

posteriorly acute; coxa 1 with curved incised dorsal line; coxa 6 broad, rectangular, overlapping narrow coxa 7. Pereonites 6 and 7 with transverse incised line in anterior half across dorsum. Pleonite 1 with very short acute lateral margin wedged between coxa 7 and more elongate acute lateral margin of pleonite 2; lateral margin of pleonite 3 contiguous with coxa 7, half width of lateral margin of pleonite 4; pleonite 5 lacking free lateral margin. Pleotelsonic margin entire, posteriorly broadly and evenly rounded.

Antennule with article 2 longer than both article 1 or 3; flagellum of five articles, four distal articles each with single aesthetasc. Antenna with three basal peduncle articles together equal to article 4; flagellum of seven articles. Mandibular palp with article 2 almost three times length of article 1, with seven finely serrate spines distally; article 3 with six serrate spines; incisor of three cusps; spine row with ten spines. Maxilla 1, inner ramus with three stout fringed setae; outer ramus with nine simple and serrate spines. Maxilla 2, inner ramus with eight setae on rounded mediodistal margin, lobes of outer ramus each with three distal spines. Maxilliped with palp article 2 longest and broadest; setae on mediodistal corners of articles 2-5; endite with one retinaculum and four distal setae. Pereopods 1-3 similar, with propodus robust and somewhat curved. Pereopod 1, propodus with three sensory spines on posterior margin; carpus with one posterodistal spine; merus with three spines; ischium with single posterodistal spine. Pereopod 2, propodus with five sensory spines on posterior margin; merus produced distodorsally into triangular lobe bearing three stout spines. Pereopods 4-7 with propodi elongate-rectangular; clumps of sensory spines, at dorsodistal and posterodistal corner of propodi, carpi, meri, and ischia. Pleopods with all rami except endopod of pleopod 5 bearing plumose marginal setae. Pleopod 2, copulatory stylet articulating subbasally on endopod, reaching by half its length beyond rami, apically narrowly acute; exopods of pleopods 4 and 5 clearly biarticulate. Uropodal basis produced into triangular lobe along medial margin of endopod; latter broadly oval, with marginal setae; exopod three-fourths length and half width of exopod.

Remarks

The present species bears a close resemblance to *Cirolana anocula* (see p. 260), especially in overall body shape and proportions. Numerous differences, however, make separation of the two species easy, but also suggest that *C. anocula* may be a closely related species to, or even a sister-species of, *C. convexissima*, the former having found an ecological niche at greater depths and, in so doing, lost its eyes.

These afore-mentioned differences lie in the eyes (present in *C. convexissima*, absent in *C. anocula*), uropodal shape; incised lines on pereonites 6 and 7 in *C. convexissima*, coxal shape, and pleotelsonic shape. As with *C. anocula*, the frontal lamina and clypeus agree with Bruce's diagnosis of *Metacirolana*, but pleonite 5 does not have free lateral margins, and is overlapped by pleonite 4.

