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On the genus *Scalopidia* Stimpson, 1858 (Crustacea: Brachyura: Goneplacoidea: Scalopidiidae), with the description of one new genus and three new species

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Abstract

A revision of *Scalopidia* Stimpson, 1858 (Brachyura: Goneplacoidea: Scalopidiidae) has resulted in the description of two new species of *Scalopidia* from the Indian Ocean and Papua New Guinea, as well as a new genus and new species from Madagascar. The type species of *Scalopidia*, *S. spinosipes* Stimpson, 1858, is redescribed and *Hypophthalmus leuchochirus* Richters, in Lenz & Richters, 1881, is synonymised with *S. spinosipes*.

Key words: Decapoda, Brachyura, Scalopidiidae, revision, Indian Ocean, Papua New Guinea, taxonomy, new genus, new species

Introduction

The Indo-West Pacific family Scalopidiidae Števčić, 2005, currently contains one genus, *Scalopidia* Stimpson, 1858, and two species, *S. spinosipes* Stimpson, 1858 (type species), and S. *leucochirus* (Richters, in Lenz & Richters, 1881) (Ng *et al.* 2008). *Scalopidia* has been placed in the Rhizopinae Stimpson, 1858 (e.g., Stimpson 1858; Tesch 1918), Chasmocarcininae Serène, 1964 (e.g., Serène 1964, 1968; Hsueh & Huang 2002), or Goneplacidae MacLeay, 1838 sensu lato (Huang 1994), depending on the classification of the day. The Rhizopinae has been treated as a family, or as a subfamily in the Goneplacidae MacLeay, 1838, Xanthidae MacLeay, 1838, or Pilumnidae Samouelle, 1819, by different authors. Ng (1987) reviewed the Rhizopinae, restricted the subfamily and placed it in the Pilumnidae. The Chasmocarcininae was originally established as a subfamily of the Goneplacidae but is at present recognised as a distinct family in the Goneplacoidea (Ng *et al.* 2008; Castro & Ng 2000; Castro *et al.* 2010; Komai *et al.* 2012).

Števčić (2005) established Scalopidiidae within the Chasmocarcinoidea Serène, 1964, for *Scalopidia* but did not explain why a separate family was necessary. Ng *et al.* (2008: 85) discussed the affinities of the genus and commented that since *Scalopidia* has a coxo-sternal male gonopore condition, with a long calcified penis partially protected in a channel (or "gutter", as used by Guinot *et al.* 2013) between thoracic sternites 7 and 8 (Fig. 1), there appeared to be grounds for recognising a separate family within the Goneplacoidea for it (see also Guinot *et al.* 2013: 118). Števčić (2005: 107), in placing the Scalopidiidae in his Chasmocarcinoidea, stated that its supplementary plate on sternite 8 "extremely narrow" but this is clearly not the case—*Scalopidia* does not have any trace of a supplementary plate (termed "additional plate" by Guinot *et al.* 2013). He appears to have mistaken the narrow channel between thoracic sternites 7 and 8 containing the long penis for the supplementary plate.

The Scalopidiidae is revised in the present paper, resulting in the description of two new species of *Scalopidia*, and a new genus and new species from the western Indian Ocean and Papua New Guinea. The abbreviations G1 and G2 are used for the male first and second gonopods, respectively; and P2–P5 for pereiopods 2–5 (ambulatory legs 1–4), respectively. Measurements provided (in millimetres) are of the carapace length and width, respectively. Specimens examined are deposited in the Zoological Reference Collection of the Raffles Museum of Biodiversity