SOME NEW AND NOTABLE AMPHIPODA FROM SOUTHERN AFRICA

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(With 12 figures)

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ABSTRACT

Two new genera and seven new species of gammaridean amphipod from southern Africa are described and figured. These are *Bolttsia minuta* gen. et sp. nov. and *Unguja yaya* gen. et sp. nov. (Amphilochidae), *Yulumara improvisa* sp. nov., *Aora inflata* sp. nov., *Guernea tumulosa* sp. nov., *Maera lobata* sp. nov. and *Mandibulophoxus latipes* sp. nov. In addition *Afrochiltonia capensis* is synonymized with *Austrochiltonia subtenuis*; *Maera pacifica* and *Probolisca ovata* are recorded from southern Africa for the first time and the Angolan *Talorchestia skoogi* is redescribed.

CONTENTS

INTRODUCTION

The amphipod fauna of southern Africa has recently been reviewed in a series of papers summarized by Griffiths (1976). The material upon which these publications were based was largely collected intertidally or by means of ship-borne grabs and dredges. Since neither of these methods has adequately sampled near-shore sublittoral sites, it has come as no surprise that collecting by SCUBA diving in these regions has revealed previously unrecorded species. The majority of records in this paper come from two such collections made by the author. The first of these sampled the fauna of a coarse wave-washed shelly sand, while the second investigated the fauna of kelp holdfasts from an exposed rocky coast. Also incorporated are a number of other miscellaneous samples and some taxonomic revisions which have only recently come to light.

Holotypes of new species and representative material of all other species have been deposited with the South African Museum, Cape Town.

Ann. S. Afr. Mus. **72**(2), 1976: 11–35, 12 figs.

SYSTEMATIC SECTION

Family **Amphilochidae**

Bolttsia gen. nov.

Diagnosis

Antenna 1 longer than 2; accessory flagellum scale-like; upper lip entire; lower lip with inner lobes; inner plate of maxilla 1 without terminal setae; maxilla 2 reduced, poorly setose; gnathopods subequal, strongly subchelate, article 5 much smaller than 6, weakly lobed posteriorly: pereopod 5 hardly longer than 3 and 4; telson entire, rounded.

Type species

Bolttsia minuta sp. nov.

Relationships

The structure of this genus is typical of Amphilochidae, except for the large coxa 1, which is not normal for the family. There is, however, one other genus of Amphilochidae with this feature—the aberrant *Pseudamphilochus* Schellenberg, 1931. *Bolttsia* and *Pseudamphilochus* are closely related, differing primarily in the form of the telson and in maxilla 2, the reduced maxilla 2 of *Bolttsia* being reminiscent of that found in *Amphilochoides* Sars, 1895. There appears to be a case for the removal of *Bolttsia* and *Pseudamphilochus* from the Amphilochidae, perhaps to Eusiridae or to a group of their own.

The genus is named after a friend and colleague Dr Robin Boltt, who provided the author with the material shortly before his untimely death.

Bolttsia minuta sp. nov.

Figs 1–2

Description (of ovigerous female, 1,5 mm)

Head with moderate rostrum, eyes lateral with darkly pigmented core; antenna 1 somewhat longer than 2, accessory flagellum a small scale, flagellum 7-articulate; flagellum of antenna 2 5-articulate; upper lip entire; mandible with 3-articulate palp, article 3 falcate, shorter than 2, incisor and lacinia mobilis each of five strong teeth, spine row of four short spines, molar large but triturative surfaces not evident; maxilla 1 with bi-articulate palp, outer plate with seven strong spines, inner plate smooth; maxilla 2 small, outer plate with two plumose setae and two minute setules, inner plate with a single apical setae and minute medial setules; maxilliped with powerful 4-articulate palp, outer plate excavate medio-distally, inner plate with two apical spines.

Coxae 1–4 subequal, 4 excavate posteriorly; gnathopods 1 and 2 powerfully subchelate, equal in size; palm of gnathopod 1 transverse, lined with minute teeth, defined by a single slender spine; palm of gnathopod 2 with a slight convexity posteriorly, defined by two long slender spines, dactyl apically bifurcate; pereiopods normal, 5 hardly longer than 3 and 4.

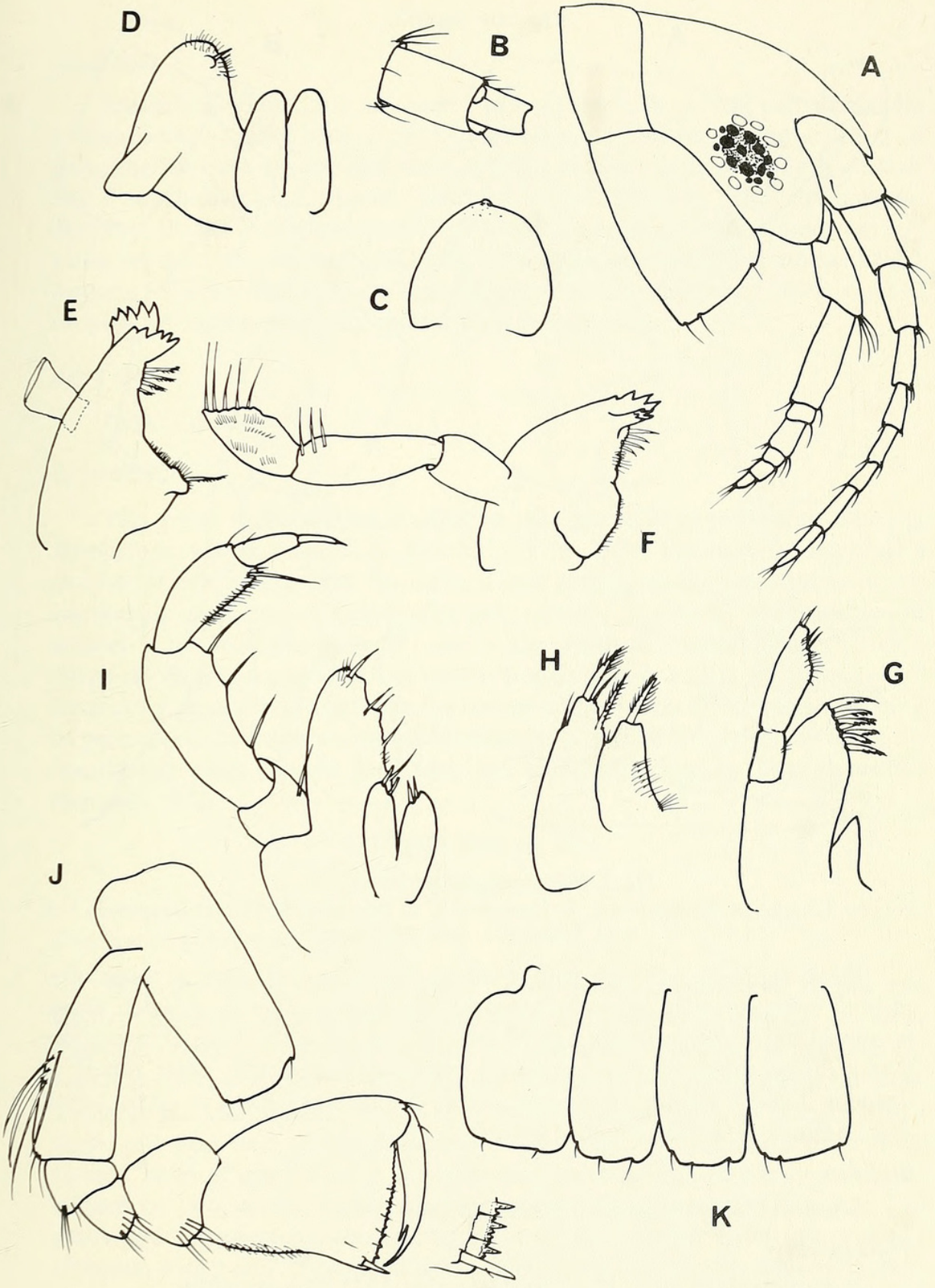

Fig. 1. *Bolttsia minuta* gen. et sp. nov.
Female, 1,5 mm. A. Head. B. Accessory flagellum. C. Upper lip. D. Lower lip. E–F. Two views of mandible. G–H. Maxillae 1, 2. I. Maxilliped. J. Gnathopod 1. K. Coxae 1–4.

