

Fig. 4. *Limnoria indica*: A, Pleotelson ♂; B, Pleotelson ♀; C, Last pleonite and anterior pleotelson ♂; D, Pleotelson ♂, in lateral view; E, Pleotelsonic surface enlarged; F, Anterior pleotelson ♂, enlarged.

lize, 0–3 m, 24 Mar 1980, coll. G. Hender.—USNM 221624, 4 specimens, sta AC-CBC-610B, Carrie Bow Cay, coarse *Hali-medea* sediment, 1.5 m, 14 Jun 1981, coll.

A. Cohen.—USNM 221625, 10 specimens, sta CBC-K166, Man o'War Cay, Belize, submerged red mangrove wood and roots, 0.5 m, 29 Nov 1985.—USNM 221626, 2

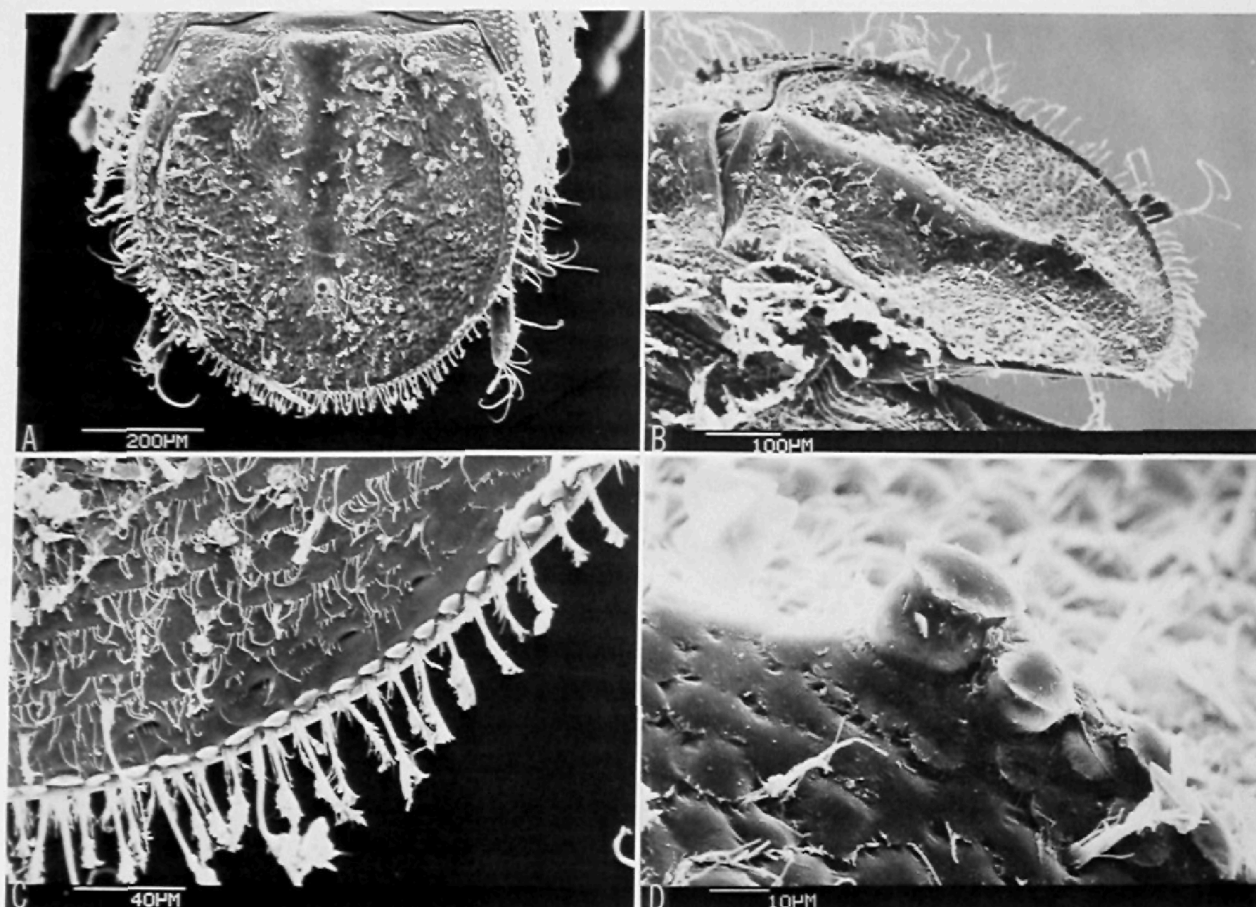


Fig. 5. *Limnoria multipunctata*: A, Pleotelson; B, Pleotelson in oblique-lateral view; C, Pleotelsonic margin; D, Middorsal tubercles of posterior pleotelson.

