

## 7. Some Rare and New Species of Decapod Crustaceans Found in the Vicinity of the Misaki Marine Biological Station

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(With 10 Text-figs.)

The species which will be described in this paper were mostly collected by Messrs. Saburo Murayama and Yasuo Ohsima, who kindly allotted all Decapod specimens in their collection to my examination. I wish to express my hearty thanks to the gentlemen.

Tribe EUCIPHIDEA

Family ALPHEIDAE Bate

Genus *Athanas* Fabr.

*Athanas ohsimai* n. sp.

Fig. 1.

The present species was collected by Mr. Y. Ohsima in tidal pools at Aburatubo. According to him it is common in that region and easily kept alive in a small aquarium.

All the specimens are small in size, in the largest male it is 11,8 mm long and in the smallest female 9,5 mm long, measuring from the tip of the rostrum to the end of the telson. The body is rather stout and its surface smooth. The carapace is scarcely  $\frac{1}{2}$  as long as the abdomen. The rostrum, which is triangular in dorsal view, is terminally acutely pointed and exceeds the middle of the second peduncular joint of the first antenna. Without supracorneal tooth. In the first antenna, the stylocerite scarcely reaches the distal end of the second peduncular joint; the two flagella are nearly equal in length, the outer one branched at the fourth or fifth proximal article. The second antenna bears the scaphocerite a little exceeding the distal end of the second peduncular joint of the first antenna; the peduncle attains the level of the distal end of the rostrum. The mandible is distinctly divided into two processes and bears a broad two-jointed palp. The outer process corresponding the endopodite of the first maxilla is terminally two lobed and on each of the lobes there is a seta. The median lobe of the second maxilla corresponding endopodite is very small and devoid of setae; the outer foliaceous plate bears marginal setae of almost equal length. The first maxilliped has the long exopodite which is armed with four long setae at the distal end, and on the outer margin of the basal expansion there are some setae; the next inner

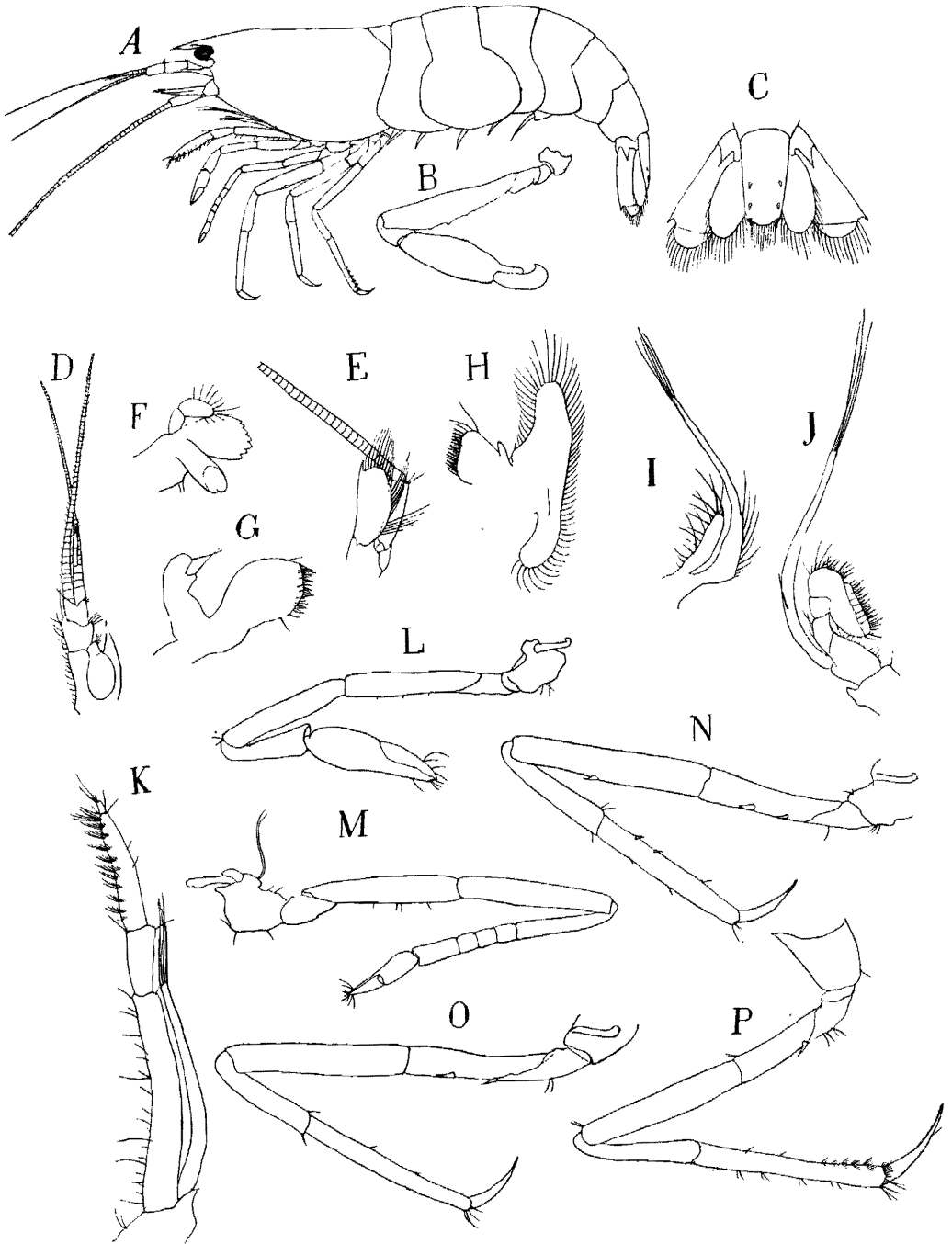


Fig. 1. *Athanas ohsimai* n. sp.

