# THE AMPHIPODA OF THE SMITHSONIAN-ROEBLING EXPEDITION TO CUBA IN 1937 

BY
CL.ARENCE R. SHOEMAKER

Associate in Zoology, Smithsonian Institution

(Publication 3918)

## さge Eord 返aftimore (Press

BALTIMORE, MD., Ј. s. A.

# THE AMPHIPODA OF THE SMITHSONIANROEBLING EXPEDITION TO CUBA IN 1937 

By CLARENCE R. SHOEMAKER<br>Associate in Zoology, Smithsonian Institution

The amphipods of the Smithsonian-Roebling Expedition were taken in Corrientes Bay and in the vicinity of the Isle of Pines on the southwest coast of Cuba, in comparatively shallow waters. Many of the specimens were collected by means of the submarine electric light, which was used at a number of stations with considerable success. The Gammaridea are represented by 9 families, io genera, and II species. The Hyperiidea are represented by 3 families, 6 genera, and 8 species. Two species, Pontogeneia bartschi and Ceradocus sheardi, are new to science.

## STATIONS AT WHICH AMPHIPODS WERE TAKEN

Station 30. Bahía Corrientes, Meyers anchorage, April 6, 1937.
Stations 48, 49, and 52. Bahía Corrientes, Corrientes anchorage, submarine light, April 8, 1937.

Stations 78, 88, and 89. Bahía Corrientes, Corrientes anchorage, submarine light, April 9, 1937.

Station ioo. Cayos San Felipe, submarine light, April io, 1937.
Station ili. Shore collecting, Siguanea Bay, opposite Siguanea Island, Isle of Pines, April II, 1937.

Station 124. Siguanea Bay, dredge, 12 to 26 feet, April il, 1937.
Station 169. Lat. $21^{\circ} 57^{\prime} 15^{\prime \prime}$ N., Long. $82^{\circ} 32^{\prime} 45^{\prime \prime}$ W., April I5, 1937.

## Order GAMMARIDEA

Family LYSIANASSIDAE

## Shoemakerella nasuta (Dana)

Lysianassa nasula Dina, 1853 and 1855 , United States Exploring Expedition, Crustacea, vol. 13, II, p. 915, pl. 62, fig. 2a-m.
Lysianax cubensis Stebbing, i897, Trans. Linn. Soc. London, ser. 2, vol. 7, p. 29, pl. 7B.

Lysianopsis alba Pearse, 1912, Proc. U. S. Nat. Mus., vol. 43, p. 369, fig. i. Lysianopsis alba Shoemaker, 1921, Univ. Iowa Stud. Nat. Hist., vol. 9, No. 5, p. 99.

Lysianassa cubensis Shoemaker, 1935, New York Acad. Sci. Scientific Survey of Porto Rico and the Virgin Islands, vol. 15, pt. 2, p. 232, fig. I.
Shoemakerclla nasuta Pirlot, 1936, in Max Weber, Siboga Expeditie, vol. 33e, p. 265.

Shoemakerella masuta Pirlot, 1939, Mem. Mus. Roy. Hist. Nat. Belgique, 2 d ser., fasc. 15, p. 47.

Station 169, 2 specimens $ㅇ$
This species was described by Dana from Rio de Janeiro, Brazil, and it has since been recorded from Barbados, Puerto Rico, Cuba, Tortugas and the coast of Florida, and Albatross station 2369-74 (northeastern part of the Gulf of Mexico). The animal measures about io mm. in length.

## Family PHOXOCEPHALIDAE

## PONTHARPINIA FLORIDANA Shoemaker

Pontharpinia floridana Shoemaker, 1933, Amer. Mus. Novit., No. 598, p. 5, figs. 3, 4 .

Station 48, 2 specimens; station 49, 2 specimens; station II2, 2 specimens.

This species was described from off Key Largo, Fla. There are in the collection of the United States National Museum specimens from Skull Creek, S. C., and from off Sable Island lighthouse, Ga. The species measures 6 to 8 mm .

