

Pl. 10a-b; *Izanami inermis* (Miers, 1884) USNM 65379; a = dorsal view, b = left chela.

species. The accompanying figure (pl. 26c) is somewhat distorted, leading Alcock (1896) to describe the species with "carapace pentagonal" in his key.

The syntypes collected from stn 177, Thursday Island and stn 158, Torres Strait by Dr Coppinger, of *M. inermis* Miers are no longer extant.

Type locality.— Albany Is., Torres Strait, Australia (Miers, 1884: 256).

Distribution.— Philippines, Torres Strait, Arafura Sea.

Matuta Weber, 1795

Matuta Weber, 1795: 92.

Type species: *Cancer victor* Fabricius, 1781, by monotypy.

Diagnosis.— Carapace subcircular, slightly convex, bearing six obtuse tubercles centrally, regions undefined. Front, wider than orbit, trilobate, median lobe projecting, anteriorly emarginate. Anterolateral margin arcuate, tuberculate. Posterolateral margin sharply convergent, carinate. Lateral spine long, acute. Antennae rudimentary, inferior to antennular basal segment. Orbits obliquely cut, communicating with antennular fossa. Supraorbital margin smooth. Outer orbital angle prominently produced. Eye stalk elongate, densely covered with long plumose setae on inferior surface. Suborbital margin tuberculate, laterally interrupted by curved inhalant canal with setose margins. Internal orbital tooth molariform, apparent in dorsal view. Subhepatic region minutely granulate, laterally set with plumose setae. On pterygostomial region rows of elongate tubercles diminishing in size laterally, serving as stridulating organ. Outer maxilliped elongate, extending nearly to anterior margin of carapace.

Chelipeds subequal. Carpus with anterior angle produced. Upper margin of palm cut into three teeth, two proximalmost interiorly striate. Length of palm nearly twice its height. External surface of palm sculptured, with two rows of tubercles below cristate upper margin. Mid-palm, in male, oblique ridge extending from acute spine to lower finger, ridge less distinct in female. Lower margin with row of tubercles. External surface of dactylus in male bearing strongly milled ridge, absent in female. Lower finger with molariform tooth proximally and cup-like depression distally. Upper margin of dactylus basally setose, cutting margin dentate. Ambulatory legs natatory, with first propodus bearing triangular tooth on inferior margin; penultimate carpus unicarinate; ultimate propodus greatly extended posteriorly.

Sternum anteriorly in 'fleur de lis' form. Male abdomen five-segmented, tapering, telson one and half as long as wide at base, with prominently tuberculate carina on third abdominal tergite. First male pleopod distally setose, apex rounded, with funnel-shaped appendage on inner surface framed laterally by minute granules.

Etymology.— Mater *Matuta*, ancient Italian goddess of birth and dawn, patroness of sailors. Gender feminine.

Remarks.— In the present study *Matuta* Weber, 1795 encompasses three species, *M. circulifera*, *M. planipes*, *M. victor*, which are characterized by a 'fleur de lis' sternum, penultimate carpus unicarinate, mid-palmar oblique ridge and, in males, strongly milled dactylar ridge.

Fabricius (1798) placed two species in *Matuta*, *M. victor* and *M. planipes*. Miers (1877) too, grouped *M. victrix*, *M. victrix* var. *crebrepunctata* [now both *M. victor*], *M. rubrolineata* and *M. lineifera* [now both *M. planipes*], recognizing their affinity: "Hand of male with an interrupted ridge or series of spines and tubercles crossing its outer surface obliquely, and continued along the outer surface of the lower (immobile) finger. Upper (mobile) finger with a strongly beaded ridge extending throughout its whole length". Miers (1880) added *M. circulifera* to this group.

Subsequent authors failed to differentiate between *Matuta* spp. and their close relatives and united them all in a single genus.

Matuta circulifera Miers, 1880
(fig. 6a-b, pl. 11a-b)

Matuta victor var. III; de Haan, 1841:127.

Matuta victor var. c; Herklots, 1861: 26.

Matuta circulifera Miers, 1880: 315, pl. 14(5); 1886: 295; de Man, 1896: 361, fig. 44.

Matuta lunaris; de Man, 1881: 112; Ortmann, 1892: 572 (part); Alcock, 1896: 161 (part).

Matuta planipes; Shen, 1932: 35 (part).

Material.— **Indo-Malayan seas**, coll. Dr P. Bleeker, purch. E. Gerrard, det. E. J. Miers as *M. circulifera*, holotype, redet. *M. planipes* Shen, ♂ 60 mm (NHM 1880.6). **Indonesia**. Sumatra, Atjeh, coll. Capt. Storm, det. de Man, (Museum Lübeck) 1 ♂ 43 mm, 1 ♀ 41 mm (USNM 39168); 1 ♂ (RMNH D 1382); Java, transferred from the Indian Museum, 2 ♀♀, 44 mm, 41 mm, (NHM 1879.32); South coast of Java, 1 ♂, 2 ♀♀ (RMNH D 38170). **No further data**. 3 ♂♂, 5 ♀♀ (RMNH D 1705); 2 ♂♂, 3 ♀♀ (RMNH D 749).

Description.— Surface of carapace minutely granulate, granules clustering around six dorsal tubercles, largest cluster surrounding mesogastric tubercle. Front with rounded lobes laterally and a slightly emarginate rostrum medially. Ischium of third maxilliped tuberculate.

Anterolateral margins with five teeth, diminishing in size anteriorly, two anterior teeth interspaced with tubercles. Lateral spine 0.3 carapace width. Posterolateral margin oblique, with granulate carina extending three quarters of its length. Carpus of cheliped with two obtuse tubercles on outer surface, its upper margin carinate, granulate, internal anterior angle produced. Upper margin of palm cut into three teeth, proximal tooth tuberculate.

Upper external surface with two rows of granulate low tubercles, proximalmost in lower row largest. Mid palm, in male, four tubercles continuing in a rounded ridge extending to tip of lower finger; proximal tubercle granulate, second tubercle prominent, acuminate, following tubercles small, obtuse. Mid palm, in female, five tubercles second tubercle prominent, acuminate. At lower proximal angle of palm a small granulate tubercle. Lower margin with row of tubercles terminating at base of dactylus. In female, an additional row of obtuse granules runs parallel to lower margin. Distinctly milled ridge on outer surface of dactylus in male, absent in female.

Plastron finely granular.

Colour (in alcohol).— Dorsally on carapace eight reddish circles arranged in three rows, three on protogastric region, of four in mid carapace, median pair smaller than lateral circles and two on metagastric region.

