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NEW BRACHYURA FROM THE GULF OF DAVAO, MINDANAO, PHILIPPINE ISLANDS

BY MELBOURNE WARD[1]

This report is based on two collections made on the coral reefs and beaches and in shallow water along the western coast of the Gulf of Davao. Much the larger part of the material was collected by Mr. Godfred R. Oesch during the months March to July, 1936; the remainder of it was collected by Dr. Willard G. Van Name in November, 1937, in the same general region.

I wish to express my gratitude to Dr. Roy Waldo Miner, Curator of Living Invertebrates, of The American Museum of Natural History, New York, and Dr. Willard G. Van Name for allowing me to study this most interesting material.

In this article I establish a new genus of Grapsidae, *Parapyxidognathus*, with *Pyxidognathus deianira* de Man, 1888, as the type.

The following 15 new species are described:

Heteronucia oeschi
Huenia brevifrons
Charybdis vannamei
Charybdis philippinensis
Charybdis padadina
Actaea paraspeciosa
Leptodius davaoensis
Chlorodiella davaoensis
Chlorodopis philippinensis
Sphaerozius oeschi
Ruppeloides philippinensis
Actumnus davaoensis
Eriphia pilumnoides
Trapezia davaoensis
Trapezia plana

Also the following new subspecies:

Actaea subpunctata philippinensis
Leptodius sanguineus philippinensis

One new name, *Trapezia miersi* (for *T. guttata* Miers, 1888), is proposed.

The following previously known Brachyura were comprised in the two collections:

SUBTRIBE DROMIACEA

Dromiidae

Cryptodromia tumida Stimpson, 1858
Cryptodromia bullifera Alcock, 1899
Cryptodromia canaliculata Stimpson, 1858

SUBTRIBE OXYSTOMATA

Calappidae

Calappinae

Calappa philargius (Linnaeus), 1758
Calappa hepatica (Linnaeus), 1758

Matutinae

Matuta crebrepunctata Miers, 1877
Matuta banksii Leach, 1817

SUBTRIBE BRACHYRHYNCHA

Majidae

Inachinae

Camposcia retusa Latreille, 1829

Majinae

Tiarinia tiarata (Adams and White), 1848
Tiarinia gracilis Dana, 1852
Tiarinia angusta Dana, 1852
Tylocarcinus styx (Herbst), 1803

Pisinae

Hyastenus auctus Rathbun, 1916
Hyastenus borradailei Rathbun, 1907

Schizophrysinae

Schizophrys spiniger Adams and White, 1848

Micippinae

Micippa bicarinata Adams and White, 1848

Parthenopidae

Parthenopinae

Daldorfia horrida (Linnaeus), 1758

SUPERFAMILY BRACHYRHYNCHA

Portunidae

Thalamitinae

Portunus sanguinolentus (Herbst), 1803
Lupocyclopotus gracilimanus (Stimpson), 1858

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Thalamita admete (Herbst), 1803
Thalamita picta Stimpson, 1858
Thalamita crassimana Dana, 1852
Thalamita crenata Latreille, Edwards, 1834
Charybdis annulata (Fabricius), 1798
Charybdis orientalis (Dana), 1852
Goniohellenus hongkongensis Shen, 1934

Caphyrinae

Caphyra laevis A. M. Edwards, 1869
Goniocaphyra truncatifrons de Man, 1888

Catoptrinae

Carupa laeviuscula Heller, 1865

Podophthalminae

Podophthalmus vigil Fabricius, 1798

Atelecyclidae

Kraussia integra de Haan, 1837
Kraussia porcellana (Adams and White), 1849

Xanthidae[1]

Carpilius convexus (Forskal), 1777
Carpilodes cinctimanus (White), 1847
Carpilodes bellus (Dana), 1852
Carpilodes laevis A. M. Edwards, 1873
Neoliomera sundaica (de Man), 1888
Zozymus aeneus (Linnaeus), 1758
Zozymodes pumilis (Lucas), 1853
Atergatis subdivisus Adams and White, 1849
Atergatis ocyroe (Herbst), 1801
Actaea tomentosa (H. M. Edwards), 1834
Actaea hirsutissima (Ruppell), 1830
Actaea scabra H. M. Edwards, 1834
Actaea modesta (de Man), 1888
Actaea ruppellii (Krauss), 1843
Banareia armata A. M. Edwards, 1869
Platypodia maculata (de Man), 1888
Platypodia semigranosa (de Man), 1902
Platypodia anaglypta (Heller), 1861
Platypodia granulosa (Ruppell), 1830
Ralumia dahli Balss, 1933
Leptodius cavipes (Dana), 1852
Leptodius nudipes (Dana), 1852
Leptodius crassimanus A. M. Edwards, 1867
Leptodius cristatus Borradaile, 1903
Xanthias granosomanus (Dana), 1852
Paraxanthias notatus (Dana), 1852
Paraxanthias pachydactylus (A. M. Edwards), 1879
Euxanthus punctatus A. M. Edwards, 1865
Ozius rugulosus Stimpson, 1858
Epixanthus frontalis (H. M. Edwards), 1834
Chlorodiella hirtipes (Adams and White), 1849
Chlorodopsis pilumnoides (Adams and White), 1849
Chlorodopsis melanochirus A. M. Edwards, 1873
Pilodius pubescens Dana, 1852
Phymodius sculptus (A. M. Edwards), 1873
Phymodius ungulatus (H. M. Edwards), 1834
Etisus laevimanus (Randall), 1839
Etisodes demani Odhner, 1925
Lioxantho laevidorsalis (Miers), 1886
Eriphia sebana (Shaw), 1803
Cymo melanodactylus de Haan, 1833
Cymo deplanatus A. M. Edwards, 1873
Trapezia reticulata Stimpson, 1858
Trapezia cymodoce (Herbst), 1801
Tetralia glaberrima (Herbst), 1790
Pilumnus scabriculus Adams and White, 1849
Pilumnus vespertilio (Fabricius), 1789
Pilumnus striatus de Man, 1888
Pilumnus forskali bleekeri Miers, Balss, 1933
Pilumnus haswelli de Man, 1888
Pilumnus barbatus A. M. Edwards, 1873
Pilumnus caerulescens A. M. Edwards, 1873
Glabropilumnus edamensis (de Man), 1888
Glabropilumnus dispar (Dana), 1852
Parapilumnus quadridentatus de Man, 1895

Grapsidae

Grapsinae

Grapsus strigosus (Herbst), 1799
Metopograpsus gracilipes de Man, 1888
Metopograpsus oceanicus (Lucas), 1842
Metopograpsus latifrons (White), 1847
Pachygrapsus minutus A. M. Edwards, 1873
Pachygrapsus planifrons de Man, 1888

Plagusiinae

Plagusia immaculata Lamarck, 1818
Percnon planissimum (Herbst), 1804
Percnon demani Ward, 1934

Sesarminae

Sarmatium indicum A. M. Edwards, 1868
Parasesarma batavica (Moreira), 1903
Parasesarma lenzii de Man, 1889
Parasesarma edamensis de Man, 1888
Parasesarma moluccensis de Man, 1892
Metasesarma aubryi A. M. Edwards, 1869
Sesarma peraccae Nobili, 1903
Sesarma taeniolatum White, 1847
Sesarma brockii de Man, 1888
Sesarma rotundifrons A. M. Edwards, 1869
Chiromantes semperi Burger, 1893
Chiromantes onycophora de Man, 1895–1898
Holometopus villosus (A. M. Edwards), 1869
Cleistocoeloma tectum Rathbun, 1914

Varuninae

Ptycognathus pilipes A. M. Edwards, 1868
Ptycognathus guijulugani Rathbun, 1914
Ptycognathus affinis de Man, 1895
Ptycognathus riedelii A. M. Edwards, 1868
Pseudograpsus crassus A. M. Edwards, 1868
Varuna litterata (Fabricius), 1798

Ocypodidae

Ocypodinae

Ocypoda ceratophthalma (Pallas), 1767–1780
Ocypoda cordimana Desmarest, 1825

[1] The Xanthidae here recorded have not been placed in subfamilies owing to the unsatisfactory state of the classification.