## Family LEUCOTHOIDAE

## LEUCOTHOE SPINICARPA (Abildgaard)

Gammarus spinicarpa Abildga ard, 1789, in O. F. Müller, Zoologia Danica seu Animalium Daniae et Norvegiae rariorum ac minus notorum Descriptiones et Historia, ed. 3, vol. 3, p. 66, pl. II9, fig. i.
Leucothoe spinicarpa Sars, 1892, Crust. Norway, vol. 1, p. 283, pl. 100.
Lencothoe spinicarpa Stebbing, 1906, Das Tierreich, Amphipoda I, Gammaridea, p. 165 (literature).

Station 124, 2 specimens; station 169 , I specimen.
This is a cosmopolitan species and has been frequently taken on the east coast of the United States. It has also been taken in the Gulf of Mexico and the West Indies. This species measures from I4 to 18 mm . in length.

## Family SYNOPIIDAE <br> SYNOPIA ULTRAMARINA Dana

Synopia ultramarina DANA, 1853 and 1855, United States Exploring Expedition, Crustacea, vol. 13, II, p. 995, pl. 68, fig. 6a-h.
Synopia ultramarina Stebbing, 1906, Das Tierreich, Amphipoda I, Gammaridea, p. 271.

Synopia schécleana Bovallies, 1886, Nova Acta Reg. Soc. Sci. Upsala, ser. 3, vol. 13, No. 9, p. 16, pl. 2, figs. 22-29.
Synopia ultramarina Shofmaker, 1945, Amphipoda of the Bermuda Oceanographic Expedition 1929-1931, P. 195, fig. 8.
Station 30, about 50 specimens; station $\downarrow 8.3$ specimens; station 49 , I specimen ; station $5^{2}, 4$ specimens; station 78 , i specimen ; station 89, 15 specimens; station il2, i8 specimens.

Widely distributed in all tropical and subtropical seas. The species usually measures from 2 to 5 mm ., but specimens may reach 7 mm . in length.

## Family BATEIDAE

## CARINOBATEA CUSPIDATA Shoemaker

Carinobatca cuspidata Shoemaker, 1926, Proc. U. S. Nat. Mus., vol. 68, p. 21, figs. 14, 15.
Carinobatea chspidata Shoemaker, 1933, Amer. Mus. Novit., No. 598, p. 11. Carinobalca cuspidata Shoemaker, 1935, New lork Acad. Sci. Scientific Survey of Porto Rico and the Virgin Islands, vol. 15, pt. 2, p. 235.

Station 78, I specimen: station 89, 6 specimens; station 124, 8 specimens.

This species was described from St. Thomas, Virgin Islands. It has since been taken at Puerto Rico and the west coast of Florida. The animal measures about 5 mm . in length.

## CARINOBATEA CARINATA Shoemaker

Carinobatea carinata Shoemaker, 1926, Proc. U. S. Nat. Mus., vol. 68, p. 24. fig. 16.
Station 169 , I specimen.
This species was described from the west coast of Florida. The present record from off the Isle of Pines is the second of its occurrence. The animal measures about 5 mm . in length.

## Family PONTOGENEIIDAE

The difficulties of the family Pontogenciidac and the confusion existing among its genera have been discussed by Schellenberg ${ }^{1}$.

[^0]Stephensen ${ }^{2}$, Nicholls ${ }^{3}$, and others. Schellenberg has produced a key which, as Nicholls remarks, "has made the task of separating members of the various genera a comparatively simple one." The species which I am here describing, while obviously a member of the Pontogeneiidae, does not possess a combination of characters agreeing with any of the genera as keyed by Schellenberg. In the present species the fourth joint of the second antenna is longer than the fifth; the carpus of the gnathopods is not elongate; the fourth coxal plate is very shallowly excavate ; the telson is cleft to base ; and the branchiae are not simple but rather complex.