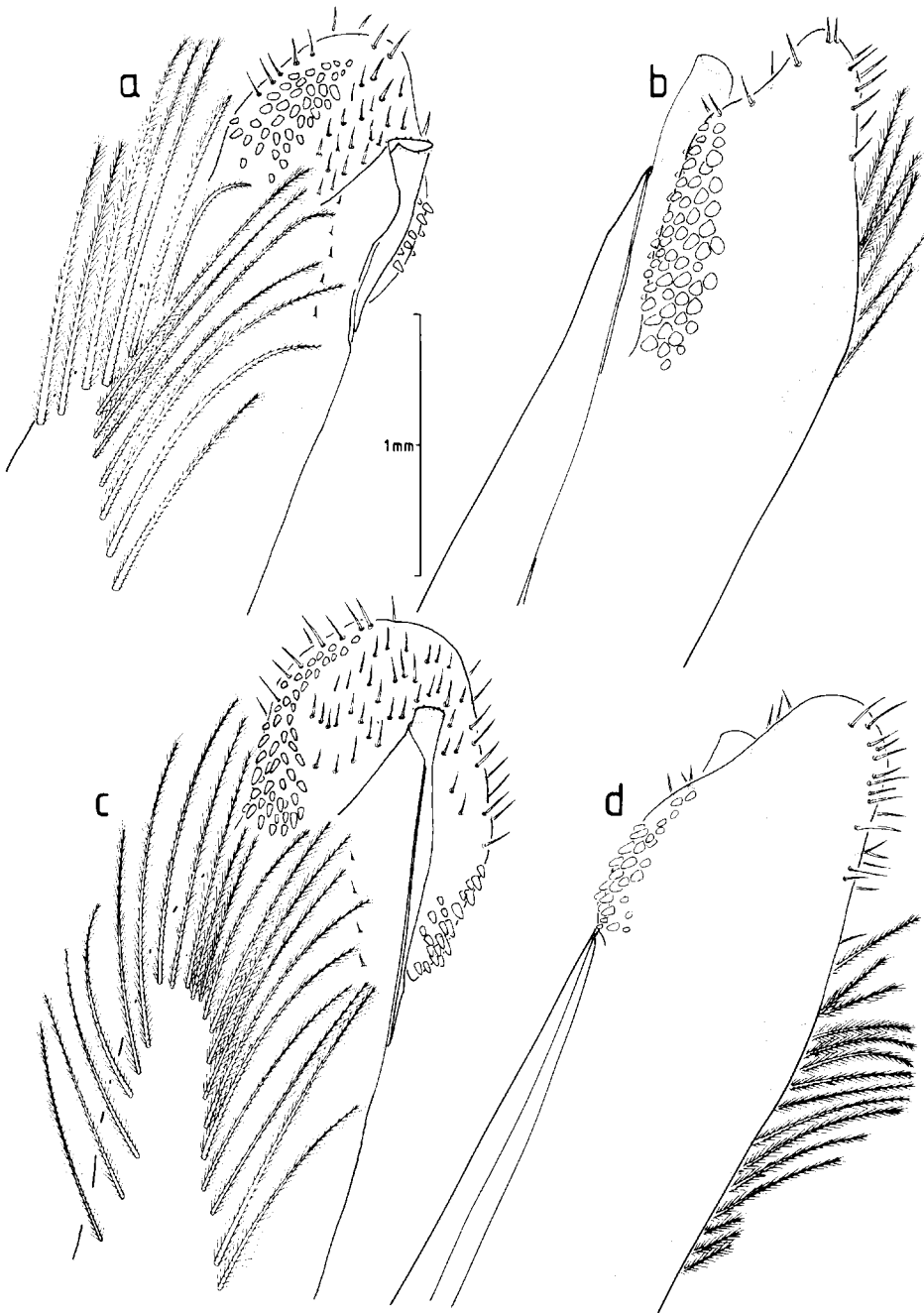
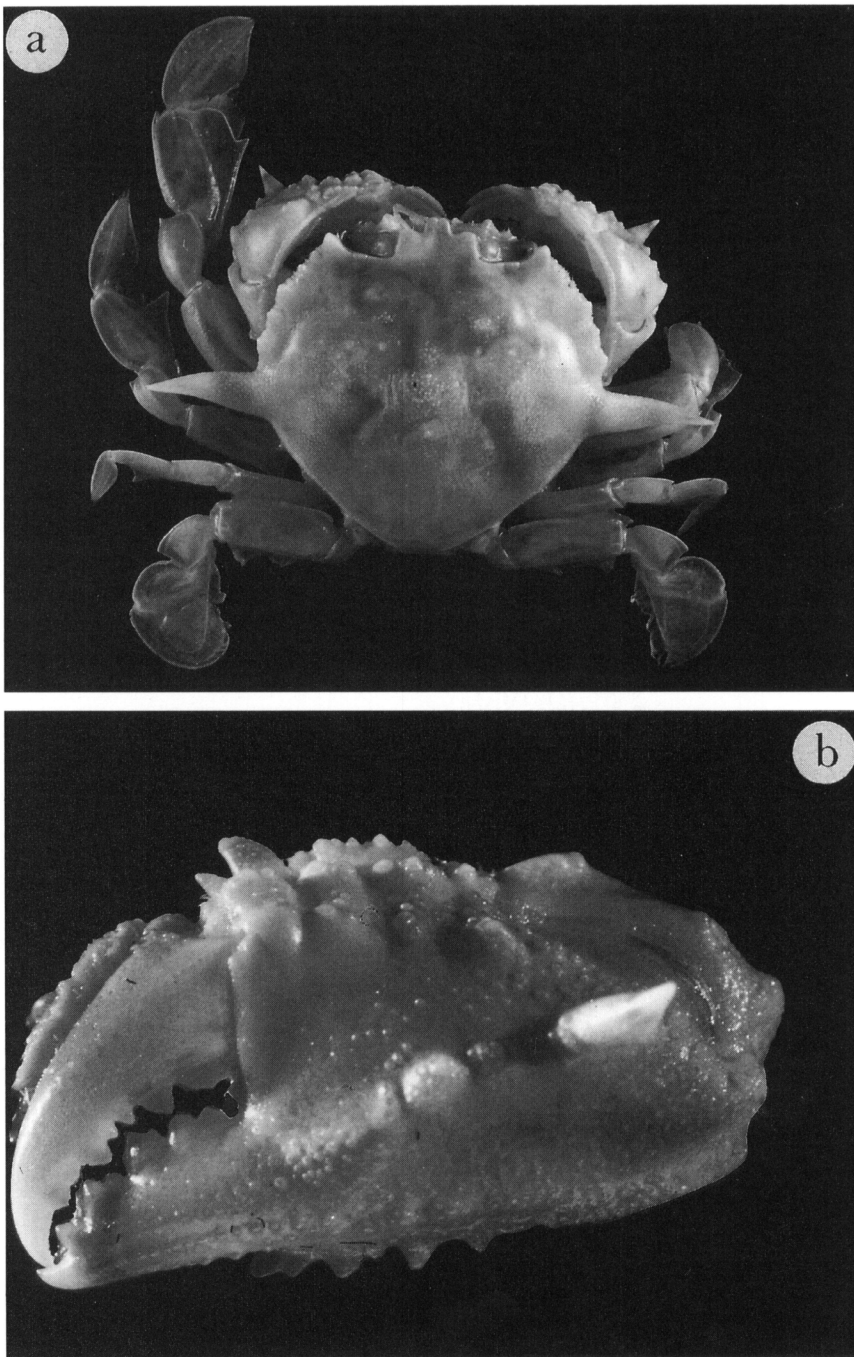


Fig. 6a-d; a & c = dorsal view, b & d = ventral view; a-b *Matuta circulifera* NHM 1880.6; c-d *Matuta plannipes* Fabricius, 1798 NHM 1930.12.6.1.



Pl. 11a-b; *Matuta circulifera* USNM 39168; a = dorsal view, b = left chela.

Remarks.— De Haan (1841) assigned to *Matuta victor* six varieties, to which no names were given, but the lucid description leaves no doubt as to the identity of the species he called variety III: “octo offert in thorace circulos sanguineos tres aequales in parte anteriore distantes; quatuor inter spinas laterales, quorum duo intermedii minores; et unicus posticus. Manus parte inferiore spinam unicam acutam et tubercula tria obtusa offerunt in utroque sexu”. De Haan’s material is preserved in the NNM.

