

Fig. 37. *Spinianirella walfishensis* Menzies A. Pleopod 1 male. B. Pleopod 2 male. C. Pleopod 3 male. D. Pereopod 1. E. Uropod. F. Pereopod 2. G. Pereopod 7. H. Operculum, female.

*Remarks*

The present material agrees well with Menzies' description. As this is the first record of the male of this species, figures of the male pleopods 1-3 are provided, as well as additional appendages, to supplement the original description.

Family *Joeropsidae**Joeropsis* Koehler, 1885*Joeropsis integer* sp. nov.

Fig. 38

*Material*

East London area. Holotype SAM-A17852, SM 163, 33°04'S 28°06'E, 90 m, 1 ovig. ♀, TL 3,5 mm. Paratypes SAM-A17853, SM 163, 90 m, 2 ♀, TL 2,8 mm, 3,9 mm.

*Description**Ovigerous female*

Body almost three times longer than wide. Head with lateral margins entire; frontal plate very gently convex; dorsolateral eyes well developed; broad, roughly pentagonal dorsal pigment patch present. Body widest at pereonite 3. Pleon with lateral margins entire; posterior margin between uropods triangular. Antennule, basal article having rounded distolateral lobe; article 2 about half length and width of article 1; distal article bearing three aesthetascs. Antenna with article 3 having transparent membrane on median margin; flagellum of seven articles. Mandible with three-articulate palp, distal article with eight spines. Maxilla 1, outer ramus with eleven strongly toothed distal spines; inner ramus with three distal setae. Maxilla 2, inner ramus short, with four simple distal spines; two lobes of outer ramus each with three elongate fringed spines and one simple spine. Maxilliped with palp article 2 broadest; article 5 relatively elongate, about twice length of third; endite with few short distal spines; four retinaculæ on median margin. Pereopod 1 shorter than following pereopods; dactylus biunguiculate; propodus with four short spines on posterior margin; following pereopods triunguiculate; propodi with seven or eight spines on posterior margins. Operculum broadly oval, longer than wide. Uropodal basis with broadly rounded inner lobe; rami very short, inner longer than outer, both rami bearing elongate setae.

*Remarks*

All four of the southern African species of *Joeropsis* have either serrate or toothed pleonal margins, unlike the present species, which is entire. *Joeropsis paulensis* (Vanhöffen) from Gough, St. Paul and Amsterdam islands has entire head and pleonal margins but a markedly tapering pleon, and is noticeably