## PONTOGENEIA BARTSCHI new species

## Figure I

Station 30, about 50 specimens; station 48, about 50 specimens; station 49 , about 50 specimens; station 52 , about 25 specimens; station 78 , about 50 specimens; station 88,5 specimens ; station 89 , about Ioo specimens; station 100, many thousands of specimens.

Male.-Head with very short rostrum; lateral lobes broadly rounding ; eye very large and black. Antenna I shorter than 2; first joint nearly twice as long as second, which is twice as long as third; first peduncular joint bearing only groups of very fine setae on under surface; second peduncular joint bearing calceoli on its under surface; third peduncular joint is without accessory flagellum, but is expanded distally on the inner side into a shallow lobe bearing a few calceoli ; flagellum long and slender and composed of many joints, each of which bears a calceolus and two or three sensory filaments on its under distal edge. Antenna 2, fourth joint longer than fifth and both with calceoli on the upper surface; flagellum composed of many joints, each of which bears a calceolus and two sensory filaments on its upper distal edge.

Mandible normal, cutting edge rather narrow and armed with short blunt teeth ; accessory plate small, simple, and armed with short teeth; three spines in spine row; molar strong; palp strong, second joint longer than third and somewhat expanded. Maxilla I, inner plate small and bearing 3 distal plumose setae; outer plate bearing II spine teeth; second joint of palp armed distally with 4 slender teeth and

[^1]

Fig. 1.-Ponfogeneia bartschi new species. Male, $a$, front end of animal; $b$, a few segments of antemna I , greatly enlarged; $c$, mandible; $d$, maxilla $\mathrm{I} ; c$, maxilla 2 ; $f$, maxilliped; $g$, lower lip; $h$, distal end of gnathopod 1 ; i, peracopod 2 showing side plate and the complex branchia; $j$, hind end of anmal; $k$, telson; $l$, uropod 3.

4 setae. Maxilla 2, inner lobe narrower than outer and without oblique row of setae. Maxilliped, inner lobe not reaching to base of palp and armed distally with three strong teeth, one slender spine tooth, and several curved setae; outer lobe reaching just beyond the first joint of palp, armed with a row of submarginal spine teeth arranged in pairs, and bearing distally several curved spines; palp rather short and stout, third joint produced distally into a small lobe at the base of the dactyl. Upper lip with lower margin broadly rounding. Lower lip with inner lobes scarcely perceptible and mandibular processes short and rather blunt.

Gnathopods rather slender and weak and much alike in size and shape. Gnathopod i, fifth joint as long as wide with lower margin scarcely at all produced ; sixth joint about twice as long as wide, palm oblique, finely serrulate throughout and defined by a slight angle which is armed on the outer surface with one long and one short spine and on the inner surface with two long spines. Seventh joint fitting palm and bearing about six short setae on inner margin. Gnathopod 2 like I except that the fifth joint is produced below into a rather long, narrow lobe which lies against the base of the sixth joint. Peraeopods I and 2 alike in size and shape; fourth joint slightly expanded; fourth, fifth, and sixth joints bearing a row of plumose setae on the hind margin ; seventh joint long, curved, and bearing a minute setule at base of nail. Peraeopods 3 to 5 increasing consecutively in length, the second joint considerably expanded. The coxal plates are all shallow and are shaped as shown in figure i A. Metasome segment 1 is rounding below : segment 2 is quadrate at lower hind corner; and lower hind corner of segment 3 is obtuse angled.

Uropods I and 2 slender and bearing a few short spines. Uropod 3 extending farther back than $I$, rami broad and converging to a sharp point, their margins armed with spines and plumose setae. Telson extending beyond peduncle of uropod 3 , cleft to its base, the lobes obliquely rounding distally and unarmed, but upper surface bearing a few submarginal setules. The branchiae are quite complex and consist of a series of overlapping lobes attached to a broad lamellar base which is strengthened at one edge by a thickened process resembling a vertebral column. Length from rostrum to end of uropod 3 about 6 mm .

