NEW RECORDS OF SPIDER CRABS OF THE GENERA CYRTOMAIA MIERS, 1886, AND PLATYMAIA MIERS, 1886 (DECAPODA: MAJOIDEA: INACHIDAE) FROM THE ANDAMAN SEA, THAILAND

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ABSTRACT Two species of deep-water spider crabs, Cyrtomaia suhmii Miers, 1886, and Platymaia alcocki Miers, 1886, were collected by the R.V. Chakratong Tongyai from the Andaman Sea during the BIOSHELF project surveys of the west coast of Thailand in 1996–2000. Based on Ng and Davie (2002), and Naiyanetr (2007), the species as well as the genera had not been previously reported from Thai waters. The present report serves to formally record these species, as well to discuss variation in adult and juvenile specimens.

Key words: new records, spider crabs, Decapoda, Majoidea, Inachidae, Cyrtomaia, Platymaia, Thailand

INTRODUCTION

Two rare spider crabs, Cyrtomaia suhmii Miers, 1886, and Platymaia alcocki Miers, 1886, were collected by the R.V. Chakratong Tongyai from the Andaman Sea during the BIOSHELF project surveys of the west coast of Thailand in 1996–2000. Based on Ng and Davie (2002), and Naiyanetr (2007), the species as well as the genera had not been previously reported from Thai waters. The present report serves to formally record these species, as well as to discuss variation in adult and juvenile specimens.

MATERIALS AND METHODS

Specimens examined are deposited in the Reference Collection of Phuket Marine Biological Center (PMBC). All measurements provided are pre-rostral lengths and carapace widths respectively. For details on all BIOSHELF stations, see Aungtonya et al. (2000). The classification used here follows Ng et al. (2008).
Cyrtomaja suhmi curvicornis Serène and Lohavanijya, 1973: 45, 46 (in key).

Cyrtomaia curviceros Sakai, 1976: 181; Guinot and Richer de Forges, 1982a: 1096; 1982b: 24, fig. 12A–D; Richer de Forges and Guinot, 1988: 42–43, fig. 2A; Ng et al., 2001: 13; 81 fig. 3h; Richer de Forges and Ng, 2007: 56 (list).

not Cyrtomaia suhmi - Griffin and Brown. 1976: 252, fig. 6; Griffin and Tranter, 1986a: 30, fig. 91g [= C. griffini Richer de Forges and Guinot, 1990].

not Cyrtomaia suhmi typica Doflein, 1904: 54–55, pl. 19: figs. 1, 2 [= C. gaillardi Guinot and Richer de Forges, 1982].

Material examined

PMBC 19999, 1 male (60.2 × 67.1 mm), BIOSHELF St. E8, 0832°N, 09604°E, Otter trawl, 488 m, coll. S. Bussarawit and C. Aungtonya, 06.02.1999; PMBC 20000, 2 juv. (11.8 × 11.5 mm, 8.6 × 8.2 mm), BIOSHELF St. J10, 0715°N, 09715°E, Agassiz trawl, 695–683 m, coll. C. Aungtonya & V. Vongpanich, 19.02.2000; PMBC 19929, 1 juv. (7.7 × 7.4 mm), 1 female (56.3 × 61.2 mm), BIOSHELF St. L10, 0645°N, 09723°E, Agassiz trawl, 707–651 m, coll. C. Aungtonya & V. Vongpanich, 21.02.2000

Diagnosis

Carapace smooth, not granular or spinulate, with 2 long, subparallel protogastric spines. Pseudorostral spine divergent, arched. Basal antennal article cylindrical, armed with 3–5 spines (include internal spine). Orbital border smooth, intercalated orbital granule present (in young) or absent, without preocular spines (in adults). Ocular spine blunt.
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Distribution
Indo-West Pacific: Japan, Philippines, Indonesia, Australia, Thailand (Andaman Sea) and India.

Remarks
Cyrtomaia suhmii was described by Miers (1886) on the basis of an imperfect crushed young male specimen collected from Talaud Islands (Tulur

