

Pl. 7a-b; *Ashtoret sanguianulata* spec. nov. MNHN B.21359; a = dorsal view, b = left chela.

Etymology.— from the Latin, *sangre* - blood, *anulus* - ring, for the red ring pattern on its carapace. Gender feminine.

Colour (in alcohol).— Carapace with red rings encircling pale centres on a background of tiny red spots.

Remarks.— *A. sanguianulata* is easily distinguished from its congeners by its exceedingly long lateral spines. From *A. miersii*, that possess a similar colour pattern, it differs in structure of mid palmar ridge and presence of milled ridge on palmar dactylus.

Distribution.— Known only from the type locality, Madagascar.

*Ashtoret shengmuuae* spec. nov.  
(fig. 4c-d, pl. 8a-b)

Material.— **South China Sea**. Holotype, Tanjung Datu, 0°60'N 109°40'45"E, 24.xi.1955, 35 m, M.F.V. "Manihine", ♂ 40.3 mm (NUS 1984.6003-6007); same data as holotype, 4 ♀♀ 44.4-49.8 mm (NUS 1984.6003-6007), paratypes; 3°37'30"N 108°24'E, 16.vi.1956, 78-101 m, M.F.V. "Manihine", 2 ♀♀ 34, 34.4 mm (NUS 1984.6008- 6009), paratypes.

Description.— Surface of carapace minutely granulate, slightly coarser granules near lateral spines. Two anterior dorsal tubercles nearly obsolete. Front with straight horizontal lobes laterally and a bilobed rostrum medially. On pterygostomial region three parallel rows of elongate tubercles diminishing in size laterally, serving as stridulating organ. Exognath and ischium of third maxilliped granulate.

Anterolateral margins of carapace nearly evenly crenulate with two somewhat larger triangular tubercles at mid margin and prior to lateral spine. Lateral spine short, 0.15 carapace width. Posterolateral margin oblique, with granulate carina extending to base of lateral spine, bearing mid posterolateral tubercle.

Cheliped carpus coarsely granulate distally on outer surface, its upper margin carinate, granulate. Palm coarsely granulate proximally on external surface. Upper external surface of palm with two rows of granulate obtuse tubercles. Mid palm, in both male and female, a five-toothed ridge parallel to lower margin, second tooth prominent, acuminate, fourth tooth somewhat larger than third and fifth. At lower proximal angle of palm a small granulate tubercle. A row of molariform tubercles extending from lower proximal angle of palm to base of immobile finger distally parallel to a short row of rounded tubercles. Lower margin with row of sharply triangular tubercles terminating at base of dactylus, distalmost largest. Dactylus in male with distally milled ridge on outer surface, obsolete in female.

Plastron coarsely granular.

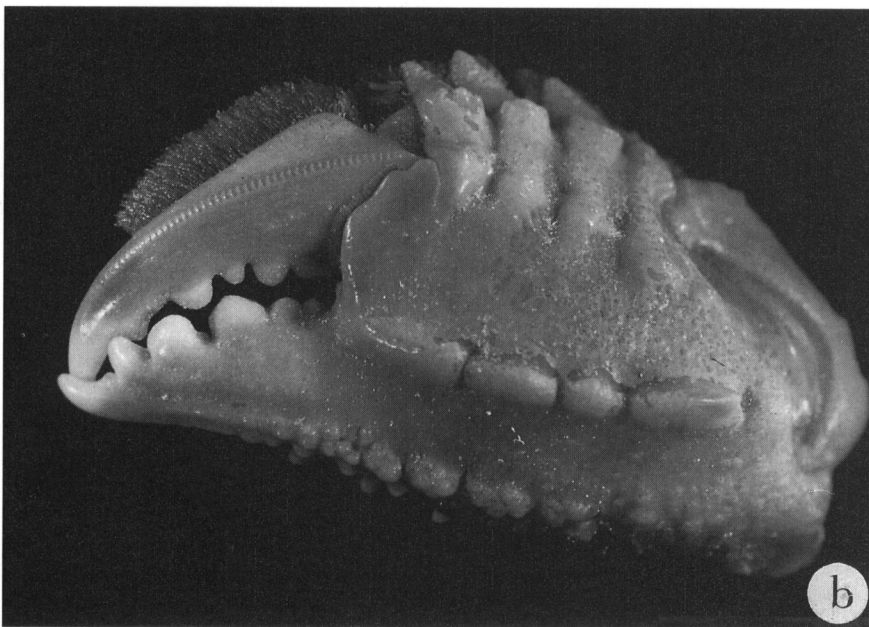
First male pleopod with shaft unbroken.