Female.-The female closely resembles the male but is slightly smaller. It differs from the male as follows: the antennae are shorter, but bear calceoli as in the male; the gnathopods are smaller and weaker, though they are similar in structure to those of the male; the first and second peraeopods are without the plumose setae on the
fourth to sixth joints, but bear spines instead. Length of female from rostrum to end of uropod 3 about 5 mm .

Type.-A male, U.S.N.M. No. So622, taken by Dr. Paul Partsch at station 100, south coast of the west end of the western island of the Cayos San Felipe, Corrientes Bay, western end of Cuba, April 1o, 1937.

## Family GAMMARIDAE

## CERADOCUS SHEARDI new species

Figure 2

## Station 169,12 specimens.

These specimens do not agree with any of the known species of Ccradocus as set forth in Keith Sheard's comprehensive paper "The Genus Ceradocus," Records of the Australian Museum, vol. 6, No. 3. 1939. I am therefore describing the species as new and naming it Ceradocus shardi in honor of Mr. Sheard.
Male.-Antenna I about two-thirds the length of the body; first joint a little shorter than the second, lower margin bearing a distal spine, one near the center, and two smaller proximal spines: second joint without spines; flagellum longer than peduncle; accessory flagellum of about eight joints. Antenna 2, peduncle about equal in length to that of antenna 1 ; flagellum a little longer than the fifth peduncular joint and consisting of about 16 joints. Mandibular palp with third joint a little over one-third the length of the second. Maxilla 1 , imer plate normal ; outer plate with 9 spine teeth; palp with 18 slender terminal spines. Maxilla 2 normal. Maxillipeds, inner plate armed distally with three rather long teeth and several slender, curved spines, inner margin with a few plumose setae; outer plate armed on imner margin with about nine slender, curved teeth, and distally with slender, curved plumose spines and setac; palp with second joint reaching a little beyond outer plate. Lower lip with small inner lobes; mandibular processes or lateral lobes slender.

Gnathopod I, sixth joint a little shorter than fifth ; coxal plate with lower front corner produced. Gnathopod 2 with sixth joint very large and strong ; palm convex distally and concave at the defining angle, which bears two stout spines. Peracopods I and 2 very short. Peracopods 3 to 5 increasing consecutively in length. Peracopod 3 , second joint with the lower posterior corner not produced downward into an angular lobe but marrowly rounding. The second joints of peraeopods 4 and 5 with the lower posterior corner rounding. Metasome segments toothed as shown in figure 2 A . The posterior teeth of the first and second urosome segments do not appear to adhere to
a definite pattern. They do not always have a large mediodorsal tooth nor are they evenly dentate. In the male that I have figured the first urosome segment possesses a large mediodorsal tooth, but the second


Fig. 2.-Ceradocus sheardi new species. Male, $a$, entire animal ; $b$, mandible; $c$, maxilla 1 ; $d$, maxilla $2 ; e$, maxilliped; $f$, lower lip; $g$, gnathopod $I ; h$, gnathopod $2 ; i$, dorsal view of first and second urosome segments ; $j$, telson ; $k$, uropod 3 .
segment does not (fig. 2 I ). In most of the specimens the median tooth of the first urosome segment is larger than some of the adjacent teeth and in some of the specimens there is no median tooth on the
second urosome segment. Between the teeth of the metasome segments and those of the first urosome segment there is a seta, but between the teeth of the second urosome segment there are no setae.

Uropod 3 with rami rather broad, outer ramus bearing groups of stout spines on outer margin and a few spines on distal half of inner margin ; inner ramus with spines on both margins. Telson not reaching to end of peduncle of uropod 3 , deeply cleft, bearing three distal spines on each lobe, and two plumose setules or hairs on the lateral margins. Length of male from front of head to end of uropod 3 . 14 mm .

Fenale.-The female does not differ materially from the male; even the gnathopods being like those of the male. The right and left gnathopods are alike in both sexes. The length is 14 mm .

