jimiensis** 1856) ≈ *Boulengerana* 2010 (*guentheri** 1882) ≈ *Indosylvirana* 2015 (*flavescens*° 1853) ≈ *Bijurana* 1992 (*nicobariensis** 1870) **{99}**

F.22.21. Hypotribus *Raninoa* Batsch, 1796.ba.f001-35 **{99}**

F.23.13. Clanus *Nidiranites* Fei[+2], 2010.fa.f013-01 **{100}**

G.28.410. *Babina** 1912*a* (*holsti** 1892) ≡ *Babina* 1912*b* **{100}**

G.28.411. *Nidirana*[1] 1992 (*psaltes* 1895 ≈ *okinavana** 1895) ≈ *Dianrana* 2010 (*pleuraden** 1904) **{100}**

F.23.14. Clanus *Odorranites* Fei[+2], 2010.fa.f015-01 **{100}**

G.28.412. *Odorrana** 1990 (*margaretae** 1950) ≈ *Eburana* 1992 (*narina** 1901) ≈ *Bamburana* 2005 (*versabilis** 1962) ≈ *Wurana* 2006 (*tormotus** 1977) ≈ *Matsuirana* 2010 (*ishikawae** 1901)

F.23.15. Clanus *Ranites* Batsch, 1796.ba.f001-36 **{97}**

F.24.07. Subclanus *Lithobatities* **nov.**, DOP.da.f108-00 **{100}**

G.28.413. *Aquarana** 1992 (*catesbeiana** 1802) ≡ *Conrana* 1985 JH **{100}**

G.28.414. *Boreorana** **nov.** (*sylvatica** 1825)

G.28.415. *Lithobates** 1843 (*palmipes** 1824) ≡ *Pohlia* 1867 ≈ *Ranula* 1859 JH (*gollmeri* 1859 ≈ *palmipes** 1824) ≈ *Trypheropsis* 1868 (*chrysoprasina* 1866 ≈ *warszewitschii** 1857) ≈ *Levirana*

1894 (*vibicaria** 1894) ≈ *Chilixalus* 1899 (*warszewitschii** 1857) ≈ *Anchylorana* 1942 (*moorei*° 1942 ‡) ≈ *Prana* 1985 (*pipiens** 1782) ≡ *Pantherana* 1992 ≡ *Novirana* 2005 **AN** ≈ *Sierrana* 1992 (*sierramadrensis** 1939) ≈ *Zweifelia* 1992 (*tarahumarae** 1917) ≡ *Torrentirana* 2005 ≈ *Lacusirana* 2005 (*megapoda*° 1942) ≈ *Nenirana* 2005 (*areolata** 1852) ≈ *Scurrilirana* 2005 (*berlandieri** 1854) ≈ *Stertirana* 2005 **AN** (*montezumae** 1854) **{100}**

F.24.08. Subclanus *Pseudoranities* **nov.**, DOP.da.f109-00

G.28.416. *Pseudorana** 1990 (*weiningensis** 1962)

F.24.09. Subclanus *Ranities* Batsch, 1796.ba.f001-37 **{98}**

F.25.18. Infraclanus *Liuhuranitoes* **nov.**, DOP.da.f110-00

G.28.417. *Liuhurana** 2010 (*shuchinae** 1950)

F.25.19. Infraclanus *Ranitoes* Batsch, 1796.ba.f001-38 **{96}**

G.28.418. *Amerana** 1992 (*boylii** 1854) ≈ *Aurana* 1985 **JH** (*aurora** 1852) ≡ *Aurorana* 1992 ≡ *Laurasiarana* 2005 **AN** **{100}**

G.28.419. *Rana** 1758*a* (*temporaria** 1758) ≡ *Rana* 1758*b* **AN** ≡ *Rana* 1758*c* **AN** ≡ *Gyrinus* 1783 **AN** ≡ *Ranaria* 1814 ≡ *Batracinus* 1815 **AN** ≡ *Chondrodela* 1815 **AN** ≡ *Palmirana* 1828 ≈ *Protobatrachus* 1848 (*nodicaudatus* 1848 ≈ *temporaria** 1758) ≈ *Crotaphitis* 1891 (*arvalis** 1907) ≈ *Pseudoamolops* 1997 **AN** (*sauteri** 1909) ≡ *Pseudoamolops* 2000 **{100}**

F.22.22. Hypotribus *Rugosinoa* **nov.**, DOP.da.f111-00 **{100}**

G.28.420. *Rugosa** 1990 (*rugosa** 1838)

F.22.23. Hypotribus *Sanguiraninoa* Fei[+2], 2010.fa.f017-01 **{100}**

G.28.421. *Sanguirana** 1992 (*sanguinea** 1893)

F.18.76. Subfamilia *Stauroinae* Dubois, 2005.da.f001-01 **{100}**

G.28.422. *Staurois** 1865 (*natator** 1858) ≈ *Simomantis* 1918 (*latopalmatus** 1887)

F.17.49. Familia *Rhacophoridae* ||Günther, 1858.gc.f012||-Hoffman, 1932.ha.f001-00 **{100}** [Q]

F.18.77. Subfamilia *Mantellinae* Laurent, 1946.la.f001-00 **{100}**

F.19.69. Tribus *Boophini* Vences[+1], 2001.va.f001-01 **{100}**

G.28.423. *Boophis** 1838 (*goudotii** 1838) ≡ *Elophila* 1841 **AN** ≡ *Buccinator* 1848 ≈ *Sahona* 2006 (*tephraeomystax** 1853)

F.19.70. Tribus *Laliostomini* Vences[+1], 2001.va.f002-01 **{100}**

G.28.424. *Aglyptodactylus** 1919 (*mascareniensis** 1853) **{94}**

G.28.425. *Laliostoma** 1998 (*labrosa** 1868)

F.19.71. Tribus *Mantellini* Laurent, 1946.la.f001-02 **{100}**

F.20.67. Subtribus *Mantellina* Laurent, 1946.la.f001-03 **{100}**

F.21.46. Infratribus *Blommersinia* **nov.**, DOP.da.f112-00 **{100}**

G.28.426. *Blommersia** 1992 (*blommersae** 1975) **{100}**

G.28.427. *Guibemantis** 1992 (*depressiceps** 1882) ≈ *Pandanusicola* 1994 (*bicalcaratus** 1913) **{100}**

F.21.47. Infratribus *Mantellinia* Laurent, 1946.la.f001-04 **{100}**

G.28.428. *Mantella** 1882 (*betsileo** 1872) **{97}**

G.28.429. *Wakea** 2006 (*madinika** 2002)

F.20.68. Subtribus *Mantidactylina* **nov.**, DOP.da.f113-00 **{99}**

F.21.48. Infratribus *Mantidactylinia* **nov.**, DOP.da.f113-01 **{100}**

F.22.24. Hypotribus *Boehmantinoa* **nov.**, DOP.da.f114-00

G.28.430. *Boehmantis** 2006 (*microtympanum** 1935)

F.22.25. Hypotribus *Mantidactylinoa* **nov.**, DOP.da.f113-02 **{98}**

G.28.431. *Gephyromantis** 1920 (*boulengeri** 1920) ≈ *Microphryne* 1913 **JH** (*malagasia** 1913) ≡ *Trachymantis* 1920 **JH** ≡ *Laurentomantis* 1980 ≈ *Phylacomantis* 1994 (*corvus** 1994) ≈ *Duboimantis* 2006 (*granulatus** 1881) ≈ *Vatomantis* 2006 (*webbi** 1953) ≈ *Asperomantis* 2017 (*aspera** 1882) **{100}**

G.28.432. *Mantidactylus** 1895 (*guttulata** 1881) ≈ *Brygoomantis* 1992 (*ulcerosus** 1880) ≈ *Chonomantis* 1994 (*albofrenata** 1892) ≈ *Hylobatrachus* 1943 (*cowanii** 1882) ≈ *Maitsomantis* 2006 (*argenteus** 1920) ≈ *Ochthomantis* 1994 (*femoralis** 1882) **{90}**

F.21.49. Infratribus *Spinomantinia* **nov.**, DOP.da.f115-00 **{100}**

G.28.433. *Spinomantis** 1992 (*aglavei** 1913)

F.19.72. Tribus *Tsingymantini* **nov.**, DOP.da.f116-00

G.28.434. *Tsingymantis** 2006 (*antitra** 2006)

F.18.78. Subfamilia *Rhacophorinae* ||Günther, 1858.gc.f012||-Hoffman, 1932.ha.f001-01 **{100}**

F.19.†0a. Tribus *INCERTAE SEDIS*

G.28.†106. *Indorana*° 2013 † (*prasadi*° 2013 †)

F.19.0c. Tribus *INCERTAE SEDIS*

G.28.435. *Dendrobatorana*° 1927 (*dorsalis*° 1875)

F.19.73. Tribus *BUERGERIINI* Channing, 1989.ca.f002-01 **{100}**

G.28.436. *Buergeria** 1838 (*buergeri** 1838) ≡ *Dendricus* 1848

F.19.74. Tribus *RHACOPHORINI* ||Günther, 1858.gc.f012||-Hoffman, 1932.ha.f001-03 **{100}**

F.20.69. Subtribus *RHACOPHORINA* ||Günther, 1858.gc.f012||-Hoffman, 1932.ha.f001-05 **{99}**

F.21.50. Infratribus *NYCTIXALINIA* Grosjean[+3], 2008.ga.f001-01 **{100}**

G.28.437. *Nyctixalus** 1882 (*margaritifer** 1882) ≈ *Hazelia* 1920 **JH** (*spinosa** 1920) ≡ *Edwardtayloria* 1975 **{99}**

G.28.438. *Theloderma** 1838 (*leporosa** 1838) ≈ *Phrynoderma* 1893 **JH** (*asperum** 1893) **{96}**

F.21.51. Infratribus *RHACOPHORINIA* ||Günther, 1858.gc.f012||-Hoffman, 1932.ha.f001-06 **{98}**

F.22.26. Hypotribus *GRACIXALINOA* **nov.**, DOP.da.f117-00 **{100}**

G.28.439. *Gracixalus** 2005 (*gracilipes** 1937)

F.22.27. Hypotribus *ORIXALINOA* **nov.**, DOP.da.f118-00 **{97}**

G.28.440. *Orixalus** **nov.** (*nonggangensis** 2013)

F.22.28. Hypotribus *PHILAUTINOA* Dubois, 1981.da.f001-02 **{97}**

F.23.16. Clanus *KURIXALITES* **nov.**, DOP.da.f119-00 **{100}**

G.28.441. *Kurixalus** 1999 (*eiffingeri** 1895) ≈ *Aquixalus* 2005 (*odontotarsus** 1993)

F.23.17. Clanus *MERCURANITES* **nov.**, DOP.da.f120-00 **{100}**

F.24.10. Subclanus *BEDDOMIXALITIES* **nov.**, DOP.da.f121-00

G.28.442. *Beddomixalus** 2013 (*bijui** 2011)

F.24.11. Subclanus *MERCURANITIES* **nov.**, DOP.da.f120-01 **{98}**

G.28.443. *Mercurana** 2013 (*myristicapalustris** 2013)

G.28.444. *Pseudophilautus*[2] 1943 (*temporalis*° 1864) ≈ *Kirtixalus* 1987 (*microtympanum** 1858) **{100}**

G.28.445. *Raorchestes** 2010 (*glandulosus** 1854) **{100}**

F.23.18. Clanus *NASUTIXALITES* **nov.**, DOP.da.f122-00

G.28.446. *Nasutixalus** 2016 (*medogensis** 2016) ≈ *Frankixalus* 2016 (*jerdonii*° 1876)

F.23.19. Clanus *PHILAUTITES* Dubois, 1981.da.f001-03 **{100}**

G.28.447. *Philautus** 1848 (*aurifasciata** 1837) ≡ *Orchestes* 1838 **JH** ≡ *Ixalus* 1841 **JH** ≈ *Gorhixalus* 1987 (*hosii** 1895)

F.22.29. Hypotribus *RHACOPHORINOA* ||Günther, 1858.gc.f012||-Hoffman, 1932.ha.f001-07 **{98}**

F.23.20. Clanus *CHIRIXALITES* **nov.**, DOP.da.f123-00 **{100}**

G.28.448. *Chirixalus** 1893 (*doriae** 1893) **{100}**

G.28.449. *Chiromantis** 1854 (*xerampelina** 1854) **{100}**

F.23.21. Clanus *RHACOPHORITES* ||Günther, 1858.gc.f012||-Hoffman, 1932.ha.f001-08 **{92}**

F.24.12. Subclanus *FEIHYLITIES* **nov.**, DOP.da.f124-00 **{98}**

G.28.450. *Feihyla** 2006 (*palpebralis** 1924)

F.24.13. Subclanus *POLYPEDATITIES* Günther, 1858.gc.f012-05 **{91}**

F.25.20. Infraclanus *GHATIXALITOES* **nov.**, DOP.da.f125-00 **{100}**

G.28.451. *Ghatixalus** 2008 (*variabilis** 1853)

F.25.21. Infraclanus *POLYPEDATITOES* Günther, 1858.gc.f012-06 **{99}**

G.28.452. *Polypedates** 1838 **LT** (*leucomystax** 1829) ≡ *Polypedotes* 1838 **LP** ≡ *Polypedetes* 1890 ≈ *Trachyhyas* 1843 (*rugosus* 1841 ≈ *leucomystax** 1829) **{94}**

G.28.453. *Taruga** 2010 (*fastigo** 2001) **{100}**

F.24.14. Subclanus *RHACOPHORITIES* ||Günther, 1858.gc.f012||-Hoffman, 1932.ha.f001-09 **{100}**

G.28.454. *Leptomantis** 1867 (*bimaculata** 1867) **{99}**

G.28.455. *Rhacophorus*[1] 1822 (*moschatus* 1822 ≈ *reinwardtii** 1840) ≡ *Racophorus* 1826 ≡ *Rhacoforus* 1898 ≈ *Huangixalus* 2012 (*translineatus** 1977) **{100}**

G.28.456. *Zhangixalus** 2019 (*dugritei** 1872) **{100}**

F.24.15. Subclanus *TAMIXALITIES* **nov.**, DOP.da.f126-00

G.28.457. *Tamixalus** **nov.** (*calcadensis** 1927)

F.22.30. Hypotribus *VAMPYRIINOA* **nov.**, DOP.da.f127-00 **{97}**

G.28.458. *Vampyrius** **nov.** (*vampyrus** 2010)

F.20.70. Subtribus *ROMERINA* **nov.**, DOP.da.fc128-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.459. Romerus* **nov**. (romeri* 1953) ≡ Liuixalus 2008 AN

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.16.07. Apofamilia RANIXALEIDAE Dubois, 1987.da.f005-03 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.50. Familia RANIXALIDAE Dubois, 1987.da.f005-02 [M]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.460. Indirana* 1986 (beddomii* 1875) ≈ Ranixalus 1986 (gundia° 1986)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.461. Walkerana* 2016 (diplostictus* 1876) ≡ Sallywalkerana* 2016 ≈ Indirana 1985 AN (leptodactyla* 1882)

_ _ _ _ _ _ _ _ _ _ _ C.12.04. Infraphalanx **SAVANURA nov.**, DOP.da.c08-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.51. Familia PTYCHADENIDAE Dubois, 1987.da.f002-02 **{100}** [M]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.462. Hildebrandtia* 1907 (ornatus* 1878)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.463. Lanzarana° 1982 (largeni° 1978)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.464. Ptychadena* 1917 (mascareniensis* 1841) ≡ Limnophilus 1843 JH ≡ Ptychadaena 1930 ≈ Abrana 1931 JH (schillukorum° 1908) ≡ Parkerana 1984 **{100}**

_ _ _ _ _ _ _ _ C.09.02. Epiphalanx **HELANURA nov.**, DOP.da.c09-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.52. Familia HELEOPHRYNIDAE Noble, 1931.na.f004-01 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.465. Hadromophryne* 2008 (natalensis* 1913)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.466. Heleophryne* 1898 (purcelli* 1898) ≡ Heliophryne 1975 **{100}**

_ _ _ _ _ C.06.02. Infraordo **MEDIOGYRINIA** Lataste, 1878.la.c02-02 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.14.†0b. Superfamilia INCERTAE SEDIS †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0h. Familia INCERTAE SEDIS †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†107. Callobatrachus° 1999 † (sanyanensis° 1999 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†108. Electrorana° 2018 † (limoae° 2018 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†109. Enneabatrachus° 1993 † (hechti° 1993 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†110. Opisthocoelellus° 1941 † (weigelti° 1941 †) ≈ Germanobatrachus 1941 † (beurelni 1941 ≈ weigelti° 1941 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†111. Pelophilus° 1838 † (agassizii° 1838 †) ≡ Baryboas 1848 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†06. Familia GOBIATIDAE Roček[+1], 1991.ra.f001-00 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†112. Cretasalia° 1999 † (tsybini° 1999 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†113. Gobiates° 1986 † (khermeentsavi° 1986 †) ≡ Gobiates 1983 AN

_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.14.13. Superfamilia ALYTOIDEA Fitzinger, 1843.fa.f008-07 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.53. Familia ALYTIDAE Fitzinger, 1843.fa.f008-02 **{100}** [S] [P]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†114. Kizylkuma° 1981 † (antiqua° 1981 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.467. Alytes* 1829 (obstetricans* 1768) ≡ Obstetricans 1834 ≈ Baleaphryne 1979 ‡ (muletensis* 1979)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.468. Ammoryctis* 1879 (cisternasii* 1879)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.54. Familia DISCOGLOSSIDAE Günther, 1858.gc.f004-00 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†115. Bakonybatrachus° 2012 † (fedori° 2012 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†116. Eodiscoglossus° 1954 † (santonjae° 1954 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†117. Latoglossus° 2000 † (zraus° 2000 †)99

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_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†119. Paralatonia° 2003 † (transylvatica° 2003 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.469. Discoglossus* 1837 (pictus* 1837) **{97}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.470. Latonia[3] 1845 ‡ (seyfriedi° 1845 †) ≡ Latonia 1843a AN ≡ Latonix 1843b AN ≡ Latonia 1843c AN ≈ Diplopelturus 1897 (gigantea° 1851 †) ≡ Miopelobates 1955 † ≈ Prodiscoglossus 1944 (vetaizoni° 1944 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.14.14. Superfamilia BOMBINATOROIDEA Gray, 1825.ga.f002-16 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.55. Familia BOMBINATORIDAE Gray, 1825.ga.f002-02 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†120. Eobarbourula° 2013 † (delfinoi° 2013 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.471. Barbourula* 1924 (busuangensis* 1924) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.472. Bombina* 1816 (bombina* 1760) ≈ Bombinator 1820 (igneus 1768 ≈ bombina* 1760) ≡ Bombitator 1830 ≈ Glandula 1985 JH (maximus* 1905) ≡ Grobina 1987 **{100}**

