

Fig. 11. *Microarcturus barnardi* sp. nov. A. Female, dorsal view. B. Male, dorsal view. C. Pleotelson, male, lateral view. D. Pleopod 1 male. E. Pleopod 2 male. F. Apex of copulatory stylet. Scale = 2 mm.

Etymology

The species is named for the late Dr K. H. Barnard who contributed much knowledge to isopod systematics.

Microarcturus biserialis Kensley, 1978

Fig. 12

Microarcturus biserialis Kensley, 1978a: 128, fig. 2; 1978e: 27, fig. 11A-B.

Material

Holotype SAM-A15467, 1 300 m, 1 ♂; paratypes, 2 ♂.

Diagnosis

Integument finely granulate. Head lacking eyes or even unpigmented ommatidia; with one pair of narrow submedian processes. Pereonites 1-7 each with one pair submedian conical processes. Epimera of pereonites 2-3 short, triangular. Fused pleonites 1-3 each with submedian pair of conical processes, anterior pair smallest. Pleotelson with distinct lateral angle, posterior margin broadly triangular. Pleopod 1 ♂, with distal margin of exopod formed by finely setulose lobe, evenly convex; three short plumose setae medially; endopod slightly less than half length of exopod, lacking elongate plumose setae, having only fine setules. Copulatory stylet robust, open, distally acute, simple. Female unknown.

Microarcturus dayi Kensley, 1977

Fig. 13

Microarcturus dayi Kensley, 1977: 246, figs 6-7; 1978a: 133; 1978e: 28, fig. 11C-E.

Material

Saldanha Bay area. SAM-A5952, 240 m, 1 ♂.

False Bay area. SAM-A13843, 75 m, 1 ♂, 1 ovig. ♀. SAM-A13895, 87 m, 2 ovig. ♀. SAM-A17799, 75 m, 1 ♂, 2 ovig. ♀.

Agulhas Bank. SAM-A13772, 78 m, 1 ♂, 2 ovig. ♀, 2 juvs. SAM-A13773, 106 m, 2 ♂. SAM-A17800, 84 m, 1 ♂, 2 ♀, 3 juvs.

East London area. SAM-A17801, SM 179, 80 m, 1 ♂. SAM-A17802, SM 180, 80 m, 6 ♂, 1 ovig. ♀, 4 juvs.

Diagnosis

Integument with numerous small tubercles; 1 pair large conical tubercles on head; female with pair of large flattened submedian tubercles on pereonite 3; male and female with conical, posteriorly directed middorsal spine on fused pleonite 3. Epimera of pereonite 2 triangular, distally rounded, of pereonite 4 rectangular in female, with marginal denticulations, reduced in male. Pleotelson pentagonal, with strong subspinose lateral angle.