Type.-A male, U.S.N.M. No. $\mathrm{Si}_{5} \mathrm{~F}_{4}$, taken by Dr. Paul Bartsch at station $169\left(21^{\circ} 57^{\prime} 15^{\prime \prime} \mathrm{N} ., 82^{\circ} 32^{\prime} 45^{\prime \prime}\right.$ W.) , April I5, 1937.

In many characters this species agrees with rubromaculatus, but disagrees in others. The lower posterior corner of the third, fourth, and fifth peraeopods is not produced angularly downward, but is evenly rounding. The palm of the second gnathopod is quite different, as is seen by comparison with Sheard's figure 2 F . The first and second urosome segments are not evenly dentate. The telson bears on each lobe three distal spines, the outer one of which is the longest and the inner one the shortest.

The male which I have figured was taken by the Albatross at station 2365 , just north of Yucatan, in 24 fathoms. It has been taken also on the west coast of Florida, and at Albatross station 2369-74 in the northeastern part of the Gulf of Mexico, in 26 fathoms.

## CERADOCUS sp.

Station 169 , I specimen.
This specimen, an ovigerous female measuring about 10 mm ., resembles Ceradocus chiltoni Sheard in several characters, but differs in others. The second gnathopods, the right and left of which are alike, very much resemble those of $C$. chiltoni, though the sixth joint is proportionally a little longer and narrower. The palm is toothed as shown by Sheard's figure 7 A , but the prominent defining angle bears two stout spines instead of one as shown in his figure. The lower posterior corner of the second joint of peraeopods 3 to 5 is produced angularly downward. The teeth of the first and second urosome segments vary greatly in size, some of them being long and upward-curved. The
telson bears two long and two short spines distally on each lobe. The third uropods are missing. I refrain from describing and figuring this species, as there is only the one specimen.

## ELASMOPUS POCILLIMANUS (Bate)

Moera pocillimanus Bate, 1862, Cat. Amph. British Mus., p. 191, pl. 34, fig. 7. Moera levis Smith, 1873, in A. W. Verrill, Rep. U. S. Fish Comm. [1874], vol. I, p. 559.
Elasmopus laevis Paulmier, 1905, Bull. 91, Zoology 12, New York State Mus., Albany, p. 162, fig. 32.
Elasmopus lacvis Holmes, 1905, Bull. Bur. Fisheries for 1904, vol. 24, p. 507, fig.
Elasmopus pocillimanus Stebbing, 1906, Das Tierreich, Amphipoda I, Gammaridea, p. 443.
Elasmopus pocillimanus Kunkel, 1910, Connecticut Acad. Arts and Sci., vol. i6, p. 56, fig. 2I.

Elasmopus pocillimanus Chevreux, 1911, Mem. Soc. Zool., vol. 23, p. 225, pl. I6, figs. I, 2.
Elasmopus levis Fowler, i912, Ann. Rep. New Jersey State Mus. [i911], p. 197, pl. 58.

Elasmopus pocillimanus Chevreux and Fage, 1925, Faune de France, 9, Amph., p. 246, fig. 257.

Elasmopus pocillimanus Shoemaker, 1935, New York Acad. Sci. Scientific Survey of Porto Rico and the Virgin Islands, vol. 15, pt. 2, p. 239.
Elasmopus pocillimanus Schellenberg, 1938, Kungl. Svenska Vetensk. Akad. Handlingar, 3d ser., vol. 16, No. 6, p. 56, fig. 28.

Station 124, 12 specimens; station 169,3 specimens.
Elasmopus pocillimanus was described from Genoa, Italy, and it occurs on the east coast of the United States from southern New England to the Gulf of Mexico. It has also been recorded from Bermuda, Puerto Rico, Cape Verde Islands, Annobon Island, West Africa, and the Gilbert Islands (Schellenberg). The animal measures about 10 mm . in length.

