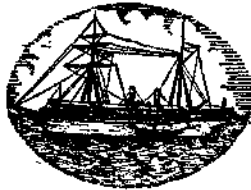


PROCEEDINGS
SYMPOSIUM ON CRUSTACEA

HELD AT
ERNAKULAM
FROM JANUARY 12 TO 15, 1965

PART I



SYMPOSIUM SERIES 2

MARINE BIOLOGICAL ASSOCIATION OF INDIA
MARINE FISHERIES P.O., MANDAPAM CAMP
INDIA

ON THE GAMMARIDEAN AMPHIPODA OF THE GULF OF MANNAR, WITH SPECIAL REFERENCE TO THOSE OF THE PEARL AND CHANK BEDS*

K. NAGAPPAN NAYAR**

Central Marine Fisheries Research Institute, Mandapam Camp, India

ABSTRACT

During the underwater survey of the pearl and chank beds off Tuticorin carried out by 'Scuba' diving, a number of amphipods were also seen amongst various material collected from the sea bottom. These amphipods were studied in detail. Incorporating the amphipods of the pearl banks of Ceylon described by Walker (1904) a complete list with synonymies of all the reported species of amphipods from the Gulf of Mannar, together with the description and sketches of species wherever found necessary, has been given in this account.

INTRODUCTION

THE present paper deals with the amphipods collected while engaged in the underwater exploration of the pearl and chank grounds off Tuticorin by 'Scuba' † diving during the years 1962-64. A good number of amphipods were collected from different habitats at depths varying from 10 metres to 30 metres. Additional materials were also obtained from shallow areas, sandy beach of Tuticorin and from plankton collections made off Tuticorin. The aim was not only to make the account of the amphipod fauna of this part of the Sub-Continent a comprehensive one, but also to compare the amphipod fauna with that of the Gulf of Mannar coast of Ceylon, almost an identical habitat, as reported by Walker (1904).

Separated as it is only by a distance of a few scores of miles with the nearest points between India and Ceylon coasts being hardly more than 20 miles and interconnected by Adam's bridge through submerged coral reefs lying in shallow waters between Dhanushkodi and Thalaimannar at the head of the Gulf, one would find close similarity of fauna from identical habitat. Naturally most of the forms reported by Walker (1904) are reported here. But such of those forms which Walker (1904) recorded but which were not collected during the present study have also been included to make the account of some use to the systematic worker on this group. It was not possible before the present paper was released to complete the description of some of the unreported species collected now from Gulf of Mannar both due to insufficient material and the limited time at the disposal of the author. It is hoped to bring it out shortly.

Detailed descriptions of the species have been omitted to lessen the bulk, but sketches of some of the characteristic appendages which would help in the identification of the species have been given wherever possible. Included in this account are amphipods referable to 78 species of 54 genera under 27 families.

* Published with the permission of the Director, Central Marine Fisheries Research Institute, Mandapam Camp.

** Present Address: Central Marine Fisheries Research Unit, Tuticorin.

† Self-contained underwater breathing apparatus.

Suborder GAMMARIDEA

Family LYSIANASSIDAE

Genus *Shoemakerella* Pirlot*Shoemakerella nasuta* (Dana)

(Fig. 1)

Lysianassa nasuta Dana, 1853-55, p. 915, pl. 62, fig. 2 a-m.*Lysianax cubensis* Stebbing, 1897, p. 29, pl. 7B.*Lysianassa cubensis* & *nasuta* Stebbing, 1906, pp. 38 & 40.*Lysianassa alba* Pearse, 1912, p. 369.*Lysianassa alba* Shoemaker, 1921, p. 99.*Shoemakerella nasuta* Pirlot, 1936, p. 264.*Shoemakerella nasuta* Shoemaker, 1948, pp. 1-2.*Shoemakerella nasuta* Nayar, 1959, pp. 6-7, pl. 1, figs. 1-15.

Locality.—A few specimens were collected from the pearl and chank beds off Tuticorin on 20-10-1963.

Distribution.—This species has been described by Dana (1853-55) from Rio de Janeiro, Brazil, and it has since been recorded from Barbados, Puerto Rico, Cuba, Tortugas, the coast of Florida, Gulf of Mexico and from Madras coast. This is the first record of this species from the Gulf of Mannar.

Genus *Ichnopus* Costa*Ichnopus taurus* Costa*Ichnopus taurus* Della Valle, 1893, p. 802, pl. 27.*Ichnopus taurus* Walker, 1904, p. 238, pl. I, fig. 3.

Locality.—One male specimen was collected from Galle Harbour at a depth of 100 fathoms.

Remarks.—This species is not represented in the present collection. For further details regarding the synonymy of the species, Chevreux and Fage (1925) may be consulted.

Genus *Socarnella* Walker*Socarnella bonnieri* Walker*Socarnella bonnieri* Walker, 1904, pp. 239-40, pl. I, figs. 4.

Locality.—One female specimen was obtained from Reef, Galle along with compound Ascidians.

Remarks.—Walker created *Socarnella* (1904) to accommodate the single female specimen collected from Ceylon on 16-2-1902. This species has not been reported from anywhere else and no other species has also been added to this genus to date.

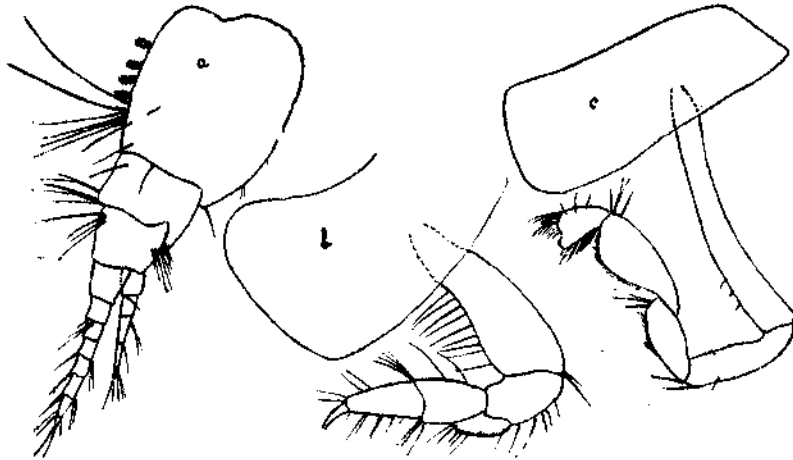


FIG. 1. *Shoemakerella nasuta* (Dana). Male: (a) Antenna 1; (b) gnathopod 1; (c) gnathopod 2.

Genus *Lysianassa* Milne Edwards

Lysianassa cinghalensis (Stebbing)

Lysianax cinghalensis Stebbing, 1897, p. 28, pl. 7 A.

Lysianax cinghalensis Walker, 1904, pp. 242-43, pl. 1, fig. 6.

Lysianax cinghalensis Walker, 1909, p. 328.

Lysianassa cinghalensis Barnard, 1937, pp. 142-43.

Locality.—A number of specimens were collected at various localities round the coast of Ceylon.

Size.—Length of male about 6 mm. and of female about 10 mm.

Recorded localities in the Indian Ocean.—This species has been previously collected and recorded from Ceylon by Walker (1904) and from Red Sea, Gulf of Oman, by Barnard (1937).

Remarks.—This species is not represented in the present collection.

Lysianassa coelochir (Walker)

Lysianax coelochir Walker, 1904, pp. 243, pl. 1, figs. 7.

Lysianassa coelochir Barnard, 1937, p. 143.

Locality.—Ceylon coast.

Distribution.—This species was first recorded by Walker (1904) from Ceylon and it has since been recorded from the Gulf of Oman by Barnard (1937).

Remarks.—This species is not represented in the present collection.

Genus *Orchomenella* Sars

Orchomenella nana (Kroyer)

Orchomenella nana Walker, 1904, p. 244.

Locality.—A number of specimens were collected from the Ceylon coast at Cheval Paar.

Size.—Length of male is about 5.5 mm.

Remarks.—For more details regarding this species and its distribution Gurjanova (1951) may be referred to. This species is not represented in the present collection.

Genus *Tryphosa* Boeck

Tryphosa cucullata Walker

Tryphosa cucullata Walker, 1904, p. 244, pl. IV, fig. 8.

Locality.—Only one male specimen of this species was collected from Kondatchi Paar on 17th November 1902 near Ceylon.

Size.—Male about 5.5 mm.

Remarks.—This species was created by Walker (1904) based on a single male specimen collected from Kondatchi Paar. This is the only record of this species. This species is not represented in the present collection.

Genus *Amaryllis* Haswell

Amaryllis tenuipes (Walker)

Vijaya tenuipes Walker, 1904, pp. 241–42, pl. I, figs. 5.

Locality.—From the coast of Ceylon two specimens were obtained.

Size.—4 mm.

Remarks.—Two specimens, a male and a female collected from Ceylon, have been described by Walker (1904) as a new species under a new genus. Barnard (1932) considers the genus *Vijaya* as a synonym of *Amaryllis*. This species is not represented in the present collection.

Genus *Anonyx* Kroyer

Anonyx schmardae Heller

Socarnes schmardae Walker, 1904, p. 238.

Locality.—Only one male specimen has been recorded from Ceylon coast.

Distribution.—This has been first recorded from the Mediterranean coast and has since been recorded from the Ceylon coast.

Remarks.—No specimen belonging to this species has been collected during the underwater survey work carried out at Tuticorin during 1962–64. This is considered a doubtful species by J. L. Barnard (1958). Since no specimen has been collected during the present survey it is not possible to comment on the validity of this species.

Genus *Lepidepecreum* Bate & Westw.

Lepidepecreum foraminiferum Stebbing

Lepidepecreum foraminiferum Stebbing, 1888, p. 686, p. 24.

Anonyx longicornis Della Valle, 1893, p. 814.

Lepidepcreum foraminiferum Stebbing, 1906, p. 79.

Lepidepcreum foraminiferum Nayar, 1959, p. 7, pl. I, figs. 16-26.

Locality.—This has been previously recorded from Tuticorin by Nayar (1959).

Remarks.—It is not represented in the present collection.

Family AMPELISCIDAE

Genus *Ampelisca* Kroyer

Ampelisca tridens Walker

Ampelisca tridens Walker, 1904, pp. 249-50, pl. IV, fig. 11.

Ampelisca tridens Stebbing, 1906, p. 722.

Ampelisca tridens Pirlot, 1936, pp. 281-82.

Ampelisca tridens Nayar, 1959, p. 10, pl. II, figs. 19-29.