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|---|--|
| A. Entire animal of a female, view from left side. ( $\times 8$ ) | J. Second Maxilliped. (ca. $\times 17$ )   |
| B. Left cheliped of a male. ( $\times 6\frac{2}{3}$ )             | K. Third Maxilliped. (ca. $\times 17$ )    |
| C. Rhipidula, dorsal aspect. ( $\times 13\frac{1}{3}$ )           | L. First leg of female. (ca. $\times 17$ ) |
| D. First antenna, dorsal aspect. ( $\times 13\frac{1}{3}$ )       | M. Second leg. (ca. $\times 17$ )          |
| E. Second antenna, dorsal aspect. ( $\times 13\frac{1}{3}$ )      | N. Third leg. (ca. $\times 17$ )           |
| F. Mandible. (ca. $\times 133$ )                                  | O. Fourth leg. (ca. $\times 17$ )          |
| G. First maxilla. (ca. $\times 53$ )                              | P. Fifth leg. (ca. $\times 17$ )           |
| H. Second maxilla. (ca. $\times 21$ )                             |  |
| I. First maxilliped. (ca. $\times 17$ )                           |  |

lobe is comparatively well developed and emarginated by some numbers of setae. The exopodite of the second maxilliped bears four or five setae on the distal end and one more seta near proximal  $\frac{1}{3}$ . In the third maxilliped, the exopodite reaches the distal end of the proximal joint of the endopodite. The terminal joint of this endopodite is very small and appears to be an appendix of the penultimate joint.

The first ambulatory leg is quite different in sexes. In the male it is long and stout; the merus is long and provided with three or four small tubercular processes on the posterior margin, the carpus is short about  $\frac{1}{3}$  as long as the palm of the chela, which is long and stout; the finger is half-moon shaped and the immovable finger is much shorter than the movable one. In the female, however, it is more slender; the merus is nearly as long as the ischium; the carpus, which is a little shorter than  $\frac{2}{3}$  the length of the merus, is longer than the palm of the chela; the finger is nearly as long as the palm. In the second leg, the merus is as long as the ischium; the carpus is subdivided into five articles, in which proximal one is as long as the remaining four articles altogether; in these four articles, the proximal three are subequal in length and each is about  $\frac{1}{2}$  as long as the terminal one. The palm of the chela is as long as the terminal carpal article, and the finger is a little shorter than the palm. The posterior three pairs of the legs are similar in general appearance; but in the third leg, the ischium is provided with two spinules, merus with one and propodus with two or three on their posterior margins respectively. In the fourth leg, two spinules are on the ischium, but no one on the other segments; and the posterior spinule of the ischium is just in front of the basis. In the fifth leg, the ischium is armed with a single spinule just in front of the basis; the propodus bears some numbers of bundles of setae on its distal half. All the legs but the last one are each provided with a rudimentary epipodite.

The abdomen, the surface of which is smooth, is almost  $2\frac{1}{2}$  times as long as the carapace excluding the rostrum, and the epimeron of each somite is posteriorly rounded. The telson, which is a little shorter than the sixth abdominal somite, is about  $\frac{1}{2}$  as broad as long at the base, and the terminal margin is obtusely rounded. On the dorsal aspect there are two pairs of spinules, and two more are on each of the outer corners of the distal margin.

The species is nearly allied to *Athanas haswelli*, *A. orientalis* and *A. minikoensis* (de Man, 1911). But in the present species, the carpus of the first leg of the male is much shorter than those of these species; even in the female the carpus is nearly  $\frac{2}{3}$  as long as the chela and it is somewhat inflated at the distal end.

Genus *Betaeus* Dana  
*Betaeus murayamai* n. sp.

Fig. 2.

One probably male specimen was collected by Mr. S. Murayama in December 1933.

The specimen is rather small in size, 15,5 mm long. Body moderately laterally compressed, surface almost smooth and naked. The anterior margin of the orbital hood is almost truncated; between the orbital hoods in the place of a rostrum, the carapace is notched as in the case of *B. granulimanus* Yokoya (1927, p. 173, Pl. VII, Figs. 17-22.), and the notch is continuous to the median groove between the orbital hoods. Pterygostomial angle rounded.

The basal peduncular joint of the first antenna produces at the antero-lateral corner to a spine, which exceeds the middle of the second joint; the basal appendix or stylocerite reaches the end of the second joint; the second and the third joints are nearly equal in length; outer flagellum longer than half of inner, proximal half of the former is thick, but not bifurcated. The basal joint of the second antenna is provided with a small spine on the inferior side; scaphocerite a little longer than the peduncle of the first antenna and nearly as long as that of the second one. Third maxilliped exceeds a little

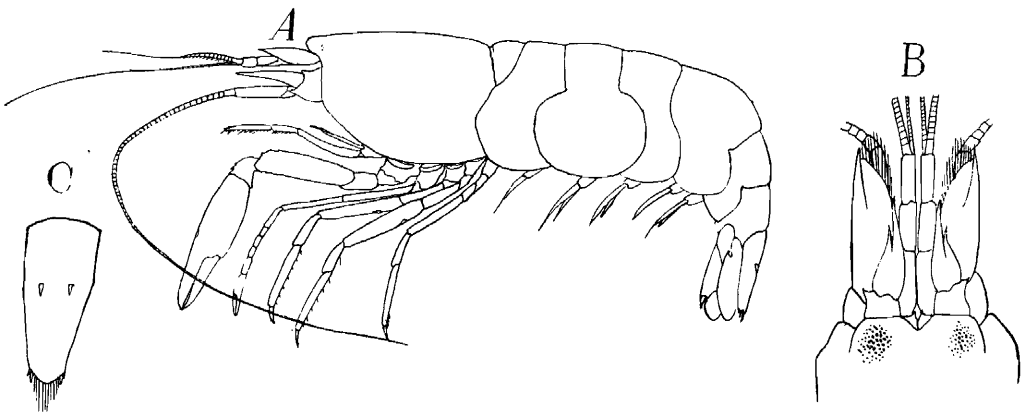


Fig. 2. *Betaeus murayamai* n. sp.  
 A. Entire animal, view from left side. ( $\times 4$ )  
 B. Frontal and antennal region of the carapace, dorsal aspect. ( $\times 8$ )  
 C. Telson, dorsal aspect. ( $\times 8$ )

the end of the peduncle of the second antenna; the proximal joint of the endognath is not so granulated as that of *B. granulimanus* and is rather slender; the exognath exceeds a little basal  $\frac{2}{3}$  of the proximal joint of the endognath. First pair of legs are subequal, almost smooth, and exceeds the tip of the scaphocerite with lengths of the chela and a part of the carpus. The merus and the carpus are provided with some spinular tubercles on the

upper and the lower margins; chela inverted in position, compressed and the finger is about  $\frac{3}{4}$  as long as the palm; cutting edge nearly straight, not gaping. Second leg slender, somewhat longer than third leg; the carpus is divided into five articles, in which the proximal is the longest, the terminal the next in length and the intermediate ones are subequal in length, and each is a little shorter than the terminal one. The chela of this leg is nearly as long as the terminal three carpal articles altogether. Third and fourth legs similar in feature as well as in size, and distinctly stouter than second; merus with a spinule on the inferior margin, propodus with some spinular setae. Last leg a little more slender than the preceding, no spinule on the merus, on the inferior margin of the propodus there are some short hairs near the distal end. All the ambulatory legs but the last one are provided with epipodites on the bases.