Ilyoplax integer Tesch, 1918
Dotilla wichmanni de Man, 1892
Tmethypocoelis ceratophorus (Koebel), 1897
Mycteris brevidactylus Stimpson, 1858
Uca zamboangana Rathbun, 1913
Uca mearnsi Rathbun, 1913
Uca marionis (Desmarest), 1825
Uca variabilis (de Man), 1891
Uca demani Ortman, 1897
Uca rathbuni Pearse, 1912
Macrophthalmus transversus (Latreille), 1817
Macrophthalmus latreilli Desmarest, 1822
Macrophthalmus crinitus Rathbun, 1913
Macrophthalmus granulosus de Man, 1904

TRIBE BRACHYURA

SUBTRIBE OXYSTOMATA

Leucosiidae

HETERONUCIA ALCOCK

Heteronucia ALCOCK, 1896, Journ. Asiat. Soc. Bengal, LXV, part 2, No. 2, p. 177.

HAPLOTYPE.—*Heteronucia vesciculosa* Alcock.

TYPE LOCALITY.—Off Ceylon, 34 fathoms.

Heteronucia oeschi, new species

Figures 1 and 2

Carapace covered with coarse pearly granules. The gastric regions are defined by two broad and deep sulci which form a narrow triangle, the apex lying between the teeth of the front and the base separates the intestinal regions from the posterior margins of the carapace. There are four large inflations placed transversely, two on each side of the gastric triangle. The subhepatic regions are produced into broadly triangulate lobes. The posterolateral margins are armed with short cylindrical spinules. All the sternal surfaces are covered with coarse granules.

The chelae are short and thick and very coarsely granulated.

HOLOTYPE.—Female measuring 6 mm. in maximum width of the carapace.

LOCALITY.—Collected by Godfred R. Oesch, for whom the species is named. March to July, 1936.

Majidae

Acanthonychinae

HUENIA DE HAAN

Huenia DE HAAN, 1839, in Siebold, Fauna Japon., Crust., 83.

HAPLOTYPE.—*Huenia proteus* de Haan.

TYPE LOCALITY.—Japan.

Huenia brevifrons, new species

Figures 3 and 4

The carapace is as broad as it is long. The anterolateral margins are developed into petaloid processes; there is a smaller lobe on the posterior margin. The posterior margin is developed into a raised lamina, the outer angles of which are acclivous and rounded.

The rostrum is broadly triangulate without prolongation and is fringed on each side with hooked hairs. The supraocular eave is produced into a short tooth anteriorly. The eyes are large and appear to be rigid. The ambulatory legs are short and compressed.

I have material of *Huenia proteus* de Haan from Japan and note the following characters by which the two species may be differentiated.

1.—The form of the petaloid processes on the anterolateral margins of the carapace.
2.—The short rostrum of *H. brevifrons*.
3.—The short spines on the supraorbital eave of *H. brevifrons*.
4.—The shorter ambulatory legs of *H. brevifrons*.

MATERIAL.—Holotype, female, 10 mm. (Cat. No. A.M.N.H. 8328). Collected by G. R. Oesch.

Portunidae

Thalamitinae

CHARYBDIS DE HAAN

Charybdis DE HAAN, 1833, Fauna Japon., Crust., 3, 10.

TYPE.—*Charybdis japonicum* A. M. Edwards = *Charybdis sexdentatus* de Haan (not Herbst).

The following species are known to me by examination of specimens:

Charybdis natator (Herbst), Queensland and Northern N. S. W. *Charybdis cruciata* (Herbst), India and Eastern Australia as far south as Sydney. *Charybdis miles* de Haan, Japan; *Charybdis spiniferum* Miers, Eastern Australia. *Charybdis anisodon* de Haan, Singapore; *Charybdis variegata* (Fabricius), Singapore. *Charybdis callianassa* (Herbst), Penang; *Charybdis incisa* Rathbun, Queensland and as far south as Sydney; *Charybdis orientalis* Dana, Davao, Philippine Islands; *Charybdis jaubertensis* Rathbun, Broome; *Charybdis merguiensis* de Man, Singapore; *Charybdis affinis* Dana, Singapore; *Charybdis acutifrons* de Man, Port Moresby and Queensland; *Charybdis japonica* A. M. Edwards, Japan and China; *Charybdis bimaculata* Miers. *Charybdis rostrata* A. M. Edwards, India. *Charybdis annulata* (Fabricius), Davao, Philippine Islands.

Leene (1938) has given a most interesting

study of *Charybdis* in Siboga Expeditie, Monog. XXXIXc[3], VII, but there are several specimens in the present collection which I have been unable to reconcile with her descriptions and, after a careful search through the literature, I have come to the conclusion that they represent three new species.

Charybdis vannamei, new species

Figures 5 and 6

Carapace broader than long, smooth and glossy to the unaided eye, finely granulated under a lens. There are four granulated transverse ridges on the anterior half of the carapace; the first is placed on the epigastric region and is broken into two by a broad shallow sulcus which extends back from the incision between the median pair of frontal teeth; the second ridge is also divided into two and more widely separated than the epigastric ridges. The third ridge is entire and concave. The fourth ridge extends from the last tooth of the anterolateral margin and is broken on each side of the gastric region at the cervical groove. The cardiac region is separated from the gastric and branchial regions by an H-shaped depression.

The hepatic regions are slightly sunken below the level of the rest of the carapace and there are a few scattered punctations.

The anterolateral margins are divided into six subequal teeth, the first and the last are the smallest, the third and the fourth are the largest. The posterolateral margins are convex with an indistinct line of granules outlining the margin, this ridge does not reach the posterior margin of the carapace. The posterior margin is developed into a sharp granular ridge. The epimeral walls of the carapace are slightly inflated, finely granular and clothed with a scant coat of fine hairs which become more numerous and coarse toward the teeth of the anterolateral margins and can be seen as a fringe upon the anterior margin of each tooth.

The orbits are large, the width equal to one-third the length of the carapace, without dorsal inclination. The upper border is broken by two narrow fissures, a third is present below the outer angle; the inner angle is obtuse, produced as far as the outer angle and is slightly broader than the two submedian frontal teeth. The lower orbital border is granulated, the inner angle is obtuse and not as produced as the inner angle of the upper border. The orbital hiatus is occupied by the short prolongation of the base of the antenna; a broad V-shaped space exists between the lower orbital border and the side of the prolongation, the upper margin is in close contact with the upper margin of the hiatus. A well-developed granulated ridge extends along the anterior part of the base of the antenna.

The front is divided into six teeth, excluding the orbital angles; the median pair of teeth are rounded, separated by a narrow V-shaped incision and placed on a lower plane than the other teeth, the submedian pair are more triangulate with obtuse tips, the outer pair are the narrowest and directed slightly outward. The antennules are large and transversely directed. The epistome is smooth, narrow and sunken in the median line.

The buccal orifice is not quite closed by the external maxillipeds. The merus of the external maxillipeds is equal to half the length of the ischium, the outer angle is produced into a narrow auriculate angle. There are two broad sulci on the outer surface with patches of granules and coarse golden hairs near the margins. The palp is large and fringed with coarse golden hairs. The ischium is flat and flossy with a deep longitudinal sulcus parallel to the inner margins.

The sternum is smooth.