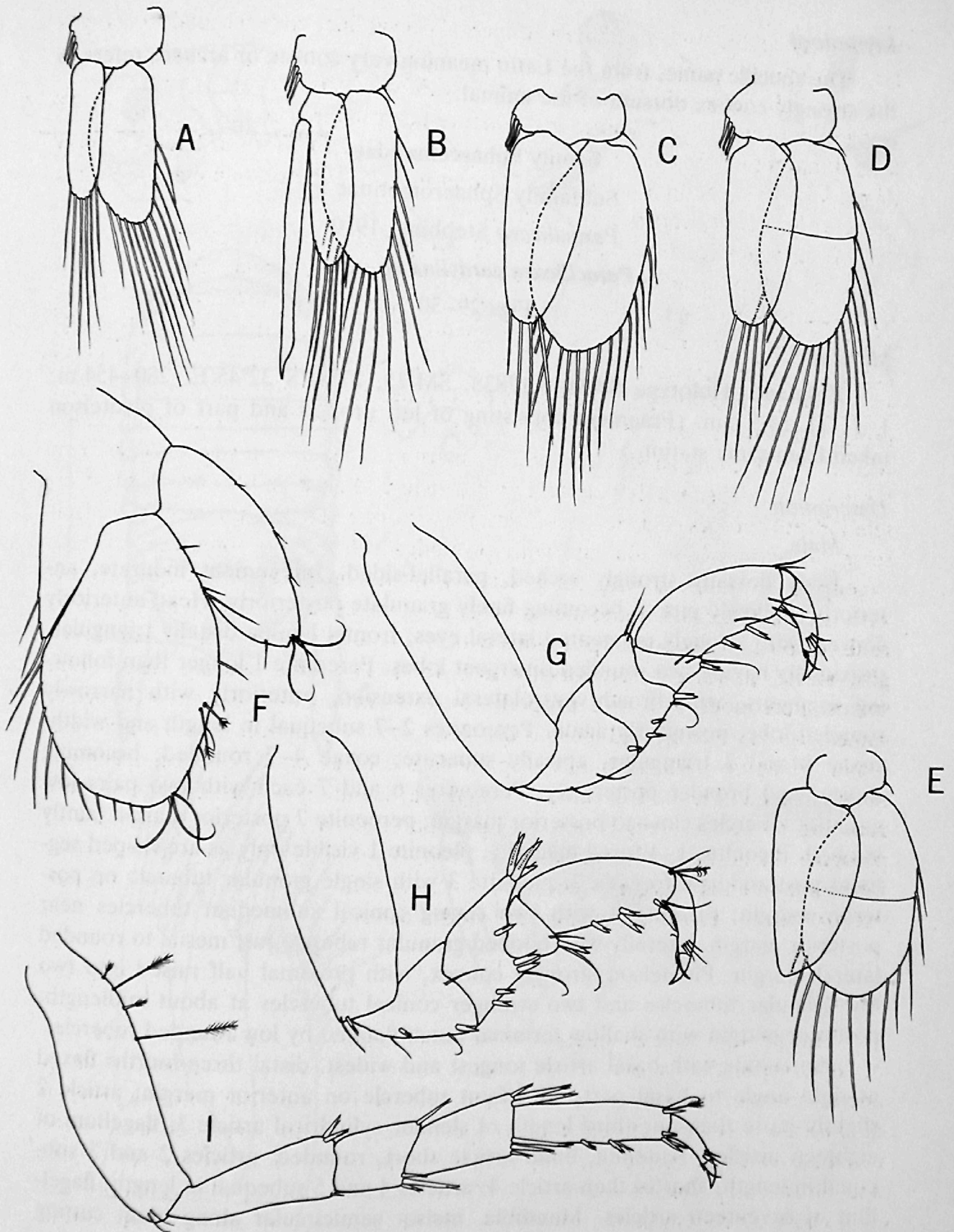


Fig. 28. *Cirolana convexissima* sp. nov. A. Pleopod 1. B. Pleopod 2 male. C. Pleopod 3. D. Pleopod 4. E. Pleopod 5. F. Uropod. G. Pereopod 1. H. Pereopod 2. I. Pereopod 7.

Etymology

The specific name, from the Latin meaning very convex or arched, refers to the strongly convex dorsum of the animal.

Family **Sphaeromatidae**

Subfamily Sphaeromatinae

Paracilicaea Stebbing, 1910*Paracilicaea cordylina* sp. nov.

Figs 29–30

Material

Zululand. Holotype SAM-A17838, SM 15, 27°31'S 32°45'E, 280–454 m, 1 ♂, TL 14,5 mm. (Fragment consisting of left uropod and part of pleotelson taken from same station.)