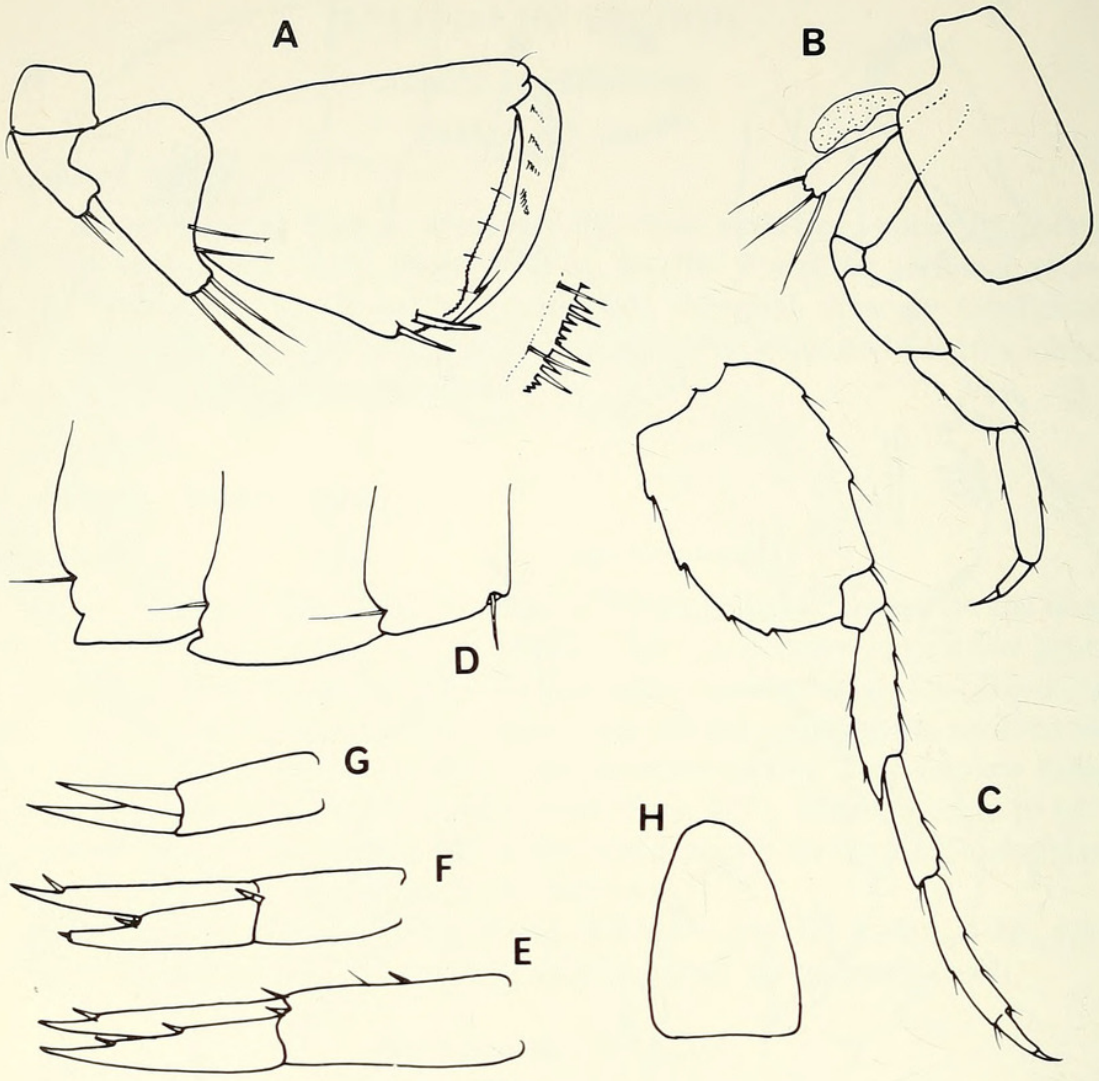

Fig. 2. *Bolttsia minuta* gen. et sp. nov.
Female, 1,5 mm. A. Gnathopod 2. B. Pereiopod 2. C. Pereiopod 5. D. Pleonal epimera 1–3. E–G. Uropods 1, 2, 3. H. Telson.

Pleon segments 1–3 each with a minute flat-lying medio-dorsal tooth; first pleonal epimeron with an antero-ventral seta and another in a notch above postero-distal corner, epimera 2 and 3 each with two notches in posterior margin, a seta in the upper of these; uropods extending subequally, outer ramus of uropods 2 and 3 slightly the shorter, uropod 3 lacking spines or setae; telson thin, laminar, smoothly rounded apically.

Holotype

SAM–A13650, ovigerous female, 1,5 mm.

Type locality

Lake Sibayi (27.20 S, 32.40 E), December 1973–January 1974.

Material

Numerous specimens from the type locality.

Unguja gen. nov.

Diagnosis

Mandible without palp; antenna 1 with accessory flagellum; palp of maxilla 1 uni-articulate; outer plate of maxilliped reaching half-way along article 2 of palp; gnathopod 1 weakly subchelate, article 5 weakly produced along 6; gnathopod 2 subchelate, palm almost transverse, article 5 weakly produced postero-distally; article 2 of pereiopods 3–5 broadly expanded and subrectangular; pleon segment 4 moderately elongate with a pair of weak latero-dorsal keels; pleonite 5 shorter than 6; telson boat shaped, extending to apex of outer ramus of uropod 3, which is distinctly shorter than inner ramus.

Type species

Unguja yaya sp. nov.

Relationships

This genus forms a further addition to a group of Cyproideinae allied to *Hoplopleon*, within which J. L. Barnard (1972*a*, 1974) has recently described a number of new genera from Australia. These genera are distinguished from one another by characters of mandibular palp (present or absent), configuration of articles 5 and 6 of gnathopods 1 and 2, the width of article 2 of pereiopod 3, shape of pleonite 4 and length of telson. *Unguja* gen. nov. may be distinguished from other genera in the group in the unique combination of broadened article 2 of pereiopod 3 and absence of mandibular palp. Except for the character of the mandibular palp, *Unguja* gen. nov. lies extremely close to *Unyapheonoides* Barnard, 1972.

Unguja yaya sp. nov.

Fig. 3

Description (of female, 2,3 mm)

With the characters of the genus; eyes round, colourless in 70 per cent alcohol; flagellum of antenna 1 of one large and three small articles, accessory flagellum present; flagellum of antenna 2 of four articles; article 5 of gnathopod 1 hardly produced postero-distally, terminally bearing two strong feathered setae, posterior margin of article 6 with four feathered setae, anterior margin with a single seta near base of dactyl, dactyl with a single serration and a few minute setules; palm of gnathopod 2 almost transverse, bearing two minute teeth and defined by two strong feathered setae, dactyl with a single tooth; article 2 of pereiopod 3 sub-rectangular, bearing a few minute anterior spines; urosomite 1 elongate, with a pair of rounded latero-dorsal keels posteriorly, not overlapping urosomite 2, which is very short; urosomite 3 much longer than 2, weakly keeled latero-dorsally; rami of uropod 1 equal; outer ramus of uropods 2 and 3 considerably shorter than inner; telson extending to apex of outer ramus of uropod 3.

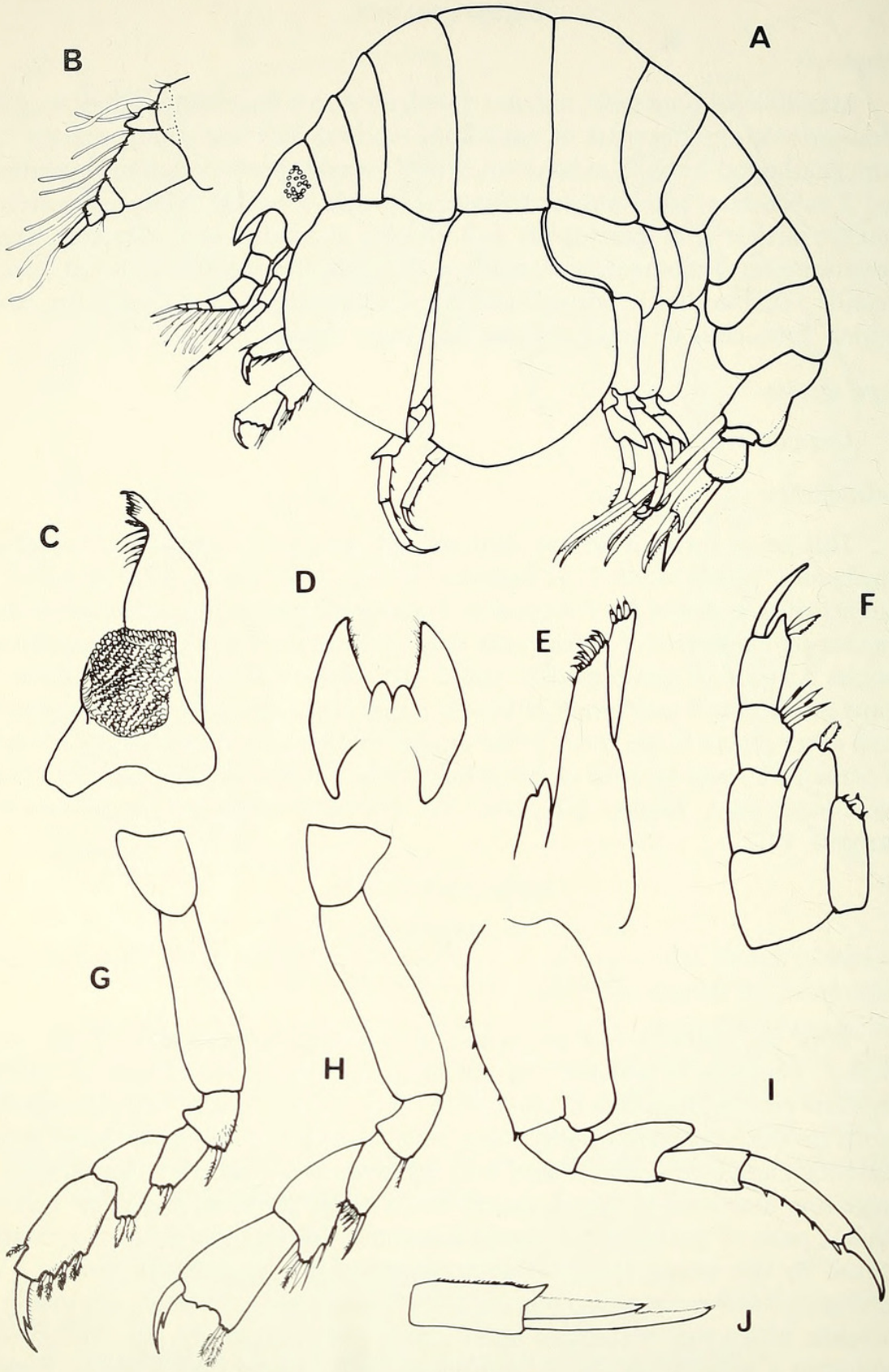

Fig. 3. *Unguja yaya* gen. et sp. nov.
Female, 2,3 mm. A. Lateral aspect. B. Flagellum of antenna 1. C. Mandible. D. Lower lip. E. Maxilla 1. F. Maxilliped. G–H. Gnathopods 1, 2. I. Pereiopod 3. J. Uropod 3.

