

Figure 24. *Cercosphaera dilkera* sp. nov. A-E holotype, remainder 3.0 mm paratype, NMV J26153. A, dorsal view; B, lateral view; C, frons; D, pleon, ventral view; E, pleon, posterior view; F, antennule; G, antenna; H, right mandible; I, right mandible, distal part; J, left mandible, distal part. Scale 1.0 mm.

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Figure 25. *Cercosphaera dilkera* sp. nov. A–C paratype, NMV J26153, remainder holotype. A, maxilliped; B, maxillule; C, maxilla; D, pereopod 1; E, pereopod 1, distal propodus and dactylus; F, pereopod 2; G, pereopod 3; H, pereopod 6, spines on anterodistal angle of carpus; I, pereopod 7.

*Etymology.* *Dilkera* is an Aboriginal word meaning shore (noun in apposition).

*Remarks.* The short truncate pleotelsonic process and large pleonal flanges readily separates manca and immature specimens. The characters of body ornamentation are persistent through all observed growth stages for the other

species of the genus, and adults should equally be recognized by these characters.

***Cercosphaera coloura* sp. nov.**

Figures 27–30

*Material examined.* Holotype. SA, northeast side of Topgallant I., Investigator Group (33°43.00'S,

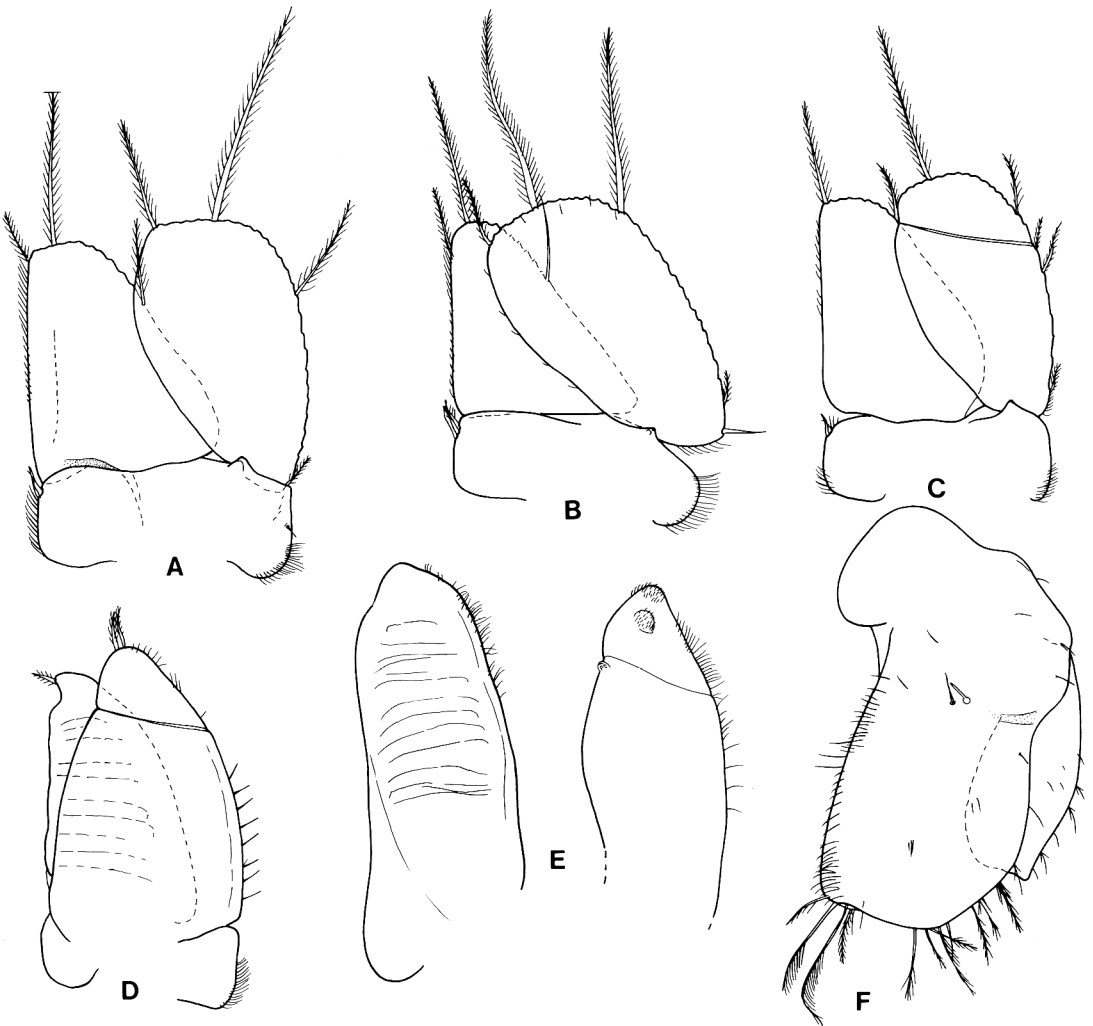
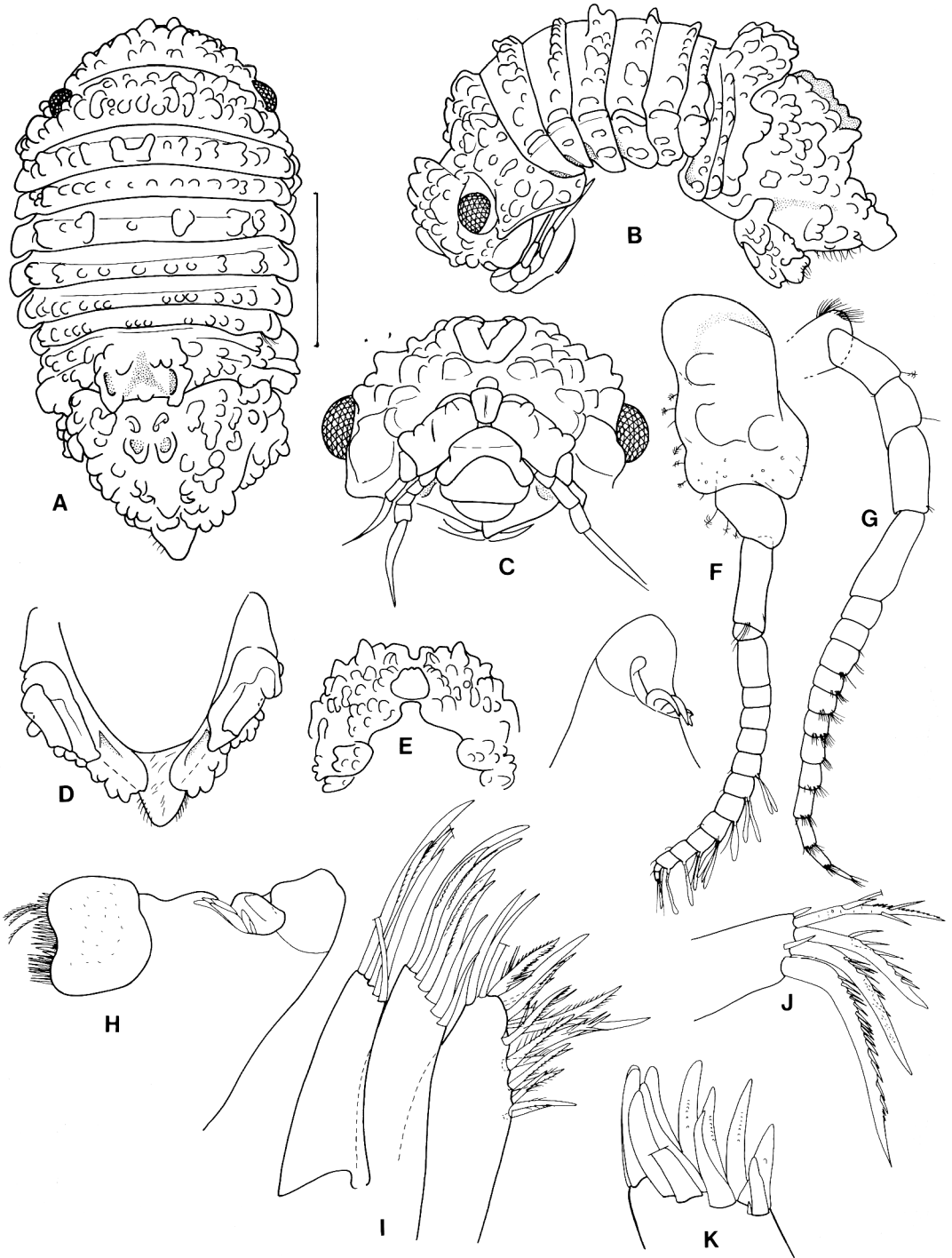


