

AMPHIPODA OF THE FAMILY  
AMPELISCIDAE COLLECTED BY THE  
*VELERO III* IN THE CARIBBEAN SEA

(PLATES 1-2)

By J. LAURENS BARNARD



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A small collection of ampeliscids was made by the *Velero III* during its journey to the Caribbean Sea in 1939. These few specimens are of interest primarily for comparison with the eastern Pacific ampeliscids reported earlier by Barnard (1954). With the exception of a species new to science, all of the representatives are also known from the eastern Pacific. The literature reveals no record of the genus *Ampelisca* from the Caribbean Sea proper, although Shoemaker (1933) reported *A. schellenbergi* from "off Yucatan."

Preliminary examination of several of the Caribbean species revealed types different from those of the eastern Pacific. This was due to the robustness of the forms and the presence of variations in shape of the third pleonal epimera and in ornamentation of the fourth pleonal segment. Comparison of these specimens with Pacific materials showed that these variations were not of sufficient divergency to warrant the publication of new names, since the two characters mentioned exhibit wide variability in the Ampeliscidae.

A full account of the *Velero III* station records may be found in Garth (1945).

The writer owes a debt of gratitude to the staff of the Allan Hancock Foundation for assistance and support in preparing this paper.

***Ampelisca schellenbergi* Shoemaker**

*Ampelisca schellenbergi* Shoemaker, 1933, Amer. Mus. Nov., no. 598, pp. 3-5, fig. 2; Barnard, 1954, Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 14-16, pls. 7, 8 (with synonymy).

*Remarks.*—This species was described originally from Florida and off Yucatan.

*Material examined.*—A56-39 (7).

*Distribution.*—Caledonia Bay, Panama, shoal.

***Ampelisca lobata* Holmes**

*Ampelisca lobata* Holmes, 1908, Proc. U.S. Natl. Mus., vol. 35, no. 1654, pp. 517-518, fig. 25; Barnard, 1954, Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 11-14, pls. 5, 6 (with synonymy).

*Material examined.*—A12a-39 (6), A14-39 (1), A18-39 (29, the largest a female, 6 mm in length).

*Distribution.*—Eleven mi southwest of Cape la Vela, Colombia, 5 fms; 2 mi southwest of Cape la Vela, Colombia, 21-22 fms; 8 mi southwest of San Nicolaas Bay, Aruba, 23-24 fms.

***Ampelisca venetiensis* Shoemaker**

*Ampelisca venetiensis* Shoemaker, 1916, Proc. Biol. Soc. Washington, vol. 29, pp. 158-159; Barnard, 1954, Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 16-18, pl. 9.

*Remarks.*—Of the three specimens and one fragment available, the largest specimen is a female, 15 mm in length.

*Material examined.*—A14-39 (4).

*Distribution.*—Two mi southwest of Cape la Vela, Colombia, 21-22 fms.

**Ampelisca romigi** J. L. Barnard

*Ampelisca romigi* Barnard, 1954, Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 18-20, pls. 10, 11.

*Material examined.*—A13-39 (11), A14-39 (1), A18-39 (13, the largest a female, 8 mm in length).

*Distribution.*—One mi southwest of Cape la Vela, Colombia, 10-13 fms; 2 mi southwest of Cape la Vela, Colombia, 21-22 fms; 8 mi southwest of San Nicolaas Bay, Aruba, 23-24 fms.

**Ampelisca vera** J. L. Barnard

(Plate 1, figs. K, L)

*Ampelisca vera* Barnard, 1954, Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 23-26, pls. 14-16.

*Remarks.*—The uropods of the specimens from A13-39 were slightly stouter than in the other materials examined. Two variations in the carina of pleon segment 4 are figured.

*Material examined.*—A13-39 (3), A14-39 (1), A53-39 (1).

*Distribution.*—One mi southwest of Cape la Vela, Colombia, 10-13 fms; 2 mi southwest of Cape la Vela, Colombia, 21-22 fms; Caledonia Bay, Panama, 7-12 fms.

**Ampelisca cristata** Holmes

*Ampelisca cristata* Holmes, 1908, Proc. U.S. Natl. Mus., vol. 35, no. 1654, pp. 507-508, figs. 16, 17; Barnard, 1954, Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 26-28, pls. 17, 18.