_ _ _ C.04.02. Ordo **GYMNOPHIONA** Rafinesque, 1814.ra.c01-02 **{100}**

_ _ _ _ C.05.†0b. Subordo INCERTAE SEDIS †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0i. Familia INCERTAE SEDIS †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†121. Apodops° 1972 † (pricei° 1972 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†122. Rubricacaecilia° 2001 † (monbaroni° 2001 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†07. Familia EOCAECILIIDAE Jenkins[+1], 1993.ja.f001-04 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†123. *Eocaecilia*° 1993 † (*micropodia*° 1993 †)
_ _ _ _ C.05.03. Subordo **Plesiophiona nov.**, DOP.da.c10-00 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.56. Familia *Rhinatrematidae* Nussbaum, 1977.na.f001-00 **{100}** [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.473. *Rhinatrema** 1841 (*bivittata** 1838) ≈ *Epicrionops* 1883 (*bicolor*° 1883)
_ _ _ _ C.05.04. Subordo **Pseudophiona** Blainville, 1816.ba.c11-06 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ F.14.15. Superfamilia *Caeciloidea* Rafinesque, 1814.ra.f003-|Gray, 1825.ga.f008|-18 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.57. Familia *Caeciliidae* Rafinesque, 1814.ra.f003-|Gray, 1825.ga.f008|-10 **{99}** [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.79. Subfamilia *Caeciliinae* Rafinesque, 1814.ra.f003-|Gray, 1825.ga.f008|-16 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.75. Tribus *Caeciliini* Rafinesque, 1814.ra.f003-|Gray, 1825.ga.f008|-24 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.71. Subtribus *Caeciliina* Rafinesque, 1814.ra.f003-|Gray, 1825.ga.f008|-25 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.474. *Caecilia** 1758 LT (*tentaculata** 1758) ≡ *Coecilia* 1758 LP ≡ *Coecilia* 1801 ≡ *Cecilia* 1814 ≈ *Amphiumophis* 1900 (*andicola* 1900 ≈ *tentaculata** 1758) **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.475. *Oscaecilia** 1968 (*ochrocephala** 1866)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.72. Subtribus *Typhlonectina* Taylor, 1968.ta.f002-09 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.476. *Atretochoana*° 1995 (*eiselti*° 1968)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.477. *Chthonerpeton** 1880 (*indistinctus** 1862)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.478. *Nectocaecilia*° 1968 (*petersii*° 1882)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.479. *Potamotyphlus*° 1968 LT (*kaupii*° 1859) ≡ *Potomotyphlus* 1968 LP
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.480. *Typhlonectes** 1880 (*compressicauda** 1841) ≈ *Pseudotyphlonectes* 1986 (*natans** 1880)} **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.76. Tribus *Siphonopini* Bonaparte, 1850.bb.f019-08 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.73. Subtribus *Grandisoniina* Lescure[+2], 1986.lb.f004-01 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21.0b. Infratribus *Incertae sedis*
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.481. *Sylvacaecilia*° 1987 (*grandisonae*° 1970)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21.52. Infratribus *Grandisoniinia* Lescure[+2], 1986.lb.f004-02 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.482. *Hypogeophis** 1880 (*rostrata** 1829) ≈ *Grandisonia* 1968 (*alternans** 1893)**{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.483. *Idiocranium*° 1936 (*russeli*° 1936)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.484. *Praslinia** 1909 (*cooperi** 1909)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21.53. Infratribus *Indotyphlinia* Lescure[+2], 1986.lb.f006-02 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.485. *Gegeneophis** 1880 (*carnosum** 1870) ≡ *Gegenes* 1876 JH ≡ *Gegenophis* 1882 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.486. *Indotyphlus** 1960 (*battersbyi** 1960) **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.74. Subtribus *Siphonopina* Bonaparte, 1850.bb.f019-10 **{99}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21.54. Infratribus *Dermophiinia* Taylor, 1969.ta.f002-04 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.22.31. Hypotribus *Dermophiinoa* Taylor, 1969.ta.f002-05 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.487. *Gymnopis** 1874 (*multiplicata** 1874) ≡ *Gymnophis* 1901 ≈ *Cryptopsophis* 1883 (*multiplicatus* 1883 ≈ *multiplicata** 1874) ≈ *Dermophis* 1880 (*mexicanus** 1841) ≈ *Copeicaecilia* 1968 (*syntremus*° 1866) ≡ *Copeotyphlinus* 1968 ≈ *Minascaecilia* 1983 (*sartoria* 1983 ≈ *syntremus*° 1866)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.488. *Schistometopum** 1941 (*gregorii** 1895) **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.22.32. Hypotribus *Geotrypetinoa* Lescure[+2], 1986.lb.f001-02
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.489. *Geotrypetes** 1880 (*seraphini** 1859)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21.55. Infratribus *Siphonopinia* Bonaparte, 1850.bb.f019-11 **{98}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.22.0b. Hypotribus *Incertae sedis*
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.490. *Brasilotyphlus*° 1968 (*braziliensis*° 1945)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.491. *Mimosiphonops*° 1968 (*vermiculatus*° 1968) ≈ *Pseudosiphonops*° 1968 (*ptychodermis* 1968 ≈ *vermiculatus*° 1968)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.22.33. Hypotribus *Microcaeciliinoa* **nov.**, DOP.da.f129-00 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.492. *Microcaecilia*[3] 1968 (*albiceps*° 1882) ≈ *Parvicaecilia* 1968 (*nicefori*° 1924) ≈ *Caecilita* 2009 (*iwokramae*° 2009)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.22.34. Hypotribus *Siphonopinoa* Bonaparte, 1850.bb.f019-12 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.493. *Luetkenotyphlus** 1968 (*brasiliensis** 1852) ≡ *Lutkenotyphlus* 1986
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.494. *Siphonops** 1828 (*annulata** 1820) **{93}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.80. Subfamilia *Herpelinae* Laurent, 1984.la.f001-00 **{99}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.77. Tribus *Chikilini* Kamei[+9], 2012.ka.f001-01
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.495. *Chikila** 2012 (*fulleri** 1904)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.78. Tribus *Herpelini* Laurent, 1984.la.f001-02 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.496. *Boulengerula** 1896 (*boulengeri** 1896) ≈ *Afrocaecilia* 1968 (*taitanus** 1935) **{98}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.497. *Herpele** 1880 (*squalostoma** 1834)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.58. Familia *SCOLECOMORPHIDAE* Taylor, 1969.ta.f001-00 **{100}** [N]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.498. *Crotaphatrema*[3] 1985 (*bornmuelleri*° 1899) **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.499. *Scolecomorphus*[2] 1883 (*kirkii*° 1883) ≈ *Bdellophis* 1895 (*vittatus** 1895) **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.16. Superfamilia *ICHTHYOPHIOIDEA* Taylor, 1968.ta.f001-04 **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.59. Familia *ICHTHYOPHIIDAE* Taylor, 1968.ta.f001-00 **{100}** [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.500. *Epicrium*° 1828 (*hypocyanea*° 1827) ≈ *Caudacaecilia* 1968 (*nigroflavus*° 1960) **{94}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.501. *Ichthyophis** 1826 (*glutinosa** 1758) **{100}**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.60. Familia *URAEOTYPHLIDAE* Nussbaum, 1979.na.f001-01 **{98}** [S] [N]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.502. *Uraeotyphlus*[3] 1880 (*oxyura*° 1841)
_ _ _ C.04.03. Ordo **URODELA** Duméril, 1805.da.c02-12 **{100}**
_ _ _ _ C.05.†0c. Subordo *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0j. Familia *INCERTAE SEDIS*-†
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†124. *Apricosiren*° 2002 † (*ensomi*° 2002 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†125. *Balveherpeton*° 2020*b* † (*hoennetalensis*° 2020*b* †) ≡ *Balveherpeton* 2020*a* AN
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†126. *Bishara*° 1997 † (*backa*° 1997 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†127. *Bissektia*° 1981 † (*nana*° 1981 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†128. *Comonecturoides*° 1960 † (*marshi*° 1960 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†129. *Cryptobranchichnus*° 1941 † (*infericolor*° 1941 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†130. *Egoria*° 2020 † (*malashichevi*° 2020 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†131. *Galverpeton*° 1982 † (*ibericum*° 1982 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†132. *Iridotriton*° 2005 † (*hechti*° 2005 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†133. *Jeholotriton*° 2000 † (*paradoxus*° 2000 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†134. *Kiyatriton*° 2002 † (*leshchinskiyi*° 2002 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†135. *Kulgeriherpeton*° 2018 † (*ultimum*° 2018 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†136. *Laccotriton*° 1998 † (*subsolanus*° 1998 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†137. *Marmorerpeton*° 1988 † (*kermacki*° 1988 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†138. *Nesovtriton*° 2009 † (*mynbulakensis*° 2009 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†139. *Nezpercius*° 2001 † (*dodsoni*° 2001 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†140. *Ramonellus*° 1969 † (*longispinus*° 1969 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†141. *Seminobatrachus*° 2012 † (*boltyschkensis*° 2012 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†142. *Sinerpeton*° 2001 † (*fengshanensis*° 2001 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†143. *Urupia*° 2011 † (*monstrosa*° 2011 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†144. *Valdotriton*° 1996 † (*gracilis*° 1996 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†08. Familia *HYLAEOBATRACHIDAE* Lydekker, 1889.la.f001-00 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†145. *Batrachosauroides*° 1943 † (*dissimulans*° 1943 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†146. *Hylaeobatrachus*° 1884 † (*croyii*° 1884 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†147. *Opisthotriton*° 1961 † (*kayi*° 1961 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†148. *Palaeoproteus*° 1935 † (*klatti*° 1935 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†149. *Parrisia*° 1998 † (*neocesariensis*° 1998 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†150. *Peratosauroides*° 1981 † (*problematica*° 1981 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†151. *Prodesmodon*° 1964 † (*copei*° 1964 †) ≈ *Cuttysarkus* 1964 (*mcnallyi* 1964 ≈ *copei*° 1964)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†09. Familia *KARAURIDAE* Ivachnenko, 1978.ia.f001-00 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†152. *Karaurus*° 1978 † (*sharovi*° 1978 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†153. *Kokartus*° 1988 † (*honorarius*° 1988 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†10. Familia *PROSIRENIDAE* Estes, 1969.ea.f001-00 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†154. *Prosiren*° 1958 † (*elinorae*° 1958 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†11. Familia *SCAPHERPETIDAE* Auffenberg[+1], 1959.aa.f001-05 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†155. *Hedronchus*° 1877 (*sternbergii* 1877 ≈ *tectum*° 1877) † ≈ *Scapherpeton* 1877 (*tectum*° 1877 ‡) ≈ *Hemitrypus* 1877 (*jordanianus* 1877 ≈ *tectum*° 1877 ‡)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†156. *Lisserpeton*° 1965 † (*bairdi*° 1965 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†157. *Piceoerpeton*° 1967 † (*willwoodense*° 1967 †)
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†12. Familia *TRIASSURIDAE* Ivachnenko, 1978.ia.f002-00 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†158. *Triassurus*° 1978 † (*sixtelae*° 1978 †)
_ _ _ _ C.05.05. Subordo **IMPERFECTIBRANCHIA** Hogg, 1838.ha.c03-02 **{100}**

F.17.†0k. Familia *INCERTAE SEDIS* †

G.28.†159. *Liaoxitriton*° 1998 † (*zhongjiani*° 1998 †)

G.28.†160. *Linglongtriton*° 2019 † (*daxishanensis*° 2019 †)

G.28.†161. *Nuominerpeton*° 2016 † (*aquilonaris*° 2016 †)

G.28.†162. *Pangerpeton*° 2006 † (*sinensis*° 2006 †)

G.28.†163. *Regalerpeton*° 2009 † (*weichangensis*° 2009 †)

F.17.61. Familia *CRYPTOBRANCHIDAE* Fitzinger, 1826.fb.f003-04 **{100}** [Q+] [S] [P]

G.28.†164. *Aviturus*° 1991 † (*exsecratus*° 1991 †)

G.28.†165. *Chunerpeton*° 2003 † (*tianyiensis*° 2003 †)

G.28.†166. *Eoscapherpeton*° 1981 † (*asiaticum*° 1981 †) ≡ *Mynbulakia* 1981 (*surgayi* 1981 ≈ *asiaticum*° 1981 ‡)

G.28.†167. *Horezmia*° 1981 † (*gracile*° 1981 †)

G.28.†168. *Ukrainurus*° 2013 † (*hypsognathus*° 2013 †)

G.28.†169. *Ulanurus*° 1991 † (*fractus*° 1991 †)

G.28.†170. *Zaissanurus*° 1959 † (*beliajevae*° 1959 †)

G.28.503. *Andrias*[2] 1837 ‡ (*scheuchzeri*° 1831 †) ≡ *Tritogenius* 1848 ≡ *Proteocordylus* 1831 **CI** ‡ (*diluvii* 1831 ≡ *scheuchzeri*° 1831) ≈ *Megalobatrachus* 1837 (*sielboldi* 1837 ≡ *japonicus** 1836) ≡ *Sieboldia* 1838 ≡ *Sieboldtia* 1839 ≡ *Hydrosalamandra* 1840 ≡ *Tritomegas* 1854 **JH** ≡ *Sieboldiana* 1904 ≡ *Onycopus* 1841 **AN** ≡ *Palaeotriton* 1837 (*gigantea* 1832 ≡ *scheuchzeri*° 1831) **CI** ≡ *Paleotriton* 1838 **AN** ≈ *Plicagnathus* 1917 ‡ (*matthewi*° 1917 †) **{100}**

G.28.504. *Cryptobranchus*[1] 1821 (*salamandroides* 1821 ≈ *alleganiensis** 1801) ≈ *Urotropis* 1822 (*mucronata* 1822 ≈ *alleganiensis** 1801) ≡ *Eurycea* 1832 **JH** ≈ *Protonopsis* 1824 (*horrida* 1808 ≈ *alleganiensis** 1801) ≡ *Protonophis* 1838 **AN** ≈ *Abranchus* 1825 **AN** (*alleganiensis** 1801) ≡ *Menopoma* 1825 ≈ *Salamandrops* 1830 (*gigantea* 1808 ≈ *alleganiensis** 1801) ≡ *Pelusius* 1830 **AN**

F.17.62. Familia *HYNOBIIDAE* ||Hallowell, 1856.ha.f001||-Cope, 1859.cb.f002-01 **{100}** [Q]

F.18.†0e. Subfamilia *INCERTAE SEDIS* †

G.28.†171. *Geyeriella*° 1950 † (*mertensi*° 1950 †)

G.28.†172. *Parahynobius*° 1999 † (*betfianus*° 1999 †)

G.28.†173. *Prohynobius*° 1985 † **AN-AP** (NINS)

F.18.81. Subfamilia *HYNOBIINAE* ||Hallowell, 1856.ha.f001||-Cope, 1859.cb.f002-00 **{100}**

F.19.79. Tribus *HYNOBIINI* ||Hallowell, 1856.ha.f001||-Cope, 1859.cb.f002-04 **{98}**

F.20.75. Subtribus *HYNOBIINA* ||Hallowell, 1856.ha.f001||-Cope, 1859.cb.f002-05 **{97}**

F.21.56. Infratribus *HYNOBIINIA* ||Hallowell, 1856.ha.f001||-Cope, 1859.cb.f002-06 **{100}**

F.22.35. Hypotribus *HYNOBIINOA* ||Hallowell, 1856.ha.f001||-Cope, 1859.cb.f002-07 **{100}**

G.28.505. *Hynobius** 1838 (*nebulosa** 1838) ≈ *Pseudosalamandra* 1838 (*naevia** 1838) ≡ *Hydroscopes* 1848 ≡ *Ellipsoglossa* 1854 **{100}**

G.28.506. *Pachypalaminus** 1912 (*boulengeri** 1912) **{100}**

G.28.507. *Poyarius** 2012 (*formosanus** 1922) ≈ *Makihynobius* 2012 (*sonani** 1922) **{97}**

F.22.36. Hypotribus *SATOBIINOA* **nov.**, DOP.da.f130-00

G.28.508. *Satobius** 1990 (*retardatus** 1923)

F.21.57. Infratribus *PROTOHYNOBIINIA* Fei[+1], 2000.fa.f001-02 **{100}**

G.28.509. *Batrachuperus** 1878 (*pinchonii** 1872) ≡ *Batrachohyperus* 1881 ≡ *Hyperobatrachus* 1881 ≡ *Batrachyperus* 1882 ≈ *Tibetuperus* 2012 (*yenyuanensis** 1950) **{100}**

G.28.510. *Liua*[1] 1983 (*wushanensis* 1960 ≈ *shihi** 1950) ≡ *Liuia* 1985 ≈ *Tsinpa* 2012 (*tsinpaensis** 1966) **{100}**

G.28.511. *Pseudohynobius** 1983 (*flavomaculatus** 1978) ≈ *Protohynobius* 2000 (*puxiongensis** 2000)} **{100}**

F.20.76. Subtribus *PACHYHYNOBIINA* Dubois[+1], 2012.da.f002-01

G.28.512. *Pachyhynobius** 1983 (*shangchengensis** 1983) ≈ *Xenobius* 1985 **JH** (*melanonychus* 1985 ≈ *shangchengensis** 1983) ≡ *Sinobius* 1987

F.20.77. Subtribus *SALAMANDRELLINA* Dubois[+1], 2012.da.f004-00 **{100}**

G.28.513. *Salamandrella** 1870 (*keyserlingii** 1870) ≈ *Isodactylium* 1870 (*schrenckii* 1870 ≈ *keyserlingii** 1870)

F.19.80. Tribus *RANODONTINI* Thorn, 1966.ta.f001-01 **{100}**

F.20.78. Subtribus *IRANODONTINA* **nov.**, DOP.da.f131-00 **{100}**

G.28.514. *Afghanodon** 2012 (*mustersi** 1940)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.515. *Iranodon** 2012 (*persicus** 1970) ≈ *Paradactylodon* 1984 AN (*gorganensis** 1979) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.79. Subtribus *RANODONTINA* Thorn, 1966.ta.f001-02

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.516. *Ranodon** 1866 (*sibiricus** 1866) ≡ *Ranidens* 1882

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.82. Subfamilia *ONYCHODACTYLINAE* Dubois[+1], 2012.da.f001-00 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.517. *Onychodactylus*[1] 1838 (*schlegeli* 1838 ≈ *japonica** 1782) ≡ *Dactylonyx* 1839 AN ≡ *Onychopus* 1854 AM ≈ *Geomolge* 1886 (*fischeri** 1886)

_ _ _ _ C.05.06. Subordo **MEANTES** Linné, 1767.la.c01-01 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†13. Familia *NOTERPETIDAE* Rage[+2], 1993.ra.f001-00 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†174. *Kababisha*° 1996 † (*humarensis*° 1996 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†175. *Noterpeton*° 1993 † (*bolivianum*° 1993 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.63. Familia *SIRENIDAE* Gray, 1825.ga.f005-00 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†176. *Habrosaurus*° 1928 † (*dilatus*° 1928 †) ≈ *Adelphesiren* 1958 (*olivae* 1958 ≈ *dilatus*° 1928 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.518. *Pseudobranchus** 1825 (*striata** 1824) ≡ *Parvibranchus* 1839 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.519. *Siren** 1766 (*lacertina** 1766) ≡ *Sirena* 1808 AN ≡ *Sirene* 1813 AN ≡ *Sirene* 1816 CI ≡ *Meantes* 1822 AN ≡ *Syren* 1828 **{100}**

_ _ _ _ C.05.07. Subordo **PSEUDOSAURIA** Blainville, 1816.ba.c08-07 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.†0c. Superfamilia *INCERTAE SEDIS* †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0l. Familia *INCERTAE SEDIS* †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†177. *Beiyanerpeton*° 2012 † (*jianpingensis*° 2012 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†178. *Qinglongtriton*° 2016 † (*gangouensis*° 2016 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.17. Superfamilia *AMPHIUMOIDEA* Gray, 1825.ga.f007-10 **{98}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.11. Epifamilia *AMPHIUMOIDAE* Gray, 1825.ga.f007-12 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.16.08. Apofamilia *AMPHIUMEIDAE* Gray, 1825.ga.f007-13 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.64. Familia *AMPHIUMIDAE* Gray, 1825.ga.f007-00 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†179. *Paleoamphiuma*° 1998 † (*tetradactylum*° 1998 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†180. *Proamphiuma*° 1969 † (*cretacea*° 1969 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.520. *Amphiuma** 1821 (*means** 1821) ≈ *Chrysodonta* 1822 (*larvaeformis* 1822 ≈ *means** 1821) ≈ *Muraenopsis* 1843 (*tridactylum** 1827) ≡ *Myraenopsis* 1847 ≈ *Sirenoidis* 1843 (*didactylum* 1827 ≈ *means** 1821) ≡ *Sirenoides* 1850

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.65. Familia *PLETHODONTIDAE* Gray, 1850.ga.f001-00 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.†0f. Subfamilia *INCERTAE SEDIS* †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†181. *Palaeoplethodon*° 2015 † (*hispaniolae*° 2015 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.83. Subfamilia *HEMIDACTYLIINAE* Hallowell, 1856.ha.f003-05 **{99}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.81. Tribus *BOLITOGLOSSINI* Hallowell, 1856.ha.f002-03 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.80. Subtribus *BATRACHOSEPINA* Wake, 2012.wa.f001-01 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.521. *Batrachoseps** 1839 (*attenuata** 1833) ≈ *Plethopsis* 1937 (*wrighti** 1937)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.81. Subtribus *BOLITOGLOSSINA* Hallowell, 1856.ha.f002-04 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21.58. Infratribus *BOLITOGLOSSINIA* Hallowell, 1856.ha.f002-05 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.22.37. Hypotribus *BOLITOGLOSSINOA* Hallowell, 1856.ha.f002-06 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.522. *Bolitoglossa** 1854 (*mexicana** 1854) ≡ *Mycetoides* 1854 AN ≈ *Oedipus* 1838 JH (*platydactylus** 1831) ≈ *Eladinea* 1937 (*estheri* 1937 ≈ *paraensis** 1930) ≈ *Magnadigita* 1944 (*nigloflavescens* 1941 ≈ *franklini** 1936) ≈ *Palmatotriton* 1945 CI (*rufescens** 1869) ≡ *Nanotriton* 2004 ≈ *Mayamandra* 2004 (*hartwegi** 1969) ≈ *Oaxakia* 2004 (*macrinii** 1930) ≈ *Pachymandra* 2004 (*dofleini** 1903)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.22.38. Hypotribus *ISTHMURINOA* **nov.**, DOP.da.f132-00 **{90}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.23.22. Clanus *ISTHMURITES* **nov.**, DOP.da.f132-01 **{97}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.523. *Aquiloeurycea** 2015 (*cephalicus** 1869) **{99}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.524. *Isthmura** 2012 (*bellii** 1850) **{96}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.23.23. Clanus *PARVIMOLGITES* **nov.**, DOP.da.f133-00 **{90}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.525. *Ixalotriton** 1989 (*niger** 1989) **{99}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.526. *Parvimolge** 1944 (*townsendi** 1922)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.23.24. Clanus *PSEUDOEURYCEITES* **nov.**, DOP.da.f134-00 **{97}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.527. *Pseudoeurycea** 1944 (*leprosus** 1869) ≈ *Lineatriton* 1950 (*lineola** 1865)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21.59. Infratribus *THORIINIA* Cope, 1869.cb.f001-02 **{90}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.22.39. Hypotribus *THORIINOA* Cope, 1869.cb.f001-03 **{95}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.528. *Chiropterotriton** 1944 (*multidentatus** 1939) **{100}**

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.529. *Cryptotriton** 2000 (*nasalis** 1924) **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.530. *Thorius** 1869*a* (*pennatribus** 1869*a**) **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.22.40. Hypotribus *THORNELLINOA* **nov.**, DOP.da.f135-00 **{94}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ F.23.25. Clanus *DENDROTRITONITES* **nov.**, DOP.da.f136-00 **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.531. *Dendrotriton** 1983 (*bromeliacia** 1936)
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ F.23.26. Clanus *NYCTANOLITES* **nov.**, DOP.da.f140-00
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.532. *Nyctanolis** 1983 (*pernix** 1983)
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ F.23.27. Clanus *THORNELLITES* **nov.**, DOP.da.f135-01 **{99}L**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ F.24.16. Subclanus *THORNELLITIES* **nov.**, DOP.da.f135-02 **{96}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = F.25.22. Infraclanus *BRADYTRITONITOES* **nov.**, DOP.da.f137-00
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.533. *Bradytriton** 1983 (*silus** 1983)
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = F.25.23. Infraclanus *THORNELLITOES* **nov.**, DOP.da.f135-03 **{96}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ F.26.13. Hypoclanus *OEDIPINITUES* **nov.**, DOP.da.f138-00 **{98}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.534. *Oedipina** 1868 (*uniformis** 1868) ≈ *Ophiobatrachus* 1868 (*vermicularis* 1868 ≈ *uniformis** 1868) ≈ *Haptoglossa* 1893 (*pressicauda** 1893) **{93}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.535. *Oedopinola** 1946 (*complex** 1924) **{90}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ F.26.14. Hypoclanus *THORNELLITUES* **nov.**, DOP.da.f135-04 **{99}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.536. *Thornella** **nov.** (*quadra** 2008) ≡ *Oeditriton* 2008 **AN**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ F.24.17. Subclanus *NOTOTRITONITIES* **nov.**, DOP.da.f139-00 **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.537. *Nototriton** 1983 (*picadoi** 1911) ≈ *Bryotriton* 2012 (*barbouri** 1936)
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ F.19.82. Tribus *HEMIDACTYLIINI* Hallowell, 1856.ha.f003-03
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.538. *Hemidactylium** 1838 (*scutata** 1838) ≡ *Cotobotes* 1848 ≡ *Desmodactylus* 1854
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ F.19.83. Tribus *SPELERPINI* Cope, 1859.cb.f001-06 **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = F.20.82. Subtribus *PSEUDOTRITONINA* Dubois[+1], 2012.da.f006-00 **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.539. *Gyrinophilus** 1869 (*porphyritica** 1827) **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.540. *Pseudotriton*[1] 1838 (*subfusca* 1818 ≈ *rubra** 1801) ≡ *Mycetoglossus* 1839 ≡ *Batrachopsis* 1843 ≡ *Pelodytes* 1848 **JH** **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.541. *Stereochilus** 1869 (*marginatus** 1856)
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = F.20.83. Subtribus *SPELERPINA* Cope, 1859.cb.f001-07 **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.542. *Eurycea** 1822 (*lucifuga** 1822) ≡ *Spelerpes* 1832 ≈ *Glossiphus* 1832 **AN** (*longicauda** 1818) ≡ *Cylindrosoma* 1838 ≡ *Saurocercus* 1843 ≈ *Manculus* 1869 (*quadridigitata** 1842) ≈ *Typhlotriton* 1892 (*spelaeus** 1842) ≈ *Typhlomolge* 1896 (*rathbuni** 1896) ≈ *Haideotriton* 1939 (*wallacei** 1939) ≈ *Blepsimolge* 2001 (*nana** 1941) ≈ *Notiomolge* 2001 (*neotenes** 2001) ≈ *Paedomolge* 2001 (*tonkawae** 2000) ≈ *Septentriomolge* 2001 (*chisholmensis** 2000) **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.543. *Urspelerpes** 2009 (*brucei** 2009)
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ F.18.84. Subfamilia *PLETHODONTINAE* Gray, 1850.ga.f001-05 **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ F.19.84. Tribus *HYDROMANTINI* Wake, 2012.wa.f003-00 **{94}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = F.20.84. Subtribus *HYDROMANTINA* Wake, 2012.wa.f003-01 **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.544. *Hydromantes** 1848 (*platycephalus** 1916) ≡ *Hydromantoides* 1981 **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.545. *Speleomantes** 1984 (*italicus** 1923) ≈ *Atylodes* 1868 **RI** (*genei** 1838) **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = F.20.85. Subtribus *KARSENIINA* Dubois[+1], 2012.da.f008-01
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.546. *Karsenia** 2005 (*koreana** 2005)
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ F.19.85. Tribus *PLETHODONTINI* Gray, 1850.ga.f001-07 **{99}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = F.20.86. Subtribus *DESMOGNATHINA* Gray, 1850.ga.f003-05 **{90}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ F.21.60. Infratribus *ANEIDINIA* Wake, 2012.wa.f002-01 **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.547. *Aneides** 1851 **LT** (*lugubris** 1849) ≡ *Anaides* 1851 **LP-CI** ≡ *Autodax* 1887 **CI** ≈ *Castaneides* 2012 (*aeneus** 1881)
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ F.21.61. Infratribus *DESMOGNATHINIA* Gray, 1850.ga.f003-06 **{99}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.548. *Desmognathus** 1850 (*fuscus** 1820) ≈ *Leurognathus* 1899 (*marmorata** 1899) ≈ *Geognathus* 2012 (*wrighti** 1936) ≈ *Hydrognathus* 2012 (*brimleyorum** 1895) **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.549. *Phaeognathus** 1961 (*hubrichti** 1961)
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = F.20.87. Subtribus *ENSATININA* Gray, 1850.ga.f005-02
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.550. *Ensatina** 1850 (*eschscholtzii** 1850) ≈ *Heredia* 1857 (*oregonensis* 1857 ≈ *eschscholtzii** 1850) ≡ *Heteroglossa* 1857 **AN** ≈ *Urotropis* 1875 **JH** (*platensis* 1875 ≈ *eschscholtzii** 1850)
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = F.20.88. Subtribus *PLETHODONTINA* Gray, 1850.ga.f001-09 **{100}**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ G.28.551. *Plethodon** 1838 (*glutinosa** 1818) ≡ *Phatnomatorhina* 1839 **AN** ≈ *Sauropsis* 1843 **JH**