The chelae are subequal. The merus is armed with three spines on the anterior margin, other surfaces quite smooth. The carpus is armed with four spines, the largest of which is upon the inner angle; an obsolete ridge extends along the anterior side of this spine and continues almost to the posterior articulation with the merus. The other three spines are placed in a triangle on the outer surface of the carpus, the two lower are on the margin; obsolete ridges extend from them toward the posterior articulation with the merus and resemble the ridge from the large spine on the inner angle. The manus of both chelae is slightly inflated and finely granulated; the granules tend to form a venose pattern visible only under a lens; five spines are present on the upper surface—one at the articulation with the carpus, three of almost equal size distally; two of the latter are on the inner margin; a minute spine is placed above the articulation of the dactylus. Three smooth longitudinal ridges are placed upon the outer surface, the lowest is the most developed and extends from the tip of the immobile finger becoming obsolete proximally and not reaching the articulation with the carpus. The second ridge extends from an abrupt elevation near the gape and ends abruptly at the articulation with the carpus. The third ridge is the shortest and most indistinct. The dactylus and immovable finger are longitudinally grooved, four grooves on each.

The ambulatory legs are slender and unarmed, finely granulose and punctate. The merus of the fifth leg is twice as long as it is wide, compressed and punctate. The carpus is compressed, longer than broad, armed below at the propodal articulation with a long sharp spine. The lower margin of the propodus is armed with ten small spines. All the articles of the fifth leg are fringed with pale brown hair.

The abdomen of the male is narrow. The penultimate segment is as broad as long, the anterior angles are abruptly rounded.

HOLOTYPE.—Male 54 mm. (Cat. No. A.M.N.H. 8507), collected by Dr. W. G. Van Name.

ADDITIONAL MATERIAL.—One female 41 mm., collected by Godfred R. Oesch.

Charybdis vannamei and *C. spiniferum* Miers differ in the following characters:

1.—The teeth of the front are more acute and longer and more separated in *C. spiniferum*.

2.—The penultimate segment of the abdomen of the male has its margins more evenly curved in *C. spiniferum*.

3.—The spines of the anterolateral margins are more slender in *C. spiniferum*.

C. vannamei differs from *C. merguiensis* de Man in the following characters:

1.—In the pleopods of the male being longer, more slender and undulate.

2.—In the outline of the abdomen of the male.

3.—In having the teeth of the front more widely separated.

4.—In having the anterolateral margins more transversely directed.

5.—In having the anterolateral angle of the merus of the external maxilliped produced into a more acutely auriculate angle.

Charybdis philippinensis, new species

Figures 7 and 8

The carapace is broader than long; bare and glossy, granulated under lens. Four ridges across the carapace placed as in *C. vannamei;* the first is obsolete and the others are less developed than in *C. vannamei.*

The front is equal to one-fourth the width of the carapace and is cut into six teeth excluding the inner orbital angles. The submedian teeth are the broadest, truncated and sloping toward the median teeth, the lateral pair are narrow obtuse and sloping inward.

The anterolateral margins are armed with six spines, including the outer orbital angle; the spines become larger posteriorly; the last is transversely directed and twice as long as any of the others. The posterolateral margins are strongly convergent and outlined by a fine ridge which ends abruptly close to the raised edge of the epimeral wall between the fourth and fifth ambulatory legs. A strong ridge outlines the edge of the epimeral wall and continues unbroken into the posterior margin of the carapace.

The orbits are small, dorsally directed so that the entire lower margin is visible from a dorsal view when the eyes are retracted; two obsolete fissures in the upper margin, one below the outer angle. The outer angle is formed by a tooth similar in shape to that in *C. cruciata* (Herbst). The orbital hiatus is filled by the prolongation of the base of the antenna but is extremely short.

The epistome is well developed though sunken. The buccal orifice is completely closed by the external maxillipeds. The external maxillipeds resemble those of *C. vannamei.*

The chelae are subequal. The merus is armed on the anterior margin with two spines and granules, the latter continue onto the upper surface and form a distinct patch becoming reduced in size toward the center. The carpus is armed with four spines, the largest of which is on the inner angle; the upper surface is granulated. The manus is very much inflated proximally and armed above with two spines placed side by side at some distance from the articulation of the dactylus; strong ridges of granules extend posteriorly from these spines. Three broad and low ridges extend longitudinally along the outer surface. The dactylus is equal to the length of the upper border of the manus; both fingers are strongly curved inward toward the front of the carapace, the teeth on both fingers are tricuspidate and interlocking and the tips cross when gripping.

The ambulatory legs are long and slender; the distal articles are fringed with long hair.

HOLOTYPE.—Male 35 mm. (Cat. No. A.M.N.H. 8382), collected by Godfred R. Oesch.

ADDITIONAL MATERIAL.—One male 32 mm., collected by Godfred R. Oesch.

