

*Dr. Mary J. Rathbun
with the compliments of
S. Miyake*

REPORTS ON THE BRACHYURA OF RIUKIU ISLANDS
COLLECTED BY THE YAÉYAMA EXPEDITIONS
DURING THE YEARS 1932-1934

I. NOTES ON A NEW AND SOME RARE
CRABS FROM IRIOMOTE-SHIMA

SADAYOSHI MIYAKE

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I. NOTES ON A NEW AND SOME RARE
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SADAYOSHI MIYAKE (三宅 貞祥)

Zoological Laboratory, Kyushu Imperial University

TWO PLATES AND TWO TEXTFIGURES

(Received August 14, 1936)

The biological expeditions to the Yaeyama-Group, Riukiu Islands, under the leadership of Professor Hiroshi Ohshima were made three times during the years 1932-1934. Three forms of the Brachyura described in the following pages were collected in Iriomote-shima,² Yaeyama-Group, during the Second and the Third Yaeyama Expeditions. The Second Expedition was made by Prof. H. Ohshima, Mr. Hayato Ikeda and the author in July 1933, and the Third was made by Prof. H. Ohshima, Prof. Teiso Esaki, Mr. H. Ikeda and Mr. Kikutaro Baba in July-August, 1934. A part of the expense of the expeditions was defrayed from a grant of the Imperial Academy.

One of the crabs *Cymopolia longimana*, seems to me a new species. The genus of *Cymopolia* includes many forms of America, but few species are to be seen in the Indo-Pacific waters. The other two species, *Sesarma* (*Sesarma*) *smithi* and *Baptozius vinosus*, are rare forms in the Indo-Pacific region. Furthermore, this is the first time that they have ever been recorded from Japanese waters.

In Iriomote-shima, *Sesarma* (*Sesarma*) *smithi* is called by the local name "Aka-gani" (Red Crab) owing to its reddish colour of the general appearance. On the other hand *Baptozius vinosus* is called "Yakudjama." As to this curious Japanese name "Yakudjama," I should like to refer

¹ Contributions from the Zoological Laboratory, Kyushu Imperial University, No. 91.

² Koo-kien-san, Kou-kien-san or Ku-kien-san by early writers.

the reader to the interesting paragraphs of "Yakudjâma" in the paper by Prof. H. Ohshima.³

I am especially indebted to Prof. Hiroshi Ohshima for his valuable suggestions. I desire to express my obligation to the gentlemen who joined the Third Expedition, from whom I have received the type-specimen of *Cymopolia longimana* n. sp. My thanks are also due to Messrs. C. Senaha and M. Taba who kindly collected for us interesting materials of *Sesarma* (*Sesarma*) *smithi* and *Baptozius vinosus*.

CYMOPOLIIDAE

Cymopolia longimana sp. nov.

(Textfig. 1; Pl. 35, figs. 3, 4)

Holotype. ♂ in the Zoological Laboratory, Kyushu Imperial University.

Type-locality. Sonai, Iriomote-shima, Yaéyama-Group.

Description of Holotype. Only one ♂ has been collected during the Third Yaéyama Expedition. The carapace is depressed and rather quadrate in shape. The outer surface of the carapace is covered with granules and short hairs. The frontal lobes are broad and separated by a small V-shaped notch. The upper orbital lobe is broad and blunt; the external orbital angles are subtriangular trending forward and inward. There are two antero-lateral teeth. One is behind the external orbital angle; the other is on the branchial region just in front of the widest part of the carapace. The regions are distinct; the regional lobes are more or less elevated. The cervical groove is very deep. The urogastric and the cardiac regions are divided into two lobes by the median groove.

The rounded pterygostomian region does not conceal the cornea and the eye peduncle. The lower orbital margins are fringed with long hairs. The basal antennal articles are enlarged and are armed with a long, acute spine on the outer distal edge.