(*erythronota* 1818 ≈ *cinerea** 1818) ≡ *Saurophis* 1850 ≈ *Hightonia* 2011 (*vehiculum** 1859)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.16.09. Apofamilia *Rhyacotritoneidae* Tihen, 1958.ta.f002-03 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.66. Familia *Rhyacotritonidae* Tihen, 1958.ta.f002-01 [Q+] [C]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.552. *Rhyacotriton** 1920 (*olympicus** 1917)

_ _ _ _ _ _ _ _ _ _ _ _ _ F.15.12. Epifamilia *Proteoidae* Bonaparte, 1831.ba.f002-10 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.67. Familia *Proteidae* Bonaparte, 1831.ba.f002-02 [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†182. *Mioproteus*° 1978 † (*caucasicus*° 1978 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†183. *Orthophyia*° 1845 † (*longa*° 1845 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†184. *Paranecturus*° 2013 † (*garbanii*° 2013 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.553. *Necturus** 1819 (*maculosa** 1818) ≡ *Nectura* 1940 **AM** ≡ *Nectusus* 1940 **AM** ≈ *Phanerobranchus* 1821 (*tetradactylus* 1821 ≈ *maculosa** 1818) ≡ *Phaenerobranchus* 1826 ≡ *Phanerabronchus* 1849 **AM** ≡ *Phanerobronchus* 1849 **AM** ≈ *Menobranchus* 1825 (*lateralis* 1822 ≈ *maculosa** 1818) ≈ *Parvurus* 2012 (*punctatus** 1850) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.554. *Proteus** 1768 (*anguinus** 1768) ≡ *Exobranchia* 1815 **AN** ≡ *Larvarius* 1815 ≡ *Platyrhynchus* 1816 ≡ *Hypochthon* 1820 ≡ *Caledon* 1820 ≡ *Hydrospelaeus* 1821 ≡ *Apneumona* 1822 ≡ *Cordylus* 1828 **JH** ≡ *Hydochthon* 1831 **AM** ≡ *Hemitriton* 1833

_ _ _ _ _ _ _ _ _ _ _ _ F.14.18. Superfamilia *Salamandroidea* Goldfuss, 1820.ga.f002-21 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.68. Familia *Ambystomatidae* Gray, 1850.ga.f002-08 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†185. *Ambystomichnus*° 1954 † (*montanensis*° 1928 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†186. *Amphitriton*° 1976 † (*brevis*° 1976 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†187. *Chrysotriton*° 1981 † (*tiheni*° 1981 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†188. *Sanchizia*° 2012 † (*wettsteini*° 1955 †) ≡ *Bargmannia* 1955 **JH**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†189. *Wolterstorffiella*° 1950 † (*wiggeri*° 1950 †) ≡ *Wolterstorffiella* 1939 **AN**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.555. *Ambystoma*[1] 1838 (*subviolacea* 1804 ≈ *maculata** 1802) ≡ *Salamandroidis* 1843 ≡ *Amblystoma* 1844 **CI** ≡ *Limnarches* 1848 ≡ *Plagiodon* 1854 **AN** ≡ *Plagiodons* 1854 **AN** ≈ *Gyrinus* 1798 **JH** (*mexicanus** 1798) ≡ *Axolotes* 1844 ≈ *Axolotl* 1821 **AN** (*housciformis* 1802 ≈ *mexicanus** 1798) ≡ *Axolotus* 1822 **CI** ≡ *Philhydrus* 1828 **CI** ≡ *Axolot* 1831 **NC-CI** ≡ *Phyllhydrus* 1831 **CI** ≡ *Phylhydrus* 1839 ≡ *Axoloth* 1842 ≡ *Phyllidrus* 1844 ≈ *Siredon* 1829 **CI** (*axolotl* 1829 ≈ *mexicanus** 1798) ≡ *Sirenodon* 1832 **CI** ≡ *Stegoporus* 1832 **CI** ≈ *Xiphonura* 1838 (*jeffersoniana** 1827) ≡ *Xiphoctonus* 1848 ≈ *Heterotriton* 1850 (*ingens* 1831 ≈ *tigrina** 1825) ≈ *Desmiostoma* 1858 (*maculatum* 1858*a* ≈ *mavortia*° 1850) ≈ *Camarataxis* 1859 (*maculatum* 1858*b* ≈ *mavortia*° 1850) ≈ *Pectoglossa* 1868 (*persimilis* 1859 ≈ *jeffersoniana** 1827) ≈ *Linguaelapsus* 1887 (*annulatum** 1886) ≈ *Rhyacosiredon* 1928 (*altamirani** 1895) ≈ *Plioambystoma* 1929 (*kansense*° 1929 ‡) ≈ *Bathysiredon* 1939 (*dumerilii** 1870) ≈ *Lanebatrachus* 1941 (*martini* 1941 ≈ *kansense*° 1929 ‡) ≈ *Ogallalabatrachus* 1941 (*horarium* 1941 ≈ *kansense*° 1929 ‡) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.556. *Dicamptodon** 1870 (*ensatus** 1833) ≈ *Chondrotus* 1887 (*tenebrosum** 1852) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.69. Familia *Salamandridae* Goldfuss, 1820.ga.f002-01 **{100}** [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.85. Subfamilia *Pleurodelinae* Tschudi, 1838.ta.f005-08 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.†0b. Tribus *Incertae sedis* †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†190. *Archaeotriton*° 1860 † (*basalticus*° 1859 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†191. *Brachycormus*° 1860 † (*noachicus*° 1831 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†192. *Carpathotriton*° 2008 † (*matraensis*° 2008 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†193. *Chelotriton*° 1853 † (*paradoxus*° 1853 †) ≈ *Heliarchon* 1860 (*fuscillatus* 1860 ≈ *paradoxus*° 1853 †) ≈ *Polysemia* 1860 **JH** (*ogygia*° 1831 †) ≡ *Epipolysemia* 1973 ≈ *Grippiella* 1949 (*mohri* 1949 ≈ *paradoxus*° 1853 †) ≈ *Palaeosalamandrina* 1949 (*dehmi* 1949 ≈ *paradoxus*° 1853 †) ≈ *Tischleriella* 1949 (*buddenbrocki* 1949 ≈ *paradoxus*° 1853 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†194. *Koalliella*° 1950 † (*genzeli*° 1950 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†195. *Oligosemia*° 1923 † (*spinosa*° 1922 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†196. *Palaeopleurodeles*° 1941 † (*hauffi*° 1941 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†197. *Phosphotriton*° 2016 † (*sigei*° 2016 †) ≡ *Phosphotriton* 2015 † **AN**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.†198. *Procynops*° 1965 † (*miocenicus*° 1965 †)

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.19.86. Tribus *Molgini* Bonaparte, 1850.bb.f015-04 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.20.89. Subtribus *Molgina* Bonaparte, 1850.bb.f015-05 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.21.62. Infratribus *Euproctinia* Dubois[+1], 2009.db.f002-01 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.557. *Euproctus*[1] 1839 (*rusconii* 1839 ≈ *platycephala** 1829) ≡ *Bradyarges* 1868 ≡ *Bulga* 1868 ≈ *Megapterna* 1839 (*montana** 1839) ≈ *Pelonectes* 1843 (*platycephala** 1829)

F.21.63. Infratribus *Molginia* Bonaparte, 1850.bb.f015-07 **{95}**

F.22.41. Hypotribus *Cynopinoa* Dubois[+1], 2009.db.f001-01 **{100}**

F.23.28. Clanus *Cynopites* Dubois[+1], 2009.db.f001-02 **{100}**

G.28.558. *Cynops*[1] 1838 (*subcristatus* 1838 ≈ *pyrrhogaster** 1826)

F.23.29. Clanus *Hypselotritonites* **nov.**, DOP.da.f141-00 **{99}**

G.28.559. *Hypselotriton*[2] 1934 (*wolterstorffi*° 1905) ≈ *Cynotriton* 2011 (*orientalis** 1875)

F.23.30. Clanus *Pachytritonites* **nov.**, DOP.da.f142-00 **{99}**

G.28.560. *Laotriton** 2009 (*laoensis** 2002)

G.28.561. *Pachytriton** 1878 (*brevipes** 1877) ≈ *Pingia* 1936 (*granulosus** 1933) **{99}**

G.28.562. *Paramesotriton** 1935 (*deloustali** 1934) ≡ *Mesotriton* 1934 JH ≈ *Trituroides* 1936 (*chinensis** 1859) ≈ *Allomesotriton* 1983 (*caudopunctatus** 1973) ≈ *Karstotriton* 2016 (*zhijinensis** 2008) **{96}**

F.22.42. Hypotribus *Ichthyosaurinoa* **nov.**, DOP.da.f143-00

G.28.563. *Ichthyosaura*[1] 1801 (*tritonius* 1768 ≈ *alpestris** 1768) ≈ *Hemitriton* 1852 JH (*alpestris** 1768) ≡ *Mesotriton* 1927

F.22.43. Hypotribus *Lissotritoninoa* **nov.**, DOP.da.f144-00 **{100}**

G.28.564. *Lissotriton*[1] 1839 (*punctata* 1800 ≈ *vulgaris** 1758) ≈ *Lophinus* 1815 AN ≡ *Lophinus* 1850 ≈ *Meinus* 1815 AN (*boscai** 1879) ≡ *Pelonectes* 1879 JH ≡ *Meinus* 2009 ≈ *Palmitus* 1815 AN (*helvetica** 1879) ≈ *Geotriton* 1831 AN (*exigua* 1768 ≈ *vulgaris** 1758) ≡ *Geotriton* 1832 CI ≈ *Palaeotriton* 1927 (*vulgaris** 1758)

F.22.44. Hypotribus *Molginoa* Bonaparte, 1850.bb.f015-08 **{100}**

F.23.31. Clanus *Molgites* Bonaparte, 1850.bb.f015-09 **{99}**

G.28.565. *Calotriton*[1] 1858 (*punctulatus* 1852 ≈ *asper** 1852) **{100}**

G.28.566. *Triturus** 1815 (*cristatus** 1868) ≡ *Triton* 1768 JH ≡ *Molge* 1820 ≡ *Oiacurus* 1821 ≡ *Tritonella* 1839 ≡ *Hemisalamandra* 1852 ≡ *Alethotriton* 1872 ≈ *Petraponia* 1853 (*nigra* 1854 ≈ *carnifex** 1768) ≈ *Pyronicia* 1858 (*marmorata** 1800) ≈ *Turanomolge* 1918 (*mensbieri* 1918 ≈ *karelinii** 1870) ≈ *Neotriton* 1927 (*karelinii** 1870) **{100}**

F.23.32. Clanus *Neurergites* **nov.**, DOP.da.f145-00 **{99}**

G.28.567. *Neurergus** 1862 (*crocatus** 1862) ≈ *Rhithrotriton* 1916 (*derjugini*° 1916) ≈ *Musergus* 2009 (*strauchii** 1888) **{100}**

G.28.568. *Ommatotriton** 1850 (*vittatus** 1835) **{100}**

F.20.90. Subtribus *Tarichina* Dubois[+1], 2009.db.f003-00 **{100}**

G.28.569. *Notophthalmus*[1] 1820 (*miniatus* 1820 ≈ *viridescens** 1820) ≈ *Diemictylus* 1820 (*viridescens** 1820) ≈ *Tristella*[1] 1850 AN (*symmetrica* 1825 ≈ *viridescens** 1820) ≈ *Rafinus* 2009 (*meridionalis** 1880) **{100}**

G.28.570. *Taricha** 1850 (*torosus** 1833) ≈ *Palaeotaricha* 1955 (*oligocenica*° 1955 †) ≈ *Twittya* 2009 (*rivularis** 1935) **{100}**

F.19.87. Tribus *Pleurodelini* Tschudi, 1838.ta.f005-09 **{100}**

F.20.91. Subtribus *Pleurodelina* Tschudi, 1838.ta.f005-10 **{100}**

G.28.571. *Pleurodeles** 1830 (*waltl** 1830) ≡ *Pleuroderes* 1878 AM ≈ *Bradybates* 1838 (*ventricosus* 1838 ≈ *waltl** 1830) ≡ *Bradytes* 1848 ≈ *Glossoliga* 1839 (*poireti** 1835)

F.20.92. Subtribus *Tylototritonina* **nov.**, DOP.da.f146-00 **{100}**

F.21.64. Infratribus *Echinotritoninia* **nov.**, DOP.da.f147-00 **{100}**

G.28.572. *Echinotriton** 1982 (*andersoni** 1892)

F.21.65. Infratribus *Tylototritoninia* **nov.**, DOP.da.f146-01 **{100}**

G.28.573. *Tylototriton** 1871 (*verrucosus** 1871) ≡ *Tylotriton* 1885 ≈ *Qiantriton* 2012 (*kweichowensis** 1932) ≡ *Qianotriton* 2016 ≈ *Liangshantriton* 2012 (*taliangensis** 1950) **{100}**

G.28.574. *Yaotriton** 2009 (*asperrimus** 1830) **{97}**

F.18.86. Subfamilia *Salamandrinae* Goldfuss, 1820.ga.f002-15 **{93}**

F.19.†0c. Tribus *Incertae sedis* †

G.28.†199. *Megalotriton*° 1890 † (*filholi*° 1890 †)

F.19.88. Tribus *Chioglossini* Dubois[+1], 2009.db.f004-00 **{100}**

G.28.575. *Chioglossa** 1864 (*lusitanica** 1864)

G.28.576. *Mertensiella** 1925 (*caucasicus** 1876) ≡ *Exaeretus* 1876 JH

F.19.89. Tribus *Salamandrini* Goldfuss, 1820.ga.f002-28 **{100}**

G.28.577. *Lyciasalamandra** 2004 (*luschani** 1891) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.578. *Salamandra*[1] 1764 (*terrestris* 1788 ≈ *salamandra** 1758) ≈ *Salamandra* 1763 AN (*maculosa* 1768 ≈ *salamandra** 1758) ≡ *Salamandra* 1768 ≈ *Salamandraches* 1848 (*crassicaudis* 1848 ≈ *salamandra** 1758) ≈ *Heteroclitotriton* 1903 (*zitteli* 1903 ≈ *sansaniensis*° 1851 ‡) ≈ *Palaeosalamandra* 1949 (*kohlitzi* 1949 ≈ *sansaniensis*° 1851 ‡) ≈ *Voigtiella* 1949 (*ludwigi* 1949 ≈ *sansaniensis*° 1851 ‡) ≈ *Dehmiella* 1950 (*schindewolfi* 1950 ≈ *sansaniensis*° 1851 ‡) ≈ *Algiandra* 2009 (*algira** 1883) ≈ *Alpandra* 2009 (*atra** 1768) ≈ *Corsandra* 2009 (*corsica** 1838) ≈ *Mimandra* 2009 (*lanzai** 1988) ≈ *Oriandra* 2009 (*infraimmaculata** 1885) **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.87. Subfamilia SALAMANDRININAE Fitzinger, 1843.fa.f013-01 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ G.28.579. *Salamandrina** 1826 (*perspicillata** 1821) ≈ *Seiranota* 1826 (*condylura* 1826 ≈ *perspicillata** 1821)

**Appendix A10.CLAD-2.** Simplified cladonomy and nomenclature of **LISSAMPHIBIA** proposed here, showing all taxa from classis to subfamily and all genera.

Unavailable and invalid genera nomina are not listed here (see Appendix **A9.CLAD-1**).

G • genus including at least one recent species.
G † • all-fossil genus.

For the meaning of all other identifiers, see legend of Appendix **A9.CLAD-1**.

C.01.01. Subphylum **VERTEBRATA** 1800
_ C.02.01. Classis **AMPHIBIA** 1816
_ _ C.03.01. Subclassis **LISSAMPHIBIA** 1898
_ _ _ C.04.†00. Ordo *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Archaeoovulus* 2013 †
_ _ _ C.04.†01. Ordo **ALLOCAUDATA** 1982 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†01. Familia *ALBANERPETIDAE* 1982 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 6 G †: *Albanerpeton* 1976 †; *Anoualerpeton* 2003 †; *Celtedens* 1995 †; *Nukusurus* 1981 †; *Shirepeton* 2018 †; *Wesserpeton* 2013 †
_ _ _ C.04.01. Ordo **ANURA** 1805
_ _ _ _ C.05.†0a. Subordo *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0a. Familia *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 39 G †: *Altanulia* 1993 †; *Aralobatrachus* 1981 †; *Arariphrynus* 2006 †; *Aygroua* 2003 †; *Batrachulina* 1962 †; *Comobatrachus* 1960 †; *Cratia* 2009 †; *Czatkobatrachus* 1998 †; *Eobatrachus* 1887; *Eorubeta* 1960 †; *Estesiella* 1995 †; *Estesina* 1993 †; *Eurycephalella* 2009 †; *Gobiatoides* 1993 †; *Hatzegobatrachus* 2003 †; *Hensonbatrachus* 2015 †; *Iberobatrachus* 2013 †; *Itemirella* 1981 †; *Liaobatrachus* 1998 †; *Liventsovkia* 1993 †; *Lutetiobatrachus* 1998 †; *Mengbatrachus* 2018 †; *Mesophryne* 2001 †; *Monsechobatrachus* 1921 †; *Negatchevkia* 1993 †; *Novooskolia* 1993 †; *Procerobatrachus* 1993 †; *Ranipes* 2014 †; *Ranomorphus* 1993 †; *Saevesoederberghia* 1993 †; *Scotiophryne* 1969 †; *Sunnybatrachus* 2002 †; *Thaumastosaurus* 1904 †; *Theatonius* 1976 †; *Tyrrellbatrachus* 2015 †; *Uberabatrachus* 2012 †; *Varibatrachus* 2015 †; *Vieraella* 1961 †; *Yizhoubatrachus* 2004 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†02. Familia *PROSALIRIDAE* 1995 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Prosalirus* 1995 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†03. Familia *TREGOBATRACHIDAE* 1975 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Tregobatrachus* 1975 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†04. Familia *TRIADOBATRACHIDAE* 1962 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Triadobatrachus* 1962 †
_ _ _ _ C.05.01. Subordo **ANGUSTICOELA** 1958
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.01. Familia *ASCAPHIDAE* 1923
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Ascaphus* 1899
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.02. Familia *LEIOPELMATIDAE* 1869-|1942| **[Q]**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.†01. Subfamilia *NOTOBATRACHINAE* 1956 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Notobatrachus* 1956 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.01. Subfamilia *LEIOPELMATINAE* 1869-|1942|
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Leioaspetos* 1985; *Leiopelma* 1861
_ _ _ _ C.05.02. Subordo **HYDROBATRACHIA** 1828
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0b. Familia *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 4 G †: *Hyogobatrachus* 2016 †; *Kururubatrachus* 2020 †; *Tambabatrachus* 2016 †; *Wealdenbatrachus* 1988 †
_ _ _ _ _ C.06.01. Infraordo **GEOBATRACHIA** 1828
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0c. Familia *INCERTAE SEDIS* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Genibatrachus* 2017 †
_ _ _ _ _ _ C.07.01. Hypoordo **DORSIPARES** 1816
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0d. Familia *INCERTAE SEDIS* †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 7 G †: *Avitabatrachus* 2000 †; *Gracilibatrachus* 2013 †; *Neusibatrachus* 1972 †; *Nevobatrachus* 2019 †; *Shomronella* 1978 †; *Thoraciliacus* 1968 †; *Vulcanobatrachus* 2005 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†05. Familia *Palaeobatrachidae* 1865 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 3 G †: *Albionbatrachus* 1984 †; *Palaeobatrachus* 1838 †; *Probatrachus* 1878 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.03. Familia *Pipidae* 1825-|1826| [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.†0a. Subfamilia *Incertae sedis* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 6 G †: *Cratopipa* 2019 †; *Eoxenopoides* 1931 †; *Llankibatrachus* 2003 †; *Oumtkoutia* 2008 †; *Pachycentrata* 2004 †; *Singidella* 2005 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.†02. Subfamilia *Salteniinae* **nov.** †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 4 G †: *Kuruleufemia* 2016 †; *Saltenia* 1959 †; *Shelania* 1960 †; *Patagopipa* 2019 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.02. Subfamilia *Dactylethrinae* 1838
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 4 G: *Hymenochirus* 1896; *Pseudhymenochirus* 1920; *Silurana* 1864; *Xenopus* 1827
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.03. Subfamilia *Pipinae* 1825-|1826|
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Pipa* 1768
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.04. Familia *Rhinophrynidae* 1858 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 3 G †: *Chelomophrynus* 1991 †; *Eorhinophrynus* 1959 †; *Rhadinosteus* 1998 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Rhinophrynus* 1841
_ _ _ _ _ _ C.07.02. Hypoordo **Laevogyrinia** 1878
_ _ _ _ _ _ _ C.08.0a. Superphalanx *Incertae sedis*
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.0a. Familia *Incertae sedis*
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Colodactylus* 1845
_ _ _ _ _ _ _ C.08.01. Superphalanx **Archaeosalientia** 1981
_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.14.†0a. Superfamilia *Incertae sedis* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0f. Familia *Incertae sedis* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 4 G †: *Elkobatrachus* 2006 †; *Macropelobates* 1924 †; *Tephrodytes* 1994 †**;** *Uldzinia* 1996 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.14.01. Superfamilia *Pelobatoidea* 1850
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.01. Epifamilia *Pelobatoidae* 1850
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0g. Familia *Incertae sedis* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Sanshuibatrachus* 2017 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.05. Familia *Megophryidae* 1850-|1931| [Q+]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.04. Subfamilia *Leptobrachiinae* 1983
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 4 G: *Leptobrachella* 1925; *Leptobrachium* 1838; *Oreolalax* 1962; *Scutiger* 1868
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.05. Subfamilia *Megophryinae* 1850-|931|
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 7 G: *Atympanophrys* 1983; *Boulenophrys* 2016; *Brachytarsophrys* 1983; *Grillitschia* **nov.**; *Megophrys* 1822; *Ophryophryne* 1903; *Xenophrys* 1864
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.06. Familia *Pelobatidae* 1850 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Eopelobates* 1929 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Pelobates* 1830
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.02. Epifamilia *Pelodytoidae* 1850
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.07. Familia *Pelodytidae* 1850 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G †: *Aerugoamnis* 2013 †; *Miopelodytes* 1941 †**.**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Pelodytes* 1838; *Pelodytopsis* 1896
_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.14.02. Superfamilia *Scaphiopodoidea* 1865
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.08. Familia *Scaphiopodidae* 1865
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Scaphiopus* 1836; *Spea* 1866
_ _ _ _ _ _ _ C.08.02. Superphalanx **Ranomorpha** 1921
_ _ _ _ _ _ _ _ C.09.01. Epiphalanx **Aquipares** 1816
_ _ _ _ _ _ _ _ _ C.10.01. Phalanx **Gondwanura nov.**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.09. Familia *Nasikabatrachidae* 2003
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Nasikabatrachus* 2003
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.10. Familia *Sooglossidae* 1931 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Sechellophryne* 2007; *Sooglossus* 1906
_ _ _ _ _ _ _ _ _ C.10.02. Phalanx **Phaneranura nov.**
_ _ _ _ _ _ _ _ _ _ C.11.01. Subphalanx **Bainanura nov.**
_ _ _ _ _ _ _ _ _ _ _ C.12.01. Infraphalanx **Phoranura nov.**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.11. Familia *Aromobatidae* 2006