*Material examined.*—A13-39 (1 male).

*Distribution.*—One mi southwest of Cape la Vela, Colombia, 10-13 fms.

***Ampelisca cristata* forma *microdentata* J. L. Barnard**

(Plate 1, figs. A-G)

*Ampelisca cristata* forma *microdentata* Barnard, 1954, Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 28-29, pls. 17, 18.

*Remarks.*—In the accompanying figures are shown variations in the shape of the carina on pleon segment 4 and the third pleonal epimera. The third uropods of specimens from A24-39 were stouter than in other Caribbean specimens examined.

*Material examined.*—A13-39 (2 and frags.), A15-39 (2), A18-39 (5), A24-39 (12), A32-39 (2), A42-39 (1), A44-39 (1).

*Distribution.*—One mi southwest of Cape la Vela, Colombia, 10-13 fms; 2 mi off Bahia Honda, Colombia, 9-10 fms; 8 mi southwest of San Nicolaas Bay, Aruba, 23-24 fms; Cubagua Island, Venezuela, 2-5 fms; 3 mi north of Coche Island, Venezuela, 19-33 fms; 7 mi north of Margarita Island, Venezuela, 21-22 fms; 4 mi north of Tortuga Island, Venezuela, 21-22 fms.

***Ampelisca cristoides* J. L. Barnard**

(Plate 1, figs. H-J)

*Ampelisca cristoides* Barnard, 1954, Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 29-31, pls. 19, 20.

*Remarks.*—Several variations in the keel-like carina of the fourth pleonal segment are shown in the figures. Otherwise, the specimens correspond with the type material of the species.

*Material examined.*—A13-39 (4), A14-39 (5), A32-39 (1).

*Distribution.*—One mi southwest of Cape la Vela, Colombia, 10-13 fms; 2 mi southwest of Cape la Vela, Colombia, 21-22 fms; 3 mi northwest of Coche Island, Colombia, 19-33 fms.



***Ampelisca pacifica* Holmes**

*Ampelisca pacifica* Holmes, 1908, Proc. U.S. Natl. Mus., vol. 35, no. 1654, pp. 511-513, figs. 20-22; Barnard, 1954, Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 31-33, pls. 21-22.

*Material examined*.—A4-39 (3), A52-39 (1).

*Distribution*.—Caledonia Bay, Panama, 5-14 fms.

***Ampelisca parapanamensis*, new species**

(Plate 2)

*Description of female*.—Head as long as first 3 body segments, lower front edge subparallel to upper edge; anterior edge slightly incised, upper pair of eyes behind upper edge of first antenna, lower pair at the lower front corner of head.

Antenna 1 reaching to end of peduncle of antenna 2, first 3 articles successively slightly shorter.

Antenna 2 about as long as first 7 body segments, article 5 of peduncle two thirds as long as 4.

Mandible: spine row with 8 spines, article 3 of palp two thirds as long as 2.

Maxilla 1: outer plate with 10 spines, article 2 of palp as wide as outer plate, apex armed with 5 spines, 4 cusps and 7 setae, outer edge lined with 5 setae.

Maxilliped: rounded apex of inner plate armed with 3 spine teeth and several short setae, inner edge of outer plate with 10 spines, rounded apex with 3 setal spines, the outermost one plumose.

Lower posterior edge of coxa 1 with a strong tooth, coxae 2-3 lack a tooth or slit.

Gnathopod 1: article 6 two thirds as long as 5, hind margin slightly convex, article 7 one half as long as 6.

Gnathopod 2: article 6 one half as long as 5, hind margin straight, article 7 one half as long as 6.

Peraeopod 1: anterodistal end of article 4 slightly produced, article 7 as long as or slightly longer than 5 and 6 combined.

Peraeopod 2 similar to 1 but more setose.

Peraeopod 3: article 5 with 2 sets of spines on posterior edge, article 6 with 3 spines on posterior edge.

Peraeopod 4 similar to 3 but with 2 spines on posterior edge of article 6.