The chelipeds are very long and are furnished with fine short hairs. They are unequal, the right one being larger. The arms and palms are subcylindrical, very long, but the wrists are short. The fingers are short and fringed with thick hairs on the outer surface. There is a wide gap between them. The movable finger bears a blunt tooth on the inner margin. The ambulatory legs are moderately long

³ H. Ohshima 1935 A glimpse on animals of the Yaéyama-Group, Riukiu (IV). (in Japanese). Botany and Zoology, Tokyo, Vol. 3, No. 4, pp. 777-780.

and unarmed. The first ambulatory leg reaches beyond the carpus of the second, the third beyond the propodus; the second is the largest of all the ambulatory legs. The ambulatory legs are compressed and grooved longitudinally, with hairs instead of protuberance; the merus is narrowed distally; the propodus is widened slightly toward distal end.

The abdomen is in four segments; the penultimate segment is the longest of all. The upper surface of the abdomen is furnished with fine granules and short hairs.

This species is closely allied to *Cymopolia kyusyuensis* (Yokoya 1933, p. 206) in the shape of the carapace. The median notch of the frontal margin is narrower than in *C. kyusyuensis*. The upper orbital lobe is distinct, but not so prominent as in *C. kyusyuensis*.

Cymopolia longimana can be distinguished at once from all the other species of the genus by its long chelipeds. I should like to propose its specific name "longimana."

Dimensions (in mm).
Length of carapace, 9.5; width of carapace, 12; width of frontal margin, 9.5; length of right cheliped, 31.5; length of

left cheliped, 30; length of first ambulatory leg, 14; length of second ambulatory leg, 22; length of third ambulatory leg, 21; length of fourth ambulatory leg, 11.

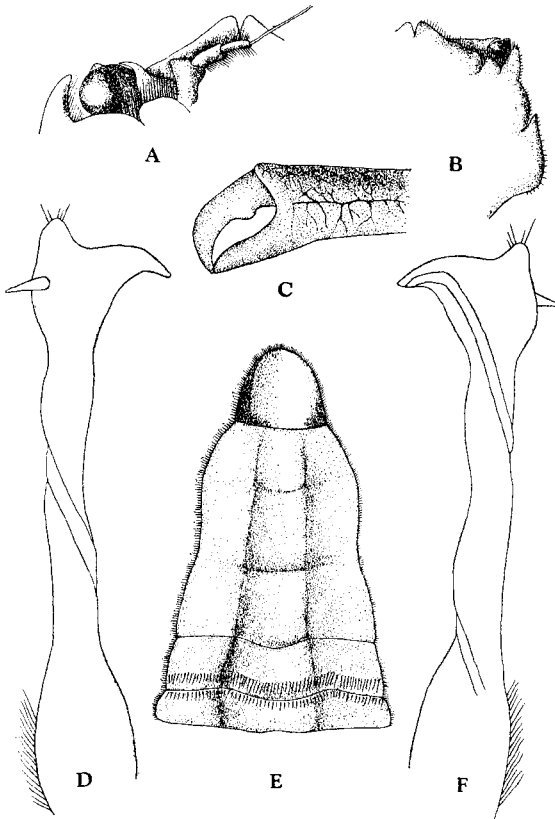


Fig. 1. *Cymopolia longimana*, male (Holotype). A. right oculo-antennal region, ventral view, $\times 6$. B. right antero-lateral portion of carapace, dorsal view, $\times 4\frac{1}{2}$. C. distal part of right cheliped, inner side view, $\times 5$. D. left anterior abdominal appendage, inner side view, $\times 15$. E. abdomen, $\times 6$. F. left anterior abdominal appendage, outer side view, $\times 15$.

Colour (in spirit). The dorsal surface of the carapace is of vandyke brown chestnut. Besides, warm gray spots are found in the posterior half. The ventral surface of the body is whitish gray. The chelipeds and ambulatory legs are of the same colour as the carapace.