Locality.—This species has been first recorded from the Ceylon coast by Walker (1904). A few specimens were collected from the pearl banks off Tuticorin during the present survey from the Thollayiram Paar at depths ranging from 19 metres to 22 metres.

Distribution.—Ceylon, Madras, East Indies.

Ampelisca scabripes Walker

Ampelisca scabripes Walker, 1904, pp. 250-51, pl. II, figs. 12.

Locality: Ceylon.

Remarks.—"Characterized by the spinous 4th joints of the 3rd and 4th peraeopods, the form and proportions of the joints of the 5th and the serrated and dentate 3rd uropods" (Walker, 1904). This species has not been recorded since 1904.

Ampelisca brachyceras Walker

Ampelisca brachyceras Walker, 1904, pp. 251-52, pl. II, fig. 13.

Locality.—Only two specimens belonging to this species were collected in 1902 from Kondatchi Paar and Cheval Paar. This species is not represented in the present collection.

Size.—About 4.5 mm.

Remarks.—"This species can easily be recognised by the short antenna 1, the peculiar structure of the 4th joint of the 3rd and 4th and the 1st joint of the 5th peraeopods, and the curiously formed and ornamented 3rd uropods" (Walker, 1904). This species has not been recorded since 1904.

Ampelisca brevicornis (Costa)

Ampelisca loevigate Sars, 1891, p. 169, pl. 59, fig. 1.

Ampelisca brevicornis Walker, 1904, p. 253.

Ampelisca brevicornis Stebbing, 1906, p. 100.

Ampelisca brevicornis Chevreux & Fage, 1925, p. 78, fig. 69.

Ampelisca brevicornis Schellenberg, 1925, p. 130, fig. 9 (with vars.).

Ampelisca brevicornis Schellenberg, 1928, p. 634.

Ampelisca brevicornis Pirlot, 1936, p. 277.

Ampelisca brevicornis Barnard, 1937, p. 148.

Locality.—Ceylon. This species is not represented in the present collection.

Distribution.—Ceylon, Bagamoyo, Suez, N. Atlantic, Mediterranean, West, South and East coasts of Africa, Java and Japan.

***Ampelisca cyclops* Walker**

Ampelisca cyclops Walker, 1904, p. 253, pl. 2, fig. 14.

Ampelisca cyclops Pirlot, 1936, p. 280.

Ampelisca cyclops Barnard, 1937, p. 149.

Ampelisca cyclops Nayar, 1959, pp. 8-9, pl. II, figs. 12-18.

Locality.—Ceylon and Tuticorin pearl banks.

Distribution.—This species was first recorded off the coast of Ceylon by Walker (1904) and it has since been recorded from East Indies by Pirlot (1936), from Suez Canal by Barnard (1937) and from Madras coast by Nayar (1959).

Size.—Length from the front of the head to the end of uropods is about 9 mm.

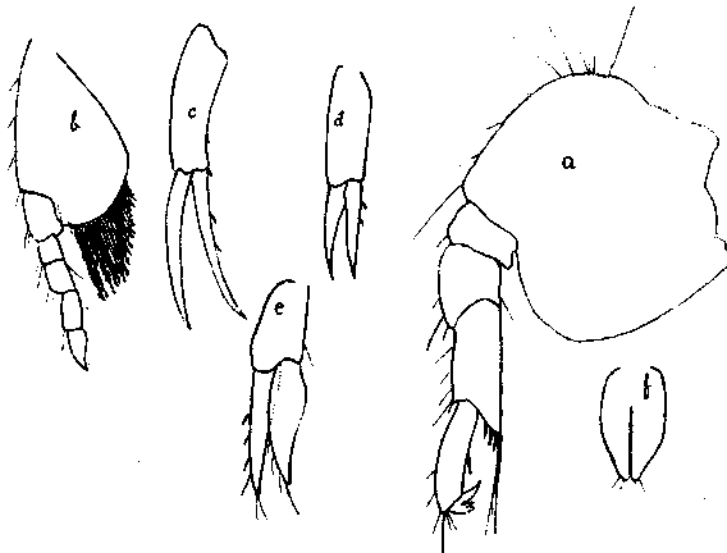


FIG. 2. *Ampelisca zamboangae* Stebbing. (a) Peracopod 4; (b) peracopod 5; (c) uropod 1; (d) uropod 2; (e) uropod 3; (f) telson.

***Ampelisca zamboangae* Stebbing
(Fig. 2)**

Ampelisca zamboangae Stebbing, 1888, p. 1057, pl. 106.

Ampelisca chevreuxi Walker, 1904, p. 254, pl. 3, fig. 15.

Ampelisca zamboangae Pirlot, 1936, p. 280.

Ampelisca zamboangae Barnard, 1937, p. 149.

Ampelisca zamboangae Pillai, 1957, p. 30, fig. I, 1-2.

Ampelisca zamboangae Nayar, 1959, pp. 7-8, pl. II, figs. 1-11.

Locality.—A number of specimens were collected from the pearl and chank beds off Tuticorin. This has been previously recorded from the Ceylon coast.

Distribution.—This species was described by Stebbing (1888) from Philippine Island and it has since been recorded from Ceylon by Walker (1904), East Indies by Pirlot (1936), Red Sea by Barnard (1937), Trivandrum by Pillai (1957) and Madras coast by Nayar (1959).

Size.—Length of the male as well as the female from front of the head to the end of the uropods is about 6 mm.

Genus *Byblis* Boeck

Byblis lepta (Giles)

(Fig. 5 a)

Ampelisca lepta Giles, 1888, p. 223, t. 8 & 9.

Ampelisca lepta Della Valle, 1893, p. 894.

Byblis lepta Stebbing, 1906, p. 115.

Byblis lepta Nayar, 1959, p. 2, pl. 2, figs. 30-34.

Locality.—A single female specimen belonging to this species was obtained from the sand samples collected from Thollayiram Paar on 23-2-1963.

Distribution.—This has been previously recorded from the Bay of Bengal by Giles (1888), the Suez Canal by Barnard (1937) and Madras coast by Nayar (1959).

Remarks.—This is the first record of this species from the Gulf of Mannar.

Family HAUSTORIIDAE

Genus *Platyschnopus* Stebbing

Platyschnopus herdmani Walker

Platyschnopus herdmani Walker, 1904, p. 247, pt. II, fig. 10.

Platyschnopus capensis, Barnard, 1925, p. 338, pl. xxxiv, figs. 13-14.

Platyschnopus herdmani, Pillai, 1957, pp. 35-37, fig. III.

Platyschnopus herdmani, Nayar, 1959, pp. 11-12, pl. iii, figs. 1-15.

Locality.—Ceylon.

Distribution.—Ceylon, Madras, Trivandrum and South Africa.

Size.—Length of the male about 5 mm.

Remarks.—This species is not represented in the present collection. But the occurrence of this species in Indian waters has been reported by Pillai (1957) and Nayar (1959). Pillai (1957) considers *P. capensis* Barnard collected from Africa as a synonym of this species.

Genus *Urothoe* Dana*Urothoe spinidigitus* Walker

Urothoe spinidigitus Walker, 1904, pp. 235-46, pl. I, fig. 9.

Urothoe spinidigitus Nayar, 1959, p. 13, figs. 16-28, pl. III.

Locality.—Only one specimen was collected from Ceylon coast. Two specimens were obtained during the present collection from Thollayiram Paar off Tuticorin.

Remarks.—This has been previously recorded from Madras.

Size.—Length of female about 5 mm.

Family ARGISSIDAE

Genus *Argissa* Boeck*Argissa hamatipes* (Norman)

Argissa typica Sars, 1891-95, p. 141, pl. 48.

Argissa hamatipes Walker, 1904, p. 246.

Locality.—Only one female specimen was collected from Ceylon from Kondatchi Paar on 17th November 1902.

Size.—2.5 mm.

Remarks.—This genus is represented by 2 species only, of which one species, viz., *A. hamatipes* (Norman) has been reported to occur at Ceylon by Walker (1904). No specimen belonging to this species has been collected during the present underwater survey work. For details regarding this species Gurjanova (1951), may be referred to.

Family PHOXOCEPHALIDAE

Genus *Paraphoxus* Sars*Paraphoxus uncistrostrata* (Giles)

Phoxus uncistrostratus, Giles, 1890, p. 65, pl. II, fig. 2.

Leptophoxus uncistrostratus, Walker, 1904, p. 249.

Leptophoxus uncistrostratus, Nayar, 1959, p. 14, pl. IV, figs. 1-16.

Paraphoxus uncistrostratus, Barnard, 1958, p. 118.

Locality.—Ceylon.

Distribution.—This has been previously recorded by Giles (1890) from Burma and from Ceylon by Walker (1904) and from Madras by Nayar (1959).

Remarks.—A single specimen belonging to this species was obtained from the sand sample collected and examined from the Thollayiram Paar on 17-12-1963. Barnard (1958) has brought this species under the genus *Paraphoxus*.

Family AMPHILOCHIDAE

Genus *Amphilocheus* Bate*Amphilocheus neapolitanus* Della Valle

(Fig. 3)

Amphilocheus neapolitanus Walker, 1904, p. 255.*Amphilocheus neapolitanus* Chevreux & Fage, 1925, p. 112, figs. 106-108.*Amphilocheus neapolitanus* Barnard, 1937, pp. 151-52.*Locality*.—Ceylon.

Remarks.—A single specimen was collected from the Muttuvaratu pearl oyster washings which Walker (1904) has referred to as *Amphilocheus neapolitanus*. During the present survey specimens belonging to the species were obtained from the pearl banks off Tuticorin during 1962-64.

Distribution.—North Sea, Mediterranean, Canaries and Sahara coast.

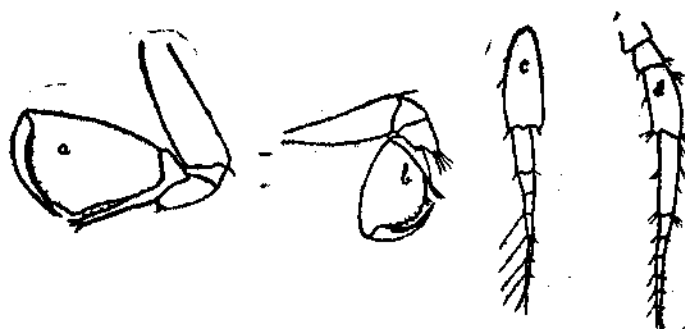


FIG. 3. *Amphilocheus neapolitanus* Della Valle. (a) Gnathopod 2; (b) gnathopod 1; (c) antenna 1; (d) antenna 2.