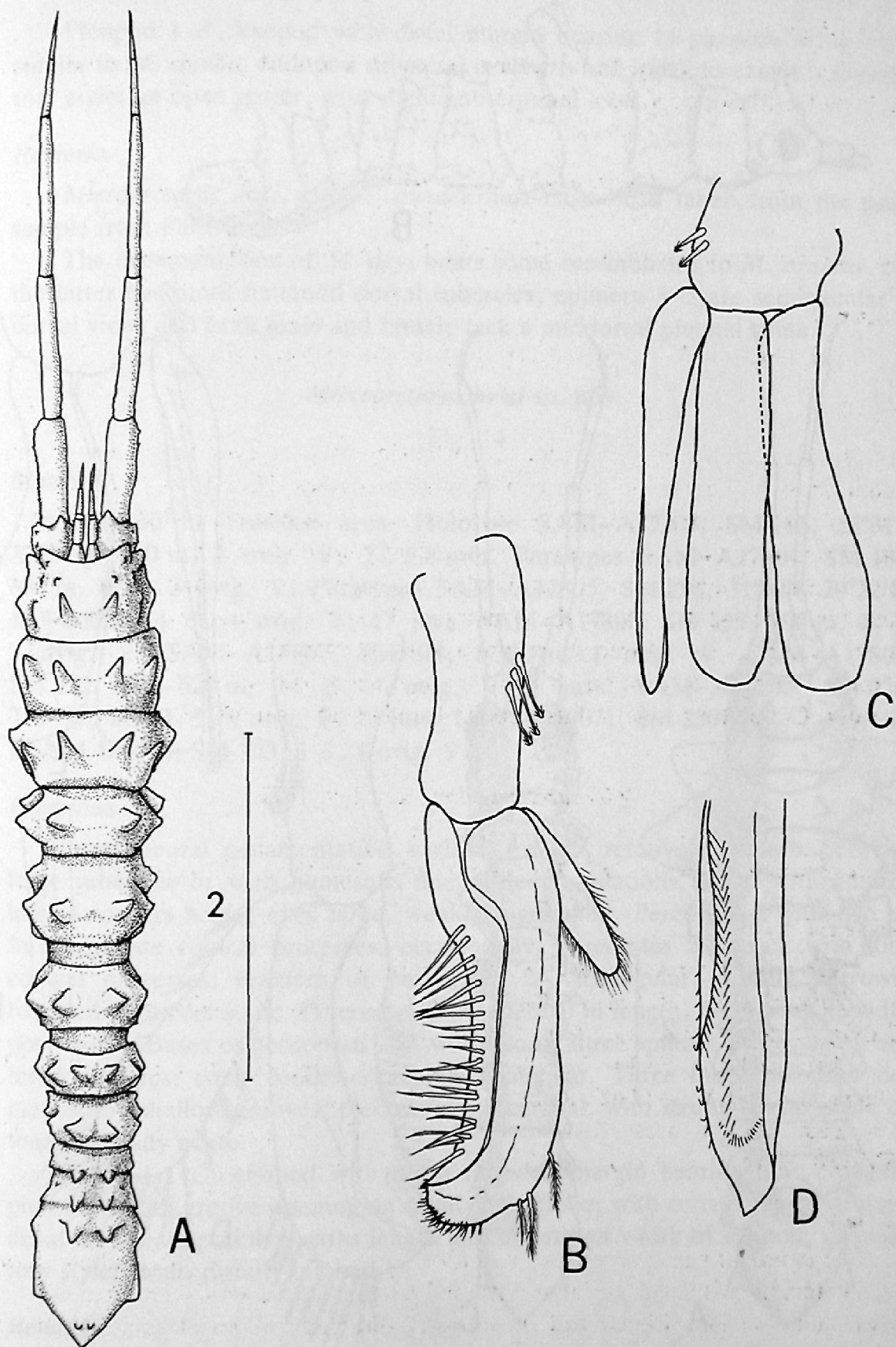


Fig. 12. *Microarcturus biserialis* Kensley A. Male, dorsal view. B. Pleopod 1 male. C. Pleopod 2 male. D. Apex of copulatory stylet. Scale = 2 mm.