GRAPSIDAE

Sesarma (*Sesarma*) *smithi* Milne-Edwards

(Pl. 35, Figs. 1, 2)

Sesarma smithi Milne-Edwards 1854-1855, p. 149, Pl. 9, figs. 2, 2 a-c; de Man 1887, p. 305; 1889, p. 426; Bürger 1893, p. 618, Pl. 21, figs. 2 a-d; Ortmann 1894, p. 722.

Sesarma (*Sesarma*) *smithi* Rathbun 1910, p. 328; Tesch 1917, p. 199.

Locality. Komi, Iriomote-shima, Yaéyama-Group, 1 ♀ (ovig.)

Dimensions (in mm).

| | |
|----------------------------------------------|------|
| Width of carapace | 36.3 |
| Length of carapace | 33.5 |
| Width of frontal margin | 16.2 |
| Distance between external orbital teeth..... | 30.5 |
| Width of posterior margin | 17.5 |
| Depth of carapace | 28.0 |

Remarks. This species was very well described and figured by Milne-Edwards. It may easily be recognized by its peculiar shape of the carapace and the coloration. The carapace is remarkably deep and strongly convex longitudinally. The upper surface is covered with many traces of tufts of hair in the anterior half. In preserved state, the carapace and ambulatory legs are of pansy purple colour. The arms and the wrists of the chelipeds are also of pansy purple; the palms and fingers are peach red tangerine. The abdomen is neutral gray silver and cameo pink.

This species has not been described from Japanese waters.

Distribution. South Africa, type-locality (A. Milne-Edwards); Zanzibar (A. Milne-Edwards); Natal (A. Milne-Edwards); Madagascar (Hoffman, de Man); Queensland (McCulloch); Java (de Man); Celebes (de Man); New Guinea (Nobili); Philippines (Bürger); New Caledonia (A. Milne-Edwards); Fiji (de Man, Ortmann); Siam (Rathbun).

XANTHIDAE

Baptozius vinosus (Milne-Edwards)

(Textfig. 2; Pl. 36, figs. 1-4)

Rüppellia vinosus Milne-Edwards 1834, p. 422.

Eurüppellia vinosa de Man 1892, p. 278, Pl. 15, fig. 1.

Baptozius vinosus Alcock 1898, p. 189; Balss 1932, p. 513.

Locality. Komi, Iriomote-shima, Yaéyama-Group, 1 ♀, collected by Mr. C. Senaha on Sept. 25, 1933; Komi, Iriomote-shima, Yaéyama-Group, 1 ♂, 2 ♀, collected by Mr. M. Taba during the Third Yaéyama Expedition.

Dimensions (in mm).

| | ♂ | Largest ♀ |
|-------------------------------|------|-----------|
| Width of carapace | 63.0 | 68.0 |
| Length of carapace | 42.5 | 45.0 |
| Width of frontal margin | 25.3 | 26.0 |
| Length of right chela..... | 52.5 | 42.0 |
| Length of left chela | 37.0 | missing |

Remarks. Our specimens agree almost completely with de Man's descriptions and figure. The carapace is strongly convex from the front to back, nearly straight transversely. The frontal margin is broad, a little less than one-half the maximum width of the carapace and has the frontal margin nearly straight, divided into two lobes by a slight median fissure from which a median groove runs backward on the carapace and bifurcates. The inner angle of the frontal lobes is straight and the outer angle a little rounded. The antero-lateral margin is very short. The first tooth separated from the external orbital angle by a deep groove, is triangular, obtuse, but little more than half as wide as the second tooth; the second tooth is blunt and broad; the third is broader than the preceding tooth, but is more raised; the fourth is acute and the smallest of the series. Behind this fourth tooth the posterior margins converge abruptly. There is no groove delineating the regions of the carapace, except a transverse line on the hepatic regions. The carapace is smooth and furnished with many fine granules in the anterior half on both the dorsal and ventral surface. The orbit is large and subtubular. Only one notch, where the flagellum of the antenna projects, is divided into the upper and lower angles.

