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Two new species of *Laophontodes* (Copepoda, Harpacticoida, Ancorabolidae) from McMurdo Sound, Antarctica

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Two new species of harpacticoid copepods of the family Ancorabolidae are described from a subtidal site in Cape Armitage, McMurdo Sound, Antarctica. *Laophontodes macclintocki* sp. n. and *L. spongiosus* sp. n. are easily distinguished from the remaining members of the genus *Laophontodes* by the setal formula of swimming legs P2–P4.

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Introduction

The macrobenthic invertebrates of McMurdo Sound, Antarctica, have been the subject of many studies (Dayton *et al.* 1974; McClintock 1987; McClintock *et al.* 1988), but the metazoan meiofauna are relatively unstudied. A few harpacticoid copepod species have been described from shallow water in the South Orkney Islands (Gee & Fleeger 1986), but generally the harpacticoid community of the shelf ice edge and deeper waters of Antarctica, which are more easily accessible by oceanographic vessels, is better known (Bradford & Wells 1983; Dahms 1987, 1989, 1992; Dahms & Dieckmann 1987).

During a study of the meiofauna community of a substrate consisting primarily of hexactinellid sponge spicules in the shallow subtidal of McMurdo Sound, Antarctica, a number of new species of harpacticoid copepods were discovered; two congeners of the family Ancorabolidae are described herein.

Material and methods

Meiofauna were collected from Cape Armitage, McMurdo Sound, Antarctica (77°50'S, 166°45'E) on November 14, 1989. SCUBA was used to collect six 65 mm diameter cores to a depth of 10 cm from two adjacent subtidal sites under the sea ice. Water temperature and salinity are relatively constant in McMurdo Sound, ranging from –1.6°C to –1.8°C and 34.5 to 35.5 ppt, respectively (Littlepage 1965). Three cores were collected from a muddy bottom substrate at 18 m depth and three cores were taken from a nearby hexactinellid spicule substrate at 27 m depth. Samples were preserved in 10% buffered formalin. In the lab the samples were washed through a 500 µm sieve to separate macrofauna and Rose Bengal was added to the meiofauna retained on a 43 µm sieve in order to facilitate sorting.

Copepods were dissected in 85% lactic acid and mounted in Hoyer's solution. All illustrations were drawn under immersion oil magnification with the aid of a camera lucida on a One-Ten Microstar, American Optics microscope and confirmed with a Laborlux 12 Leitz microscope. The descriptive terminology for the segmentation and armature of

appendages is adopted from Huys & Boxshall (1991). Abbreviations used throughout the text and figure legends are: P1–P6 for swimming legs 1–6; and exopod (or endopod) -1, -2, -3 to indicate the proximal, middle, and distal segments of each respective ramus.

Family ANCORABOLIDAE

Genus *Laophontodes* T. Scott, 1894

Laophontodes macclintocki sp. n. (Figs 1–7)

Holotype. USNM (266548), female dissected on three slides.

Type locality. Cape Armitage, McMurdo Sound, Antarctica (77°50'S, 166°45'E), substrate composed of hexactinellid sponge spicules, depth 27 m.

Allotype. USNM (266549), male dissected on three slides from same samples as holotype.

Paratypes. USNM (266550), two females and five males (intact specimens) preserved in 70% alcohol from same samples as holotype.

Etymology. We are pleased to name this copepod after Dr James B. McClintock, University of Alabama at Birmingham, for his contributions to Antarctic biology.

Description of female

Body (Fig. 1A, B). Length of holotype from tip of rostrum to posterior edge of caudal rami 409 µm (\bar{x} = 430 µm, n = 4). Body slender, cylindrical; no clear distinction of prosome-urosoma articulation. Rostrum and cephalothorax approximately the length of three succeeding somites combined. First pedigerous somite fused to cephalothorax. Cephalothorax with sensillae and pores on lateral and dorsal surface; lateral edges with slender spinules. Several pores elongated to form conspicuous secretory hyaline tubes, symmetrically arranged in relation to mid-longitudinal axis. Additionally, cephalo-

thorax extended dorsally with two lateral, more or less rounded processes and transverse chitinous ridge near posterior margin. All somites with sensillae at posterior border and serrate edges except preanal somite; anal somite with two sensillae on either side of operculum. First three free prosomites with large medial pore and smaller, scattered pores dorsally and with rows of strong spinules laterally. Genital double-somite fused dorsally, but with continuous serrate ridge. Dorsally, all urosomites with pair of mid-lateral pores; additionally first two urosomites with large medial secretory tube-pores, and urosomites 3, 4 and 5 with pair of secretory hyaline tubes near posterior edge. Anal somite with small spinules laterally and ventrally on posterior edge; anal operculum semicircular, with rows of short setules flanked by two sensillae; two longitudinal arched ridges with fine spinules extend from dorsum to ventrum. Genital double-somite and following somite with dense rows of strong spinules mid-laterally; posterior border of urosomites 3, 4 and 5 with rows of spinules interspersed with delicate sensillae. Genital and first abdominal somites completely fused ventrally; genital area with simple seta on each side representing vestigial P6; otherwise as shown in Fig. 2A. Additional secretory tubes on posterior edge of genital double-somite, urosomite 4 and anal somite. Only penultimate somite furnished with complete row of spinules ventrally; all others with serrate edges. Caudal rami approximately four times longer than wide with few spinules on base of terminal caudal setae (Fig. 1C). Anterolateral accessory seta I small; seta II simple and slender; seta III simple and slender, originates near dorsal seta VII; terminal seta IV spinulose and fused basally with strong terminal seta V, which is spinulose distally; accessory seta VI simple and slender; dorsal seta VII basally biarticulated.

Rostrum (Fig. 3A). Fused to cephalothorax, almost trapezoidal, with two sensillae laterally and pore with hyaline tube on anterior edge.