*Description**Male*

Body dorsally strongly arched, parallel-sided. Integument indurate, anteriorly shallowly pitted, becoming finely granulate posteriorly. Head anteriorly convex, with strongly pigmented lateral eyes; frontal lamina distally triangular, proximally having two rounded divergent lobes. Pereonite 1 longer than following segments, with broad ventrolateral extension, anteriorly with narrowly rounded lobe, posteriorly acute. Pereonites 2–7 subequal in length and width; coxae 2 and 3 triangular, apically subacute; coxae 4–7 rounded, becoming shorter and broader posteriorly. Pereonites 6 and 7 each with two pairs low granular tubercles close to posterior margin; pereonite 7 posterior margin faintly bilobed. Pleonites 1–4 fused medially, pleonite 1 visible only as arc-shaped segment posterodorsal to coxa 7; pleonite 3 with single granular tubercle on posterior margin; pleonite 4 with two strong conical submedian tubercles near posterior margin, laterally with bilobed granular tubercle just mesial to rounded lateral margin. Pleotelson strongly convex, with proximal half raised into two low granular tubercles and two stronger conical tubercles at about midlength; posterior margin with shallow terminal notch flanked by low rounded tubercle.

Antennule with basal article longest and widest, distal three-fourths flexed at right angle to basal part, with faint tubercle on anterior margin; article 2 slightly more than one-third length of slender cylindrical article 3; flagellum of eighteen articles. Antenna, basal article short, rounded; articles 2 and 3 subequal in length, shorter than article 4; articles 4 and 5 subequal in length; flagellum of seventeen articles. Mandible, incisor semicircular along blunt cutting edge, strongly sclerotized; lacinia distally broadened, of three blunt cusps; five strong spines in spine row; molar stout, truncate, fringed with dense band of short spines; palp with article 1 subequal in length to article 2, latter bearing row of twelve spines distally; article 3 curved, armed with row of sixteen short and