Genus *Cyproidea* Haswell*Cyproidea ornata* Haswell

(Fig. 4)

Cyproidea ornata, Haswell, 1880, p. 320, Taf. 18, fig. 1.*Callea tecticauda* Walker, 1904, p. 256, pls. 3 & 8, fig. 16.*Cyproidea ornata* Stebbing, 1910, p. 578.*Cyproidea ornata* Barnard, 1925, p. 341.*Cyproidea ornata* Schellenberg, 1938, p. 18 (literature).*Cyproidea ornata*, Nayar, 1959, pp. 15-16, pl. IV, figs. 17-30.

Locality.—A number of specimens were got from Ceylon. This has been collected from Krusadai Island and also from Tuticorin coast.

Distribution.—This has been previously recorded from South Australia, Ceylon, Suez Canal, Capeland, Bismarck Archipelago and Madras coast.

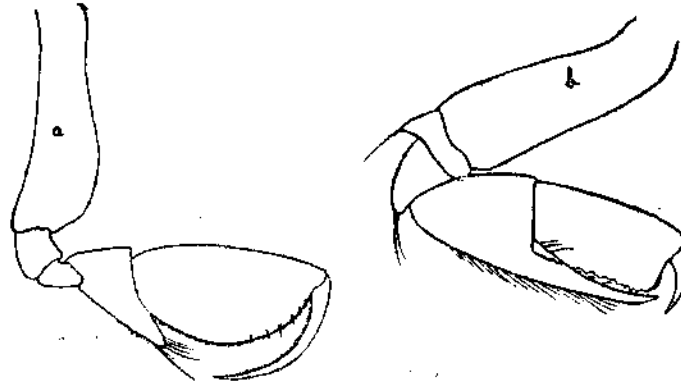


FIG. 4. *Cyproidea ornata* Haswell. male. (a) gnathopod 2, (b) gnathopod 1.

Family LEUCOTHOIDAE

Genus: *Leucothoe* Leach

Leucothoe spinicarpa (Abildg.)

(Fig. 5 b, c)

Leucothoe spinicarpa Walker, 1904, p. 258.

Leucothoe spinicarpa Walker, 1905, p. 925.

Leucothoe spinicarpa Walker, 1909, p. 331.

Leucothoe spinicarpa Gravely, 1927, p. 123.

Leucothoe spinicarpa Schellenberg, 1928, p. 687.

Leucothoe spinicarpa Schellenberg, 1931, p. 92.

Leucothoe spinicarpa Shoemaker, 1933, pp. 8-9.

Leucothoe spinicarpa Barnard, 1937, p. 152.

Leucothoe spinicarpa Nayar, 1959, pp. 16-17.

Locality.—A number of specimens were collected from Ceylon. Several specimens were collected from the pearl and chank beds off Tuticorin and from Mandapam Camp during the present survey.

Distribution.—This is a cosmopolitan species.

Size.—About 10 mm.

Leucothoe furina (Sav.)

(Fig. 5 d)

Leucothoe hornelli Walker, 1904, pp. 258-59, pl. 3, fig. 17.

Leucothoe hornelli Walker, 1905, p. 925.

Leucothoe hornelli Walker, 1909, p. 331.

Leucothoe hornelli, Chevreux, 1907, p. 470.

Leucothoe furnia Schellenberg, 1928, p. 635.

Leucothoe furina Barnard, 1937, p. 152.

Locality.—A number of specimens were collected from the branchial sacs of tunicates from Ceylon.

Distribution.—Ceylon, Maldives, Red Sea (Walker), Red Sea (Spandl.), Suez, (Schellenberg), Gambier Archipelago (Chevreux), East Indies and Australia (Schellenberg, var. *indica*).

Remarks.—This species is represented in the present collection by a single male specimen obtained from Thollayiram Paar on 2-4-1964.

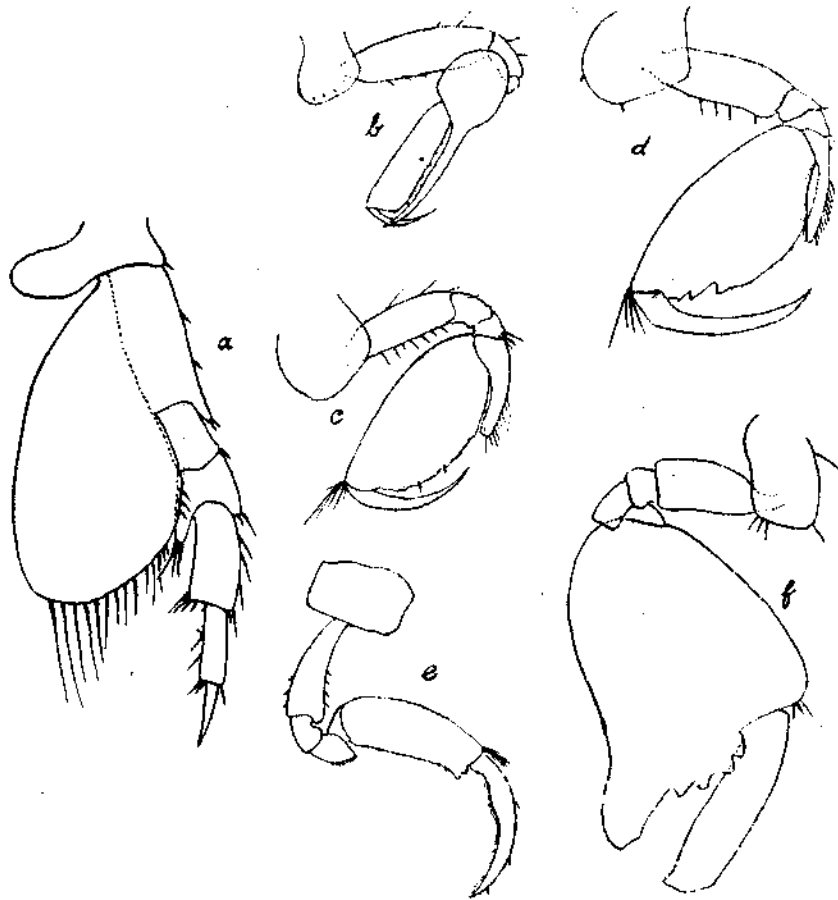


FIG. 5. (a) *Byblis lepta* (Giles).—Peraeopod 5; (b) *Leucothoe spinicarpa* (Abildg.) male, gnathopod 1; (c) same, gnathopod 2; (d) *Leucothoe furina* (Sav.), male, gnathopod 2; (e) *Stenothoe gallensis* Walker, male, gnathopod 2; (f) *Melita fresnellii* (Aud.), male, gnathopod 2, right side.

Family ANAMIXIDAE

Genus *Anamixis* Stebbing*Anamixis stebbingi* Walker

(Fig. 6)

Anamixis stebbingi Walker, 1904, p. 259, pl. II, figs. 18.

Locality.—Only one imperfect specimen was collected from Ceylon. One male specimen was found in the collections made from Thollayiram Paar on 1-4-1964.

Remarks.—The family Anamixidae comprises of a single genus with five species. *A. stebbingi* has been created by Walker (1904) based on an imperfect specimen collected from the Muttuvaratu pearl oyster washings from Ceylon. One male specimen of this species was collected from Tuticorin. As the specimen was slightly damaged it was not possible to make detailed sketches but sketches of most of the appendages are given here. The description given by Walker (1904) agrees well with the specimen collected.

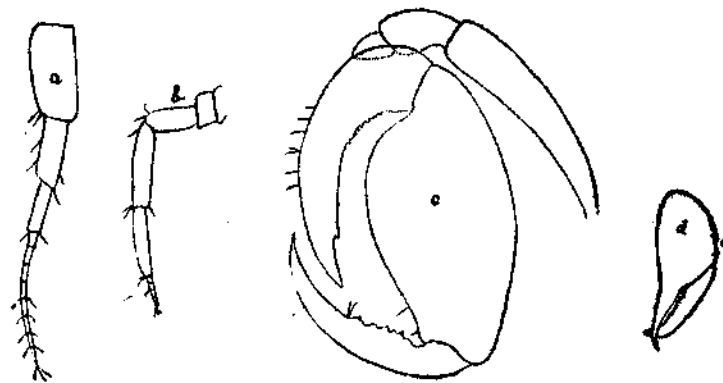


FIG. 6. *Anamixis stebbingi* Walker. (a) Antenna 1; (b) antenna 2; (c) gnathopod 2, right side; (d) end of gnathopod 1.

Family STENOTHOIDAE

Genus *Stenothoe* Dana*Stenothoe gallensis* Walker

(Fig. 5 e)

Stenothoe gallensis Walker, 1904, p. 261, pl. 3, fig. 19.*Stenothoe cruenulata* Chevreux, 1907, p. 471.*Stenothoe gallensis* Barnard, 1916, p. 154.*Stenothoe gallensis* Schellenberg, 1928, p. 640.*Stenothoe gallensis* Barnard, 1937, pp. 153-54.*Stenothoe gallensis* Nayar, 1959, p. 17, pl. I, figs. 7-19.

Locality.—An abundant species on the Ceylon coast. A number of species were collected from the Tuticorin coast.

Distribution.—South Africa (Barnard), Gambier Archipelago (Chevreux). Recorded localities in the Indian Ocean: This has been previously recorded from Ceylon, Seychelles, Zanzibar, Red Sea, Dar-es-Salaam and also from Madras coast.

Remarks.—Based on the single female specimen obtained from Ceylon, Walker (1904) created this species. This could be easily identified by the peculiar size and shape of gnathopod 2 of the male.

Stenothoe marina (Bate)

Stenothoe marina Walker, 1904, p. 261.

Remarks.—A single female specimen belonging to this species was collected from Cheval Paar in 1902 and described by Walker (1904) as *Stenothoe marina* var. *sinhalensis*. But Gurjanova (1951) considers this as a synonym of *Stenothoe marina*. This species is not represented in the present collection. For further details regarding the species and its distribution Gurjanova (1951) may be referred to.

Stenothoe monoculoides (Mont)

Stenothoe monoculoides Walker, 1904, p. 261.

Remarks.—A few species were obtained from Ceylon and recorded by Walker (1904). This species is not represented in the present collection. For further details Gurjanova (1951) may be consulted.

Family COLOMASTIGIDAE

Genus *Colomastix* Grube

Colomastix pusilla Grube

(Fig. 7)

Colomastix pusilla Walker, 1904, p. 299.

