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## CRUSTACEA BRACHYURA FROM THE COASTS OF QUEENSLAND.

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# CRUSTACEA BRACHYURA FROM THE COASTS OF QUEENSLAND.* 

By Melbourne Ward, F.R.Z.S., F.Z.S., Honorary Zoologist Australian Museum, Honorary Collector Queensland Museum.
(Plates I-III.)
Super-Family BRACHYRHYNCHA.
Family Gonoplactidae Dana.
CRYPTOLUTEA gen. nov.
CRYPTOLUTEA LINDEMANENSIS Orthotype.
Type locality, Lindeman Island, Whitsunday Passage, Queensland.
Generic description. - The carapace is moderately convex longitudinally; transversely flat. The fronto-orbital width is more than half the width of the carapace. The antero-lateral màrgins are arcuate but unarmed. Postero-lateral margins are parallel. The eye stalk is as long as the antennulary fossa, fitting snugly into the orbit. Basal article of the antenna does not reach the front. The epistome is smooth and slightly concave and of equal proportions throughout its extent. The buccal frame does not widen anteriorly. The space between the external maxillipeds is filled by the palpi. The antero-lateral angle of the merus of the external maxilliped is rectangular and not at all prominent. Chelipeds are unequal, but not markedly so. The third legs are longer than the others by half the length of the dactylus. The masculine abdomen is narrower at the base than the sternum and all seven segments are free.

CRYPTOLUTEA LINDEMANENSIS sp. nov.
(Pl. I, figs. 1, 2, 3.)
The carapace is three-quarters as long as it is broad. The surface is smooth; there is no indication of regions except for the depressions separating the cardiac from the gastric. Lank hairs are scattered over the surface and form thick fringes along the margins and front, effectively concealing the eyes from a dorsal view. The vertical walls of the carapace, composed of the epimeral and anteriorly of the sub-hepatic and pterygostomian regions, are smooth and hairy only on the posterior third.

The palms of the chelipeds are unequal in the males. The merus is hidden beneath the carapace, the upper border has a strong tooth near the distal extremity. The carpus is smooth and compressed, its inner angle blunt, granulated and clothed with a dense fringe of scraggy brown hairs; this fringe extends along the anterior margins.

* The types are housed in the Queensland Museum, Brisbane.

The palm of the larger cheliped is smooth on the surface with a few well marked punctae; near the lower border is a row of small sub-spinate granules, their points directed towards the pollex; on the pollex is a shallow groove in which a line of coarse punctation may be seen. The small palm resembles the larger except for the more developed groove on the pollex.

In the females the chelae are equal in size; the lower part of the outer surface of the palm of both is more granulated than in the male.

Relationships.-Cryptolutea lindemanensis bears a superficial resemblance to Speocarcinus luteus McNeil, Port Stephens, N.S.W., but differs in the form of the external maxillipeds, in the form of the fingers of the larger cheliped, being shorter and thicker in lindemanensis; in the short palm of lindemanensis. The cornea of the eye of C. lindemanensis is not visible from a dorsal view.

Material.--Six males ranging from $7-15 \mathrm{~mm}$., in greatest breadth of carapace. The type is 16 mm . broad.

Ten females ranging from 6.5 to 16 mm . greatest carapace width.
Habitat.-All the material here recorded came from a region on the western side of Lindeman Island where stones lie partially buried in mud. At low water this region does not drain off completely, so that on turning over a stone, a pool quickly forms where the stone had lain. Cryptolutea excavates intricate burrows under the stones, extending from one to the other at an inch or two below the surface of the mud.

PRONOTONYX nom. nov.
Pronotonyx lcevis (Miers) Orthotype.
Type Locality, Arafura Sea, 32 fms .
Pronotonyx differs from the related Notonyx A. M. Edwards, New Caledonia, in all the characters enumerated below :-

Carapace broader than long, smooth and shining. Front more than one third the width of the carapace. A strong tooth on the upper border of the merus of the cheliped. The merus of the external maxilliped has the antero-lateral angle auriculated. The anterior margin of the buccal frame is entire. The basal segment of the masculine abdomen almost reaches the coxi of the fifth pair of ambulatory legs.