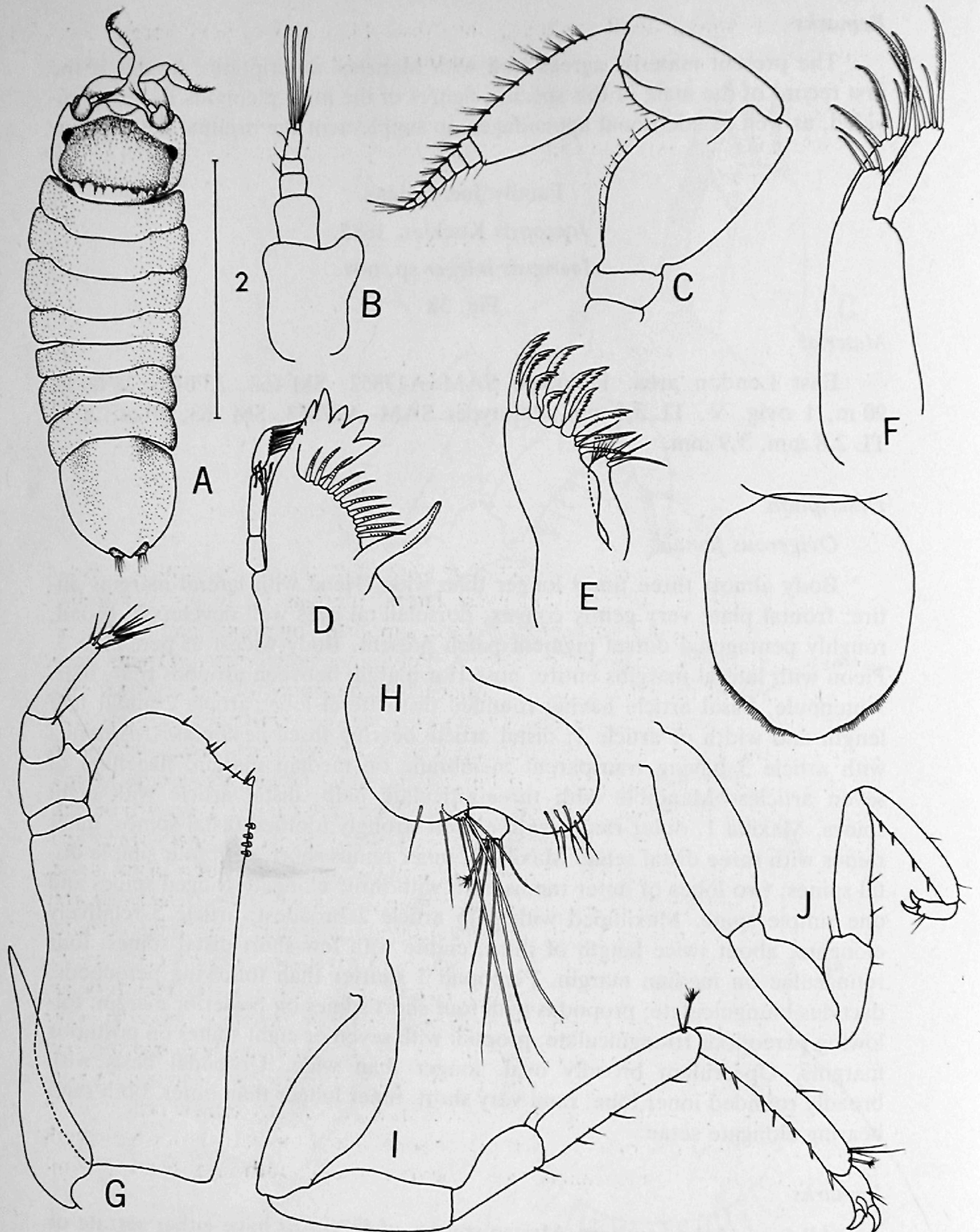


Fig. 38. *Joeropsis integer* sp. nov. A. Holotype, dorsal view. B. Antennule. C. Antenna. D. Mandible. E. Maxilla 1. F. Maxilla 2. G. Maxilliped. H. Uropod. I. Pereopod 7. J. Pereopod 1. Scale = 2 mm.



setose; the frontal plate of the head, while resembling *J. integer*, is more convex, while the maxillipedal palp article 2 is distinctly lobed.

### *Etymology*

The specific name, meaning 'entire', refers to the lateral margins of the head and pleon.

### *Joeropsis serrulus* sp. nov.

Fig. 39

### *Material*

East London area. Holotype SAM-A17854, SM 185, 33°39'S 27°11'E, 90 m, 1 ovig. ♀, TL 2,3 mm. Paratype SAM-A17855, SM 163, 33°04'S 28°06'E, 90 m, 1 ovig. ♀, TL 2,3 mm. Paratype SAM-A17856, SM 164, 33°04'S 28°06'E, 90 m, 1 ♀, TL 2,1 mm.

### *Description*

#### *Ovigerous female*

Body about three times longer than wide, broadest at pereonite 3. Head with well-pigmented dorsolateral eyes; lateral margins finely serrate; frontal plate roughly triangular with apex truncate, supported by prominent 'shoulders'; pigment reticulation over entire dorsum. Pereonites with lateral margins finely serrate; pigment reticulation on pereonites 1-6, becoming obsolete posteriorly. Pleon tapering posteriorly, lateral margin with twelve to thirteen teeth; posterior margin triangular between uropods, apex narrowly rounded. Antennule of six articles, basal article broadest and longest, terminal article with single aesthasc. Antennal flagellum of seven articles. Mandibular palp, basal article subequal to article 2; terminal article with six distal fringed spines; spine row bearing eight slender spines. Maxilla 1, inner ramus with three distal setae, outer ramus with twelve strongly toothed spines. Maxilla 2, inner ramus shorter than lobes of outer ramus, with four distal setae; inner and outer lobes of outer ramus each with four elongate fringed spines. Maxilliped, palp article 2 mesial margin strongly lobed, article 4 elongate, two and one-half times length of article 3; endite with distal margin stepped in mesial half, evenly rounded in outer half; three retinaculae on mesial margin. Pereopod 1 biunguiculate, shorter than following triunguiculate legs; propodi with two or three sensory spines on posterior margin. Operculum slightly longer than wide, distally somewhat narrowly rounded. Uropod reaching beyond pleotelsonic apex, medial lobe of basis with strong distal hook, inner ramus twice length of outer, both rami bearing elongate setae.