Etymology.— Sheng-Mu, Chinese goddess, protector of women and children, presides over birth. Greatly venerated throughout China. Gender feminine.

Colour (in alcohol).— Numerous fine brownish-red spots cover carapace, spots somewhat larger posteriorly. Ambulatory meri and carpi finely spotted.

Remarks.— *A. shengmuuae* closely resembles *A. granulosa* save for a distinct colour pattern; whereas the carapace of the latter is covered with pale-centered spots and the lateral spines bear a single large spot basally, the carapace and lateral spines of *A. shengmuuae* are covered with fine spots.

Distribution.— Known only from the type locality, South China Sea.



Pl. 8a-b; *Ashtoret shengmuiae* sp. nov. Holotype NUS 1984.6003-6007; a = dorsal view, b = left chela.

*Izanami* gen. nov.

Type species: *Matuta inermis* Miers, 1884.

Diagnosis.— Carapace circular, slightly convex, bearing six tubercles centrally, regions undefined. Front, wider than orbit, trilobate, median lobe projecting. Antero-lateral margin tuberculate. Posterolateral margin carinate. Lateral spine rudimentary. Orbits obliquely cut, separated from antennular fossa. Antennae rudimentary. Inferior orbital tooth molariform. Supraorbital margin smooth. Outer orbital angle produced. Eye stalk elongate, densely covered with long plumose setae inferiorly. Sub-orbital margin laterally interrupted by curved inhalant canal with setose margins. Pterygostomial region prominently and evenly granular. Outer maxilliped elongate, extending nearly to anterior margin of carapace.

Chelipeds subequal. Carpus with anterior angle produced. External surface of palm sculptured, with two rows of tubercles below cristate upper margin, a milled ridge mid-palm serving as stridulating organ and two rows of tubercles inferiorly. Upper margin of palm cut into three teeth, inner surface of teeth granulate. External surface of dactylus smooth, cutting margin with molariform tooth. Ambulatory legs with first propodus unidentate, penultimate carpus unicarinate, ultimate carpus heart-shaped.

Anterior margin of sternum triangular. Male abdomen five-segmented, with prominent carina on second abdominal tergite. First male pleopod distally setose, with coiled tubular appendage distally on inner surface, apex lobate distad.

Etymology.— *Izanami*, literally she-who-invites. In Japanese mythology the primal female principle. Gender feminine.

Remarks.— The new genus includes the two species, *I. curtispina* and *I. inermis*, possessing rudimentary lateral spines and is distinguished from other matutine genera by narrow orbits closed off from antennular fossa, presence of carina on second abdominal tergite, mid-palm stridulating ridge, granulate interior surface of palmar teeth and evenly granulate pterygostomial region.

Romimohtarto (1972), in discussing the grouping of the Indonesian species of *Matuta*, recognized the affinity between *M. inermis* and *M. curtispina* and assigned them to his "group II". This group was characterized by rudimentary epibranchial spine, molariform tooth on dactylus, stridulating ridge on external surface of palm and "Stridulating organ on the inner face of the palm composed of two batches of granules or very faint striae". However, examination of the specimens convinced us that in *I. inermis* the two proximalmost palmar teeth are granulate interiorly, while in *I. curtispina* all three superior palmar teeth bear granules, never striae, on their interior surfaces.