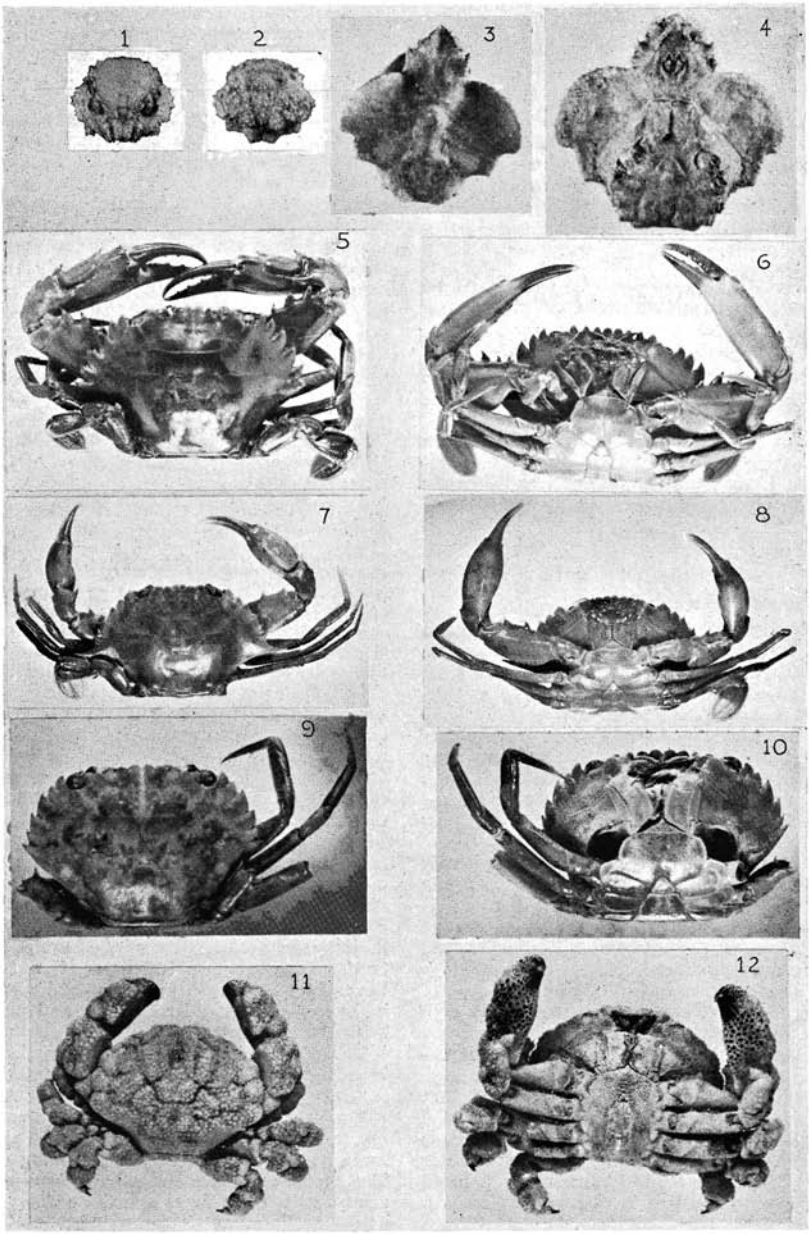
Charybdis padadiana, new species

Figures 9 and 10

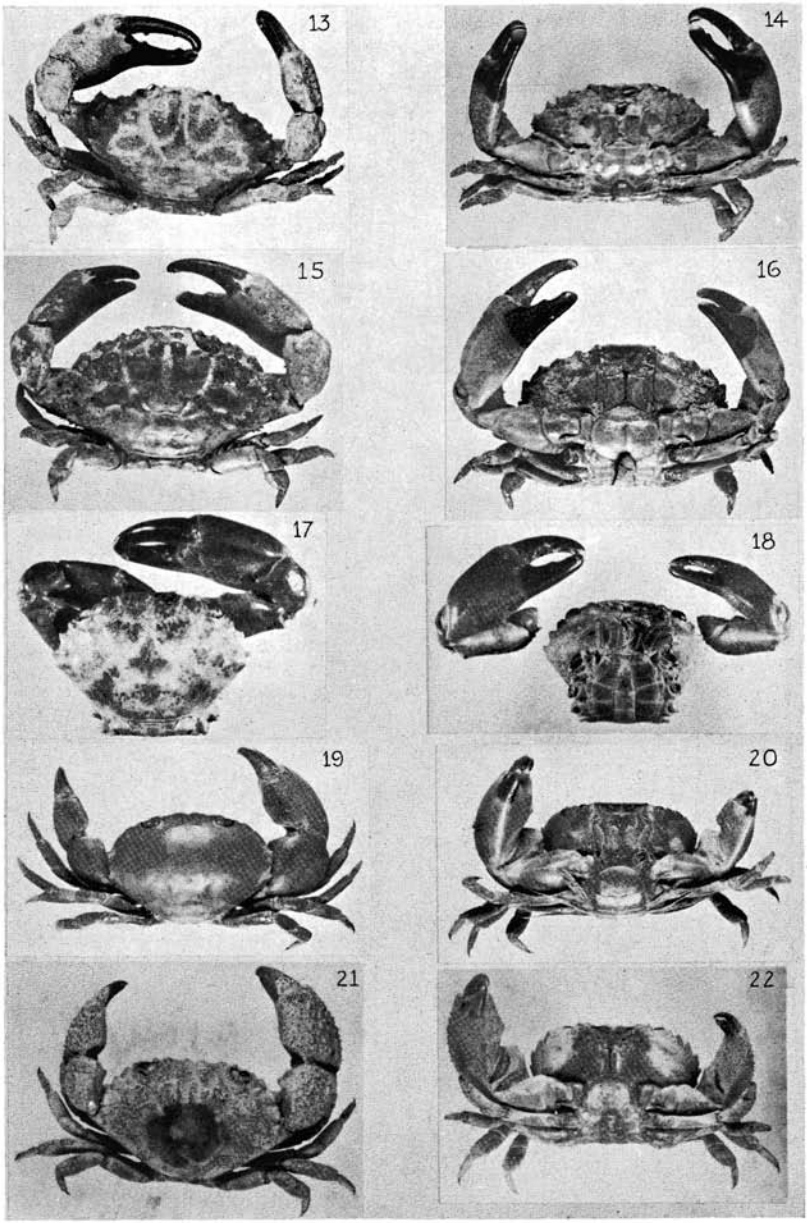
Carapace broader than long, surfaces uneven, crossed by four ridges as in *C. vannamei* and *C. philippinensis.* The front is broader than in either of the previous species and is composed of six teeth, excluding the orbital angles the teeth are all short, broad and rounded. The anterolateral margins are armed with six teeth, the first two are blunt, the following three each capped by a spine, the second and fifth are the smallest. The posterolateral margins are thick with a line of granules which do not reach the posterior margin. The orbits are small, the upper margin with two closed fissures and one straight and narrow below the external angle. The orbital hiatus is broad and not completely filled by the prolongation of the base of the antenna. The lower orbital border is not visible throughout its length from a dorsal view; the inner angle is broad and obtuse and produced beyond the upper angle.

The epistome is sunken and broadly triangulate in outline; the apex divides the antennulary fossae.

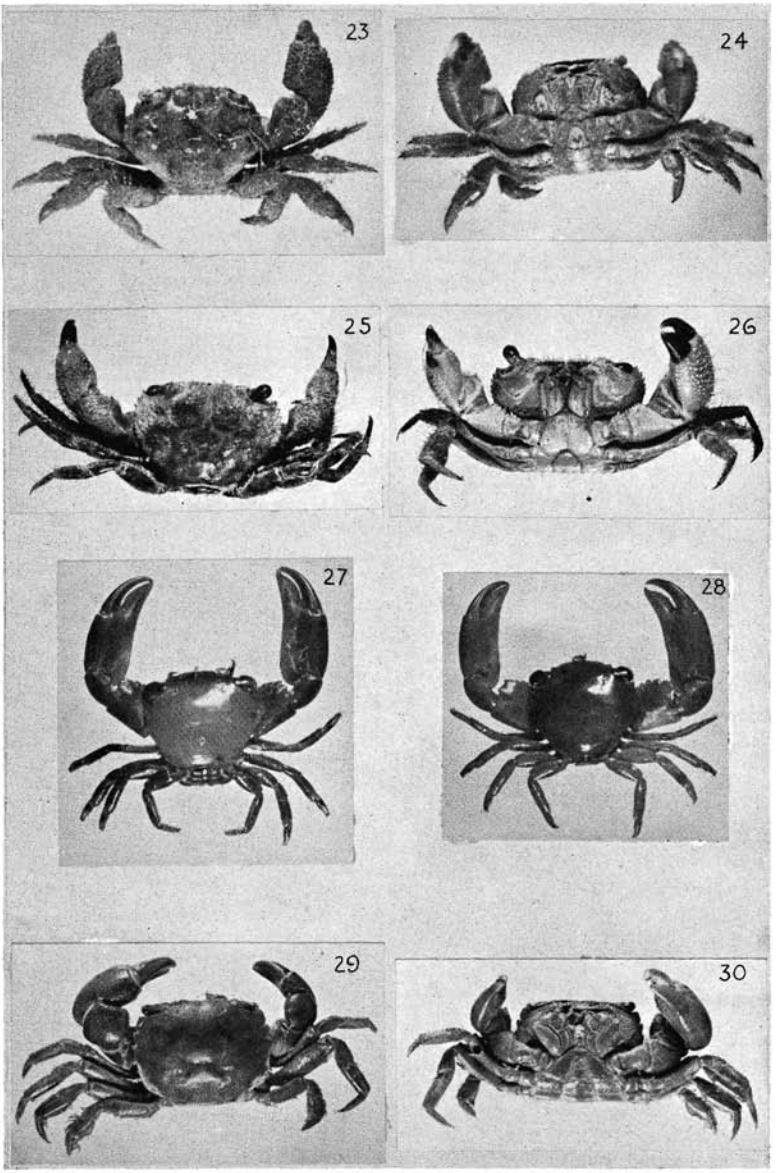
The external maxillipeds close the buccal orifice and the anterolateral angle of the merus is more auriculate than in the preceding species. The chelae are short and robust; the merus is armed with three large spines on the anterior margin; the carpus is armed with four spines, one on the inner angle, three in a triangle on the outer surface; strongly developed ridges extend onto each spine except the one which forms the apex of the triangle. The manus is armed with four spinate teeth above and three well-developed granular ridges on the outer surface. The dactylus and immovable finger are sulcated; teeth not very large and appear to be simple.