specimens, sta H-18(80), Twin Cays, Belize, under mangroves, 1–2 m, 28 Mar 1980, coll. G. Hendler.—USNM 221627, 5 specimens, sta CBC-K45, Twin Cays, Belize, algal mat under red mangrove roots, 0.1 m, 9 Apr 1979.

Distribution.—Indian Ocean; Florida; Puerto Rico; Panama; Philippines; New Guinea.

Limnoria (Limnoria) platycauda
Menzies, 1957

Limnoria (Limnoria) platycauda Menzies, 1957:139, fig. 17.—Ortiz, 1983:7.

Material.—USNM 221622, 23 specimens, Twin Cays, Belize, from red mangrove wood, 3 m, 28 Nov 1985, coll. J. Kohlmeyer.—USNM 221628, 38 speci-

mens, sta CBC-K166, Man o'War Cay, Belize, submerged red mangrove wood and roots, 0.5 m, 29 Nov 1985.

Distribution.—Cuba; Puerto Rico to Curaçao.

Limnoria (Limnoria) tuberculata
Sowinsky, 1884

Limnoria (Limnoria) tripunctata Menzies, 1951:86, pl. 30; 1957:137, fig. 16.

Limnoria tuberculata Sowinsky, Kussakin, 1979:322, figs. 187–190.

Material.—USNM 221630, 4 specimens, sta CBC-K166, Man o'War Cay, Belize, submerged red mangrove wood and roots, 0.5 m, 29 Nov 1985.

Distribution.—Yellow Sea; Hong Kong; Rhode Island to Venezuela; Gulf of Mexico;