Colomastix crassimanus Walker, 1909, p. 332.

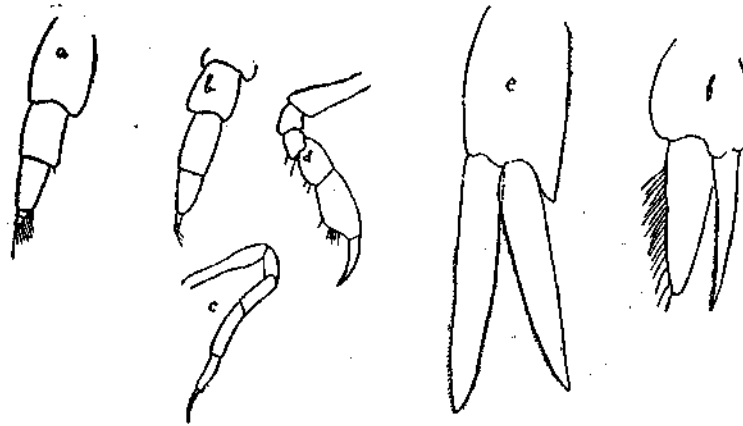


FIG. 7. *Colomastix pusilla* (Grube). (a) Antenna 1; (b) antenna 2; (c) gnathopod 1; (d) gnathopod 2; (e) uropod 1; (f) uropod 3.

Colomastix pusilla Chilton, 1925, p. 533.

Colomastix pusilla Schellenberg, 1928, p. 687.

Colomastix pusilla Barnard, 1937, p. 154.

Colomastix pusilla J. L. Barnard, 1955, pp. 39-42, fig. 20.

Locality.—This has been previously recorded from Ceylon. A single specimen of this species was obtained from the Tuticorin pearl banks on 21-9-1962.

Distribution.—Cosmopolitan; in tropical and temperate seas.

Family LILJEBORGIDAE

Genus *Liljeborgia* Bate

Liljeborgia pallida Bate

Liljeborgia pallida Sars, 1891-95, p. 530, pl. 187.

Liljeborgia pallida Della Valle, 1893, p. 658, pl. 19.

Liljeborgia pallida Walker, 1904, p. 279.

Remarks.—This has been previously collected and recorded from Ceylon by Walker (1904). This species has not been described after Stebbing (1906).

Family OEDICEROTIDAE

Genus *Periocolodes* Sars

Periocolodes serra Walker

Periocolodes serra Walker, 1904, pp. 262-63, pl. IV, fig. 20.

Locality.—This has been previously recorded from the Ceylon coast by Walker (1904).

Size.—Length of adult male is about 5 mm.

Remarks.—This genus is represented by four species only. *P. serra* is not reported from anywhere except from Ceylon by Walker (1904). Since this species is not represented in the present collection, it is not possible to say anything about this species. According to Walker (1904) the upper margins of the rami of the first uropod, in the adults, are strongly serrated.

Genus *Synchelidium* G. O. Sars

Synchelidium brevicarpum (Sp. Bate)

Synchelidium brevicarpum Walker, 1904, p. 263.

Remarks.—A single specimen belonging to this species was collected from Cheval Paar in 1902 and recorded by Walker (1904). This species is not represented in the present collection.

Family TIRONIDAE

Genus *Tiron* Liljeborg

Tiron thompsoni Walker

Tiron thompsoni Walker, 1904, p. 263, pl. IV, figs. 21.

Locality.—Only two specimens were collected from Ceylon (Walker, 1904).

Remarks.—This species was created by Walker (1904) to accommodate two specimens collected from Ceylon. It has not been recorded from anywhere else since then. This species is not represented in the present collection.

Family EUSIRIDAE

Genus *Eusiroides* Stebbing

Eusiroides diplonyx Walker

Eusiroides caesaris var. Walker, 1904, p. 264, pl. IV, fig. 22.

Eusiroides diplonyx Walker, 1909, p. 333, pl. 43, fig. 4.

Eusiroides diplonyx Pirlot, 1936, pp. 302-304, figs. 126-28.

Locality.—This species was previously recorded from Ceylon coast.

Remarks.—Pirlot (1936) considers *Eusiroides caesaris* var. described by Walker (1904) as a synonym of *Eusiroides diplonyx*. This species is not represented in the present collection.

Eusiroides orchomenipes Walker

Eusiroides orchomenipes Walker, 1904, pp. 264-65, pl. IV, fig. 23.

Locality.—This has been previously recorded from Ceylon.

Remarks.—Based on the single female specimen obtained from Ceylon, Walker (1904) created this species. The occurrence of this species has not yet been reported from anywhere else. This species is not represented in the present collection.

Family ATYLIDAE

Genus *Atylus* Leach

Atylus granulosa (Walker)

Paratylus granulatus, Walker, 1904, p. 265.

Atylus granulosa, Barnard, 1916.

Locality.—This has been previously collected and recorded from Cheval Paar, Ceylon.

Remarks.—Walker (1904) has described it as a new species and included it under the genus *Paratylus* but Barnard (1916) transferred it to *Atylus*. This species is not represented in the present collection.

Family GAMMARIDAE

Genus *Megaluropus* Hoek

Megaluropus agilis Hoek

Megaluropus agilis Della Valle, 1893, p. 695, t. 3, fig. 9; t. 34, figs. 1-17.

Megaluropus agilis Walker, 1904, pp. 278-79.

- Megaluropus agilis* Stebbing, 1906, p. 420.
Megaluropus agilis Chevreux & Fage, 1925, p. 226, figs. 236-237.
Phylluropus capensis Barnard, 1930, p. 146, figs. 84-85.
Megaluropus agilis Barnard, 1940, p. 453.
Megaluropus agilis Schellenberg, 1942, p. 46, figs. 25-28.
Megaluropus agilis Pillai, 1957, p. 50, fig. X.
Megaluropus agilis Nayar, 1959, p. 21, p. VI, figs. 18-29.

Locality.—Ceylon and Tuticorin.

Distribution.—This species has been previously recorded from Kattegat; North Sea, Holland; Firth of Clyde; Liverpool Bay; English Channel; British Channel; Gulf of Naples; Travancore coast and Madras coast.

Remarks.—A few specimens, both males and females belonging to this species, were collected from Thollayiram Paar from sponges found at depths 15 meters to 25 metres.

Genus *Melita* Leach

Melita fresnelii (Aud)

(Fig. 5f)

- Melita cotesi* Giles, 1890, p. 64, pl. 2, fig. 1.
Melita anischir, Walker, 1904, p. 270, pl. 4, figs. 28.
Melita fresnelii Walker, 1909, p. 334.
Melita fresnelii Barnard, 1916, p. 189, pl. 28, fig. 32.
Melita fresnelii Schellenberg, 1928, p. 644.
Melita fresnelii Shoemaker, 1935, p. 239.
Melita fresnelii Barnard, 1937, p. 159.
Melita fresnelii Nayar, 1959, p. 22, pl. VII, figs. 1-5.

Locality.—This has been recorded from Ceylon previously and it has since been collected from Tuticorin during 1962-64.

Recorded localities in the Indian Ocean.—Andaman Island (Giles); Ceylon, Seychelles; Wasin, Suakim (Walker); Suez Bay (Schellenberg).

Distribution.—This species has been previously recorded from East Indies, South Africa, Australia, California, Red Sea, Gulf of Aden, Zanzibar area and Madras coast.

Size.—The length of the male from front of the head to the end of the uropods is about 5 mm.

Melita obtusata (Mont)

- Melita obtusata* Walker, 1904, p. 270.
Melita obtusata Schellenberg, 1942.

Locality.—This species has been previously reported from Ceylon.

Remarks.—This species is not represented in the present collection.

Genus *Maera* Leach*Maera othonides* Walker

Maera othonides Walker, 1904, p. 271, pl. V, fig. 29.

Maera othonides Walker, 1905, p. 927.

Maera othonides Chilton, 1921, p. 535, fig. 5.

Maera othonides Barnard, 1935, pp. 285-286.

Maera othonides Nayar, 1959, pp. 24-25, pl. VIII, figs. 1-18.

Locality.—This has been previously reported from Ceylon. During the present survey, a number of specimens were obtained from Tuticorin pearl banks and also from Mandapam coast.

Distribution.—This species has been recorded from Ceylon and Maldiv Islands by Walker (1904 & 1908), Chilka Lake by Chilton (1921), from Travancore and Cochin by Barnard (1935) and from Madras coast by Nayar (1959).

Maera subcarinata (Hasw.)

Elasmopus subcarinatus Walker, 1904, p. 275, pl. 5, fig. 34.

Elasmopus subcarinatus Walker, 1909, p. 335.

Elasmopus subcarinatus Gravely, 1927, p. 123.

Elasmopus subcarinatus Stephensen, 1931, p. 11.

Elasmopus subcarinatus Barnard, 1935, p. 286.

Elasmopus subcarinatus Barnard, 1937, p. 160.

Maera subcarinata Harley, 1954 a, p. 603.

Locality.—Very common in Ceylon. A number of specimens belonging to this species have been collected during the present survey work from different pearl banks off Tuticorin. A number of specimens have also been collected from Mandapam coast.

Recorded localities in Indian Ocean.—Ceylon and Seychelles (Walker); Krusadai Island (Gravely); Travancore (Barnard).

Distribution.—East Indies; Australia, South Africa.

Maera tenella (Dana)

(Fig. 8)

Maera tenella Walker, 1904, pp. 272-73, pl. 5, fig. 31.

Locality.—This has been previously recorded from Ceylon. One male specimen belonging to this species was obtained from the underwater collections made at Thollayiram Paar on 11-10-1963.

Maera inaequipes (Costa)

Maera scissimana Walker, 1904, p. 273, pl. 5, fig. 32.

Maera inaequipes Walker, 1909, p. 1334.

Maera inaequipes Schellenberg, 1928, p. 646.

Maera inaequipes Barnard, 1937, p. 159.

