

A NEW SPECIES OF *GONGYLOSOMA* (SQUAMATA: COLUBRIDAE) FROM PULAU TIOMAN, WEST MALAYSIA

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ABSTRACT: A new species of *Gongylosoma* is described from Pulau Tioman, a small island 38 km off the southeast coast of Pahang, West Malaysia, in the South China Sea. This species differs from all other *Gongylosoma* in having a single, enlarged, posterior temporal; chinshields of equal size; and a thin nuchal band that contacts a vestigial vertebral stripe. The new species forms a clade with *G. nicobariense* from the Nicobar Islands and *G. longicauda* from Borneo, Java, and Sumatra and is the sister species of the latter.

Key words: Biogeography; *Gongylosoma*; *Liopeltis*; Malaysia; Pulau Tioman

THE COLUBRID genus *Gongylosoma* Fitzinger 1843 currently contains four southeast Asian species (Das, 1999; de Haas, 1950; de Rooij, 1915; Leviton, 1964) and an additional undescribed form from Borneo (*Gongylosoma* "Borneo") listed under the genus *Liopeltis* Fitzinger 1843 (Stuebing and Inger, 1999). Species of *Gongylosoma* are generally small, secretive, forest floor inhabitants that, with the exception of *G. baliodeirum*, are not commonly seen. Consequently, many species are known from fewer than 10 specimens. Leviton (1964) provided compelling character support from a number of anatomical systems as evidence for separating *Gongylosoma* from *Liopeltis*, which most authors have followed (i.e., Das, 1999; Das et al., 1998; David and Vogel, 1996) but others have not (Grandison, 1978; Manthey and Grossmann, 1997; Stuebing and Inger, 1999; Tweedie, 1983). Species of *Gongylosoma* range from Myanmar and Thailand southward through peninsular Malaysia, Singapore, and the Nicobar Islands to Sumatra, Borneo, Java, and their associated islands.

We report here a newly discovered population of *Gongylosoma* from Pulau Tioman, a small (133.6 km²) island 38 km off the southeast coast of the state of Pahang, West Malaysia, in the South China Sea (Fig. 1). Pulau Tioman has been the focal point of recent herpetological investigations (e.g., Das and Lim, 2000; Grismer et al., 2002a,b,c;

Leong and Grismer, 2002; Lim and Lim, 1999) that have resulted in the discovery of several new island records and species (see Grismer et al., 2002a for a summary). The *Gongylosoma* reported here is sufficiently distinct from all other congeneric taxa in both squamation and color pattern that we herein describe it as a new species.

MATERIALS AND METHODS

All species of *Gongylosoma* were examined (Appendix I) and compared with the single, new specimen from Pulau Tioman. Scale counts included preoculars, postoculars, supralabials, number of supralabials contacting the eye, infralabials, anterior and posterior temporals, ventrals, and subcaudals (Table 1). Measurements included eye diameter (ED); head length (HL) from the union of the posteromedial corners of the parietals to the tip of the snout; head depth (HD) from the dorsal surface of the head to the ventral surface of the jaw immediately posterior to the eye; and snout length (SL) from the anterior margin of the eye to the tip of the snout. All measurements were made with vernier calipers to the nearest 0.1 mm. Color pattern characters were taken from preserved specimens, color photographs in Stuebing and Inger (1999), and 35-mm color transparencies (Appendix I). Scale terminology follows Stuebing and Inger (1999). Museum acronyms follow Leviton et al. (1985) except that we retain ZRC (Zoological Reference Collection) for USDZ, which follows conventional usage.

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