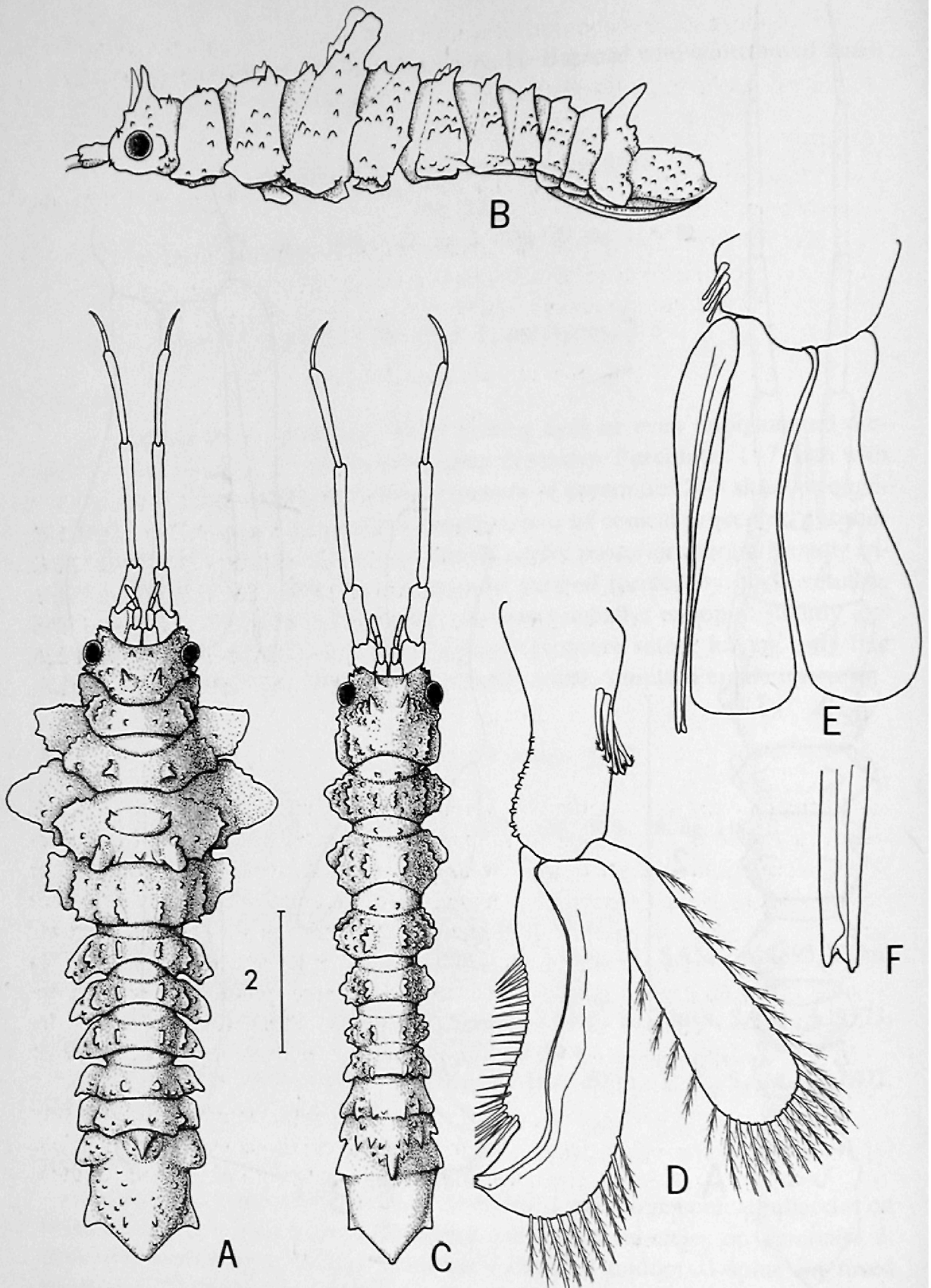


Fig. 13. *Microarcturus dayi* Kensley A. Female, dorsal view. B. Female, lateral view. C. Male, dorsal view. D. Pleopod 1 male. E. Pleopod 2 male. F. Apex of copulatory stylet. Scale = 2 mm.

Pleopod 1 ♂, exopod with distal margin bearing 11 plumose setae, very similar to *M. similis*; endopod subequal in length and width to exopod. Copulatory stylet an open gutter, with slight subterminal lobe.

Remarks

Microarcturus dayi and *M. quadriconus* have been taken from the same sample from False Bay.

The ornamentation of *M. dayi* bears some resemblance to *M. ornatus*, but the latter has more flattened dorsal tubercles, epimera 3–5 are semicircular in dorsal view, and both male and female lack a middorsal pleonal spine.

Microarcturus halei sp. nov.

Fig. 14

Material

Zululand to Transkei area. Holotype SAM-A17803, SM 103, 28°31'S 32°34'E, 680 m, 1 ovig. ♀, TL 5,8 mm. Paratypes SAM-A17804, SM 103, 680 m, 8 ♂, 3 ovig. ♀. Paratypes SAM-A17805, SM 250, 31°59'S 29°22'E, 150–200 m, 4 ♂, 4 ovig. ♀, 17 juvs. SAM-A17806, SM 123, 690 m, 2 ♂, 2 ovig. ♀. SAM-A17807, SM 109, 1 300 m, 1 ovig. ♀. SAM-A17808, SM 232, 560–620 m, 14 ♂, 4 ovig. ♀, 4 juvs. SAM-A17809, SM 226, 710–775 m, 11 ♂, 6 ovig. ♀, 20 juvs. USNM 189071, SM 250, 2 ♂, 2 ovig. ♀. USNM 189072, SM 103, 3 ♂, 1 ovig. ♀.