_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.06. Subfamilia *Allobatinae* 2006
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 1 G: *Allobates* 1988
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.07. Subfamilia *Anomaloglossinae* 2006
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 2 G: *Anomaloglossus* 2006; *Rheobates* 2006
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.08. Subfamilia *Aromobatinae* 2006
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 2 G: *Aromobates* 1991; *Mannophryne* 1992
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ F.17.12. Familia *Dendrobatidae* ||1850||-1865 [Q]
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.09. Subfamilia *Colostethinae* 1867
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 5 G: *Ameerega* 1986; *Colostethus* 1866; *Epipedobates* 1987; *Leucostethus* 2017; *Silverstoneia* 2006
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.10. Subfamilia *Dendrobatinae* ||1850||-1865
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 8 G: *Adelphobates* 2006; *Andinobates* 2011; *Dendrobates* 1830; *Excidobates* 2008; *Minyobates* 1987; *Oophaga* 1994; *Phyllobates* 1841; *Ranitomeya* 1985
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.11. Subfamilia *Hyloxalinae* 2006
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 3 G: *Ectopoglossus* 2017; *Hyloxalus* 1870; *Paruwrobates* 1994
_ _ _ _ = _ _ _ _ = _ C.12.02. Infraphalanx **Phrynanura nov.**
_ _ _ _ = _ _ _ _ = _ _ C.13.01. Hypophalanx **Gaianura nov.**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ F.17.13. Familia *Brachycephalidae* 1858 [Q]
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.0a. Subfamilia *Incertae sedis*
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 2 G: *Atopophrynus* 1982; *Geobatrachus* 1915
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.12. Subfamilia *Brachycephalinae* 1858
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 2 G: *Brachycephalus* 1826; *Ischnocnema* 1862
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.13. Subfamilia *Craugastorinae* 2008
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 21 G: *Bahius* **nov.**; *Barycholos* 1969; *Bryophryne* 2008; *Craugastor* 1862; *Euparkerella* 1959; *Haddadus* 2008; *Holoaden* 1920; *Hypodactylus* 2008; *Lynchius* 2008; *Microkayla* 2017; *Niceforonia* 1963; *Noblella* 1930; *Oreobates* 1872; *Phrynopus* 1873; *Phyllonastes* 1977; *Pristimantis* 1870; *Psychrophrynella* 2008; *Qosqophryne* 2020; *Strabomantis* 1863; *Tachiramantis* 2015; *Yunganastes* 2007
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.14. Subfamilia *Eleutherodactylinae* 1954
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 5 G: *Adelophryne* 1984; *Diasporus* 2008; *Euhyas* 1843; *Eleutherodactylus* 1841; *Phyzelaphryne* 1977
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ F.17.14. Familia *Ceuthomantidae* 2009
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 2 G: *Ceuthomantis* 2009; *Dischidodactylus* 1979
_ _ _ _ = _ _ _ _ = _ _ C.13.02. Hypophalanx **Hemiphractiformia** 1881
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ F.17.15. Familia *Hemiphractidae* 1862 [Q]
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.15. Subfamilia *Amphignathodontinae* 1882
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 5 G: *Alainia* 2018; *Amphignathodon* 1882; *Cryptotheca* 2015; *Eotheca* 2015; *Gastrotheca* 1843
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.16. Subfamilia *Cryptobatrachinae* 2006
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 1 G: *Cryptobatrachus* 1916
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.17. Subfamilia *Flectonotinae* **nov.**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 1 G: *Flectonotus* 1926
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.18. Subfamilia *Fritzianinae* **nov.**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 1 G: *Fritziana* 1937
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.19. Subfamilia *Hemiphractinae* 1862
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 1 G: *Hemiphractus* 1828
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.20. Subfamilia *Stefaniinae* **nov.**
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 1 G: *Stefania* 1968
_ _ _ _ = _ _ _ _ = _ _ C.13.03. Hypophalanx **Hylobatrachia** 1828
_ _ _ _ = _ _ _ _ = _ _ _ F.14.0a. Superfamilia *Incertae sedis*
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 1 G: *Ancudia* 1902
_ _ _ _ = _ _ _ _ = _ _ _ F.14.03. Superfamilia *Bufonoidea* 1825
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ F.17.16. Familia *Bufonidae* 1825 [Q]
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ F.18.21. Subfamilia *Bufoninae* 1825
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 1 G †: *Palaeophrynos* 1838 †
_ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ _ _ _ = _ 53 G: *Adenomus* 1861; *Altiphrynoides* 1987; *Amazophrynella* 2012; *Anaxyrus* 1845; *Ansonia* 1870; *Atelopus* 1841; *Barbarophryne* 2013; *Beduka* **nov.**; *Blaira* **nov.**; *Blythophryne* 2016; *Bufo* 1764; *Bufoides* 1973; *Bufotes* 1815; *Capensibufo* 1980; *Churamiti* 2002; *Dendrophryniscus* 1870; *Didynamipus* 1903; *Duttaphrynus* 2006; *Epidalea* 1864; *Firouzophrynus* 2020; *Frostius* 1986; *Incilius* 1863; *Ingerophrynus* 2006; *Laurentophryne* 1960; *Leptophryne* 1843; *Mertensophryne* 1960; *Metaphryniscus* 1994; *Mo* **nov.**;

*Nannophryne* 1870; *Nectophryne* 1875; *Nectophrynoides* 1926; *Nimbaphrynoides* 1987; *Oreophrynella* 1895; *Osornophryne* 1976; *Parapelophryne* 2003; *Pedostibes* 1876; *Pelophryne* 1938; *Peltophryne* 1843; *Phrynoidis* 1842; *Poyntonophrynus* 2006; *Pseudobufo* 1838; *Rentapia* 2016; *Rhaebo* 1862; *Rhinella* 1826; *Sabahphrynus* 2007; *Schismaderma* 1849; *Sclerophrys* 1838; *Sigalegalephrynus* 2017; *Strauchbufo* 2012; *Truebella* 1995; *Vandijkophrynus* 2006; *Werneria* 1903; *Wolterstorffina* 1939

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.22. Subfamilia *Melanophryniscinae* **nov.**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Melanophryniscus* 1961

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.17. Familia *Odontophrynidae* 1971

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.†0b. Subfamilia *Incertae sedis* †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Chachaiphrynus* 2017 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.23. Subfamilia *Odontophryninae* 1971

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Macrogenioglottus* 1946; *Odontophrynus* 1862

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.24. Subfamilia *Proceratophryinae* **nov.**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Proceratophrys* 1920

_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.04. Superfamilia *Centrolenoidea* 1951

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.18. Familia *Allophrynidae* 1978

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Allophryne* 1926

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.19. Familia *Centrolenidae* 1951 [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.25. Subfamilia *Centroleninae* 1951

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 10 G: *Audaciella* **nov.**; *Centrolene* 1872; *Chimerella* 2009; *Cochranella* 1951; *Espadarana* 2009; *Nymphargus* 2007; *Rulyrana* 2009; *Sachatamia* 2009; *Teratohyla* 1951; *Vitreorana* 2009

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.26. Subfamilia *Hyalinobatrachinae* 2009

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Celsiella* 2009; *Hyalinobatrachium* 1991

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.27. Subfamilia *Ikakoginae* **nov.**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Ikakogi* 2009

_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.05. Superfamilia *Ceratophryoidea* 1838

_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.03. Epifamilia *Ceratophryoidae* 1838

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.20. Familia *Ceratophryidae* 1838

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.28. Subfamilia *Ceratophryinae* Tschudi, 1838.ta.f002-06 **{100}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Beelzebufo* 2008 †

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_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.29. Subfamilia *Lepidobatrachinae* Bauer, 1987.ba.f001-01 **{97}**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _1 G.†: *Baurubatrachus* 1990

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Chacophrys* 1963; *Lepidobatrachus* 1899

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.30. Subfamilia *Stombinae* Gallardo 1965.ga.f001-00

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Stombus* 1825

_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.04. Epifamilia *Telmatobioidae* 1843

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.16.01. Apofamilia *Cyclorampheidae* 1850-|1852|

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_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.31. Subfamilia *Alsodinae* 1869

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Alsodes* 1843; *Eupsophus* 1843

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.32. Subfamilia *Batrachylinae* 1965

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 4 G: *Atelognathus* 1978; *Batrachyla* 1843; *Chaltenobatrachus* 2011; *Hylorina* 1843

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.33. Subfamilia *Cycloramphinae* 1850-|1852|

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Cycloramphus* 1838; *Thoropa* 1865

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.34. Subfamilia *Hylodinae* 1858

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Crossodactylus* 1841; *Hylodes* 1826

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.35. Subfamilia *Limnomedusinae* **nov.**

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Limnomedusa* 1843

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.16.02. Apofamilia *Telmatobieidae* 1843

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.22. Familia *Rhinodermatidae* 1850 [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Insuetophrynus* 1970; *Rhinoderma* 1841

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.23. Familia *Telmatobiidae* 1843

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Neoprocoela* 1949 †

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_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.06. Superfamilia *Hyloidea* 1815-|1825|

F.17.24. Familia *HYLIDAE* 1815-|1825| [Q]

F.18.†0c. Subfamilia *INCERTAE SEDIS* †

3 G †: *Etnabatrachus* 2003 †; *Geophryne* 2014 †; *Proacris* 1961 †

F.18.36. Subfamilia *COPHOMANTINAE* 1878

7 G: *Aplastodiscus* 1950; *Bokermannohyla* 2005; *Boana* 1825; *Colomascirtus* 2016; *Hyloscirtus* 1882; *Myersiohyla* 2005; *Nesorohyla* 2019

F.18.37. Subfamilia *HYLINAE* 1815-|1825|

41 G: *Acris* 1841; *Anotheca* 1939; *Aparasphenodon* 1920; *Argenteohyla* 1970; *Atlantihyla* 2018; *Bromeliohyla* 2005; *Charadrahyla* 2005; *Corythomantis* 1896; *Dendropsophus* 1843; *Diaglena* 1887; *Dryaderces* 2013; *Dryophytes* 1843; *Duellmanohyla* 1992; *Ecnomiohyla* 2005; *Exerodonta* 1879; *Gabohyla* 2020; *Hyla* 1768; *Hyliola* 1899; *Isthmohyla* 2005; *Itapotihyla* 2005; *Megastomatohyla* 2005; *Nyctimantis* 1882; *Osteocephalus* 1862; *Osteopilus* 1843; *Phyllodytes* 1830; *Phytotriades* 2009; *Plectrohyla* 1877; *Pseudacris* 1843; *Pseudis* 1830; *Ptychohyla* 1944; *Quilticohyla* 2018; *Rheohyla* 2016; *Scarthyla* 1988; *Scinax* 1830; *Smilisca* 1865; *Sphaenorhynchus* 1838; *Tepuihyla* 1993; *Tlalocohyla* 2005; *Trachycephalus* 1838; *Triprion* 1866; *Xenohyla* 1998

F.17.25. Familia *PHYLLOMEDUSIDAE* 1858

F.18.38. Subfamilia *PELODRYADINAE* 1859

1 G †: *Australobatrachus* 1976

3 G: *Litoria* 1838; *Nyctimystes* 1916; *Ranoidea* 1838

F.18.39. Subfamilia *PHYLLOMEDUSINAE* 1858

8 G: *Agalychnis* 1864; *Callimedusa* 2016; *Cruziohyla* 2005; *Hylomantis* 1873; *Phasmahyla* 1991; *Phrynomedusa* 1923; *Phyllomedusa* 1830; *Pithecopus* 1866

F.14.07. Superfamilia *LEPTODACTYLOIDEA* ||1838||-1896

F.17.26. Familia *LEPTODACTYLIDAE* ||1838||-1896 [Q]

F.18.40. Subfamilia *LEIUPERINAE* 1850

5 G: *Edalorhina* 1870; *Engystomops* 1872; *Eupemphix* 1863; *Physalaemus* 1826; *Pleurodema* 1838

F.18.41. Subfamilia *LEPTODACTYLINAE* ||1838||-1896

3 G: *Adenomera* 1867; *Leptodactylus* 1826; *Lithodytes* 1843

F.18.42. Subfamilia *PARATELMATOBIINAE* 2012

2 G: *Crossodactylodes* 1938; *Rupirana* 1999

F.18.43. Subfamilia *PSEUDOPALUDICOLINAE* 1965

1 G: *Pseudopaludicola* 1926

C.11.02. Subphalanx **DIPLOSIPHONA** 1859

F.17.27. Familia *CALYPTOCEPHALELLIDAE* 1960

2 G: *Calyptocephalella* 1928; *Telmatobufo* 1952

F.17.28. Familia *MYOBATRACHIDAE* 1850 [Q]

F.18.†0d. Subfamilia *INCERTAE SEDIS* †

1 G †: *Indobatrachus* 1930 †

F.18.44. Subfamilia *LIMNODYNASTINAE* 1971

7 G: *Adelotus* 1907; *Heleioporus* 1841; *Limnodynastes* 1843; *Neobatrachus* 1863; *Notaden* 1873; *Philoria* 1901; *Platyplectrum* 1863

F.18.45. Subfamilia *MIXOPHYINAE* **nov.**

1 G: *Mixophyes* 1864

F.18.46. Subfamilia *MYOBATRACHINAE* 1850

11 G: *Arenophryne* 1976; *Assa* 1972; *Crinia* 1838; *Geocrinia* 1973; *Metacrinia* 1940; *Myobatrachus* 1850; *Paracrinia* 1976; *Pseudophryne* 1843; *Spicospina* 1997; *Taudactylus* 1966; *Uperoleia* 1841

F.18.47. Subfamilia *RHEOBATRACHINAE* 1976

1 G: *Rheobatrachus* 1973

C.10.03. Phalanx **SCOPTANURA** 1973

C.11.†0a. Subphalanx *INCERTAE SEDIS*

1 G †: *Hungarobatrachus* 2010 †

C.11.03. Subphalanx **ECOSTATA** 1879

F.17.29. Familia *MICROHYLIDAE* ||1843||-1931 [Q]

F.18.48. Subfamilia *ADELASTINAE* 2016

1 G: *Adelastes* 1986

F.18.49. Subfamilia *ASTEROPHRYINAE* 1858

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 4 G: *Asterophrys* 1838; *Gastrophrynoides* 1926; *Siamophryne* 2018; *Vietnamophryne* 2018
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.50. Subfamilia *Cophylinae* 1889
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 8 G: *Anodonthyla* 1892; *Cophyla* 1880; *Madecassophryne* 1974; *Mantipus* 1883; *Paradoxophyla* 1991; *Platypelis* 1882; *Rhombophryne* 1880; *Scaphiophryne* 1882
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.51. Subfamilia *Gastrophryninae* 1843
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 11 G: *Arcovomer* 1954; *Chiasmocleis* 1904; *Ctenophryne* 1904; *Dasypops* 1924; *Dermatonotus* 1904; *Engystoma* 1826; *Gastrophryne* 1843; *Hamptophryne* 1954; *Hypopachus* 1867; *Myersiella* 1954; *Stereocyclops* 1870
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.52. Subfamilia *Hoplophryninae* 1931
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Hoplophryne* 1928; *Parhoplophryne* 1928
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.53. Subfamilia *Kalophryninae* 1869
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Kalophrynus* 1838
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.54. Subfamilia *Melanobatrachinae* 1931
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Melanobatrachus* 1878
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.55. Subfamilia *Microhylinae* ||1843||-1931
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 10 G: *Chaperina* 1892; *Dyscophus* 1872; *Glyphoglossus* 1869; *Kaloula* 1831; *Metaphrynella* 1934; *Micryletta* 1987; *Microhyla* 1838; *Mysticellus* 2019; *Phrynella* 1887; *Uperodon* 1841
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.56. Subfamilia *Otophryninae* 1987
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Otophryne* 1900; *Synapturanus* 1954
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.30. Familia *Phrynomeridae* 1931
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Phrynomantis* 1867
_ _ _ _ _ _ _ _ _ _ C.11.04. Subphalanx **Gastrechmia** 1867
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.08. Superfamilia *Arthroleptoidea* 1869
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.31. Familia *Arthroleptidae* 1869
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.57. Subfamilia *Arthroleptinae* 1869
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Arthroleptis* 1849
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.58. Subfamilia *Astylosterninae* 1927
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 4 G: *Astylosternus* 1898; *Leptodactylodon* 1903; *Nyctibates* 1904; *Scotobleps* 1900
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.59. Subfamilia *Leptopelinae* 1972
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Leptopelis* 1859
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.32. Familia *Hyperoliidae* 1943 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.0b. Subfamilia *Incertae sedis*
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 3 G: *Arlequinus* 1988; *Callixalus* 1950; *Chrysobatrachus* 1951
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.60. Subfamilia *Cryptothylacinae* **nov.**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Cryptothylax* 1950
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.61. Subfamilia *Hyperoliinae* 1943
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 12 G: *Acanthixalus* 1944; *Afrixalus* 1944; *Heterixalus* 1944; *Hylambates* 1853; *Hyperolius* 1842; *Kassina* 1853; *Kassinula* 1940; *Morerella* 2009; *Opisthothylax* 1966; *Paracassina* 1907; *Semnodactylus* 1939; *Tachycnemis* 1843
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.09. Superfamilia *Brevicipitoidea* 1850
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.33. Familia *Brevicipitidae* 1850
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.62. Subfamilia *Brevicipitinae* 1850
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Breviceps* 1820
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.63. Subfamilia *Callulininae* **nov.**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 4 G: *Balebreviceps* 1989; *Callulina* 1911; *Probreviceps* 1931; *Spelaeophryne* 1924
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.34. Familia *Hemisotidae* 1867 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Hemisus* 1859
_ _ _ _ _ _ _ _ _ _ C.11.05. Subphalanx **Pananura nov.**
_ _ _ _ _ _ _ _ _ _ _ C.12.03. Infraphalanx **Ecaudata** 1777
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.10. Superfamilia *Odontobatrachoidea* 2014
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.35. Familia *Odontobatrachidae* 2014
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Odontobatrachus* 2014
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.11. Superfamilia *Phrynobatrachoidea* 1941
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.36. Familia *Phrynobatrachidae* 1941
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Phrynobatrachus*1862; *Phrynodon* 1935
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.12. Superfamilia *Ranoidea* 1796