*Izanami curtispina* (Sakai, 1961) comb. nov.  
(fig. 5a-b, pl. 9a-b)

*Matuta curtispina* Sakai, 1961: 139, pl. 3(7); 1965: 60, pl. 24(2); 1976: 142, pl. 45(3); Takeda & Miyake, 1970: 231; Romimohtarto, 1972: 16, figs 11, 12, 33-38, pls 2b, 3e; Takeda, 1982: 110, pl. 323; Miyake, 1983: 200 (list).

*Matuta* sp. II Romimohtarto, 1967: 8, figs 1c, 2c, pl. 1e, f.



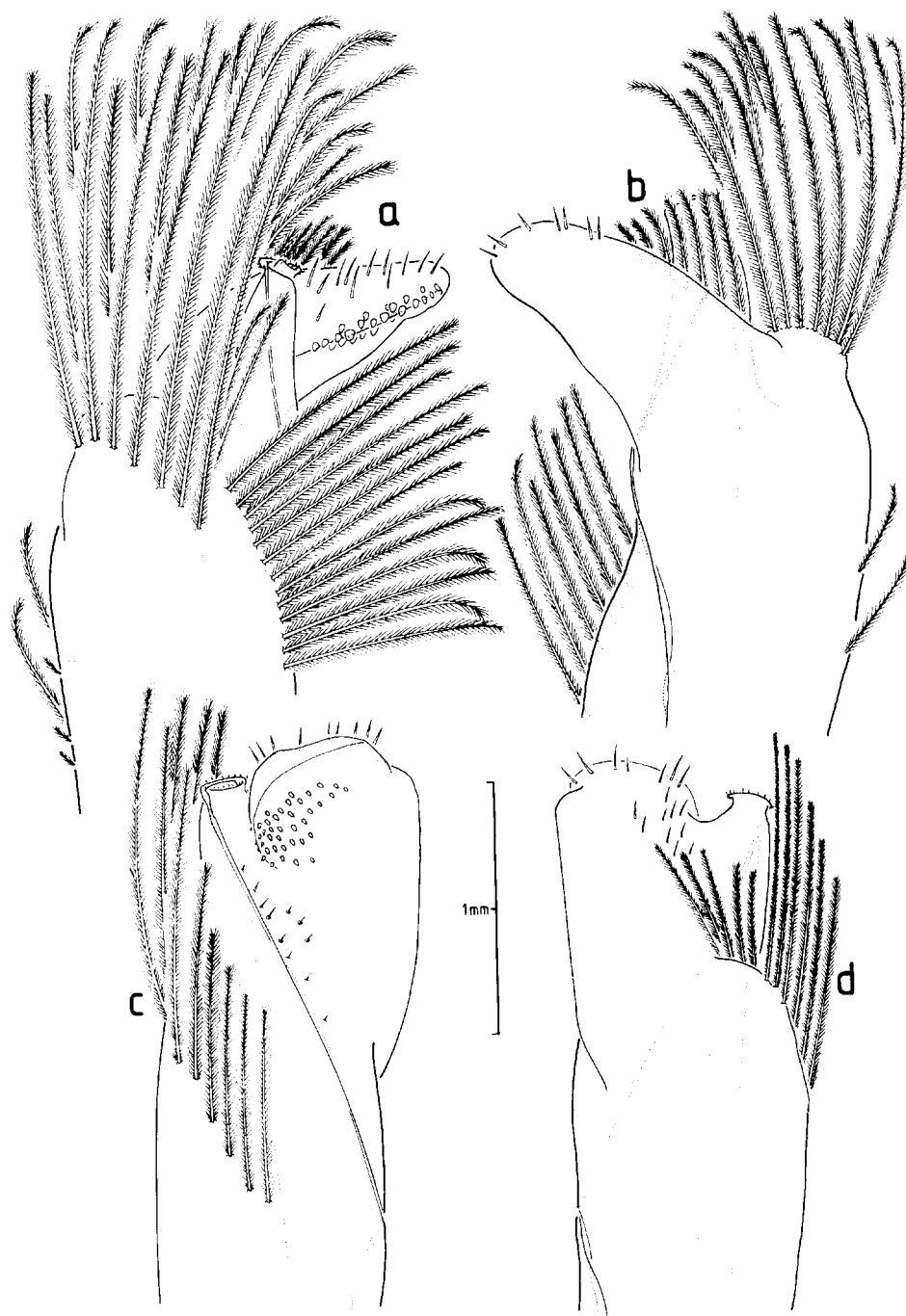
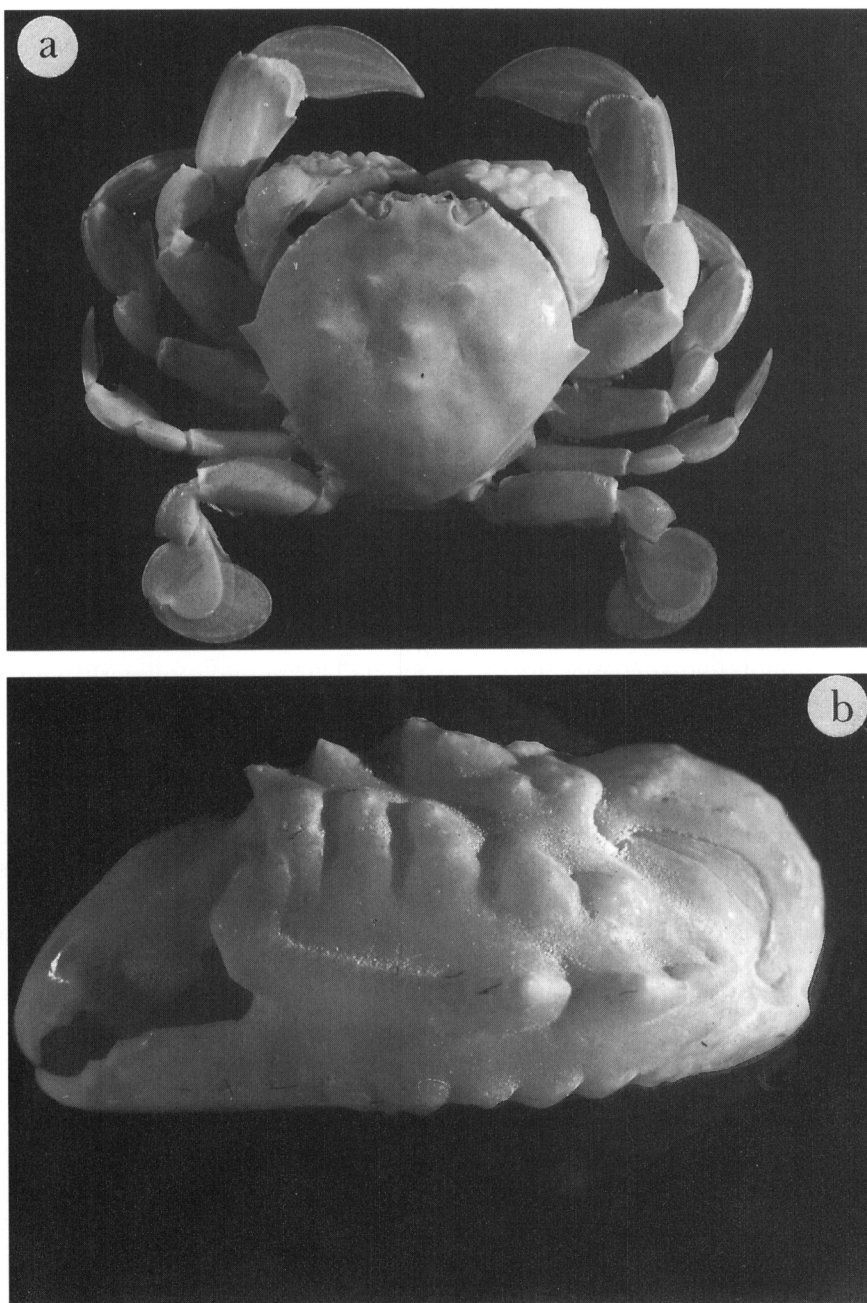


Fig. 5a-d; a & c = dorsal view, b & d = ventral view; a-b *Izanami curtispina* (Sakai, 1961) USNM stn 4915; c-d *Izanami inermis* (Miers, 1884) NHM 1884: 31.