Peraeopod 5: article 2 rather narrow, lower posterior edge straight, oblique, produced downward to joint between articles 4 and 5; article 4 longer than 3, posterior edge with a narrow, setose lobe; article 6 longer than 5, article 7 as long as 5.

Uropod 1 reaching to end of uropod 2, rami about as long as peduncle, outer upper edge of peduncle not spinose, inner edge of inner ramus with 3 spines, outer edge with 1 spine; outer edge of outer ramus with 3 small spines on outer edge.

Uropod 2: outer ramus shorter than inner, inner as long as peduncle, inner edge of inner and both edges of outer ramus spinose, outer edge of inner ramus with 1 spine, outer ramus with a long, subapical spine.

Uropod 3: rami broadly lanceolate, inner longer than outer, with inner edge serrate, outer ramus setose on both margins.

Telson slender, apices laterally notched, each with 2-3 spinules, dorsal surface of each lobe with a line of setae.

Pleon segment 3: posterior edge of epimera slightly convex, lower posterior corner produced into a short, blunt tooth.

Pleon segment 4 raised into a low, massive, straight-topped boss, nearly cristate at apex.

Pleon segment 6 with well developed lateral crests.

*Male*.—Unknown.

*Types*.—Holotype, AHF No. 3916, female, 5 mm, with 6 paratypes.

*Type locality*.—Station A25-39, Cubagua Island, Venezuela, shore, April 14, 1939.

*Material examined*.—The types.

*Remarks*.—This species is very closely related to *Ampelisca panamensis* Barnard (1954), differing from that species by the serrate inner mar-

gin of the inner ramus of the third uropod and the shape and armature of the telsonic lobes.

It should be noted in Barnard's key (1954, pp. 6-7) to the species of *Ampelisca* from the eastern Pacific, that the words "16" and "*panamensis*" were interchanged inadvertently.

### ***Ampelisca brevisimulata* J. L. Barnard**

*Ampelisca brevisimulata* Barnard, 1954, Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 33-35, pls. 23, 24.

*Material examined*.—A13-39 (3), A14-39 (1), A24-39 (1 female, 14 mm in length), A27-39 (5), A32-39 (1), A42-39 (6).

*Distribution*.—One mi southwest of Cape la Vela, Colombia, 10-13 fms; 2 mi southwest of Cape la Vela, Colombia, 21-22 fms; Cubagua Island, Venezuela, 2-5 fms; 3 mi north of Coche Island, Venezuela, 19-33 fms; 7 mi north of Margarita Island, Venezuela, 17-22 fms.

### ***Ampelisca mexicana* J. L. Barnard**

*Ampelisca mexicana* Barnard, 1954, Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 45-46, pls. 31, 32.

*Material examined*.—A4-39 (1).

*Distribution*.—Caledonia Bay, Panama, 8-14 fms.

### ***Ampelisca pugetica* Stimpson**

*Ampelisca pugetica* Stimpson, 1864, Proc. Acad. Nat. Sci., Philadelphia, vol. 16, pp. 158-159; Barnard, 1954, Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 49-51, pls. 35, 36 (with synonymy).

*Material examined*.—A13-39 (3), A18-39 (1), A42-39 (12, the largest a female, 16 mm in length).

*Distribution*.—One mi southwest of Cape la Vela, Colombia, 10-13 fms; 8 mi southwest of San Nicolaas Bay, Aruba, 23-24 fms; 7 mi north of Margarita Island, Venezuela, 17-22 fms.

## LITERATURE CITED

## BARNARD, J. L.

1954. Amphipoda of the family Ampeliscidae collected in the eastern Pacific Ocean by the *Velero III* and *Velero IV*. Allan Hancock Pacific Expeds., vol. 18, no. 1, pp. 1-137, pls. 1-38.

## GARTH, J. S.

1945. Geographical account and station records of *Velero III* in Atlantic waters in 1939. Allan Hancock Atlantic Exped., Rpt. No. 1, pp. 1-106, pls. 1-28, charts 1-10.

## HOLMES, S. J.

1908. The Amphipoda collected by the U. S. Bureau of Fisheries Steamer "Albatross" off the west coast of North America, in 1903 and 1904, with descriptions of a new family and several new genera and species. Proc. U. S. Natl. Mus., vol. 35, pp. 439-543, 46 text-figs.