## PRONOTONYX Levis Miers.

(Pl. I, figs. 4, 5, 6.)
Ceratoplax laevis Miers, Zool. Alert, Crust., 1884, 244. Dredged $32-36$ fms. Arafura sea. The species occurs in deep water in the vicinity of Lindeman Island where I have dredged it on mud.

Material.-Two males measuring 9 and 9.5 mm ., in maximum carapace width. Three females measuring $7 \cdot 5,8,8.5 \mathrm{~mm}$., in maximum carapace width. The female measuring 8 mm ., has an immature abdomen and is infested by the Rhizocephalid barnacle Thomsonia sp.

Family Xanthidae Alcock.
PSEUDOCRYPTOCGLOMA gen. nov. Orthotype PSEUDOCRYPTOCGLOMA PARVUS sp. nov.
Type Locality, Lindeman Island, Whitsunday Passage, Queensland.
Generic Description.-Carapace three-quarters as long as it is broad. The posterior portions of the carapace are flat, smooth and shining. The epistome is twice as wide as it is long. The anterior margin of the buccal frame is raised and has an obsolete fissure on each side. The merus of the external maxilliped has the antero-lateral angle sub-auriculate. The buccal frame is completely filled by the external maxillipeds.

## PSEUDOCRYPTOCGLOMA PARVUS sp. nov.

(PI. I, figs. 7, 8, 9.)
The posterior and median portions of the carapace are flat, smooth, shining and devoid of hair. Fringes of long shaggy hairs cross the front, eyes, hepatic regions and antero-lateral margins. The chelae and ambulatory legs are similarly fringed with long hairs. The front is equal to one third of the breadth of the carapace. The antero-lateral margins are arcuate and slightly shorter than the postero-lateral margins and are obscurely dentate.

The basal article of the antenna fills the orbital hiatus. The antennules are large, the fossæ take up the entire under surface of the front.

The chelae are broad and compressed, sub-equal. The merus is hidden by the margin of the carapace; the carpus has a broad sharp angle, the outer surface smooth and covered with hair. The upper margin of the palm is granulated under the fringe of hair, the outer and inner surfaces are smooth, the margin is sinuous. The pollex is broad and bent slightly below the outline of the palm; the dactylus is bent sharply downward proximally; the prehensile edges of both fingers have a few teeth proximally and both tips acuminate. There is a strongly developed line of punctre parallel with and close to the lower border extending from the tips of the pollex to the middle of the palm; this is more marked in the smaller cheliped.

The ambulatory legs are long and slender, their upper borders lined with thick fringes of hairs, becoming more dense on the distal articles. The sternal surface is smooth and polished.

Material.-Twenty-eight males measuring from 6 mm . to 10.5 mm . maximum carapace width. Twenty-six females measuring from 6 mm . to 10 mm . maximum carapace width. The type is a male measuring 10 mm ., in maximum carapace width.

Habitat.-The species occurs under stones on mud at about half way down the intertidal area.

Relationships.-Pseudocryptocoloma differs from Cryptocoeloma in the following characters :-

Pscudocryptocoloma. Cryptocoloma
The eyes are visible from a dorsal view.
Ant. lat. margins of carapace lined with hairs of unequal length.

Exposed surface of carapace is smooth and Exposed surface of the carapace is dull, polished. uneven and sculptured on the branchial regions.

Pseudocryptocceloma differs from Heteropilumnus De Man in the form of the chela, in the entire margin of the carapace, in the development of the posterior margin of the carapace which is wider than that of Heteropilumnus.

Genus CHLORODOPSIS A. M. Edwards.
Chlorodopsis A. Nilne Edwards, Nouv. Archiv. Mus. Hist. Nat. Paris, ix, 1873, 227. Ward, Australian Zoologist, vii, iii, (15 Sept.) 1932, 250.