Diagnosis

Integumental ornamentation variable, either relatively smooth between large tubercles or with numerous fine acute granulations. Head with anterolateral corners acute; eyes large, weakly pigmented. Pereonite 2 with two or four elongate conical processes; occasionally, pereonites 2–3 each with four conical processes; epimera of pereonites 2–3 triangular, distally narrowly rounded to almost acute. Pereonites 5–7 subequal in length, decreasing in width posteriorly. Bases of pereopods 2–4 with two or three spinose processes on anterior margins; coxal processes acutely triangular. Three fused pleonites demarcated by shallow grooves; pleotelson pentagonal, with strong lateral angle or tooth; apically acute.

Pleopod 1 ♂, exopod with distal rounded margin bearing nine elongate plumose setae; groove opening on small curled lobe; with convex finely setulose distal lobe; endopod five-sixths length and about half width of exopod. Copulatory stylet stout, distally bilobed.

Remarks

The finely granulate form of *Microarcturus halei* has an integument similar to that of *M. hirticornis* (Monod) from the Antarctic, but differs markedly from this species in having fewer elongate dorsal processes, and in having a

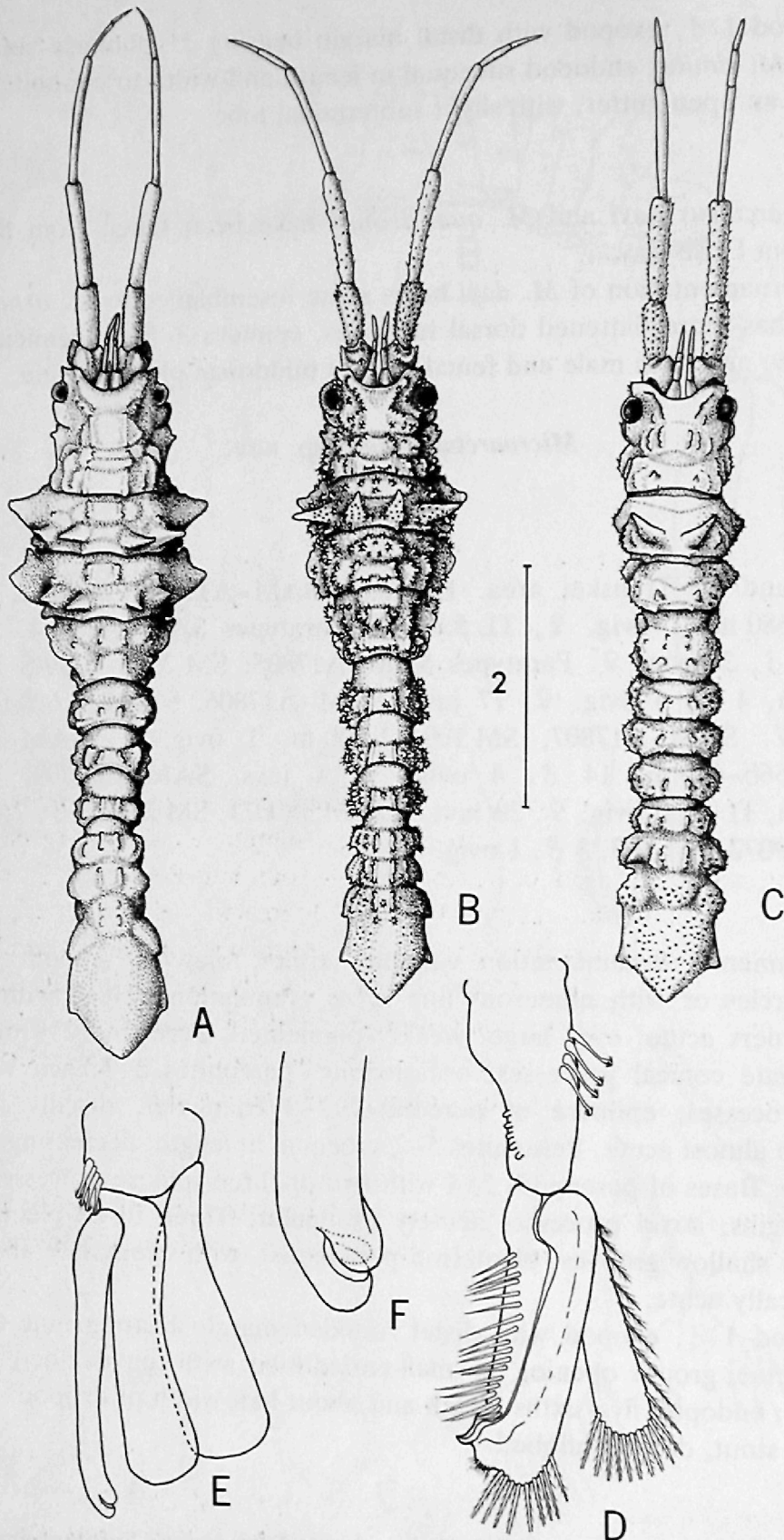


Fig. 14. *Microarcturus halei* sp. nov. A. Female, dorsal view. B. Female, dorsal view. C. Male, dorsal view. D. Pleopod 1 male. E. Pleopod 2 male. F. Apex of copulatory stylet. Scale = 2 mm.

posteriorly acute, rather than a bifid pleotelson. The arrangement of conical tubercles on the dorsum differs from any of the other South African species of *Microarcturus*.