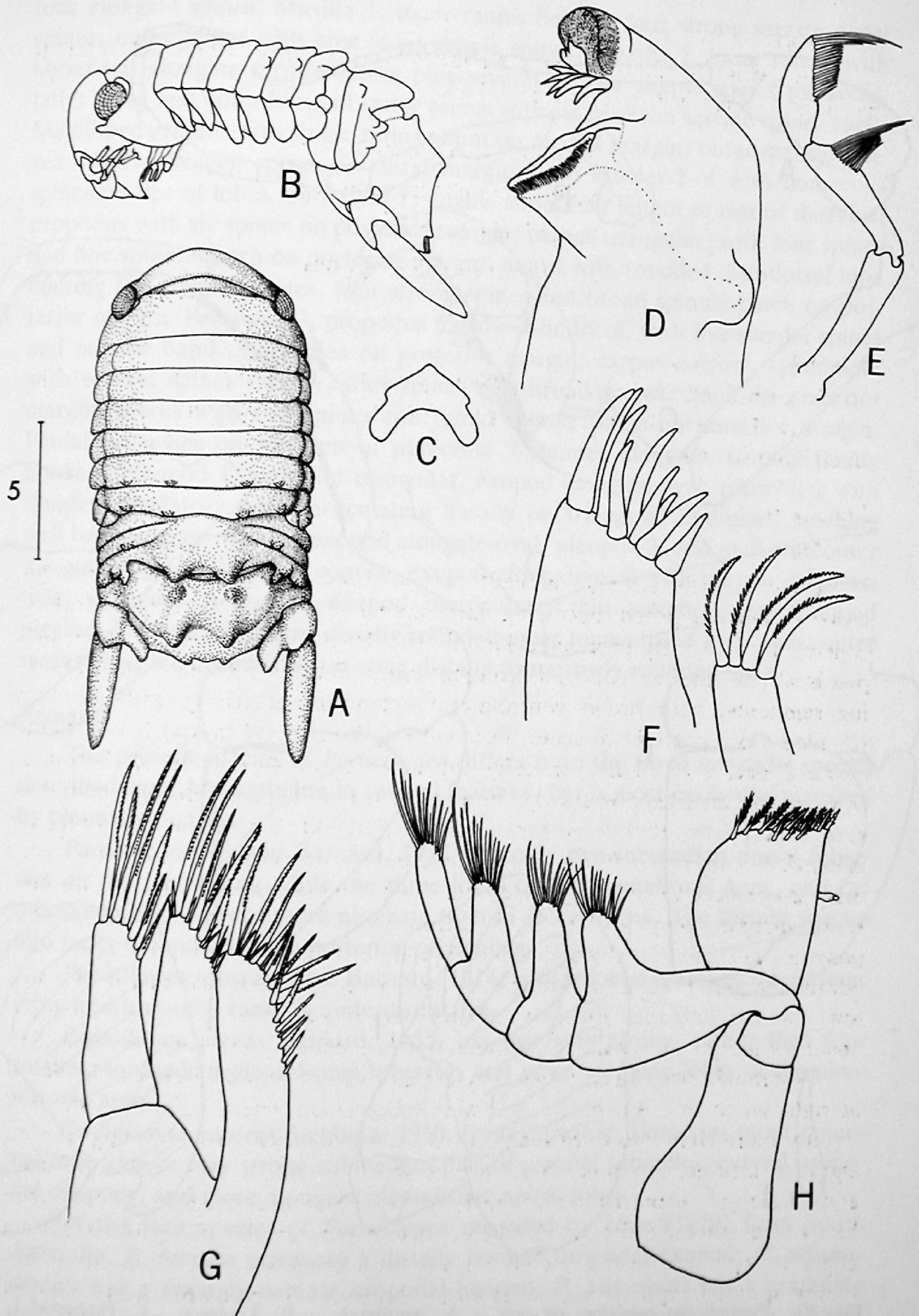


Fig. 29. *Paracilicæa cordylina* sp. nov. A. Holotype, dorsal view. B. Holotype, lateral view. C. Frontal lobe. D. Mandible. E. Mandibular palp. F. Maxilla 1.