Pl. 9a-b; *Izanami curtispina* (Sakai, 1961) USNM 72475; a = dorsal view, b = left chela.

Material.— **Madagascar.** det. R. Serène, ♂ 33 mm (MNHN B. 20983). **China Sea.** Near Hong Kong, 21°33'N 116°15'E, 4.xi.1908, 160 m, "Albatross" Exped., stn 5311, det. T. Sakai, ♂ 17 mm (USNM). **Japan.** Sagami Bay, 1977, 85 m, ♀ (RMNH D 38136); N.E. Point Yaku-Shima, 30°12'N 130°43'40"E, 15.viii.1906, 150 m, "Albatross" Exped., stn 4931, det. M. J. Rathbun, as *M. inermis*, 2 ♂♂ 26 mm, 29 mm (USNM 72475); 12.viii.1906, "Albatross" Exped., stn 4915, ♂ (USNM).

Description.— Surface of carapace smooth, bearing six obtuse tubercles. Front with two horizontal lobes laterally and an anteriorly emarginate, tapering rostrum. Subhepatic and pterygostomial regions evenly granulate. Third maxilliped very finely granular.

Anterolateral margins set with low tubercles, smaller and closer together anteriorly. Lateral spine triangular. Posterolateral margin with ridge extending to tip of lateral spine.

Carpus of cheliped swollen, granulate, its upper margin carinate, anterior angle produced. Palm with upper margin cristate, tridentate, teeth diminishing in size distally, interior surface of teeth granulate. Upper external margin with two rows of wide, blunt tubercles. Mid-palm, a milled ridge basally set with two tubercles. Lower margin with tubercles growing in size distally, largest at base of lower finger. Fingers acuminate. Cutting margin of lower finger with three small teeth. Dactylus strongly curved, upper margin carinate, proximally setose, cutting margin, proximally with large rounded tooth.

First ambulatory propodus one and half times long as wide, inferiorly with acute tooth; second propodus anteriorly bilobate; third propodus with acute tooth on inferior margin.

Plastron minutely pitted.

Male abdomen with lateral margins of penultimate segment convex. Telson one and half times as long as wide at base, triangulate. A granulate carina on second abdominal segment. First male pleopod with apical lobe lingulate, distended sideways, minutely granulate on inner surface.

Colour.— Carapace covered with reddish vermilion lines. For colour illustration see Takeda, 1982, pl. 323.

Remarks.— Sakai (1961) when describing *M. curtispina* wrote "Among the known species of the genus *Matuta*, the new species is related to *M. inermis*", and again (Sakai, 1976): "Among the species of the genus *Matuta*, both *M. curtispina* and *M. inermis* are peculiar in having the lateral processes of the carapace undeveloped". However, the two are readily distinguished by the pronounced granulation of *I. inermis*, its evenly tapering penultimate abdominal segment, and the form of ambulatory propodi and first male pleopod as compared to the smooth carapace of *I. curtispina*, its laterally convex penultimate abdominal segment, the form of ambulatory propodi and the laterally distended tip of first male pleopod.

Type locality.— Aichi Prefecture, Japan (Sakai, 1961: 139).

Distribution.— Madagascar, China Sea, Japan, Arafura Sea.

*Izanami inermis* (Miers, 1884) comb. nov.

(fig. 5c-d, pl. 10a-b)

bun, 1924: 27; Ward, 1942: 69 (list); Tyndale-Biscoe & George, 1962: 72; Romimohtarto, 1972: 19, figs 13-14, 39-41, pls 2a, 3d; Campbell & Stephenson, 1970: 246, fig. 6.