Abdomen excluding the telson nearly as long as 2 times of carapace; surface smooth, laterally compressed and dorsally rounded. The telson is a little shorter than the lengths of the fifth and the sixth abdominal somites; width at the anterior end is about 2 times of that at the posterior margin. Uropodial appendage shorter than that of *B. granulimanus*, but distinctly exceeds the end of the telson.

#### Genus *Synalpheus* Bate

#### *Synalpheus japonicus* n. sp.

Fig. 3.

One ovigerous female was collected by Mr. S. Murayama on June 20, 1934.

The species is rather small, and the body is about 20 mm long.

Rostrum broad and short, shorter than 2 times the width at the base and reaches the distal end of the basal peduncular joint of the first antenna; the lateral margin shows almost straight line in the dorsal view. The lateral spines are broader than the rostral spine, and a little shorter than this; these are almost horizontal, but directed slightly downwards. Viewing from above, these lateral spines appear to be slightly curved inwards.

The peduncle of the first antenna is somewhat shorter than 4 times the width of the second joint at the distal end; the relative proportions between the visible part of the first joint and the following two joints are as 3:2:2; the stylocerite is acuminate and almost extends to the distal end of the second peduncular joint. In the second antenna, inferior margin of the basal joint is armed with a spine shorter than the stylocerite; the scaphocerite has a nearly straight spine, distinctly exceeding the end of the stalk in the right side, but in the left side it is abnormally shorter in the specimen. The stalk of this second antenna is  $3\frac{3}{4}$  times longer than wide, reaching the extremity of the peduncle of the first antenna.

The third maxilliped, which has the terminal joint long and exceeds the end of the peduncle of the first antenna, is armed with about six spinular

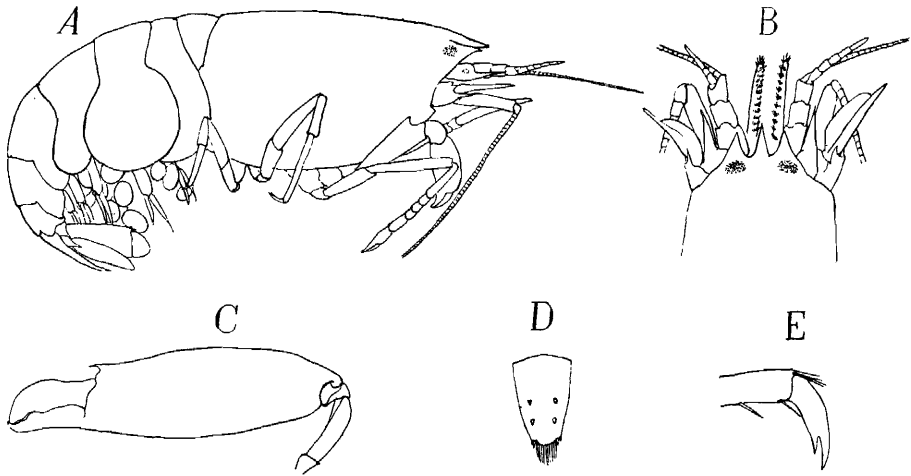


Fig. 3. *Synalpheus japonicus* n. sp.

- A. Entire animal, view from right side. ( $\times 4$ )
- B. Frontal and antennal region of the carapace, showing distal parts of the third maxillipeds between the first antennae, dorsal aspect. ( $\times 6$ )
- C. Larger cheliped. ( $\times 4$ )
- D. Telson, dorsal aspect ( $\times 4$ )
- E. Dactylus of third leg. (ca.  $\times 16$ )

processes near the distal end and ten or eleven bundles of setae on the inner margin. In the larger cheliped, the merus is about 2 times as long as wide, the upper margin terminates in a small spiniform tooth and is about  $1\frac{1}{5}$  times as long as that of the smaller cheliped; and in the latter the merus is  $2\frac{1}{3}$  times as long as wide. The larger chela has the palm a little less than  $2\frac{2}{3}$  times the length of the finger, while in the smaller one the ratio between these is about 3:2. The upper margin of the palm terminates in a small pointed tooth in the larger cheliped, while in the smaller one such a pointed tooth is not noticeable. The second leg is moderate in width; the carpus five articulate; the first article is the longest and about  $\frac{5}{6}$  as long as the remaining four articles; the terminal one is about as long as two of the three intermediate articles, which are almost subequal in length. The third leg has the ischium and the merus compressed and unarmed. The merus is about 2 times as long as the carpus, which is  $\frac{3}{5}$  as long as the propodus. The dactylus, which is armed with two pointed hooks, is about  $\frac{1}{5}$  as long as the propodus. The fourth leg is shorter than the third, but similar in feature with this; the dactylus has the ventral hook very small. The last pair of legs of both sides are unfortunately missing in the specimen.

Abdomen  $1\frac{2}{3}$  as long as carapace, and dorsally rounded. Telson, which has its posterior angle obtuse, is slightly longer than  $1\frac{1}{2}$  the width at the base and a little longer than 3 times the width at the posterior margin. On the dorsal surface there are two pairs of spinules, which are short and rather

stout. Of two pairs of spinules at the postero-lateral angle, the inner ones are a little longer than 2 times the length of the outer.

The eggs are rather large and few in number, ellipsoid in shape, its major diameter about 0,75 mm.

Family Palaemonidae Borradaile

Subfamily Pontoniinae Kingsley

Genus *Palaemonella* Dana

*Palaemonella spinulata* n. sp.

Fig. 4.

One female was collected by Mr. S. Murayama in January 1934.

Body rather robust. Rostrum nearly straight, a little shorter than the rest of carapace, armed with seven teeth above, of which proximal two are behind the orbital crescent and the terminal one is subterminal; there are two teeth on the inferior margin. A supraorbital, an antennal and a hepatic tooth, but pterygostomian angle rounded. Eye rather stout pedunculate. Peduncle of first antenna does not reach the end of rostrum, proximal joint long and broad with a short stylocerite; succeeding two joints subequal in length in lateral view, but in the ventral view the terminal one is the shortest.

