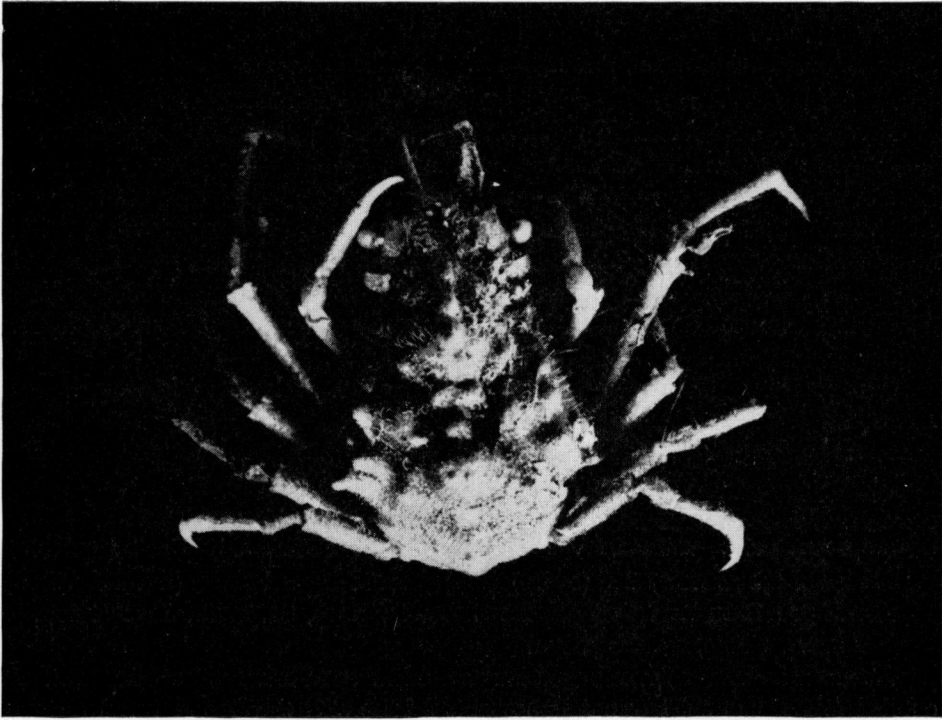


(a)



(b)

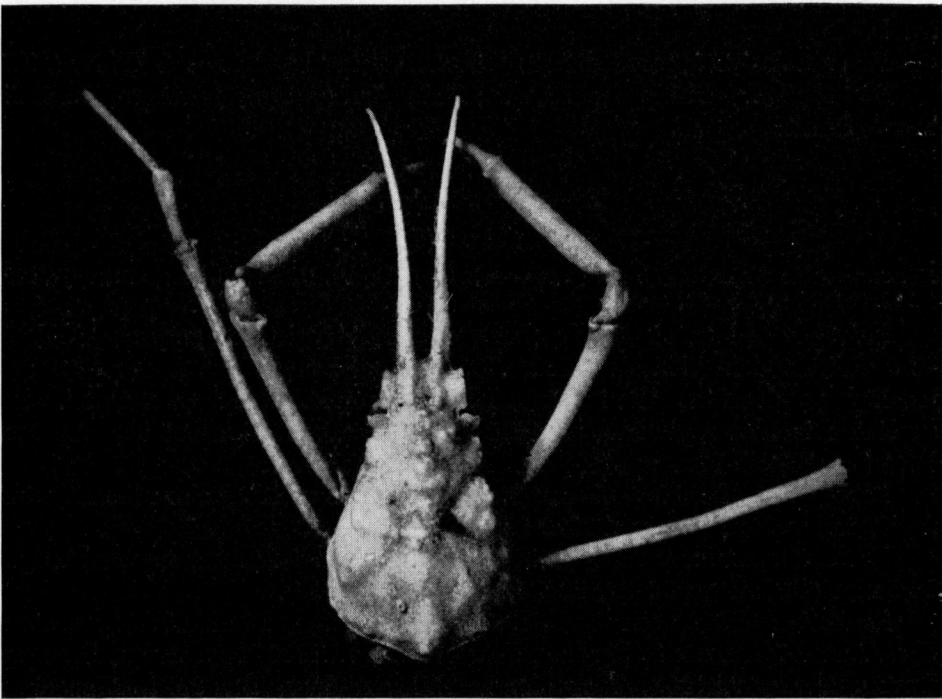


FIG. 6. (a) *Hyastenus sebae* White, lectotype, female, ca. 11.5 mm, dorsal view. (b) *Hyastenus whitei* sp. nov., holotype, male, 40 mm, dorsal view.