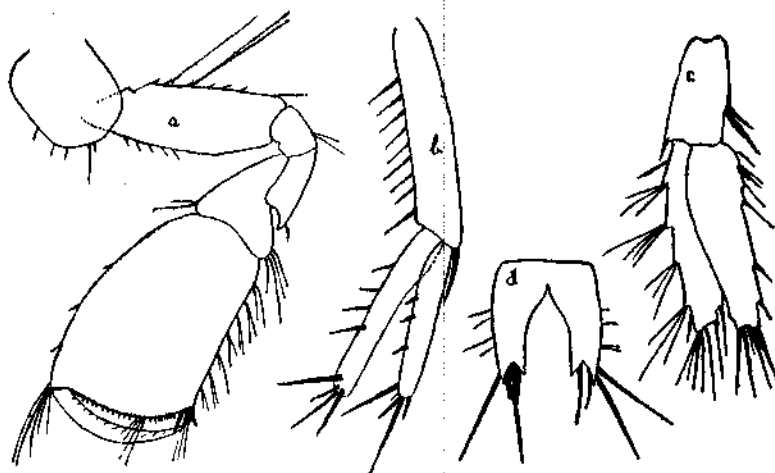


FIG. 8. *Maera tenella* (Dana). Male: (a) Gnathopod 2; (b) uropod 1; (c) uropod 3; (d) telson.

Locality.—This has been previously recorded from Ceylon.

Recorded localities in Indian Ocean.—Red Sea (Kossmann, Spandl); Seychelles (Miers); Maldives, Seychelles, Wasin, Suez, Suakim (Walker); Suez (Schellenberg).

Distribution.—Bermuda; Azores and Canaries; Mediterranean; South Africa; Australasia; Chile.

Remarks.—This species is not represented in the present collection.

***Maera quadrimana* (Dana)**

(Fig. 9 a, b)

Garrarus quadrimanus Dana, 1853, p. 955, t. 65, fig. 9.

Maera quadrimanus Bate, 1862, p. 194, t. 35, fig. 5.

Maera quadrimana Stebbing, 1906, p. 434 (literature).

Maera quadrimana Schellenberg, 1938, pp. 45–48, figs. 21–22.

Maera quadrimana J. L. Barnard, 1955, p. 13.

Maera quadrimana Nayar, 1959, p. 23, pl. 7, figs. 6–15.

Locality.—Number of specimens belonging to this species have been collected from Tuticorin and also from Mandapam coast. This is the first record of this species from the Gulf of Mannar.

Distribution.—This has been previously recorded from Tropical and South Pacific, Fiji Islands, New Zealand, Hawaiian Islands and from Madras coast.

***Maera pacifica* Schellenberg**

(Fig. 9 c, d)

Maera pacifica Schellenberg, 1938, pp. 42–45, figs. 19 & 20.

Maera pacifica Nayar, 1959, pp. 23–24, pl. 8, figs. 16 & 17.

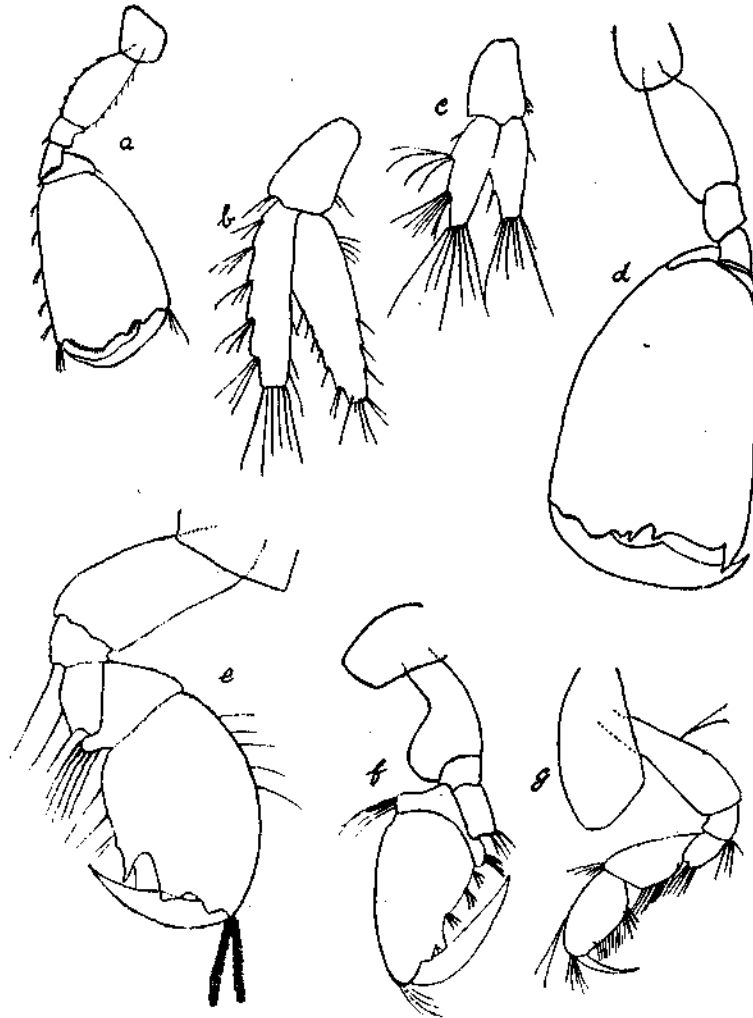


FIG. 9. (a) *Maera quadrimana* (Dana) male, gnathopod 2; (b) same, uropod 3; (c) *Maera pacifica* Schellenberg, male, uropod 3; (d) same, gnathopod 2; (e) *Lembos podocerooides* Walker, male, gnathopod 1, right side; (f) *Photis longimanus* Walker, gnathopod 2; (g) same, gnathopod 1.

Locality.—A few specimens belonging to this species were collected from Tuticorin and also from Mandapam Camp. This is the first record of this species from the Gulf of Mannar.

Distribution.—This has been previously recorded from Hawaii Islands by Schellenberg (1938) and from Krusadai Island by Nayar (1959).

Genus *Ceradocus* Costa

Ceradocus rubromaculatus (Stimpson)

Maera rubro-maculata Walker, 1904, p. 272, pl. 5, fig. 30.

Maera rubro-maculata Chevreux 1907, p. 479, fig. 6.

Maera rubro-maculata Chilton, 1921 a, p. 71, fig. 9, lib.

Maera rubro-maculata Tattersall, 1922, p. 6, pl. 1, figs. 15-16.

Maera rubro-maculata Schellenberg, 1925, p. 154.

Maera rubro-maculata Schellenberg, 1928, p. 644.

Maera rubro-maculata Pirlot, 1934, p. 222.

Maera rubro-maculata Barnard, 1937, p. 160.

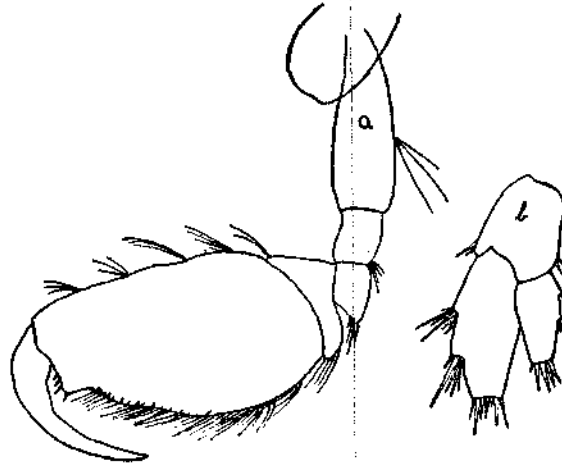


FIG. 10. *Elasmopus pecteniscrus* (Bate), male, (a) gnathopod 1; (b) uropod 3.

Locality.—Collected from Ceylon.

Recorded localities in Indian Ocean.—Maldives, Ceylon, Seychelles, Red Sea (Walker), Suez (Schellenberg).

Distribution.—South Africa, East Indies, Australia, New Zealand and Gambier Archipelago.

Genus *Elasmopus* Costa

Elasmopus spinimanus Walker

Elasmopus spinimanus Walker, 1904, p. 277, pl. 5, figs. 36.

Elasmopus spinimanus Gravely, 1927, p. 123.

Locality.—This species was collected from Ceylon and described by Walker (1904) as a new species. It has also been recorded by Gravely (1927) from Krusadai Island. It is not represented in the present collection.

Elasmopus pecteniscrus (Bate)

(Fig. 10)

Elasmopus serrula Walker, 1904, p. 277, pl. 18, fig. 34.

Elasmopus serrula Walker, 1909, p. 336.

Elasmopus pecteniscrus Barnard, 1916, p. 197, pl. 28, fig. 33.

Elasmopus pecteniscrus Gravely, 1927, p. 123.

Elasmopus pecteniscrus Schellenberg, 1928, p. 647.

Elasmopus pecteniscrus Shoemaker, 1935, p. 238.

Elasmopus pecteniscrus Pirlot, 1936, p. 312.

Elasmopus pecteniscrus Barnard, 1937, p. 161.

Elasmopus pecteniscrus J. L. Barnard, 1955, pp. 8-10, fig. 4.

Elasmopus pecteniscrus Nayar, 1959, pp. 27-28, pl. 9, figs. 20-35.

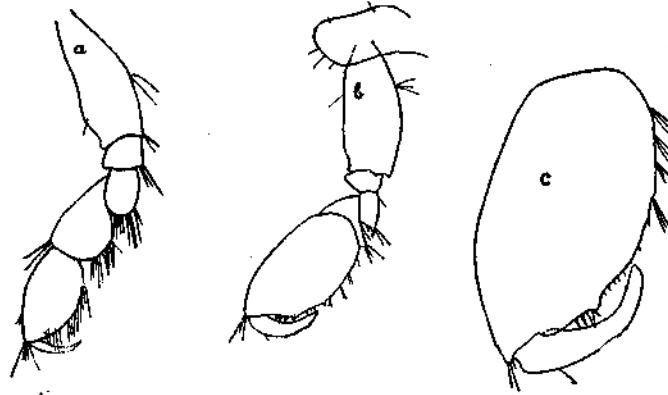


FIG. 11. *Parelasmopus suluensis* (Dana). Male: (a) gnathopod 1; (b) gnathopod 2; (c) end of gnathopod 2.

Locality.—Ceylon and Tuticorin. This has been previously recorded from Ceylon. A number of specimens were obtained from the pearl and chank beds off Tuticorin during 1962-64.

Recorded localities in Indian Ocean.—Red Sea (Kossmann, Spandl); Ceylon, Zanzibar, Suez (Walker); Krusadai Island (Gravely); Suez, Dar-es-Salaam (Schellenberg) and Madras coast (Nayar).

Distribution.—This is a cosmopolitan species and has been recorded from New Guinea; South Africa; East Indies; Puerto Rico and Hawaiian Island.

Elasmopus dubius Walker

Elasmopus dubius Walker, 1904, p. 276, pl. 5, fig. 35.

Locality.—Ceylon.