Holotype

SAM–A13594, female, 2,3 mm.

Type locality

Oudekraal (33.58 S, 18.21 E), 10 m, from holdfast of *Laminaria pallida*, 8 January 1975.

Material

Four specimens from the type locality.

Family **Colomastigidae**

Yulumara improvisa sp. nov.

Fig. 4

Description (of female, 2,5 mm)

Antenna 1 not geniculate, article 1 greatly enlarged, widening distally, flagellum of three short articles each bearing long aesthetascs, accessory flagellum not seen; antenna 2 with article 1 of peduncle fused with head, article 2 very broad, flagellum of three short articles; eyes round, clear; rostrum large, projecting between bases of antenna 1; mandible with five long teeth, molar smooth, palp absent; maxillae not clearly seen; maxilliped with large quadrate outer plates and 4-articulate palp.

Gnathopods simple, article 3 elongate; gnathopod 1 very slender, terminating in a brush of curled setae, gnathopod 2 larger than 1, articles 4–6 widening distally and bearing pectinate setae; pereiopods stout, weakly ornamented; pleopods with rami 4-articulate, outer slightly the longer; uropod 1 visible in side view, inner ramus broadly lanceolate, much wider than outer; uropod 2 with rami of subequal width but inner ramus 70 per cent length of outer; uropod 3 much larger than 1 or 2, peduncle very short with a dorso-lateral keel, single ramus thick and heavily calcified with large blunt dorsal lobes; telson short, round, entire.

Holotype

SAM–A13593, female, 2,5 mm, unique.

Type locality

Oudekraal (33.58 S, 18.21 E), 10 m, collected from holdfast of *Laminaria pallida*, 8 January 1975.

Remarks

This remarkable genus was first described by J. L. Barnard (1972*a*) to accommodate a single specimen collected in South Australia and named *Yulumara wallanger*. *Yulumara* differs from *Colomastix*, the only other genus in the family, in a number of important features, notably the uniramous uropod 3,

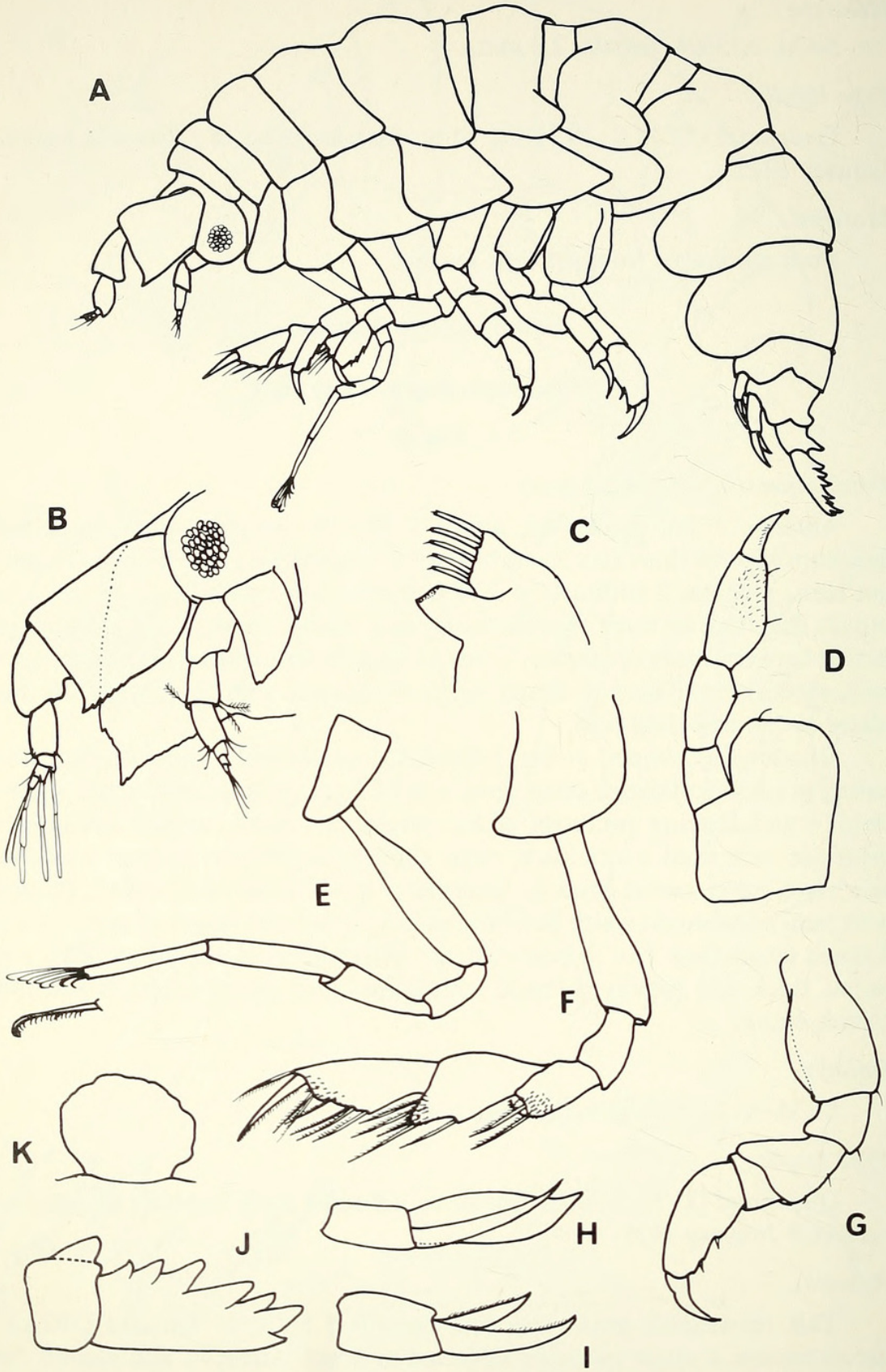

Fig. 4. *Yulumara improvisa* sp. nov.
Female, 2,5 mm. A. Lateral aspect. B. Antennae and rostrum. C. Mandible. D. Maxilliped. E–F. Gnathopods 1, 2. G. Pereiopod 5. H–J. Uropods 1, 2, 3. K. Telson.

enlarged coxae and heavily calcified, brittle exoskeleton. This last feature makes identification of these small species via dissection in the normal way extremely difficult. The shape of uropod 3 is, however, diagnostic, while gnathopod 1 is characteristically Colomastigid.

Yulumara improvisa sp. nov. closely resembles *Y. wallanger* in overall morphology, but differs from it in a number of significant features. Thus *Y. improvisa* has antenna 1 linear, cuticle smooth, uropod 1 visible in lateral aspect and with rami of unequal width and uropod 2 with rami unequal, all these conditions being dissimilar in *Y. wallanger*.

The generic diagnosis given by Barnard should be amended to omit characters not shared by the two species—i.e. mode of attachment of uropod 1 and flexure of antenna 1.

Family **Corophiidae**

Aora inflata sp. nov.

Fig. 5

Description (of male, 5 mm)

Antennae sparsely setose, 1 exceeding 2 by half length of flagellum, flagellum of antenna 1 17-articulate, accessory flagellum 4-articulate; eyes oval, dark.

Coxa 1 large, produced antero-ventrally to front of eye (adult male only); articles 2 and 3 of gnathopod 1 anteriorly smooth, 4 produced beyond tip of 5, tip bent posteriorly, article 5 enlarged, lacking teeth and sparsely setose, fused to article 4 along almost its entire length, leaving a very short free posterior margin, article 6 less than half size of 5, medially strongly setose, bearing a distinct rounded lobe posteriorly, dactyl short, stout, falciform; articles 5 and 6 of gnathopod 2 strongly setose medially, 6 about half size of 5, palm concave, defined by a strong spine; article 2 of pereiopods 3–5 smoothly ovate, lacking postero-distal heels; pleonal epimera with postero-distal setiferous notch above bluntly produced corner, oblique ridge running across each epimeron; uropods extending subequally, 1 with strong interramal spine, 2 with interramal spine minute; outer ramus of uropod 3 with minute article 2, inner ramus as long as article 1 of outer.

Holotype

SAM–A13595, male, 5 mm.

Type locality

False Bay (34.14 S, 18.29 E), depth 20 m, 23 January 1974, substrate coarse shelly sand.

Material

Twenty-one specimens from the type locality.