Note.-In 1916 K. H. Barnard (Ann. South African Mus., vol. I5, pt. 3, p. 200, pl. 27, fig. 15) described a species Elasmopus levis from South Africa, but S. I. Smith's species Moera levis, described in 1873, was transferred to the genus Elasmopus by F. C. Paulmier in 1905. Barnard's name thus becomes a homonym and will have to be discarded. I therefore propose the new name Elasmopus barnardi for Barnard's species.

## Family TALITRIDAE

## PARHYALELLA WHELPLEYI (Shoemaker)

Hyalella zehelpleyi Shoemaker, 1933, Amer. Mus. Novit., No. 598, p. 23, figs. 12, 13.

Station 78 , i specimen.
This species was described from Trinidad, British West Indies, and the present record from Cuba is the second of its occurrence.

Parhyalella zuhclpleyi may prove to be a synonym of the genotype, Parhyalella batesoni, described by Kunkel from Bermuda in 1910. Kunkel's figures are greatly lacking in detail, and his description does not mention the characters which I consider specific in P. zelhelpleyi. The identity of these two species will have to remain in abeyance until material can be obtained from Bermuda for comparison. This species measures about 6 mm . in length.

## Family COROPHIIDAE

## GRANDIDIERELLA BONNIERI Stebbing

## Figure 3

Grandidicrella bonnieri Stebbing, 1908, Rec. Indian Mus., vol. 2, pt. 2, No. 13, p. $120, \mathrm{pl} .6$.

Grandidicrella megnac Cinltox, 1921, Mem. Indian Mus., vol. 5, p. $5 \not+8$, fig. iob, e-f (form 1).
U'nciolella lunata Schellenberg, 1928, Trans. Zool. Soc. London, vol. 22, pt. 5, p. 669, fig. 207.

Grandidicrella megnac Stepiensen, 1933, Zool. Jahrb., Bd. 64, Heft 3/5, Pp. 434,446 .
Grandidicrella bonnicri Barãard, 1935, Rec. Indian Mus., vol. 37, pt. 3, p. 299 , figs. I2d, 13b (literature).
Grandidicrella bonnieri Schellenberg, 1938, Zool. Jahrb., Bd. 7 I, Heft 3, p. 215.
Station 124, I specimen $\sigma^{*}$.
This species was described from brackish pools at Port Canning, Lower Bengal, India, in 1908. Dr. Chas. Chilton recorded it from Chilka Lake (G. megnac) in 1921. Dr. A. Schellenberg recorded it from the Suez Canal (Unciolclla luala) in 1928. In 1933 Dr. K. Stephensen recorded it from the Island of Bonaire (G. megnac) off the coast of Venezuela. K. H. Barnard recorded it again from the coast of India in 1935. In 1938 Dr. A. Schellenberg recorded it from the coast of Brazil. It is now recorded from Cuba, and, as shown by material in the collections of the Linted States National Museum, it is widely distributed in the West Indian and Caribbean regions. The length of the species from front of head to end of third uropod is 6 to 7 mm .

## Order HYPERIIDEA <br> Family HYPERIIDAE <br> HYPERIA BENGALENSIS (Giles)

Lestrigonus bengalensis Giles, 1887, Journ. Asiatic Soc. Bengal, vol. 56, pt. 2, p. 224, pls. 6, 7.

Hyperia atlantica Vosseler, igoi, Amph. Plankton Exped., I Theil, Hyperiidea I, p. 67, pl. 6, figs. 5-15.

Hyperia bengalensis Pirlot, 1939, Résult. Camp. Sci. Prince de Monaco, fasc. 102, p. 35 (literature).

Station 30, I4 specimens; station 48, 13 specimens; station 49, 14


Fig. 3.-Grandidierella bonnieri Stebbing. Male, $a$, front end of animal; $b$, gnathopod $2 ; c$, peraeopod $3 ; d$, peraeopod $5 ; e$, uropod 3. Female, f, gnathopod $1 ; g$, sixth and seventh joints of gnathopod I , enlarged.
specimens; station 52 , 15 specimens; station 78 , I specimen; station 89, 6 specimens.