Figure 26. *Cercosphaera dilkera* sp. nov. A–E holotype, remainder paratype, NMV J26153. A–E, pleopods 1–5, respectively; F, uropod.



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 Figure 27. *Cercosphaera coloura* sp. nov. A-E holotype, remainder paratype, SAM C5544. A, dorsal view; B, lateral view; C, frons; D, pleon, ventral view; E, pleon, posterior view; F, antennule; G, antenna; H, left mandible; I, right mandible; J, maxilla; K, maxillule endopod; L, maxillule, exopod. Scale 2.0 mm.

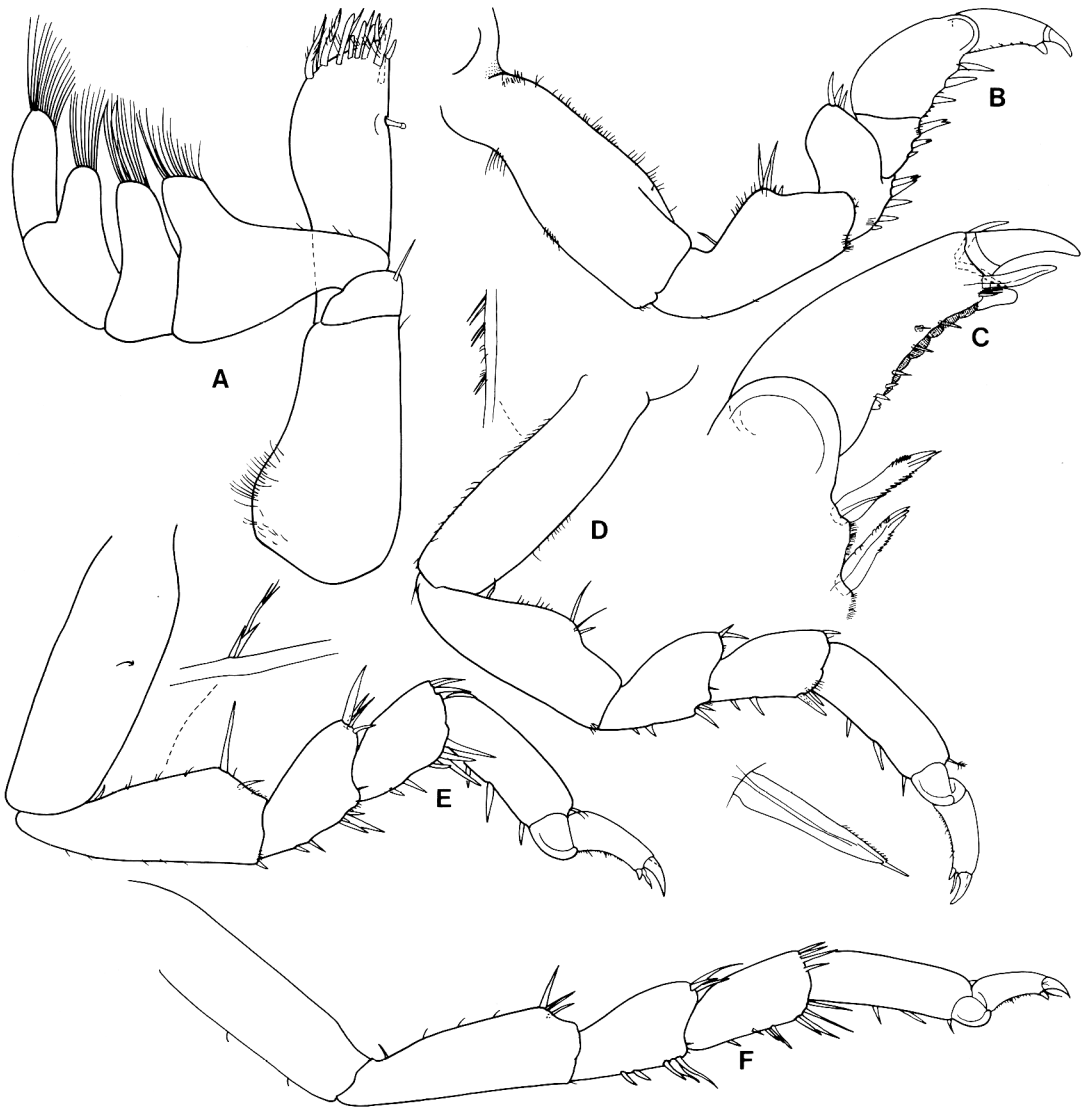


Figure 28. *Cercosphaera coloura* sp. nov. All figs paratype, SAM C5544. A, maxilliped; B, pereopod 1; C, pereopod 1, dactylus; D, pereopod 2; E, pereopod 6; F, pereopod 7.

134°36.60'E) 22 Apr 1985, 16 m, *Cystophora*, S. Shepherd and G.C.B. Poore, NMV J36937 (♂ imm. 7.8 mm).

Paratypes. SA, Pearson I., Investigator Group, 9 Jan 1969, 50 m, coarse gravel, S.A. Shepherd, (SAM C5544) (♂ imm. 6.8 mm). SA, Stokes Bay, off Kangaroo I. (35°37'S, 137°12'E) 4 Mar 1978, 7 m, mixed algae on vertical rock, I. Loch, AM P41146 (♂ juv 7.3 mm). Vic, northwest side of Henty Reef, Mounts Bay, Apollo Bay (38°47.0'S, 143°40.5'E) 18 m, red algae on

boulder, R.T. Springthorpe and P.B. Berents, AM P41376 (2 manca).

*Description of male.* Body about 1.8 times as long as wide, widest at pereonites 2–5; dorsal surface covered in rounded low nodules; lateral margin of pereonites 2–7 with nodules forming more distinct carinate ridge; large sublateral and submedian tubercles present on pereonite 4 and prominent sublateral tubercle on pereonite 5;