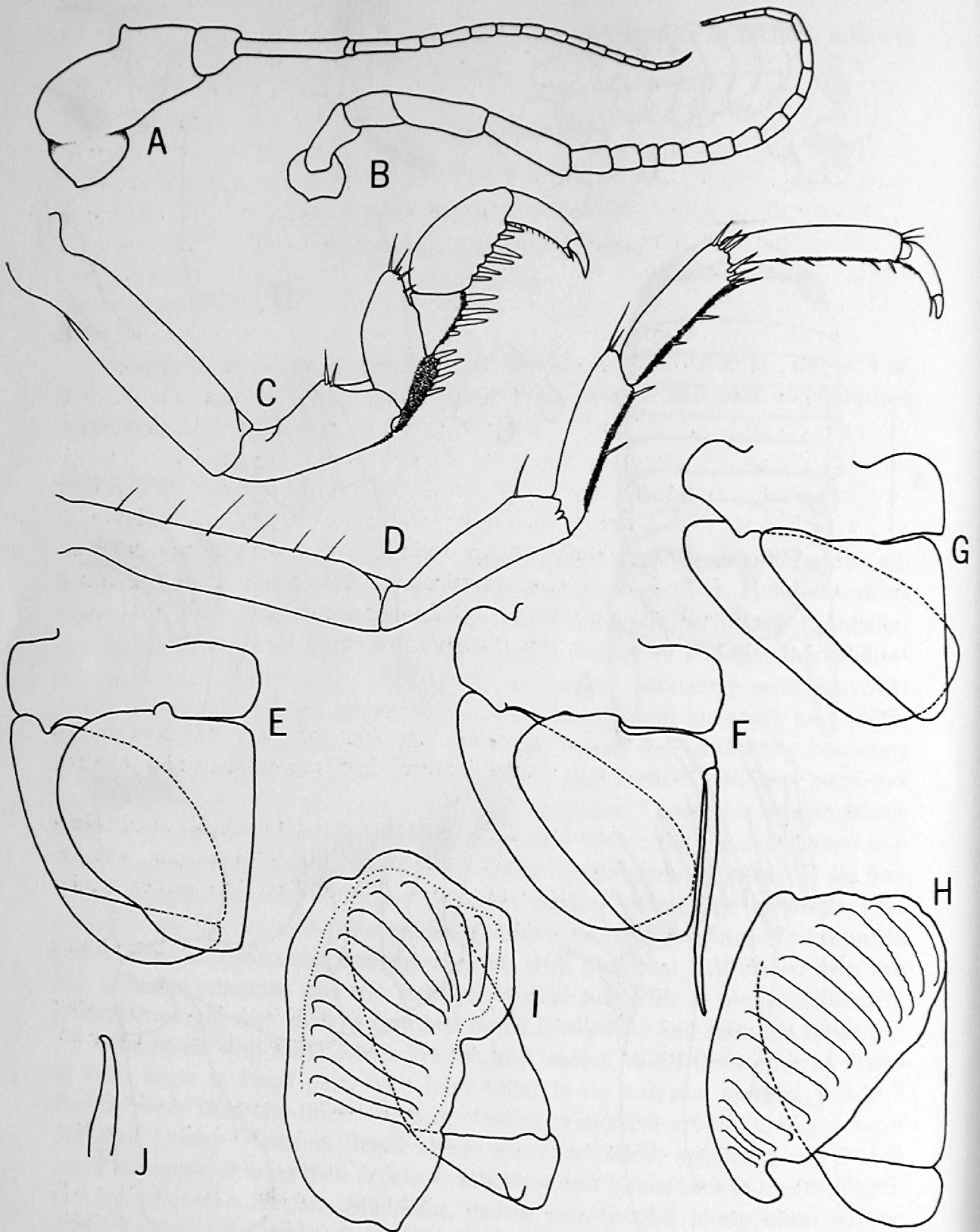


Fig. 30. *Paracilicaea cordylina* sp. nov. A. Antennule. B. Antenna. C. Pereopod 1. D. Pereopod 7. E. Pleopod 3. F. Pleopod 2. G. Pleopod 1. H. Pleopod 4. I. Pleopod 5. J. Penial lobe.

four elongate spines. Maxilla 1, inner ramus bearing four strong serrate distal spines; outer ramus with nine stout simple spines. Maxilla 2, inner ramus with about ten elongate serrate spines plus several shorter simple spines mediodistally; inner and outer lobes of outer ramus with six or seven serrate spines each. Maxilliped, endite with single retinaculum on medial margin, outer margin convex, twelve fringed spines on distal margin; palp articles 2-4 with numerous spines on tips of lobes. Pereopod 1, unguis about half length of rest of dactylus; propodus with six spines on posterior margin; carpus triangular, with four spines and fine spinule patch on posterior margin; merus with rounded distodorsal lobe bearing few slender spines, four strong spines and broad spinule patch on posterior margin. Pereopod 7, propodus narrow-cylindrical, with five slender spines and narrow band of spinules on posterior margin; carpus narrow, cylindrical, with several spines distally, four spines and broad spinule band on posterior margin; merus with two spines and broad spinule patch on posterior margin. Penial processes on sternum of pereonite 7 slender elongate, distally faintly hooked. Pleopod 1, endopod triangular, exopod elongate-oval; pleopod 2 with slender copulatory stylet articulating basally on triangular endopod, reaching well beyond apex of rami, exopod elongate-oval; pleopod 3, endopod with outer margin becoming strongly convex; exopod elongate-oval with narrow distal article; pleopods 4 and 5, exopod biarticulate, thin membranous; endopod pleated. Uropod with short distally rounded inner ramus fused with basis, outer ramus elongate-cylindrical, tapering distally to narrowly rounded apex.

Remarks

The present species of *Paracilicæa* differs from the three intertidal species described from Mozambique in several features, but is most easily distinguished by pleonal structure.