### *Remarks*

In possessing finely serrate lateral margins of the head, pereon, and pleon, *Joeropsis serrulus* bears little resemblance to any of the five species described



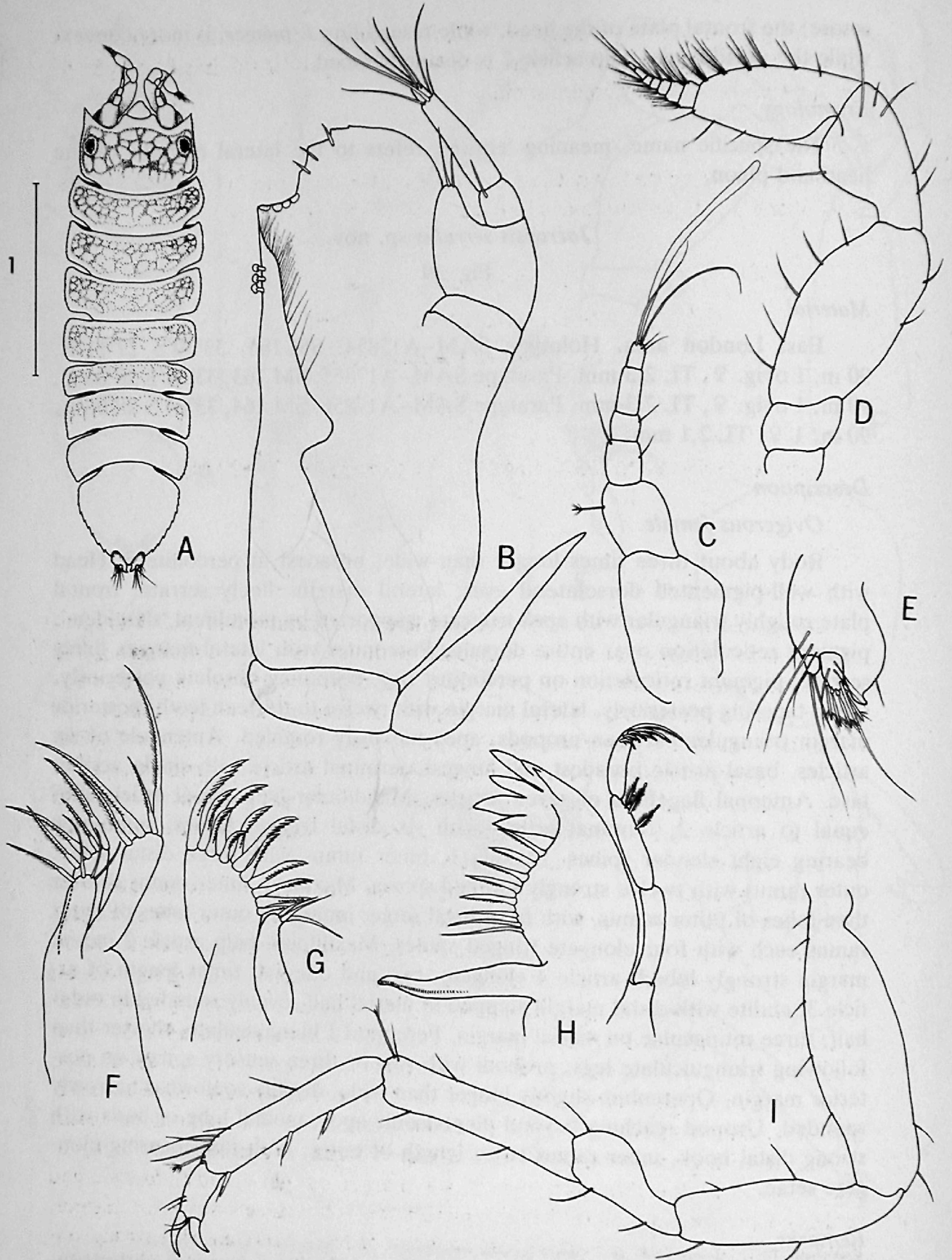


Fig. 39. *Joeropsis serrulus* sp. nov. A. Holotype, dorsal view. B. Maxilliped. C. Antennule. D. Antenna. E. Uropod. F. Maxilla 2. G. Maxilla 1. H. Mandible. I. Pereopod 7. Scale = 1 mm.

from South Africa (see Kensley 1975b). *Joeropsis antarctica* (Menzies & Schultz, 1968) possesses coarsely serrate lateral margins of the head and pleon, but apparently smooth pereonite margins.