Miers (1880) described and figured (pl. 14 fig. 5) *M. circulifera*. In his drawing the long lateral spine, rounded lateral frontal lobes, single acute spine at palmar base and colour pattern are clearly evident. Miers wrote that *M. circulifera* has “Hand of male nearly as in *M. lunaris* (*M. rubrolineata*, Miers) and *M. lineifera*” [= *M. planipes*]. The present study agrees with Miers’ later (1886) assignation of *M. circulifera* to his ‘section A’ of the genus - all species with oblique ridge across chela and milled ridge on dactylus.

De Man (1881) considered the most important characters to be “the course of the ridge on the outer surface of the hands of the male; the presence and shape of the spines or tubercles with which the latter is armed, and the ridge on the mobile finger being beaded over it all length or not...while the manner of coloration of the cephalothorax ...of a very slight value”; and that “*Matuta circulifera* Miers ... must be united ...with the *Matuta lunaris* (Herbst) (*rubrolineata* Miers)” [= *M. planipes*]. Ortmann (1892) and Alcock (1896) followed de Man in placing *M. circulifera* in synonymy with *M. lunaris* [= *M. planipes*]. In 1896 de Man, though yet unconvinced, assigned *circulifera* specific status: “Ich führe jetzt diese Form wieder als eigne Art an, obgleich die Frage, ob wir es hier mit einer Varietät von *Mat. lunaris* Herbst (*rubrolineata* Miers) zu thun haben oder nicht, nur durch Vergleichung mit typischen Exemplaren dieser Art zu entscheiden ist”.

Shen (1932), while visiting the British Museum, redetermined Miers’ *M. circulifera* type as *M. planipes* and placed *M. circulifera* in synonymy with *M. planipes*.

M. circulifera differs from *M. victor* in having a single spine on external surface of chela; from *M. planipes* it differs in having anterolateral margin five-toothed, lateral frontal lobes rounded, long lateral spine and eight red circles dorsally on carapace.

Type locality.— “Indo-Malayan seas” (Miers, 1880: 315).

Distribution.— Indonesia.

Matuta planipes Fabricius, 1798
(fig. 6c-d, pl. 12a-b)

Cancer americanus Seba, 1758, pl. 20, figs 10, 11 (non binominal).

Matuta planipes Fabricius, 1798: 369; Latreille, 1803: 24; Bosc, 1802: 225; 1830: 222; Ihle, 1918: 308 (part); Balss, 1922: 125; Gordon, 1930: 527 (list); Shen, 1932: 35, textfig. 20, 21, pl. 3(2) (part); Chopra, 1933: 32; Balss, 1935: 116; Sakai, 1937: 101, pl. 13(4); 1976: 141, pl. 44(2); Chopra & Das, 1937: 384, fig. 1b; Buitendijk, 1939: 232; Ward, 1942: 69 (list); Chhapgar, 1957: 406; Miyake, 1961: 170 (list); Tyndale-Biscoe & George, 1962: 71, fig. 2(11); Zimsen, 1964: 652; Campbell & Stephenson, 1970: 246, fig. 7; Holthuis & Sakai, 1970: 118, pl. 10(3); Romimotahrto, 1972: 11, figs 1-3, 5, 8, 15-20, pls 1a, 3a; Takeda, 1982: 109, fig. 321; Miyake, 1983: 199 (list); Utinomi, 1985: 69, pl. 35(4); Dai et al., 1986: 98, textfig. 55(1), pl. 12(4); Dai & Yang, 1991: 109, fig. 55(1), pl. 12(4).

Cancer lunaris; Herbst, 1799: 43, pl. 48(6).

Matuta victor; Latreille, 1818: 273, figs 3, 4.

Matuta appendiculata Bosc, 1830: 222.

Matuta victor var. IV; de Haan, 1841: 128.

Matuta victor var. d; Herklots, 1861: 26.

Matuta lunaris; White, 1847: 46 (part); Miers, 1877: 247, pl. 40(10, 11); Hilgendorf, 1879: 810; de Man, 1881: 112; Miers, 1886: 295; Henderson, 1887: 66, fig. 6; 1893: 396; Walker, 1887: 111; Alcock, 1896: 161; Cano, 1889: 251; Lanchester, 1900: 763; Stimpson, 1907: 166; Parisi, 1914: 291; Andre, 1931: 641.

Matuta rubrolineata Miers, 1877: 244, pl. 39(5, 6).

Matuta lineifera Miers, 1877: 245, pl. 39(7); Haswell, 1882: 134; Whitelegge, 1889: 230; Ward, 1942: 69 (list).

Matuta laevidactyla Miers, 1880: 316; 1886: 296; Whitelegge, 1889: 230; de Man, 1896: 364, fig. 45.

Matuta victrix var. *lunaris*; Ortmann, 1892: 572.

Matuta flagra Shen, 1936: 64, fig. 1.