Paracilicæa teretron Barnard, 1955, has only two submedian dorsal tubercles on the pleotelson, while the three lobes of the pleotelsonic apex, and the uropodal endopod, are more elongate than in *P. cordylina*. The former species also lacks tubercles on the posterior pereonites.

Paracilicæa mossambicus Barnard, 1914, with trilobed apices of the telsonic lobes and uropodal rami, is quite distinctive.

Paracilicæa clavus Barnard, 1955, has two very strong, rather than four smaller, submedian pleotelsonic tubercles and more elongate lobes of the pleotelsonic apex.

Paracilicæa hanseni Stebbing, 1910, from Zanzibar, possesses more pereonal tubercles, a very strong submedian pair of pleonal tubercles, curved uropodal exopods, and more elongate pleotelsonic apical lobes.

Of the four species of *Paracilicæa* recorded by Hale (1929) from South Australia, *P. hamata* possesses a distally hooked uropodal exopod; *P. septemdentata* has a strongly dentate uropodal exopod; *P. pubescens* has a granulate and densely pubescent body; and *P. gigas* is also pubescent, with a narrow notched pleotelsonic apex.

Etymology

The specific name, from the Greek *kordylinos*, meaning club-like, refers to the shape of the uropodal ramus.

INFRAORDER ASELLOTA

Family Stenetriidae

Stenetrium Haswell, 1881

Stenetrium perestrelloi sp. nov.

Figs 31–32

Material

East London area. Holotype SAM-A17839, SM 163/4, 33°04'S 28°06'E, 90 m, 1 ♂, TL 6,5 mm. Paratypes SAM-A17840, SM 163/4, 90 m, 1 ovig. ♀, TL 5,1 mm, 1 ♀, TL 5,9 mm, 15 juvs. USNM 189077, SM 163/4, 90 m, 1 ♂, TL 6,0 mm, 3 juvs.

Description

Male

Body three and one-half times longer than wide, widest at pereonite 7. Integument with diffuse brown pigmentation, strongest around eye, localized lateral dark patches on pereonites, diffuse lateral band on pleon. Anterior half of body with scattered elongate setae. Head with lateral margins entire; anterolateral angle acute; rostrum roughly pentagonal, widest at base, apically narrowly rounded, distal margin with hyaline teeth (easily broken off). Eyes reniform, strongly pigmented. Pleon slightly wider than long; lateral margins entire; posterior margin between uropod bases evenly rounded.

Antennule with flagellum of thirteen articles, eleven distal articles each bearing single aesthetasc. Basal antennal article with tooth-like lobe at outer distal angle. Mandibular palp, article 2 bearing two strong serrate spines and distal row of ten short spines; distal article widest at midlength, with distal narrowed part, both regions bearing spines. Maxilla 1, inner ramus with one narrow and two stout serrate spines; outer ramus with ten toothed spines. Maxilla 2, inner ramus with thirteen to fifteen fringed spines on mediobasal margin; both lobes of outer ramus bearing four elongate fringed spines. Maxilliped with six retinaculæ and distal row of fringed spines on medial margin; article 3 with broadly rounded mediobasal lobe. Pereopod 1 dactylus overlapping propodal palm by about one-fourth of its length; propodus broad, palm armed with strong triangular outer and large inner tooth, with three small teeth between them; small triangular tooth close to dactylar articulation on medial surface; dactylus, anterior and posterior margins of propodus, and posterior margins of carpus and merus with dense setae; merus and ischium with triangular lobe on anterodistal angle. Posterior pereopods with strongly biunguiculate dactyli, with narrower proximal spine; propodi and carpi elongate-rectangular, with sensory spines on posterior