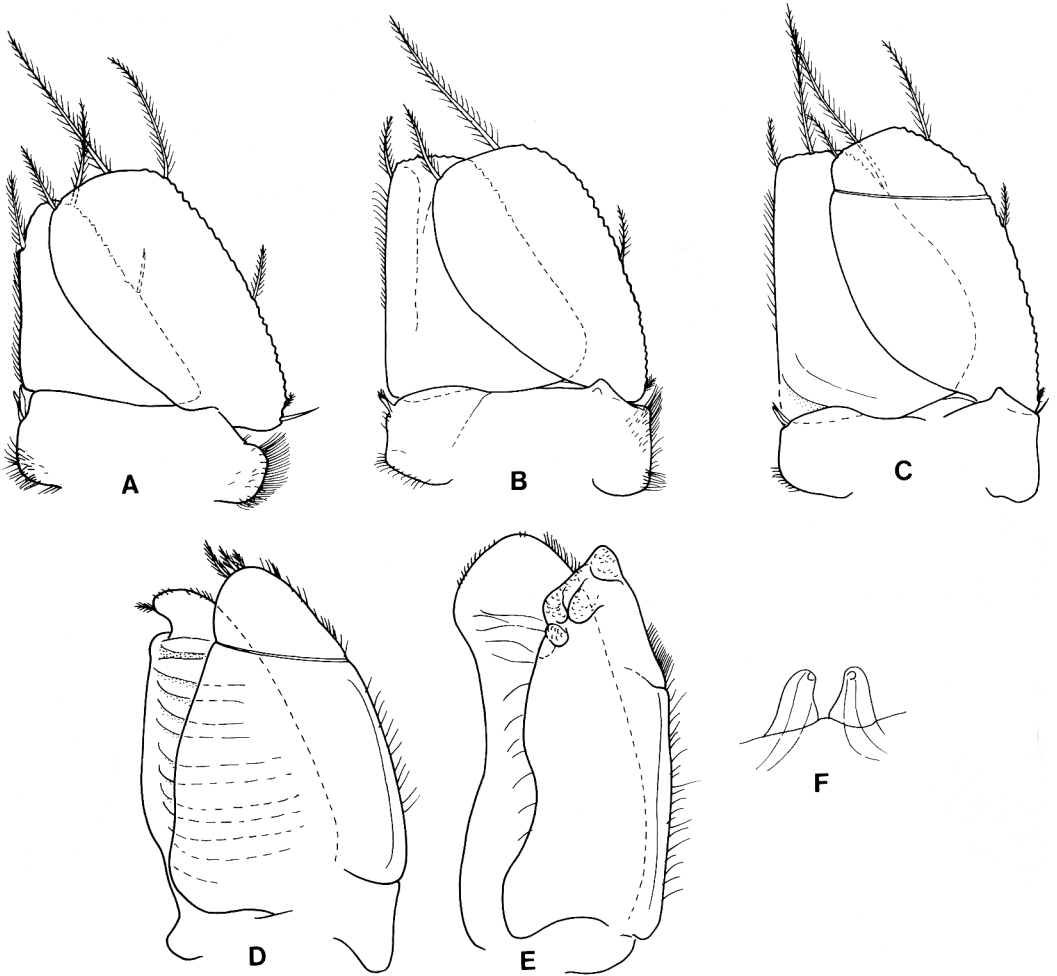


Figure 29. *Cercosphaera coloura* sp. nov. All figs paratype, SAM C5544. A-E, pleopods 1-5, respectively; F, penes.

nodules dorsally weak on pereonite 7. Pleon with prominent pair of submedian flanges, which have an irregular dorsal surface. Pleotelsonic process short, about 6% BL, distally forming a point in dorsal view, truncate in lateral view.

Epistome, antennule and antenna similar to *C. dilkera*. Mouthparts similar to *C. dilkera* except maxillule mesial lobe spines with few spinules.

Pereopods similar to *C. dilkera*, but generally with more and more slender spines.

Paired penes present on sternite 1.

Pleopods similar to *C. dilkera*, but pleopod 5 exopod with weak transverse suture and more prominently scaled distal margin. Uropod rami nodular, endopod narrowing distally to oblique posterior margin; endopod distal margin concave, dorsolateral margin with prominent tubercle; exopod 0.66 length of endopod.

*Female.* Adult females not observed.

*Size.* 6.8-7.8 mm.

*Distribution.* Investigator Archipelago and Kangaroo I., South Australia; Apollo Bay, Victoria.