Etymology

The species is named for the late H. M. Hale who contributed much valuable work to arcturid systematics.

Microarcturus laevis Kensley, 1975

Fig. 15

Microarcturus laevis Kensley, 1975a: 48, fig. 6; 1978e: 28, fig. 12A–B.

Material

False Bay. Holotype SAM–A13544, 75 m, 1 ovig. ♀. Paratype SAM–A13545, 48 m, 1 ovig. ♀. SAM–A13837, 66 m, 2 ♂, 1 ♀. SAM–A13852, 66 m, 11 ♂, 8 ovig. ♀, 4 ♀, 4 juvs. SAM–A13879, 81 m, 1 ♂.

Agulhas Bank. SAM–A13883, 78 m, 1 ♂.

Diagnosis

Integument smooth, occasionally very faintly pitted, lacking other ornamentation. Head with convex bulge between eyes, sometimes tending to be double, especially in males. Epimera of pereonites 2–4 rounded. Pereonites 2 and 3 with evenly convex submedian dorsal bulges. Pleotelson shield-shaped, apically acute, lacking distinct lateral angle; base of pleotelson with low rounded mid-dorsal convexity. Pleopod 1 ♂ with exopod distally rounded, with ten dorsal plumose setae; margin between end of groove and spine cluster on outer margin gently convex; endopod subequal in length and width to exopod. Copulatory stylet of pleopod 2 exopod distally simple, open, gutter-like.

Remarks

The rounded epimera of pereonites 2–4 and the lack of conical tubercles distinguishes this species from *M. quadriconus*, which it otherwise closely resembles.

Microarcturus longispinus sp. nov.

Fig. 16

Material

East London area. Holotype SAM–A17810, SM 226, 32°28'S 28°58'E, 710–775 m, 1 ovig. ♀, TL 6.2 mm. Allotype SAM–A17811, SM 228, 32°29'S 28°57'E, 650–700 m, 1 ♂, TL 6.5 mm. Paratypes USNM 189073, SM 250, 31°59'S 29°22'E, 150–200 m, 2 ♂, 1 ovig. ♀, 1 juv.