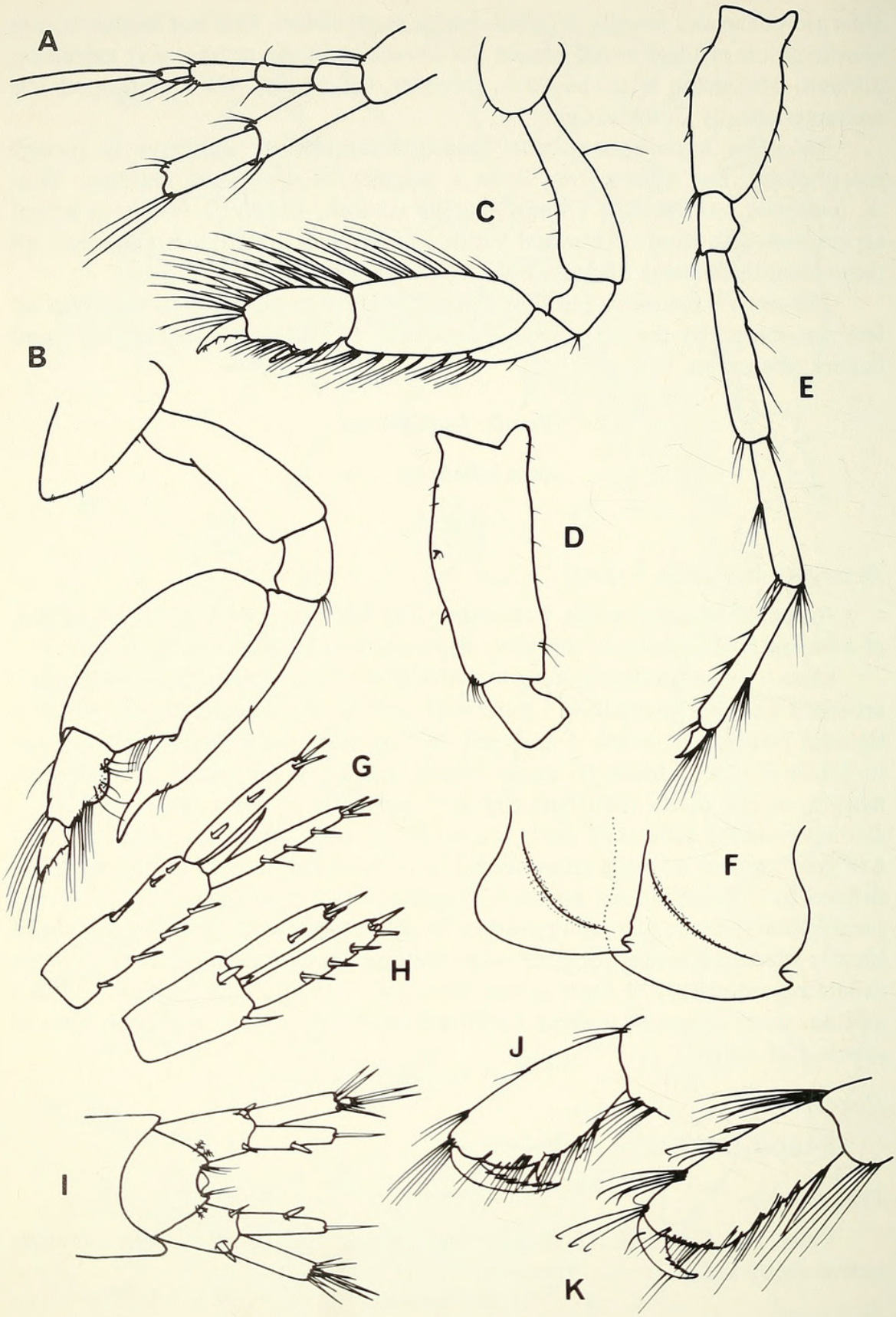

Fig. 5. *Aora inflata* sp. nov.
Male, 5 mm. A. Accessory flagellum. B–C. Gnathopods 1, 2. D. Articles 2 and 3 of pereiopod 4. E. Pereiopod 5. F. Pleonal epimera 2 and 3. G–H. Uropods 1, 2. I. Uropod 3 and telson. Female, 4 mm. J–K. Gnathopods 1, 2.

Variation

Juvenile males have article 6 of gnathopod 1 relatively larger compared to 5 and palm defined by a single spine, rather than the posterior lobe found in terminal males. Females are ovigerous at 4 mm, have gnathopods normally subchelate, palm of gnathopod 1 defined by a spine, pectinate throughout and with dactyl serrate, gnathopod 2 similar but article 6 longer, palm undefined.

Remarks

J. L. Barnard (1972*b*) has recently revived a number of varieties of *Aora* synonymized by Stebbing (1906) and raised other recognized forms to specific rank. The genus at present consists of nine species differentiated primarily by structure of male gnathopods 1 and 2.

Of the existing species *Aora gibbula* may be distinguished by an anterior expansion of article 2 of gnathopod 1, while *A. typica* has a smaller process and both articles 2 and 3 antero-distally lobed. *A. trichobostrychus* has a characteristic posterior setal brush on article 2 of gnathopod 1, *A. atlantidea* has article 6 strongly setose anteriorly and *A. anomala* is typified by a strong postero-distal tooth on article 5.

Of the remaining species *A. gracilis* is recognized by the distinct 'heel' on article 2 of pereiopod 4 while this species, *A. kergueleni*, and *A. maculata* have article 6 of gnathopod 1 of comparable size to article 5, while the dactyl is elongate and smoothly tapering. *A. inflata* sp. nov. may be recognized by differences in the proportions of articles 5–7 of gnathopod 1, as well as by the short free posterior margin of article 5.

Family **Dexaminidae**

Guernea (Guernea) tumulosa sp. nov.

Fig. 6

Description (of female, 2 mm)

Antenna 1 with distinct but minute uniarticulate accessory flagellum, primary flagellum 6-articulate; flagellum of antenna 2 8-articulate; eyes moderate with black cores; mandible with weakly ornamented molar, incisor simple, lacinia mobilis bifid; inner plate of maxilla 1 with a single seta, outer plate with seven strong spines, palp bi-articulate, slightly exceeding outer plate; inner plate of maxilla 2 much the shorter; postero-ventral base of maxilliped produced into paired ventral lobes each bearing five strong setae, inner plate small with a single apical seta, outer plate large with 11 medial spines, palp 4-articulate, considerably exceeding outer plate, terminal article well developed.

Pereiopods 1 and 2 slender, article 5 bearing strong posterior spines; article 2 of pereiopod 3 not greatly expanded posteriorly, anterior margin strongly convex with only a few minute setules, article 5 with four strong posterior spines; article 2 of pereiopod 4 strongly tapering distally, articles 2–5 with plumose setae; pereiopod 5 with articles 4 and 5 lined with dense plumose setae, interspersed with slender spines.

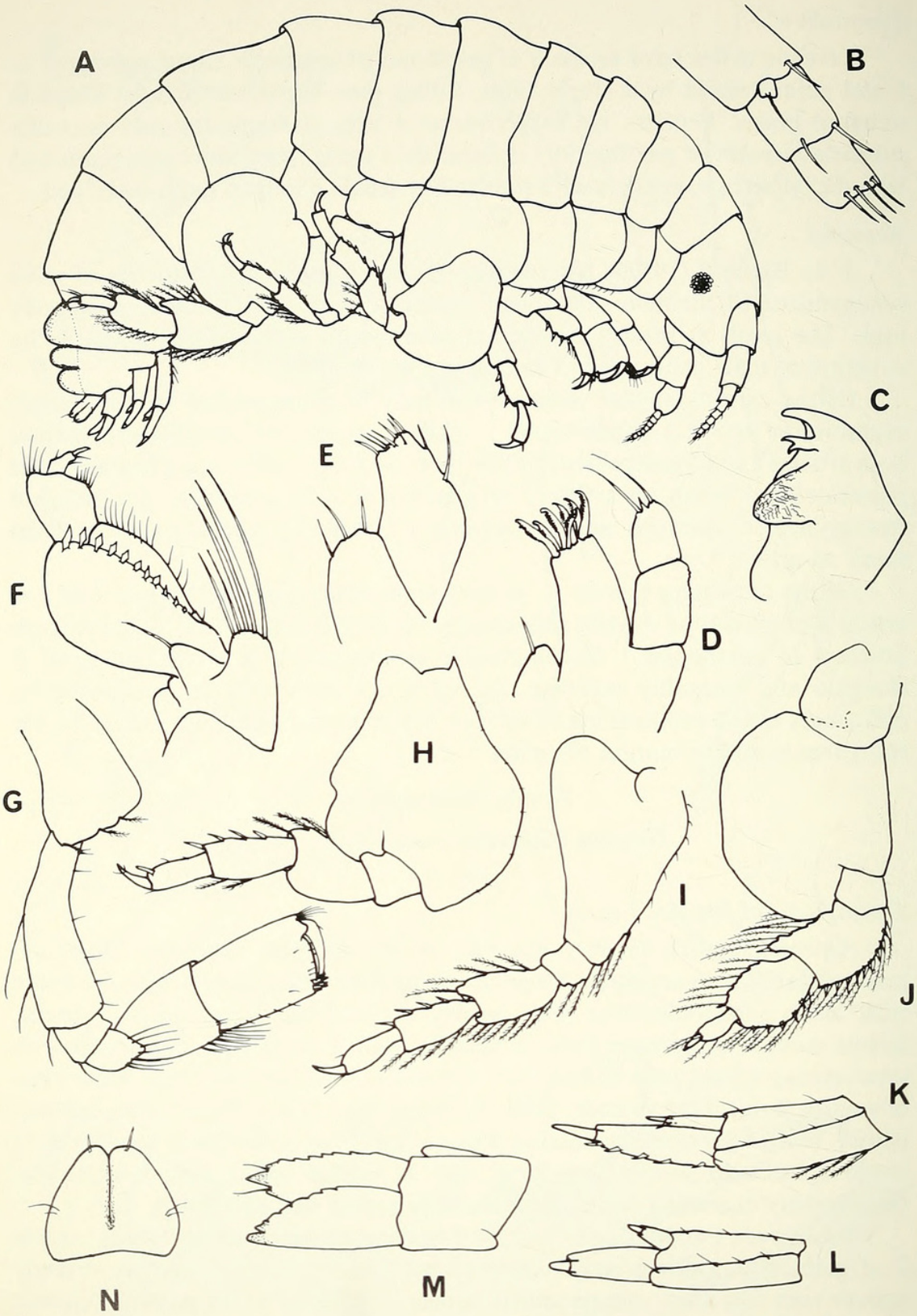

Fig. 6. *Guernea* (*Guernea*) *tumulosa* sp. nov.
Female, 2 mm. A. Lateral aspect. B. Accessory flagellum. C. Mandible. D–E. Maxillae 1, 2. F. Maxilliped. G. Gnathopod 2. H–J. Pereiopods 3, 4, 5. K–M. Uropods 1, 2, 3. N. Telson.