### *Etymology*

The specific epithet, from the Latin for a little saw, refers to the fine serrations of the head, pereon, and pleon margins of this species.

### Family **Pleurogoniidae**

*Notoxenoides* Menzies, 1962

*Notoxenoides acalama* sp. nov.

Fig. 40

### *Material*

Holotype SAM-A17857, SM 117, 30°17'S 31°10'E, 820 m, 1 ovig. ♀, TL 2,0 mm.

### *Description*

#### *Ovigerous female*

Integument covered dorsally with very fine circular tubercles. Head with anterior margin evenly convex, lacking ocular peduncles and eyes. Pereonites 1-6 each with elongate lateral spinose process and shorter middorsal spine; pereonites 1 and 2 with cluster of three short spines at base of spinose process; coxae visible in dorsal view in pereonites 5-7; pereonite 7 with short middorsal spine, but lacking lateral spinose process. Pleon consisting of two segments; pleonite 1 very short, unarmed; pleotelson subglobose, with lateral margin armed with thirteen or fourteen transparent spines; posterior margin between uropodal bases broadly triangular, apically rounded.

Basal antennular article armed with five dorsolateral spines and two stronger distal spines; article 2 about half length of article 1; four distal articles together subequal to article 2; terminal article bearing single aesthetasc. Mandibular palp three-articulate, terminal article short, curved, bearing single seta; incisor broad, of five cusps; spine row of four elongate serrate spines; molar stout, distally truncate, with irregular marginal serrations. Maxilla 1, inner ramus with one simple, one broadly serrate, and one finely fringed distal seta; outer ramus with eight distal spines. Maxilla 2, inner ramus with eight distal serrate and fringed spines; inner lobe of outer ramus with four elongate setae, outer lobe with three elongate setae. Maxilliped palp with articles 2 and 3 broad, but not as wide as endite; latter with distal margin straight, bearing five fringed setae and two broad sensory fringed spines; two retinaculae on medial margin. Pereopod 1 prehensile, shorter than ambulatory legs, dactylus with strong unguis and shorter accessory spine; propodus with two sensory spines on posterior margin; carpus distally expanded, posterior margin with two elongate stout