Material.— **Indian Ocean.** coll. Daldorff, det. Fabricius as *M. planipes*, lectotype, ♂ 39.5 mm (ZM 154-6); paralectotype, ♀ 40 mm (ZM 154-7). **Pakistan.** Karachi, pres. J. A. Murray, Karachi Museum, reg. 265; ♂ 45 mm, (NHM 1883:8); pres. E. Jackson; ♀ 34 mm, (NHM 1897.9.12.6). **India.** Madras, coll. pres. J.R. Henderson; det. J.R. Henderson as *M. lunaris*, redet. C-J. Shen as *M. planipes*, ♀ 49.5 mm, (NHM 1892.7.15.357); 3.ii.1979, 2 ♂♂ 24 mm, 41 mm (USNM); Calcutta, coll. pres. F. Day; ♂ 27 mm, ♀ 19 mm, (NHM 1889.6.17.129). **Ceylon.** pres. Dr. Kelaart, det. E.J. Miers *M. laevidactyla*, syntype now lectotype, ♂ juv. 22 mm, (NHM 1939.9.20.12-14); ♂ 21 mm, ♀ juv. 20 mm, det. E.J. Miers *M. laevidactyla*, syntypes now paralectotypes (NHM 1939.9.20.12-14). **Indian Ocean.** pres. General Th. Hardwicke; det. A. White as *Matuta lunaris*, redet. E.J. Miers as *M. rubrolineata*, syntypes now paralectotypes, redet. J.R. Henderson as *M. lunaris*, redet. C-J. Shen as *M. planipes*, ♂ 34 mm, 2 ♀♀ 47 mm, 46 mm, (NHM 1993.13). **Gulf of Thailand.** Pattani Bay, 14.xi.1985, coll. C. Swennen, 2 ♀♀ (RMNH D 36521). **Malaysia.** Pinang Is. coll. Dr Canton; transferred from the Indian Museum; ♂ 51 mm, ♀ 47 mm (NHM 1879.32); Port Dickson, -iii.1946, coll. J.C.A. Detach, 2 ♂♂, 3 ♀♀ (RMNH D 5281); Melaka; pres. Bedford Lanchester; det. Lanchester as *M. lunaris*, ♂ 33 mm, ♀ 28 mm, juv. 23 mm, (NHM 1900.10.22.332-334). **Singapore.** stn 201, beach, coll. Dr Coppinger, HMS "Alert"; pres. Lords of the Admiralty; 2 juv. 20 mm, 19 mm, (NHM 1882.24); stn 205, beach, coll. Dr Coppinger, HMS "Alert"; pres. Lords of the Admiralty; ♀ 28 mm (NHM 1882.24); ♂ 21 mm, ♀ 31 mm (USNM 17912); Tuas, 23.iii.1981, coll. K.L. Yeo, ♂ 39 mm (NUS 1981.8.14.106); Katong, 15.vi.1926, ♂ 31.1 mm, ♀ 32.5 mm (NUS 1973.11.20.1-2). **Indonesia.** Sumatra, Padang, 1894, coll. E. Büttikofer, ♀, juv., (RMNH D 3098); Poeloe Weh, -.x.1921, det. A. Buitendijk, 2 ♀♀ (RMNH D 3081); 1913, det. A. Buitendijk, ♂ (RMNH D 3082); Java, coll. P. Bleeker, ♀ (RMNH D 750); Molluca Id., Amboina, Batoe Merah, 15.x.1930, "Snellius" Exped., det. A. Buitendijk, ♀ (RMNH D 4251); Borneo, Tarakan, 16.viii.1930, "Snellius" Exped., det. A. Buitendijk, ♂, ♀ (RMNH D 4250). **China.** 1930, coll. C.J. Shen, det. T. Sakai, 2 ♂♂ 31 mm, 32 mm, ♀ 30 mm (USNM 134240); Chufoo, Shantung Peninsula, purch. Mr Swinhoe, det. E.J. Miers as *M. rubrolineata*, syntype now lectotype, redet. J.R. Henderson as *M. lunaris*, redet. C-J. Shen as *M. planipes*, ♂ 40 mm, (NHM 1874.2); purch. Mr Swinhoe, det. E.J. Miers as *M. rubrolineata*, syntypes now paralectotypes, redet. J.R. Henderson as *M. lunaris*, redet. C-J. Shen as *M. planipes*, ♂ 40 mm, ♀ 39 mm, (NHM 1874.2); -iii.1927, pres. E. Hindle, ♂ 42 mm, (NHM 1930.12.6.1); Yanghokou, Peichihli Bay, 17.vii.1930, pres C-J. Shen, Fan Memorial Institute of Biology, reg. 6657; 2 ♀♀ 39 mm, 38 mm, (NHM 1935.3.19.140); Peitaiho, Summer 1926, C. S. King; pres. Fan Memorial Institution of Biology, Peiping, China, reg. 2016; det. C-J. Shen, ♂ 38 mm, (NHM 1930.11.14.4). Gulf of Chihli, Peitaiho, 4.vi.1929, coll. C.J. Shen, ♂ 24 mm, ♀ 27 mm (USNM 99346); -viii.1921, coll. A. Sowerby, det. M.J. Rathbun, 3 ♂♂ 23-34 mm, ♀ 24 mm (USNM 50468); 3 ♂♂ 23-32 mm, 3 ♀♀ 26-27 mm (USNM 55707); Peiping, ♂ 31 mm (USNM 108418); Shantung Peninsula, Yentai (Chefoo), 1922, coll. C. Ping, det. M.J. Rathbun, ♂ 31 mm, ♀ 26 mm (USNM 56751); Foochow, 1924, coll. C.R. Kellogg, det. M.J. Rathbun, 3 ♀♀ 28-31 mm (USNM 58725); Usiok, near Foochow, -viii.1923, coll. C.R. Kellogg, det. M.J. Rathbun, ♂ 30 mm, 2 ♀♀ 27 mm, 28 mm (USNM 61981). **South China Sea.** Tanjong Datu, 0°60'N 109°40'45"E, M.F.V. "Manihine", 24.xi.1955, 32 m, ♀ 34.1 mm (NUS 1984.6032). **Japan.** Miyagi Prefecture, coll. M. Sasaki, det. M.J. Rathbun, ♂ 40 mm (USNM 54486); Ishibashi, Atami Prefecture, ♂ 29 mm (USNM 18877); Kobe, det. Hilgendorf, ♂ 29

mm (USNM 19562). **New Guinea.** Mimika River, coll. pres. by the British Ornithologists' Union Expedition to New Guinea; 2 ♂ 57 mm, 33 mm, ♀ 31.5 mm, (NHM 1911.8.1.9-10). **Australia.** Queensland, stn 202, Off Cape Byron Moreton Island, coll. Mr Macgillivray, HMS "Rattlesnake", ♂ 33 mm (NHM 1848:53); N.W. Australia, pres. Mrs B. Grey; ♂ 55 mm, ♀ 34 mm, (NHM 1931.5.15.42-43); Nicol (Nickol) Bay, N.W. Australia (Western Australia), purch. H. Du Boulay, det. E.J. Miers as *M. lineifera*, holotype, redet. C-J. Shen as *M. planipes*, ♂ 61 mm, (NHM 1869.38); New South Wales, Coffs Harbour, 23.i.1955, ♀ (RMNH D 10365); Wreck Rock, 60 ♂ 33 mm, NNE Bundaberg, 24 March, 1974, coll. R. Whalley, ♂ 30 mm (QM W4180); 21°05'10"S 153°18'40"E, 5.x.1964, 9 m, ♀ 28 mm (QM W2933). **Australian seas.** det. Leach as *M. banksii* type (part); redet. White as *M. victor*, ♂ 35.6 mm (NHM 1993.74). **Pacific Ocean.** coll. U.S. Exploring Expedition, C. Wilkes U.S.N. Commanding; det. E.J. Miers as *M. rubrolineata*, syntypes now paralectotypes, redet. J.R. Henderson as *M. lunaris*, redet. C-J. Shen as *M. planipes*, ♀ 54 mm (NHM 1861.44). **No further details.** Kiel, ♂ 44 mm (ZM 154-3); ♀ 38.5 mm (ZM 154-4); ♂ 30 mm (ZM 154-5).

Description.— Surface of carapace minutely granulate, small tubercles clustering around six dorsal tubercles, largest cluster surrounding mesogastric tubercle. Front with straight horizontal lobes laterally and a slightly emarginate rostrum medially. Ischium of third maxilliped tuberculate.

Anterolateral margins nearly uniformly crenulate, tubercles somewhat larger posteriorly. Lateral spine 0.2 carapace width. Posterolateral margin oblique, with granulate carina extending to base of lateral spine.