_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.05. Epifamilia *Conrauoidae* 1992
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.37. Familia *Conrauidae* 1992
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Conraua* 1908
_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.06. Epifamilia *Ericabatrachoidae* **nov.**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.38. Familia *Ericabatrachidae* **nov.**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Ericabatrachus* 1991
_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.07. Epifamilia *Micrixaloidae* 2001
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.39. Familia *Micrixalidae* 2001
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Micrixalus* 1888
_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.08. Epifamilia *Petropedetoidae* 1931
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.40. Familia *Petropedetidae* 1931
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Arthroleptides* 1911; *Petropedetes* 1874
_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.09. Epifamilia *Pyxicephaloidae* 1850
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.41. Familia *Cacosternidae* 1931
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.64. Subfamilia *Anhydrophryninae* **nov.**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Anhydrophryne* 1919
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.65. Subfamilia *Cacosterninae* 1931
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 7 G: *Amietia* 1987; *Arthroleptella* 1926; *Cacosternum* 1887; *Microbatrachella* 1926; *Natalobatrachus* 1912; *Poyntonia* 1989; *Strongylopus* 1838
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.66. Subfamilia *Tomopterninae* 1987
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Nothophryne* 1963; *Tomopterna* 1841
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.42. Familia *Pyxicephalidae* 1850
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Aubria* 1917; *Pyxicephalus* 1838
_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.10. Epifamilia *Ranoidae* 1796
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.16.03. Apofamilia *Ceratobatracheidae* 1884
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.43. Familia *Ceratobatrachidae* 1884
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.67. Subfamilia *Alcalinae* 2015
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Alcalus* 2015
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.68. Subfamilia *Ceratobatrachinae* 1884
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Cornufer* 1838; *Platymantis* 1859
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.69. Subfamilia *Liuraninae* 2010
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Liurana* 1987
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.16.04. Apofamilia *Dicroglosseidae* 1987
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.44. Familia *Dicroglossidae* 1987
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.0c. Subfamilia *Incertae sedis*
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Chrysopaa* 2006
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.70. Subfamilia *Dicroglossinae* 1987
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 7 G: *Euphlyctis* 1843; *Fejervarya* 1915; *Hoplobatrachus* 1863; *Minervarya* 2001; *Nannophrys* 1869; *Phrynoderma* 1843; *Sphaerotheca* 1859
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.71. Subfamilia *Limnonectinae* 1992
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Limnonectes* 1843
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.72. Subfamilia *Painae* 1992
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 12 G: *Allopaa* 2006; *Annandia* 1992; *Chaparana* 1939; *Diplopaa* **nov.**; *Eripaa* 1992; *Feirana* 1992; *Gynandropaa* 1992; *Nanorana* 1896; *Ombropaa* **nov.**; *Paa* 1975; *Quasipaa* 1992; *Yerana* 2006
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.45. Familia *Occidozygidae* 1990
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.73. Subfamilia *Ingeraninae* 2010
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Ingerana* 1987
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.74. Subfamilia *Occidozyginae* 1990
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 4 G: *Frethia* **nov.**; *Occidozyga* 1822; *Oreobatrachus* 1896; *Phrynoglossus* 1867
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.16.05. Apofamilia *Nyctibatracheidae* 1993
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.46. Familia *Astrobatrachidae* 2019
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Astrobatrachus* 2019
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.47. Familia *Nyctibatrachidae* 1993
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Lankanectes* 2001; *Nyctibatrachus* 1882
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.16.06. Apofamilia *Raneidae* 1796
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.48. Familia *Ranidae* 1796 [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.75. Subfamilia *Raninae* 1796
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Ranavus* 1885 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 21 G: *Abavorana* 2015; *Amerana* 1992; *Amolops* 1865; *Aquarana* 1992; *Babina* 1912; *Boreorana* **nov.**; *Clinotarsus* 1869; *Glandirana* 1990; *Hylarana* 1838; *Lithobates* 1843; *Liuhurana* 2010; *Meristogenys* 1991; *Nidirana* 1992; *Odorrana* 1990; *Pelophylax* 1843; *Pseudorana* 1990; *Pterorana* 1986; *Rana* 1758; *Rugosa* 1990; *Sanguirana* 1992; *Sumaterana* 2018
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.76. Subfamilia *Stauroinae* 2005
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Staurois* 1865
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.49. Familia *Rhacophoridae* ||1858||-1932 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.77. Subfamilia *Mantellinae* 1946
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 12 G: *Aglyptodactylus* 1919; *Blommersia* 1992; *Boehmantis* 2006; *Boophis* 1838; *Gephyromantis* 1920; *Guibemantis* 1992; *Laliostoma* 1998; *Mantella* 1882; *Mantidactylus* 1895; *Spinomantis* 1992; *Tsingymantis* 2006; *Wakea* 2006
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.78. Subfamilia *Rhacophorinae* ||1858||-1932
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Indorana* 2013 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 25 G: *Beddomixalus* 2013; *Buergeria* 1838; *Chirixalus* 1893; *Chiromantis* 1854; *Dendrobatorana* 1927; *Feihyla* 2006; *Ghatixalus* 2008; *Gracixalus* 2005; *Kurixalus* 1999; *Leptomantis* 1867; *Mercurana* 2013; *Nasutixalus* 2016; *Nyctixalus* 1882; *Orixalus* **nov.**; *Philautus* 1848; *Polypedates* 1838; *Pseudophilautus* 1943; *Raorchestes* 2010; *Rhacophorus* 1822; *Romerus* **nov**.; *Tamixalus* **nov.**; *Taruga* 2010; *Theloderma* 1838; *Vampyrius* **nov.**; *Zhangixalus* 2019
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.16.07. Apofamilia *Ranixaleidae* 1987
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.50. Familia *Ranixalidae* 1987
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Indirana* 1986; *Walkerana* 2016
_ _ _ _ _ _ _ _ _ _ _ C.12.04. Infraphalanx **Savanura nov.**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.51. Familia *Ptychadenidae* 1987
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 3 G: *Hildebrandtia* 1907; *Lanzarana* 1982; *Ptychadena* 1917
_ _ _ _ _ _ _ _ C.09.02. Epiphalanx **Helanura nov.**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.52. Familia *Heleophrynidae* 1931 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Hadromophryne* 2008; *Heleophryne* 1898
_ _ _ _ _ C.06.02. Infraordo **Mediogyrinia** 1878
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.†0b. Superfamilia *Incertae sedis* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0h. Familia *Incertae sedis* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 5 G †: *Callobatrachus* 1999 †; *Electrorana* 2018 **†;** *Enneabatrachus* 1993 †; *Opisthocoelellus* 1941 †; *Pelophilus* 1838 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†06. Familia *Gobiatidae* 1991 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G †: *Cretasalia* 1999 †; *Gobiates* 1986 †
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.13. Superfamilia *Alytoidea* 1843
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.53. Familia *Alytidae* 1843
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Kizylkuma* 1981 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Alytes* 1829; *Ammoryctis* 1879
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.54. Familia *Discoglossidae* 1858 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 5 G †: *Bakonybatrachus* 2012 †; *Eodiscoglossus* 1954 †; *Latoglossus* 2000 †; *Paradiscoglossus* 1982 †; *Paralatonia* 2003 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Discoglossus* 1837; *Latonia* 1843
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.14. Superfamilia *Bombinatoroidea* 1825
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.55. Familia *Bombinatoridae* 1825 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Eobarbourula* 2013 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Barbourula* 1924; *Bombina* 1816
_ _ _ C.04.02. Ordo **Gymnophiona** 1814
_ _ _ _ C.05.†0b. Subordo *Incertae sedis* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0i. Familia *Incertae sedis* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Rubricacaecilia* 2001 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†07. Familia *Eocaeciliidae* 1993 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Eocaecilia* 1993 †
_ _ _ _ C.05.03. Subordo **Plesiophiona nov.**
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.56. Familia *Rhinatrematidae* 1977

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Rhinatrema* 1841

_ _ _ _ C.05.04. Subordo **Pseudophiona** 1816

_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.15. Superfamilia *Caecilioidea* 1814-|1825|

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.57. Familia *Caeciliidae* 1814-|1825| [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.79. Subfamilia *Caeciliinae* 1814-|1825|

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Apodops* 1972 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 21 G: *Atretochoana* 1995; *Brasilotyphlus* 1968; *Caecilia* 1758; *Chthonerpeton* 1880; *Gegeneophis* 1880; *Geotrypetes* 1880; *Gymnopis* 1874; *Hypogeophis* 1880; *Idiocranium* 1936; *Indotyphlus* 1960; *Luetkenotyphlus* 1968; *Microcaecilia* 1968; *Mimosiphonops* 1968; *Nectocaecilia* 1968; *Oscaecilia* 1968; *Potamotyphlus* 1968; *Praslinia* 1909; *Schistometopum* 1941; *Siphonops* 1828; *Sylvacaecilia* 1987; *Typhlonectes* 1880

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.80. Subfamilia *Herpelinae* 1984

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 3 G: *Boulengerula* 1896; *Chikila* 2012; *Herpele* 1880

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.58. Familia *Scolecomorphidae* 1969

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Crotaphatrema* 1985; *Scolecomorphus* 1883

_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.16. Superfamilia *Ichthyophioidea* 1968

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.59. Familia *Ichthyophiidae* 1968 [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Epicrium* 1828; *Ichthyophis* 1826

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.60. Familia *Uraeotyphlidae* 1979

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Uraeotyphlus* 1880

_ _ _ C.04.03. Ordo **Urodela** 1805

_ _ _ _ C.05.†0c. Subordo *Incertae sedis* †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0j. Familia *Incertae sedis* †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 21 G †: *Apricosiren* 2002 †; *Balveherpeton* 2020 †; *Bishara* 1997 †; *Bissektia* 1981 †; *Comonecturoides* 1960 †; *Cryptobranchichnus* 1941 †; *Egoria* 2020 †; *Galverpeton* 1982 †; *Iridotriton* 2005 †; *Jeholotriton* 2000 †; *Kiyatriton* 2002 †; *Kulgeriherpeton* 2018 †; *Laccotriton* 1998 †; *Marmorerpeton* 1988 †; *Nesovtriton* 2009 †; *Nezpercius* 2001 †; *Ramonellus* 1969 †; *Seminobatrachus* 2012 †; *Sinerpeton* 2001 †; *Urupia* 2011 †; *Valdotriton* 1996 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†08. Familia *Hylaeobatrachidae* 1889 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 7 G †: *Batrachosauroides* 1943 †; *Hylaeobatrachus* 1884 †; *Opisthotriton* 1961 †; *Palaeoproteus* 1935 †; *Parrisia* 1998 †; *Peratosauroides* 1981 †; *Prodesmodon* 1964 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†09. Familia *Karauridae* 1978 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G †: *Karaurus* 1978 †; *Kokartus* 1988 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†10. Familia *Prosirenidae* 1969 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Prosiren* 1958 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†11. Familia *Scapherpetidae* 1959 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 3 G †: *Hedronchus* 1877 †; *Lisserpeton* 1965 †; *Piceoerpeton* 1967 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†12. Familia *Triassuridae* 1978 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Triassurus* 1978 †

_ _ _ _ C.05.05. Subordo **Imperfectibranchia** 1838

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0k. Familia *Incertae sedis* †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 5 G †: *Liaoxitriton* 1998 †; *Linglongtriton* 2019 †; *Nuominerpeton* 2016 †; *Pangerpeton* 2006 †; *Regalerpeton* 2009 †;

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.61. Familia *Cryptobranchidae* 1826 [Q+]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 7 G †: *Aviturus* 1991 †; *Chunerpeton* 2003 †; *Eoscapherpeton* 1981 †; *Horezmia* 1981 †; *Ukrainurus* 2013 †; *Ulanurus* 1991 †; *Zaissanurus* 1959 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Andrias* 1837; *Cryptobranchus* 1821

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.62. Familia *Hynobiidae* ||1856||-1859 [Q]

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.†0d. Subfamilia *Incertae sedis* †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G †: *Geyeriella* 1950 †; *Parahynobius* 1999 †

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.81. Subfamilia *Hynobiinae* ||1856||-1859

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 12 G: *Afghanodon* 2012; *Batrachuperus* 1878; *Hynobius* 1838; *Iranodon* 2012; *Liua* 1983; *Pachyhynobius* 1983; *Pachypalaminus* 1912; *Poyarius* 2012; *Pseudohynobius* 1983; *Ranodon* 1866; *Salamandrella* 1870; *Satobius* 1990

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.82. Subfamilia *Onychodactylinae* 2012

_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G:. *Onychodactylus* 1838

_ _ _ _ C.05.06. Subordo **Meantes** 1767
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†13. Familia *Noterpetidae* 1983 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G †: *Kababisha* 1996 †; *Noterpeton* 1993 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.63. Familia *Sirenidae* 1825 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Habrosaurus* 1928 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Pseudobranchus* 1825; *Siren* 1766
_ _ _ _ C.05.07. Subordo **Pseudosauria** 1816
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.†0c. Superfamilia *Incertae sedis* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.†0l. Familia *Incertae sedis* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G †: *Beiyanerpeton* 2012 †; *Qinglongtriton*° 2016 †
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.17. Superfamilia *Amphiumoidea* 1825
_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.11. Epifamilia *Amphiumoidae* 1825
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.16.08. Apofamilia *Amphiumeidae* 1825
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.64. Familia *Amphiumidae* 1825 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G †: *Paleoamphiuma* 1998 †; *Proamphiuma* 1969 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Amphiuma* 1821
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.65. Familia *Plethodontidae* 1850 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.†0f. Subfamilia *Incertae sedis* †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Palaeoplethodon* 2015 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.83. Subfamilia *Hemidactyliinae* 1856
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 23 G: *Aquiloeurycea* 2015; *Batrachoseps* 1839; *Bolitoglossa* 1854; *Bradytriton* 1983; *Chiropterotriton* 1944; *Cryptotriton* 2000; *Dendrotriton* 1983; *Eurycea* 1822; *Gyrinophilus* 1869; *Hemidactylium* 1838; *Isthmura* 2012; *Ixalotriton* 1989; *Nototriton* 1983; *Nyctanolis* 1983; *Oedipina* 1868; *Oedopinola* 1946; *Parvimolge* 1944; *Pseudoeurycea* 1944; *Pseudotriton* 1838; *Stereochilus* 1869; *Thorius* 1869; *Thornea* **nov.**; *Urspelerpes* 2009
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.84. Subfamilia *Plethodontinae* 1850
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 8 G: *Aneides* 1851; *Desmognathus* 1850; *Ensatina* 1850; *Hydromantes* 1848; *Karsenia* 2005; *Phaeognathus* 1961; *Plethodon* 1838; *Speleomantes* 1984
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.16.09. Apofamilia *Rhyacotritoneidae* 1958
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.66. Familia *Rhyacotritonidae* 1958 [Q+]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Rhyacotriton* 1920
_ _ _ _ _ _ _ _ _ _ _ _ _ _ F.15.12. Epifamilia *Proteoidae* Bonaparte, 1831.ba.f002-11
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.67. Familia *Proteidae* Bonaparte, 1831.ba.f002-02 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 3 G †: *Mioproteus* 1978 †; *Orthophyia* 1845 †; *Paranecturus* 2013 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Necturus* 1819; *Proteus* 1768
_ _ _ _ _ _ _ _ _ _ _ _ _ F.14.18. Superfamilia *Salamandroidea* 1820
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.68. Familia *Ambystomatidae* 1850 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 5 G †: *Ambystomichnus* 1954 †; *Amphitriton* 1976 †; *Chrysotriton* 1981 †; *Sanchizia* 2012 †; *Wolterstorffiella* 1950 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 2 G: *Ambystoma* 1838; *Dicamptodon* 1870
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.17.69. Familia *Salamandridae* 1820 [Q]
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.85. Subfamilia *Pleurodelinae* 1838
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 9 G †: *Archaeotriton* 1860 †; *Brachycormus* 1860 †; *Carpathotriton* 2008 †; *Chelotriton* 1853†; *Koalliella* 1950 †; *Oligosemia* 1923 †; *Palaeopleurodeles* 1941 †; *Phosphotriton* 2016 †; *Procynops* 1965 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 18 G: *Calotriton* 1858; *Cynops* 1838; *Echinotriton* 1982; *Euproctus* 1839; *Hypselotriton* 1934; *Ichthyosaura* 1801; *Laotriton* 2009; *Lissotriton* 1839; *Neurergus* 1862; *Notophthalmus* 1820; *Ommatotriton* 1850; *Pachytriton* 1878; *Paramesotriton* 1935; *Pleurodeles* 1830; *Taricha* 1850; *Triturus* 1815; *Tylototriton* 1871; *Yaotriton* 2009
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.86. Subfamilia *Salamandrinae* 1820
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G †: *Megalotriton* 1890 †
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 4 G: *Chioglossa* 1864; *Lyciasalamandra* 2004; *Mertensiella* 1925; *Salamandra* 1764
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ F.18.87. Subfamilia *Salamandrininae* 1843
_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ 1 G: *Salamandrina* 1826

**Appendix A11.CLAD-3.** Families and subfamilies of **Lissamphibia** here considered valid.

† • all-fossil taxon.

Abbreviations for numbers in column 1 • **A**, **Anura**; **B**, **Allocaudata**; **G**, **Gymnophiona**; **i**, *incertae sedis*; **L**, **Lissamphibia**; **U**, **Urodela**.

For the meaning of all other identifiers, see legend of Appendix **A9.CLAD-1**.

| Nr. | Family [number of genera] | Subfamilies [number of genera] | Lowest class-series angionym of this family [Rank] |
|---|---|---|---|
| **B†1** | *Albanerpetidae* 1982 † [6 †] | – | **Allocaudata** 1982 † [Ordo] |
| **BT** | **Total Allocaudata: 1** † [6 †] | [0 + 1 †] | **Allocaudata** 1982 † [Ordo] |
| **A01** | *Allophrynidae* 1978 [1] | – | **Hylobatrachia** 1828 [Hypophalanx] |
| **A02** | *Alytidae* 1843 [2 + 1 †] | – | **Mediogyrinia** 1878 [Infraordo] |
| **A03** | *Aromobatidae* 2006 [5] | *Allobatinae* 2006 [1]<br>*Anomaloglossinae* 2006 [2]<br>*Aromobatinae* 2006 [2] | **Phoranura nov.** [Infraphalanx] |
| **A04** | *Arthroleptidae* 1869 [6] | *Arthroleptinae* 1869 [1]<br>*Astylosterninae* 1927 [4]<br>*Leptopelinae* 1972 [1] | **Gastrechmia** 1867 [Subphalanx] |
| **A05** | *Ascaphidae* 1923 [1] | – | **Angusticoela** 1958 [Subordo] |
| **A06** | *Astrobatrachidae* 2019 [1] | – | **Ecaudata** 1777 [Infraphalanx] |
| **A07** | *Bombinatoridae* 1825 [2 + 1 †] | – | **Mediogyrinia** 1878 [Infraordo] |
| **A08** | *Brachycephalidae* 1858 [30] | *Brachycephalinae* 1858 [2]<br>*Craugastorinae* 2008 [21]<br>*Eleutherodactylinae* 1954 [5]<br>*Incertae sedis Brachycephalidae* [2] | **Gaianura nov.** [Hypophalanx] |
| **A09** | *Brevicipitidae* 1850 [5] | *Brevicipitinae* 1850 [1]<br>*Callulininae* **nov.** [4] | **Gastrechmia** 1867 [Subphalanx] |
| **A10** | *Bufonidae* 1825 [54 + 1 †] | *Bufoninae* 1825 [53 + 1 †]<br>*Melanophryniscinae* **nov.** [1] | **Hylobatrachia** 1828 [Hypophalanx] |
| **A11** | *Cacosternidae* 1931 [10] | *Anhydrophryninae* **nov.** [1]<br>*Cacosterninae* 1931 [7]<br>*Tomopterninae* 1987 [2] | **Ecaudata** 1777 [Infraphalanx] |
| **A12** | *Calyptocephalellidae* 1960 [2] | – | **Diplosiphona** 1859 [Subphalanx] |
| **A13** | *Centrolenidae* 1951 [13] | *Centroleninae* 1951 [10]<br>*Hyalinobatrachinae* 2009 [2]<br>*Ikakoginae* **nov.** [1] | **Hylobatrachia** 1828 [Hypophalanx] |
| **A14** | *Ceratobatrachidae* 1884 [4] | *Alcalinae* 2015 [1]<br>*Ceratobatrachinae* 1884 [2]<br>*Liuraninae* 2010 [1] | **Ecaudata** 1777 [Infraphalanx] |

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**Appendix A11.** (Continued)

| Nr. | Family [number of genera] | Subfamilies [number of genera] | Lowest class-series angionym of this family [Rank] |
|---|---|---|---|
| **A15** | *Ceratophryidae* 1838 [4 + 2 †] | *Ceratophryinae* 1838 [1 + 1 †]<br>*Lepidobatrachinae* 1987 [2 + 1 †]<br>*Stombinae* 1965 [1] | **Hylobatrachia** 1828 [Hypophalanx] |
| **A16** | *Ceuthomantidae* 2009 [2] | – | **Gaianura nov.** [Hypophalanx] |
| **A17** | *Conrauidae* 1992 [1] | – | **Ecaudata** 1777 [Infraphalanx] |
| **A18** | *Cycloramphidae* 1850-\|1852\| [11] | *Alsodinae* 1869 [2]<br>*Batrachylinae* 1965 [4]<br>*Cycloramphinae* 1850-\|1852\| [2]<br>*Hylodinae* 1858 [2]<br>*Limnomedusinae* **nov.** [1] | **Hylobatrachia** 1828 [Hypophalanx] |
| **A19** | *Dendrobatidae* \|\|1850\|\|-1865 [16] | *Colostethinae* 1867 [5]<br>*Dendrobatinae* \|\|1850\|\|-1865 [8]<br>*Hyloxalinae* 2006 [3] | **Phoranura nov.** [Infraphalanx] |
| **A20** | *Dicroglossidae* 1987 [21] | *Dicroglossinae* 1987 [7]<br>*Limnonectinae* 1992 [1]<br>*Painae* 1992 [12]<br>*Incertae sedis Dicroglossidae* [1] | **Ecaudata** 1777 [Infraphalanx] |
| **A21** | *Discoglossidae* 1858 [2 + 5 †] | – | **Mediogyrinia** 1878 [Infraordo] |
| **A22** | *Ericabatrachidae* **nov.** [1] | – | **Ecaudata** 1777 [Infraphalanx] |
| **A23** | *Heleophrynidae* 1931 [2] | – | **Helanura nov.** [Epiphalanx] |
| **A24** | *Hemiphractidae* 1862 [10] | *Amphignathodontinae* 1882 [5]<br>*Cryptobatrachinae* 2006 [1]<br>*Flectonotinae* **nov.** [1]<br>*Fritzianinae* **nov.** [1]<br>*Hemiphractinae* 1862 [1]<br>*Stefaniinae* **nov.** [1] | **Hemiphractiformia** 1881 [Hypophalanx] |
| **A25** | *Hemisotidae* 1867 [1] | – | **Gastrechmia** 1867 [Subphalanx] |
| **A26** | *Hylidae* 1815-\|1825\| [48 + 3 †] | *Cophomantinae* 1878 [7]<br>*Hylinae* 1815-\|1825\| [41]<br>*Incertae sedis Hylidae* † [3 †] | **Hylobatrachia** 1828 [Hypophalanx] |
| **A27** | *Hyperoliidae* 1943 [16] | *Cryptothylacinae* **nov.** [1]<br>*Hyperoliinae* 1943 [12]<br>*Incertae sedis Hyperoliidae* [3] | **Gastrechmia** 1867 [Subphalanx] |
| **A28** | *Leiopelmatidae* 1869-\|1942\| [2 + 1 †] | *Leiopelmatinae* 1869-\|1942\| [2]<br>*Notobatrachinae* 1956 † [1 †] | **Angusticoela** 1958 [Subordo] |
| **A29** | *Leptodactylidae* \|\|1838\|\|-1896 [11] | *Leiuperinae* 1850 [5]<br>*Leptodactylinae* \|\|1838\|\|-1896 [3]<br>*Paratelmatobiinae* 2012 [2]<br>*Pseudopaludicolinae* 1965 [1] | **Hylobatrachia** 1828 [Hypophalanx] |