Hyastenus trispinosus Rathbun

(Fig. 5 (b))

Hyastenus trispinosus Rathbun, 1916 : 542-543.*Material examined*: 1 ♂ (holotype), 16 mm (USNM 48213).*Locality*: Sulu Archipelago: Tawi Tawi Group, St. 5159, 1 specimen.*Habitat*: 10 fms, coral sand.

Remarks: This species has not been recorded since being taken by the *Albatross*. However, four specimens from Amboina (3 ♂, 1 ♀ (ovig.)), 16-20.5 mm *Snellius* Expedition, det. Alida Buitendijk as *H. hilgendorft*, RML 4306) and one from Singapore (♂, 13 mm coll. Bryant & Palmer, 1909-10, USNM 48265) are almost certainly *H. trispinosus* and extend the known distribution slightly.

Distribution: Sulu Archipelago, Philippine Islands; Singapore and Amboina.

Hyastenus verrucosipes (Adams & White)*Chorinus verrucosipes* Adams & White, 1848 : 13, pl. 2, fig. 3.*Hyastenus verrucosipes*.—Calman, 1900 : 36-37, pl. 2, figs. 23-24; Griffin, 1966 b : 281 (in key).*Material examined*: 1 ♀ (ovig.), postrostral length 11 mm (USNM 48260).*Locality*: Sulu Archipelago: Tawi Tawi Group, St. 5165, 1 specimen.*Habitat*: 9 fms, coral bottom.

Remarks: The rather broad supraorbital eave with preorbital and ant-orbital lobes, the subtruncate postorbital lobe and the broad basal antennal article set this species apart from other species of *Hyastenus* except *H. tinak-tensis*.

This species was recorded from 'Eastern Seas' by Adams & White (1848).

Distribution: Philippine Islands; Sulu Archipelago; northern Australia-Torres Strait.

Hyastenus whitei sp. nov.

(Fig. 6 (b))

Hyastenus sebae White, 1847 b : 57 (part—see below); Alcock, 1895 : 213-214; Buitendijk, 1939 : 248; Griffin, 1966 b : 281 (part: not pl. 15, figs. (b), (c)).

Holotype: Male, cl. 40 mm (dry), originally registered as part of BMNH 43.6 and listed in White's manuscript catalogue under the number 851; the locality is given as 'Philippine Islands, purchased of Cumming'. This specimen is now registered as 1972 : 29 in the collections of the Crustacea Division, British Museum (Natural History), London.

Paratypes: The two other males in this series with the same locality data; registered as 1972 : 30 and 1972 : 31.

Material examined: 4 ♂♂, 5 ♀♀ (3 ovig.), 14.5-31 mm, smallest ovig. ♀, 14.5 mm (USNM 48233-34, 49825, 49884-86, 49924).

Localities: N. Luzon: Port San Vicente, seine, 13.xi.1908, 1 specimen. S.W. Luzon-Mindoro: Subig Bay, shore, seine, 7.i.1908, 1 specimen; Olongapo, Luzon, shore, 7.i.1908, 1 specimen; Balayan Bay, St. 5364, 1 specimen. Negros: Guijulugan, shore, 2.iv.1908, 1 specimen. S. Mindanao: Davao, 150 ft, 16.v.1908, 1 specimen. Sulu Archipelago: Tawi Tawi Group, St. 5169, 3 specimens.

Habitat: Intertidal to 10 fms; sand and sometimes gravel.