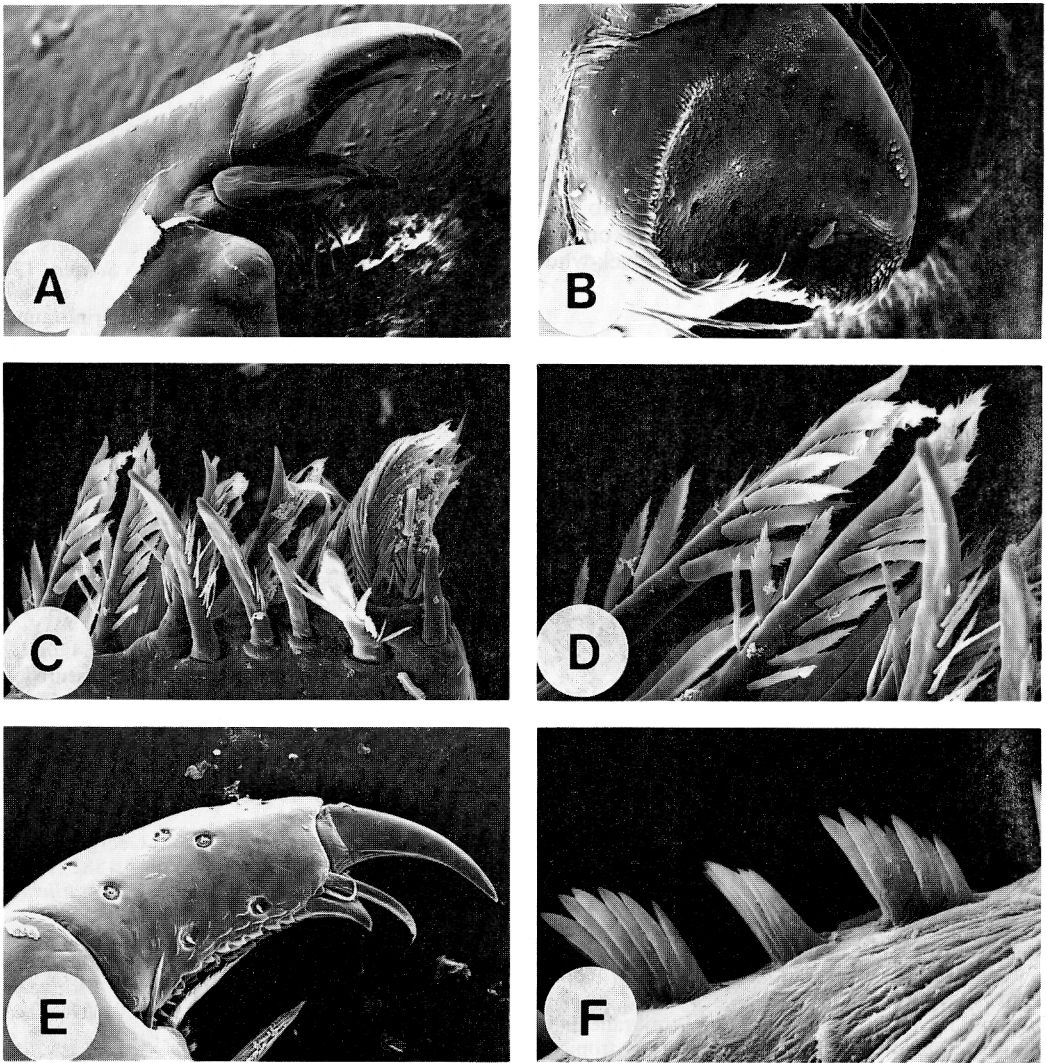


Figure 30. *Cercosphaera coloura* sp. nov. SEMs. A, left mandible (180  $\times$ ); B, mandibular molar process (350  $\times$ ); C, maxilliped endite, distal margin (550  $\times$ ); D, maxilliped endite, distal bipectinate seta (1000  $\times$ ); E, pereopod 1, propodus (270  $\times$ ); F, pereopod 1, cuticular scales on posterior margin of merus (3000  $\times$ ).

**Etymology.** The Greek word *kolouros* meaning bobtailed.

**Remarks.** This, the largest species of the genus, is recognized by the arrangement and distribution of the tubercles, and by the shape of the pleonal flanges and pleotelsonic process. The prominence of the flanges and short pleotelsonic process separate *C. coloura* from *Cercosphaera dilkera*, which being about half the size of *C.*

*coloura*, is otherwise similar. The flanges on *C. coloura* arise abruptly and have an irregularly trilobed distal surface while those of *C. dilkera* are larger and curve smoothly from the anterior with a swept-back appearance. The pleotelsonic process of both species also differ, that of *C. coloura* being bilaterally acute, while that of *C. dilkera* is blunt or subtruncate with a median indentation. The appendages of the two species, which have overlapping ranges, are similar.

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