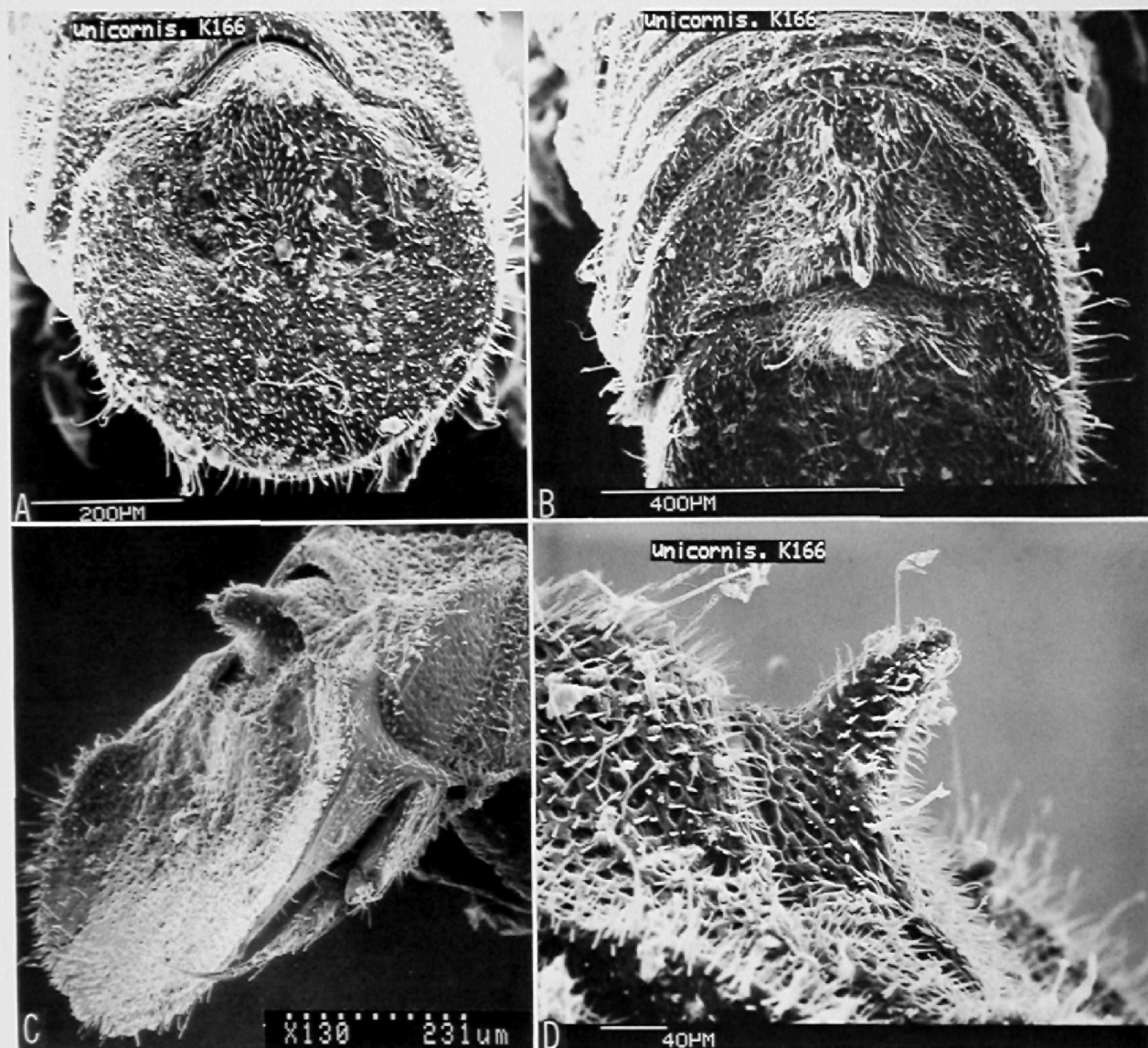


Fig. 6. *Limnoria unicornis*: A, Pleotelson; B, Last pleonite and anterior pleotelson; C, Pleotelson in oblique-lateral view; D, Pleotelsonic tooth enlarged.

Caribbean; Uruguay; California; Hawaii; Australia; Mediterranean; Black Sea; India; Ghana.

Limnoria unicornis Menzies, 1957

Fig. 6

Limnoria unicornis Menzies, 1957:173, fig. 32.

Material.—USNM 221631, 6 ♂, 8 ovig. ♀, 3 non-ovig. ♀, Pigeon Creek, San Salvador, Bahamas, 22 May 1986, coll. J. Clark.—USNM 211423, 2 ♂, sta CBC-K166, Man

o'War Cay, Belize, submerged red mangrove wood and roots, 0.5 m, 29 Nov 1985.—USNM 211424, 2 ♂, 1 non-ovig. ♀, Twin Cays, Belize, from green algal turf under *Rhizophora mangle*, 0.5 m.—USNM 211425, 9 ♂, 3 ovig. ♀, 6 non-ovig. ♀, 7 juvs., Ngeruktabel Is., Palau, from anchialine cenote, 9 Feb 1985, coll. T. Iliffe and D. Williams.—USNM 102745, 1 ♂, 1 ♀, 1 juv., Baie de Maroe, Huahine Is., Society Islands, 1 m, 30 Apr 1957, coll. T. Bowman.

Remarks.—This species has been mentioned once in the literature, i.e., in the orig-

inal description. For this reason, all the Smithsonian Institution (USNM) holdings, both from the Pacific and the Caribbean, are included here.

Distribution.—Caroline Islands; Society Islands; Palau; Bahamas; Belize.

Phycolimmoria clarkae, new species

Figs. 7–9

Material.—HOLOTYPE, USNM 211426, ♂ 4.3 mm, PARATYPES, USNM 211427, 44 ♂, 18 ovig. ♀, 3.3–4.4 mm, 10 non-ovig. ♀, 14 juvs., Pigeon Creek, San Salvador, Bahamas, from dead red mangrove wood, coll. J. Clark, 22 May 1986.