Remarks.—This species has been created by Walker (1904) based on the single male specimen obtained from the pearl oysters, East Cheval Paar, on 8-11-1902. It has not been reported from anywhere else since 1904. It is not represented in the present collection also.

Genus *Parelasmopus* Stebbing

Parelasmopus suluensis (Dana)

(Fig. 11)

Parelasmopus suluensis Stebbing, 1888, p. 1029, pl. c.

Parelasmopus suluensis Walker, 1904, p. 278, pl. 6, fig. 38,

Pareasmopus suluensis Barnard, 1935, p. 286, fig. 6.

Pareasmopus suluensis Barnard, 1940, p. 463.

Pareasmopus suluensis Pillai, 1957, p. 52, fig. 11.

Locality.—Mandapam. A single male specimen belonging to this species was collected from Mandapam during October 1964. This has been previously recorded from Cheval Paar, Ceylon.

Distribution.—Sulu Sea, Marshal and Solomon Islands, India, Ceylon, Australia, Red Sea, Africa.

Family DEXAMINIDAE

Genus *Dexamine* Leach

Dexamine serraticrus Walker

Dexamine serraticrus Walker, 1904, pp. 265–66, p. 14, fig. 24.

Locality.—This has been previously collected and recorded from Cheval and Talavillu Paars, Ceylon.

Remarks.—Walker (1904) has created a new species to accommodate the two specimens collected from Ceylon. The occurrence of this species has not yet been reported from anywhere else. This species is not represented in the present collection also.

Genus *Polycheria* Haswell

Polycheria atolli Walker

Tritaeta antarctica Walker, 1904, p. 266, pl. 4, fig. 25.

Polycheria atolli Walker, 1905, p. 926, pl. 88, figs. 1–5.

Polycheria atolli Walker, 1909, p. 337.

Polycheria atolli Schellenberg, 1925, p. 157, fig. 15.

Polycheria atolli Barnard, 1930, p. 390, fig. 49.

Polycheria atolli Barnard, 1937, p. 162.

Polycheria atolli Barnard, 1940, p. 464.

Polycheria atolli Pillai, 1957, pp. 52–54, fig. 12.

Locality.—This has been previously recorded from Ceylon. A single female specimen was obtained in the present collections from Thollayiram Paar on 28–1–1963.

Distribution.—Ceylon, Maldives, Seychelles, East Africa, South Africa, Arabian Sea, Trivandrum coast.

Family MELPHIDIPPIDAE

Genus *Hornella* Walker

Hornella incerta Walker

Hornella incerta, Walker, 1904, p. 269, pl. 4, fig. 27.

Hornella incerta Stebbing, 1906, p. 728.

Hornella incerta Pillai, 1957, pp. 48–49, fig. 9.

Locality.—A few specimens were collected from Ceylon and also from Tuticorin.

Remarks.—A new genus was created by Walker (1904) to accommodate this species collected from Ceylon. A few specimens belonging to this species were collected by Pillai (1957) from plankton collections made at Trivandrum. In the present collection also a few specimens were obtained from the plankton off Tuticorin collected during the months May to June 1964. No other species has yet been added to this genus.

Family AORIDAE

Genus *Lembos* Bate

Lembos podoceroides Walker

(Fig. 9 e)

Lembos podoceroides Walker, 1904, p. 279, pl. 6, fig. 39.

Lembos podoceroides Walker, 1909, p. 338.

Locality.—Based on a single specimen collected from Ceylon, this species has been created by Walker (1904). A single male specimen was obtained from Thollayiram Paar on 26-2-1963.

Recorded localities in the Indian Ocean: Ceylon, Maldives, Red Sea (Walker).

Lembos chelatus Walker

Lembos chelatus Walker, 1904, pp. 280-81, pl. 6, fig. 40.

Locality.—This has been previously collected and recorded from Ceylon.

Remarks.—This species was created by Walker (1904) based on a single specimen obtained from Chiltan Paar. The occurrence of this species has not yet been reported from anywhere else. This species is not represented in the present collection also.

Family TALITRIDAE

Genus *Talorchestia* Dana

Talorchestia martensii (Weber)

(Fig. 12)

Talorchestia martensii Stebbing, 1906, p. 553.

Talorchestia martensii Chilton, 1921, pp. 541-45, fig. 8.

Talorchestia martensii Chilton, 1925, p. 535.

Talorchestia martensii Gravely, 1927, p. 123.

Talorchestia martensii Barnard, 1935, pp. 289-90.

Talorchestia martensii Nayar, 1959, pp. 28-29, pl. 10, figs. 1-9.

Locality.—A number of specimens were collected from Tuticorin and also from Mandapam coast.

Distribution.—This has been recorded from Flores, East Indies, Chilka Lake, Gulf of Mannar, Tale Sap, Siam, Vizagapatnam, Travancore coast and Madras coast.

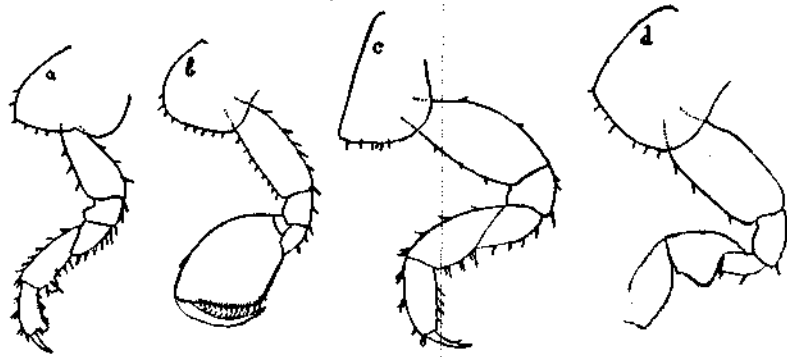


FIG. 12. *Talorchestia martensii* Stebbing. Male: (a) Gnathopod 1; (b) gnathopod 2; Female: (c) gnathopod 1; (d) gnathopod 2.

Family HYALELLIDAE

Genus *Parhyalella* Kunkil

Parhyalella indica Barnard

Parhyalella indica Barnard, 1935, pp. 294-95, text-fig. 11.

Locality.—Tuticorin.

Remarks.—The species was collected from Tuticorin harbour in 1926, and described as a new species by Barnard (1935). It is not represented in the present collection.

Family HAYLIDAE Bulycheva

Genus *Hyale* Rathke

Hyale honoluluensis Schellenberg

Hyale honoluluensis Schellenberg, 1938, p. 69, fig. 35.

Hyale honoluluensis Nayar, 1959, p. 31, pl. 11, figs. 1-9.

Locality.—Tuticorin.

Remarks.—Number of specimens belonging to this species were collected from the shore, pier, and the buoys at the harbour areas. This is the first record of this species from the Gulf of Mannar region.

Distribution.—This has been previously recorded from Hawaiian Islands by Schellenberg (1938) and from Madras by Nayar (1959).

Genus *Parhyale* Stebbing

Parhyale hawaiiensis (Dana)

Allorchestes hawaiiensis Dana, 1853, p. 900, Taf. 61, fig. 5.

Hyale brevipes Shoemaker, 1933, p. 18, figs. 10 and 11.

Hyale brevipes Barnard, 1935, p. 292.

Hyale hawaiiensis Schellenberg, 1938, p. 66, fig. 34.

Hyale hawaiiensis Shoemaker, 1942, p. 18.

Hyale hawaiiensis Nayar, 1959, pp. 30-31, pl. 10, figs. 10-24.

Locality.—Number of specimens belonging to the species have been collected from Tuticorin and also from Mandapam Camp.

Distribution.—The occurrence of this species has been recorded from Hawaii, Seychelles, Ceylon, Maldives, Tale Sap (Siam), Vizagapatnam, Travancore, Krusadai, Suez, West Indies, Narborough Island, Galapagos Island and Madras coast.

Family PHOTIDAE

Genus *Eurystheus* Bate

Eurystheus atlanticus (Stebbing)

(Fig. 13)

Gammaropsis zeylanicus Walker, 1904, p. 282, pl. 6, fig. 41.

Gammaropsis gardinery Walker, 1905, p. 929, pl. 88, figs. 11, 14, 16 and 17.

Gammaropsis zeylanicus Walker, 1909, p. 339.

Eurystheus atlanticus Stebbing, 1908, p. 86, pl. 14 B.

Eurystheus atlanticus Barnard, 1937, p. 164.

Eurystheus atlanticus Pirlot, 1938, pp. 345-46.

Locality.—Generally distributed round the coast of Ceylon. A number of specimens were collected from the pearl banks. They were found in association with some of the common sponges found in Paar area.

Distribution.—Ceylon, Maldives, Seychelles, Cape Verdigs and South Africa.

Genus *Photis* Kroyer

Photis longicaudata (Bate & Westwood)

Photis longicaudata Sars, 1894, p. 571, pl. 203, fig. 1.

Photis longicaudata Walker, 1904, p. 286, pl. 6, fig. 43.

Photis longicaudata Walker, 1908, p. 339.

Photis longicaudata Chevreux and Fage, 1925, p. 310, fig. 319.

Photis longicaudata Schellenberg, 1926 a, p. 231.

Photis longicaudata Schellenberg, 1928, p. 662.

Photis longicaudata Barnard, 1937, p. 164.

Photis longicaudata Shoemaker, 1945, p. 11, fig. 5.

Photis longicaudata Nayar, 1959, p. 34, pl. 12, figs. 1-7.