CHLORODOPSIS MIERSI nom. nov.
Chlorodopsis granulatus Miers (nec. Stimpson) Zool. Alert, Crust., 1884, 216. Pl. xxi, fig. A., Port Denison, Port Molle.

> (Pl. II, figs. 1, 2, 3.)

I have a mature male of Chlorodopsis granulatus Stimpson from Singapore, and the following notes on the Australian species are based upon this specimen and one of similar proportions from Lindeman Island, Queensland.

1. The eyes fit the orbits completely in miersi.
2. The process on the base of the antenna is joined to the upper angle of the orbit, not joined in miersi.
3. The dark colour of the palm almost covers the whole surface in C. granulatus.
4. The lobes of the front are more produced in C. granulatus.
5. The pubescence of the carapace is different, being of a uniform length in miersi, while there are some longer hairs on the lateral portions in granulatus.
Material.-Thirty-two males ranging from 7 to 17 mm ., maximum carapace width ; twenty-three females ranging from 8.5 to 15 mm ., maximum carapace width.
memoirs of the quemnsland museum, Vol. Xi, Plate I.


Queensland Crustacea.-Melbourne Ward.
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## Genus ETISODES.

Etisodes Dana, Sillimans Amer. Journ. Sci. and Arts (2), xii, 126 (footnote), Pro. Philad. Acad. Nat. Sci., 1852, 77 ; and U.S. Explor. Exped. xiii I, 1852, 185. Type E. frontalis Dana, Sooloo Sea.

In 1932 I recorded Etisodes Dana as a sub-genus of Etisus A. M. Edwards; since then I have examined considerably more material and have come to the conclusion that Etisodes should be considered a distinct genus.

## ETISODES AUSTRALIS sp. nov.

(Pl. II, figs. 4, 5, 6.)
Type locality.-Lindeman Island, Whitsunday Passage, Queenstand.
The carapace is broader than long. The dorsal surface is flat posteriorly, slightly convex anteriorly. The inter-regional sulci are moderately developed; the areolations are finely granulated, the granules tend to form short transverse lines, there are a few hairs on these ridges. The antero-lateral margins are arcuate, quadridentate, each tooth procurved and its margin granulated.

The upper margin of the orbit is broken by two fissures, a third deeper one below the external angle; the lower margin is entire.

The flagellum of the antenna does not enter the orbit, there is a prolongation of the basal article which fills the orbital hiatus.

The antennulary fossæ are large, square. The epistome is smooth and restricted. The sub-hepatic and pterygostomian areas are granulated and tomentose.

The external maxillipeds fill the buccal frame. The ischia are smooth and polished, the meral articles are finely granulated; few golden hairs on the anterior margins of the maxillipeds. The sternum is polished and sparsely punctate.

The masculine chelae are sub-equal, the merus projects beyond the edge of the carapace; the carpus is very rugose, crossed by fine lines of granules which tend to become squamiform and there is a short, sharp spine on the inner angle. The manus is compressed and as broad as the superior margin is long, squamose above, becoming smooth towards the lower margin. The pollex is deep and has two ridges on the outer surface; the dactylus is strongly curved, meeting the pollex only at the tip, both are strongly spoonexcavated. The smaller chelae has the manus and fingers long and narrow. The brown colouration extends back on to the palm from the pollex.

The ambulatory legs are slender, hairy and have the upper margins of the last three articles ornamented with sharp granules.

Material.-The type is a male measuring 12.5 mm ., maximum carapace - width.

Fifteen males ranging from 8.5 to 16.5 mm ., maximum carapace width. Three of these are parasitised by Rhizocephalid barnacles, Sacculina. Eleven females ranging from 10 mm ., to 41 mm . maximum carapace width. Six of these are infested by Sacculina.

## LEPTODIUS.

Leptodius A. Milne Edwards, Ann. Sci. Nat. (4), xx, 1863, 284. Ward, Australian Zoolog. vii, iii, 1932, 244. Type L. exaratus (H. M. Edwards).