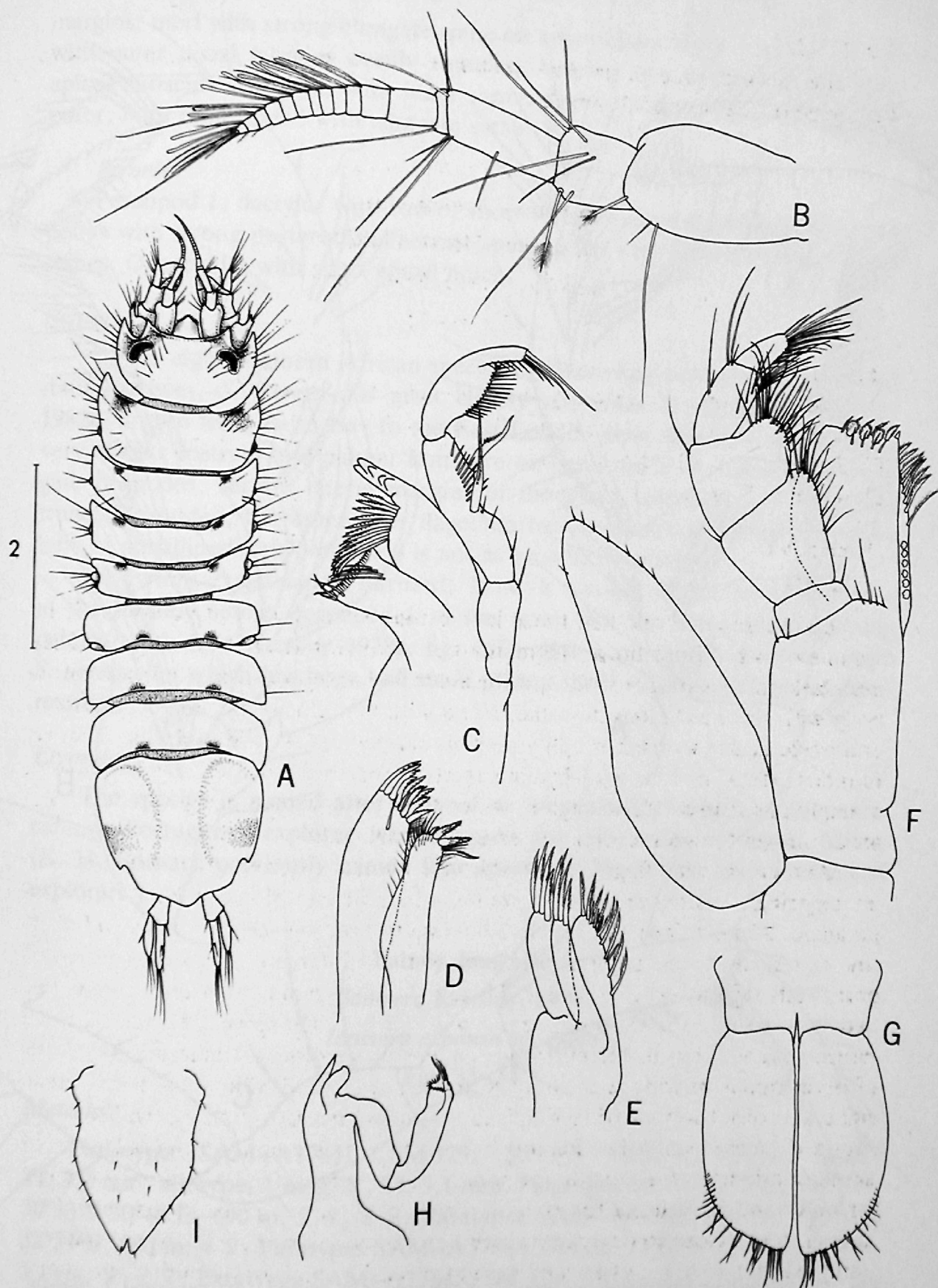


Fig. 31. *Stenetrium perestrelloi* sp. nov. A. Male, dorsal view. B. Antennule. C. Mandible. D. Maxilla 1. E. Maxilla 2. F. Maxilliped. G. Pleopod 1 male. H. Pleopod 2 male. I. Operculum, female. Scale 2 mm.

