



A new genus for *Psopheticus megalops* Takeda, 1989 (Crustacea: Brachyura: Goneplacidae)

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Abstract

A new genus is established for *Psopheticus megalops* Takeda, 1989, an unusual and poorly known species of goneplacoid crab known only from Japan. The carapace and male gonopods are very distinctive, and easily distinguish it from all other genera. Although its classification in the Goneplacidae has been questioned, its thoracic sternal and other characters clearly argue for its continued retention in this family.

Key words: Brachyura, Goneplacidae, *Psopheticus megalops*, new genus, Japan

Introduction

Takeda (1989) described an unusual goneplacid crab from southern Japan on the basis of one small male and one female which he named *Psopheticus megalops*. Nevertheless, the atypical carapace features and probably the unusual male gonopod structures made him comment that the "... inclusion to the genus *Psopheticus* represented by three Indo-West Pacific species is rather arbitrary [*sic*] and tentative." (Takeda 1989: 174). Castro (2007: 739) explicitly excluded it from *Psopheticus* Wood-Mason, 1892, and *Exopheticus* Castro, 2007, commenting that the pointed male first and second gonopods suggest that it is not a member of the Goneplacidae MacLeay, 1838, *sensu stricto*. Ng *et al.* (2008: 80) retained it in the Goneplacidae as an *incerta sedis* and also commented that it had a suite of unusual characters that challenged its classification in the family.

We have re-examined the type specimens as well as several recently collected specimens from Japan, and are now confident *Psopheticus megalops* is a member of the Goneplacidae (see discussion for genus). However, it differs so markedly from other goneplacid genera that it has to be placed in its own genus. The redescription of the species and the establishment of a new genus for *Psopheticus megalops* form the basis of the present paper.

The abbreviations G1 and G2 refer to the male first and second gonopods, respectively. Specimens examined are deposited in the Natural History Museum and Institute, Chiba (ZMC); and National Science Museum, Tokyo (NSMT); and Zoological Reference Collection of the Raffles Museum of Biodiversity Research, National University of Singapore (ZRC). Measurements provided are of the carapace width and length, respectively.

Systematics

Family Goneplacidae MacLeay, 1838

Pedroplax new genus

Diagnosis. Carapace slightly wider than long, with single anterolateral tooth (Figs. 1, 2A, 3A). Orbit short; eyes large, protruding lateral margin of orbit (Figs. 1, 2A, 3A). Antennules proportionately large, fossa asymmetrical (Fig. 2A). Epistome with anterior part triangular; posterior margin sinuous with 3 low median lobes, separated