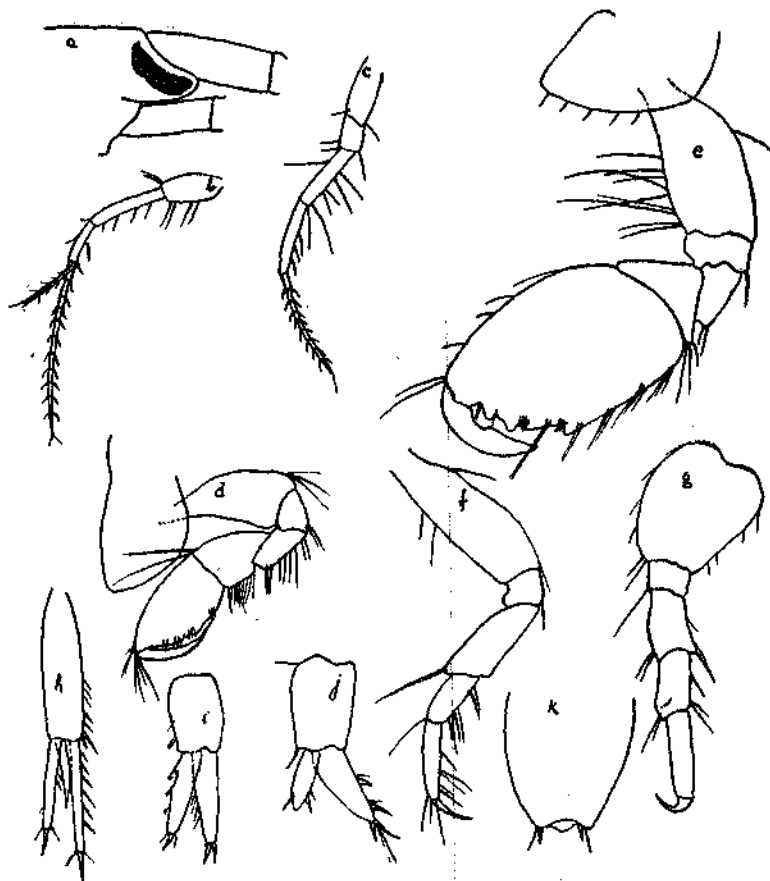


FIG. 13. *Eurystheus atlanticus* (Stebbing). (a) Head; (b) antenna 1; (c) antenna 2; (d) gnathopod 1; (e) gnathopod 2; (f) pereopod 1; (g) pereopod 3; (h) uropod 1; (i) uropod 2; (j) uropod 3; (k) telson.

Locality.—Ceylon. This has been previously collected and recorded from Ceylon. Number of specimens were also collected during the present survey from Thollayiram Paar and also from the shore during 1962-64.

Distribution.—This species has been recorded from Northern Europe, Mediterranean, Gulf of Guinea (Schellenberg), Suez Canal (Schellenberg), South Arabian coast (Barnard), British East Africa and Seychelles (Walker), Ceylon (Walker), Gulf of Mexico, Tortugas, Florida (Shoemaker) and Madras coast (Nayar).

***Photis longimanus* Walker**

(Fig. 9 f, g)

Photis longimanus Walker, 1904, pp. 286-87, pl. 7, fig. 44.

Locality.—This has been previously recorded from Ceylon. Two specimens were obtained from Thollayiram Paar off Tuticorin on 16-11-1963.

Photis nana Walker

Photis nana Walker, 1904, pp. 287-88, pl. 17, figs. 45.

Locality.—Ceylon.

Remarks.—Only 2 specimens were collected from Ceylon and recorded by Walker (1904) and since then the species has not been reported from anywhere. It is not represented in the present collection also.

Genus *Cheiriphotis* Walker*Cheiriphotis megacheles* (Giles)

(Fig. 17 a)

Melita megacheles Giles, 1885, p. 70, pl. 3.

Eurystheus hirsutus Giles, 1887, p. 227, pl. 8.

Cheiriphotis megacheles Walker, 1904, p. 284, pl. 6, fig. 42.

Cheiriphotis walkeri Stebbing, 1910, p. 461.

Cheiriphotis durbanensis Barnard, 1916, p. 247.

Cheiriphotis megacheles Schellenberg, 1928, p. 381.

Cheiriphotis delloeti Pirlot, 1934, p. 231.

Cheiriphotis megacheles, Barnard, 1937, p. 169.

Cheiriphotis megacheles Nayar, 1959, p. 33, pl. 11, figs. 23-25.

Locality.—Ceylon. Number of specimens, both males and females, were obtained from the pearl and chank beds off Tuticorin. They are generally found in association with the common sponges found in the Paar area.

Distribution.—This has been previously recorded from Bay of Bengal (Giles), Ceylon (Walker), South Africa, East Indies, South Arabian coast, and from Madras coast (Nayar).

Genus *Chevalia* Walker*Chevalia aviculae* Walker

(Fig. 17 b)

Chevalia aviculae Walker, 1904, p. 288, pls. 7-8, fig. 50.

Chevalia aviculae Walker, 1909, p. 341.

Chevalia aviculae Barnard, 1916, p. 252.

Chevalia aviculae Barnard, 1937, p. 169, fig. 15.

Locality.—Ceylon. A few specimens belonging to this species have been obtained in the present collection from oyster beds of Tuticorin.

Recorded localities in Indian Ocean.—Ceylon, Seychelles (Walker).

Distribution.—South Africa.

Ampithoe ramondi, Schellenberg, 1928, pp. 665-66.

Ampithoe ramondi Barnard, 1935, p. 305.

Ampithoe ramondi Pirlot, 1938, pp. 346-47.

Ampithoe ramondi Barnard, 1937, p. 170.

Ampithoe vaillanti Chevreux and Fage, 1925, pp. 333-34.

Ampithoe vaillanti Walker, 1904, p. 291.

Ampithoe intermedia Walker, 1904, pp. 290-91.

Ampithoe ramondi, Barnard, 1955, pp. 28-29.

Locality.—This species has been previously recorded from Ceylon. Number of specimens belonging to this species have been collected from the pearl and chank beds off Tuticorin during 1962-63 and also from Mandapam during 1964.

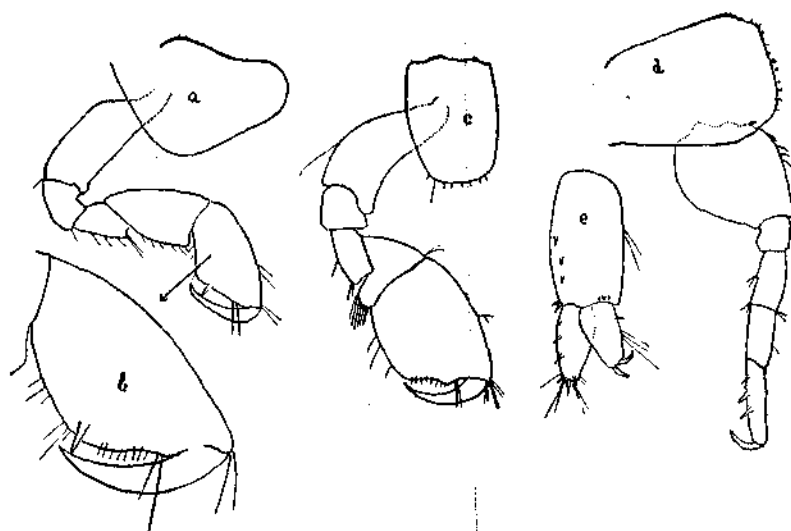


FIG. 14. *Ampithoe ramondi* Audouin. Male: (a) Gnathopod 1; (b) end of gnathopod 1; (c) gnathopod 2; (d) peraeopod 3; (e) uropod 3.

Distribution.—This is a cosmopolitan species found in the tropical and subtropical seas.

Remarks.—J. L. Barnard (1955) considers *Ampithoe vaillanti* Lucas and *Ampithoe intermedia* Walker described from the collections made from the Ceylon pearl oyster beds by Walker (1904) as a synonym of *Ampithoe ramondi* Audouin. For a complete list of synonymy of this species J. L. Barnard (1955) may be referred to.

Genus *Cymadusa* Savigny*Cymadusa filosa* Savigny

Grubia filosa Schellenberg, 1928, pp. 666-68, fig. 206.

Grubia filosa Nayar, 1959, pp. 37-38, pl. 13, figs. 12-19.

Grubia filosa Shoemaker, 1935, p. 245, figs. 4-5.

Grubia filosa Barnard, 1937, pp. 171-72.

Cymadusa filosa, J. L. Barnard, 1955, pp. 29-30, fig. 15.

Locality.—This has been previously recorded from Krusadai Island and Mandapam Camp by Nayar (1959). Number of specimens were collected during the present underwater survey work from pearl and chank beds off Tuticorin during 1962-64.

Distribution.—Mediterranean Sea, Indian Ocean, Red Sea, Australia, Caribbean Sea, West Africa, Bermuda, Hawaiian Islands and Madras coast.

Family ISCHYROCERIDAE

Genus *Jassa* Leach*Jassa falcata* (Montagu)

Jassa falcata Walker, 1904, p. 292, pl. 7, fig. 47.

Remarks.—Walker got only a single female and in the absence of a male in the collection he was not certain about the identity of the specimen although he has referred it to as *Jassa falcata*. This species is not represented in the present collection of material from Tuticorin waters.

Family COROPHIDAE

Genus *Grandidierella* Countiere*Grandidierella bonnieri* Stebbing

(Fig. 17 f)

Grandidierella bonnieri Stebbing, 1908, p. 120, pl. 6.

Grandidierella megnae Chilton, 1921, p. 548.

Unciolella lunata Schellenberg, 1928, p. 669, fig. 207.

Grandidierella megnae Stephensen, 1933, p. 434.

Grandidierella bonnieri Barnard, 1935, p. 299, figs. 12 d and 13 b.

Grandidierella megnae Panikkar & Aiyar, 1937, p. 294.

Grandidierella bonnieri Shoemaker, 1948, p. 11.

Grandidierella bonnieri Nayar, 1959, pp. 38-39, pl. 14, figs. 1-5.

Locality.—Number of specimens were collected from Tuticorin and Mandapam coast.

Distribution.—This species has been recorded from the brackish pools as Port Canning, Lower Bengal (Stebbing, 1908); Chilka Lake (*G. megnae*) (Chilton, 1932); Suez Canal (*Unciolella lunata*)

(Schellenberg, 1928); Island of Bonaire (Stephensen, 1933); Vizagapatnam, Cochin & Travancore (Barnard, 1935); Brazil (Schellenberg, 1938); Cuba (Shoemaker, 1937); the West Indian and Caribbean regions (Shoemaker, 1937), and from Madras coast (Nayar, 1959).

Genus *Cerapus* Say

Cerapus abditus Templeton

- Cystophium calamicola* Giles, 1885, p. 54, pl. 1.
Cerapus flindersi Stebbing, 1888, p. 1163, pl. 125.
Cerapus abditus Stebbing, 1910, p. 616, pl. 55-A.
Cerapus calamicola, Walker, 1904, p. 293.
Cerapus abditus, Barnard, 1916, p. 271.
Cerapus abditus Barnard, 1937, p. 173.
Cerapus abditus, Pirlot, 1938, p. 349, figs. 157-58.
Cerapus abditus, Pillai, 1957, p. 59, fig. 16, 1-2.
Cerapus abditus, Nayar, 1959, pp. 41-42, pl. 14, figs. 7-15.

Locality.—Collected from Ceylon. This species is represented by a few specimens in the present collection.

Distribution.—Bay of Bengal, Ceylon, Socotra, Australia, South Africa, Mauritius, South Arabian coast, Travancore and Madras.