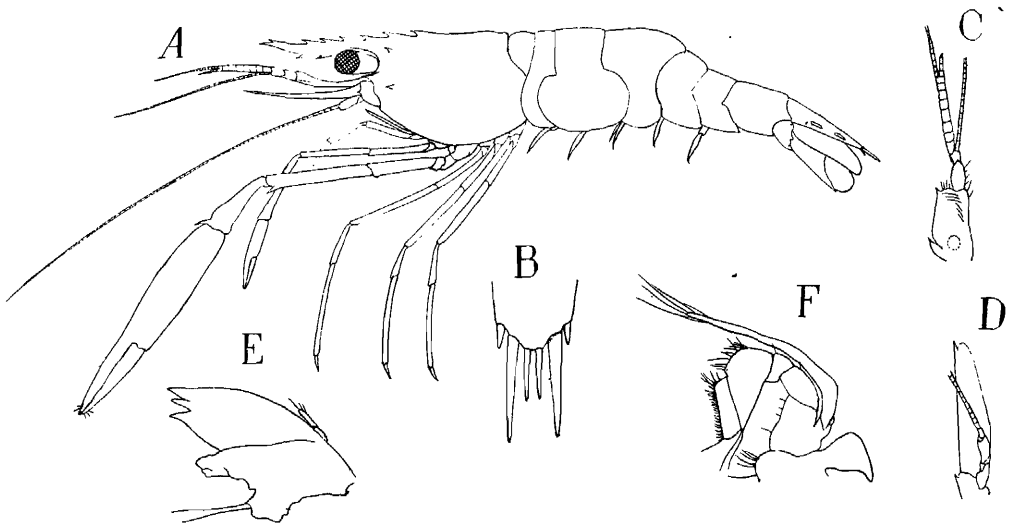


Fig. 4. *Palaemonella spinulata* n. sp.

- A. Entire animal, view from left side. ( $\times 6$ )
- B. Terminal end of telson, dorsal aspect. (ca.  $\times 15$ )
- C. First antenna. ( $\times 6$ )
- D. Second antenna. ( $\times 6$ )
- E. Mandible. (ca.  $\times 18$ )
- F. Second maxilliped. (ca.  $\times 18$ )

Outer flagellum stout at the base, from eighth article arises a short branch in four or five articles. Inner flagellum longer and more slender than outer. Basal joint of second antenna with a short spine at the outer distal angle; peduncle rather short, scarcely reaches the end of eye; scaphocerite exceeds the end of rostrum, its outer margin nearly straight, terminally pointed and exceeds the blade. Mandible consisting of two parts with a slender palp in two joints. Endognath of second maxilliped with short hooked setae on the inner margin of the terminal joint and some long setae at the inferior corner of the distal two joints; no podobranchiae. Third maxilliped, reaching the end of the proximal peduncular joint of first antenna, rather slender, its exognath exceeds a little the end of the antepenultimate joint of the endognath. The first leg exceeds the end of the scaphocerite by more than the length of the chela; the carpus is a little longer than the merus or the chela; the latter two are subequal in length. Second leg very strong and reaches the end of the rostrum by the end of the merus; merus with a pointed tooth on the inferior margin near the extremity; carpus nearly as long as  $\frac{2}{3}$  of merus, terminally inflated and armed with a tooth at the upper corner; chela stout and long, palm 2 times as long as carpus and about  $1\frac{1}{2}$  times as long as finger. Posterior three pairs of legs similar in feature as well as in length; they are slender and unarmed; dactyli simple.

Abdomen  $1\frac{1}{2}$  times as long as carapace including rostrum. Sixth abdominal somite a little longer than width. Telson about  $1\frac{2}{3}$  as long as the sixth somite, with two pairs of rather strong spinules on the dorsal aspect and three pairs of spines on the posterior margin. Pleopods rather weak and short. Sixth abdominal appendage or the outer plate of the rhipidura rather broad and exceeds a little the end of the telson.

The species is nearly allied with *P. tenuipes* Dana (1853, p. 582, Pl. 38, Figs. 3a-d) and *P. longirostris* Borradaile (1815, p. 210) etc., but it is easily distinguishable from all these in the longer chela and in the presence of supraorbital spine. The latter fact is extraordinary for this genus, although Dr. S. Kemp already noted the presence of a small angular prominence on that place in his species *P. vestigialis* (Kemp, 1922, p. 123, Pl. 3, Fig. 2.).

#### Genus *Anchistus* Borradaile

#### *Anchistus misakiensis* n. sp.

Fig. 5.

One specimen was collected by Mr. Y. Ohsima in February 1934 inside of a bivalve, *Amusium japonicum*.

Body rather robust and its surface smooth. Carapace about  $\frac{5}{6}$  as long as abdomen. Rostrum shorter than  $\frac{1}{2}$  of carapace, distally slightly descending; upper and lower margins entire and the extremity minutely notched. Carapace dorsally rounded, with an antennal and a pterygostomial tooth.

Eye-stalk rather large. Peduncle of first antenna exceeds the end of



rostrum by the lengths of terminal joint and a part of second joint. Basal peduncular joint  $1\frac{1}{2}$  as long as succeeding two joints altogether. Outer flagellum broad at base and branched from third article: in the branches the inner three- and the outer nine-articulate. Inner flagellum longer than outer, about sixteen articulate. Second antenna with scaphocerite of rather large size; peduncle exceeds a little the middle of the scaphocerite. Mandible divided into two parts and without palp. Basal lobe of second maxilla reduced.