Antennule (Fig. 3B). Five-segmented. Segment I, longer than wide, covered with spinules and with pinnate seta at anterior distal corner. Segment II, approximately twice longer than wide, with rows of spinules at anterior and posterior edge, with nine simple setae. Segment III, three times longer than wide, with five setae on mid-anterior edge and two setae originating from the same process as aesthetasc. Segment IV smallest, with long simple seta. Segment V, longer than wide with 10 simple setae (most setae articulate basally) and aesthetasc.

Antenna (Fig. 3C). Coxa twice longer than wide with row of spinules. Allobasis with three to four rows of spinules. Exopod absent. Endopod with several rows of spinules on anterior edge and near distal margin; with two subterminal pinnate setae, three terminal geniculate setae (one spinulose) and two strong, terminal, pinnate spines.

Mandible (Fig. 3D). Coxa well developed. Gnathobase with at least six teeth and an ornamented seta. Palp longer than wide with three subterminal setae (two spinulose) and two simple terminal setae.

Paragnaths (Fig. 3E). Well developed and ornamented with spinules.

Maxillule (Fig. 3F). Praecoxa well developed; arthrite

furnished with two surface simple setae, two subterminal simple setae and six terminal curved spines and one seta. Coxal endite with longitudinal row of spinules, spine and simple seta on distal margin. Basis with two simple setae subterminally, two setae and one ornamented spine on distal margin; endopod and exopod incorporated into basis, represented by two simple setae each.

Maxilla (Fig. 3G). Syncoxa with rows of spinules on proximal and distal margin; with two endites; proximal endite with two setae (one pinnate) and fused pinnate spine; distal endite with two simple setae. Allobasis with strong curved spine and two terminal simple setae. Endopod one-segmented with two simple setae.

Maxilliped (Fig. 3H). Subchelate. Syncoxa with rows of spinules on surface and near basis of pinnate seta on distal margin. Basis elongate with rows of spinules on anterior and posterior margins. Endopod one-segmented, bearing an ornamented claw which is longer than basis.

P1 (Fig. 4A). Prehensile. Intercoxal sclerite well developed, semi-ellipsoid, without ornamentation. Praecoxa triangular with row of spinules. Coxa twice longer than wide with row of spinules on outer margin. Basis almost as long and wide as coxa, with transverse row of spinules, rows of spinules on outer and inner margin, and outer and inner pinnate seta. Exopod three-segmented; all segments with spinules on outer margins. Exopod-1 with spinulose spine; exopod-2 with geniculate seta; exopod-3 with four geniculate setae. Endopod two-segmented with proximal segment more than twice as long as exopod; endopod-1 with row of fine spinules on inner margin; endopod-2 with row of spinules on outer margin, strong claw, long seta, and small accessory seta.

P2-P4 (Figs 4B, 5A, B). Intercoxal sclerite prominent, semi-ellipsoid, without ornamentation (only P2 intercoxal sclerite is illustrated). Praecoxa triangular with row of minute spinules on distal margin. Coxa wider than long; P2 coxa with row of spinules on outer margin. Basis transversely elongated, with row of spinules near basis of outer simple seta and inner margin. Exopods three-segmented and endopods two-segmented. Exopodal spines stout and spinulose. Exopod-2 and exopod-3 with inner thin pinnate seta. P2 and P3 endopods with two setae; P4 endopod with four setae. Endopodal setae long, slender and pinnate. Setal formula as follows:

	Exopod	Endopod
P1	0.0.022	0.030
P2	0.1.123	0.020
P3	0.1.123	0.020
P4	0.1.123	0.121

P5 (Fig. 5C). Basis covered with small spinules; basal seta simple, originating from setophore. Exopod one-segmented, with dense spinules, two subterminal pinnate setae, and three terminal pinnate setae. Endopodal lobe represented by two setae, one of which being longer than basis and exopod combined, ornamented distally.

Description of male

Similar to female except for body size and ornamentation, antennule, P3 endopod, P5 and genital somites.