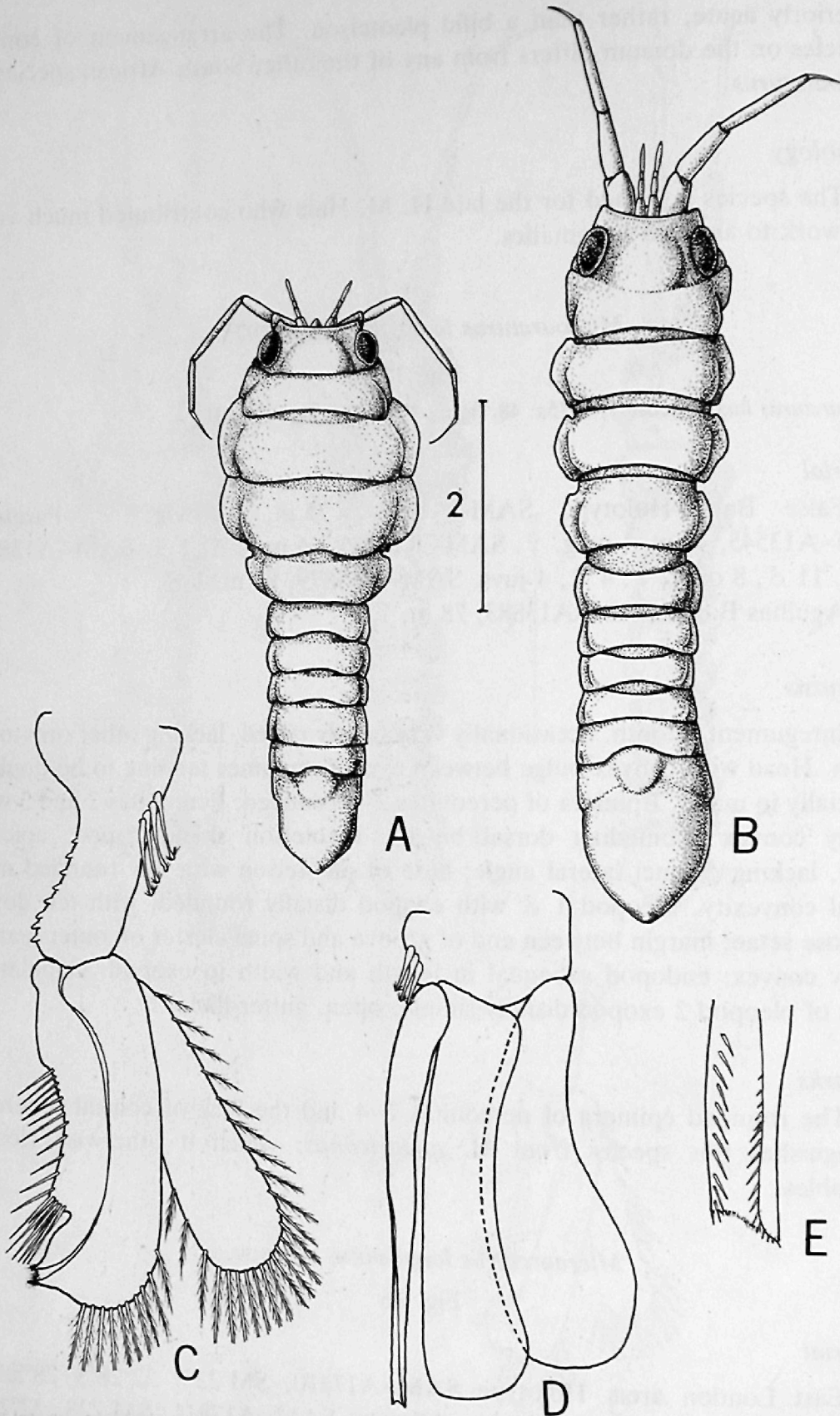


Fig. 15. *Microarcturus laevis* Kensley A. Female, dorsal view. B. Male, dorsal view. C. Pleopod 1 male. D. Pleopod 2 male. E. Apex of copulatory stylet. Scale = 2 mm.