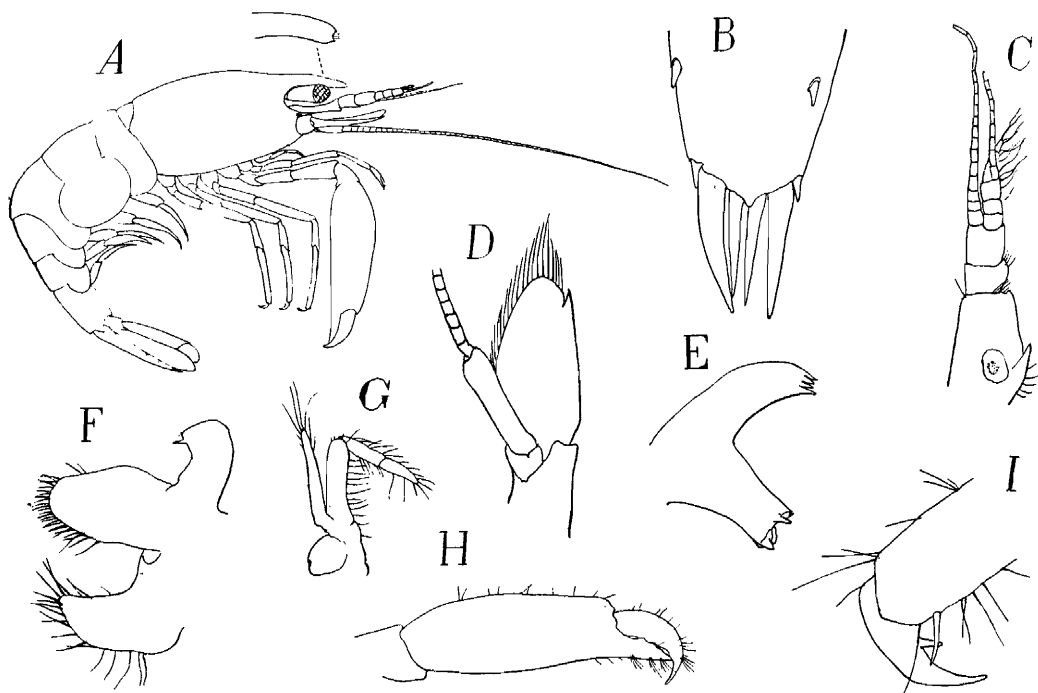


Fig. 5. *Anchistus misakiensis* n. sp.

- A. Entire animal, view from right side. ( $\times 8$ )
- B. Terminal part of telson, dorsal aspect. ( $\times 64$ )
- C. First antenna of right side. ( $\times 16$ )
- D. Second antenna of left side. ( $\times 16$ )
- E. Mandible. ( $\times 64$ )
- F. First maxilla. ( $\times 64$ )
- G. Third maxilliped. ( $\times 28$ )
- H. Chela of second leg. ( $\times 16$ )
- I. Tip of third leg. ( $\times 28$ )

Maxillipeds with exopodites of rather degenerated conditions; antepenultimate joint of third maxilliped not much dilated. First leg exceeds the end of scaphocerite; chela about  $\frac{2}{3}$  as long as carpus. Second leg strong; right one somewhat larger than left. In the right leg, the carpus is nearly  $\frac{1}{2}$  as long as merus, and the palm is 3 times as long as the merus or the movable finger of the chela; this finger considerably exceeds the tip of the immovable one.

Posterior three pairs of legs similar in feature as well as in size; dactyli hooked and each has a proximal tooth.

Abdomen dorsally rounded. Sixth somite about  $\frac{3}{5}$  as long as telson. The uropodial appendages exceed a little the tip of the telson, which is dorsally rounded, provided with two pairs of spinules on the dorsal aspect and three pairs on the distal margin.

Dimensions of the specimen:

Total length, from the tip of rostrum to the end of telson	8,5 mm
Length of carapace, excluding rostrum	2,5 "
Length of rostrum	1,05 "
Length of chela of second leg (of the right side)	2,8 "

Colour in life almost translucent white and some numbers of brownish red marks on the carapace and abdomen as well as on some appendages.

No species of this genus has hitherto been known from Japanese waters.

#### Tribe Galatheidea

#### Family Galatheidae Dana

#### Genus *Galathea* Fabricius

#### *Galathea longirostris* n. sp.

Fig. 6.

One female was collected by Mr. Y. Ohsima on November 22, 1933.

Rostrum very long and broad, somewhat longer than  $\frac{3}{4}$  the rest of carapace; its dorsal surface nearly flat or rather longitudinally furrowed and the lateral margins are armed with seven teeth, which are as indistinct as those of *G. paucilineata* Benedict (1902, p. 241), the ventral surface is provided with a longitudinal carina, which is obtuse but distinct. On the dorsal surface of the carapace there are about ten or eleven transverse lines, which are mostly continuous in whole width of the carapace, and each of the lines is connected with the tooth on the lateral margin of the carapace, therefore the teeth are ten or eleven in number on each side, but some posterior ones are indistinct. There is no spine on the dorsal surface of the carapace. The specimen is not well preserved and the abdomen is shrunk.

The eye reaches proximal  $\frac{1}{8}$  of the rostrum. The basal peduncular joint of the first antenna is stout and armed with three pointed teeth at the extremity; succeeding two joints are distinctly narrower than the basal; the outer flagellum is five articulate, while the inner is about eight articulate, stouter than the outer at the base and thickly fringed with long setae on its outer margin. In the peduncular joints of the second antenna, the proximal one is distally pointed on each of outer and inner side, and the next is pointed on the inner side, while the third is unarmed. In the third maxilliped, the proximal joint of the exognath almost attains the level of the distal end of the merus of the endognath. In the figure 6 E, the endognath is distorted at the merus, which is armed with two strong teeth on the inner margin;