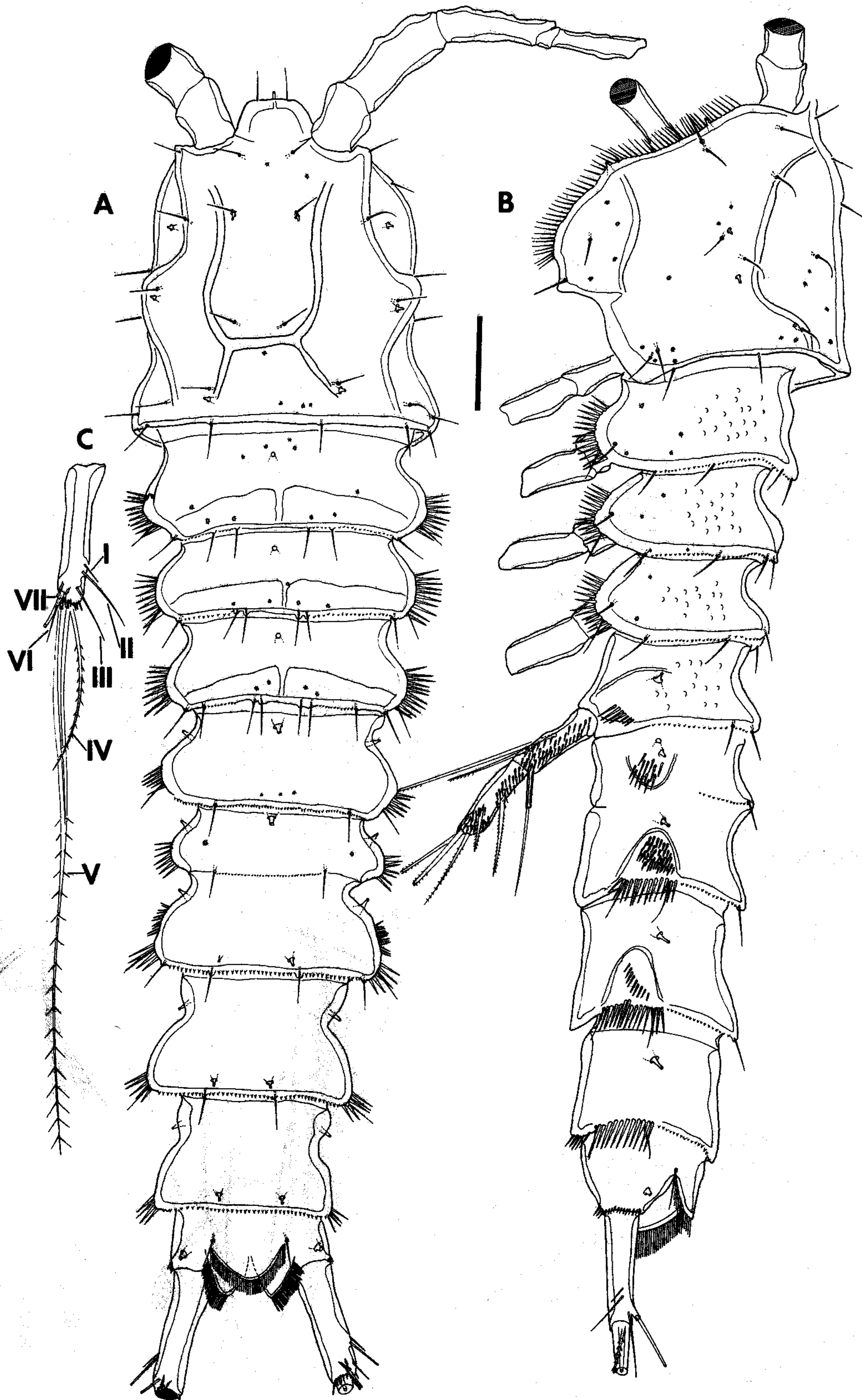


Fig. 1. *Laophontodes macclintocki* sp. n. Female.—A. Habitus, dorsal view.—B. Habitus, lateral view.—C. Caudal ramus. Scale bar 30 μ m.

Body (Fig. 6A, B). Smaller than female. Length varied from 340 to 390 μ m (\bar{x} = 360 μ m, n = 8). Body ornamentation varies slightly from female, especially in number and relative position of sensillae. No differences noticed in number and position of large pores. Genital somites distinct. Urosomites with rows of spinules at ventral posterior edge (Fig. 2B).

Antennule (Fig. 7A). Six-segmented, sub-chirocer. Segment I almost square, with four rows of spinules and a

pinnate seta on anterior distal margin. Segment II longer than wide, with two rows of spinules and nine setae (one ornamented). Segment III with nine simple setae (Fig. 7B). Segment IV swollen, with approximately 12 setae near anterior margin, three long setae, and aesthetasc arising from process near distal margin (Fig. 7C). Segment V small, with three simple setae. Segment VI with eight setae and aesthetasc fused basally with one seta; many setae articulated basally.