## LEPTODIUS AUSTRALIS sp. nov.

(Pl. II, figs. 7, 8, 9.)
Type locality, Lindeman Island, Whitsunday Passage, Queensland.
The carapace is broader than long, very distinctly areolated; flat posteriorly, anteriorly convex, the surface is granulated anteriorly, the hepatic region has two elevated granular areas near the margin, the sub-hepatic regions are granulated and the epimeral walls of the carapace are clothed with long hairs. The upper margin of the orbit has two obsolete fissures and both margins are granulated. The antennular flagellum occupies the orbital hiatus. - The antennules lie transversely. The epistome is narrow. The external maxillipeds completely fill the buccal orifice; the merus is granular, the ischium smooth and punctate. The sternum is finely granular and shining.

The chelae are unequal; the merus projects beyond the edge of the carapace, the carpus is coarsely granulated with an acuminate inner angle. The manus is coarsely granulated above, smooth at the lower border; the dactylus and pollex meet only at their tips.

The distal articles of the ambulatory legs are coarsely granulated. The proportions of the carapace, also the form of the teeth of the antero-lateral margins and the greater development of granules, separate australis from the other species on the Australian coast.

Material.-Fifteen males ranging from 11.5 to 19 mm . maximum carapace width. Sixteen females ranging from 9 mm . to 15 mm . maximum carapace width. Type male 13 mm . maximum carapace width.

Four other species have been recognised from the coast of QueenslandL. sanguineus H. M. Edwards, Isle de France, L. exaratus H. M. Edw., Coasts of India, L. nudipes (Dana) Mangsi Island, L. crassimanus A. M. Edw., New Caledonia.


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So far as my own field experience is concerned the species of Leptodius enumerated are localised in their occurrence on the coast. $L$. sanguineus and L. nudipes are characteristic of the outer coral reefs, L. exaratus, L. crassimanus and $L$. australis are found on the mainland and the shores of the mainland islands. Each species is limited to certain definite regions in a given locality. Hence we find $L$. exaratus under stones from just below high tide level down to the end of the boulder zone which is approximately the limit of the neap lows. L. crassimanus inhabits a boulder zone below low tide on rocky shores which slope downward and do not merge into a coral reef formation. $L$. australis inhabits a narrow belt of rocks at neap low-tide level.
L. sanguineus is found under masses of beach rock conglomerate on coral cays such as the Capricorn Group, and L. nudipes inhabits the Lagoon Zone where it hides under loose masses of coral.

## BANAREIOPSIS gen. nov.

Banareiopsis australis sp. nov. Orthotype.
Type locality, Lindeman Island, Whitsunday Passage, Queensland.
Generic description.-The length of the carapace is equal to three-quarters of the breadth. The front is equal to approximately one fifth of the carapace breadth. The antero-lateral margin is long and curved and composed of four broad teeth separated by deep and narrow fissures; those between the first, second and third teeth are continued as deep grooves over the sub-hepatic regions, becoming linked up as one groove extending parallel with the margin of the carapace. This formation enables the crab to remove poisonous slime of its host, Sarcophyton sp., from the water which is drawn down the grooves, and the accompanying slime is caught by the thick coat of bristles which covers the grooves.

Banareiopsis differs from Actaea De Haan in the formation of the external maxillipeds, the antennules and by the large size achieved by mature individuals. From Banareia A. M. Edw., by the more globose form of the carapace, the triangulate hiatus between the ischia of the external maxillipeds and the large size of the mature individuals.

## BANAREIOPSIS AUSTRALIS sp. nov.

(Pl. III, figs. 1, 2, 3.)
The carapace is strongly convex; the surface is areolated, the interregional sulci are deep and smooth, the areolae are coarsely granulated. The orbits are small and deep, the margins thick; there are two fissures above and one at the external angle; the lower margin is deeply curved to form
two coarsely granular lobes. The basal antennal article fills the orbital hiatus, leaving a narrow space which connects with the deep sub-hepatic groove. The front is poorly developed and formed into four small rounded teeth which barely cover the antennules. The antennules are folded very obliquely, the basal article of the antenna forms the lateral part of the antennulary fossæ.