Urosomites 2 and 3 fused; urosome mediodorsally concave, latero-dorsal margins strongly ridged, the ridges cut into three humps of distinctive shape; inner rami of uropods 1 and 2 considerably reduced, terminating in a short blunt spine; rami of uropod 3 equal, dorsal margins weakly serrate, apices strongly chitinized; telson cleft almost to base, each lobe with a small apical spine and two minute dorsal setae.

Holotype

SAM–A13596, female, 2 mm.

Type locality

Oudekraal (33.58 S, 18.21 E), 10 m, from holdfast of *Laminaria pallida*, 8 January 1975.

Material

Six females from the type locality.

Remarks

This species is readily recognized by the two latero-dorsal rows of urosomal humps and by the reduced inner rami of uropods 1 and 2, with their short, blunt terminal spines. The strongly reduced inner rami of uropods 1 and 2 are shared by *G. gelane* J. L. Barnard (1972*a*) but this form lacks the strong urosomal humps of *G. tumulosa* sp. nov. *G. timaru* J. L. Barnard (1972*b*) from New Zealand shows an interesting similarity with *G. tumulosa* sp. nov. in that these two species share the unique character of strongly setose ventral lobes projecting from the base of the maxilliped. The two species differ, however, in other important characters, such as structure of maxillipedal palps, inner plates of maxilla 1 and shapes of pereiopods and uropods.

Family **Gammaridae**

Maera lobata sp. nov.

Fig. 7

Description (of male, 6 mm)

Antenna 1 as long as pereon, flagellum 18-articulate, slightly exceeding peduncle, accessory flagellum of three long articles and one short article; eyes oval, brown (when preserved in 70 per cent alcohol); article 1 of mandibular palp not produced distally, article 2 sparsely setose, 3 with five long terminal setae; gnathopod 1 moderately powerful, article 2 with minute antero-distal lobe, article 6 widening distally, palm concave, almost transverse, defined by a large spinose and setose semicircular lobe; gnathopod 2 very large, article 2 antero-distally expanded into a large lobe, article 3 with semicircular lobe anteriorly, 4 with acute postero-distal tooth, article 6 elongate-oval, posterior margin strongly setose throughout, palm undefined, dactyl strongly curved basally;

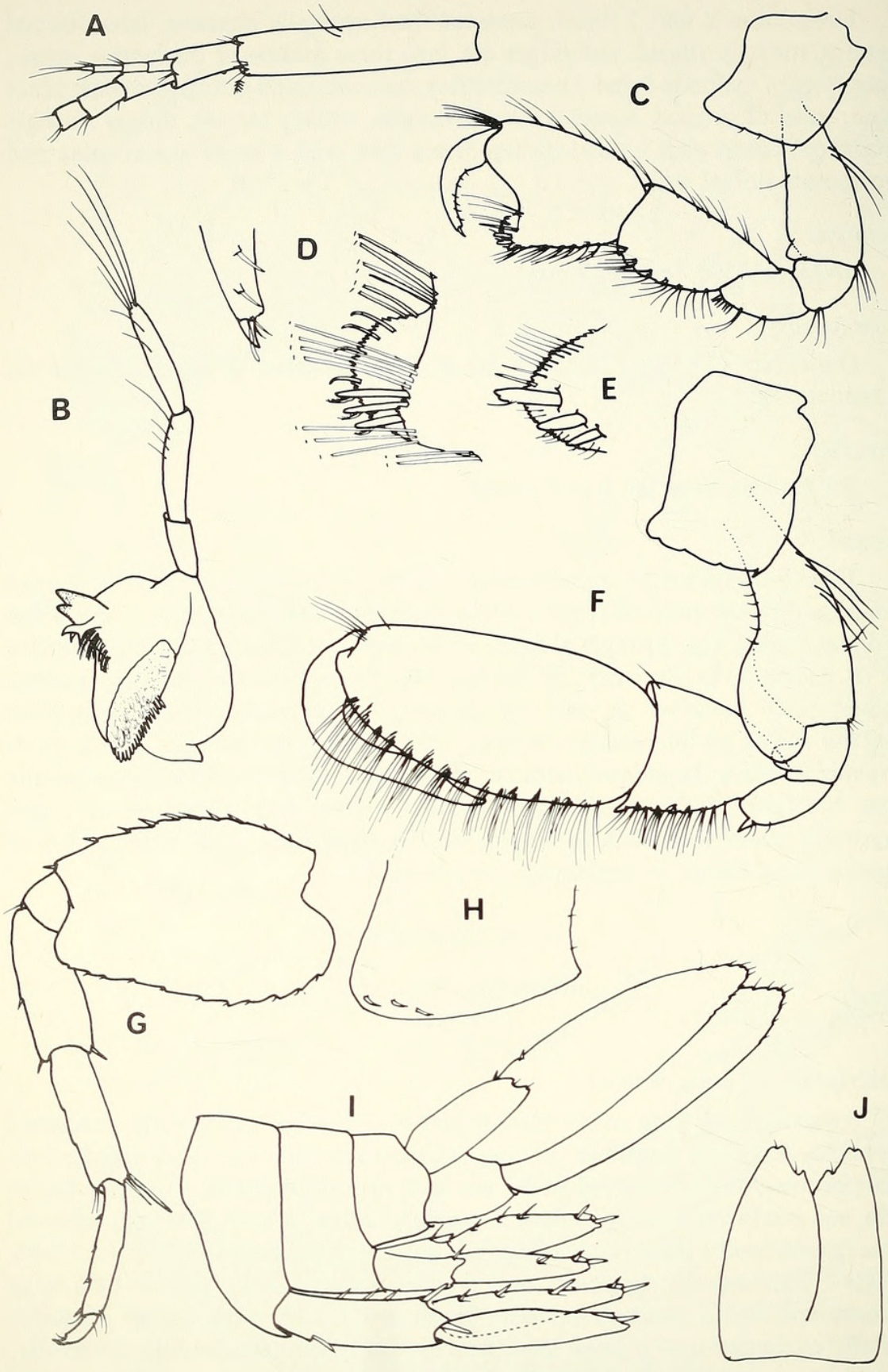

Fig. 7. *Maera lobata* sp. nov.
Male, 6 mm. A. Accessory flagellum. B. Mandible. C. Gnathopod 1. D–E. Lateral and medial views of defining angle of gnathopod 1. F. Gnathopod 2. G. Pereiopod 5. H. Third pleonal epimeron. I. Urosome. J. Telson.

article 2 of pereiopods 3–5 broadly oval; pleonal epimera with slight postero-distal projection, lacking posterior or ventral serrations; uropods 1 and 2 fairly short, inner rami slightly the longer, each with three small dorsal and two apical spines arising from pits in cuticle, outer rami with apical spines but dorsal spines minute or lacking; uropod 3 greatly exceeding 1 and 2, rami broadly oval with a few setiferous indents around apex, outer ramus with two small dorsal spines near origin; telson cleft almost to base, each lobe with a minute setiferous apical notch and another medial to apex.

Holotype

SAM–A13592, male, 6 mm.

Type locality

34.40 S, 21.39 E, 21 June 1972, depth 80 m, substrate shelly sand.

Material

Numerous specimens of both sexes from the type locality.

Female

Ovigerous at 5 mm; accessory flagellum of two long articles and one minute article; gnathopods much smaller than those of the male; gnathopod 1 with articles 5 and 6 subequal; palm oblique and smoothly convex, minutely pectinate throughout, defined by two small spines; article 2 of gnathopod 2 linear, article 6 similar to that of gnathopod 1 but considerably more elongate; uropod 3 much smaller than that of male, rami narrower and more lanceolate but hardly larger than those of uropod 1.

Remarks

With its broad, relatively smooth third uropods, undefined palm of gnathopod 2 and unornamented telson this species falls in a group characterized by *M. knudseni* Reid, *M. othonis* (Milne-Edwards) and *M. thrixa* Griffiths. The expanded article 2 of gnathopod 2 male indicates a particularly close relationship with the last of these species. *M. lobata* differs from *M. thrixa* in the shape of the process of article 2 of gnathopod 2 male, which is oval rather than triangular and extends distally to cover article 3, and from all the species in the group in the concave palm and defining lobe of gnathopod 1 male.

Maera pacifica Schellenberg, 1938

Fig. 8

Maera pacifica Schellenberg, 1938: 42–45, figs 19–20. J. L. Barnard, 1970: 150, figs 92–93. Ledoyer, 1972: 227, pls 43–44.

Records

SAM–A13591, a single male collected amongst corals, Ponta de Barra, Moçambique, December 1971, depth 4 m.

