

Revision of the Indo-West Pacific Coral Reef Mantis Shrimp Genus, *Gonodactylopsis* Manning, 1969 (Crustacea: Stomatopoda: Gonodactylidae)

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ABSTRACT. The Indo-West Pacific coral reef mantis shrimp genus *Gonodactylopsis* Manning, 1969, was established for two Indo-West Pacific species: *Gonodactylus herdmani* Tattersall, 1906 (type species) described from the Gulf of Mannar, India; and *Gonodactylus drepanophorus* de Man, 1902, from Indonesia. A third species, *Gonodactylopsis komodoensis* Erdmann & Manning, 1998, was described from Komodo, Indonesia. *Gonodactylopsis* is revised herein based on type and other material of the three known species, and two new species are described based on recent collections from coral reefs: one from Macclesfield Bank, South China Sea, and the other from Fiji and Papua New Guinea. Reconsideration of all species of *Gonodactylopsis* revealed a probable synapomorphy of the genus that is unique in the Stomatopoda: the presence of membranous, partially de-chitinized posterior surfaces of the uropodal endopod and exopod distal article. All species of *Gonodactylopsis* are described and figured, and an identification key is provided.

Introduction

Manning (1969) proposed the genus *Gonodactylopsis* to accommodate two species of mantis shrimp formerly placed in *Gonodactylus* Group II of Kemp (1913) (recognized as *Mesacturus* Miers, 1880 by Holthuis, 1967), characterized by the combination of a trispinous rostral plate, anteriorly produced lateral plates of the carapace, presence of a mandibular palp, subterminal articulation of the uropodal exopod segments, and weakly curved, movable distal outer spines on the proximal article of the uropodal exopod. More recently, it was recognized that the upraised conical spine or boss at the base of the submedian and intermediate teeth of the telson links *Gonodactylopsis* with *Hoplosquilla*

Holthuis, 1964 and a group of species within *Gonodactylellus* Manning, 1995 (Barber & Erdmann, 2000; Ah Yong, 2001; Ah Yong & Erdmann, 2007).

Prior to the present study, three species of *Gonodactylopsis*, all from Indo-West Pacific coral reefs were recognized: *G. herdmani* (Tattersall, 1906) (type species, Gulf of Mannar), *G. drepanophora* (de Man, 1902) (type locality: Ternate, Indonesia) and *G. komodoensis* Erdmann & Manning, 1998 (type locality: Komodo, Indonesia). The few published reports of *Gonodactylopsis* are based on only a few specimens in collections worldwide. In the present study, the known species of *Gonodactylopsis* are redescribed based on type and other material, and two new species are described based on expeditionary materials from various Indo-West Pacific localities collected since the 1980s.

Keywords: Mantis shrimp; Indo-West Pacific; Gonodactyloidea; *Gonodactylopsis*; coral reef
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