Pirlot (1939, p. 102) has given what he considers to be the synonymy of this species. He includes as synonyms Hyperia promontorii, disschystus, schizogeneios, and zebui of Stebbing, gilesi, latis-
sima, thoracica, and Themistclla steenstrupi of Bovallius, and $H$. macrophthalma and hydrocephala of Vosseler. Hyperia promontorii Stebbing, Themistella stecnstrupi Bovallius, and Hyperia atlantica Vosseler appear to be the male of the same species, which I believe to be H. bengalensis (Giles). Dana's figure of Hyperia fabrcii (United States Exploring Expedition, vol. 14, Atlas, pl. 67, fig. 10, 1855) is probably also a male of $H$. bengalensis. Hyperia bengalensis, a small species, the males of which measure about 4 mm ., is widely distributed in the Atlantic, Pacific, and Indian Oceans. The present records are the first for the West Indies. In the present material are several ovigerous females measuring 3.5 mm .

## Family LYCAEIDAE

## BRACHYSCELUS CRUSCULUM Bate

Brachyscelus crusculum Bate, 186ı, Ann. Mag. Nat. Hist., ser. 3, vol. 8, p. 7, pl. 2, figs. I, 2.
Thamyris mediterranca Claus, 1887, Die Platysceliden, p. 60, pl. 16, figs. 11-18.
Brachyscclus crusculum Pirlot, 1930, Siboga Expeditie, vol. 33a, pt. I, p. 25 (literature).
Brachyscclus crusculum Pirlot, 1939, Résult. Camp. Sci. Prince de Monaco, fasc. 102, p. 46.
Brachyscelus crusculum Siloemaker, 1945, Zoologica, New York Zool. Soc., vol. 30, pt. 4, p. 242.

Station 89 , I specimen.
This is a widely distributed species, having been recorded from the North and South Atlantic, Nortl Pacific, East Indies, Indian Ocean, and Mediterranean. The present record is the first from the West Indies. The species measures from 10 to 14 mm . in length.

## BRACHYSCELUS GLOBICEPS (Claus)

Thamyris globiceps Claus, 1879, Arb. Zool. Inst. Wien, vol. 2, p. 182.
Thamyris globiceps Claus, 1887, Die Platysceliden, p. 59, pl. 16, figs. 1-2, 4-10.
Brachyscelus globiceps Stepiensen, 1925, Danish Oceanographic Expedition 1908-1910, vol. 2, D.5, Hyperiidea, pt. 3, p. 176, fig. 65.
Brachyscclus globiceps Shoemaker, 1945, Zoologica, New lork Zool. Soc., vol. 30, pt. 4, p. 242.

Station 30, 5 specimens.
This species has been recorded from the Mediterranean, North and South Atlantic, Indian Ocean, and Australia. It has not heretofore been recorded from the West Indies. The animal measures about 6 mm . in length.

## BRACHYSCELUS MACROCEPHALUS Stephensen

Brachyscelus macrocephalus Stephensen, 1925, Danish Ingolf Expedition, vol. 3, p. 177 , fig. 66.
Brachyscelus macrocephalus Shoemaker, 1945, Zoologica, New York Zool. Soc., vol. 30, pt. 4, p. 243.

Station 30, I specimen.
This species has been recorded from the Mediterranean and from Bermuda. The present record is the third of its occurrence. The species measures 5 or 6 mm . in length.

## lyCAEA PULEX Marion

Lycaca pulex Marion, 1874, Ann. Sci. Nat., ser. 5, vol. 17, p. 13, pl. 2, fig. 2. Lycaca pulex Shoemaker, 1945, Zoologica, New York Zool. Soc., vol. 30, pt. 4, p. 243 (literature).

Station 48, 2 specimens.
Lycaca pulex has been recorded from the North and South Atlantic, North and South Pacific, Indian Ocean, and Mediterranean. The present record is the first for the West Indies. The species measures from 4 to 6 mm .