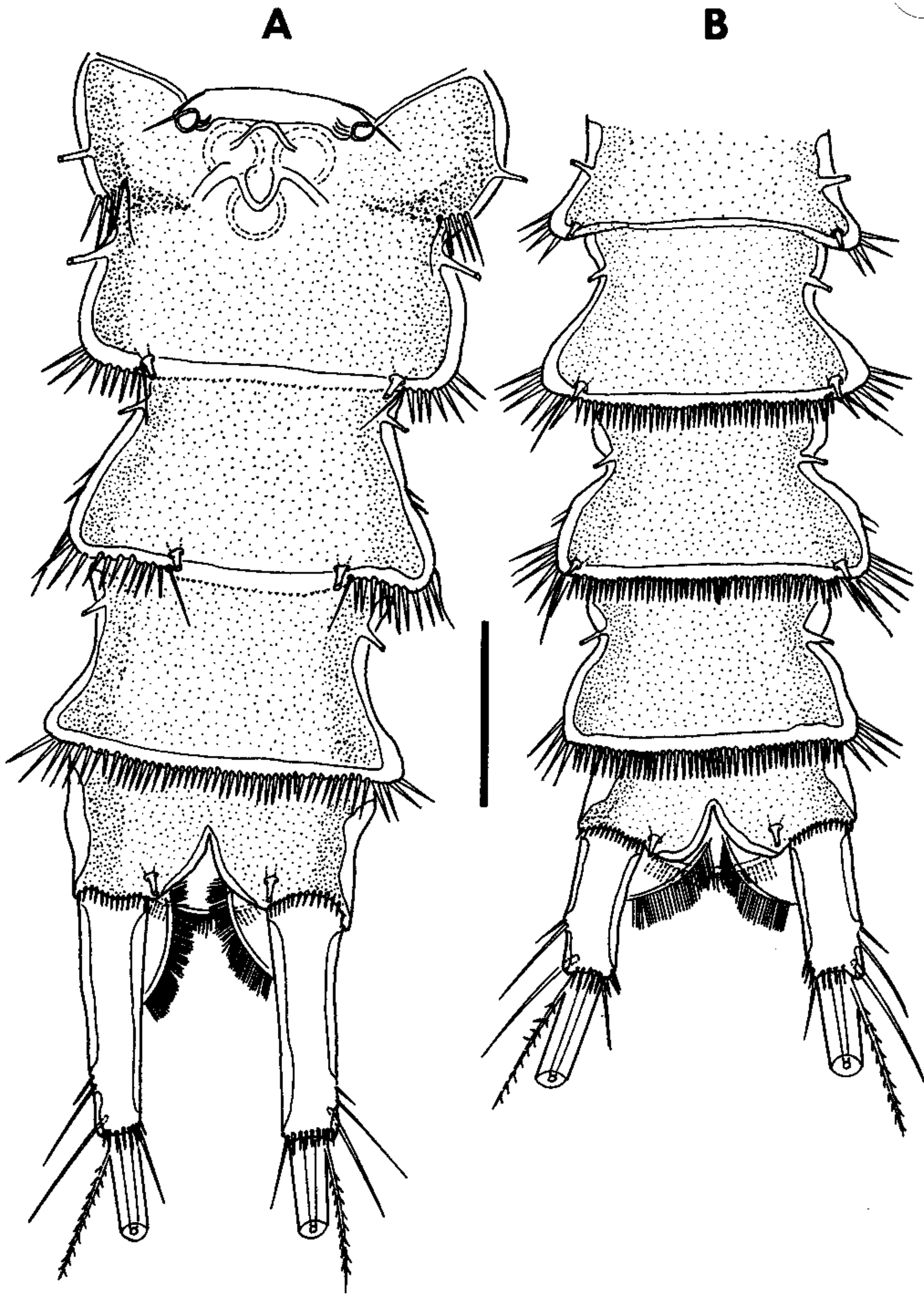


Fig. 2. *Laophontodes macclintocki* sp. n. Female.—A. Abdomen, ventral view. Male.—B. Abdomen, ventral view. Scale bar 30 μ m.

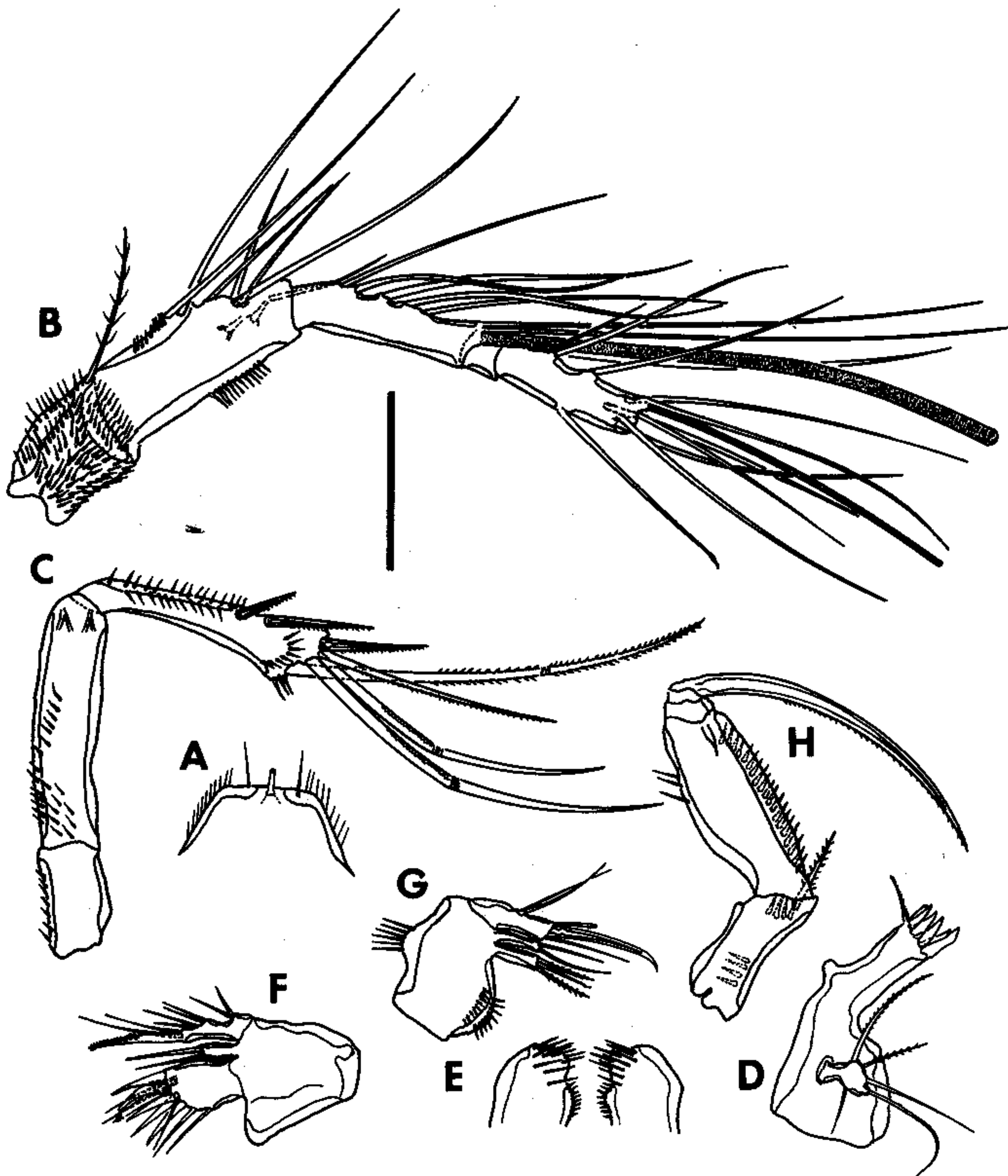


Fig. 3. *Laophontodes macclintocki* sp. n. Female.—A. Rostrum.—B. Antennule.—C. Antenna.—D. Mandible.—E. Paragnaths.—F. Maxillula.—G. Maxilla.—H. Maxilliped. Scale bar 30 μ m.