Figs. 1 and 2. *Heteronucia oeschi*, n. sp.: holotype female, 6 mm. wide.
Figs. 3 and 4. *Huenia brevifrons*, n. sp.: holotype female, 10 mm. wide.
Figs. 5 and 6. *Charybdis vannamei*, n. sp.: holotype male, 54 mm. wide.
Figs. 7 and 8. *Charybdis philippinensis*, n. sp.: holotype male, 35 mm. wide.
Figs. 9 and 10. *Charybdis padadiana*, n. sp.: holotype female, 17 mm. wide.
Figs. 11 and 12. *Actaea paraspeciosa*, n. sp.: holotype male, 12 mm. wide.



Figs. 13 and 14. *Leptodius davaoensis*, n. sp.: holotype male, 18 mm. wide.
Figs. 15 and 16. *Leptodius sanguineus philippinensis*, n. subsp.: holotype male, 37 1/2 mm. wide.
Figs. 17 and 18. *Chlorodiella davaoensis*, n. sp.: holotype male, 10 mm. wide.
Figs. 19 and 20. *Sphaerozius oeschi*, n. sp.: holotype female, 17 mm. wide.
Figs. 21 and 22. *Ruppellioides philippinensis*, n. sp.: holotype male, 10 mm. wide.



Figs. 23 and 24. *Actumnus davaoensis*, n. sp.: holotype male, 10 mm. wide.
Figs. 25 and 26. *Eriphia pilumnoides*, n. sp.: holotype male, 23 mm. wide.
Fig. 27. *Trapezia davaoensis*, n. sp.: holotype, 8 mm. wide orign.
Fig. 28. *Trapezia plana*, n. sp.: holotype, 9 mm. wide.
Figs. 29 and 30. *Parapyxidognathus deianira* (de Man): typical male, 12 mm. wide.

The walking legs are long, the distal articles are fringed with long hair. The sternum appears smooth but is finely granulated and punctate under a lens.

HOLOTYPE.—Female 17 mm. (Cat. No. A.M.N.H. 8381), collected by Godfred R. Oesch.

Charybdis padadiana is allied to *C. bimaculata* Miers and the following characters serve to distinguish the species:

1.—The eyes are comparatively smaller in *C. padadiana.*

2.—The front is broader and more produced anteriorly in *C. padadiana.*

3.—The inner angles of the lower orbital border are much more produced in *C. bimaculata* Miers.

Xanthidae

I have refrained from the division of Xanthidae into subfamilies owing to the unsatisfactory state of the classification.

ACTAEA DE HAAN

Actaea DE HAAN, 1833, in Siebold, Fauna Japon., Crust., pp. 4 and 18.

Actaea RATHBUN, 1930, Bull. 152, U. S. Nat. Mus. Washington, p. 250.

LOGOTYPE.—Specified by Rathbun, 1930. *Actaea savignyi* (H. M. Edwards) = *Actaea granulata* de Haan, 1833.

TYPE LOCALITY.—Red Sea.

Actaea rufopunctata philippinensis, new subspecies

The type locality of *A. rufopunctata* (H. M. Edwards) is Mauritius, and I have material from St. Brandon near Mauritius. The following characters serve to distinguish the subspecies:

1.—The areolations of the carapace are more salient in *A. rufopunctata.*

2.—The teeth of the anterolateral margins are more salient in *philippinensis.*

3.—The cardiac areolation is almost completely divided into two parts in *A. rufopunctata.*

MATERIAL.—One male 10 mm., holotype. One female 35 mm., collected by Godfred R. Oesch.

Actaea paraspeciosa, new species

Figures 11 and 12

The length of the carapace is equal to three-quarters of the width; flat posteriorly, convex anteriorly. The regions of the carapace are distinctly demarcated by deep sulci filled with hairs. The areolae are covered with pearly granules. The anterolateral margins are very arcuate, divided into four rounded teeth. The posterolateral margin is shorter than the anterolateral, concave. The front-orbital region more than half the width of the carapace. Front divided into two lobes; the margins of which are invisible from a dorsal view. The orbits are small, eyes completely fill the orbit; the upper orbital border with two well-marked fissures. Lower orbital border broken near the outer angle by a deep fissure. Orbital hiatus narrow, the flagellum of the antenna stands in the hiatus. Antennules lie transversely in deep fossae. The epistome is sunken and smooth. The external maxillipeds are finely granulated.

The chelipeds are equal; upper and outer surfaces lobulated and granulated like the dorsum of the carapace. The ambulatory legs are short, thick and lobulated like the chelae. The sternum of the male is granulated. Adult females have the sternum covered by the abdomen.

A. paraspeciosa is allied to *A. speciosa* Dana, from Samoa, but can be distinguished by the following characters:

1.—All the granules are larger and more salient in *A. speciosa.*

2.—The inter-regional sulci of the carapace are wider, deeper and more clearly discernible in *A. speciosa.*

3.—The last segment of the abdomen of the male is larger in *A. paraspeciosa.*

A. speciosa Dana is found in Samoa while *A. paraspeciosa* occurs at Davao, New Britain, Samarai, Papua, and the Barrier Reef, Queensland.

In examining the collections in the Macleay Museum, Sydney, I found the original material of *Chlorodius perlatus* Macleay (= *Actaea perlata* Macleay) which was originally recorded from South Africa and although *A. paraspeciosa* bears a resemblance to *A. perlata* that species appears to be confined to the Western Pacific.

In the field I have observed *A. paraspeciosa* as a commensal upon the branches of living *Acropora* corals, sharing the habitat with *Trapezia* species and *Cymo* species.

MATERIAL.—Holotype, 12 mm. (Cat. No. A.M.N.H. 8356). Five males 9–13 mm., nine females 8–15 mm., collected by Godfred R. Oesch.

LEPTODIUS A. M. EDWARDS

Leptodius A. M. EDWARDS, 1863, Ann. Sci. Nat., (4) XX, p. 284.

LOGOTYPE.—*L. exaratus* (H. M. Edwards), 1834. Specified by Rathbun, 1930, Bull. 152, U. S. Nat. Mus., p. 296.

TYPE LOCALITY.—Coasts of India.

Leptodius davaoensis, new species

Figures 13 and 14

Carapace flattened, granulated microscopically and punctate. The areolations are strongly defined, those near the anterolateral margins, 1L, 2L, 3L, 4L, 5L, are developed into lobules.

The anterolateral are shorter than the posterolateral margins and are armed with five teeth, including the external orbital angle increasing in size posteriorly. There is a thick tomentose fringe just below the anterolateral margins and visible between the teeth of the margin. The front is declivous divided into two teeth, the outer of which are produced into small rounded teeth. The orbits are small with two fissures in the upper margin. There is a strong tooth below the outer angle which is prolonged beyond the angle. The lower orbital border is sinuous, the inner angle broadly triangulate and visible beyond the upper angle. The epistome is well developed and smooth. The sub-hepatic and pterygostomial regions close to the buccal orifice are devoid of tomentum.

The external maxillipeds are smooth and bare and completely close the buccal frame.

The chelipeds are unequal; the merus produced beyond the anterolateral margins of the carapace; the carpus is compressed, the upper surface is granulated, the granules forming irregularly anastomosing lines. There is a well-developed groove parallel and close to the articulation with manus; the inner angle is broadly triangulate and capped by a spinule. Manus compressed, longer than broad, the upper surface granulated, lower half smooth. The immobile finger is equal in length to the upper margin of the manus. The dactylus is slender and longer than the manus and armed with four teeth. The tips of both fingers are spoon excavate.

The ambulatory legs are slender; the merus smooth and fringed with tomentum, the distal articles are granulated upon the upper margins. The sternum of the male is smooth and shining.