Remarks: This species has been previously known as *Hyastenus sebae*. It differs from the species up to now known as *H. oryx* A. Milne Edwards, 1872 (see above) in a number of features including particularly the longer rostral spines (almost equal to the postrostral length of the carapace compared to less than 1/2 postrostral carapace length); the anterior part of the outer border of the supraorbital eave is rounded, not produced acutely, the anterolateral corner of the basal antennal article is not produced, and, of the tubercles near the branchial margin, α_2 is enlarged and extends outwards as an (epibranchial) spine. none/

It appears that the type series of the species described as *H. sebae* by White was split up and rearranged by someone other than White. This probably took place in the latter part of the nineteenth century, possibly by Miers. Four of the original series were relabelled as '*Notolopas sebae*'. In 1965 when Drs. Isabella Gordon and R. W. Ingle sought a specimen of White's series, only one specimen remained labelled as '*Hyastenus sebae*'. This specimen was chosen as the lectotype of *Hyastenus sebae* in 1966 (Griffin, 1966 b : 281, pl. 15, figs. (b), (c)) with the intention of avoiding further confusion with *H. oryx*. Unfortunately, re-examination of this specimen, an adult female, cl. 11 mm, originally registered as 43 : 6 in the collections of the Crustacea Section, British Museum (Natural History), shows that it is conspecific with what has up till now been understood as *Hyastenus oryx*.

In future, the name *Hyastenus sebae* will have to be applied to the species previously known as *Hyastenus oryx* since White's name predates Milne-Edwards' by 30 years. The name *Hyastenus whitei* will have to be applied to the species previously known as *H. sebae*.

Distribution: Throughout the Philippine Islands; northern Indian Ocean to western Pacific—Philippines and northern Australia.

Leptomithrax sinensis Rathbun

Leptomithrax sinensis Rathbun, 1916 : 555-556.

Material examined: None.

Remarks: Rathbun's original description is fairly detailed. She considered the species close to *L. edwardsii* De Haan, which occurs in Japan.

Rathbun's single dried specimen of this species was taken near Hong Kong, St. 5311, in 88 fms on a bottom of coarse sand and shells.

Distribution: Known only from the East China Sea off Hong Kong.

Maja bisarmata Rathbun

(Fig. 7 (b))

Maja bisarmata Rathbun 1916 : 554.

Material examined: 2 ♂♂, 25.5, 44 mm (USNM 48220 (holotype), 49696).

Locality: S.W. Luzon-Mindoro: Verde I. Passage, St. 5367, 1 specimen. N. Mindanao: northern Mindanao and vicinity, St. 5519, 1 specimen (holotype).

Habitat: 180-182 fms, sand.

Distribution: Known only from central Philippine Islands.

Maja gibba Alcock

Maja gibba Alcock, 1895 : 239-240, pl. 4, figs. 5, 5 (a); Kemp & Sewell, 1912 : 31.

Material examined: 1 ♂, 56 mm (USNM 48509).

Locality: Negros: Between Negros and Siquijor, St. 5536, 1 specimen.

Habitat: 279 fms, green mud.

Remarks: The single male is more tuberculate than shown in Alcock's illustration but the gastric regions are deeply separated from the branchial regions.

This species has not previously been recorded from the Philippine Islands.

Distribution: Central Philippine Islands; Andaman Sea.

Maja linapacanensis Rathbun

Maja linapacanensis Rathbun, 1916 : 553-554.

Material examined: None.

Remarks: This species was described from a carapace taken north of Palawan in Linapacan Strait, St. 5335, in 46 fms on sandy mud. Rathbun compared this species with *Leptomithrax compressipes* Miers from Canton.

Distribution: Known only from Palawan, Philippine Islands.

Maja suluensis Rathbun

(Fig. 7 (a))

Maja suluensis Rathbun, 1916 : 552-553.

Material examined: 1 ♂, 3 ♀♀, 14.5-50.5 mm (USNM 48224 (holotype), 48507, 49697).

Localities: Sulu Archipelago: Tawi Tawi Group, St. 5163, 1 specimen; Jolo I., St. 5557, 2 specimens; St. 5165, 1 specimen (holotype).

Habitat: 9-28 fms, sand, coral and coral sand.

Remarks: This species is distinguished by the very long mid-dorsal and marginal spines.

Distribution: Known only from the Sulu Archipelago, Philippine Islands.

Menaethius monoceros (Latreille)

Pisa monoceros Latreille, 1825 : 139-140.

Menaethius subserratus Adams & White, 1848 : 18-19, pl. 4, figs. 1, 2.