Description.—Dorsal integument, especially of pleotelson, bearing very fine, imbricate, minutely setulose ridges, giving appearance of fine, regular foveolation. Pleonite 5 with broad raised middorsal region, having irregular bumps. Pleotelson wider than long, with two rounded submedian ridges basally, becoming obsolete posteriorly.

Antennular peduncle of 3 articles, basal article longest and widest; flagellum consisting of basal article, wider than long, bearing 4 aesthetascs, and tiny terminal article bearing single aesthetasc and several setae. Antennal flagellum of 5 setose articles, basal article equal in length to 4 distal articles. Mandibular palp of 3 articles, two basal articles subequal in length; article 2 bearing 3 distal fringed spines; terminal article two-thirds length of article 2, bearing 6 distal fringed spines; spine row of left mandible of 2 laciniate spines, flanked by 2 short rounded lobes; spine row of right mandible of about 9 laciniate spines increasing in length proximally, plus bilobed distal process; incisor consisting of roughly triangular, strongly sclerotized, unornamented cusp. Maxilla 1 and 2 as figured. Maxillipedal endite with single coupling hook, 8 spines on distal margin, all save one bearing fine setules; palpal article 2 longest and widest; epipod about 3½ times longer than basal width, distally narrowly rounded,

reaching to base of palp. Pereopod 1, accessory spine at base of dactylar unguis short, bidentate; propodus with 2 fringed posterodistal spines; propodus, carpus, and merus each having row of 4 or 5 rounded tubercles on posterior surface. Pereopod 2 with 5 distal articles each having few tubercles on or near posterior surface; accessory spine at base of dactylar unguis short, bidentate; carpus with stout dentate spine at posterodistal angle; merus with single stout dentate spine at anterodistal corner. Pereopod 7, accessory spine of dactyl faintly bidentate; carpus with several fringed spines of varying lengths on distal margin; merus with 4 fringed spines on anterodistal margin. Paired penes on ventrum of pereonite 7. Pleopod 2, copulatory stylet sabre-shaped, articulating slightly proximal to midlength of median margin of endopod, just reaching beyond ramus. Uropodal endopod elongate-ovate, about twice longer than wide; ^{exo}endopod less than half length of ^{endo}exopod, triangular, tipped with short squat non-curved spine (claw); basis with row of fringed setae along outer margin.

Remarks.—This is the first record of the genus *Phycolimmoria* from the Caribbean, and is unusual in that the material was found, not boring into an alga as is usually the case, but in decaying red mangrove wood.

The absence of a “rasp” and “file” structure on the mandibles, along with the very unequal size of the uropodal rami, place this species in the genus *Phycolimmoria* Menzies.

Two features easily separate this species from the other 11 species of *Phycolimmoria* already described. None of these species possess a uropodal exopod with a short straight terminal claw. Only *P. zinovae* Kusakin, 1963, from the Sea of Japan, has a uropodal exopod in which the terminal claw is almost straight. This latter species, however, has a distinctive Y-shaped ridge on pleonite 5. *Phycolimmoria clarkae*, with its raised and rounded central area of pleonite 5, and the two longitudinal submedian rounded ridges of the pleotelson with no