## SHOEMAKER, C. R.

1916. Descriptions of three new species of amphipods from southern California. Proc. Biol. Soc. Wash., vol. 29, pp. 157-160.
1933. Amphipoda from Florida and the West Indies. Amer. Mus. Novitates, no. 598, 24 pp., 13 text-figs.

## STIMPSON, W.

1864. Descriptions of new species of marine Invertebrata from Puget Sound, collected by the naturalists of the North-West Boundary Commission, A. H. Campbell, Esq., Commissioner. Proc. Acad. Nat. Sci. Phila., vol. 16, pp. 153-161.

# PLATES

## PLATE 1

*Ampelisca cristata* forma *microdentata* J. L. Barnard

Figs. A-C. Lower corner of third pleonal epimera.

A. Female, 9.5 mm, Station A24-39.

B. Female, 8.0 mm, Station A24-39.

C. Female, 10.5 mm, Station A44-39.

Figs. D-G. Carina of pleonal segment 4.

D. Female, 9.0 mm, Station A15-39.

E. Female, 10.5 mm, Station A44-39.

F. Female, 12.5 mm, Station A18-39.

G. Female, 11.0 mm, Station A32-39.

*Ampelisca cristoides* J. L. Barnard

Figs. H-J. Carina of pleonal segment 4.

H. Female, 16.0 mm, Station A14-39.

I. Female, 16.0 mm, Station A14-39.

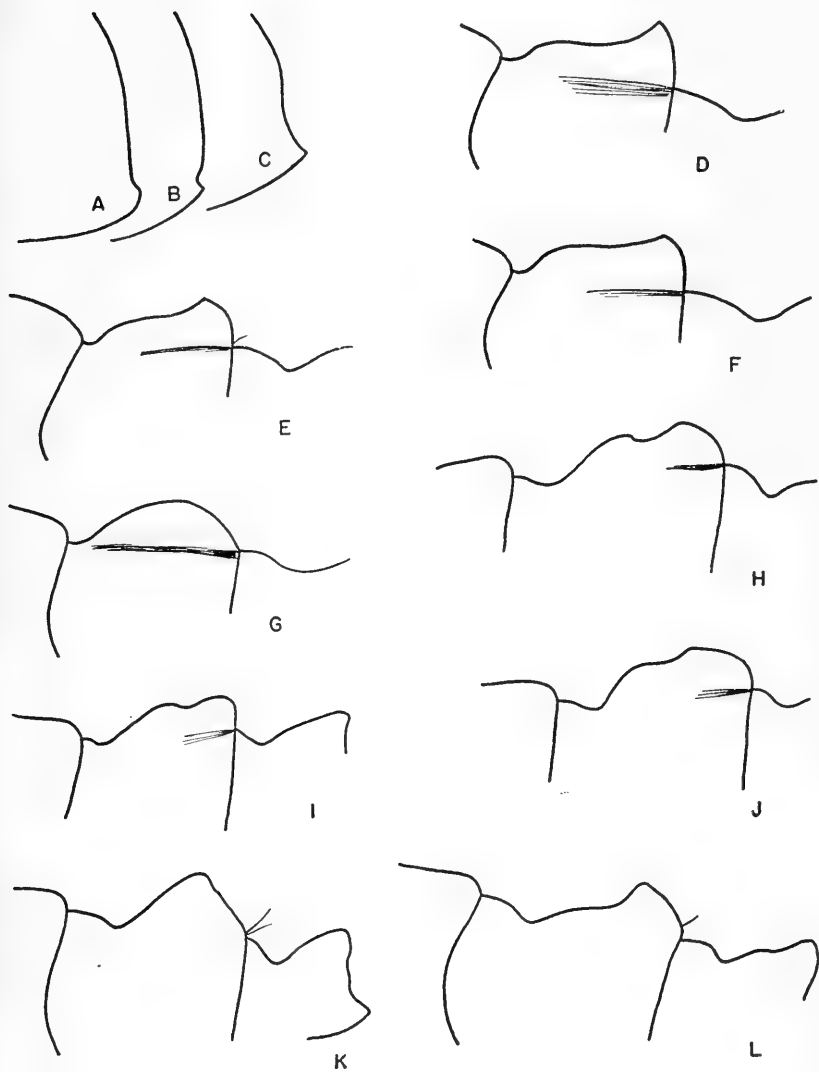
J. Female, 13.0 mm, Station A13-39.