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**Appendix A11.** (Continued)

| Nr. | Family [number of genera] | Subfamilies [number of genera] | Lowest class-series angionym of this family [Rank] |
|---|---|---|---|
| **A30** | *Megophryidae* 1850-\|1931\| [11] | *Leptobrachiinae* 1983 [4]<br>*Megophryinae* 1850-\|1931\| [7] | **Archaeosalientia** 1981 [Superphalanx] |
| **A31** | *Micrixalidae* 2001 [1] | – | **Ecaudata** 1777 [Infraphalanx] |
| **A32** | *Microhylidae* \|\|1843\|\|-1931 [40] | *Adelastinae* 2016 [1]<br>*Asterophryinae* 1858 [4]<br>*Cophylinae* 1889 [8]<br>*Gastrophryninae* 1843 [11]<br>*Hoplophryninae* 1931 [2]<br>*Kalophryninae* 1869 [1]<br>*Melanobatrachinae* 1931 [1]<br>*Microhylinae* \|\|1843\|\|-1931 [10]<br>*Otophryninae* 1987 [2] | **Ecostata** 1879 [Subphalanx] |
| **A33** | *Myobatrachidae* 1850 [20 + 1 †] | *Limnodynastinae* 1971 [7]<br>*Mixophyinae* **nov.** [1]<br>*Myobatrachinae* 1850 [11]<br>*Rheobatrachinae* 1976 [1]<br>*Incertae sedis Myobatrachidae* † [1 †] | **Diplosiphona** 1859 [Subphalanx] |
| **A34** | *Nasikabatrachidae* 2003 [1] | – | **Gondwanura nov.** [Phalanx] |
| **A35** | *Nyctibatrachidae* 1993 [2] | – | **Ecaudata** 1777 [Infraphalanx] |
| **A36** | *Occidozygidae* 1990 [5] | *Ingeraninae* 2010 [1]<br>*Occidozyginae* 1990 [4] | **Ecaudata** 1777 [Infraphalanx] |
| **A37** | *Odontobatrachidae* 2014 [1] | – | **Ecaudata** 1777 [Infraphalanx] |
| **A38** | *Odontophrynidae* 1971 [3 + 1 †] | *Odontophryninae* 1971 [2]<br>*Proceratophryinae* **nov.** [1]<br>*Incertae sedis Odontophrynidae* † [1 †] | **Hylobatrachia** 1828 [Hypophalanx] |
| **A39** | *Pelobatidae* 1850 [1 + 1 †] | – | **Archaeosalientia** 1981 [Superphalanx] |
| **A40** | *Pelodytidae* 1850 [2 + 2 †] | – | **Archaeosalientia** 1981 [Superphalanx] |
| **A41** | *Petropedetidae* 1931 [2] | – | **Ecaudata** 1777 [Infraphalanx] |
| **A42** | *Phrynobatrachidae* 1941 [2] | – | **Ecaudata** 1777 [Infraphalanx] |
| **A43** | *Phrynomeridae* 1931 [1] | – | **Ecostata** 1879 [Subphalanx] |
| **A44** | *Phyllomedusidae* 1858 [11 + 1 †] | *Pelodryadinae* 1859 [3 + 1 †]<br>*Phyllomedusinae* 1858 [8] | **Hylobatrachia** 1828 [Hypophalanx] |
| **A45** | *Pipidae* 1825-\|1826\| [5 + 10 †] | *Dactylethrinae* 1838 [4]<br>*Pipinae* 1825-\|1826\| [1]<br>*Salteniinae* † **nov**. [4 †]<br>*Incertae sedis Pipidae* † [6 †] | **Dorsipares** 1816 [Hypoordo] |

*...Continued on the next page*

**APPENDIX A11.** (Continued)

| NR. | FAMILY [NUMBER OF GENERA] | SUBFAMILIES [NUMBER OF GENERA] | LOWEST CLASS-SERIES ANGIONYM OF THIS FAMILY [RANK] |
|---|---|---|---|
| **A46** | *PTYCHADENIDAE* 1987 [3] | – | **SAVANURA nov.** [Infraphalanx] |
| **A47** | *PYXICEPHALIDAE* 1850 [2] | – | **ECAUDATA** 1777 [Infraphalanx] |
| **A48** | *RANIDAE* 1796 [22 + 1 †] | *RANINAE* 1796 [21 + 1 †]<br>*STAUROINAE* 2005 [1] | **ECAUDATA** 1777 [Infraphalanx] |
| **A49** | *RANIXALIDAE* 1987 [2] | – | **ECAUDATA** 1777 [Infraphalanx] |
| **A50** | *RHACOPHORIDAE* ‖1858‖-1932 [37 + 1 †] | *MANTELLINAE* 1946 [12]<br>*RHACOPHORINAE* ‖1858‖-1932 [25 + 1 †] | **ECAUDATA** 1777 [Infraphalanx] |
| **A51** | *RHINODERMATIDAE* 1850 [2] | – | **HYLOBATRACHIA** 1828 [Hypophalanx] |
| **A52** | *RHINOPHRYNIDAE* 1858 [1 + 3 †] | – | **DORSIPARES** 1816 [Hypoordo] |
| **A53** | *SCAPHIOPODIDAE* 1865 [2] | – | **ARCHAEOSALIENTIA** 1981 [Superphalanx] |
| **A54** | *SOOGLOSSIDAE* 1931 [2] | – | **GONDWANURA nov. [**Phalanx] |
| **A55** | *TELMATOBIIDAE* 1843 [1 + 1 †] | – | **HYLOBATRACHIA** 1828 [Hypophalanx] |
| **Ai1** | *Incertae sedis* **HYLOBATRACHIA** [1] | – | **HYLOBATRACHIA nov.** [Hypophalanx] |
| **Ai2** | *Incertae sedis* **LAEVOGYRINIA** [1] | – | **LAEVOGYRINIA** 1878 [Hypoordo] |
| **A†1** | *GOBIATIDAE* 1991 † [2 †] | – | **MEDIOGYRINIA** 1878 [Infraordo] |
| **A†2** | *PALAEOBATRACHIDAE* 1865 † [3 †] | – | **DORSIPARES** 1816 [Hypoordo] |
| **A†3** | *PROSALIRIDAE* 1995 † [1 †] | – | **ANURA** 1805 [Ordo] |
| **A†4** | *TREGOBATRACHIDAE* 1975 † [1 †] | – | **ANURA** 1805 [Ordo] |
| **A†5** | *TRIADOBATRACHIDAE* 1962 † [1 †] | – | **ANURA** 1805 [Ordo] |
| **A†i1** | *Incertae sedis* **ANURA** † [39 †] | – | **ANURA** 1805 [Ordo] |
| **A†i2** | *Incertae sedis* **ARCHAEOSALIENTIA** † [5 †] | – | **ARCHAEOSALIENTIA** 1981 [Superphalanx] |
| **A†i3** | *Incertae sedis* **DORSIPARES** † [7 †] | – | **DORSIPARES** 1816 [Hypoordo] |
| **A†i4** | *Incertae sedis* **GEOBATRACHIA** † [1 †] | – | **GEOBATRACHIA** 1828 [Infraordo] |
| **A†i5** | *Incertae sedis* **HYDROBATRACHIA** † [4 †] | – | **HYDROBATRACHIA** 1828 [Subordo] |
| **A†i6** | *Incertae sedis* **MEDIOGYRINIA** † [5 †] | – | **MEDIOGYRINIA** 1878 [Infraordo] |
| **A†i7** | *Incertae sedis* **SCOPTANURA** † [1 †] | – | **SCOPTANURA** 1973 [Phalanx] |
| **AT** | **TOTAL ANURA: 55 + 5 †** [470 + 105 †] | [78 + 2 †] | **ANURA** 1805 [Ordo] |
| **G01** | *CAECILIIDAE* 1814-\|1825\| [24 + 1 †] | *CAECILIINAE* 1814-\|1825\| [21 + 1 †]<br>*HERPELINAE* 1984 [3] | **PSEUDOPHIONA** 1816 [Subordo] |
| **G02** | *ICHTHYOPHIIDAE* 1968 [2] | – | **PSEUDOPHIONA** 1816 [Subordo] |
| **G03** | *RHINATREMATIDAE* 1977 [1] | – | **PLESIOPHIONA nov.** [Subordo] |
| **G04** | *SCOLECOMORPHIDAE* 1969 [2] | – | **PSEUDOPHIONA** 1816 [Subordo] |
| **G05** | *URAEOTYPHLIDAE* 1979 [1] | – | **PSEUDOPHIONA** 1816 [Subordo] |
| **G†1** | *EOCAECILIIDAE* 1993 † [1 †] | – | **GYMNOPHIONA** 1814 [Ordo] |
| **G†i1** | *Incertae sedis* **GYMNOPHIONA** † [2 †] | – | **GYMNOPHIONA** 1814 [Ordo] |
| **GT** | **TOTAL GYMNOPHIONA: 5 + 1 †** [30 + 4 †] | [2] | **GYMNOPHIONA** 1814 [Ordo] |
| **U01** | *AMBYSTOMATIDAE* 1850 [2 + 5 †] | – | **PSEUDOSAURIA** 1816 [Subordo] |

*...Continued on the next page*

**Appendix A11.** (Continued)

| Nr. | Family [number of genera] | Subfamilies [number of genera] | Lowest class-series angionym of this family [Rank] |
|---|---|---|---|
| **U02** | *Amphiumidae* 1825 [1 + 2 †] | – | **Pseudosauria** 1816 [Subordo] |
| **U03** | *Cryptobranchidae* 1826 [2 + 7 †] | – | **Imperfectibranchia** 1838 [Subordo] |
| **U04** | *Hynobiidae* ‖1856‖-1859 [13 + 2 †] | *Hynobiinae* ‖1856‖-1859 [12]<br>*Onychodactylinae* 2012 [1]<br>*Incertae sedis Hynobiidae* † [2 †] | **Imperfectibranchia** 1838 [Subordo] |
| **U05** | *Plethodontidae* 1850 [31 + 1 †] | *Hemidactyliinae* 1856 [23]<br>*Plethodontinae* 1850 [8]<br>*Incertae sedis Plethodontidae* † [1 †] | **Pseudosauria** 1816 [Subordo] |
| **U06** | *Proteidae* 1831 [2 + 3 †] | – | **Pseudosauria** 1816 [Subordo] |
| **U07** | *Rhyacotritonidae* 1958 [1] | – | **Pseudosauria** 1816 [Subordo] |
| **U08** | *Salamandridae* 1820 [23 + 10 †] | *Pleurodelinae* 1838 [18 + 9 †]<br>*Salamandrinae* 1820 [4 + 1 †]<br>*Salamandrininae* 1843 [1] | **Pseudosauria** 1816 [Subordo] |
| **U09** | *Sirenidae* 1825 [2 + 1 †] | – | **Meantes** 1767 [Subordo] |
| **U†1** | *Hylaeobatrachidae* 1889 † [7 †] | – | **Urodela** 1805 [Ordo] |
| **U†2** | *Karauridae* 1978 † [2 †] | – | **Urodela** 1805 [Ordo] |
| **U†3** | *Noterpetidae* 1983 † [2 †] | – | **Meantes** 1767 [Subordo] |
| **U†4** | *Prosirenidae* 1969 † [1 †] | – | **Urodela** 1805 [Ordo] |
| **U†5** | *Scapherpetidae* 1959 † [3 †] | – | **Urodela** 1805 [Ordo] |
| **U†6** | *Triassuridae* 1978 † [1 †] | – | **Urodela** 1805 [Ordo] |
| **U†i1** | *Incertae sedis* **Imperfectibranchia** † [5 †] | – | **Imperfectibranchia** 1838 [Subordo] |
| **U†i2** | *Incertae sedis* **Pseudosauria** † [2 †] | – | **Pseudosauria** 1816 [Subordo] |
| **U†i3** | *Incertae sedis* **Urodela** † [21 †] | – | **Urodela** 1805 [Ordo] |
| **UT** | **Total Urodela: 9 + 6 †** [77 + 75 †] | [7] | **Urodela** 1805 [Ordo] |
| **LT** | **Total Lissamphibia: 69 + 13 †** [575 + 190 †] | [87 + 2 †] | **Amphibia** 1816 [Classis] |

**Appendix A12.CLAD-4.** Class-series cladonomy and nomenclature of **Lissamphibia** proposed here.

Class-series partial hierarchy used here (see **A.CLAD-1**):

C.01. **bPm Subphylum** (1)
_ C.02. **C Classis** (1)
_ _ C.03. **bC Subclassis** (1)
_ _ _ C.04. **O Ordo** (4)
_ _ _ _ C.05. **bO Subordo** (7)
_ _ _ _ _ C.06. **iO Infraordo** (2)
_ _ _ _ _ _ C.07. **hO Hypoordo** (2)
_ _ _ _ _ _ _ C.08. **pP Superphalanx** (2)
_ _ _ _ _ _ _ _ C.09. **eP Epiphalanx** (2)
_ _ _ _ _ _ _ _ _ C.10. **P Phalanx** (3)
_ _ _ _ _ _ _ _ _ _ C.11. **bP Subphalanx** (5)
_ _ _ _ _ _ _ _ _ _ _C.12. **iP Infraphalanx** (4)
_ _ _ _ _ _ _ _ _ _ _ _ C.13. **hP Hypophalanx** (3)

**Total: 35** lissamphibian taxa of the class-series + 2 of their angiotaxa including also non-lissamphibians.

| Taxon | Kyronym under DONS Rules | Oldest valid generic nomen or nomina of recent amphibians (lissamphibians) |
|---|---|---|
| C.01.01. Subphylum | **VERTEBRATA** Cuvier, 1800.ca.c01 | *Caecilia* Linnaeus, 1758; *Rana* Linnaeus, 1758; *Salamandra* Garsault, 1764 |
| _ C.02.01. Classis | **AMPHIBIA** Blainville, 1816.ba.c02 | *Caecilia* Linnaeus, 1758; *Rana* Linnaeus, 1758; *Salamandra* Garsault, 1764 |
| _ _ C.03.01. Subclassis | **LISSAMPHIBIA** Gadow, 1901.ga.c01 | *Caecilia* Linnaeus, 1758; *Rana* Linnaeus, 1758; *Salamandra* Garsault, 1764 |
| _ _ _ C.04.†01. Ordo | **ALLOCAUDATA** Fox & Naylor, 1982.fa.c01 | *Albanerpeton* Estes & Hoffstetter, 1976 † |
| _ _ _ C.04.01. Ordo | **ANURA** Duméril, 1805.da.c01 | *Leiopelma* Fitzinger, 1861; *Rana* Linnaeus, 1758 |
| _ _ _ _ C.05.01. Subordo | **ANGUSTICOELA** Reig, 1958.ra.c01 | *Leiopelma* Fitzinger, 1861 |
| _ _ _ _ C.05.02. Subordo | **HYDROBATRACHIA** Ritgen, 1828.ra.c14 | *Bombina* Oken, 1816; *Rana* Linnaeus, 1758 |
| _ _ _ _ _ C.06.01. Infraordo | **GEOBATRACHIA** Ritgen, 1828.ra.c18 | *Pipa* Laurenti, 1768; *Rana* Linnaeus, 1758 |
| _ _ _ _ _ _ C.07.01. Hypoordo | **DORSIPARES** Blainville, 1816.ba.c06 | *Pipa* Laurenti, 1768 |
| _ _ _ _ _ _ C.07.02. Hypoordo | **LAEVOGYRINIA** Lataste, 1878.la.c01 | *Megophrys* Kuhl & Van Hasselt, 1822; *Rana* Linnaeus, 1758 |
| _ _ _ _ _ _ _ C.08.01. Superphalanx | **ARCHAEOSALIENTIA** Roček, 1981.ra.c01 | *Megophrys* Kuhl & Van Hasselt, 1822 |
| _ _ _ _ _ _ _ C.08.02. Superphalanx | **RANOMORPHA** Fejérváry, 1921.fb.c08 | *Heleophryne* Sclater, 1898; *Rana* Linnaeus, 1758 |
| _ _ _ _ _ _ _ _ C.09.01. Epiphalanx | **AQUIPARES** Blainville, 1816.ba.c07 | *Bufo* Garsault, 1764; *Rana* Linnaeus, 1758; *Sooglossus* Boulenger, 1906 |
| _ _ _ _ _ _ _ _ _ C.10.01. Phalanx | **GONDWANURA nov.**, DOP.db.c01 | *Sooglossus* Boulenger, 1906 |
| _ _ _ _ _ _ _ _ _ C.10.02. Phalanx | **PHANERANURA nov.**, DOP.db.c02 | *Bufo* Garsault, 1764; *Heleioporus* Gray, 1841 |
| _ _ _ _ _ _ _ _ _ _ C.11.01. Subphalanx | **BAINANURA nov.**, DOP.db.c03 | *Bufo* Garsault, 1764; *Dendrobates* Wagler, 1830 |
| _ _ _ _ _ _ _ _ _ _ _ C.12.01. Infraphalanx | **PHORANURA nov.**, DOP.db.c04 | *Dendrobates* Wagler, 1830 |
| _ _ _ _ _ _ _ _ _ _ _ C.12.02. Infraphalanx | **PHRYNANURA nov.**, DOP.db.c05 | *Brachycephalus* Fitzinger, 1826; *Bufo* Garsault, 1764; *Hemiphractus* Wagler, 1828 |
| _ _ _ _ _ _ _ _ _ _ _ _ C.13.01. Hypophalanx | **GAIANURA nov.**, DOP.db.c06 | *Brachycephalus* Fitzinger, 1826 |
| _ _ _ _ _ _ _ _ _ _ _ _ C.13.02. Hypophalanx | **HEMIPHRACTIFORMIA** Brocchi, 1881.ba.c01 | *Hemiphractus* Wagler, 1828 |
| _ _ _ _ _ _ _ _ _ _ _ _ C.13.03. Hypophalanx | **HYLOBATRACHIA** Ritgen, 1828.ra.c16 | *Bufo* Garsault, 1764 |
| _ _ _ _ _ _ _ _ _ _ C.11.02. Subphalanx | **DIPLOSIPHONA** Günther, 1859.ga.c02 | *Heleioporus* Gray, 1841 |
| _ _ _ _ _ _ _ _ _ C.10.03. Phalanx | **SCOPTANURA** Starrett, 1973.sb.c02 | *Breviceps* Merrem, 1820; *Engystoma* Fitzinger, 1826; *Rana* Linnaeus, 1758 |
| _ _ _ _ _ _ _ _ _ _ C.11.03. Subphalanx | **ECOSTATA** Lataste, 1879.lb.c04 | *Engystoma* Fitzinger, 1826 |
| _ _ _ _ _ _ _ _ _ _ C.11.04. Subphalanx | **GASTRECHMIA** Cope, 1867.ca.c02 | *Breviceps* Merrem, 1820 |
| _ _ _ _ _ _ _ _ _ _ C.11.05. Subphalanx | **PANANURA nov.**, DOP.db.c07 | *Hildebrandtia* Nieden, 1907; *Rana* Linnaeus, 1758 |
| _ _ _ _ _ _ _ _ _ _ _ C.12.03. Infraphalanx | **ECAUDATA** Scopoli, 1777.sa.c06 | *Rana* Linnaeus, 1758 |
| _ _ _ _ _ _ _ _ _ _ _ C.12.04. Infraphalanx | **SAVANURA nov.**, DOP.db.c08 | *Hildebrandtia* Nieden, 1907 |
| _ _ _ _ _ _ _ _ C.09.02. Epiphalanx | **HELANURA nov.**, DOP.db.c09 | *Heleophryne* Sclater, 1898 |
| _ _ _ _ _ C.06.02. Infraordo | **MEDIOGYRINIA** Lataste, 1878.la.c02 | *Bombina* Oken, 1816 |
| _ _ _ C.04.02 Ordo | **GYMNOPHIONA** Rafinesque, 1814.ra.c01 | *Caecilia* Linnaeus, 1758; *Rhinatrema* Duméril & Bibron, 1841 |
| _ _ _ _ C.05.03. Subordo | **PLESIOPHIONA nov.**, DOP.db.c10 | *Rhinatrema* Duméril & Bibron, 1841 |
| _ _ _ _ C.05.04. Subordo | **PSEUDOPHIONA** Blainville, 1816.ba.c11 | *Caecilia* Linnaeus, 1758 |
| _ _ _ C.04.03 Ordo | **URODELA** Duméril, 1805.da.c02 | *Cryptobranchus* Leuckart, 1821; *Salamandra* Garsault, 1764; *Siren* Österdam, 1766 |
| _ _ _ _ C.05.05. Subordo | **IMPERFECTIBRANCHIA** Hogg, 1838.ha.c03 | *Cryptobranchus* Leuckart, 1821 |
| _ _ _ _ C.05.06. Subordo | **MEANTES** Linnaeus, 1767.la.c01 | *Siren* Österdam, 1766 |
| _ _ _ _ C.05.07. Subordo | **PSEUDOSAURIA** Blainville, 1816.ba.c08 | *Salamandra* Garsault, 1764 |

## **Appendix A13.QUA.** Usage of nomina of families of extant LISSAMPHIBIA from 1796 to 2014.

For each nomen and each period, the Table gives the number of uses, followed between parentheses by the percentage of these uses among the publications of the period. In order to standardise for sample size, the number for the total period is the mean of the percentages of the five periods. The quarters are numbered from Q1 (lower quarter) to Q4 (upper quarter). According to the Upper Quartile Criterion [UQC] described in M&M 2.4.5.2.1, nomina in the upper quarter Q4 are validated, except those marked [Q4–] that do not appear in any of the publications of the 2000–2014 period (exception [E1]), whereas those of the quarter Q3 having 90 % or more usages in the same period [Q3+] are validated (exception [E2]).

Chronological list of references used for the establishment of the number of usages of family-series nomina in LISSAMPHIBIA (see References for details): Batsch 1796; Rafinesque 1815; Goldfuss 1820; Gray 1825, 1850; Fitzinger 1826, 1843; Bonaparte 1838, 1850; Hogg 1838, 1839*a*–*b*, 1841; Tschudi 1838; Duméril & Bibron 1841; Agassiz 1847; Gistel 1850; Desmarest 1856; Lichtenstein *et al.* 1956; Stannius 1856; Günther 1859; Bruch 1862; Cope 1865, 1866 1867, 1875, 1889*a*–*b*; Gouriet 1868; Mivart 1869; Fatio 1872; Hoffmann 1878; Boulenger 1882*b*–*c*, 1910, 1914; Sauvage 1885; Lydekker 1889, 1896; Gadow 1901; Lydekker *et al.* 1912; Werner 1912; Bolkay 1919; Fejérváry 1921*b*; Metcalf 1923; Nieden 1923; Miranda-Ribeiro 1926; Ahl 1931; Noble 1931; Lameere 1941; Romer 1945, 1966; Reig 1958; Fuhn 1960; Kuhn 1960, 1965, 1967*b*; Cochran 1962; Goin & Goin 1962; Hellmich 1962; Griffiths 1963; Tatarinov 1964*a*; Gorham 1966, 1974; Laurent 1967, 1979, 1986; Taylor 1968; Burton & Burton 1970; Porter 1972; Savage 1973; Breen 1974; Freytag 1974; Duellman 1975, 1977, 1979, 1988, 2003; Dowling & Duellman 1978; Goin *et al.* 1978; Estes 1981; Dubois 1984*b*, 1985, 2005*e*; Duellman & Trueb 1985; Frost 1985; Mattison 1987; Ananjeva *et al.* 1988; Benton 1993; Zug 1993; Glaw *et al.* 1998; Pough *et al.* 1998; Sanchiz 1998; McDiarmid & Altig 1999; Fhutchins *et al.* 2003; Larson *et al.* 2003; Frost *et al.* 2006; Duellman & Adler 2007; Raffaelli 2007, 2011; Roelants *et al.* 2007; Stuart *et al.* 2008; Vitt & Caldwell 2009, 2014; Zhang & Wake 2009; Blackburn & Wake 2011; Pyron & Wiens 2011.

Some of these references are used together to represent a complete classification: Hogg 1838, 1839*a*,*b*; Cope 1866, 1867; Boulenger (1882*b*–*c*); Nieden (1923) and Ahl (1931); Gorham (1966); Duellman (1977).