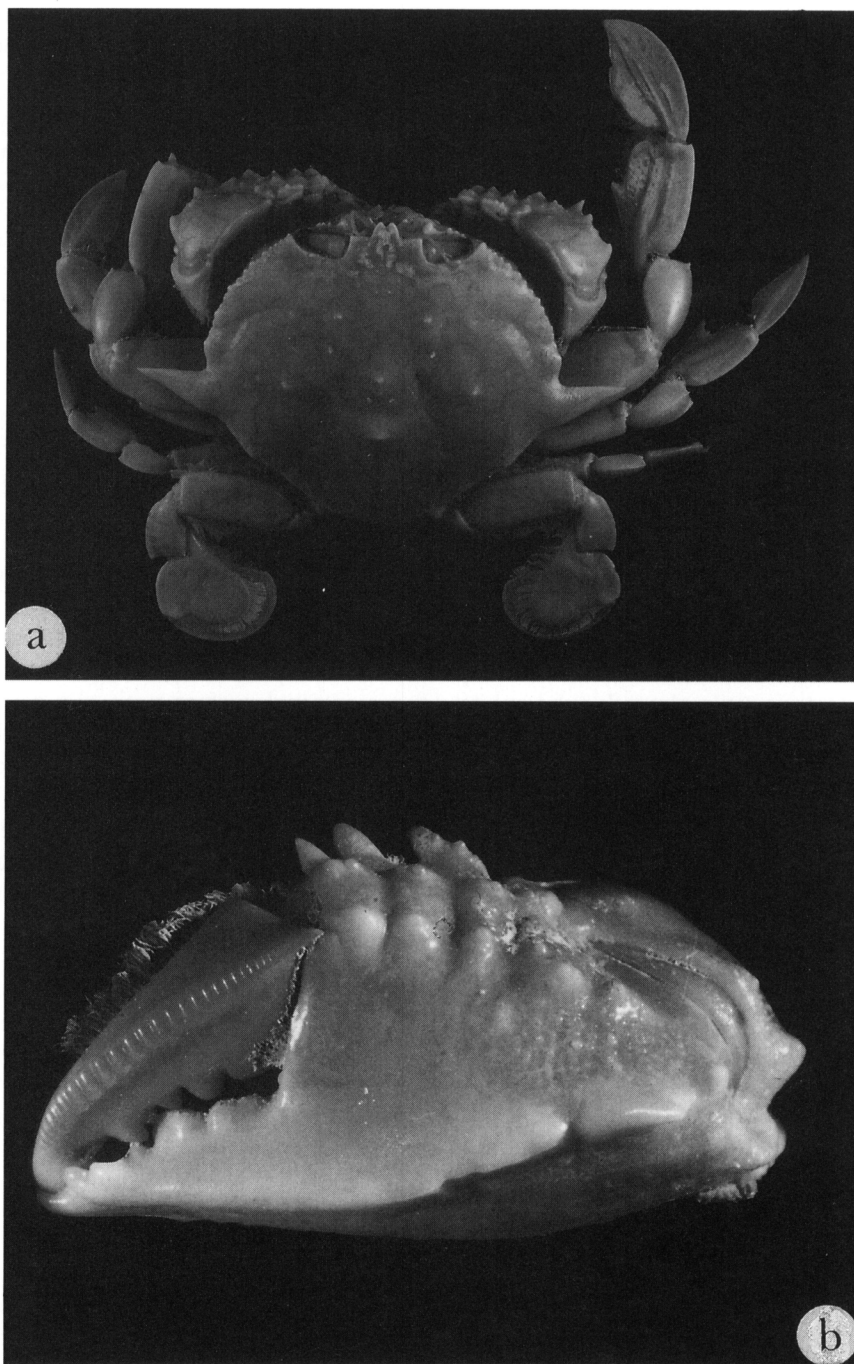
Carpus of cheliped with two obtuse tubercles on outer surface, its upper margin carinate, granulate, internal anterior angle produced. Upper margin of palm cut into three teeth, proximal tooth tuberculate. Upper external surface with two rows of granulate low tubercles, proximalmost in lower row largest. Mid palm, in male, a rounded ridge extending to tip of lower finger, proximally with granulate tubercle followed by a prominent, acuminate spine. Mid palm, in female, five tubercles, second tubercle spine-like. At lower proximal angle of palm a small granulate tubercle. Lower margin with row of tubercles terminating at base of dactylus. In female, an additional row of obtuse granules parallel to lower margin. Distinctly milled ridge on outer surface of dactylus in male, absent in female.

Plastron finely granular.

Colour (in alcohol).— Carapace with reticulating brown lines forming small rings anteriorly and larger, elongate loops posteriorly. For colour illustration see Sakai, 1960: pl. 16(6); Takeda 1982: 109 pl. 321; Utinomi, 1985: pl. 35(4).

Remarks.— Fabricius' (1798) description of *M. planipes* is succinct to a fault: "thorace postice striato". Fortunately his specimens are preserved in Copenhagen and a lectotype and paralectotype were selected from material determined by him and labelled Indian Ocean, coll. Daldorff. In addition, the Zoologisk Museum possesses three specimens labeled 'Kiel' and listed by Zimsen (1964) as belonging with Fabricius' types.

Herbst described and illustrated *Cancer lunaris* twice (1783: 140, pl. 6, fig. 44; 1799: 43, pl. 48, fig. 6). At first he described it as having "feinen violetten Punktchen uberall besprengt" and in the drawing (pl. 6, fig. 44) the hand is tridentate, whereas the later specimen is described as having "rothen flammenden Zugen gezeichnet" and in the drawing (pl. 48, fig. 6) the characteristic pattern of small rings anteriorly and elongate ones posteriorly is clearly discernible, as well as a single palmar spine. Hilgendorf (1879), who examined Herbst's material, mentions only "Die *M. lunaris*



Pl. 12a-b; *Matuta planipes* Fabricius, 1798 NHM 1931.5.15; a = dorsal view, b = left chela.

Herbst. Bd. 3 Taf. 48 fig. 6" when he compared it with Fabricius' specimens: "Auch das Original von *planipes* Fabricius konnte ich untersuchen, es gehört zu *lunaris* Herbst". Alcock (1896) commented that if Hilgendorf's remarks referred only to Herbst's second description "then the Fabrician name *M. planipes* would have the priority". This is now a mute point as Rathbun (1903) found out that: "The original of Herbst's pl. VI, fig. 44, is probably not extant; it was not to be found during my visit to the Berlin Museum in 1896". Most subsequent authors favoured the opinion that from the above colour descriptions and illustrations it seems that only the second species could be assigned with confidence to *M. planipes* (Ihle, 1918; Balss 1922; Shen, 1932; Chopra, 1933; Sakai, 1937, 1976; Chopra & Das, 1937; Buitendijk, 1939; Ward, 1942; Chhapgar, 1957; Tyndale-Biscoe & George, 1962; Zimsen, 1964; Campbell & Stephenson, 1970; Romimotahrto, 1972).

White (1847) listed as *M. lunaris* an heterogeneous group of specimens among which, material collected by General Hardwicke in India was redetermined by Miers (1877: 244) as a new species, *M. rubrolineata*. This species and *M. lineifera* were so similar Miers (1877:245), when describing the latter species, wrote: "A larger series of specimens might show that it is but a variety of the foregoing". De Man (1881) went a step further and declared: "*Matuta lineifera* Miers ...must be unitedwith the *Matuta lunaris* Herbst (*rubrolineata* Miers)". He synonymized *M. rubrolineata* and *M. lineifera* with *M. lunaris* Herbst following Hilgendorf's (1879) findings that "Die *M. lunaris* Herbst, Bd. 3 Taf. 48 Fig. 6, entspricht seiner (Miers) *rubrolineata*".

Miers (1877) described specimens from Ceylon as *M. lunaris* (Herbst) and noted: "The form of the hand is almost exactly the same in the male and female", unaware this is a juvenile characteristic. Later Miers (1880) described the specimens from Ceylon as a new species, *M. laevidactyla*. This error was repeated by Miers (1886) followed by de Man (1896). Alcock (1896) resolved this mistake by synonymizing *M. laevidactyla* with *M. lunaris* (Herbst).

M. planipes differs from *M. victor* in having a single spine on external surface of male chela, straight lateral frontal lobes and carapace covered with reticulated loops as compared with the bispinose chela, rounded frontal lobes and minutely spotted carapace of the latter.

Type locality.— Indian Ocean (Fabricius, 1798: 369).

Distribution.— India, Malaysia, China, Japan, Indonesia, New Guinea and Australia.

Matuta victor (Fabricius, 1781)
(fig. 7a-b, pl. 13a-b)

Cancer lunaris Forskål, 1775: 91 (part).

Cancer victor Fabricius, 1781: 502; 1793: 449.

Matuta victor; Fabricius, 1798: 369; H. Milne Edwards, 1837: 115, pl. 20(3-6); Krauss, 1843: 52; White, 1847: 46 (part); Dana, 1853: 395; Hilgendorf, 1869: 93, pl. 3(2), 1879: 810; Tozzetti, 1877: 191, pl. 11(a-c) (part); Hoffmann, 1877: 27 pl. 6(45-48); Lenz & Richters, 1881: 57; Alcock, 1896: 160; Nobili, 1899: 250 (part); 1906: 149; Lenz, 1905: 347; Kemp, 1915: 209; Gravely, 1927: 142, pl. 22(28); Gordon, 1930: 527 (list); Ward, 1942: 69 (list).

Matuta peronii Leach, 1817: 13; pl. 127(1, 2).