Figure 2. Cyrtomaia suhmii: A–C, juvenile (11.8 × 11.5 mm) (PMBC 20000); D–F, adult male (60.2 × 67.1 mm) (PMBC 19999); A, D, dorsal view; B, E, anterior part of carapace showing rostrum; C, F, lateral view of carapace. Scale = 10 mm.
Islands) (see Guinot & Richer de Forges 1982b: 22, fig. 10), Indonesia, by the Challenger Expedition. Subsequently, *Cyrtomaia suhmii curviceros* Bouvier, 1915, was described from Japan and recognized as a distinct species by Sakai (1976). The status of *C. curviceros* has long been uncertain. Griffin and Tranter (1986) treated both names as synonyms, while Richer de Forges and Guinot (1982a, 1988) argued that it may be a good species. Ng and Huang (1997) treated Taiwanese material of the species as *C. curviceros* (see also Ng *et al*., 2001), and until recently, was still regarded as a distinct species (see Richer de Forges and Ng, 2007). In their annotated checklist of extant brachyuran crabs of the world, Ng *et al.* (2008) treated *C. suhmii curviceros* as a synonym of *C. suhmii* but without comments. Examination of more material of other allied species like *C. griffini* Richer de Forges & Ng, 1990, has shown that the characters used to separate *C. curviceros* from *C. suhmii* are not valid at the species level (P. K. L. Ng, pers. comm., see also Richer de Forges and Ng, 2008).

Specimens of various sizes were collected from the same Thai locality. The young specimens are similar to the original description and figure of *C. suhmii* by Guinot and Richer de Forges (1982b: 22, 23, fig. 10, 11A, B), especially with regards to the protogastric spines which are divergent (Miers, 1886: 16, pl. 3, fig. 2). On the other hand, large male specimens resemble *C. curviceros* (Fig. 1, 2D–F), although the number of the spines on the basal antennal article is slightly different. This difference, however, is not significant and can easily be explained by variation. The present series of specimens confirm that the differences which have been observed in the past between these two species are due to size and age, and that *C. suhmii curviceros* Bouvier, 1915, clearly is a junior synonym of *C. suhmii* Miers, 1886.

**Genus Platymaia Miers, 1886**

*Platymaia alcocki* Rathbun, 1916

(Figs. 3, 4A–F)


**Figure 3.** *Platymaia alcocki*, adult male (71.0 × 77.5 mm) (PMBC 20367), dorsal view of whole animal. Scale = 20 mm.
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Platymaia wyville-thomsoni Miers, 1886

Platymaia alcocki Rathbun, 1916: 530; 1918: 8; Serène and Lohavanijya, 1973: 48 (in key); Griffin, 1974: 27; Griffin and Tranter, 1986a: 48 (Pl. 4b; figs. 10a, b; 11c); 1986b: 357; Takeda and Webber, 2006: 194.

Not Platymaia alcocki - Takeda and Miyake, 1969: 498–500, figs. 10a, b, 11a–c; Sakai, 1976:

Figure 4. Platymaia alcocki: A–C, adult male (71.0 × 77.5 mm); D–F, young male (25.9 × 30.4 mm) (PMBC 20367); A, D, dorsal view; B, E, anterior part of carapace showing rostrum; C, F, lateral view of carapace. Scale = 10 mm.
176–177, fig. 94a; Dai and Yang, 1991: 120 [=Platymaia wyville-thomsoni Miers, 1886].

Material examined
PMBC 20367, 4 male (71.0 × 77.5 mm, 25.9 × 30.4 mm, 20.6 × 22.7 mm, 20.2 × 22.8 mm), 5 female (19.4 × 21.4 mm, 19.0 × 21.4 mm, 19.0 × 22.1 mm, 18.7 × 21.2 mm, 18.4 × 20.3 mm), BIOSHELF St. J8, 0715°N, 09730°E, Agassiz trawl, 490–479 m, coll. S. C. Aungtonya & V. Vongpanich, 18.02.2000

Diagnosis
Carapace tranversly subcircular, surface nearly smooth in adults, rostral spine subequal to interantennular spine, preocular spine absent; protogastric ridge with 2 tubercles, lacking spines (in adults); groove on each side of mesogastric region deep, clearly separating adjacent branchial regions; palm of male chelipeds more than twice as long as high, distally increasing in width; propodus of ambulatory legs flattened, 7.5 times width of fourth ambulatory leg.

Distribution
Indian Ocean: Andaman Sea to eastern Africa

Remarks
Platymaia alcocki can sometimes be misidentified with P. wyvillethomsoni because young and juveniles of P. alcocki also have prominent spines on all the carapace regions (Alcock, 1895). Although all the spines on the dorsal carapace surface of adult P. alcocki are reduced to only tubercles (Fig. 4A–C), adult P. wyvillethomsoni are still armed with one or two spines on each side of the protogastric regions even as adults (Griffin and Tranter, 1986a: 307, fig. 5b). The main diagnostic feature of P. alcocki is the deep groove on each side of mesogastric region, which separates the two adjacent branchial regions (Rathbun, 1916) (Fig. 4A, D). This character is useful even for young and adult specimens of P. alcocki and is clearly evident on the series of Thai specimens here.

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