This list includes 107 references which represent 101 analysed classifications, 94 for the ANURA, 76 for the URODELA and 64 for the GYMNOPHIONA.

| Familial nomen | 1796–1849 | 1850–1899 | 1900–1949 | 1950–1999 | 2000–2014 | 1796–2014 | Quartile |
|---|---|---|---|---|---|---|---|
| | | | ANURA | | | | |
| Number of works | 12 | 20 | 13 | 38 | 11 | 94 | – |
| *RANIDAE* | 12 (100 %) | 20 (100 %) | 12 (92.3 %) | 38 (100 %) | 11 (100 %) | 98.5 | Q4 |
| *BUFONIDAE* | 6 (50 %) | 18 (90 %) | 13 (100 %) | 37 (97.4 %) | 11 (100 %) | 87.5 | Q4 |
| *HYLIDAE* | 5 (41.7 %) | 17 (85 %) | 13 (100 %) | 38 (100 %) | 11 (100 %) | 85.3 | Q4 |
| *PIPIDAE* | 3 (25 %) | 15 (75 %) | 11 (84.6 %) | 37 (97.4 %) | 11 (100 %) | 76.4 | Q4 |
| *PELOBATIDAE* | 0 (0 %) | 8 (40 %) | 11 (84.6 %) | 38 (100 %) | 11 (100 %) | 64.9 | Q4 |
| *DISCOGLOSSIDAE* | 0 (0 %) | 12 (60 %) | 13 (100 %) | 37 (97.4 %) | 5 (45.5 %) | 60.6 | Q4 |
| *DENDROBATIDAE* | 0 (0 %) | 8 (40 %) | 3 (23.1 %) | 25 (65.8 %) | 11 (100 %) | 45.8 | Q4 |
| *LEIOPELMATIDAE* | 0 (0 %) | 0 (0 %) | 3 (23.1 %) | 33 (86.8 %) | 12 (109.1 %) | 43.8 | Q4 |
| *MICROHYLIDAE* | 0 (0 %) | 3 (15 %) | 1 (7.7 %) | 35 (92.1 %) | 11 (100 %) | 43.0 | Q4 |
| *LEPTODACTYLIDAE* | 0 (0 %) | 1 (5 %) | 2 (15.4 %) | 35 (92.1 %) | 11 (100 %) | 42.5 | Q4 |
| *RHINOPHRYNIDAE* | 0 (0 %) | 4 (20 %) | 0 (0 %) | 35 (92.1 %) | 11 (100 %) | 42.4 | Q4 |
| *BRACHYCEPHALIDAE* | 0 (0 %) | 3 (15 %) | 4 (30.8 %) | 24 (63.2 %) | 10 (90.9 %) | 40.0 | Q4 |
| *PELODYTIDAE* | 0 (0 %) | 4 (20 %) | 2 (15.4 %) | 23 (60.5 %) | 10 (90.9 %) | 37.4 | Q4 |
| *CENTROLENIDAE* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 30 (78.9 %) | 11 (100 %) | 35.8 | Q4 |
| *MYOBATRACHIDAE* | 0 (0 %) | 2 (10 %) | 0 (0 %) | 19 (50 %) | 11 (100 %) | 32.0 | Q4 |
| *RHACOPHORIDAE* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 29 (76.3 %) | 9 (81.8 %) | 31.6 | Q4 |
| *BOMBINATORIDAE* | 3 (25 %) | 5 (25 %) | 0 (0 %) | 3 (7.9 %) | 11 (100 %) | 31.6 | Q4 |
| *SOOGLOSSIDAE* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 22 (57.9 %) | 11 (100 %) | 31.6 | Q4 |
| *HELEOPHRYNIDAE* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 19 (50 %) | 11 (100 %) | 30.0 | Q4 |
| *HYPEROLIIDAE* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 22 (57.9 %) | 10 (90.9 %) | 29.8 | Q4 |
| *HEMISOTIDAE* | 0 (0 %) | 3 (15 %) | 1 (7.7 %) | 9 (23.7 %) | 10 (90.9 %) | 27.5 | Q4 |
| *RHINODERMATIDAE* | 0 (0 %) | 2 (10 %) | 0 (0 %) | 23 (60.5 %) | 6 (54.5 %) | 25.0 | Q4 |
| *CYSTIGNATHIDAE* | 1 (8.3 %) | 10 (50 %) | 8 (61.5 %) | 1 (2.6 %) | 0 (0 %) | 24.5 | Q4– |

*...Contined on the next page*

**Appendix A13.** (Continued)

| Familial nomen | 1796–1849 | 1850–1899 | 1900–1949 | 1950–1999 | 2000–2014 | 1796–2014 | Quartile |
|---|---|---|---|---|---|---|---|
| *Engystomatidae* | 0 (0 %) | 12 (60 %) | 8 (61.5 %) | 0 (0 %) | 0 (0 %) | 24.3 | Q4– |
| *Hemiphractidae* | 0 (0 %) | 6 (30 %) | 4 (30.8 %) | 0 (0 %) | 6 (54.5 %) | 23.1 | Q4 |
| *Brevicipitidae* | 0 (0 %) | 3 (15 %) | 2 (15.4 %) | 1 (2.6 %) | 8 (72.7 %) | 21.1 | Q3 |
| *Ascaphidae* | 0 (0 %) | 0 (0 %) | 1 (7.7 %) | 14 (36.8 %) | 6 (54.5 %) | 19.8 | Q3 |
| *Arthroleptidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 6 (15.8 %) | 9 (81.8 %) | 19.5 | Q3 |
| *Megophryidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 2 (5.3 %) | 10 (90.9 %) | 19.2 | Q3+ |
| *Pseudidae* | 1 (8.3 %) | 0 (0 %) | 0 (0 %) | 32 (84.2 %) | 0 (0 %) | 18.5 | Q3 |
| *Ceratophryidae* | 1 (8.3 %) | 1 (5 %) | 1 (7.7 %) | 2 (5.3 %) | 7 (63.6 %) | 18.0 | Q3 |
| *Scaphiopodidae* | 0 (0 %) | 5 (25 %) | 0 (0 %) | 0 (0 %) | 7 (63.6 %) | 17.7 | Q3 |
| *Alytidae* | 1 (8.3 %) | 3 (15 %) | 0 (0 %) | 0 (0 %) | 7 (63.6 %) | 17.4 | Q3 |
| *Ceratobatrachidae* | 0 (0 %) | 3 (15 %) | 1 (7.7 %) | 0 (0 %) | 7 (63.6 %) | 17.3 | Q3 |
| *Allophrynidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 5 (13.2 %) | 7 (63.6 %) | 15.4 | Q3 |
| *Mantellidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1 (2.6 %) | 8 (72.7 %) | 15.1 | Q3 |
| *Limnodynastidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 8 (72.7 %) | 14.5 | Q3 |
| *Petropedetidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 2 (5.3 %) | 7 (63.6 %) | 13.8 | Q3 |
| *Amphignathodontidae* | 0 (0 %) | 3 (15 %) | 3 (23.1 %) | 0 (0 %) | 3 (27.3 %) | 13.1 | Q3 |
| *Cyclorhamphidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 7 (63.6 %) | 12.7 | Q3 |
| *Dicroglossidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 7 (63.6 %) | 12.7 | Q3 |
| *Micrixalidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 7 (63.6 %) | 12.7 | Q3 |
| *Nyctibatrachidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 7 (63.6 %) | 12.7 | Q3 |
| *Pyxicephalidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 7 (63.6 %) | 12.7 | Q3 |
| *Ptychadenidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 7 (63.6 %) | 12.7 | Q3 |
| *Hylodidae* | 0 (0 %) | 2 (10 %) | 1 (7.7 %) | 0 (0 %) | 5 (45.5 %) | 12.6 | Q3 |
| *Dactylethridae* | 2 (16.7 %) | 8 (40 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 11.3 | Q3 |
| *Nasikabatrachidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 6 (54.5 %) | 10.9 | Q3 |
| *Phrynobatrachidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 6 (54.5 %) | 10.9 | Q3 |
| *Xenopodidae* | 1 (8.3 %) | 3 (15 %) | 4 (30.8 %) | 0 (0 %) | 0 (0 %) | 10.8 | Q3 |
| *Dendrophryniscidae* | 0 (0 %) | 3 (15 %) | 4 (30.8 %) | 0 (0 %) | 0 (0 %) | 9.2 | Q2 |
| *Ranixalidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 5 (45.5 %) | 9.1 | Q2 |
| *Pelodryadidae* | 0 (0 %) | 3 (15 %) | 0 (0 %) | 8 (21.1 %) | 1 (9.1 %) | 9.0 | Q2 |
| *Polypedatidae* | 0 (0 %) | 3 (15 %) | 3 (23.1 %) | 1 (2.6 %) | 0 (0 %) | 8.1 | Q2 |
| *Dyscophidae* | 0 (0 %) | 3 (15 %) | 3 (23.1 %) | 0 (0 %) | 0 (0 %) | 7.6 | Q2 |
| *Atelopodidae* | 1 (8.3 %) | 0 (0 %) | 0 (0 %) | 11 (28.9 %) | 0 (0 %) | 7.4 | Q2 |
| *Aromobatidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 4 (36.4 %) | 7.3 | Q2 |
| *Calyptocephalellidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 4 (36.4 %) | 7.3 | Q2 |
| *Leiuperidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 4 (36.4 %) | 7.3 | Q2 |
| *Asterophryidae* | 0 (0 %) | 7 (35 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 7.0 | Q2 |
| *Phryniscidae* | 0 (0 %) | 7 (35 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 7.0 | Q2 |
| *Telmatobiidae* | 1 (8.3 %) | 0 (0 %) | 1 (7.7 %) | 0 (0 %) | 2 (18.2 %) | 6.8 | Q2 |
| *Phrynomeridae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 9 (23.7 %) | 1 (9.1 %) | 6.6 | Q2 |
| *Batrachophrynidae* | 0 (0 %) | 1 (5 %) | 0 (0 %) | 0 (0 %) | 3 (27.3 %) | 6.5 | Q2 |
| *Alsodidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 3 (27.3 %) | 5.5 | Q2 |
| *Ceuthomantidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 3 (27.3 %) | 5.5 | Q2 |
| *Craugastoridae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 3 (27.3 %) | 5.5 | Q2 |
| *Cryptobatrachidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 3 (27.3 %) | 5.5 | Q2 |
| *Eleutherodactylidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 3 (27.3 %) | 5.5 | Q2 |
| *Hymenochiridae* | 0 (0 %) | 0 (0 %) | 3 (23.1 %) | 0 (0 %) | 0 (0 %) | 4.6 | Q2 |
| *Phyllomedusidae* | 0 (0 %) | 2 (10 %) | 0 (0 %) | 1 (2.6 %) | 1 (9.1 %) | 4.3 | Q2 |
| *Scaphiophrynidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1 (2.6 %) | 2 (18.2 %) | 4.2 | Q2 |
| *Colostethidae* | 0 (0 %) | 4 (20 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 4.0 | Q2 |
| *Hylaedactylidae* | 1 (8.3 %) | 2 (10 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 3.7 | Q2 |
| *Batrachylidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 2 (18.2 %) | 3.6 | Q2 |
| *Odontophrynidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 2 (18.2 %) | 3.6 | Q1 |

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**Appendix A13.** (Continued)

| Familial nomen | 1796–1849 | 1850–1899 | 1900–1949 | 1950–1999 | 2000–2014 | 1796–2014 | Quartile |
|---|---|---|---|---|---|---|---|
| *Strabomantidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 2 (18.2 %) | 3.6 | Q1 |
| *Astrodactylidae* | 2 (16.7 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 3.3 | Q1 |
| *Gastrophrynidae* | 1 (8.3 %) | 0 (0 %) | 1 (7.7 %) | 0 (0 %) | 0 (0 %) | 3.2 | Q1 |
| *Phyllobatidae* | 1 (8.3 %) | 0 (0 %) | 0 (0 %) | 2 (5.3 %) | 0 (0 %) | 2.7 | Q1 |
| *Brachymeridae* | 0 (0 %) | 2 (10 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 2.0 | Q1 |
| *Cophylidae* | 0 (0 %) | 2 (10 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 2.0 | Q1 |
| *Hylaplesiidae* | 0 (0 %) | 2 (10 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 2.0 | Q1 |
| *Systomatidae* | 0 (0 %) | 2 (10 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 2.0 | Q1 |
| *Uperoleiidae* | 0 (0 %) | 2 (10 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 2.0 | Q1 |
| *Conrauidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1 (9.1 %) | 1.8 | Q1 |
| *Thoropidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1 (9.1 %) | 1.8 | Q1 |
| *Dendropsophidae* | 1 (8.3 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.7 | Q1 |
| *Dryophytidae* | 1 (8.3 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.7 | Q1 |
| *Lymnodytidae* | 1 (8.3 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.7 | Q1 |
| *Pelobiidae* | 1 (8.3 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.7 | Q1 |
| *Rheobatrachidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 3 (7.9 %) | 0 (0 %) | 1.6 | Q1 |
| *Elosiidae* | 0 (0 %) | 0 (0 %) | 1 (7.7 %) | 0 (0 %) | 0 (0 %) | 1.5 | Q1 |
| *Genyophrynidae* | 0 (0 %) | 0 (0 %) | 1 (7.7 %) | 0 (0 %) | 0 (0 %) | 1.5 | Q1 |
| *Paludicolidae* | 0 (0 %) | 0 (0 %) | 1 (7.7 %) | 0 (0 %) | 0 (0 %) | 1.5 | Q1 |
| *Cophomantidae* | 0 (0 %) | 1 (5 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.0 | Q1 |
| *Eubaphidae* | 0 (0 %) | 1 (5 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.0 | Q1 |
| *Plectromantidae* | 0 (0 %) | 1 (5 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.0 | Q1 |
| *Xenorhinidae* | 0 (0 %) | 1 (5 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.0 | Q1 |
| | | | **Gymnophiona** | | | | |
| Number of works | 9 | 12 | 7 | 26 | 10 | 64 | – |
| *Caeciliidae* | 9 (100 %) | 12 (100 %) | 7 (100 %) | 26 (100 %) | 10 (100 %) | 100.0 | Q4 |
| *Ichthyophiidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 15 (57.7 %) | 10 (100 %) | 31.5 | Q4 |
| *Rhinatrematidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 11 (42.3 %) | 10 (100 %) | 28.5 | Q4 |
| *Scolecomorphidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 15 (57.7 %) | 6 (60 %) | 23.5 | Q3 |
| *Typhlonectidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 17 (65.4 %) | 5 (50 %) | 23.1 | Q3 |
| *Uraeotyphlidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 6 (23.1 %) | 4 (40 %) | 12.6 | Q3 |
| *Dermophiidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1 (3.8 %) | 2 (20 %) | 4.8 | Q2 |
| *Siphonopidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1 (3.8 %) | 2 (20 %) | 4.8 | Q2 |
| *Herpelidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 2 (20 %) | 4.0 | Q2 |
| *Indotyphlidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 2 (20 %) | 4.0 | Q1 |
| *Epicriidae* | 1 (11.1 %) | 0 (0 %) | 0 (0 %) | 1 (3.8 %) | 0 (0 %) | 3.0 | Q1 |
| *Chikilidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1 (10 %) | 2.0 | Q1 |
| | | | **Urodela** | | | | |
| Number of works | 11 | 14 | 9 | 28 | 14 | 76 | – |
| *Salamandridae* | 10 (90.9 %) | 14 (100 %) | 9 (100 %) | 28 (100 %) | 14 (100 %) | 98.2 | Q4 |
| *Proteidae* | 6 (54.5 %) | 11 (78.6 %) | 7 (77.8 %) | 28 (100 %) | 14 (100 %) | 82.2 | Q4 |
| *Sirenidae* | 5 (45.5 %) | 12 (85.7 %) | 7 (77.8 %) | 28 (100 %) | 14 (100 %) | 81.8 | Q4 |
| *Amphiumidae* | 3 (27.3 %) | 13 (92.9 %) | 7 (77.8 %) | 27 (96.4 %) | 14 (100 %) | 78.9 | Q4 |
| *Ambystomatidae* | 0 (0 %) | 4 (28.6 %) | 3 (33.3 %) | 28 (100 %) | 14 (100 %) | 52.4 | Q4 |
| *Hynobiidae* | 0 (0 %) | 4 (28.6 %) | 3 (33.3 %) | 26 (92.9 %) | 14 (100 %) | 51.0 | Q4 |
| *Plethodontidae* | 0 (0 %) | 5 (35.7 %) | 2 (22.2 %) | 27 (96.4 %) | 14 (100 %) | 50.9 | Q4 |
| *Cryptobranchidae* | 1 (9.1 %) | 2 (14.3 %) | 3 (33.3 %) | 27 (96.4 %) | 14 (100 %) | 50.6 | Q3+ |
| *Dicamptodontidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 9 (32.1 %) | 10 (71.4 %) | 20.7 | Q3 |
| *Rhyacotritonidae* | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1 (3.6 %) | 14 (100 %) | 20.7 | Q3+ |
| *Pleurodelidae* | 2 (18.2 %) | 5 (35.7 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 10.8 | Q3 |
| *Menopomidae* | 2 (18.2 %) | 2 (14.3 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 6.5 | Q3 |
| *Desmognathidae* | 0 (0 %) | 4 (28.6 %) | 0 (0 %) | 1 (3.6 %) | 0 (0 %) | 6.4 | Q3 |
| *Protonopsidae* | 0 (0 %) | 4 (28.6 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 5.7 | Q3 |

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**Appendix A13.** (Continued)

| Familial nomen | 1796–1849 | 1850–1899 | 1900–1949 | 1950–1999 | 2000–2014 | 1796–2014 | Quartile |
|---|---|---|---|---|---|---|---|
| *Tritonidae* | 3 (27.3 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 5.5 | Q2 |
| *Thoriidae* | 0 (0 %) | 3 (21.4 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 4.3 | Q2 |
| *Necturidae* | 1 (9.1 %) | 1 (7.1 %) | 0 (0 %) | 1 (3.6 %) | 0 (0 %) | 4.0 | Q2 |
| *Megalobatrachidae* | 1 (9.1 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.8 | Q2 |
| *Muraenopsidae* | 1 (9.1 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.8 | Q2 |
| *Phaenerobranchidae* | 1 (9.1 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.8 | Q2 |
| *Salamandrinidae* | 1 (9.1 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.8 | Q2 |
| *Salamandropsidae* | 1 (9.1 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.8 | Q1 |
| *Geotritonidae* | 0 (0 %) | 1 (7.1 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.4 | Q1 |
| *Hypochtonidae* | 0 (0 %) | 1 (7.1 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.4 | Q1 |
| *Menobranchidae* | 0 (0 %) | 1 (7.1 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.4 | Q1 |
| *Molgidae* | 0 (0 %) | 1 (7.1 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.4 | Q1 |
| *Sieboldiidae* | 0 (0 %) | 1 (7.1 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.4 | Q1 |
| *Siredontidae* | 0 (0 %) | 1 (7.1 %) | 0 (0 %) | 0 (0 %) | 0 (0 %) | 1.4 | Q1 |

**Appendix A14.AIR.** New airesies.

This presents the new airesies concerning genus-series and species-series nomina and parographs implemented in the present work.

Column 1. **Genus-series nomen GSN or species-series nomen.**
Column 2. ● **Original situation (OS) of genus-series nomen GSN**: **A**, aphory; **M**, monophory; **S**, symphory.
Column 3. ● **Availability (A) or reason for unavailability (U) of genus-series nomen GSN** or of one of its parographs (whenever appropriate): **G**, gymnonym (nomen unavailable for failing to comply with one of the Criteria of Articles 12–13 of the *Code*); **H**, hoplonym; **L**, leipoprotograph; **P**, anecdidonym (nomen unpublished in the sense of the *Code* for failing to comply with one of the Criteria of Articles 3.2, 8–9, 11.1, 14 or 21.8).
Column 4. ● **Nucleospecies**: protonym of nominal-species hereby (or previously*) designated as nucleospecies (type species) of genus-series nomen **GSN**.
Column 5. ● **Kyronym of nucleospecies**: protonym under *CLAD* of kyronym of taxonomic species designated by the nucleospecies of the genus-series nomen.
Column 6. ● **Kyronym of taxonomic genus**: kyronym under *CLAD* of taxonomic genus designated by GSN.
Column 7. ● **Fixation of precedence** between synchronous doxisonyms or symprotographs: > GS nomen (junior doxisonym) or spelling (leipoprotograph) over which **GSN** is here afforded precedence; < GS nomen (junior doxisonym) or spelling (leipoprotograph) which **GSN** is here afforded subservience to.
Columns 2–7. ● INR, information not relevant here.

| Genus- or species-series nomen | OS | A/U | Nucleospecies | Protonym of kyronym of nucleospecies | Kyronym of taxonomic genus | Fixation of precedence |
|---|---|---|---|---|---|---|
| *Adenomera* Fitzinger, 1861 | **A** | **G** | *Adenomera marmorata* Steindachner, 1867 | *Adenomera marmorata* Steindachner, 1867 | *Adenomera* Steindachner, 1867 | INR |
| *Axolotes* Owen, 1844 | **S** | **H** | *Gyrinus mexicanus* Shaw & Nodder, 1789 | *Gyrinus mexicanus* Shaw & Nodder, 1789 | *Ambystoma* Tschudi, 1838 | INR |
| *Batrachychthis* Pizarro, 1876 | **A** | **H** | *Rana paradoxa* Linnaeus, 1758 | *Rana paradoxa* Linnaeus, 1758 | *Pseudis* Wagler, 1830 | > *Batrachychthys* Pizarro, 1876 |
| *Batrachychthys* Pizarro, 1876 | **A** | **L** | *Rana paradoxa* Linnaeus, 1758 | *Rana paradoxa* Linnaeus, 1758 | *Pseudis* Wagler, 1830 | < *Batrachychthis* Pizarro, 1876 |
| *Batracinus* Rafinesque, 1815 | **A** | **G** | *Rana temporaria* Linnaeus, 1758 | *Rana temporaria* Linnaeus, 1758 | *Rana* Linnaeus, 1758 | INR |
| *Bufo* Rösel von Rosenhof, 1758 | **A** | **P** | *Rana bufo* Linnaeus, 1758 | *Rana bufo* Linnaeus, 1758 | *Bufo* Garsault, 1764 | INR |
| *Bufo* Vogel, 1758 | **A** | **P** | *Rana bufo* Linnaeus, 1758 | *Rana bufo* Linnaeus, 1758 | *Bufo* Garsault, 1764 | INR |
| *Calamita* Fitzinger, 1826 | **S** | **H** | *Hyla cyanea* Daudin, 1803 | *Rana caerulea* White, 1790 | *Ranoidea* Tschudi, 1838.tb | INR |
| *Cavicola* Lutz, 1930 | **S** | **H** | *Rana mystacea* Spix, 1824 | *Rana mystacea* Spix, 1824 | *Leptodactylus* Fitzinger, 1826 | INR |
| *Cephalophractus* Fitzinger, 1843 | **A** | **G** | *Trachycephalus nigromaculatus* Tschudi, 1838 | *Trachycephalus nigromaculatus* Tschudi, 1838 | *Trachycephalus* Tschudi, 1838 | INR |
| *Chondrodela* Rafinesque, 1815 | **A** | **G** | *Rana temporaria* Linnaeus, 1758 | *Rana temporaria* Linnaeus, 1758 | *Rana* Linnaeus, 1758 | INR |
| *Coelonotus* Miranda-Ribeiro, 1920 | **S** | **H** | *Coelonotus fissilis* Miranda-Ribeiro, 1920 | *Coelonotus fissilis* Miranda-Ribeiro, 1920 | *Fritziana* Mello-Leitão, 1937 | INR |
| *Doryphoros* Mayer, 1835 | **S** | **H** | *Rana pachypus* Spix, 1824 | *Rana pachypus* Spix, 1824 | *Leptodactylus* Fitzinger, 1826 | INR |
| *Eupodion* Jan, 1857 | **A** | **G** | *Eupemphix nattereri* Steindachner, 1863 | *Eupemphix nattereri* Steindachner, 1863 | *Eupemphix* Steindachner, 1863 | INR |
| *Eupomplyx* Jan, 1857 | **A** | **G** | *Eupemphix nattereri* Steindachner, 1863 | *Eupemphix nattereri* Steindachner, 1863 | *Eupemphix* Steindachner, 1863 | INR |
| *Exobranchia* Rafinesque, 1815 | **A** | **G** | *Proteus anguinus* Laurenti, 1768 | *Proteus anguinus* Laurenti, 1768 | *Proteus* Laurenti, 1768 | INR |
| *Fritzia* Miranda-Ribeiro, 1920 | **S** | **H** | *Hyla goeldii* Boulenger, 1937 | *Hyla goeldii* Boulenger, 1937 | *Fritziana* Mello-Leitão, 1937 | INR |
| *Geotriton* Bonaparte, 1831 | **A** | **G** | *Salamandra exigua* Laurenti, 1768.la | *Lacerta vulgaris* Linnaeus, 1758 | *Lissotriton* Bell, 1839 | INR |