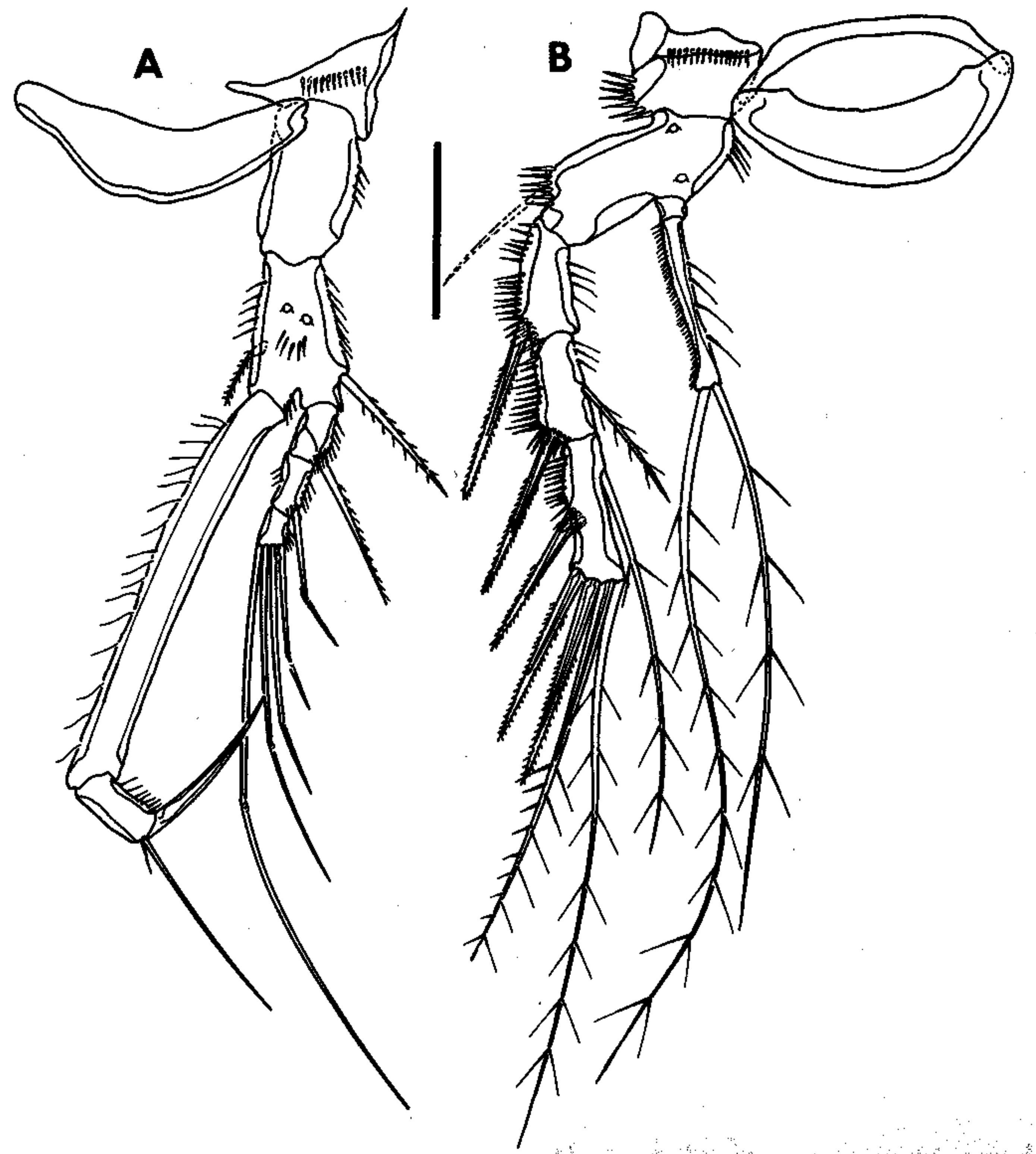


Fig. 4. *Laophontodes macclintocki* sp. n. Female.—A. P1.—B. P2. Scale bar 30 μ m.

