Article

Hyper-validation of five nomina of amphibians and reptiles threatened by senior synonyms or homonyms

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Abstract

Five nomina of amphibians and reptiles introduced by Laurenti (1768) and traditionally used in European herpetology (*Hyla*, *Natrix*, *Lacerta viridis*, *Podarcis muralis*, *Triturus cristatus*) are threatened by senior synonyms or homonyms published earlier by Garsault (1764) in a work that has long remained unnoticed by herpetologists. In a previous paper, we used Article 23.9.1 of the *Code* on reversal of precedence to validate these well-known nomina. The validity of our action was challenged because we had only used indirect evidence for this validation, quoting a single reference for each of these five nomina instead of 25. Here we argue that our action was indeed valid under the *Code*, but, to preclude any further discussion, we provide 25 references or more to the use of each of these five nomina in order to "hyper-validate" them.

Key words. Junior synonym, junior homonym, Article 23.9.1 of the *Code*, references, direct evidence, indirect evidence, validation, hyper-validation

We recently published (Dubois & Bour 2010) an analysis of the nomenclatural status of the 7 generic nomina and 6 specific nomina of amphibians and reptiles introduced in zoological nomenclature by Garsault (1764). This analysis was much more detailed than that presented earlier by Welter-Schultes & Klug (2009), and settled all the nomenclatural problems raised by these nomina. However, Welter-Schultes & Klug (2011) challenged our conclusions, mainly on two grounds.

First, they stated that the nomina that appear identical in the work of Garsault (1764) and in that of Laurenti (1768), namely *Bufo*, *Salamandra*, *Scincus* and *Vipera*, had been introduced as new nomina in zoological nomenclature only once, in the former work, and that their mention in the work of Laurenti (1768) should be construed as a mere "use" of "the same" nomina, not as the introduction of new junior homonymous nomina. This interpretation has important nomenclatural consequences, especially concerning the genus *Bufo*, but it does not hold. As discussed in more detail by Dubois (2012), this interpretation is absurd and intenable, as Laurenti (1768) was not aware of the work of Garsault (1764) and could not cite or use nomina created in a work he was not aware of. As a matter of fact, Garsault's (1764) amphibian and reptile nomina remained unknown of all herpetologists, and even of all zootaxonomists, from 1764 to the "resurrection" of this work by Welter-Schultes *et al.* (2008). Therefore, the interpretation of these nomina by Dubois & Bour (2010) and the nomenclatural acts of these authors, particularly the designations of type-species for the generic nomina created in Garsault's work, remain valid.

The second point of disagreement raised by Welter-Schultes & Klug (2011) concerns our interpretation of Article 23.9.1 of the *Code* (Anonymous 1999) on reversal of precedence. In our paper, we validated six well-known and largely used nomina that are junior synonyms (*Triturus cristatus*, *Podarcis muralis*, *Hyla*, *Natrix*) or homonyms (*Lacerta viridis*, *Testudo terrestris*) of nomina created by Garsault (1764)—respectively *Lacertus aquatilis*, *Lacertus terrestris*, *Ranetta* and *Serpens*, and *Lacertus viridis* and *Testudo terrestris*. In order to validate these junior nomina as "*nomina protecta*" and to invalidate Garsault's senior nomina as "*nomina oblita*", we provided evidence that the former had been used at least 25 times after 1899 by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years. In order to save printing space, in five of these six cases (*Lacertus aquatilis*, *Lacertus terrestris*, *Lacertus viridis*, *Ranetta*, *Serpens*), we refrained from giving a