Menaethius monoceros.—Sakai, 1965 a : 74-75, pl. 33, fig. 4.

Material examined: 1 ♀, 8.5 mm (USNM 49563).

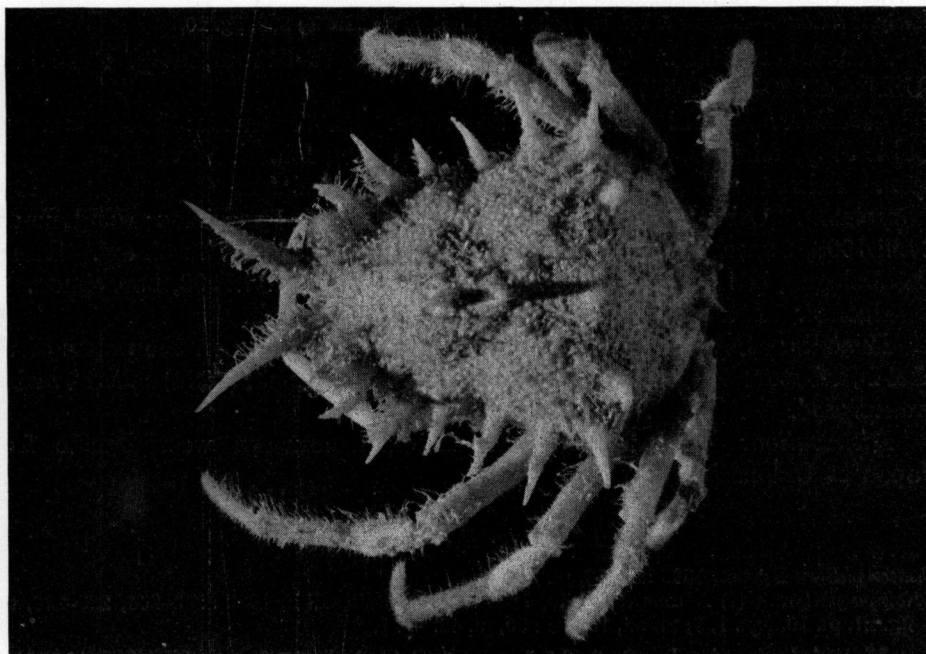
Localities: Sulu Archipelago: Marongas Sound, shore station, 10.ii.1908, 1 specimen.

Habitat: Intertidal, from coral head.

Remarks: This is among the most characteristic and widely distributed Indo-west Pacific majids. A list of the synonyms is given by Sakai (1965 a).

Distribution: Sulu Archipelago, Philippine Islands; Indo-west Pacific from East Africa to the Paumotus.

(a)



(b)