Leptodius davaoensis is related to *L. australis* Ward but differs in having:

1.—The carapace flatter.
2.—The frontal lobes differently shaped.
3.—The chelae granulated.
4.—The hands shorter and more robust.
5.—The spinate process above the first anterolateral tooth of *L. australis* missing.

MATERIAL.—Holotype, male 18 mm. (Cat. No. A.M.N.H. 8347), forty-one males 9–18 mm., sixteen females 7–12 mm., collected by Godfred R. Oesch.

Leptodius sanguineus philippinensis, new subspecies

Figures 15 and 16

The typical form of *L. sanguineus* A. M. Edwards comes from Mauritius and, as I have material from the type locality, I have been able to compare the Philippine material.

Leptodius sanguineus philippinensis differs from *L. sanguineus* in having:

1.—The lateral teeth of the front less produced and less acuminate.
2.—All the teeth in the vicinity of the orbits less acute.
3.—The orbital hiatus narrower, and the base of the antenna not extending into it as far as in *L. sanguineus*.
4.—The anterior margin of the merus of the external maxillipeds has a less deep cleft.
5.—The fingers of the chelae are shorter.
6.—The propodites and dactyli are less coarsely granulated.

MATERIAL.—Holotype, male 37 1/2 mm. (Cat. No. A.M.N.H. 8520), collected by Dr. Van Name. Four males 23–31 mm., collected by Godfred R. Oesch. Eight females 18–25 mm., collected by Dr. Van Name and Godfred R. Oesch.

CHLORODIELLA RATHBUN

Chlorodiella RATHBUN, 1897, Proc. Biol. Soc. Washington, II, p. 157; 1930, Bull. 52, U. S. Nat. Mus. Washington, p. 462.

LOGOTYPE.—*Chlorodiella niger* (Forskal).

TYPE LOCALITY.—Red Sea. Specified by Rathbun, 1897.

The genus *Chorodiella* is represented in the present collection by *Chlorodiella hirtipes* (Adams and White) of which there are sixty-four specimens, and by a second series of eighteen specimens which appear to be a new species and for which I suggest the name *Chlorodiella davaoensis*.

The material at my disposal enables me to suggest the following distribution of *Chlorodiella* species in the Indo-Pacific region:

C. niger Forskal, Red Sea.
C. hirtipes Adams and White, Philippine Islands.
C. davaoensis, new species, Philippine Islands.
C. cytherea Dana, Samoa, Fiji and perhaps the Hawaiian Islands.

Chlorodiella davaoensis, new species

Figures 17 and 18

Carapace smooth and glossy; regions indistinct; a few scattered punctations. Front formed of two broad rounded lobes strongly deflexed; a distinct cleft between the outer angle of the front and the orbital angle. The anterolateral margin armed with four unequal teeth of which the first is the smallest and fused with the

orbital angle; the second and third are subequal and widely separated, the fourth is small and placed close to the third. The posterolateral margins are longer than the anterior margins.

The eyes are large and fit snugly into the orbits, the upper orbital borders are raised and have traces of two sutures, a shallow V-shaped cleft just below the outer angle. The orbital hiatus is narrow and filled by the antenna. The sub-hepatic and pterygostomial regions are smooth and naked. The epistome is well developed, not sunken.

The external maxillipeds are smooth and completely fill the buccal frame. The chelipeds are unequal; the merus extends beyond the lateral margins of the carapace by a little more than half its length; there is a broad obtuse tooth near the proximal end of the anterior margin; carpus globose, the inner angle spinate. The upper border of the manus is equal to the width. The outer surface proximally wrinkled, the wrinkles transverse. Both fingers are curved so that they meet at the tips. Two teeth on the dactylus, one on the immobile finger. The smaller cheliped agrees with the large except that the manus is not as large and the fingers are less arched.

The ambulatory legs are slender, the tips of the dactyli are armed with two spines.

C. davaoensis differs from *C. hirtipes* in the following characters:

1.—The outline of the carapace which in *C. hirtipes* is more transverse.

2.—The anterolateral margins are more dentate in *davaoensis*.

3.—The anterior margin of the merus of the cheliped is armed with a curved acuminate spine n *C. hirtipes*.

MATERIAL.—Holotype, male 10 mm. (Cat. No. A.M.N.H. 8364), twelve males 7 to 10 mm., five females 6 to 10 mm.

CHLORODOPSIS A. M. EDWARDS

Chlorodopsis A. M. EDWARDS, 1873, Nouv. Arch. Mus. Hist. Nat. Paris, IX, p. 277.

LOGOTYPE.—*C. melanochirus* A. M. Edwards, 1873. Specified by Ward, 1932, Australian Zoologist, VII, III (Sept. 15), p. 250.

TYPE LOCALITY.—New Caledonia.

The following species are known to me by examination of specimens from the Indo-Pacific:

Chlorodopsis melanochirus A. M. Edwards. Barrier Reef, Queensland; Philippines.

Chlorodopsis melanodactylus A. M. Edwards. Barrier Reef, Queensland; Papua.

Chlorodopsis pilumnoides (Adams and White). Queensland (Mainland); Singapore; Philippines.

Chlorodopsis granulatus Stimpson. Singapore.

Chlorodopsis scabriuscula (Dana). Barrier Reef, Queensland.

Chlorodopsis pugil (Dana). Samoa; Philippines.

Chlorodopsis venusta Rathbun. Barrier Reef, Queensland.

Chlorodopsis miersi Ward. Queensland (Mainland).

Chlorodopsis philippinensis, new species

Carapace broader than long, flat posteriorly, convex anteriorly; distinctly areolated, interregional sulci, smooth and free of hair; the areolae are covered with light brown pubescence. The front is formed of two broad lobes, outer angles of which are produced into triangulate subacute teeth. The anterolateral margins are divided into four equal teeth not counting the external orbital angle; each tooth has large granules on its slopes. The posterolateral margins are slightly concave.

The orbits are large, the upper margins with two sutures. The epistome is well developed and clothed with pubescence. The sub-hepatic region is coated with pubescence. External maxillipeds are bare and polished.

The chelipeds are unequal, the merus extends beyond the margin of the carapace, the carpus is rugose and with spinose granules, the manus of the larger cheliped with rows of spinose granules on the upper surface, but becoming smooth on the lower and outer surfaces. The dactylus is equal in length to the upper margin of the manus; the immobile finger is punctate on the outer surface. The fingers are dark brown and the color extends back on to the palm.

The ambulatory legs are covered with pubescence and the distal articles are clothed with longer and thicker hairs.

The sternum of the male is smooth and bare.

MATERIAL.—Holotype, male 9 mm., six males 8 to 10 mm., four females 7 to 9 mm.

SPHAEROZIUS STIMPSON

Sphaerozius STIMPSON, 1858, Proc. Acad. Nat. Sci. Philadelphia (March), 35. BALSS, 1932, Zeitschr. f. wiss. Zool., CXLII, p. 512.

HAPLOTYPE.—*S. nitidus* Stimpson.

TYPE LOCALITY.—Hongkong.

Sphaerozius oeschi, new species

Figures 19 and 20

Carapace wider than long, very convex longitudinally, less so transversely. The surface smooth and without indications of regions. The anterolateral margins arcuate, slightly shorter than the posterolateral margins and divided into four teeth, excluding the external orbital angle, the last two teeth are subacute and there is a short carina inward across the carapace from the apex of the last tooth; there is a well-developed smooth ridge extending just below the posterolateral margin from the base of the last antero-

lateral tooth to the epimeral margin of the carapace. A well-marked transverse groove extends close to the posterior margin of the carapace.

The front is declivous, divided into two teeth with very faint indication of an outer tooth on each side. The orbits are small, the margins raised, two closed sutures placed near the outer angle and one just below the outer angle. The orbital hiatus is narrow and filled by the flagellum of the antenna. The antennules are large and lie transversely. The epistome is small and sunken. The buccal orifice is broader than long and closed by the external maxillipeds. The external maxillipeds are smooth and devoid of hair. The sub-hepatic and pterygostomian regions are smooth and devoid of hair.