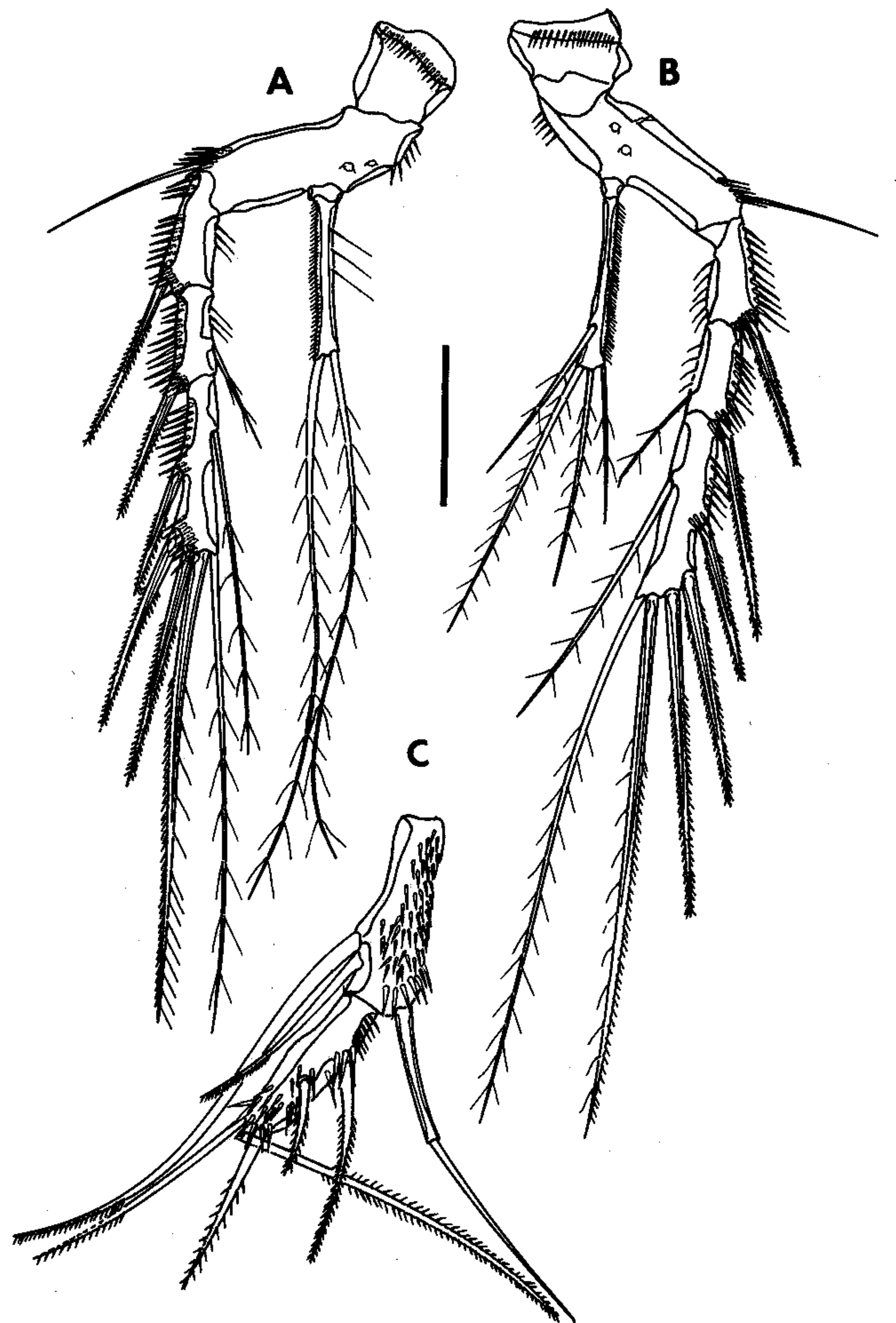


Fig. 5. *Laophontodes macclintocki* sp. n. Female.—A. P3.—B. P4.—C. P5. Scale bar 30 μ m.

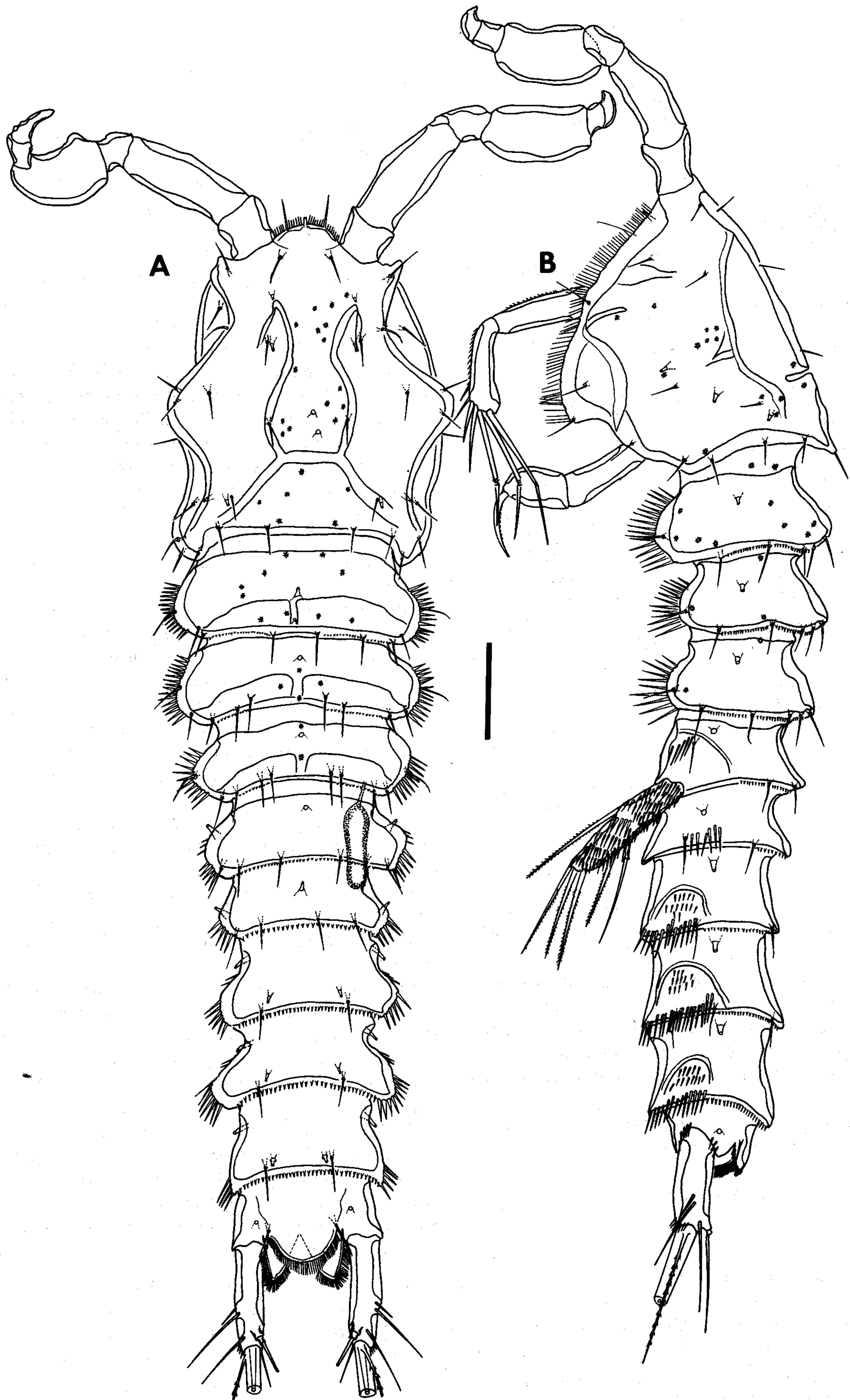


Fig. 6. *Laophontodes macclintocki* sp. n. Male.—A. Habitus, dorsal view.—B. Habitus, lateral view. Scale bar 30 μ m.