Matuta lesueurii Leach, 1817: 14.

Matuta lessueri; Rüppell, 1830: 7 (part).

Matuta victor var. I & II; de Haan, 1841: 127.

Matuta lunaris; Kossmann, 1877: 64 (part?); Rathbun, 1903: 30; Stebbing, 1905: 54 (part); Ihle, 1918: 185, 308; Chopra, 1933: 31; Sakai, 1936: 49, pl. 13(3); Chopra & Das, 1937: 383, fig. 1a; Buitendijk, 1939: 231; Barnard, 1950: 358, fig. 67(l); Sakai, 1956: 8; Miyake, 1961: 170 (list); Tyndale-Biscoe & George, 1962: 71, fig. 2(10); Sankarankutty, 1962: 153, fig. 2; Holthuis & Sakai, 1970: 118, pl. 10(2); Takeda, 1982: 109, fig. 320; Miyake, 1983: 199, pl. 8(9); Utinomi, 1985: 69, pl. 35(3); Dai et al., 1986: 98, pl. 12, fig. 4; Dai & Yang, 1991: 110, pl. 12(5), fig. 55(2).

Matuta victrix; Miers, 1877: 243, pl. 39(1-3); 1880: 315; 1884: 256; 1886: 295; de Man, 1881: 110; 1888: 389; Haswell, 1882: 133; Henderson, 1887: 65; 1893: 396; Walker, 1887: 111; Whitelegge, 1889: 230; Müller, 1890: 473 (list); Ortmann, 1892: 571; de Man, 1896: 360; Lanchester, 1900: 762; 1901: 551; Klunzinger, 1906: 67; Parisi, 1914: 291; André, 1931: 641; Estampador, 1937: 515.

Matuta victrix var. *crebrepunctata* Miers, 1877: 244, pl. 39(4); 1886: 295; de Man, 1881: 111; Miers, 1884: 256; Ortmann, 1892: 572; Zehntner, 1894: 183; Cano, 1889b: 251; Schenkel, 1902: 573.

Matuta crebripunctata; Ward, 1941: 1.

Matuta crebripunctata; Ward, 1942: 69 (list).

Material.— **India**. Madras, Tranquebar, coll. D. Daldorff, ♂ 57.5 mm (ZM 49-1) *Cancer victor*; Fabricius, 1793, neotype, material of Fabricius, 1781 is not extant., ♀ 48 mm (ZM 49-2); ♀ 46 mm (ZM 49-3). **Red Sea**. 1880, coll. Kossmann, ♀ (RMNH D 756); coll. M. Beaudouin, ♂ 64 mm (MNHN 115); purch. at Steven's sale, ♂ 38 mm (NHM 1840.3.20.34); juv. 37 mm (BM 1840.3.20.33); ♂ 47.5 mm (NHM 1840.3.20.33); Gulf of Suez, Merrra Themed, 18.iv.1928, coll. R. Dollfus, det. Th. Monod, ♂ 59 mm (MNHN B. 13529); Ras Metarma, 22.iii.1928, coll. R. Dollfus, det. Th. Monod, ♂ 45 mm, ♀ 39.5 mm (MNHN B. 13522); Sinai Peninsula, coll. H.C. Hart, ♂ 54 mm (NHM 1884.40); Ras Burka, 24.vi.1969, 0-1 m, 2 ♂♂, 2 ♀♀ (TAU NS7325); Assab, 14.i.1966, 8 ♂♂, 2 ♀♀ (RMNH D); Sudan, Suakin, 1875, leg. Reise, ♂ 35 mm (SM 81e). **Red Sea and Aden**. 1897, coll. Dr. Jousseau, det. G. Nobili, 3 ♂♂ 30-62 mm, 2 ♀♀ 31 mm, 48 mm (MNHN B.16328). **Aden**. pres. A. Fraser-Brumer, ♂ 57 mm (NHM 1950.8.8.35/36); pres. Capt. J.W. Yerbury, 2 juv. 34 mm, 36 mm (NHM 1884: 25). **Muscat**. coll. Lt. Col. Surgeon Jayakav, 2 ♀♀ 47 mm, 43 mm (NHM 1898.4.14.1-2). **Oman**. Qurum, west of Muscat, 17.iv.1981, coll. M.S. Gallagher, det. R.W. Ingle, 3 ♂♂ 42-44 mm, 5 ♀♀ 37.5-45 mm (NHM 1993.14); 8 ♂♂ 34.5-53.5 mm, ♀ 55 mm (NHM 1993.15); Khasat Market, 10.i.1972, coll. P.F.S. Cornelius, det. R.M. Cumming as *M. planipes*, ♂ 50 mm (NHM 1973: 163). **East Africa**, Mongue Ferry, Morrumbene Estuary Port, pres. J.H. Day, 2 ♂♂ 17 mm, 48 mm (NHM 1955.3.5.130-131). **Somalia**. Mogadiscu, 1953, ♀ 60 mm (MF 4792); Sar Uanle, -.vi.1973, coll. M. Vannini 2 ♂♂ 66 mm, 69 mm, ♀ 50 mm (MF); Gesira, -.x.1981, coll. M. Vannini, 2 ♂♂ 58 mm, 65 mm, 2 ♀♀ 50 mm, 53 mm (MF). **Tanzania**. Zanzibar, coll. M. Grandidier, ♂ 44 mm, ♀ 47 mm (MNHN 106); 2 ♂♂ 69 mm, 70 mm, ♀ 30 mm (MNHN 101); 2 ♂♂ 34.5 mm, 37 mm (MNHN 117); 1876, leg. C. Semper, ♀ 31 mm (SM 81f); purch. Dr. Kurk, ♂ 82 mm (NHM 1868.32); Tanga, coll. L.F. Brown, ♀ 49 mm (NHM 1955.6.9.77); Dar es Salaam, pres. Commander Smart, ♂ 45 mm (NHM 1919.11.11.1). **Comoro Is.**, Mayotte I. -.vii.1972, coll. R. von Hentig, ♂ (RMNH D 29256). **Madagascar**. Passandava Bay, det. de Man, ♂ 67 mm, ♀ 51 mm (MNHN 4126); 1864, coll. Pollen & van Dam, ca. 70 specimens (RMNH D 758); N. W. coast of Nosy Be, -.xi.1958, 6 m, coll. A. Crosnier, 7 ♂♂ 37-62 mm, ♀ 49 mm (MNHN B. 21361); East coast of Ile Sainte Marie, -.xi.1958, coll. A. Crosnier, ♂ 71 mm, ♀ 39 mm (MNHN B. 21362); Fort Dauphin, -.vi.1926, coll. Decary, det. Balss as *M. planipes*, ♂ 22 mm (MNHN B.13536) (part); St. Augustan, 1906, coll. T. Geary, det. Bouvier, 7 ♂♂ 52-71 mm, 4 ♀♀ 51-58 mm (MNHN B. 13530). **Mozambique**. Lourenço Marques (Delagoa) Bay, 18.ix.1967, coll. G. Hartmann, ♂ (RMNH D 27385); Beira Port, coll. L.F. Brown, ♂ 58 mm (NHM 1955.6.9.78). **South Andaman**. 15.viii.1985, coll. M. Vannini, ♂ 69 mm, ♀ 40 mm (MF). **Indian ocean**. pres. Th. Hardwicke, det. A. White as *M. victor*, ♂ 57.5 mm (NHM 1993.16); ♂ 67 mm (NHM 1993.17); pres. Dr. Shoath, ♂ 62 mm (NHM 1859: 123). **Pakistan**. Karachi, coll. J. A. Murray, ♂ 58 mm (NHM 1883.8.265); 5.ii.1973, coll. G. Pilleri, det. R.W. Ingle, 6 ♂♂ 47-57 mm (NHM 1993.18); coll. E. Jackson, ♂ 62 mm (NHM 1897.9.12.3); Hab estuary, Baluchistan. 1991, coll. A. Kushnir, ♀ 35.2 mm (TAU). **Sind**. coll. F. Day, 2 ♂♂ 33 mm, 39 mm (NHM 1889: 6.17.125-126). **India**. det. W.E. Leach as *M. peronii* types, redet. A. White as *M. lunaris*; ♀ 47 mm, juv. 31 mm, (NHM 1993.19); coll. A. Ansell, det. A.L. Rice, ♂ 42 mm (NHM 1993.20); pres. Sec. India Board, 2 ♂♂ 39 mm, 43.5 mm, 2 ♀♀ 50.5 mm, 51 mm