Genus *Erichthonius* M. Edwards

Erichthonius macrodactylus (Dana)

(Fig. 17 a)

- Erichthonius macrodactylus* Walker, 1904, p. 292, pl. 7, fig. 48.
Erichthonius macrodactylus Stebbing, 1906, pp. 672 and 740.
Erichthonius macrodactylus Pirlot, 1938, p. 352-53.

Locality.—This has been previously collected and recorded from Ceylon. In the present collection a few specimens were obtained from Tuticorin.

Distribution.—Ceylon.

Erichthonius brasiliensis (Dana)

(Fig. 15)

- Erichthonius abditis* Walker, 1904, p. 292.
Erichthonius brasiliensis Walker, 1909, p. 343.
Erichthonius brasiliensis Schellenberg, 1928, p. 668.
Erichthonius brasiliensis Shoemaker, 1935, p. 249.
Erichthonius brasiliensis Barnard, 1937, p. 173.
Erichthonius brasiliensis Barnard, 1955, pp. 37-38.
Erichthonius brasiliensis Nayar, 1959, p. 42, pl. 15, figs. 1-13.

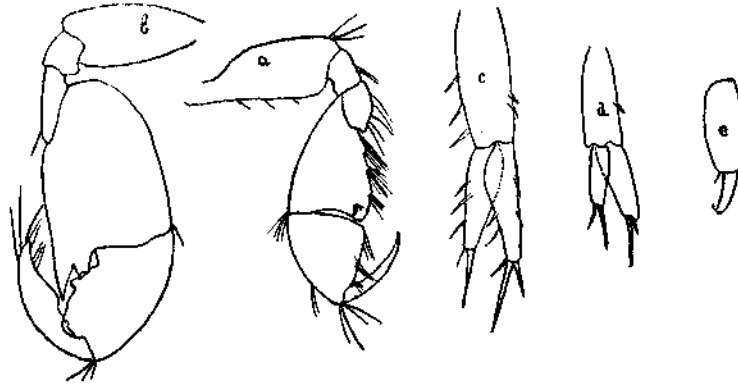


FIG. 15. *Erichthonius brasiliensis* (Dana). Male: (a) Gnathopod 1; (b) gnathopod 2; (c) uropod 1; (d) uropod 2; (e) uropod 3.

Locality.—This species has been collected and recorded from Ceylon (1904). In the present collection also number of specimens, both male and female, were obtained from the collections made at different stations in the Paar area during 1962-64.

Distribution.—Cosmopolitan.

Remarks.—For a complete list of synonymy of this species, Barnard, J. L. (1955) may be consulted.

Genus *Siphonocetes* Kroyer

Siphonocetes orientalis Walker

Siphonocetes orientalis Walker, 1904, p. 294, pl. 7, fig. 49.

Siphonocetes orientalis Barnard, 1916, p. 270.

Siphonocetes orientalis Barnard, 1937, p. 174.

Locality.—Ceylon.

Distribution.—This has been first recorded from Ceylon (Walker) and since been described from South Africa (Barnard) and South Arabian coast (Barnard).

Remarks.—This species is not represented in the present collection.

Genus *Corophium* Latreille

Corophium triaenonyx Stebbing

(Fig. 16)

Corophium triaenonyx Stebbing, 1904, p. 25, pl. 6 a.

Corophium crassicorne Walker, 1904, p. 294.

Corophium crassicorne Chilton, 1921, p. 554.

Locality.—This has been previously recorded from Ceylon. This has been collected from different pairs off Tuticorin in the present underwater survey work during 1962-64.

Remarks.—Stebbing (1904) described this species as a new one from the collections made from Ceylon. The same year Walker (1904) included the forms he got from Ceylon under *Corophium crassicorne*. Based on Walker (1904), Chilton (1921) has referred the specimens collected from Chilka lake as *Corophium crassicorne*. But Shoemaker (1947) in his studies on the genus *Corophium* has transferred the specimens described by Walker (1904) and Chilton (1921) as *Corophium triaenonyx*.

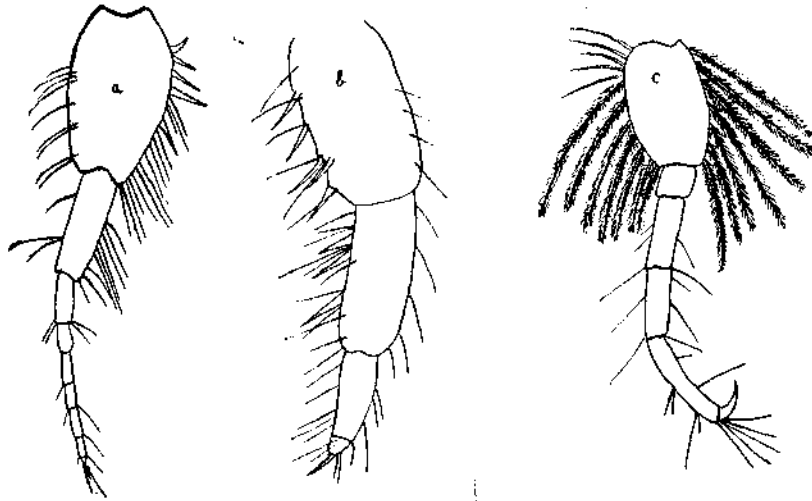


FIG. 16. *Corophium triaenonyx* Stebbing. Female: (a) Antenna 1; (b) antenna 2; (c) peraeopod 5.

Family PODOCERIDAE

Genus *Podocerus* Leach

Podocerus laevis (Haswell)

Platophium laeve Walker, 1904, pp. 295-96, pl. 7, figs. 51.

Locality.—This has been previously recorded from the Ceylon coast.

Remarks.—This species is not represented in the present collection.

Podocerus zeylanicus (Walker)

Platophium zeylanicum Walker, 1904, pp. 297-98, pl. 8, figs. 53.

Locality.—Number of species were collected from the pearl oyster beds from East Cheval Paar during 1902.

Remarks.—This species described by Walker (1904) as a new one has not yet been reported from anywhere else. This species is not represented in the present collection also.

Podocerus brasiliensis (Dana)

(Fig. 17 d, e)

Platophium brasiliensis Dana, 1853, 55, p. 838, t. 55.

Platophium synaptochir Walker, 1904, pp. 296-97, pl. 8, fig. 52.

- Platophium synaptochir* Walker, 1909, p. 243.
Platophium synaptochir Barnard, 1916, p. 279.
Podocerus brasiliensis Barnard, 1925, p. 366.
Podocerus brasiliensis Gravely, 1927, p. 123.
Podocerus brasiliensis Schellenberg, 1928, p. 674.
Podocerus brasiliensis Barnard, 1935, p. 305.

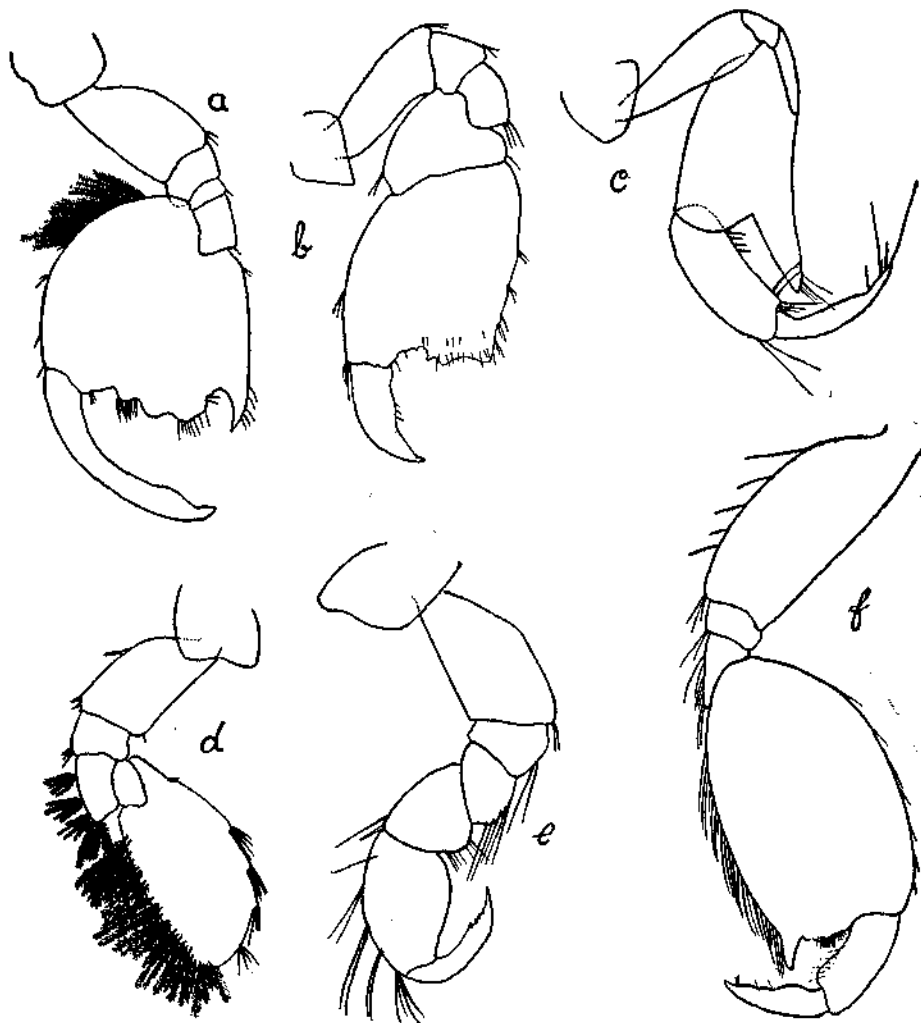


FIG. 17. (a) *Cheiriphotis megacheles* (Giles). Male: Gnathopod 2; (b) *Chevalia aviculae* Walker, male, gnathopod 2; (c) *Erichthonius macrodactylus*, (Dana) male, gnathopod 2, left side; (d) *Podocerus brasiliensis* (Dana) male, gnathopod 2; (e) same, gnathopod 1; (f) *Grandidierlla bonnieri* Stebbing, male, gnathopod 1.

Locality.—This has been previously recorded from Ceylon and Krusadai Island. In the present collection number of specimens, both males and females, were collected from different Paars during 1962-64.

Distribution.—This species has been previously recorded from tropical Atlantic; Ceylon; Gulf of Mannar; Suez, Port Said, Dar-es-Salaam, Zanzibar, Natal; Rio de Janeiro, Antigua and Madras coast.

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