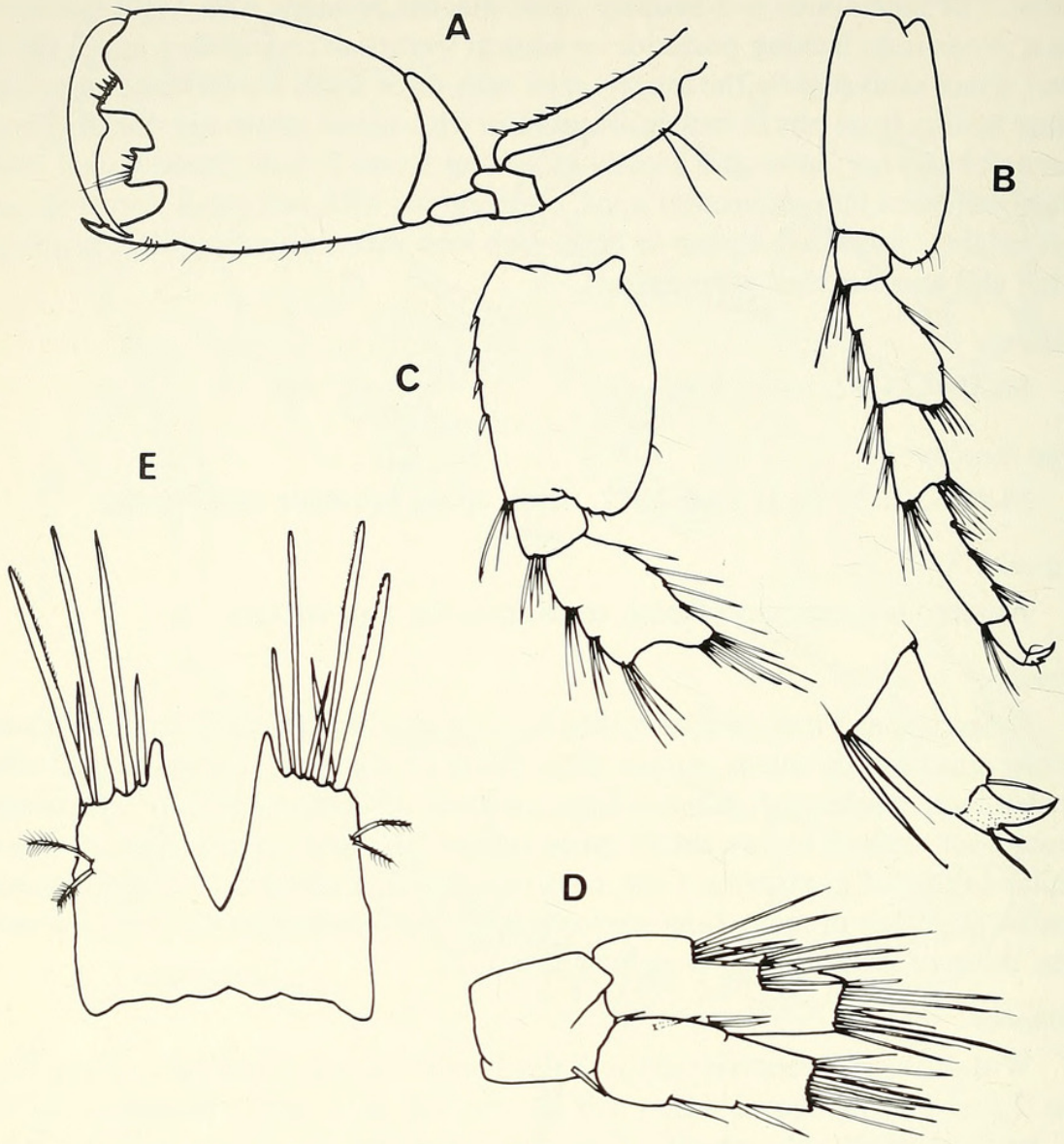

Fig. 8. *Maera pacifica* Schellenberg, 1938.
Male, 6 mm. A. Gnathopod 2. B. Pereiopod 3 with tip of dactyl enlarged. C. Articles 2–4 of pereiopod 5. D. Uropod 3. E. Telson.

Remarks

This species is one of a closely related and easily confused group typified by smooth third pleonal epimeron and transverse palm of gnathopod 2. Particular confusion exists between *M. pacifica* and *M. quadrimana* Schellenberg, which are distinguished by such variable features as the width of article 2 of pereiopods 3–5 and the shape of the palm of the male gnathopod 2. The present specimen agrees closely with the *M. pacifica* Form B described by Ledoyer (1972) and on this basis is ascribed to that species rather than *M. quadrimana*, which typically has three sinuses on the palm of gnathopod 2 male.

Distribution

Widespread Indo-Pacific. This is the first record from southern Africa.

Family **Phoxocephalidae**

Mandibulophoxus latipes sp. nov.

Figs 9–10

Description (of female, 7 mm)

Rostrum linear, terminating acutely at about article 6 of flagellum of antenna 1; eyes consisting of about 18 distinct ommatidia; mandible lacking molar process, palp 3-articulate, attached to distinct process of mandibular body, bent between articles 1 and 2, article 3 hardly widening distally, terminally bearing seven long setae; palp of maxilla 1 bi-articulate; maxilliped with article 3 of palp not produced distally, 4 subequal to 3, bearing a terminal spine.

Palm of gnathopod 1 semioblique, lacking defining lobe; gnathopod 2 somewhat larger, palm defined by a small spine and distinct rounded lobe; pereiopod 1 having articles 4 and 5 subequal, article 6 distinctively shaped with outer edge produced into a semicircular, marginally spinose plate; pereiopod 2 with article 4 considerably larger than 5, article 6 linear, margins spinose but not produced; article 2 of pereiopod 3 more than twice width of article 3, widening distally, articles 4 and 5 as wide as 2; posterior lobe of article 2 of pereiopod 5 greatly expanded, margins with a few setiferous indents but lacking distinct teeth, postero-distal corner broadly rounded.

First and second pleonal epimera with plumose setae distally, third with a distinct oblique setal row, postero-distal corner quadrate; peduncle of uropods 1 and 2 with a few small dorsal spines and strong apical spine, rami with short stout spines along distal portion of dorsal margin and at apex; uropod 3 considerably exceeding 1 and 2, inner ramus with long plumose setae on both margins and at apex, outer ramus bi-articulate, article 1 medially setose and externally spinose, extending to apex of inner ramus, article 2 about 25 per cent length of 1, bearing a single apical spine and one plumose seta; telson short, cleft to base, each lobe with two short plumose setae dorsally and two strong apical spines.

Holotype

SAM–A13590, female, 7 mm.

Type locality

Intertidal sand, Shearwater Bay, Lüderitz, South West Africa (26.38 S, 15.07 E), 25 February 1963.

Material

Numerous females from the type locality, and from Noordhoek Beach, Cape Peninsula (34.05 S, 18.21 E).

Remarks

The genus *Mandibulophoxus* was erected by J. L. Barnard (1957) to accommodate *M. gilesi* (type species), *M. uncirostratus* (Giles, 1890) and *M. stimpsoni*

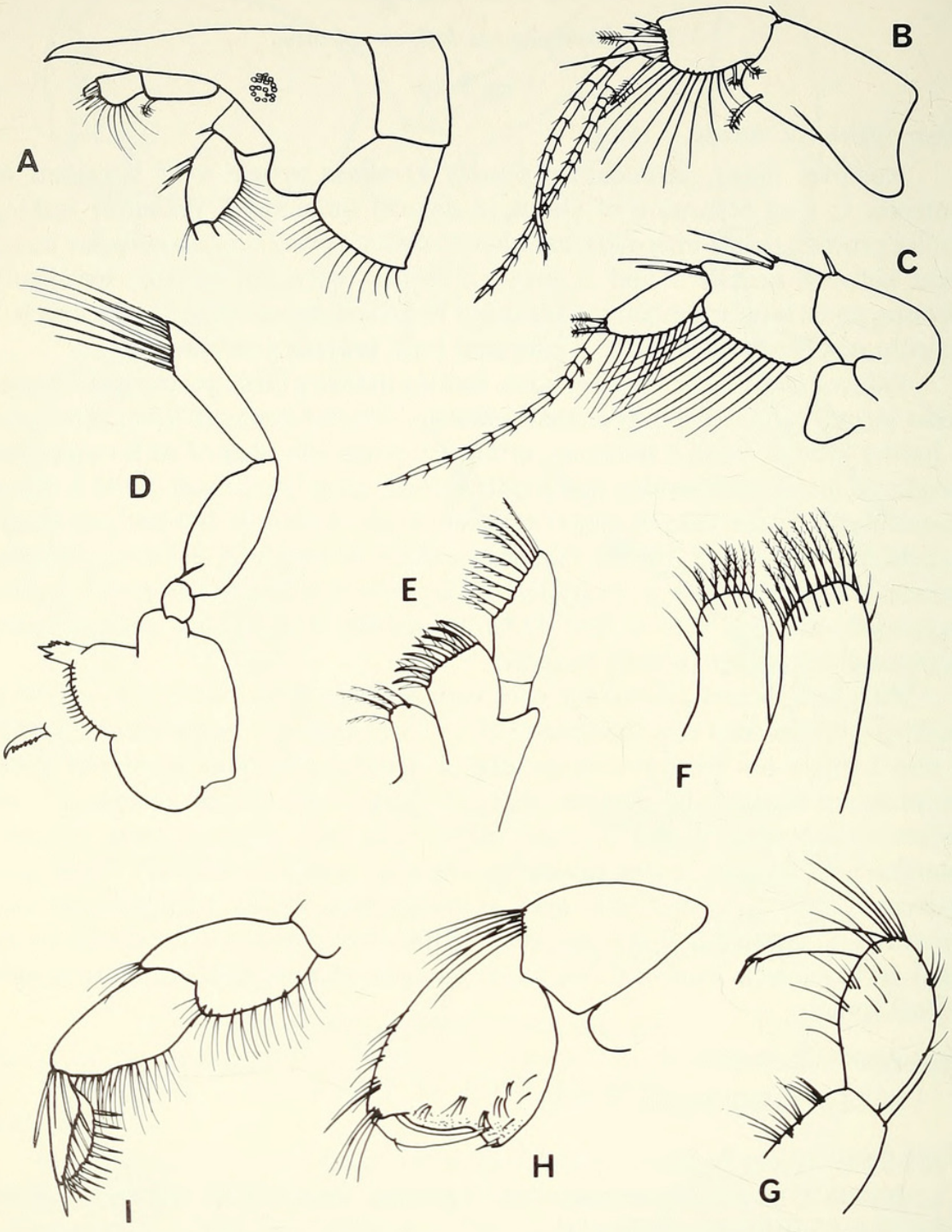

Fig. 9. *Mandibulophoxus latipes* sp. nov.
Female, 7 mm. A. Head. B–C. Antennae 1, 2. D. Mandible. E–F. Maxillae 1, 2. G. Articles 3 and 4 of maxillipedal palp. H. Tip of gnathopod 2. I. Articles 4–7 of pereiopod 1.