The outer surface of the third maxilliped is smooth. The second joint of the exognath is long and rectangular; the ischium is sub-rectangular with the inner margins rounded basally, and the outer surface is channelled longitudinally; the merus is subpentagonal and its outer surface irregularly channelled; the three-jointed palp is tapering and subcylindrical.

The chelipeds are unequal in both sexes. The merus is trigonal, with inner surface flattened and is in close contact with the side of

the carapace; the carpus is rounded on the upper and outer surface and finely granular; there is triangulated tooth on the inner subdistal margin; the palm is four-fifths as long as the width of the carapace, and the outer and upper surfaces are finely granular; the fingers bear large blunt teeth with a gap between them. The fingers of the small chela do not gap.

The four pairs of the ambulatory legs are compressed and similar to each other, but slightly decreasing in length from first to fourth; outer and inner parts of the legs are fringed with sparse long hairs. The merus is very long; the carpus and propodus are approximately equal and taken together are as long as the merus; the dactylus is almost straight, as long as the propodus or carpus; the sides of the dactylus and outer part of the propodus are covered with stiff, bristly setae.

Baptozius vinosus has hitherto been unrecorded from Japanese waters.

Distribution. Andamans (Alcock); Celebes (de Man); Philippines (A. Milne-Edwards); Solomons (Sandler); Saparoea (Balss).

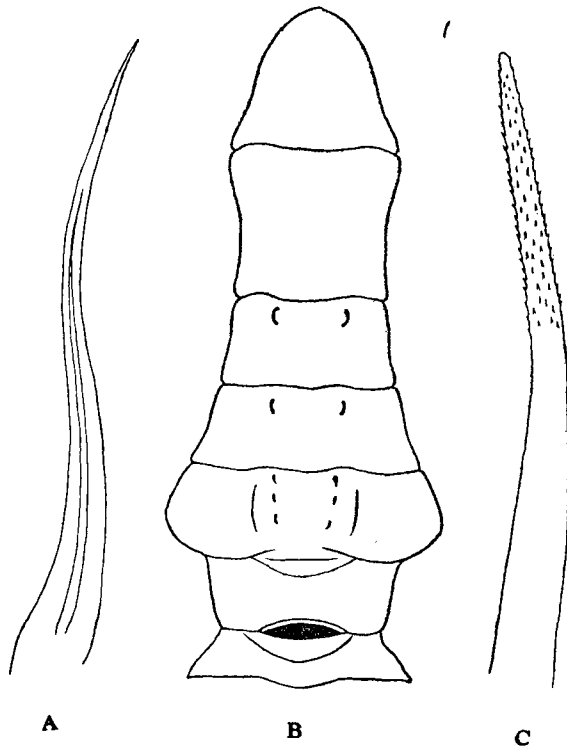


Fig. 2. *Baptozius vinosus*, male. A. ventral view of right anterior abdominal appendage, $\times 4\frac{2}{3}$. B. abdomen, $\times 2\frac{2}{3}$. C. dorsal view of right anterior abdominal appendage, $\times 11\frac{1}{3}$.

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PLATE 35

- Fig. 1. *Sesarma (Sesarma) smithi* Milne-Edwards, ovigerous female. Frontal view.
- Fig. 2. Same. Dorsal view.
- Fig. 3. *Cymopolia longimana* sp. nov. Dorsal view of male (holotype).
- Fig. 4. Same. Ventral view.