(NHM 1860.15); Madras, coll. J.R. Henderson, 2 ♂♂ 62 mm, 63 mm, 2 ♀♀ 47.5 mm, 51.5 mm (NHM 1892.7.15.337-46); 20.xi.1926, 2 ♀♀ 51 mm, 56 mm (NHM 1993.21); 1878, ♂ 63 mm (NHM 1879: 32); coll. F. Day, ♀ 51 mm (NHM 1889.6.17.124); Pondicherry, det. White, ♂ 59 mm (NHM 1993.22); coll. M. Reymaud 2 ♂♂ 58 mm, 64 mm (MNHN 100) *M. lesueurii* Leach, holotype; -xii.1944, coll. K. Lindberg, ♂ 51 mm (MNHN B. 13531); Maharashtra, Ratnagiri Beach, 1980, coll. P. Noel, 2 ♂♂ 44 mm, 54 mm (MNHN B. 13519); Coromandel Coast, coll. Capt. Armange, ♂ 63.5 mm (MNHN 114). **Ceylon**. coll. Dr. Osman Hill, det. M.J. Bearman, ♀ 34 mm (NHM 1974.154); coll. H. Nevile, ♀ 57 mm (NHM 1894.8.1.19); Galle, pres. Miss Herdman, det. Laurie, ♀ 62 mm (NHM 1934.1.16.25); pres. W. Oudaatji, ♂ 31 mm, ♀ 41 mm (NHM 1882.19); Tricomali, purch. R. Winkworth, ♂ 63 mm ♀ 53 mm (NHM 1956.1.14.1-2); Peradeniya, coll. E.E. Green, ♂ 52 mm, ♀ 37 mm (NHM 1904.11.2-3). **Thailand**, Katayai, 14.viii.1976, Oxford Univ. Exped., ♂ 36 mm, 4 ♀♀ 47-51.5 mm (NHM 1985.38); Songkhla Channel, 7°13'35"N 100°34'43"E, 2.xi.1957, coll. Rofen, ♂ (USNM 230087); Kcabi province, Nophacatana Beach, 11.i.1983, coll. Holthuis, (RMNH D 35932); Pattaya, King Beach, 4.ix.1983, coll. C.J. Burgers, ♂ (RMNH D 36088); Nhatrang Bay, 1912, coll. A. Krempf, ♂ 71 mm (MNHN B. 13528); Kokraan, coll. S.S. Flower, 2 ♀♀ 55 mm, 58 mm (NHM 1898.5.27.2-4). **Malaysia**. Pinang Is., coll. Dr. Canton, transferred from Indian Mus., ♀ 50.5 mm (NHM 1879: 32); south coast of Pinang I., Batu Feringgi, ii-iii.1973, coll. H. Kuhl, ♀ (RMNH D 29449); Sarawak, ♂ 52 mm (NHM 1993.23); Melaka. coll. Bedford & Lanchester, 2 ♀♀ 26 mm, 51 mm (NHM 1899.10.22.326/7); Sabah, Kota Kinabalu, 30.x.1986, coll. L. Nyanti, ♀ 21.6 mm (NUS 1987.21); 5.xi.1986, coll. L. Nyanti ♂ 24.2 mm (NUS 1987.47). **Singapore**. coll. Bedford & Lanchester, 2 ♂♂ 68 mm, 57 mm, ♀ 37 mm (NHM 1900.10.22.322-5); Singap., -vi.1933, ♂ 22.2 mm (NUS). **Indonesia**. Sumatra, -v.1914, coll. E. Jacobson, 3 ♂♂ (RMNH D 3071); Banda Sea, 1881, coll. Y. Semmelink, ♂ (RMNH D 2761); Rupat (Roepat) I., coll. G.A.J. v. de Sande, ♂, ♀ (RMNH D 3089); Java, Jakarta (Batavia) Bay, -vii.1904, coll. A. Buitendijk, ♂ (RMNH D 2502); Java, coll. P. Bleeker, ♂ (RMNH D 7285); ♂, ♀ (RMNH D 757); Bezoeki, 1865, coll. Y. Semmelink, 6 ♂♂ (RMNH D 539); Java Sea, 1907, coll. A. Buitendijk, 3 ♂♂ (RMNH D 3080); 1908, ♀ (RMNH D 3070); Ciulang (Tjilowong) I., 1906, ♂ (RMNH D 3084); Tanjunc Priok, 1906, coll. A. Buitendijk, ♂ (RMNH D 3079); 1907, ♂ (RMNH D 3078); -v.1924, (RMNH D 3013); 1906, 2 ♂♂ (RMNH D 3083); Poeloe Weh, 1914, coll. A. Buitendijk, ♂, ♀ (RMNH D 3076); -iii.1925, (RMNH D 3073); 1904, ♂, ♀ (RMNH D 3096); -ii.1927, ♂ (RMNH D 3075); -i.1922, ♂ (RMNH D 3095); -x.1915, ♀ (RMNH D 3088); -xi.1926, 2 ♀♀ (RMNH D 3085); Bali. purch. E. Gerrard, ♀ 59 mm (NHM 1880.6); Celebes, Paleleh, 22.viii.1929, Snellius Exped., det. A. Buitendijk, 2 ♀♀ (RMNH D 4247); Ujung Pandang (Makassar), 3 ♂♂, ♀ (RMNH D 2686); Makassar, purch. of E. Gerrard, ♂ 43.5 mm, ♀ 42 mm (NHM 1880.6); Sangihe I., 1867, coll. Moedt, 2 ♂♂, 2 ♀♀ (RMNH D 1700); Johore, Telok Makhota (Jason's Bay), 7.x.1991, coll. K.L.Yeo, 2 ♂♂ 43.9, 36.7 mm (NUS 1993.156-158); Molucca Id., 1895, coll. W.A. Horeau, 4 ♀♀ (RMNH D 3072); Obi I., 1862, coll. Bernstein, ♂ (RMNH D 1730); Natuna I., Ranai, pres. Hon. W. Rothschild, ♀ 52 mm (NHM 1905.10.26.9-10); Borneo, pres. Admiralty, ♂ 52 mm (NHM 1844: 106); Mouth of Baram River, ♂ 55 mm (NHM 1895.7.2.25-7). **Philippine Id.**, 14.iii.1979, 5 ♂♂ 18-46 mm, 5 ♀♀ 24-39 mm (USNM); coll. M. Porte, 2 ♂♂ 64 mm, 69 mm (MNHN 104); Siquijoz, purch. Cuming, ♂ 44.5 mm (NHM 1843.6); 10°51'24" N 120°59'36" E, 21.v.1978, 3 m, 2 ♂♂ 41 mm, 51 mm, ♀ 31 mm (USNM); Luzon I., Manila Bay, 28.i.1909, 2 ♂♂ (USNM 134237); Ternate, 15.x.1874, HMS "Challenger", det. E.J. Miers as *M. victrix* var. *crebrepunctata*, ♂ 49 mm (NHM 1884.31); Negros I., mouth of Mangnanod river, coll. H.C. Kellers, det. M.J. Rathbun, ♂ 32 mm, 5 ♀♀ 28-35 mm (USNM 73147); Mindoro I., Puerto Galera, -v.1939, coll. F. Gutierrez, 5 ♀♀ 33-35 mm (USNM); Mindanao I., Gulf of Davao, mouth of Padada River, 14-21.vi.1936, coll. G.R. Oesch, det. M. Ward, 3 ♂♂ 17-24 mm, 2 ♀♀ 20 mm, 34 mm (AMNH 7643); 23-24.vi.1936, det. M. Ward, 2 ♀♀ 23 mm (AMNH 7890); 6-19.vii.1936, det. M. Ward, ♀ 23 mm (AMNH 7837); 6.xi.1937, coll. F. Berte, det. M. Ward, ♂ 47 mm, ♀ 21 mm (AMNH 8510); 7.xi.1937, coll. W. G. Van Name, det. M. Ward, ♂ 52 mm (AMNH 8417); 7.xi.1937, coll. W. G. Van Name, det. M. Ward, ♂ 46 mm (AMNH 8511); -ix.1939, coll. G. R. Oesch, det. D. V. Espinosa, ♀ 23 mm (AMNH 15975); Zamboanga, HMS "Challenger", 10-20 fms, 2 ♂♂ 39 mm, 65 mm, 2 ♀♀ 39 mm, 47 mm (NHM 1884.31); 1891, coll. M. van Embden, ♂, ♀ (RMNH D 7286); 18.vii.1897, coll. van der Volk, 2 ♂♂ (RMNH D 7284). **Hong Kong**. pres. Dr. C.J. Chen, 2 ♀♀ 37 mm, 52.5 mm (NHM 1935.3.19.141); coll. Barney, 2 ♂♂ 56 mm, 61 mm, 2 ♀♀ 49 mm, 53 mm, juv. 21 mm (NHM 1930.12.3.37-40). **China**. Amoy, coll. J.A. Buddingh, ♂ (RMNH D 7283). **Taiwan**. pres. Formosa Museum, 3 ♀♀ 46-53 mm (NHM