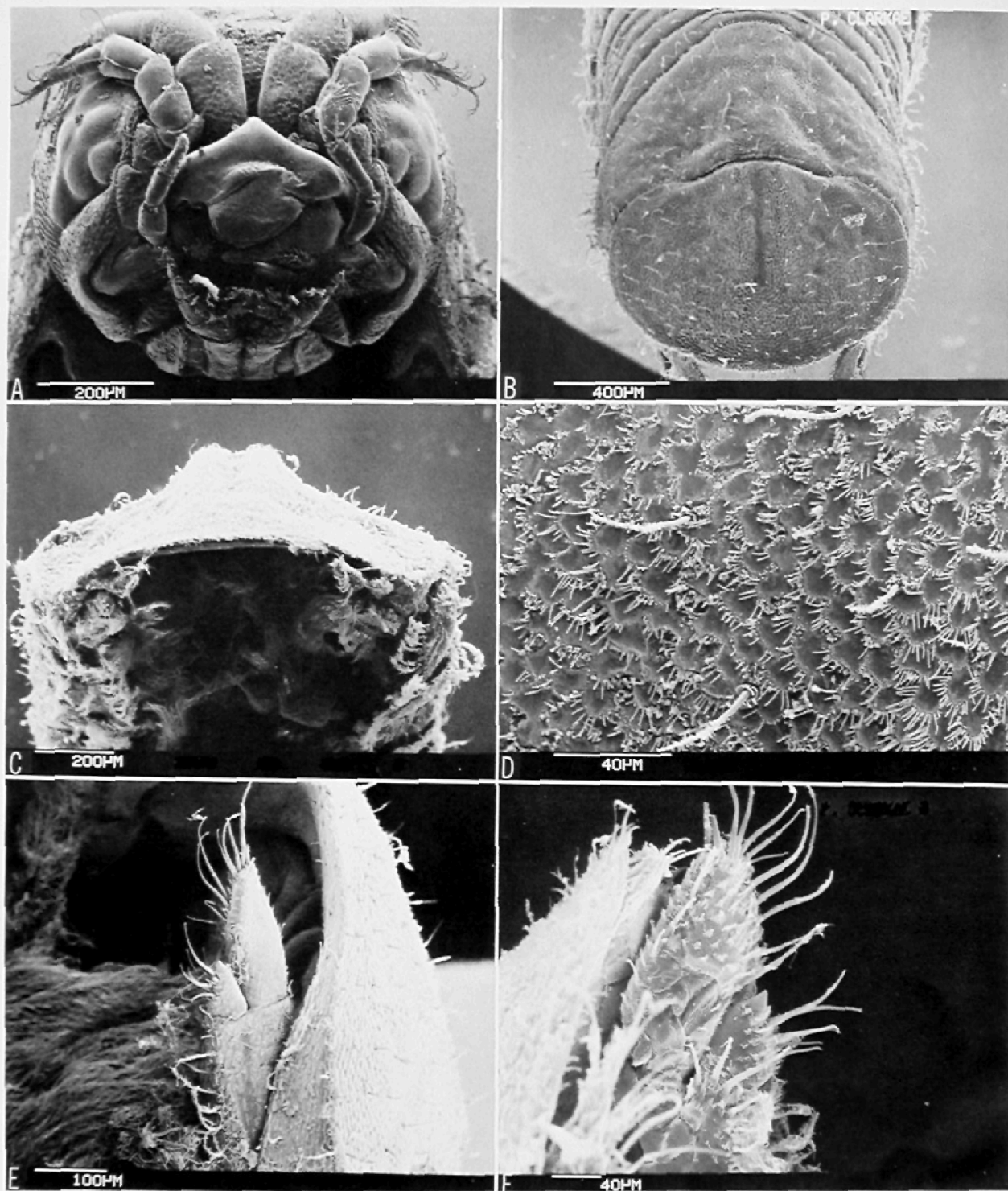


Fig. 7. *Phycolimmoria clarkae*: A, Cephalon in ventral view; B, Pleotelson; C, Pleotelson seen from posterior margin; D, Pleotelsonic integumental surface enlarged; E, F, Uropod.

other ornamentation would also seem to be unique in the genus.

Etymology.—The species is named for Janice Clark of the Department of Invertebrate Zoology, Smithsonian Institution, who collected the type material.

