



The systematic status of *Gonocephalus robinsonii* Boulenger, 1908 (Squamata: Agamidae: Draconinae)

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Abstract

The generic assignment of the draconine lizard *Gonocephalus robinsonii* from the highlands of West-Malaysia has been uncertain since the original description. Here we present a study based on morphology, previously published karyotype data and molecular phylogenetics using 16S rRNA sequences to evaluate the systematic status of *G. robinsonii*. As a result we describe *Malayodracon* **gen. nov.** to accommodate the species.

Key words: *Gonocephalus*, phylogeny, cranial morphology, *Malayodracon* **gen. nov.**, *Malayodracon robinsonii* comb. nov., *Dendragama boulengeri*

Introduction

The genus *Gonocephalus* Kaup, 1825 constitutes a group of arboreal agamid lizards belonging to the subfamily Draconinae distributed in the Sunda archipelago west of the Wallace line, the Philippines and mainland Southeast Asia south of the Isthmus of Kra (with the exception of isolated populations of *G. grandis* (Gray, 1845) in southern Laos [Teynié *et al.* 2004] and Vietnam [Ananjeva *et al.* 2007]).

For a long time the genus *Gonocephalus* was a conglomerate of arboreal agamid lizards that comprised species from Southeast Asia, Andaman & Nicobar Islands, the Sunda Archipelago, the Philippines, New Guinea, the Bismarck Archipelago and Australia. Currently only those species from west of the Wallace line are considered true *Gonocephalus*. The isolated population from Andaman and Nicobar Islands belong to the genus *Coryphophylax* Blyth, 1860 and those species east of the Wallace line are members of the genus *Hypsilurus* Peters, 1867. These taxonomic changes had already been proposed by Moody (1980) based on phenotypic characters and results of his phylogenetic study were corroborated through discovering additional characters separating *Gonocephalus* from *Hypsilurus* such as hair-like skin receptors in *Gonocephalus* or lens-like skin receptors in *Hypsilurus* (Ananjeva & Matveyeva-Dujsebayaeva 1996), differing karyotypes (Ota *et al.* 1992) and differences in hemipenis morphology (Böhme 1988).

The first *Gonocephalus* species to be discovered was *Gonocephalus chamaeleontinus* (Laurenti, 1768), originally described as *Iguana chamaeleontina*. The genus *Gonocephalus* was erected much later by Kaup (1825: 590) with *Lophyrus tigrinus* Duméril & Bibron, 1837 (= *G. chamaeleontinus*) constituting the type species (fide Wermuth 1967). The original name was *Gonocephalus* (gono- from gr. γωνία / gonia - angle, - cephalus from gr. κεφαλή / kephale - head) but in a later publication (Kaup 1827: 614) he amended it to *Goniocephalus*. Wagler (1830: 150) introduced the alternative spelling *Gonyocephalus* that was used by several authors in subsequent publications (e. g. Gray 1845, Boulenger 1885, 1908, 1912, Smith 1922).

Since the description of *Gonocephalus chamaeleontinus* the diagnostic characters changed over time in order