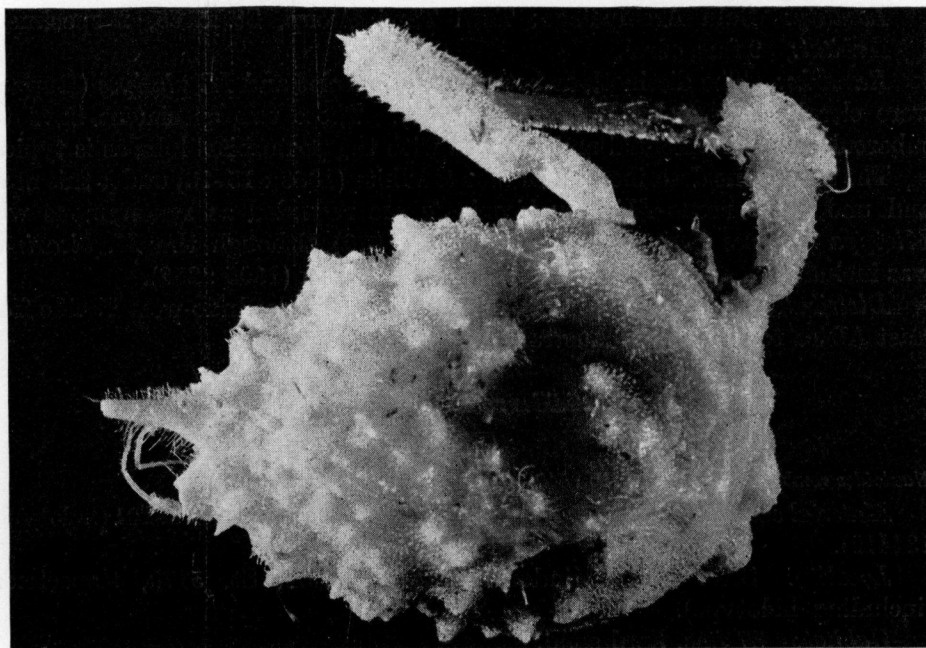


FIG. 7. (a) *Maja suluensis* Rathbun, female, 50.3 mm, dorsal view, USNM 49697, Sulu Archipelago, Tawi Tawi group. (b) *Maja bisarmata* Rathbun, male, 43.9 mm, dorsal view, USNM 49696, Verde Island Passage.

Micippa cristata (Linnaeus)

Cancer cristata Linnaeus, 1758 : 629.

Micippe cristata.—H. Milne Edwards, 1834 : 330.

Micippa cristata.—Adams & White, 1848 : 16; Buitendijk, 1939 : 252, fig. 20.

Material examined: 7 ♂♂, 7 ♀♀ (1 ovig.), 15–61 mm, ovig. ♀ 24.5 mm (USNM 49680–88, 50547).

Localities: 'Philippines', 1 specimen. S.W. Luzon: Port Binanga, Lubic Bay, 8.i.1908, 3 specimens; Tilig, Lubang Island, 14.vii.1908, 1 specimen. Palawan: Verde del Sur I., 6.iv.1909, 1 specimen; Cuyo Is., 9.iv.1909, 1 specimen. Cebu-Bohol: Cebu market, 29.viii.1909, 1 specimen; Pandanon I., 24.iii.1909, 3 specimens. Leyte: Port Dupon, 17.iii.1909, 1 specimen. Samar: Catabalogan, 16.iv.1908, 1 specimen; Atulayan Bay, 17.vi.1909, 1 specimen.

Habitat: Intertidal, 1 specimen taken from jellyfish.

Remarks: Several of the specimens possess granules on the palms of the chelae, a feature supposedly characterising what Zehntner (1894) called 'variety *granulipes*'.

Distribution: Central Philippine Islands; northern west Pacific from Japan to Indonesia.

Micippa philyra (Herbst)

Cancer philyra Herbst, 1803 : 51–52, pl. 58, fig. 4.

Micippa philyra.—(?) Adams & White, 1848 : 15–16; Buitendijk, 1939 : 253–254, 255–256, text fig. 21, pl. 10, figs. 1, 3; Sakai, 1965 a : 90, pl. 42, fig. 1.

Material examined: 1 ♂, 24.6 mm, 1 ♀ (ovig.), 25.2 mm (USNM 49691).

Locality: Sulu Archipelago: Tawi Tawi Group, St. 5165, 2 specimens.

Habitat: 9 fms, coral.

Remarks: The distinctions between this species and *M. platipes* (Ruppell) were clearly set out by Buitendijk (1939). These two specimens have the tuberculate basal antennal article fused with the postorbital lobe as is typical.

The specimens described by Adams & White (1848 : 15–16) under this name and under the name *Micippa bicarinata* are regarded as synonymous with *Micippa platipes* Ruppell by Buitendijk (1939) although the *M. bicarinata* was included as a synonym of *M. philyra* by Alcock (1895 : 258).

Distribution: Sulu Archipelago, Philippine Islands; Indo-west Pacific from East Africa to Japan and Australia.

Naxioides rombloni Rathbun

(Fig. 8)

Naxioides rombloni Rathbun, 1916 : 549–551.

Material examined: 2 ♂♂, 1 ♀, 1 juv., 7.5–14.5 mm (USNM 48201 (holotype), 134418).

Locality: S.W. Luzon-Mindoro: near Romblon, St. 5179, 4 specimens (including holotype).

Habitat: 37 fms, hard sand.

Remarks: This species is distinguished by the extremely long, weakly outwardly curved rostral spines which exceed the length of the postrostral portion of the carapace.

Distribution: Known only from the Philippine Islands.



FIG. 8. *Naxioides rombloni* Rathbun, holotype, male, 14.6 mm, dorsal view.