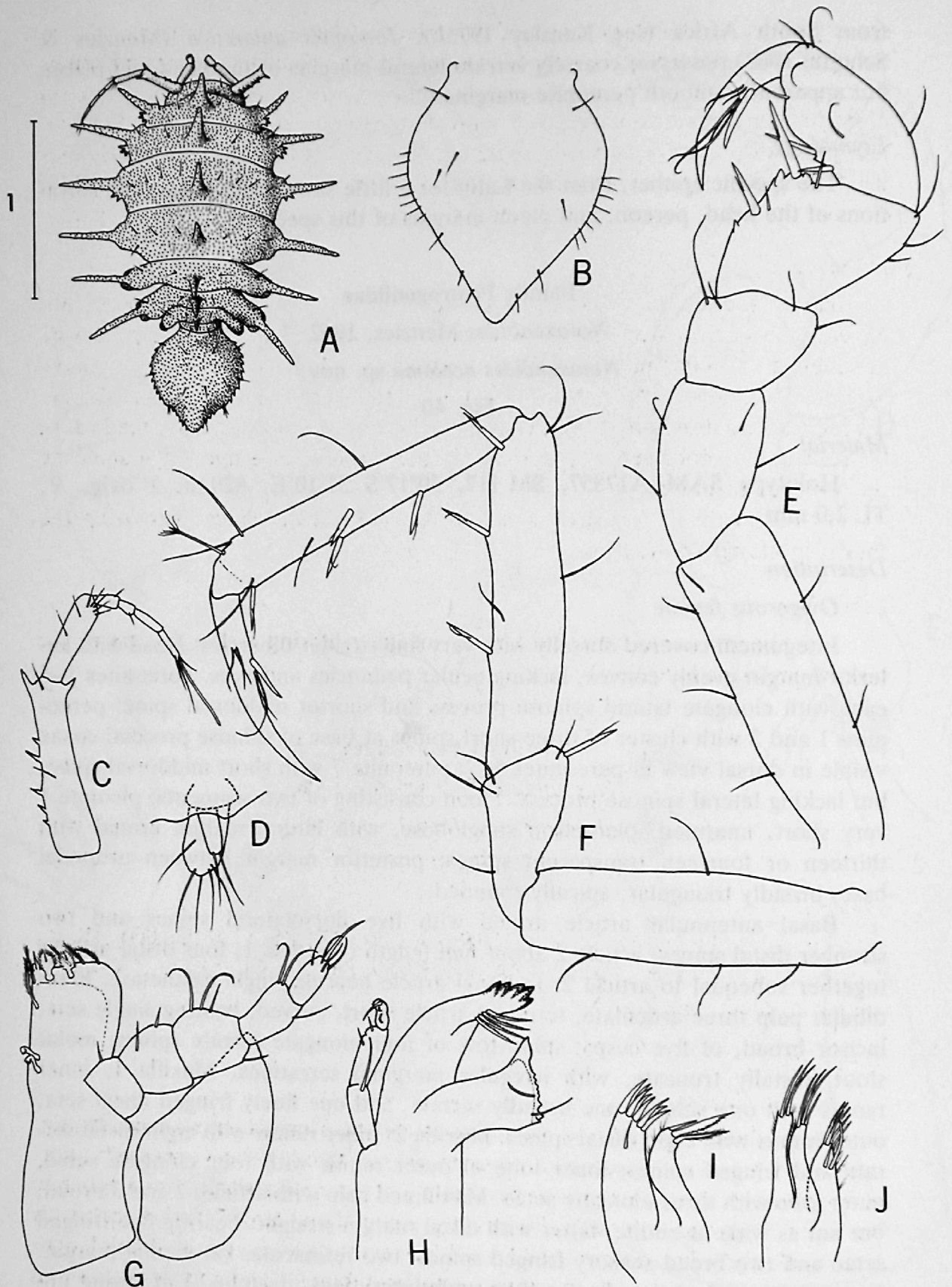


Fig. 40. *Notoxenoides acalama* sp. nov. A. Holotype, dorsal view. B. Operculum, female. C. Antennule. D. Uropod. E. Pereopod 1. F. Pereopod 7. G. Maxilliped. H. Mandible. I. Maxilla 1. J. Maxilla 2. Scale = 1 mm.



sensory spines. Ambulatory pereopods with slender, curved dactylus bearing accessory spine at base of unguis; propodus elongate, with four or five sensory spines on posterior margin; carpus elongate-rectangular, with three sensory spines on posterior margin; merus short, with sensory spine at anterodistal angle. Operculum pyriform, apically narrowly rounded, sparsely setose. Uropodal basis hidden by lateral margin of pleon, outer (dorsal) ramus shorter and one-third width of inner, with two apical setae; inner (ventral) ramus with several distal setae.

#### Remarks

Three species of *Notoxenoides* Menzies, 1962, have been described: *N. abyssi* Menzies, from the west coast of South Africa, 1 816 m; *N. vemae* Menzies, from 4 047 m on the Walvis Ridge, South Atlantic; and *N. dentata* Menzies & George, 1972, from 3 900 m in the Peru–Chile Trench. *Notoxenoides acalama* differs from all three in the lack of ocular peduncles, the lack of lateral spinose processes on pereonite 7, and the lack of a middorsal spine on the first free pleonite.

At 820 m this is the shallowest record for this rare genus (this being the fourth specimen known).

#### Etymology

The specific name from the Greek, meaning lacking a stalk, refers to the lack of ocular peduncles.

#### Family Ischnomesidae

*Haplomesus* Richardson, 1908

*Haplomesus zuluensis* sp. nov.

Fig. 41

#### Material

Zululand. Holotype SAM–A17858, SM 60, 27°09'S 32°58'E, 800–810 m, 1 ovig. ♀, TL 4.9 mm. Paratype SAM–A17859, SM 60, 800–810 m, 1 ovig. ♀, damaged, pleon missing.