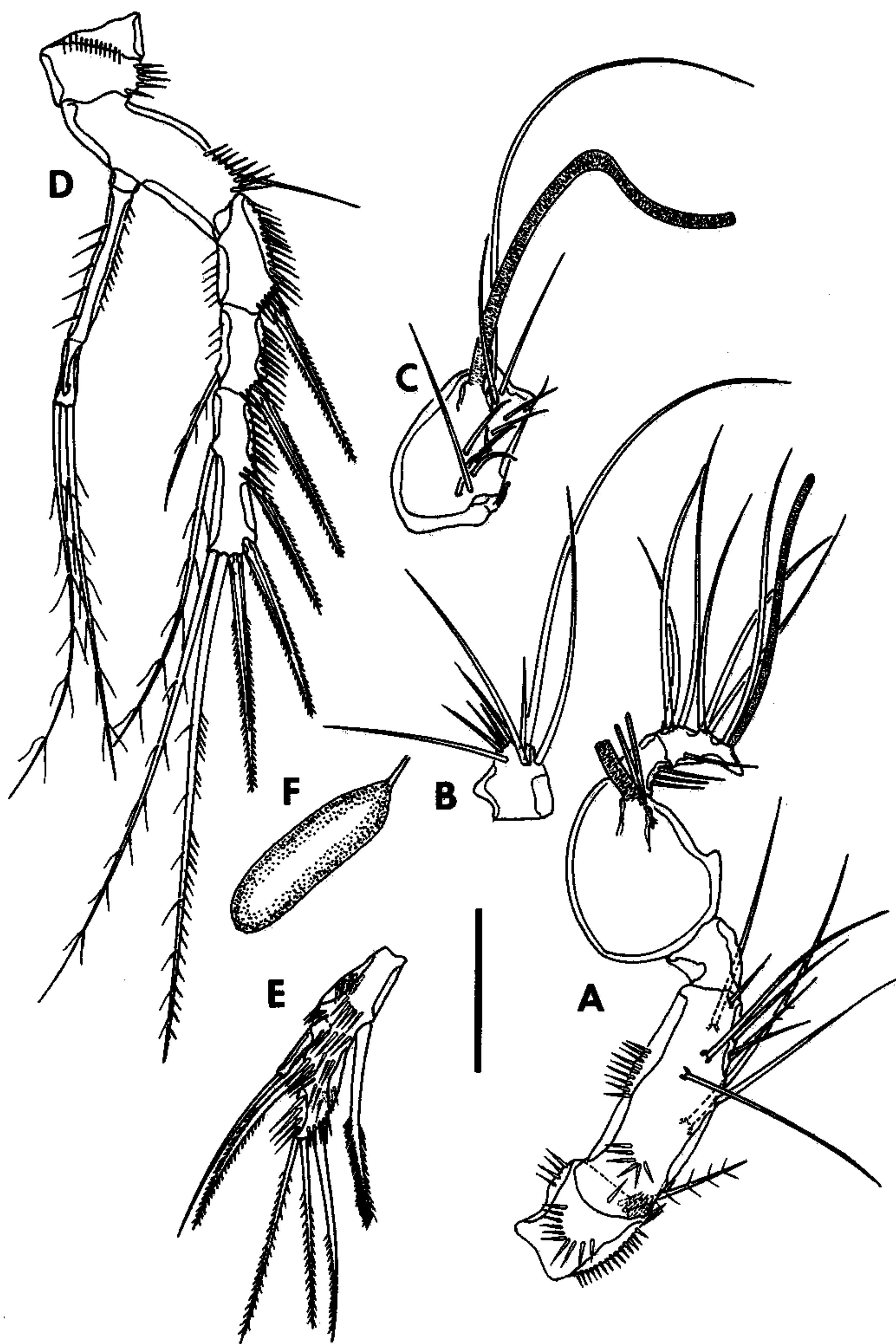


Fig. 7. *Laophontodes macclintocki* sp. n. Male.—A. Antennule (setation of segment III and IV not shown).—B. Antennule segment III.—C. Antennule segment IV.—D. P3.—E. P5.—F. Spermatophore. Scale bar 30 μ m.

P3 (Fig. 7D). Endopod three-segmented; endopod-2 with small apophysis on distal margin; endopod-3 with two terminal pinnate setae.

P5 (Fig. 7E). Basal seta simple, arising from cylindrical setophore. Exopod fused to basis, with many rows of spinules, with two subterminal and two terminal pinnate setae. Endopodal lobe represented by pinnate seta.

P6. Represented by an asymmetrical operculum closing off the left gonopore.

Spermatophore (Fig. 7F). Cylindrical, with short neck. Only right testis and vas deferens functional in all males examined.

Variation. No variation was detected.

Laophontodes spongiosus sp. n. (Figs 8–13)

Holotype. USNM (266545), female dissected on four slides.

Type locality. Cape Armitage, McMurdo Sound, Antarctica (77°50'S, 166°45'E), hexactinellid sponge spicule substrate, depth 27 m.

Paratypes. USNM (266547), one female (intact specimen) preserved in 70% alcohol, one male dissected on three slides, from same samples as holotype. Unfortunately, the male specimen was squashed during the drawing process.

Etymology. The species name is derived from the Greek word σπγγος

(sponge) and indicates the substrate from which the species was collected.

Description of female

Body (Fig. 8A, B). Length of holotypic and paratypic female from tip of rostrum to posterior edge of caudal rami 410 μ m. Cephalothorax with ridges (without transverse ridge as in *L. macclintocki*) extended on two more or less triangular processes and ornamented with sensillae and pores on surface; lateral edges with spinules. All but the last two somites posteriorly with sensillate protuberances. The large single dorsal and paired lateral pores in same approximate position as in *L. macclintocki*. Genital double-somite fused dorsally but with continuous serrated ridge. Genital area as in Fig. 9; gonopores covered by operculum representing vestigial P6 bearing one seta. Ventrally, posterior edge of genital double-somite, and two subsequent urosomites with spinules (Fig. 9).

Rostrum (Fig. 10A). Fused to cephalothorax, triangular, with smooth tip anteriorly, two lateral sensillae and median pore.