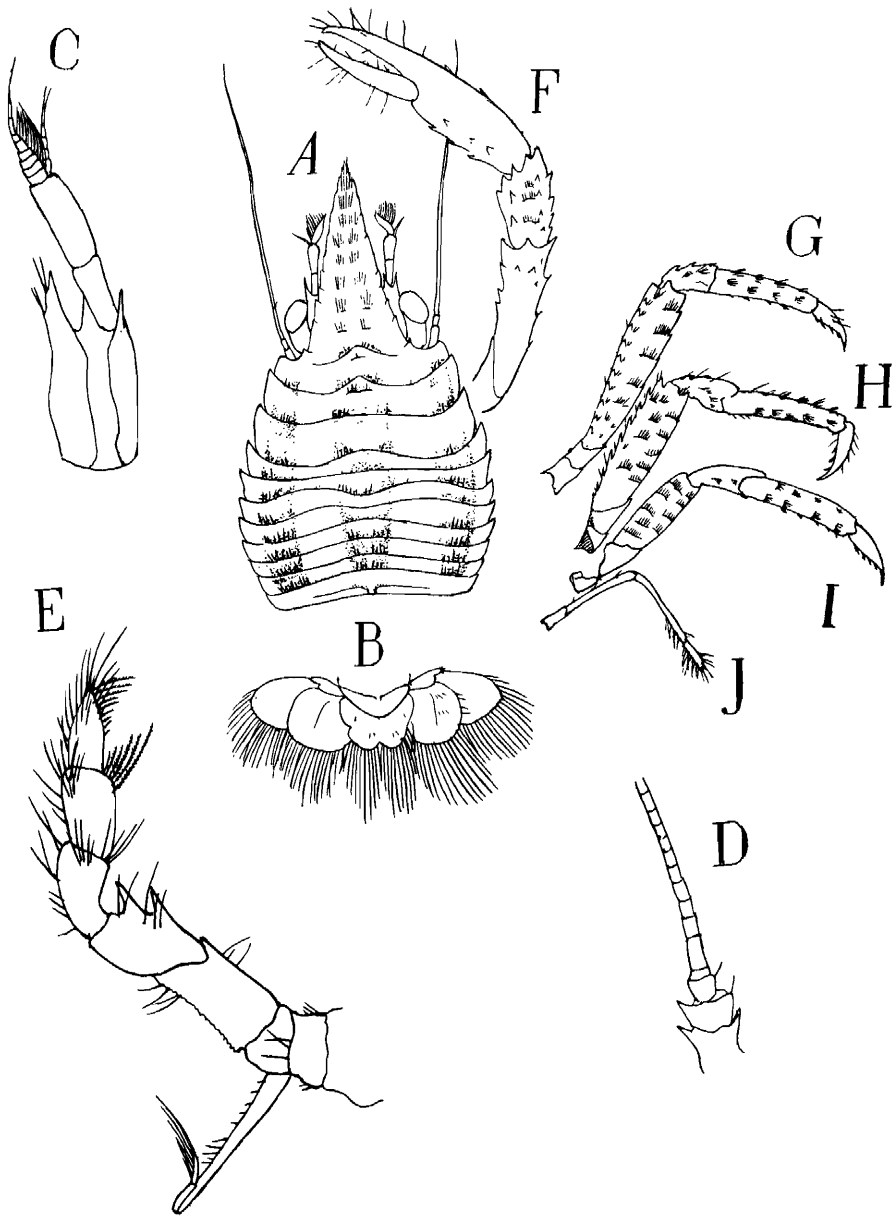


Fig. 6. *Galathea longirostris* n. sp.

- A. Carapace with eye and two pairs of antennae, dorsal aspect. ( $\times 10$ )  
 B. Rhipidula, dorsal aspect. ( $\times 10$ )  
 C. First antenna. ( $\times 30$ )  
 D. Second antenna. ( $\times 30$ )  
 E. Third maxilliped. ( $\times 30$ )  
 F. Right cheliped. ( $\times 10$ )  
 G. Second leg. ( $\times 10$ )  
 H. Third leg. ( $\times 10$ )  
 I. Fourth leg. ( $\times 10$ )  
 J. Fifth leg. ( $\times 10$ )

succeeding three joints are unarmed. The right cheliped is much larger than the left; the latter seems to be abnormally small; the former is a little longer than the carapace including the rostrum, and the merus, the carpus and the palm are armed with several numbers of pointed teeth on the dorsal and the outer surfaces. Second leg longer than the succeeding pair of legs, successively decreasing in length to the last pair. Meri and carpi of second and third legs with spinular teeth on their anterior margins, while those of fourth leg toothless. The teeth on the merus of the second leg are ten or eleven in number and eight in the third leg, while the teeth on the carpus are three in both of the legs. The last leg is very weak; the carpus is a little longer than the merus, the latter is about 2 times as long as the propodus, which bears many soft hairs; the dactylus seems to be degenerated. Rhipidura unarmed, its surface almost smooth and fringed with long setae on the posterior margins.

Colour in life dorsally pale yellow with three longitudinal brownish bands.

Tribe OXYSTOMATA

Family LEUCOSIIDAE Dana

Subfamily LEUCOSIINAE Miers

Genus *Philyra* Leach

*Philyra nipponensis* n. sp.

Fig. 7.

One immature female was collected by Mr. S. Murayama in April 1935.

Nearly allied to *Philyra tuberculosa* Stimpson (1858, p. 159; 1907, p. 153, Pl. 18, Fig. 5; Balss, 1922, p. 130). Carapace slightly longer than broad, front almost  $\frac{1}{7}$  as wide as carapace. No hairs on frontal margin nor on external maxilliped. Granulations of carapace and chelipeds almost coincide with the description of Stimpson, but a granulated line on the inner surface of the hand almost parallel with the inferior margin. (in *P. tuberculosa* hand without granulated lines within). The abdomen of the female is distinctly divided into seven somites; in these somites the first is very short, successively increases in length to the sixth, and the terminal one is nearly as long as the fifth somite. Speaking of the widths of these somites, the first is much narrower than the next, from the latter they gradually increase to the fifth; the seventh is the narrowest. The surfaces of these somites excepting the first and the terminal ones are provided with some flattened granules. Not only these different features of the abdomen and other respects described above, but the absence of the ciliated line of the outer maxilliped parallel to the inner margin suggest us the species to be different from *P. tuberculosa*. On the other hand the species seems to be allied to *P. kanekoi* Sakai (1934, p. 286, text-fig. 4), but in the latter species the hepatic or the pterygostomial angle is not well developed and the granulation of the feet is evidently more prominent.

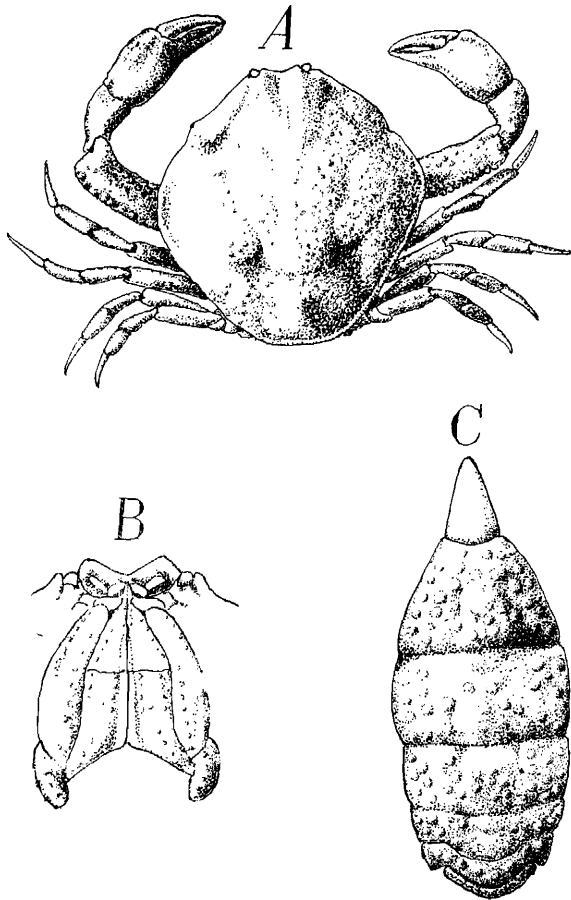


Fig. 7. *Philyra nipponensis* n. sp.  
 A. Entire animal, dorsal aspect ( $\times 5$ )  
 B. Antennal and buccal region, ventral view ( $\times 10$ )  
 C. Abdomen of the female ( $\times 10$ )