#### Description

##### *Ovigerous female*

Body about five and one-half times longer than broad. Integument brittle, very finely granulate. Head with anterior margin slightly concave medially; dorsally gently convex, sunken into pereonite 1. Latter with small lateral tubercle posterior to strong dorsolaterally directed spine. Pereonites 2 and 3 each with two small submedian tubercles and small lateral tubercle. Pereonite 4 half length of pereonite 5, with small middorsal anterior tubercle, and row of four small submedian tubercles. Pereonite 5 with two submedian rows of small tubercles, becoming obsolete in posterior half of segment. Pereonites 6 and 7 fused with

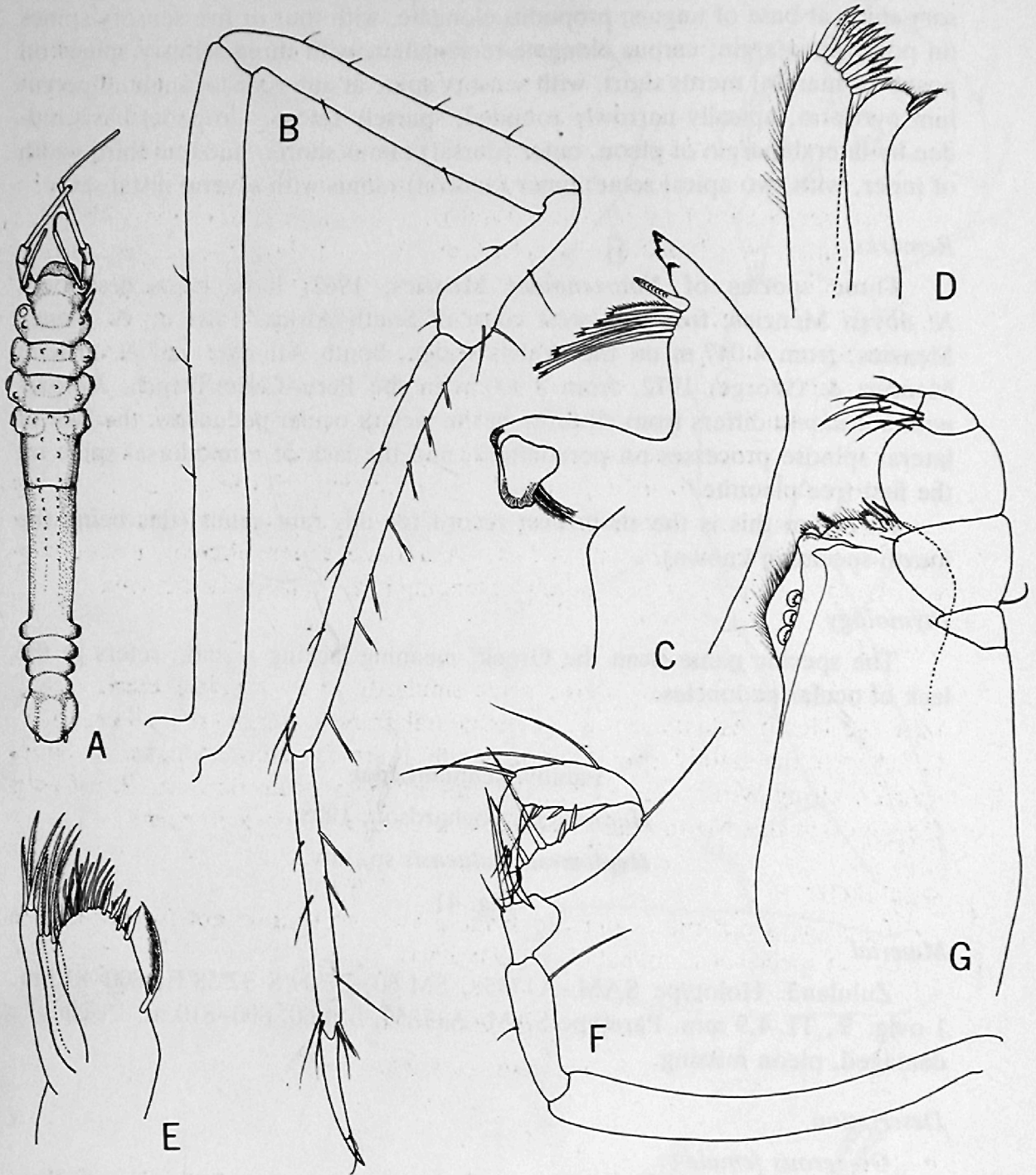


Fig. 41. *Haplomesus zuluensis* sp. nov. A. Holotype, dorsal view. B. Pereopod 7. C. Mandible. D. Maxilla 1. E. Maxilla 2. F. Pereopod 1. G. Maxilliped. Scale = 1 mm.