The chelae are equal in size and capable of close application against the sub-hepatic regions of the carapace; the merus is compressed the upper surface concave and with shallow grooves which resemble those on the sub-hepatic regions of the carapace; the upper margin is sub-acute and has a broad, blunt tooth near the distal extremity. The carpus is as long as the merus, measured along the upper margin; the outer surface is areolated by shallow smooth sulci and the areolae are granulated. The manus is slightly compressed, the upper margin is broadly rounded and granulated; these granules spread over the upper half, becoming fewer towards the lower margin. The dactylus and immovable finger are blade-like; their tips cross when closed.

The ambulatory legs are short and thick and capable of being closely drawn together in flexion.

The whole animal is covered with a dense coat of short bristles, and tufts of longer and more flexible hairs are situated on the areolae of the carapace.

Material.-One female measuring 44.5 mm ., in maximum carapace width, designated as type.

Twenty females ranging from 24.5 to 40.5 mm ., maximum carapace width. Sixteen males ranging from 24.5 to 40.5 mm ., maximum carapace width. The mature females differ from the males in being thicker through the body; the abdomen is broad, covering nearly the whole of the sternum. The size at which maturity is achieved by the females is not fixed; there are four specimens $26,27,29$ and 30 mm ., broad which have abdomina almost as narrow as the male, there are two others, $24 \cdot 5$ and 28 mm ., which have mature abdomina and another 32.5 has an abdomen of intermediate size.

Super-Family OXYRHYNCHA.

## Sub-Family Acanthonychinae Alcock.

SARGASSOCARCINUS gen. nov.
Orthotype Sargassocarcinus foliatus sp. nov.
Type Tocality, Lindeman Island, Whitsunday Passage, Queensland.
Generic description.-The lateral margins of the carapace are produced into petaloid processes, which are not divided as in Huenia De Haan. The


Gufinsiand Crustacea.-Melbourne Ward.
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rostrum is bifid and steeply deflexed. There is no post-ocular spine. The eyes are fixed in the orbits. The supra-ocular eave is produced into a large flattened spine resembling the rostral spine.

The ambulatory legs are sharply carinated.

## SARGASSOCARCINUS FOLIATUS sp. nov.

(Pl. III, figs. 4, 5, 6.)
The carapace is broader than long, flattened; the surface is irregular and covered with fine tomentum which imparts a punctate appearance. Three low elevations form a triangle on the postcrior portion of the gastric region, the apex directed posteriorly. The posterior margin of the carapace is carinate, its lateral angles acute.

The basal articles of the antennae are broad; the flagella stand in the orbital hiatus between the rostral and supra-orbital spines and are visible in dorsal view. The antennulary fossæ are long and narrow. The epistome is well developed and smooth. The margins of the buccal frame are faintly carinated except at the antero-lateral angles which are distinctly carinate. The external maxillipeds completely close the buccal orifice, the merus is much shorter than the ischium and has the lateral angle truncated. The surface of the sternum near the maxillipeds is moderately excavated. The development of the chelipeds varies in the sexes. Those of the mature male, 10 mm ., maximum carapace width, are massive and compressed and all the margins are carinated; the dactylus is trigonal, the upper margins are carinated, the intervening surfaces are concave. The fingers meet only at the tips when closed and there is a single tooth on the prehensile surface of the dactylus proximally.

Sargassocarcinus foliatus differs from Mimulus cristatipes Balss, Sagamibai, in the proportions of the carapace, and the relative dimensions of the frontoorbital region.

Material.-One female 8 mm ., maximum carapace width, designated as type. Four females ranging from 8.5 to 10.5 mm ., maximum carapace width. Four males ranging from $7 \cdot 5$ to 10 mm . maximum carapace width.

Family PARTHENOPIDAE Alcock.
Sub-Family Eumedoninae Miers.
HARROVIA Adams and White.
Zool. Voy. Samarang, Crust., 11, 1849, 55.
Holotype, H. albo-lineata Adams and White.
Since the original description of the typical species, the following have been described.