Dimensions of the specimen :

Length of carapace .....	7,2 mm
Width of carapace .....	7,0 "
Length of cheliped (in left side)	
Length of merus .....	3,6 "
Length of palm .....	1,8 "
Length of movable finger .....	2,1 "

Tribe CANCRIDEA  
 Subtribe OXYRHYNCHAEA  
 Family PARTHENOPIDAE Miers  
 Subfamily EUMEDONINAE Miers  
 Genus *Harrovia* Adams & White  
*Harrovia elegans* de Man

Fig. 8.

de Man, 1887, p. 21. Pl. 1, Figs. 5, 6; Urita, 1936, p. 30; Sakai, 1932, p. 54. *Harrovia japonica* Balss, 1921, p. 177; 1922, p. 136, Figs. 8, 9.

One female. The specimen is probably referable to the present species, but some differences are noticeable in this from the description and the figures given by the original author. On the antero-lateral margin of the carapace there are two granular plates, which are closely in contact with each other on the margin, leaving a round hole between the plates a little retreated from the margin. The lateral two teeth of the carapace are prominent (anterior one of the right side has been broken in the specimen). The dorsal surface of the carapace is densely hairy, under the hair a pair of rather prominent but rounded lobes are noticeable on the gastric region; on the anterior part of the branchial region there is a prominence on each side.

The chelipeds of the female are subequal and their surfaces are granular; the merus is armed with one or two spinular tubercles near the base of its anterior margin; the carpus is unarmed; the palm, which is longer than 2 times the length of the finger, is provided with two shallow longitudinal furrows near the upper border one on each side of this border, and with a round tubercle at the base. In the succeeding four pairs of legs, the meri are provided with six rarely seven spinular teeth on their upper margins and the terminal one is the most prominent, and the anterior leg is the longest of all and the most slender. The dactylus of the first leg is almost as long as the propodus, while those of the posterior three legs are rather robust and a little shorter than the propodi.

The type specimen is in young stage. Difference in the features especially of the carapace by the different authors, I think, is due to the gradation of growth.

Dimensions of the specimen:

Length of carapace .....	12,2 mm
Width of carapace (distance between tips of epibranchial teeth) .....	18,0 "
Length of left cheliped: Merus .....	9,0 "
Carpus .....	5,5 "
Palm .....	10,3 "
Dactylus .....	5,0 "

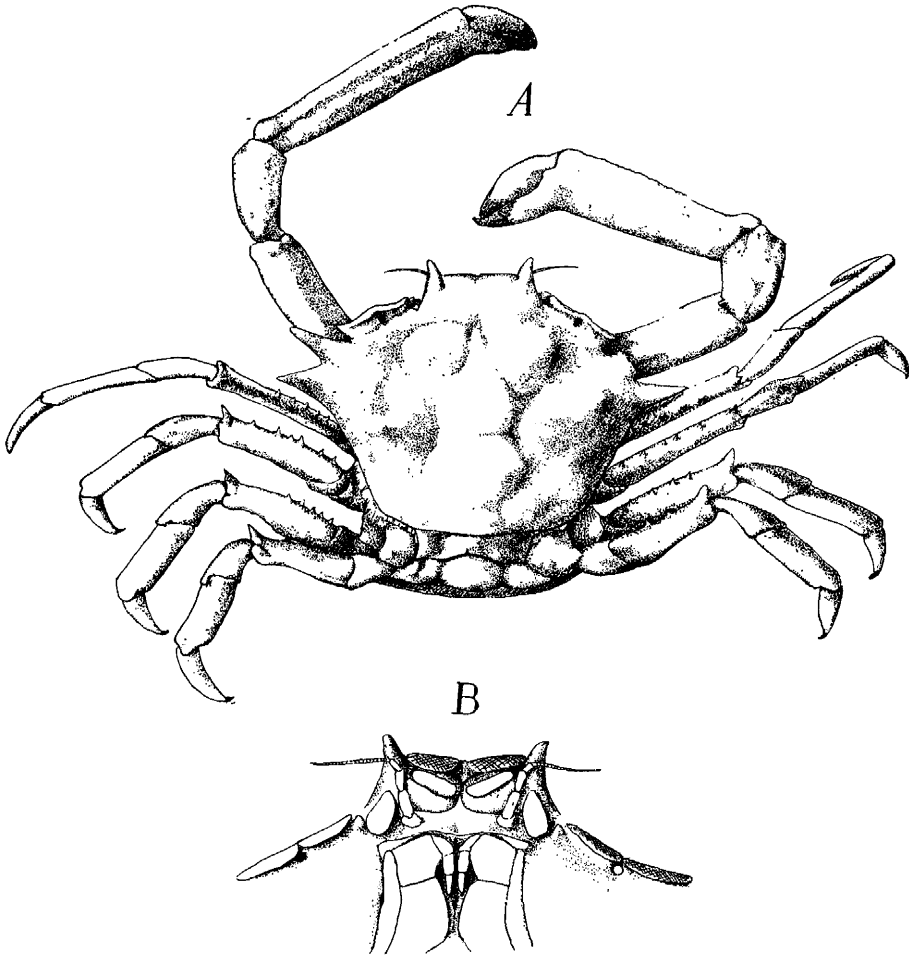


Fig. 8. *Harrovia elegans* de Man.

A. Entire animal, dorsal aspect. ( $\times 3$ )

B. Frontal antennal region, ventral aspect. ( $\times 4\frac{1}{2}$ )

Subtribe BRACHYRHYNCHEA

Family CANCRIDAE Alcock

Subfamily THIINAE Alcock

Genus *Kraussia* Dana

*Kraussia quadriceps* n. sp.