## Family PLATYSCELIDAE

## AMPHITHYRUS SCULPTURATUS Claus

Amphithyrus sculpturatus Claus, 1887, Die Platysceliden, p. 41, pl. 7, figs. 1-9. Amphithyrus oricntalis Stebbing, 1888, Challenger Rep., p. 1485, pl. 210, fig. B. Amphithyrus orientalis Shoemaker, 1925, Bull. Amer. Mus. Nat. Hist., vol. 52, p. 58 , figs. $25,26$.

Amphithyrus sculpturatus Stephensen, 1925, Danish Oceanographic Expedition 1908-i9io, vol. 2, D.5, Hyperiidea, pt. 3, p. 226.
Amphithyrus sculpturatus Spandl, 1927, Die Hyperiden der Deutschen SüdpolarExpedition 1901-1903, Deutsch. Südpolar-Exped., vol. 19, Zool. 11, p. 250.
Amphithyrus sculpturatus Pirlot, 1929, Résultats Zoologiques Croisière atlantique de " 1 'Armauer Hansen," 1922, fasc. i, p. i58.
Amphithyrus sculpturatus Barnard, 1937, The John Murray Expedition 193334, Sci. Rep., vol. 4, No. 6, Amphipoda, p. 196.

Station 30, 2 specimens.
This species has been recorded from the Mediterranean, Atlantic Ocean, Arabian Sea, Pacific Ocean, and the Gulf of California. The present record is the first for the West Indies. Several specimens of Amphithyrus similis Claus were taken by Dr. William Beebe at Bermuda in 1931, and this species is regarded by Pirlot (1929, p. 158) as a synonym of $A$. sculpturatus. The species measures from 4 to 5 mm . in length.

## PARATYPHIS MACULATUS Claus

Paratyphis maculatus Claus, 1887, Die Platysceliden, p. 39, pl. 5, figs. 1-9.
Paratyphis maculatus Pırlot, 1939, Résult. Camp. Sci. Prince de Monaco, fasc. 102, p. 56.
Paratyphis maculatus Simoemaker, 1945, Zoologica, New York Zool. Soc., vol. 30, pt. 4, p. 259.

Station 30, 8 specimens; station 52, I specimen.
This species has been recorded from the North and South Atlantic, East Inclies, and Culf of Aden, but it has not heretofore been recorded from the West Indies. It is a small species measuring from 2 to 4 mm. in length.

## TETRATHYRUS FORCIPATUS Claus

Tetrathyrus forcipatus Claus, 1887, Die Platysceliden, p. 40, pl. 5, figs. 10-18, pl. 6, figs. 1-3.
Tetrathyrus samcti-joschhi Smoemaker, 1925, Bull. Amer. Mus. Nat. Hist., vol. 52, p. 54, figs. 22-24.
Tetrathyrus forcipatus Sifoemaker, 1945, Zoologica, New lork Zool. Soc., vol. 30, pt. 4, p. 256.

Station 30,1 specimen ; station 48,25 specimens; station 49,7 specimens: station 52, I specimen.

This species has been recorded from the North, tropical, and South Atlantic, Mediterranean, Red Sea, northern Arabian Sea, East Indies, New Zealand, and North Pacific. It is a small species measuring 3 to 4.5 mm .


[^0]:    ${ }^{1}$ Schellenberg, A., Revision der Amphipoden-Familie Pontogeneiidae. Zool. Allz., Bd. 85. Heft 11/12. pp. 273-282, 1929.

[^1]:    ${ }^{2}$ Stephensen, K., Crustacea from the Auckland and Campbell Islands. Vidensk. Medd. Dansk Naturh. Foren., Bd. 83, pp. 315-342, 1927.
    ${ }^{3}$ Nicholls, G. E., Australian Antarctic Expedition 1911-14, Scientific Reports, Ser. C., Zoology and Botany, vol. 2, pt. 4, Amphipod Gammaridea, pp. 100-122, 1938.