Family Cirolanidae

Cirolana albidoida, new species

Figs. 10–12

Material.—HOLOTYPE, USNM 211419, ♂ tl 7.8 mm; sta GB-7, off Lucaya, Grand

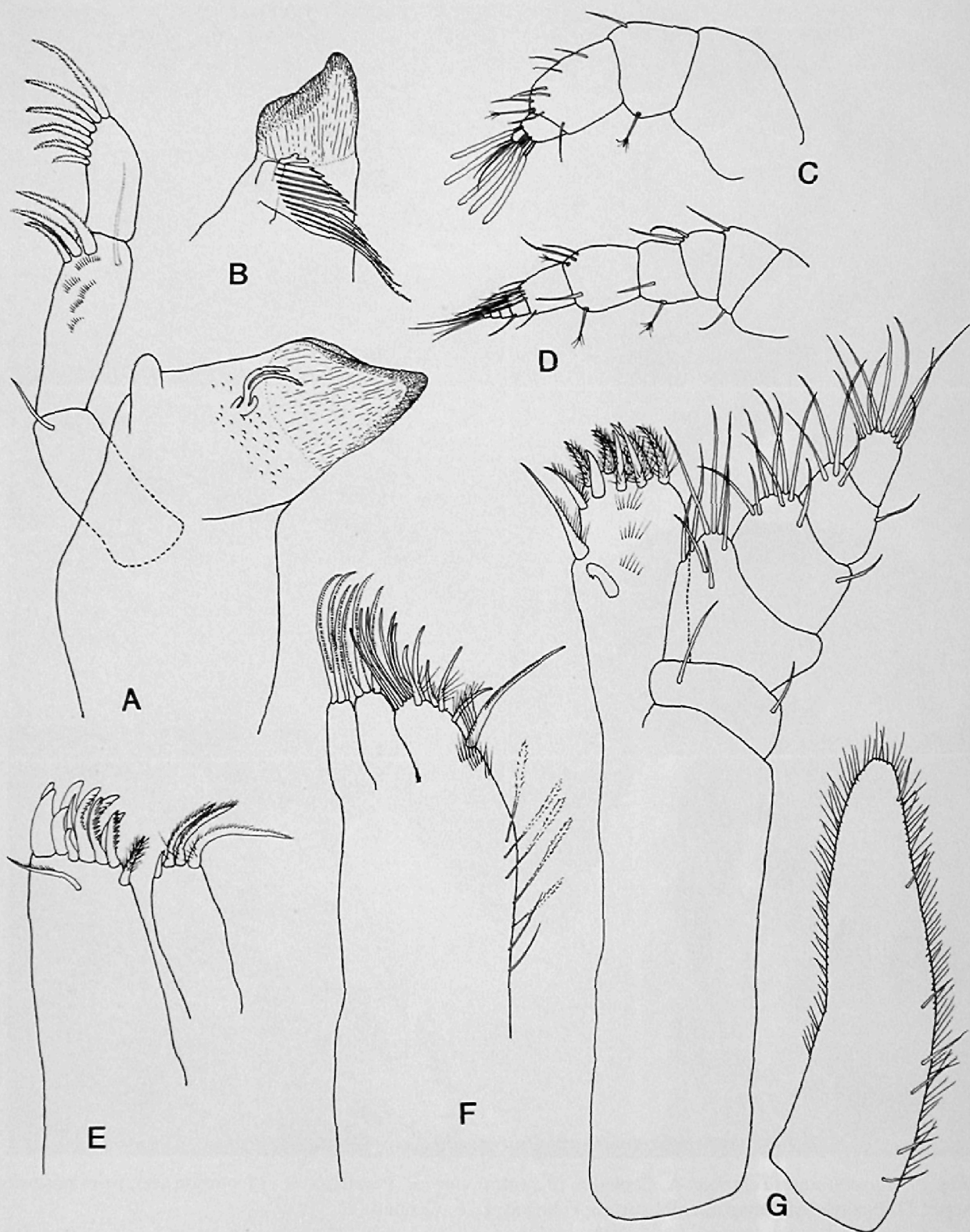


Fig. 8. *Phycolimmoria clarkae*: A, Left mandible; B, Incisor and spine row of right mandible; C, Antennule; D, Antenna; E, Maxilla 1; F, Maxilla 2; G, Maxilliped.

Bahama, 180–220 m, from trap baited with fish, set for 8 days, 24 May 1981, coll. D. Camp.

PARATYPES, USNM 211420, 55 spec-

imens, 4.6–9.0 mm; same data as holotype. All specimens lack internal organs and musculature, suggesting that they may have been retained dead in the fish trap for some days.