Naxioides spinigera Borradaile

Naxioides spinigera Borradaile, 1903 : 687, pl. 47, figs. 3 (a)–(c); Rathbun, 1911 : 253, pl. 20, fig. 8.

Material examined: 1 ♂, 6 ♀♀ (3 ovig.), 15–32.5 mm, smallest ovig. ♀ 15 mm (USNM 49507, 49547–48, 49564).

Localities: S.W. Luzon-Mindoro: vicinity of Romblon, St. 5179, 1 specimen. S. Mindanao: Gulf of Davao, St. 5253, 3 specimens. Sulu Archipelago: Tawi Tawi Group, St. 5163, 1 specimen; St. 5164, 2 specimens.

Habitat: 18–73 fms, sand, green mud, and coral.

Remarks: This species differs from *N. taurus* Pocock mainly in having more erect spines on the carapace. In *N. taurus* the antorbital and intercalated spines are slightly more flattened and the intestinal region is rounded posteriorly in the midline with a tubercle or blunt spine close to the edge. These differences may prove to be of little significance. Both species have a longer rostrum—about 1/2 postrostral length—than *N. investigatoris* (Alcock) in which the rostrum is about 1/3 postorbital length.

Distribution: Central and southern Philippine Islands from southern Luzon to the Sulu Archipelago; previously known from the western Indian Ocean, Maldive Islands, Gulf of Aden.

Phalangipus filiformis Rathbun

Phalangipus filiformis Rathbun, 1916 : 551; Griffin, 1973 : 172-175, figs. 1 (b), 3 (e), (f), 6 (b), 7 (b), 8 (g), (h).

Material examined: 15 ♂♂, 15 ♀♀ (6 ovig.), 8.5-24.5 mm, smallest ovig. ♀ 15 mm (USNM 48223 (holotype), 49651-57, 49659-62, 49666-69).

Localities: Vicinity of Hong Kong: China Sea, St. 5304, 3 specimens; St. 5305, 1 specimen. W. Luzon-Lingayen Gulf: Manila Bay to Lingayen Gulf, St. 5442, 10 specimens. S.W. Luzon-Mindoro: China Sea, St. 5097, 1 specimen; St. 5100, fragments; St. 5104, 1 specimen; St. 5276, 1 specimen. Palawan: Linapacan Strait, St. 5335, 1 specimen; E. Palawan and vicinity, St. 5426, 1 specimen. Leyte: off W. Samar, St. 5206, 1 specimen; St. 5207, 1 specimen; E. of Leyte, St. 5478, 2 specimens (including holotype). N. Mindanao: E. coast of Mindanao, St. 5235, 1 specimen. W. Mindanao: Sulu Sea, St. 5131, 1 specimen. Sulu Archipelago: Tawi Tawi Group, St. 5164, 1 specimen. Off N. Borneo: Jolo Sea, St. 5358, 3 specimens.

Habitat: 18-57 fms, mud or sand, sometimes with shells or pebbles.

Remarks: This species is fully dealt with elsewhere (Griffin, 1973).

Distribution: Throughout the Philippine Islands; Maldive Islands, South China Sea, Indonesia to northern Australia.

Phalangipus hystrix (Miers)

Naxia hystrix Miers, 1886 : 60-61, pl. 6, fig. 4.

Phalangipus hystrix.—Griffin, 1973 : 175-179, figs. 5 (a)-(e), 6 (i), 7 (i).

Material examined: 14 ♂♂, 3 ♀♀ (1 ovig.), 13-34.5 mm, ovig. ♀ 29.5 mm (USNM 49674-79).

Localities: W. Luzon-Lingayen Gulf: Manila Bay to Lingayen Gulf, St. 5442, 11 specimens. Palawan: E. Palawan and vicinity, St. 5432, 1 specimen. Leyte: between Samar and Leyte, St. 5481, 1 specimen; St. 5482, 1 specimen; St. 5483, 2 specimens; St. 5484, 1 specimen.

Habitat: 45-76 fms, sand, mud, shell, gravel or broken shells.

Remarks: This species is described and illustrated elsewhere (Griffin, 1973). The present series represents the first record from the Philippine Islands.