*Ampelisca vera* J. L. Barnard

Figs. K, L. Carina of pleonal segment 4.

K. Female, 14.0 mm, Station A13-39.

L. Female, 9.5 mm, Station A13-39.



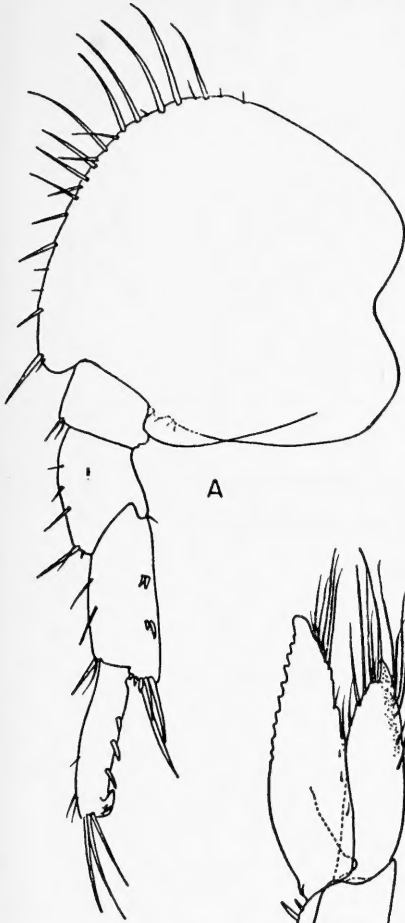
## PLATE 2

*Ampelisca parapanamensis*, new species

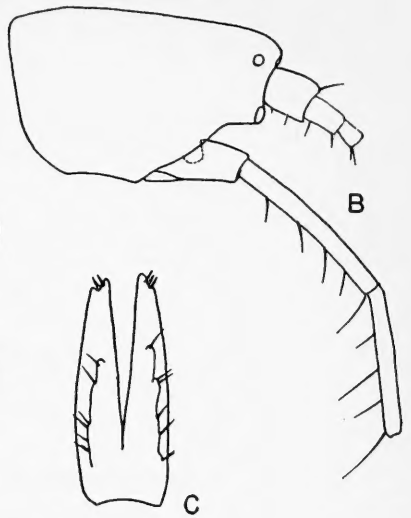
Female, 5.0 mm, Station A25-39.

- Fig. A. Peraeopod 3.  
B. Head.  
C. Telson.  
D. Uropod 3, right.  
E. Pleon segment 3 and urosome.  
F. Peraeopod 5.





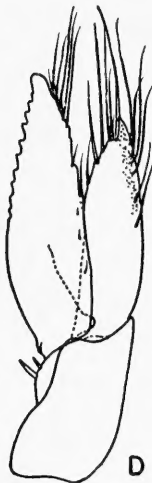
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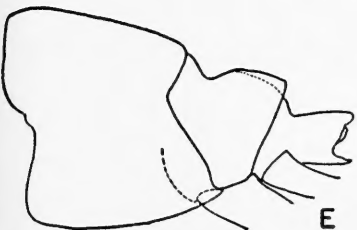
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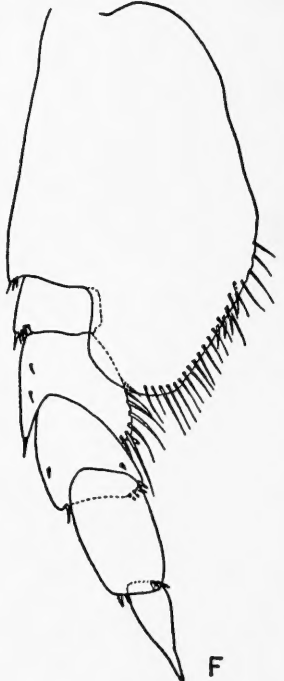
C



D



E



F