The chelipeds are very unequal in both sexes; the merus does not extend beyond the lateral margins of the carapace, the upper margin is strongly curved and sharply defined with a slight indentation near the distal extremity. The carpus is smooth and swollen externally, the inner angle bluntly produced. The manus is inflated and punctate on the outer surface and there is a well-marked groove extending along the external surface of the immobile finger and ending abruptly on a line with the articulation of the dactylus. The immobile finger is as long as the upper margin of the manus and is armed with a large proximal tooth. The dactylus is curved, punctate and with a single longitudinal groove on the outer surface close to the upper margin; the teeth are small and seven are quite separate; the proximal one is formed by three distinct cusps. The smaller chela agrees with the larger except in the details of the teeth on the fingers.

The ambulatory legs are unarmed, the distal articles have the margins sparsely clothed with stiff golden hairs.

The masculine abdomen is broad and extends as far as the first pair of ambulatory legs. In mature females the abdomen completely covers the sternum.

MATERIAL.—Holotype, female 17 mm. (Cat. No. A.M.N.H. 8368), nine males 8–13 mm., seventeen females 9 1/2–17 1/2 mm., collected by Godfred R. Oesch.

RUPPELLIOIDES A. M. EDWARDS

Ruppellioides A. M. EDWARDS, 1867, Sci. entom. France, (4) VI, p. 279.

HAPLOTYPE.—*Ruppellioides convexus* A. M. Edwards.

TYPE LOCALITY.—New Zealand. (Not since recognized from the type locality, but known to me from the mainland of Queensland and Papua.)

Ruppellioides philippinensis, new species

Figures 21 and 22

Carapace broader than long (11 by 16 mm., in the type), flat posteriorly and convex anteriorly. The regions are outlined in the anterior half by the deep sulci; the posterior half is without sulci but is granulated. The anterolateral margins are convex and armed with five procurved teeth, the posterior slope of each tooth is carinate and granular. The posterolateral margins are slightly concave. The posterior margin is raised into a line of fine granules. The front is declivous and divided into four teeth by shallow grooves, the outer tooth is fused with the base of the antenna and there is a narrow orbital hiatus in which the antennal flagella stands. The orbits have a dorsal inclination, the upper border has faint traces of two fissures. The eyes fit snugly into the orbits. The antennules are transverse. The epistome is smooth. The anterior margins of the buccal frame are broken by the efferent branchial canals. The external maxillipeds completely close the buccal orifice. The merus is equal to half the length of the ischium and is coarsely granulated with the anterior margin deeply indented to correspond with the apertures of the buccal frame.

The chelae are markedly unequal. The merus is not visible beyond the margin of the carapace; the carpus is coarsely granulated and rugose. The manus is coarsely granulated on the outer upper surface, the granules diminish in size toward the lower border and fingers, the tips of the latter are perfectly smooth. The dactylus and immovable finger are armed with coarse teeth; there is a large pearl-like tooth at the base of the dactylus on the larger hand. The ambulatory legs are coarsely granulated. The sternal surface of the male is smooth with worn granules.

Ruppellioides philippinensis differs from *Ruppellioides convexus* A. M. Edwards in having:

1.—The fingers of the larger chelae longer and the large tooth longer.

2.—The last segment of the male abdomen longer.

Ruppellioides convexus A. M. Edwards is known to me from Lindeman Island, Bathurst Head, Queensland, and Port Moresby, Papua. In Australian seas the species is confined in its occurrence on the intertidal region to the thick incrusting layer of living oysters where it hides in tunnels beneath the oysters.

MATERIAL.—Holotype, male 10 mm. (Cat. No. A.M.N.H. 8352), six females 11–16 1/2 mm.

ACTUMNUS DANA

Actumnus DANA, 1851, Journ. Amer. Sci. and Arts., (2) XII, p. 128; 1852, U. S. Explor. Exped., Crust., I, p. 243.

LOGOTYPE.—*Actumnus tomentosus* Dana.

TYPE LOCALITY.—Samoa.

The following species of *Actumnus* are known to me by examination of specimens:

A. setifer de Haan, Japan; *A. squamosus* de Haan, Japan; *A. tomentosus* Dana, New Caledonia; *A. pugilator* A. M. Edwards, New Caledonia and Queensland. *A. tessellatus* Alcock, Arabia; *A. bonieri* Nobili, Arabia; *A. verrucosus* Henderson, Ceylon; *A. carinatus* Bouvier, Mauritius.

Actumnus davaoensis, new species

Figures 23 and 24

Carapace convex but not globose; areolations faint, surface granulate and covered with a fine coat of thin bristles, irregular in length and not obscuring the surface of the carapace. The front is almost equal to half the width of the carapace, divided into two broad, rounded teeth, the outer angles of which are produced into triangulate teeth. The anterolateral margins are thin and armed with four teeth, each capped with a spine except the external orbital angle. The posterolateral margins are almost straight though they converge rapidly toward the posterior margin. The orbits are large with traces of two fissures in the upper margin. The orbital hiatus is narrow and filled by the antenna. The epistome is smooth and slightly sunken. The sub-hepatic and pterygostomian regions appear smooth and covered with fine hairs. The external maxillipeds are finely granulated. The chelae are very unequal, the merus scarcely visible beyond the margin of the carapace; the external surface of the carpus of both chelae is smooth proximally, near the distal extremity granules and spinose granules appear. The external surface of both hands have longitudinal rows of well-separated spinose granules which appear sharper and more thickly placed on the smaller hand. The fingers are very short and the dactylus has a few spinules on the upper, proximal half.

The ambulatory legs are compressed, clothed with long golden hairs which do not impart a fringed appearance to the limbs. The sternal surface is smooth and clothed with similar hairs to those on the dorsum of the carapace.

HOLOTYPE.—Male 10 mm. (Cat. No. A.M.N.H. 8299), collected by Godfred R. Oesch.

A. davoensis differs from *A. tomentosus* Dana in the following characters:

1.—The carapace of *A. tomentosus* is more transverse in outline so that the anterolateral margins form a strong curve away from the orbit; in *A. davaoensis* this margin is directed abruptly back from the orbit.

2.—The frontal teeth are rounded in *A. davaoensis* but in *A. tomentosus* they are truncated.

3.—The tomentum on the carapace of *A. tomentosus* imparts a velvety appearance, but the more scattered and bristle-like hairs of *A. davaoensis* do not obscure the surface of the carapace.

4.—The fingers of the chelae are shorter and thicker in *A. davaoensis*.

ERIPHIA LATREILLE

Eriphia LATREILLE, 1817, Nouv. Dict. Hist. Nat., XX, p. 404.

HAPLOTYPE.—*E. spinifrons* (Herbst).

TYPE LOCALITY.—Adriatic.

The following species of *Eriphia* are known to me by examination of specimens:

Eriphia gonagra (Fabricius), Cuba; *Eriphia squamata* Balboa, Panama; *Eriphia spinifrons* (Herbst), Egypt; *Eriphia norfolcensis*, McCulloch; *Eriphia sebana* (Shaw), Singapore; *Eriphia scabricula* Dana, Fiji.

During an examination of the brachyuran collection in the Macleay Museum in the University of Sydney I found what appear to be the original specimens of *Eriphia fordii* Macleay and *Eriphia smithii* Macleay, both of which were originally described from South Africa.