Harrovia elegans de Man, Journ. Linn. Soc. London, xxii, 1888, 21, pl. 1, figs. 5 and 6. Elphinstone Ild., Mergui Archipelago.
Harrovia tuberculata Haswell, Proc. Linn. Soc. N.S.W., iv. 1880, 455, pl. xxvii, fig. 1. Darnley Island.
The type is extant in the Macleay Museum in the University of Sydney.
Harrovia albolineata var. longipes Lanchester, Proc. Zool. Soc., London, 1900, 729, pl. xliv, fig. 8. Singapore.
Harrovia japonica Balss, Zool. Anzeiger, v. 52, $1921,177$.
Harrovia purpurea Gordon, Mem. Mus. Royal d'Hist. Nat. Belgique, 1934, 67. Sorong, New Guinea.

HARROVIA PLANA sp. nov.
(Pl. III, figs. 7, 8.)
The carapace is broader than long, dorsal surface convex and with two low elevations transversely placed but without granules or tubercles; the whole carapace is covered with a dense coat of pubescence. The rostrum is truncated, declined and divided into four teeth, two median and two narrow lateral ones which are produced slightly beyond the median pair. The anterolateral margin is quadridentate, the last two are developed into salient triangulate teeth, the first two are equal in size, granulated, inconspicuous, and occupy the greater part of the margin. The eyestalk not enlarged and the cornea is globose.

The chelipeds are approximately one sixth longer than the carapace; the merus is gronulated, as long as the manus measured along the lower margin; the manus is slightly thicker than the merus.

The ambulatory legs are reduced in length towards the fifth pair which are the thickest. The chelae and legs are free of tomentum.

Harrovia plana differs from Harrovia albolineata Ad. \& White as figured by Gordon, 1934, in the shape of the eyestalk and cornea and in the form of the antennae and the rostral lobes.

Material.-One male measuring 6.5 mm ., maximum carapace width designated as type. One female 9 mm ., maximum carapace width.

Type Locality, Lindeman Island, Whitsunday Passage, Queensland.
Habitat.-The species occurs as a commensal upon a Crinoid inhabiting reefs below low tide mark.

OXYSTOMATA.
Family CALAPPIDAE Alcock.
Sub-Family Calappinat Alcock.
Genus CALAPPA Weber.
Calappa Weber, Nomenclator entomologicus, 1795, 92.
Logotype, C. granulata Weber 1795. Specified by Latreille, 1810, Mediterranean.

## CALAPPA TERRAE-REGINAE sp. nov.

(Pl. III, figs. 9, 10, 11.)
Type locality, Lindeman Island, Whitsunday Passage, Queensland.
The carapace is broader than long and strongly convex. Five longitudinal rows of smooth pustulous nodules, the three median rows are more developed than the two lateral ones; the surface of the carapace is finely punctate, especially in the anterior half.

The postero-lateral eaves of the carapace are smooth, the margins dentate and finely granulated; the posterior margin of the carapace is armed with small teeth, the two median are more produced than the others.

The front is bidentate and produced slightly beyond the outer angles of the orbits. There are two closed fissures in the upper margin of the orbit. The orbital hiatus is filled by the antenna. The afferent branchial canal ends below the eye as a simple rounded process which forms the lower orbital border. The antennules fit into fossæ which lie obliquely under the frontal teeth.