Fig. 9.

One male specimen was collected by Mr. Y. Ohsima.

Carapace a little broader than long. The front, which is about  $\frac{1}{4}$ , as

wide as the carapace at the broadest point, is distinctly four lobed. The lateral margin of the carapace is minutely dentate, and near anterior  $\frac{1}{3}$  there is a notch to form a distinct tooth. Dorsal surface moderately convex, nearly smooth, but with shallow ripple-marked sculptures. A medial groove on the anterior part of the carapace is continuous from the median notch of the front. Thumb of chela normally well developed. More or less long hairs are provided on the margin of the carapace as well as on the upper and the lower margins of the legs.

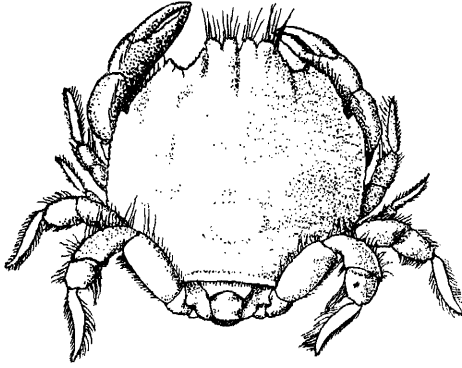


Fig. 9. *Kraussia quadriceps* n. sp. ( $\times 3$ )

This species is distinguishable from other members of this genus by the following features:

The front is divided into four distinct lobes of almost equal width; and the lateral margin of the carapace is provided with one distinct tooth.

Dimensions of the specimen:

Length of carapace .....	10,7 mm
Width of carapace .....	11,3 "
Width of front .....	3,3 "

Family GONEPLACIDAE Ortmann

Subfamily RHIZOPINAE Stimpson

Genus *Mertonia* Laurie

*Mertonia lanka* Laurie

Fig. 10.

Laurie, 1906, p. 424, Pl. 1, Fig. 11; Rathbun, 1910, p. 342, Pl. 2, Fig. 4; Tesch, 1918, p. 217, Pl. 16, Fig. 2a.

One male and one female were collected by Mr. Y. Ohsima in December 1932. The female is distinctly larger than the male.

Dimensions of specimens:

	male	female
Length of carapace in median line	4,9 mm	5,9 mm
Width of carapace at the broadest point	5,1 "	7,7 "
Width of front	1,1 "	1,7 "
Distance between the external orbital angles	3,2 "	4,0 "

In the shape of the carapace there are some differences in the present two specimens from Misaki: i. e., in the male the lateral margin of the carapace is more divergent backwards than that of the female, and the broadest point



lies near the bases of the last pair of legs, while in the female it lies near the middle of the lateral margin. On the dorsal surface of the carapace there are some numbers of small depressions near the margins, but on the cardiac region instead of the depressions there are three small markings. The anterior margin of the merus of the third maxilliped is somewhat sinuated.

The third abdominal somite is a little narrower than the basal in the male; and the latter somite occupies almost  $\frac{1}{2}$  the breadth of the sternum of the last thoracic somite, measuring at the visible broadest point; the fourth

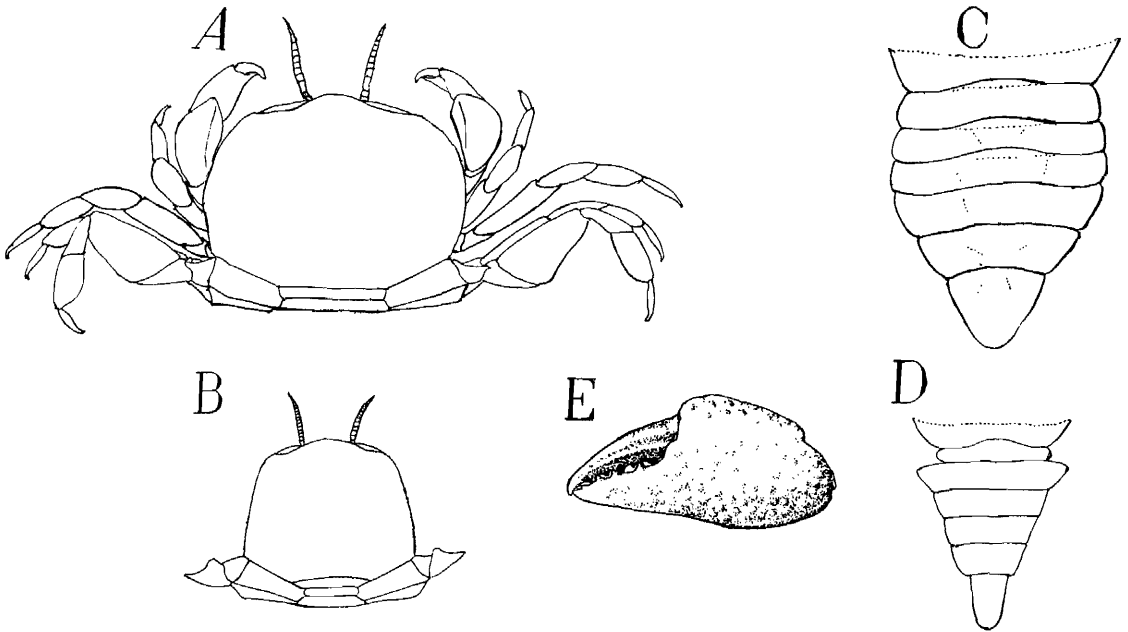


Fig. 10. *Mertonia lanka* Laurie.

- A. Entire animal of female. ( $\times 5$ )
- B. Dorsal aspect of male, appendages omitted. ( $\times 5$ )
- C. Abdomen of female. ( $\times 10$ )
- D. Abdomen of male. ( $\times 10$ )
- E. Chela of female of left side. ( $\times 10$ )

somite is nearly as long as the fifth, and the terminal one elongates, a little longer than  $1\frac{1}{2}$  times of the width of the base. In the female, the basal abdominal somite is slightly narrower than  $\frac{1}{2}$  of the breadth of the sternum of the last thoracic somite; the second is longer than the third, from which succeeding somites gradually increase in length, and the terminal is the longest but somewhat shorter than the breadth at the base.

Distribution: Ceylon; Gulf of Siam; Aru Islands. Occurrence from Japan is an interesting fact from the view point of the geographical distribution.

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