Distribution: Northern and central Philippine Islands, from Luzon to Palawan and Leyte; widespread Indo-west Pacific from the Red Sea to Japan and north-western Australia.

Phalangipus longipes (Linnaeus)

Cancer longipes Linnaeus, 1758 : 629.

Phalangipus longipes.—Griffin, 1973 : 182-186, figs. 1 (c), 3 (c), (d), 6 (d), 7 (d), 8 (a), (b).

Material examined: 4 ♂♂, 7.5-10.5 mm (USNM 49663-65).

Localities: Sulu Archipelago: near Basilan Is, St. 5134, 1 specimen; vicinity of Jolo, St. 5174, 1 specimen. Celebes Sea: Buton Strait, St. 5640, 2 specimens.

Habitat: 20-25 fms, fine to coarse sand and broken shells.

Remarks: This species is dealt with elsewhere (Griffin, 1973). It appears to be an extremely rare species in the Philippine Islands. The species recorded by Adams & White (1848 : 7) as *Egeria longipes* is *Phalangipus retusus*.

Distribution: Philippine Islands: Sulu Archipelago and Celebes Sea; Bay of Bengal to China Sea and through Malay Archipelago to northern Australia.

Phalangipus retusus Rathbun

Egeria longipes.—Adams & White, 1848 : 7. (Not *Cancer longipes* Linnaeus, 1758.)

Phalangipus retusus Rathbun, 1916 : 552; Griffin, 1973 : 190–192.

Material examined: 4 ♂♂, 2 ♀♀ (1 ovig.) 15–26 mm, ovig. ♀, 26 mm (USNM 48222 (holotype), 49670–71, 49673, 134417).

Localities: S.W. Luzon-Mindoro: Manila Bay, St. 5360, 1 specimen; Subig Bay, Olongopas, 7.i.1908, 1 specimen; Cebu Market, 28.iii.1909, 1 specimen. Sulu Archipelago: Tawi Tawi Group, St. 5157, 3 specimens (including holotype).

Habitat: 12–18 fms, beach, fine sand, or hard bottoms.

Remarks: This species is dealt with elsewhere (Griffin, 1973). Rathbun correctly suggested that the specimen referred to by Adams & White (1848 : 7) as *Egeria longipes* is in fact *P. retusus*.

Distribution: Throughout Philippine Islands from S.W. Luzon to the Sulu Archipelago; northern Bay of Bengal and Malay Archipelago.

Platymaia bartschi Rathbun

Platymaia bartschi Rathbun, 1916 : 529–530; Sakai, 1965 b : 39, 43.

Material examined: 18 ♂♂, 15 ♀♀ (1 ovig.), 26 juveniles, 8–75 mm, ovig. ♀, 80 mm (USNM 47319 (holotype), 47325, 47330, 47332–34).

Localities: Vicinity of Hong Kong: vicinity of Formosa, St. 5317, 1 specimen. S.W. Luzon-Mindoro: Balayan Bay-Verde I. Passage, St. 5118, 1 specimen; Verde I. Passage–Batangas Bay, St. 5268, 4 specimens; St. 5366, 1 specimen; vicinity of S. Luzon, St. 5282, 6 specimens; St. 5289, 26 specimens; St. 5290, 2 specimens; St. 5293, 4 specimens; St. 5297, 7 specimens (including holotype); vicinity of Luzon, St. 5296, 2 specimens. S.E. Luzon-Samar: E. coast of Luzon, St. 5459, 1 specimen. Sulu Archipelago: Tawi Tawi Group, St. 5162, 3 specimens; vicinity of Jolo, St. 5172, 1 specimen.

Habitat: 118–318 fms, coarse to fine sand and mud with shells or pebbles.

Remarks: This species is similar to *P. wyvillethomsoni*. In *P. bartschi* the interantennular spine is almost three times as long as the rostral spines (about twice as long in *P. wyvillethomsoni*). The carapace in the adult bears a few low tubercles, the basal antennal article bears three spines close to the lateral edge, the chelae in the males are relatively longer and less inflated and the tip of the first pleopod of the male is straight and not curved beyond the aperture. In juveniles the carapace bears numerous spines including six lateral branchial spines, two on each protogastric, mesogastric, cardiac (sub-medial), epibranchial and mesobranchial regions.