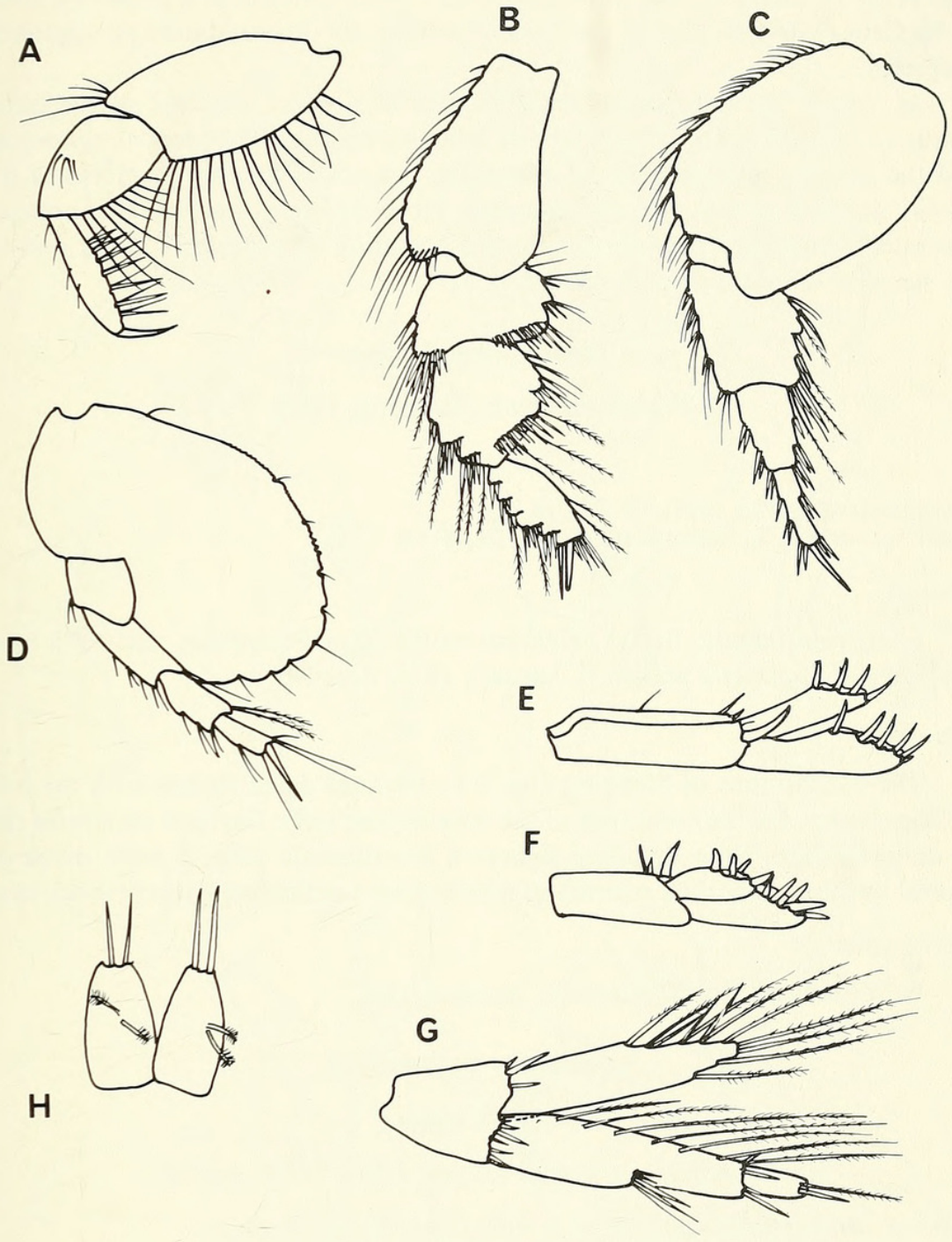

Fig. 10. *Mandibulophoxus latipes* sp. nov.
Female, 7 mm. A. Articles 4–7 of pereiopod 2. B–D. Pereiopods 3, 4, 5. E–G. Uropods 1, 2, 3. H. Telson.

(Stebbing, 1908). However, J. L. Barnard (1960) subsequently synonymized his *M. gilesi* with *M. uncirostratus*, on the basis of a redescription of the latter species by Pillai (1957). *M. gilesi* has since been reinstated in a paper by Gray & McCain (1969) so that at the time of writing the genus stands as originally proposed.

M. latipes sp. nov. shares features such as a short article 2 of the outer ramus of uropod 3, an oblique row of setae across the third pleonal epimeron, and the presence of eyes with *M. stimpsoni*, but not with other members of the genus. *M. latipes* may be distinguished from *M. stimpsoni* by the unusual expanded article 6 of pereiopod 1, by the spination of uropods 1 and 2 and by the shape of article 2 of pereiopod 5.

Family **Stenothoidae**

Probolisca ovata (Stebbing, 1888)

Fig. 11

Metopa ovata Stebbing, 1888: 764–767, pl. 44.
Probolisca ovata: J. L. Barnard, 1972*b*: 155, fig. 89 f–j.

Records

Numerous females from Oudekraal on the Cape Peninsula; recovered from holdfasts of *Laminaria pallida*, 8 January 1975, depth 10 m.

Remarks

The descriptions of Stebbing and J. L. Barnard agree closely with my own findings except for the condition of the mandibular palp. Barnard illustrates this as uni-articulate while Stebbing figures a bi-articulate palp. I have dissected several specimens for their mandibles which show 3-articulate palps in every case.

Distribution

New Zealand, South America, South Africa.

Superfamily TALITROIDEA

Family **Ceinidae**

Austrochiltonia subtenuis (Sayce, 1902). **New synonymy**

Chiltonia subtenuis Sayce, 1902: 48, pl. 4. Rühe, 1914: 35, figs 13, 14a–c.
Chiltonia capensis K. H. Barnard, 1916: 224, pl. 27, figs 38–40.
Afrochiltonia capensis: K. H. Barnard, 1955: 93.
Austrochiltonia subtenuis: Hurley, 1958: 003.

The first record of a *Chiltonia* from South Africa was that of Rühe (1914), who figures a specimen of *Chiltonia subtenuis* described as a female, but in fact showing the enlarged gnathopod 2 of a male. Apparently in ignorance of Rühe's publication K. H. Barnard (1916) erected *Chiltonia capensis* on the basis of