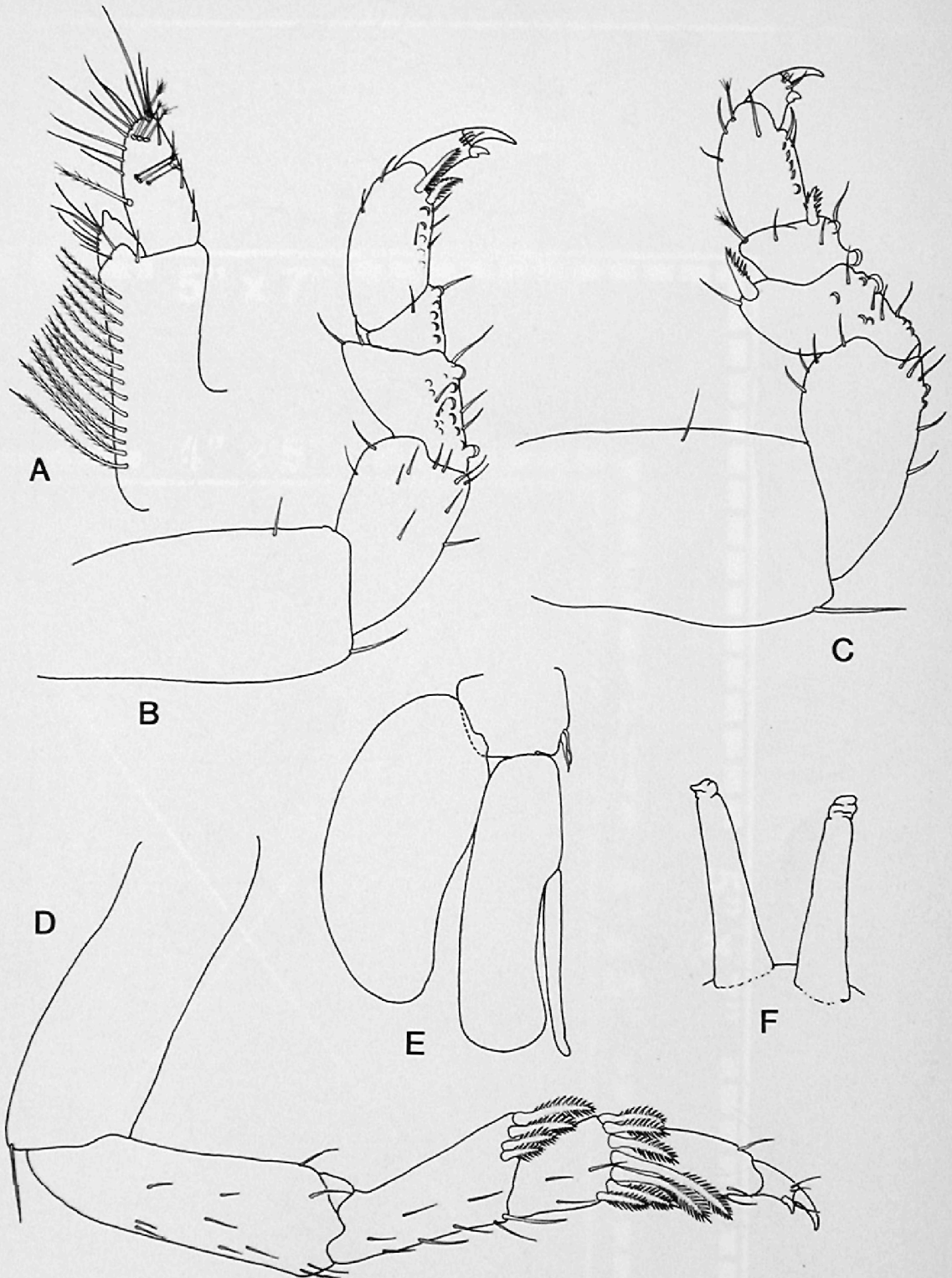


Fig. 9. *Phycolimmoria clarkae*: A, Uropod; B, Pereopod 1; C, Pereopod 2; D, Pereopod 7; E, Pleopod 2 ♂; F, Penes.

Description.—Male: Body about $3\frac{1}{2}$ times longer than wide, widest at pereonite 1. Integument sparsely pitted. Cephalon width about $\frac{1}{3}$ longer than medial length, with small rostral point between antennal bases.

Frontal lamina an equilateral pentagon. Pereonite 1 about $2\frac{1}{2}$ times length of pereonite 2; pereonites 3–6 subequal in mid-dorsal length, pereonite 7 slightly shorter. Coxae of pereonites 2 and 3 rounded, of