Distribution: Philippine Islands from north of Luzon to the Sulu Archipelago; Tosa Bay, off Mikawa and Kominato, Japan.

Platymaia fimbriata Rathbun

(Fig. 9)

Platymaia fimbriata Rathbun, 1916 : 531-532; Ihle & Ihle-Landenberg, 1931 : 149-152; Takeda & Miyake, 1969 : 497-498.

Material examined: 2 ♂♂, 6 ♀♀ (1 ovig.), 14.5-54.5 mm, ovig. ♀, 39.5 mm (USNM 47170-76, 47177, holotype).

Localities: S.W. Luzon-Mindoro: Verde I. Passage-Batangas Bay, St. 5269, 1 specimen. S.E. Luzon-Samar: San Bernadino Strait-San Miguel Bay, St. 5445, 1 specimen; St. 5460, 1 specimen; St. 5469, 1 specimen. Palawan: Palawan Passage, St. 5348, 1 specimen. North coast of Borneo: Sibuko Bay, Borneo, St. 5587, 1 specimen (holotype); St. 5589, 1 specimen. Celebes Sea: Gulf of Boni, St. 5656, 1 specimen.

Habitat: 170-608 fms, fine sand, grey or green mud with pebbles.

Remarks: This species is distinguished by the densely spinulose carapace. The aperture of the first pleopod of the male is at the apex.

Distribution: Philippine Islands from S.W. Luzon to Sulu Archipelago; Moluccas, Japan.

Platymaia wyvillethomsoni Miers

Platymaia wyville-thomsoni Miers, 1886 : 13-14, pl. 2, fig. 1; Rathbun, 1918 : 7-9, pls. 3, 4, 14; Ihle & Ihle-Landenberg, 1931 : 148-149.

Platymaia remifera Rathbun, 1916 : 530-531; syn. nov.

Platymaia alcocki.—Takeda & Miyake, 1969 : 498-500, figs. 10, 11 (a)-(c). (Not *Platymaia alcocki* Rathbun, 1916.)

Material examined: 28 ♂♂, 28 ♀♀ (2 ovig.), 10-48 mm, smaller ovig. ♀ 34 mm (USNM 43159, 47145-58 (holotype of *P. remifera* USNM 47156), 47160-65, 47327-29).

Localities: W. Luzon-Lingayen Gulf: W. coast of Luzon, St. 5440, 2 specimens. S.W. Luzon-Mindoro: Balayan Bay-Verde I. Passage St. 5117, 3 specimens; St. 5118, 2 specimens; between Marinduque and Luzon, St. 5221, 1 specimen; vicinity of Marinduque I., St. 5372, 1 specimen; off E. Mindoro, St. 5265, 2 specimens; Balayan Bay, Luzon, St. 5363, 3 specimens; St. 5364, 3 specimens. S.E. Luzon-Samar: E. coast of Luzon, St. 5453, 2 specimens; St. 5454, 9 specimens. Palawan: Balabac Strait, St. 5353, 1 specimen. Negros: between Negros and Siquijor, St. 5536, 2 specimens; St. 5537, 1 specimen; St. 5538, 1 specimen. Cebu-Bohol: vicinity of W. Bohol, St. 5198, 1 specimen; between Leyte and Cebu, St. 5409, 2 specimens; between Cebu and Bohol, St. 5419, 1 specimen (holotype of *P. remifera*). N. Mindanao: vicinity of N. Mindanao, St. 5502-03, 1 specimen; St. 5541, 4 specimens. Sulu Archipelago: vicinity of Jolo I., St. 5173, 1 specimen; between Jolo and Tawi Tawi, St. 5566, 1 specimen. Molucca Sea: off Maykaan Is., St. 5623, 7 specimens; St. 5624, 3 specimens; between Gillolo and Kayoa Is., St. 5626, 1 specimen.

Habitat: 50-288 fms, green to grey mud, Globigerina ooze or fine sand with shells.

Remarks: Examination of material from Japan, Indonesia, and Australia leads me to consider *P. remifera* a synonym of *P. wyvillethomsoni*. Some of this material comes from other expeditions which will be reported on elsewhere.