*Matuta* sp. 1 Romimohtarto, 1967: 6, figs 1d, 2d, pl. 1 a-d.

Material.— **Australia.** Queensland, Torres Strait, Albany Id, 5-7 m, coll. Dr. Coppinger, HMS "Alert", stn 109, det. E.J. Miers, syntype now lectotype, pres. Lords of the Admiralty; ♀ 21 mm, (NHM 1881.31); Prince of Wales Channel, 13 m, coll. Dr Coppinger, HMS "Alert", stn 169, det. E.J. Miers, syntypes now paralectotypes, pres. Lords of the Admiralty; 3 juv. 7-8 mm, (NHM 1882.7); 10°36'S 141°55'E, 11 m, 9 September, 1874, HMS "Challenger", stn 187, det. E.J. Miers, pres. the Lords of the Treasury; 2 ♂♂ 28.5 mm, 16.5 mm, 2 ♀♀ 32 mm, 21.5 mm, (NHM 1884.31); 27°08'00"S 153°21'30"E, 29 August, 1967, ♂ 27 mm, ♀ 27 mm (QM W2843). **Philippines.** Jolo, 14.ii.1908, 137 m, "Albatross" Exped., stn 5140, det. M. Ward as *M. inermis*, 6 ♂♂ 17-19 mm, 7 ♀♀ 18-19 mm (USNM 65381); Jolo, Jeomabal, 19.ix.1909, "Albatross" Exped., det. M. Ward as *M. inermis*, ♂ 22 mm, ♀ 20 mm (USNM 65379). **New Caledonia, N.E. coast of Australia, Timor, Ovolau Is., Fiji, Norfolk.** coll. Mr Rayner, HMS "Herald", purch. Mr Warwick, det. E.J. Miers, syntype now paralectotype; ♂ 19 mm, 1 juv. 13.5 mm, (NHM 1862.53). **Eastern seas.** coll. Adam White, HMS "Samarang", pres. Captain Sir E. Belcher, 2 juv. 11 mm, (NHM 1847.21).

Description.— Surface of carapace prominently granulose laterally, bearing six distinct tubercles. Front with two horizontal lobes laterally and a rostrum anteriorly bifid. Supraorbital margin smooth. On pterygostomial region a row of elongate tubercles, median tubercle longest, tubercles diminishing in size laterally, serving as stridulating organ. Third maxilliped finely granular.

Anterolateral margins prominently tuberculate. Lateral spine little more than tubercle. Posterolateral margin with tuberculate ridge extending to base of lateral spine, tubercles larger anteriorly.

Carpus of cheliped swollen, tuberculate, its upper margin bearing a tuberculate ridge, anterior angle produced. Palm with upper margin cristate, tridentate, teeth reduced distally, proximal tooth tuberculate. Interior surface of two proximal teeth granulate.

Upper external margin with two rows of wide, obtuse tubercles. Mid-palm a milled ridge basally set with two tubercles in males, three in females. Lower margin with molariform tubercles growing in size distally, largest at base of lower finger. Fingers acuminate. Cutting margin of lower finger with three triangular teeth. Dactylus strongly curved, upper margin carinate, proximally setose, cutting margin with large tooth midway. First ambulatory propodus 1.1 times as long as wide, inferiorly with rounded tooth, second propodus anteriorly unilobate, third propodus inferiorly with rounded tooth.

Plastron minutely pitted.

Male abdomen tapering evenly. A granulate carina on second abdominal segment. First male pleopod with apical lobe rounded, minutely granulate on inner surface adjacent to tubular appendage.

Colour.— "Pinkish beige, darker pink on anterior half of carapace, red reticulations on carapace and chelipeds (Tyndale-Biscoe & George, 1962: 72).

Remarks.— Miers (1884) referred *M. inermis* to his "second section (B) of the genus" because of its mid-palmar ridge and externally smooth dactylus. However, his description does mention enough distinctive characters, obsolete lateral spine and the lack of proximal palmar spine, as to leave no doubt as to the identity of the