Eriphia pilumnoides, new species

Figures 25 and 26

Carapace broader than long (15 by 23 mm., in the type), flat posteriorly, convex anteriorly; the regions are distinctly outlined by shallow sulci, surface entirely covered by forwardly directed coarse hairs. The anterolateral margin is strongly curved and armed with six procurved spines which diminish in size posteriorly. Posterolateral margins are slightly convex and without trace of a margin. The posterior margin is raised into a low ridge. The front is formed of two broad lobes, the median incision is broadly V-shaped, the outer angle of each lobe is rectangular. The orbits are large and set well into the dorsal surface of the carapace, supraorbital margin is raised and granulate with traces of two fissures. The lower border is thin and produced and armed with spinate granules which are large near the inner angle, a closed fissure is present just below the outer angle. The sub-orbital and sub-hepatic regions are coarsely granulated, especially near the antenna; the epistome is smooth and sunken. The anterior margin of the buccal frame is raised into a thin lamina broken on each side by the afferent branchial canals. The external maxillipeds completely close the buccal orifice. The maxillipeds are clothed with a shaggy coat of long hair. The chelae are unequal in size; the merus does not extend beyond the margin of the carapace; the carpus is convex and clothed with a thick coat of hairs. The manus is slightly longer than broad, the outer surface coarsely granulate and coated with shaggy hair except on the lower border which is bare and granulated. The fingers in both chelae are sulcated and finely granulate.

The ambulatory legs are slender, the distal articles sparsely clothed with stiff hairs.

The sternum of the male is bare and punctate.

HOLOTYPE.—Male 23 mm. (Cat. No. A.M.N.H. 8301).

ADDITIONAL MATERIAL.—Four males 19–22 mm., one female 23 mm., collected by Godfred R. Oesch.

Eriphia pilumnoides differs from *E. scabricula* Dana in the following characters:

1.—The carapace comparatively narrower.
2.—The bristles entirely cover the carapace.
3.—The abdomen of the male broader.
4.—The two lobes of the front are more developed and the median indentation deeper.

TRAPEZIA LATREILLE

Trapezia LATREILLE, 1825, Encyc. method, XX, p. 695.

LOGOTYPE.—*T. dentifrons* Latreille specified by E. Desmarest, 1858, in Chenu, Encyc. Hist. Nat., p. 18.

TYPE LOCALITY.—Red Sea.

I have examined large series of specimens of *Trapezia* from many parts of the Indo-Pacific and studied living material in tropical waters of the eastern Australian coast, Hawaii, Papua, Fiji and New Britain, but I am unable to follow Ortmann's classification (1897, Zool. Jahrb., X, pp. 201–216), there being considerably more species in existence than he allows.

It is interesting to record that during my examination of the Macleay museum collection of Brachyura I came upon the original specimens of *Trapezia subinteger* (Macleay), *Trapezia dentata* (Macleay), and *Trapezia maculata* (Macleay), all of which were originally described from Africa.

Trapezia davaoensis, new species

Figure 27

Carapace broader than long, scattered punctae over the whole surface but more numerous near the front. The anterolateral margins are thin but not lamellate and there is a procurved spine at the juncture of the antero- and posterolateral margins. The posterolateral margins are strongly convergent. The orbits are large and oblique, the outer angle produced into a strong spine; lower orbital border not strongly developed, entire and crescentic in outline; the inner angles are developed into broadly triangulate teeth visible beyond the front from a dorsal view. The width of the front is equal to half the maximum carapace width; the teeth are not strongly developed. The antennae are not within the orbital hiatus. The exopodites of the external maxillipeds are almost as broad as the endopodites; the merus is twice as long as the ischium and has the outer angle suborbiculate; there is a deep oblique longitudinal groove near the inner margin of the ischium. The merus of the cheliped has the anterior margin cut into six teeth the margins of which are granulated. The inner angle of the carpus is slightly produced and there is a broad tooth about half way between this angle and the articulation with the manus. The manus is punctate and has a mammiform swelling proximally on the dorsal surface; when flexed against the carpus, this swelling comes between the inner angle of the carpus and the broad tooth on its margin. The upper margin of the manus is thin but not carinate, the lower margin is thin and entire; there are some faint dark brown transverse lines extending from the upper margin, but these fade out before reaching a level with the gape.

The dactylus and immovable finger are equal in size; both are irregularly dentate. The ambulatory legs are slender; the distal articles with long hairs. A few large dark brown spots on the merus and carpus, two longitudinal lines of brown on the upper and two on the lower surface of the propodus. Dorsum of carapace creamy white with brown band across the front. Chelae reddish brown; legs similar but with spots and lines as noted.

HOLOTYPE.—Female 8 mm. (Cat. No. A.M.N.H. 8348).

ADDITIONAL MATERIAL.—Six males 5 to 8 mm., seven females 6 to 8 mm.

AFFINITIES.—*Trapezia davaoensis* is allied to *T. dentata* Macleay and *T. miersi*, new name, but differs from them in the following characters:

1.—The frontal teeth are less developed in *T. davaoensis*.
2.—The teeth of the front are more produced in *T. davaoensis*.
3.—The merus of the cheliped is longer in *T. miersi*.
4.—The fingers of the cheliped are longer in *T. miersi*.
5.—The external maxillipeds of *T. miersi* are without the longitudinal groove on the ischium.

Trapezia plana, new species

Figure 28

Carapace wider than long, moderately convex, with few scattered punctae. Lateral margins are thin, not carinate, and with a blunt tooth instead of a spine at the juncture of the anterolateral and posterolateral margins. The orbits are large and oblique, the outer angle is blunt and not produced. The inner angle of the lower border only slightly visible beyond the front. The front is broad and produced but not deeply dentate.

The merus of the chelipeds is as broad as long, with the anterior margins cut into six truncated teeth; the carpus is small, the inner angle formed by a broad and blunt tooth; a second tooth of equal size lies between the angle and the articulation with the manus. The manus is densely punctate; the upper margin is thick and rounded; the lower margin is thin and lined with granules almost to the tip of the immovable finger. The dactylus is not as broad as the immovable finger; both are armed with well-developed teeth.

The ambulatory legs are not compressed; the distal articles have scattered long hairs and faint traces of pale brown spots. Coloration: Uniform pale yellowish brown, fingers of chelae darker.

HOLOTYPE.—Male 9 mm. (Cat. No. A.M.N.H. 8311).

ADDITIONAL MATERIAL.—Three males 7, 7.9 mm., one female 7 mm.

AFFINITIES.—*Trapezia plana* is allied to *T. subinteger* (Macleay) but can be readily distinguished by the following characters:

1.—In the form of the front.
2.—In the dentition of the merus of the cheliped.
3.—The presence of granules on the lower border of the manus of *T. plana*.
4.—In the regular development of the dentition of the fingers of the cheliped in *T. plana*.

Trapezia miersi, new name

Trapezia guttata MIERS, 1888 (not Ruppell), Challenger, Zool. Brachyura, p. 166, from Fiji.

This species is known to me from Fiji and Papua.

Grapsidae

PARAPYXIDOGNATHUS, NEW GENUS

Pyxidognathus A. M. Edwards was originally erected for a single species, *P. granulosus* A. M. Edwards, from Fiji. I have examined a fine male from a fresh or brackish water stream in Fiji, which is housed in the Macleay Museum, Sydney.

Parapyxidognathus differs from *Pyxidognathus* in having:

1.—The carapace comparatively broader.
2.—The front not produced.
3.—The exopodite of the maxillipeds broader.
4.—The chelae are extremely unequal in size.
5.—The ambulatory legs longer.

Parapyxidognathus deianira (de Man)

Figures 29 and 30

Pyxidognathus deianira DE MAN, 1888, Journ. Linn. Soc. London, XXII, p. 148, Pl. XX, figs. 4–6.

MATERIAL.—Eighty-seven males 4 to 12 mm., seventy females 4 to 10 mm., collected by Godfred R. Oesch.