1884.10); Takao, coll. H. Sauter ♂ 46 mm, ♀ 52 mm (NHM 1908.10.27.41-42). **Eastern Seas.** HMS "Samarang", coll. A. Adams, pres. Capt. E. Belcher, ♂ 33 mm (NHM 1847.21). **Japan.** det. E.J. Miers as *M. victrix* var. *crebrepunctata*, syntype, now lectotype, ♂ 70 mm (NHM 1844.6); pres. G.B. Sowerby, ♀ 33 mm (NHM 1884.13); purch. Mr. Maries, ♀ 50 mm (NHM 1880.5); Tsushima, 2 ♀♀ 40.5 mm, 41.5 mm (NHM 1955.3.31.18-19). **New Caledonia.** coll. M. Beaudouin, ♂ 67.5 mm (MNHN 108); Noumea, ♂ 56 mm (MNHN B.13513). **New Caledonia, N.E. Coast of Australia, Timor, Ovolan, Fedjee, Norfolk.** coll. Rayner, HMS "Herald", purch. Mr. Warwick, ♀ 51 mm (NHM 1862.53); ♂ 65 mm (NHM 1862.53); ♂ 56 mm (NHM 1862.52). **Fiji.** Vanua Ienu, ♂ 67 mm, ♀ 43 mm det. E.J. Miers as *M. victrix* var. *crebrepunctata*, syntypes now paralectotypes (NHM 1862.172); Ngau, HMS "Herald", ♂ 64 mm, ♀ 58 mm, det. E.J. Miers as *M. victrix* var. *crebrepunctata*, syntypes now paralectotypes (NHM 1862.53). **Australia.** Torres Strait, pres. J.B. Jukes, ♂ 54.5 mm (NHM 1845.91); West Hill Island, pres. J.B. Jukes, ♂ 62 mm (NHM 1846.89); Queensland, Percy Is., coll. Dr. Coppinger, HMS "Alert", pres. Lords of the Admiralty, 2 ♂♂ 63 mm, 68 mm (NHM 1881.31); off Cape Byron, Moreton Is., coll. Macgillivray, HMS "Rattlesnake", det. E.J. Miers as *M. victrix*, ♂ 36 mm (NHM 1848.53); ♂ 67 mm (NHM 1848.53); ♀ 49 mm (NHM 1848.53); Western Australia, Shark Bay, 5-10 fms, coll. F.M. Rayner, HMS "Herald", juv. 25 mm (NHM 1858.172); Yampi Sound, -xii.1960, coll. G.A. Robinson, ♂ (RMNH D 17540); East Coast, pres. University College Dundee (NHM 1955.4.22.135-137). **New Hebrides.** Malekula, 27.vii.1875, pres. W. Wykeham Perry, det. E.J. Miers as *M. victor* var. *crebrepunctata*, syntype now paralectotype, ♀ 57 mm (NHM 1876.14). **South Pacific.** 2 ♂♂ (USNM 17833).

Description.— Surface of carapace minutely granulate, more prominently so laterally. Six dorsal tubercles nearly indistinct, mesogastric tubercle largest. Front with slightly rounded lobes laterally and an emarginate rostrum medially. Ischium of third maxilliped tuberculate.

Anterolateral margins with six tubercles behind outer orbital angle followed by three crenulate teeth, median teeth smallest. Lateral spine 0.25 carapace width. Postero-lateral margin oblique, with granulate carina extending three quarters of its length.

Carpus of cheliped with two obtuse tubercles on outer surface, its upper margin carinate, granulate, internal anterior angle produced. Upper margin of palm cut into three teeth, proximal tooth tuberculate. Upper external surface with two rows of granulate low tubercles, proximalmost in lower row largest. Mid palm, in male, a rounded ridge extending to tip of lower finger, proximally with granulate tubercle followed by a prominent, acuminate spine. Mid palm, in female, five tubercles, second tubercle spinose, fourth tubercle triangulate. At lower proximal angle of palm a prominent acute spine. Lower margin with row of tubercles terminating at base of dactylus. In female, an additional row of obtuse granules runs parallel to lower margin. Dactylus in male with distinctly milled ridge on outer surface, absent in female.

Plastron finely granular.

Colour.— Carapace covered with minute red dots, propodi of first pereopods distally with prominent red spot. For colour illustration see Sakai 1960, pl. 16(7); Holthuis & Sakai 1970, pl. 10(2); Takeda, 1982, fig. 320; Miyake 1983, pl. 8(9); Utinomi 1985, pl. 35(3).

Remarks.— Forskål's (1775) description of *C. lunaris*, is somewhat generic and mixes clues to two species: The transversely serrate ridge on palmar dactylus points to one species (*M. victor*), whereas the prominent posterior tubercle on the anterolateral margin indicates another (*A. lunaris*). Fabricius' (1781, 1793) descriptions of *C. victor* are rather general. The colour pattern was described as "pallidus supra punctis lineolisque ferrugineis" (1793). The original material is no longer extant, however, the specimens collected by Daldorff on the Malabar coast and described in 1798 are



Fig. 7a-d; a & c = dorsal view, b & d = ventral view; a-b *Matuta victor* (Fabricius, 1781) NHM 1955.4.22.135-137; c-d *Mebeli michaelsoni* (Balss, 1921) NHM 1957.5.26.197-202.