



Revision of the *Parasesarma plicatum* (Latreille, 1803) species-group (Crustacea: Decapoda: Brachyura: Sesarmidae)

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Abstract

The mangrove sesarmid crabs of the *Parasesarma plicatum* species-group are revised, and four distinct taxa are recognized: *Parasesarma plicatum* (Latreille, 1803), *P. affine* (De Haan, 1837), *P. unguatum* (H. Milne Edwards, 1853), and *P. dumacense* (Rathbun, 1914). These four species are easily distinguished from congeners by the number of dactylar tubercles of the chelipeds, the shape of the male first gonopod and live coloration. Their distributions are also distinct, *P. plicatum* being found in the eastern Indian Ocean, *P. affine* in Japan, China, Taiwan, *P. unguatum* throughout Southeast Asia, and *P. dumacense* in the Philippines.

Key words: Crustacea; Brachyura, Sesarmidae, *Parasesarma plicatum* species-group, revision

Introduction

The sesarmid genus *Parasesarma* De Man, 1895 (type species *Cancer quadratus* Fabricius, 1798) currently contains 31 species (Ng *et al.* 2008, Rahayu & Ng 2009). The taxonomy of the genus is one of the most problematic in the Sesarinae, with many of the species now included in it not well known. Thus a revision is clearly necessary. One of the most frequently reported species in the Indo-West Pacific is *Parasesarma plicatum* (Latreille, 1803). The species is generally considered to be very distinct, being the only member of the genus possessing relatively broad, short ambulatory legs, two pectinated crests on the palm of the male chela, less than 15 symmetrical tubercles on the dactylus of the male chela. The following species have long been regarded as synonyms of *P. plicatum*: *Cancer quadratus* Fabricius, 1798, *Ocypode (Pachysoma) affinis* De Haan, 1837, *Sesarma unguatum* H. Milne Edwards, 1853. This synonymy (*sensu* Tesch, 1917) has been followed by most workers (e.g. Crosnier 1965; Sakai 1976; Dai *et al.* 1986; Dai & Yang 1991), with *P. plicatum* regarded as having a very wide Indo-West Pacific distribution, occurring from Madagascar through Southeast Asia, southern China, Japan. One poorly known species, *Sesarma dumacense* Rathbun, 1914, which was briefly described by Rathbun (1914) on the basis of only one female, is also very close to *P. plicatum*. Its present status is uncertain. Another species, *P. exquisitum* Dai & Song, 1986, was described from China and compared with *P. plicatum* by the original authors, who regarded it as closely related.

Soh (1978) listed *Sesarma (Parasesarma) plicatum*, from Hong Kong as a species separate from *S. (P.) affinis* without explanations. In an unpublished 1970s key to the estuarine and mangrove crabs of the Indo-West Pacific in the Zoological Reference Collection of the National University of Singapore (ex National Museum of Singapore), the late Raoul Serène separated the two species in his key, noting that the two species had different number of granules on the dactylar finger. In their checklist of Taiwanese crabs, Ng *et al.* (2001: 43) commented that "...Ongoing studies by P. K. L. Ng and A.-Y. Dai indicate that *Ocypode*