The outer surface of the chelipeds is smooth to the unaided eye, but under a lens appears finely venous, the veins extending vertically. This is most developed towards the lower border. The upper half is finely granulated. The upper border is armed with six teeth. Three rows of pearly bosses are disposed in obliquely vertical lines, the median row is the most developed. A fourth row extends parallel with and slightly above the lower border finishing before the pollex is reached. In the larger cheliped the massive tooth on the outer surface of the pollex is almost square, coarsely granulated, these granules form a triangulated patch, the base of which is a little above the lower border, fills the space between the lower border and the fourth row of bosses. The tooth on the outer surface of the dactylus which is opposed to the tooth on the pollex is short and rounded at the tip. The dactylus is compressed and blade-like and strongly curved downwards. In the smaller cheliped there is a low boss covered with granules on the outer surface of the pollex. Both palms have three rows of granules along the lower borders; the outermost is the
most complete, extending from the tip of the pollex to the blunt tooth near the articulation with the carpus. The median row does not reach the tooth and the third row is faint and curved up on to the inner surface of the palm. The external surface of the carpus is produced into a tridentate carina, the teeth of which are blunt and ornamented with a thick fringe of long soft hair.

The females are mature at 33.5 mm . carapace width (not including the postero-lateral eaves). There are three strongly developed teeth on the second segment of the female abdomen.

Material.-Type female 33.5 mm . carapace width.
Relationships.-Calappa terrae-reginae is related to Calappa lophos (Herbst) ${ }^{1}$ but may be readily separated by the following characters. The carapace of C. terrae-reginae is narrower than C. lophos (Herbst), being almost as long as wide (not including the postero-lateral eaves), whereas C. lophos is threequarters as long as it is broad. The fronto-orbital region of C. lophos is distinctly more produced anteriorly and the frontal teeth are acuminate; the frontal teeth of $C$. terrae-reginae are broad and blunt. The orbital hiatus is broader in C. lophos than in C. terrae-reginae, and the afferent canals end in three projecting teeth.

The posterior margin of Cophos is armed with six slender acuminate spines; in $C$. terrae-reginae there are nine small teeth.

## EXPLANATION OF PLATES.

## PLATE I.

Cryptolutea lindemanensis.

1. Dorsal view of the type measuring 16 mm . in maximum carapace width. Lindeman Island, Whitsunday Passage, Queensland.

2 and 3. Ventral and frontal views of same.
Pronotonyx lavis (Miers).
4. Dorsal view of a male measuring 9.5 mm . in maximum carapace width. Lindeman Island, Whitsunday Passage, Queensland.

5 and 6 . Ventral and frontal views of same.
Pseudocryptoccoloma parvus.
7. Dorsal view of the type, male, 10 mm . in maximum carapace width. Lindeman Island, Whitsunday Passage, Queensland.

8 and 9 . Ventral and frontal views of same.

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## PLATE II.

## Chlorodopsis miersi.

1. Dorsal view of type, male, measuring 15 mm . maximum carapace width. Lindeman Teland, Whitsunday Passage, Queensland.

2 and 3. Ventral and frontal views of same.

## Etisodes australis.

4. Dorsal view of type, male, measuring 12.5 mm . in maximum carapace width. Lindeman Island, Whitsunday Passage, Qucensland.

5 and 6. Ventral and frontal views of same.

## Leptodius australis.

7. Ventral view of type, male, measuring 13 mm . maximum carapace width. Lindeman Island, Whitsunday Passage, Queensland.

8 and 9. Dorsal and frontal views of same.

## PLATE III.

Banarciopsis australis.

1. Dorsal view of type, female, measuring 44 mm . maximum carapace width. Lindeman Island, Whitsunday Passage, Qucensland.

2 and 3. Ventral and frontal views of same.
Sargassocarcinus foliatus.
4. Dorsal view of type, female, measuring 8 mm . maximum carapace width. Lindeman Island, Whitsunday Passage, Queensland.

5 and 6. Ventral and lateral views of same.
Harrovia plana.
7. Dorsal view of type, male, measuring 6.5 mm . maximum carapace width. Lindemar Island, Whitsunday Passage, Queensland.
8. Ventral view of same.

Calappa terre-regince.
9. Dorsal view of type, female, measuring 33.5 mm . carapace width. Lindeman Island: Whitsunday Passage, Queensland.

10 and 11. Ventral and frontal view of same.


[^0]:    ${ }^{1}$ Calappa lophos Herbst is an Indian species of which I have material from the Hooghli River, kindly forwarded to me by the Indian Museum.