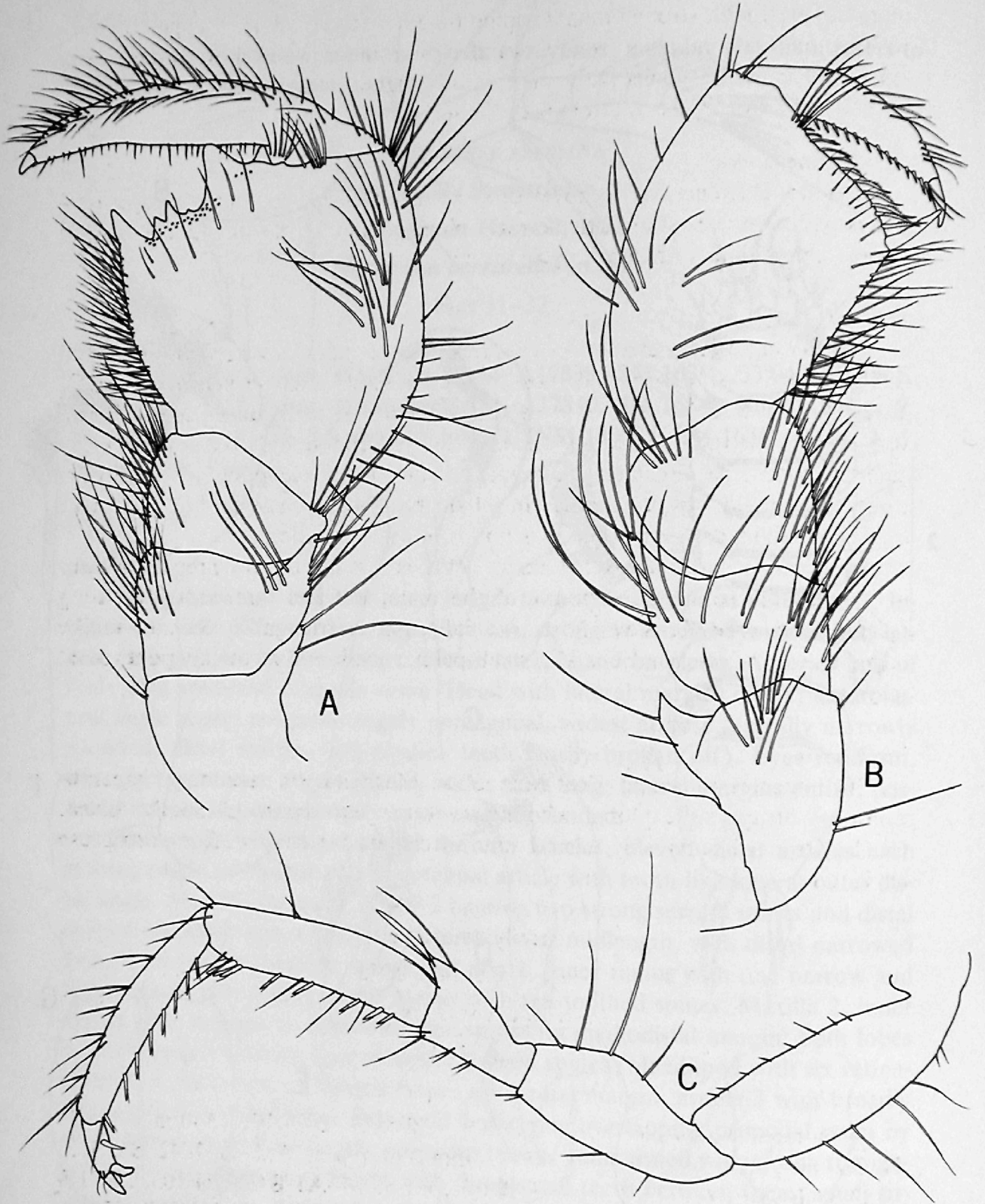


Fig. 32. *Stenetrium perestrelloi* sp. nov. A. Pereopod 1, male. B. Pereopod 1, female. C. Pereopod 7.