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**Appendix A14.** (Continued)

| Genus- or species-series nomen | OS | A/U | Nucleospecies | Protonym of kyronym of nucleospecies | Kyronym of taxonomic genus | Fixation of precedence |
|---|---|---|---|---|---|---|
| *Glossiphus* Green *in* Rafinesque, 1832 | **A** | **G** | *Salamandra longicauda* Green, 1818 | *Salamandra longicauda* Green, 1818 | *Eurycea* Rafinesque, 1822 | INR |
| *Gyrinus* Herrmann, 1783 | **A** | **G** | *Rana temporaria* Linnaeus, 1758 | *Rana temporaria* Linnaeus, 1758 | *Rana* Linnaeus, 1758 | INR |
| *Hiperoodon* Philippi, 1902 | **M** | **L** | *Engystoma marmoratum** Guérin-Méneville, 1838 | *Rana systoma* Schneider, 1799 | *Uperodon* Duméril & Bibron, 1841 | < *Hyperoodon* Philippi, 1902 |
| *Hydryla* Rafinesque, 1815 | **A** | **G** | *Rana arborea* Linnaeus, 1758 | *Rana arborea* Linnaeus, 1758 | *Hyla* Laurenti, 1768.la | INR |
| *Hyla* Burmeister, 1856 | **S** | **H** | *Rana boans* Linnaeus, 1758 | *Rana boans* Linnaeus, 1758 | *Boana* Gray, 1825 | INR |
| *Hyladactyla* Tschudi, 1838 | **M** | **L** | *Bombinator baleatus** Müller, 1836 | *Bombinator baleatus* Müller, 1836 | *Kaloula* Gry, 1831 | < *Hyladactylus* Tschudi, 1838 |
| *Hyladactylus* Tschudi, 1838 | **M** | **H** | *Bombinator baleatus** Müller, 1836 | *Bombinator baleatus* Müller, 1836 | *Kaloula* Gry, 1831 | > *Hyladactyla* Tschudi, 1838 |
| *Hylaemorphus* Jan, 1857 | **A** | **G** | *Hylaemoephus pluto* Schmidt, 1858 | *Phrynidium varium* Lichtenstein, Weinland & Martens, 1856 | *Atelopus* Duméril & Bibron, 1841 | INR |
| *Hylaemorphus* Schmidt, 1857 | **S** | **H** | *Hylaemoephus dumerilii* Schmidt, 1857 | *Phrynidium varium* Lichtenstein, Weinland & Martens, 1856 | *Atelopus* Duméril & Bibron, 1841 | INR |
| *Hylanus* Rafinesque, 1815 | **A** | **G** | *Rana arborea* Linnaeus, 1758 | *Rana arborea* Linnaeus, 1758 | *Hyla* Laurenti, 1768 | INR |
| *Hyleisnus* Rafinesque, 1815 | **A** | **G** | *Rana arborea* Linnaeus, 1758 | *Rana arborea* Linnaeus, 1758 | *Hyla* Laurenti, 1768 | INR |
| *Hylesinus* Rafinesque, 1815 | **A** | **G** | *Rana arborea* Linnaeus, 1758 | *Rana arborea* Linnaeus, 1758 | *Hyla* Laurenti, 1768 | INR |
| *Hylopsis* Rafinesque, 1815 | **A** | **G** | *Rana arborea* Linnaeus, 1758 | *Rana arborea* Linnaeus, 1758 | *Hyla* Laurenti, 1768 | INR |
| *Hyobates* Jan, 1857 | **A** | **G** | *Eupemphix fuscomaculatus* Steindachner, 1864 | *Liuperus biligonigerus* Cope, 1861 | *Physalaemus* Fitzinger, 1826 | INR |
| *Hyperoodon* Philippi, 1902 | **M** | **H** | *Engystoma marmoratum** Guérin-Méneville, 1838 | *Rana systoma* Schneider, 1799 | *Uperodon* Duméril & Bibron, 1841 | > *Hiperoodon* Philippi, 1902 |
| *Mantipus* Peters, 1883 | **M** | **H** | *Mantipus hildebrandti** Peters, 1883 | *Plethodontohyla inguinalis* Boulenger, 1882 | *Mantipus* Peters, 1883 | > *Phrynocara* Peters, 1883 |
| *Meantes* Rafinesque, 1822 | **A** | **G** | *Siren lacertina* Österdam, 1766 | *Siren lacertina* Österdam, 1766 | *Siren* Österdam, 1766 | INR |
| *Merothaelacium* Wagler *in* Michahelles, 1833 | **M** | **H** | *Rana margaritifera* Laurenti, 1768 | *Rana margaritifera* Laurenti, 1768 | *Rhinella* Fitzinger, 1826 | INR |
| *Osteocephalus* Fitzinger, 1843 | **A** | **G** | *Osteocephalus taurinus* Steindachner, 1862 | *Osteocephalus taurinus* Steindachner, 1862 | *Osteocephalus* Steindachner, 1862 | INR |
| *Pachypus* Lutz, 1930 | **A** | **A** | *Rana pentadactyla* Laurenti, 1768 | *Rana pentadactyla* Laurenti, 1768 | *Leptodactylus* Fitzinger, 1826 | INR |

*...Continued on the next page*

**Appendix A14.** (Continued)

| Genus- or species-series nomen | OS | A/U | Nucleospecies | Protonym of kyronym of nucleospecies | Kyronym of taxonomic genus | Fixation of precedence |
|---|---|---|---|---|---|---|
| *Patagopipa corsolini* Aranciaga Rolando, Agnolin & Corsolini, 2019 | INR | INR | INR | INR | INR | < *Patagopipa corsolinii* Aranciaga Rolando, Agnolin & Corsolini, 2019 |
| *Patagopipa corsolinii* Aranciaga Rolando, Agnolin & Corsolini, 2019 | INR | INR | INR | INR | INR | > *Patagopipa corsolini* Aranciaga Rolando, Agnolin & Corsolini, 2019 |
| *Phrynacius* Rafinesque, 1815 | **A** | **G** | *Rana bufo* Linnaeus, 1758 | *Rana bufo* Linnaeus, 1758 | *Bufo* Garsault, 1764 | INR |
| *Phrynocara* Peters, 1883 | **M** | **H** | *Phrynocara tuberatum** Peters, 1883 | *Phrynocara tuberatum* Peters, 1883 | *Mantipus* Peters, 1883 | < *Mantipus* Peters, 1883 |
| *Phrynocerus* Rafinesque, 1815 | **A** | **G** | *Rana bufo* Linnaeus, 1758 | *Rana bufo* Linnaeus, 1758 | *Bufo* Garsault, 1764 | INR |
| *Phrynotes* Rafinesque, 1815 | **A** | **G** | *Rana bufo* Linnaeus, 1758 | *Rana bufo* Linnaeus, 1758 | *Bufo* Garsault, 1764 | INR |
| *Physodes* Jan, 1857 | **A** | **G** | *Lystris brachyops* Cope, 1869 | *Lystris brachyops* Cope, 1869 | *Pleurodema* Tschudi, 1838 | INR |
| *Podonectes* Steindachner, 1864 | **A** | **G** | *Lysapsus limellum* Cope, 1862 | *Lysapsus limellum* Cope, 1862 | *Lysapsus* Cope, 1862 | INR |
| *Pseudoamolops* Jiang, Fei, Ye, Zhen, Xie & Chen, 1997 | **A** | **G** | *Rana sauteri* Boulenger, 1909 | *Rana sauteri* Boulenger, 1909 | *Rana* Linnaeus, 1758 | INR |
| *Rana* Rösel von Rosenhof, 1758 | **A** | **P** | *Rana temporaria* Linnaeus, 1758 | *Rana temporaria* Linnaeus, 1758 | *Rana* Linnaeus, 1758 | INR |
| *Rana* Vogel, 1758 N | **A** | **P** | *Rana temporaria* Linnaeus, 1758 | *Rana temporaria* Linnaeus, 1758 | *Rana* Linnaeus, 1758 | INR |
| *Ranapes* Lockley & Milner, 2014 | **M** | **L** | *Ranipes laci** Lockley & Milner, 2014 | *Ranipes laci* Lockley & Milner, 2014 | *Ranipes* Lockley & Milner, 2014 | < *Ranipes* Lockley & Milner, 2014 |
| *Ranipes* Lockley & Milner, 2014 | **M** | **H** | *Ranipes laci** Lockley & Milner, 2014 | *Ranipes laci* Lockley & Milner, 2014 | *Ranipes* Lockley & Milner, 2014 | > *Ranapes* Lockley & Milner, 2014 |
| *Sieboldia* Gray, 1838 | **A** | **H** | *Megalobatrachus sieboldi* Tschudi, 1837 | *Megalobatrachus sieboldi* Tschudi, 1837 | *Andrias* Tschudi, 1837 | INR |

## **Appendix A15.MIS.** Missing molecular data.

This Table lists the genera for which no molecular data from the onymophoront(s) of the valid nomen was available for the building of *TREE*.

Columns 1, 2, 3 and °:

[1] The nominal genus is represented in *TREE* by specimens referred to a doxisonym of its nucleospecies: *Pipa*[1].

[2] The nominal genus is represented in *TREE* by specimens referred to the nucleospecies of a generic nomen being its doxisonym: *Andrias*[2].

[3] The nominal genus is represented in *TREE* but only by specimens referred to species that include neither its nucleospecies, nor a doxisonym of the latter, nor the nucleospecies of a doxisonym of the generic nomen at stake: *Latonia*[3].

° The nominal genus is not represented in *TREE*: *Dischidodactylus*°.

| Family or higher taxon | 1 | 2 | 3 | ° |
|---|---|---|---|---|
| ANURA | | | | |
| ARTHROLEPTIDAE | | *Leptopelis* | | |
| ASTROBATRACHIDAE | | | | *Astrobatrachus* |
| BRACHYCEPHALIDAE | | | *Microkayla*<br>*Phrynopus* | *Atopophrynus*<br>*Geobatrachus*<br>*Niceforonia*<br>*Qosqophryne*<br>*Tachiramantis* |
| BREVICIPITIDAE | | | *Breviceps* | |
| BUFONIDAE | *Adenomus*<br>*Mertensophryne*<br>*Schismaderma* | *Leptophryne*<br>*Rhinella* | *Anaxyrus*<br>*Firouzophrynus*<br>*Frostius*<br>*Pelophryne*<br>*Poyntonophrynus*<br>*Werneria* | *Altiphrynoides*<br>*Blythophryne*<br>*Bufoides*<br>*Calliopersa*<br>*Laurentophryne*<br>*Metaphryniscus*<br>*Parapelophryne*<br>*Pseudobufo*<br>*Sigalegalephrynus*<br>*Truebella* |
| CACOSTERNIDAE | | | | *Nothophryne* |
| CERATOBATRACHIDAE | *Platymantis* | | *Alcalus* | *Liurana* |
| CERATOPHRYIDAE | | | *Ceratophrys*<br>*Lepidobatrachus* | |
| CEUTHOMANTIDAE | | | | *Dischidodactylus* |
| CYCLORAMPHIDAE | *Hylodes*<br>*Thoropa* | | *Crossodactylus* | *Chaltenobatrachus* |
| DENDROBATIDAE | | *Hyloxalus* | | *Ectopoglossus*<br>*Paruwrobates* |
| DICROGLOSSIDAE | *Chaparana*<br>*Euphlyctis*<br>*Hoplobatrachus*<br>*Phrynoderma*<br>*Sphaerotheca* | | | *Allopaa*<br>*Chrysopaa*<br>*Ombropaa* |
| DISCOGLOSSIDAE | | | *Latonia* | |
| HEMIPHRACTIDAE | *Hemiphractus* | | | |
| HEMISOTIDAE | | *Hemisus* | | |

*...Continued on the next page*

**Appendix A15.** (Continued)

| Family or higher taxon | 1 | 2 | 3 | ° |
|---|---|---|---|---|
| HYLIDAE | *Anotheca*<br>*Dendropsophus*<br>*Osteopilus*<br>*Ptychohyla*<br>*Scarthyla*<br>*Smilisca* | *Scinax* | | *Dryaderces*<br>*Gabohyla*<br>*Quilticohyla* |
| HYPEROLIIDAE | *Semnodactylus* | | | *Arlequinus*<br>*Callixalus*<br>*Chrysobatrachus*<br>*Kassinula*<br>*Paracassina* |
| LEPTODACTYLIDAE | *Leptodactylus* | | *Adenomera* | |
| MEGOPHRYIDAE | | *Leptobrachella*<br>*Scutiger* | *Xenophrys* | |
| MICROHYLIDAE | *Gastrophryne*<br>*Mantipus*<br>*Myersiella*<br>*Uperodon* | *Platypelis* | *Gastrophrynoides* | *Adelastes*<br>*Madecassophryne*<br>*Mysticellus*<br>*Siamophryne*<br>*Vietnamophryne* |
| MYOBATRACHIDAE | *Myobatrachus*<br>*Platyplectrum* | *Heleioporus*<br>*Philoria*<br>*Uperoleia* | *Geocrinia*<br>*Pseudophryne*<br>*Taudactylus* | |
| PHRYNOBATRACHIDAE | *Phrynobatrachus* | | | |
| PHYLLOMEDUSIDAE | *Ranoidea* | | | |
| PIPIDAE | *Pipa*<br>*Xenopus* | | | |
| PTYCHADENIDAE | | | | *Lanzarana* |
| RANIDAE | *Clinotarsus*<br>*Nidirana* | *Amolops* | | *Pterorana*<br>*Sumaterana* |
| RHACOPHORIDAE | | *Pseudophilautus* | | |
| RHACOPHORIDAE | | | | *Dendrobatorana* |
| SCAPHIOPODIDAE | *Scaphiopus* | | | |
| TELMATOBIIDAE | | | *Telmatobius* | |
| **HYLOBATRACHIA** | | | | *Ancudia* |
| **GYMNOPHIONA** | | | | |
| CAECILIIDAE | | | *Microcaecilia* | *Athretochoana*<br>*Brasilotyphlus*<br>*Idiocranium*<br>*Mimosiphonops*<br>*Nectocaecilia*<br>*Potamotyphlus*<br>*Sylvacaecilia* |
| ICHTHYOPHIIDAE | | | | *Epicrium* |
| SCOLECOMORPHIDAE | | *Scolecomorphus* | *Crotaphatrema* | |
| URAEOTYPHLIDAE | | | *Uraeotyphlus* | |
| **URODELA** | | | | |
| AMBYSTOMATIDAE | *Ambystoma* | | | |
| CRYPTOBRANCHIDAE | *Cryptobranchus* | *Andrias* | | |
| HYNOBIIDAE | *Liua*<br>*Onychodactylus* | | | |
| PLETHODONTIDAE | *Pseudotriton* | | | |

*...Continued on the next page*

**Appendix A15.** (Continued)

| Family or higher taxon | 1 | 2 | 3 | ° |
|---|---|---|---|---|
| *Salamandridae* | *Calotriton*<br>*Cynops*<br>*Euproctus*<br>*Ichthyosaura*<br>*Lissotriton*<br>*Notophthalmus*<br>*Salamandra* | *Hypselotriton* | | |
| Total **Anura** | **33** | **14** | **21** | **44** |
| Total **Gymnophiona** | **0** | **1** | **3** | **8** |
| Total **Urodela** | **12** | **2** | **0** | **0** |
| Total **Lissamphibia** | **45** | **17** | **24** | **52** |

**Appendix A16.BUF.** The Buffon Declaration.

The *Buffon International Symposium* was held at the Paris Muséum National d'Histoire Naturelle on 18–19 October 2007, on the occasion of the tercentenary of the birth of Buffon, one of the great founding fathers of the scientific study of the diversity of life. Four major institutions were co-organisers of this symposium: the Muséum National d'Histoire Naturelle (Paris, France), the Natural History Museum (London, UK), the Royal Botanic Gardens (Kew, UK) and the National Museum of Natural History of the Smithsonian Institution (Washington, USA). More than 200 participants, including representatives of 93 natural history institutions (natural history museums and research institutes, botanic gardens, zoos, etc.) from 36 countries and four continents discussed the following theme: "Natural History Museums and Institutions in the 21st century: impact on our common future". The symposium adopted the following concluding message (Anonymous 2008):

***The Buffon Declaration***
***"Natural history institutions and the environmental crisis"***
*Concluding Message from the Buffon Symposium*
*(October 18th and 19th, 2007; Muséum National d'Histoire Naturelle, Paris, France)*

Given that science is critical for sustainable management of biodiversity and ecosystems and, through it, survival of human populations on this planet, the vital contributions of these institutions are fourfold.

• They are the primary repositories of the scientific samples on which understanding of the variety of life is ultimately based.

• Through leading-edge research, they extend knowledge of the structure and dynamics of biodiversity in the present and in the past.

• Through partnerships, and through programs of training and capacity-building, they strengthen the global capability to address current and future environmental challenges.

• They are a forum for direct engagement with civil society, which is indispensable for helping bring about the changes of behaviour on which our common future and the future of nature depend.

Today natural history institutions have particular responsibilities because global biodiversity is collapsing. Current approaches are inadequate in the face of this challenge. We therefore reaffirm our commitment to work together, and to develop new integrated approaches to understand and address the environmental crisis, and to communicate the issues to the public, policy makers and a broad range of stakeholders.

We make three recommendations:

(1) Collections of specimens and other databases on nature are a model of nature's variability and are a part of the world's scientific infrastructure (as exemplified by the OECD Global Science Forum). They are crucial tools for understanding the impact of climate change, of biodiversity loss, and other environmental challenges, but natural history collections are nowadays disappearing in many countries due to lack of funding.

We therefore call on governments and organisations to give the conservation of these vital collections increased levels of support.

(2) Naturalist research in the field is essential for the continued gathering and dissemination of information, as well as training and capacity-building initiatives. As a group, natural history institutions have developed, and will continue to develop and implement, best practice in this area. However, current policy changes derived from the U.N. Convention on Biological Diversity have made research, and the management of collections for scientific research on biodiversity, increasingly difficult and expensive.

We therefore call on governments and the Convention on Biological Diversity:

(a) to recognize the difference between profit-oriented bioprospecting and science-oriented research for the public good, and

(b) to facilitate non-commercial biodiversity collecting and the movement of specimens, in their approaches to Access and Benefit-Sharing (ABS), including through their development of policy and regulations.

(3) Evolution is without doubt the most acceptable explanation for the diversity of life. It is crucial that only such empirical and testable approaches are accepted as "scientific" when discussing evolution. We strongly urge that support be given for the dissemination of scientific perspectives, which is our duty as outreach organisations, and for the teaching of evolution in schools.

In conclusion, the participants in the Buffon Symposium express the desire that scientists, policy makers and civil society unite in their efforts to achieve sustainable management of nature and the maintenance and restoration of ecosystems and their services upon which civilization depends. We reaffirm our conviction that a flourishing development model that is compatible with a sustainable natural world is possible. We are enthusiastic regarding the contributions we can make through our missions in this context, which consist of extending human knowledge of nature, training specialists of all kinds, and sharing knowledge with the public, particularly young people. We strongly affirm our capacity to provide an unbiased forum for the development of new ideas and new approaches among all the stakeholders concerned.

**Appendix A.17.ADD.** Notes added in proofs.

Here above we presented the results of our survey of all the supraspecific nomina of **Lissamphibia** published from 1 January 1758 to 15 November 2020. At this latter date, these nomina amounted to 2935 (1827 of the genus-series, 592 of the family-series, 420 of the class-series and 96 ectonyms).

Four new nomina of the genus-series were published during our long work of correction of the proofs of this paper, and could therefore not be included in the text and tables above.

Wilkinson *et al.* (2021) described the new rhinatrematid genus and species *Amazops amazops*, which they regarded as the sister-taxon to the genus *Rhinatrema* Duméril & Bibron, 1841.

Gorin *et al.* (2021) described the new microlylid genus *Nanohyla* (type species *Microhyla annectens* Boulenger, 1900), which they regarded as the sister-genus to *Microhyla* Tschudi, 1838. The separation of these two genera is supported by our data (see Appendix **A2.TREE-1**). They constitute together the sister-taxon to the genus *Glyphoglossus* Günther, 1869. According to our methodology, the recognition of *Nanohyla* requires to recognise two infratribes in the subtribe *Microhylina*: the *Calluellinia* Fei, Ye & Jiang, 2005 for *Glyphoglossus*, and the *Microhylinia* ||Fitzinger, 1843.fa.f012||-Noble, 1931 for *Microhyla* and *Nanohyla*.

Motta *et al.* (2021) provided the new generic nomen *Heyerus* for the single species *Eleutherodactylus bilineatus* Bokermann, 1975, which is also the type species of the genus *Bahius* described above. Since 2 February 2021, their paper is available on the website of the journal as an "early view" version, its pages being numbered from 1 to 17, and it is not included in the issue **59** (2) of February 2021 of the journal or in any other issue. According to Articles 9.9 and 21.8.3 of the 2012 Amendment of the *Code* (Anonymous 2012), such "preliminary versions of works accessible electronically in advance of publication" do not constitute published work and the nomen *Heyerus*, although preregistered on *Zoobank*, was not made available through this version. It will be made available by the publication online of the "final version" of this paper, in a subsequent issue of the journal, presumably with a different numbering of pages and perhaps other differences. The fact that the website of the journal states that the early view is the "Version of Record online" of this paper is of no relevance here, as the concept of "version of record" is absent from the version of the *Code* currently in force. The respective priority between *Bahius* and *Heyerus* will be settled by the dates of publication of the final versions of their respective papers.

Rage *et al.* (2021) described a series of fossil bone fragments as the new genus and species of *incertae sedis* anurans † *Rocekophryne ornata*. The status of these two new nomina is similar to the previous one, having been distributed first, on 9 February 2021, as a document stated to be 'in press', i.e. as a preregistered but still unpublished preliminary version. They will become available when the final version of this paper is published first, either on paper or online.

17 February 2021

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