BRACHYURA OF RIUKIU ISLANDS I
SADAYOSHI MIYAKE

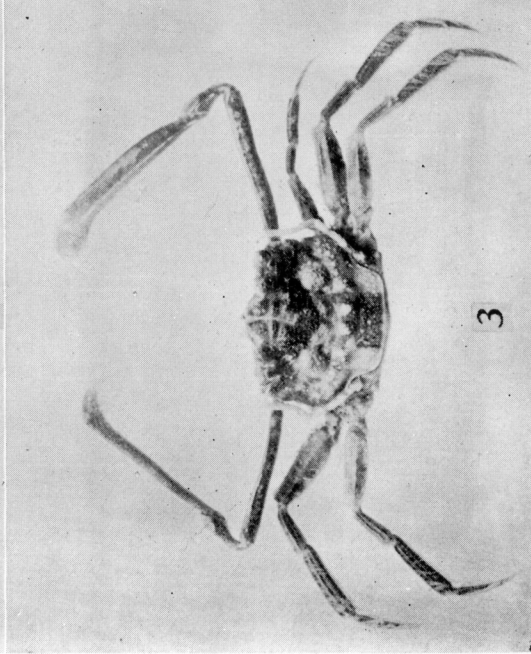
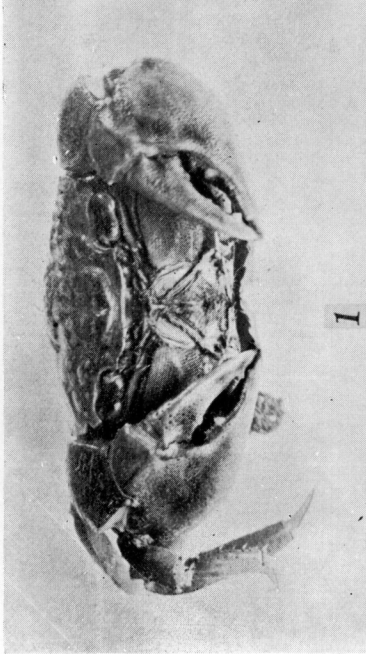
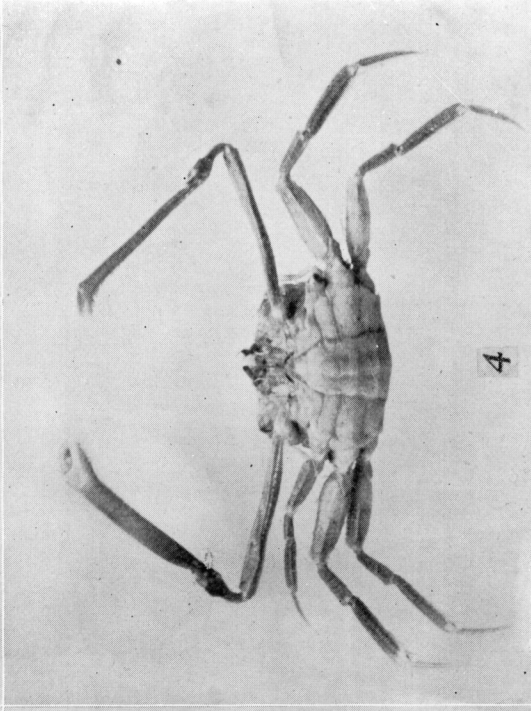
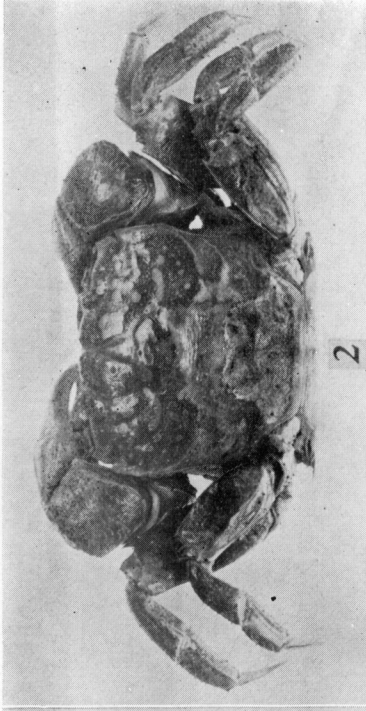


PLATE 36

Baptozius vinosus (Milne-Edwards), from Ohshima.

Fig. 1. Ventral view of ♂

Fig. 2. Dorsal view of ♂

Fig. 3. Ventral view of ♀

Fig. 4. Dorsal view of ♀