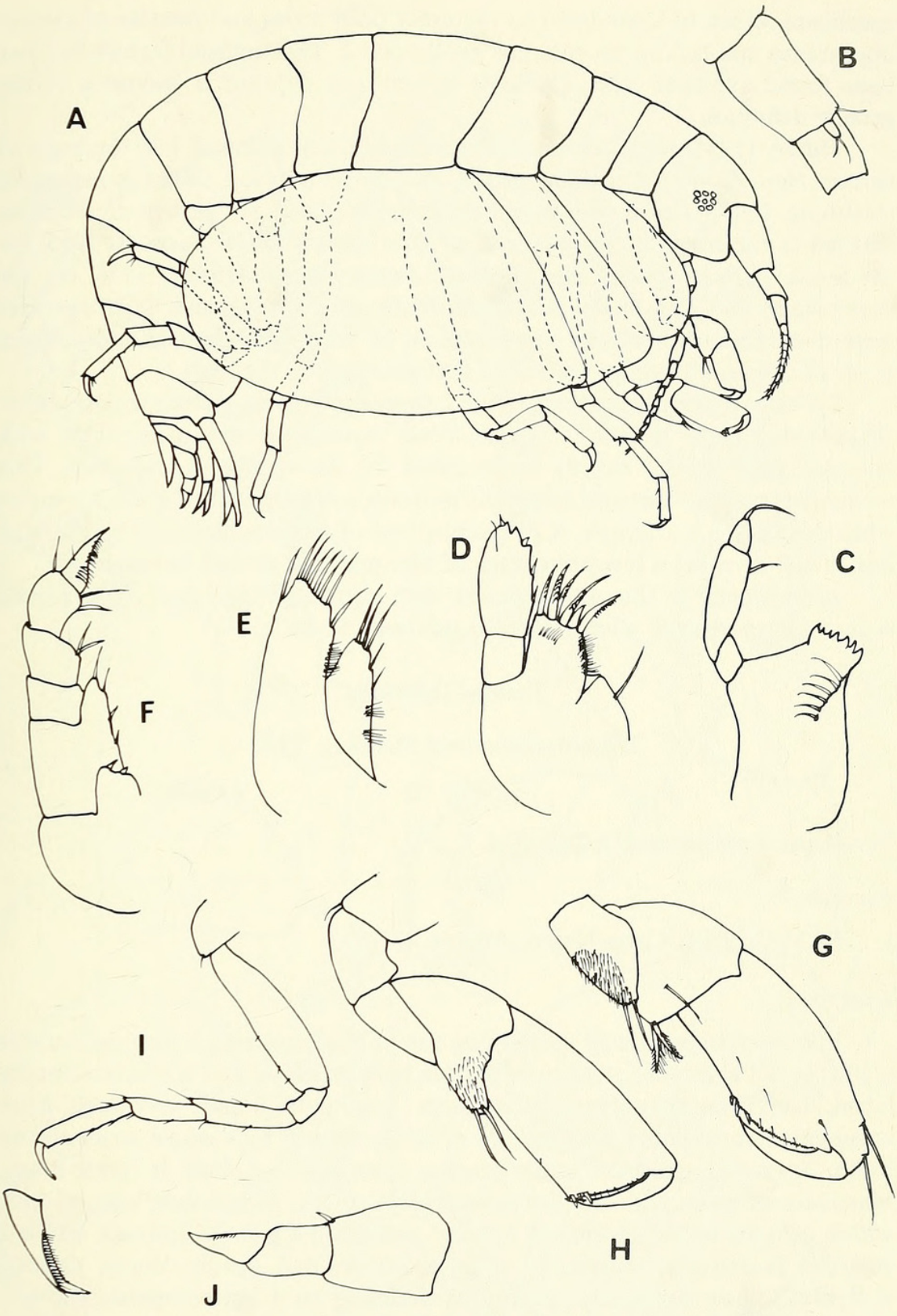

Fig. 11. *Probolisca ovata* (Stebbing, 1888).
Female, 1,5 mm. A. Lateral aspect. B. Accessory flagellum. C. Mandible. D–E. Maxillae 1, 2. F. Maxilliped. G–H. Gnathopods 1, 2. I. Pereiopod 5 with dactyl enlarged. J. Uropod 3.

specimens which he considered to represent both males and females of similar appearance and lacking an enlarged gnathopod 2. This unusual feature had not been found amongst other *Chiltonia* species and required a widening of the generic definition.

Hurley (1954) noted an unusual modification of pleopod 1 in the male of certain New Zealand *Chiltonia* species, including the type—*Chiltonia mihiwaka* (Stebbing, 1899). This modification was considered to be of generic significance and led to the erection of a new genus, *Afrochiltonia* K. H. Barnard, 1955, for the South African species and another, *Austrochiltonia* Hurley, 1958, for the Australia species *C. subtenuis* and *C. australis*. *Afrochiltonia* and *Austrochiltonia* were distinguished solely by the condition of gnathopod 2 male and differed from *Chiltonia* in having unmodified first pleopods in the male.

Specimens recently recovered from Langebaan Lagoon include females indistinguishable from Barnard's *Afrochiltonia capensis* mixed with males with enlarged gnathopod 2 exactly as described for *Austrochiltonia subtenuis*. This would indicate that Barnard originally mistook non-ovigerous females for males when describing *A. capensis*. A re-examination of samples identified by Barnard has in fact revealed a low percentage of true males in several instances.

Afrochiltonia is thus synonymous with *Austrochiltonia* and *Afrochiltonia capensis* Barnard with *Austrochiltonia subtenuis* Sayce.

Family **Talitridae**

Talorchestia skoogi Stebbing, 1922

Fig. 12

Talorchestia skoogi Stebbing, 1922: 8–9, pl. 5.

Records

SAM–A13500, Cabo Negro, Angola.

Diagnosis

Eyes very large, almost meeting on top of head, antenna 2 with peduncular segments not enlarged; gnathopod 1 male with articles 5 and 6 postero-distally lobed, dactyl considerably exceeding palm; gnathopod 2 male very large, palm occupying almost entire hind margin of hand, defined by a single acute curved tooth, a smaller quadrate tooth bearing three strong spines at finger-hinge, remainder of palm with smaller submarginal spines, dactyl very long, closing within defining tooth; pereiopod 3 short; pereiopod 4 greatly elongate, article 2 enlarged posteriorly, marginally spinose, articles 4–6 slender, dactyl slender, elongate, spinose anteriorly; pereiopod 5 similar to 4 but somewhat shorter; pleon segments with transverse keels dorsally, one on each of segments 1, 3 and 4, two on segment 2; pleonal epimera quadrate; uropods large, strongly spinose dorsally and apically; telson apically emarginate.

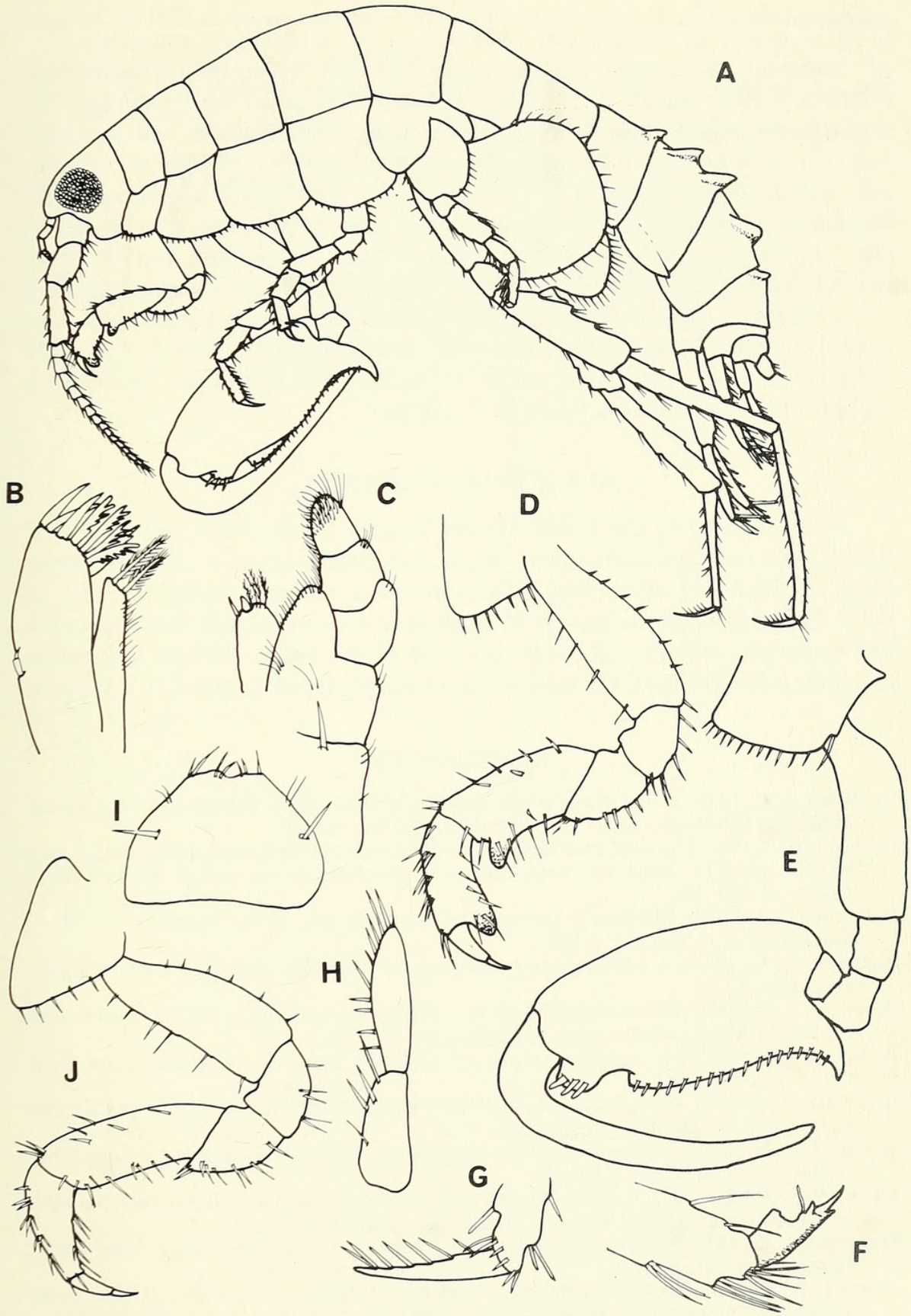

Fig. 12. *Talorchestia skoogi* Stebbing, 1922.
Male, 10 mm. A. Lateral aspect. B. Maxilla 1. C. Maxilliped. D–E. Gnathopods 1, 2. F–G. Dactyl of pereiopods 2, 5. H. Uropod 3. I. Telson.
Female, 8 mm. J. Gnathopod 1.

Remarks

Although this poorly known species does not occur strictly within the southern African region (S of 20°S) the author has taken the opportunity of available material to elucidate previously undescribed features and provided more complete figures. In his original description Stebbing (1922) failed to mention certain important characters of this species which have a bearing on its relationships (particularly the unusual dorsal keels on pleon segments 1–4 and the elongate pereiopod 4 with its enlarged article 2 and spinose dactyl). These characters place *T. skoogi* in a distinct group of eastern Atlantic species including *T. quadrispinosa*, *T. spinifera* and *T. tricornuta*. These three species, however, have acute upright pleonal teeth (four in *T. quadrispinosa*, three in *T. tricornuta* and eight in *T. spinifera*) quite unlike the raised transverse ridges, each with a slight medial emargination, found in *T. skoogi*.

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