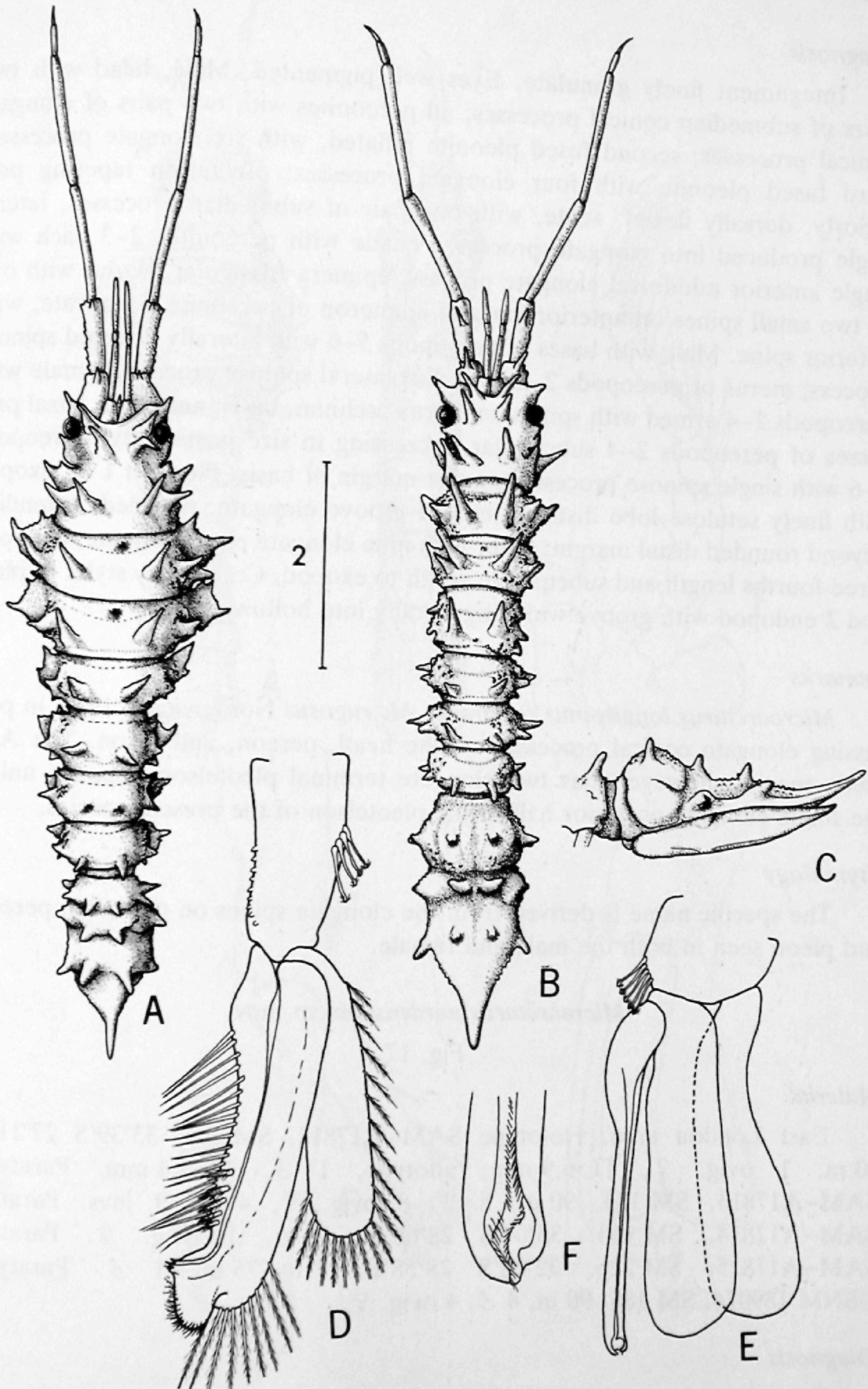


Fig. 16. *Microarcturus longispinus* sp. nov. A. Female, dorsal view. B. Male, dorsal view. C. Pleotelson, lateral view. D. Pleopod 1 male. E. Pleopod 2 male. F. Apex of copulatory stylet. Scale = 2 mm.