Antennule (Fig. 10B). Same segmentation and setation as *L. macclintocki* except segment I with three rows of spinules.

Antenna (Fig. 10C). Stouter than in *L. macclintocki*. Basis with spinules on anterior edge and simple abexopodal seta. Endopod with two rows of spinules on anterior edge and two to three rows of spinules near distal margin on dorsal and ventral surface.

Mandible (Fig. 10D). Coxa well developed. Gnathobase with three bidentate and unidentate tooth, and spinulose seta. Palp short and stout with six setae (five ornamented).

Maxillule (Fig. 10E). Praecoxa with row of spinules; arthrite with row of spinules and one subterminal seta. Coxal endite with transverse row of spinules.

Maxilla (Fig. 10F). Syncoxa with row of spinules on distal margin.

Maxilliped (Fig. 10G). Syncoxa without surface row of spinules.

P1 (Fig. 11A). Intercoxal sclerite and praecoxa not observed. Coxa almost square without ornamentation. Basis as long and wide as coxa with pore(?) near base of outer seta, without surface row of spinules. Endopod-1 slightly shorter and stouter.

P2–P4 (Figs 11B, C, 13A). Smaller than in *L. macclintocki*. Basis elongated, with row of spinules and pore; P2 with additional row of spinules on inner margin. All exopods-2 and exopods-3, except P4 exopod-3, without inner seta, otherwise shape and size as in *L. macclintocki*. P4 endopod with two terminal pinnate setae. Setal formula as follows:

	Exopod	Endopod
P1	0.0.022	0.030
P2	0.0.023	0.020
P3	0.0.023	0.020
P4	0.0.123	0.020

P5 (Fig. 11D). Basis with row of spinules; basal seta simple, originating from elongate setophore. Exopod fused to basis with two rows of spinules, two subterminal

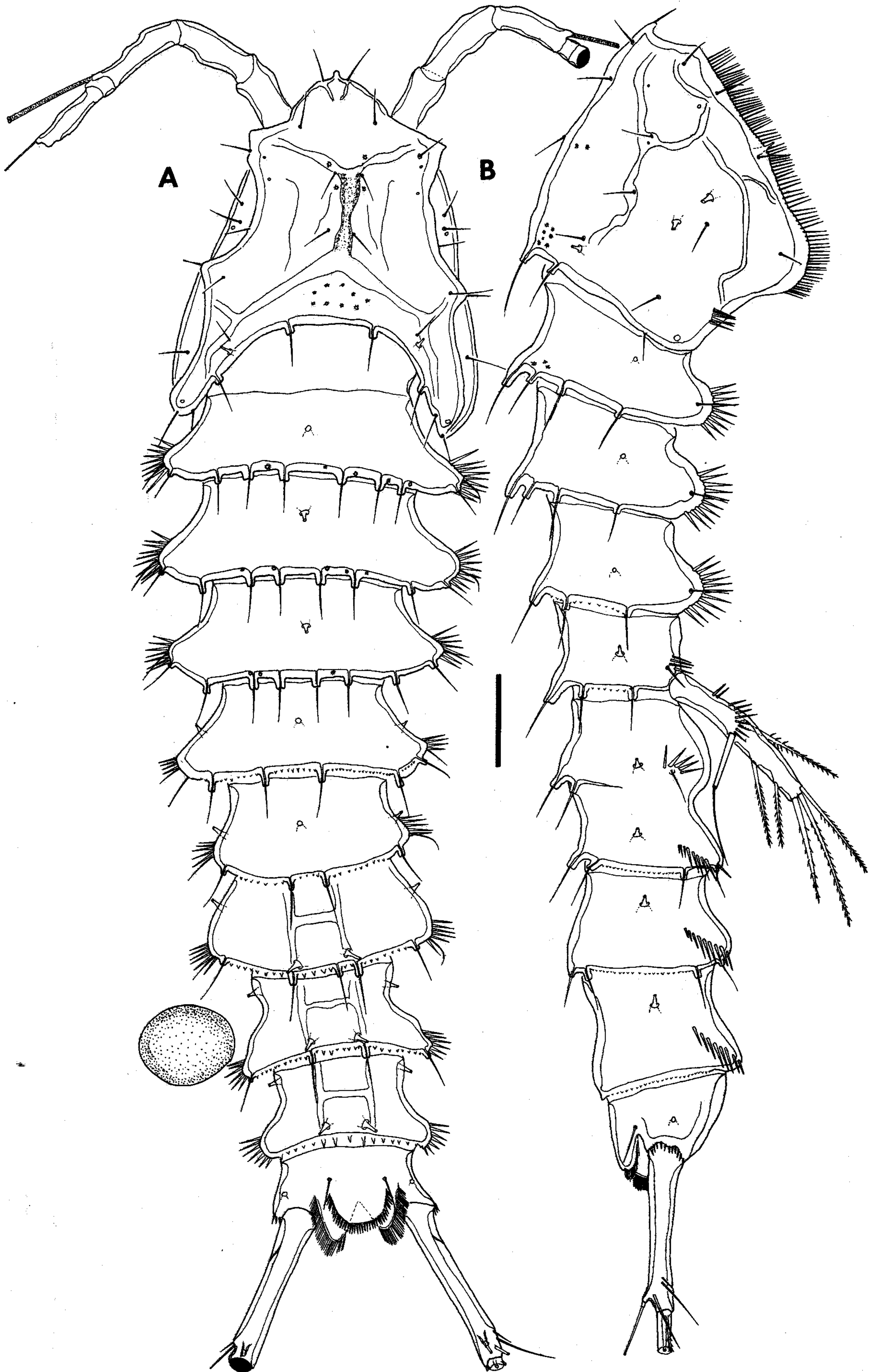


Fig. 8. *Laophontodes spongiosus* sp. n. Female.—A. Habitus, dorsal view (an egg is shown from the disrupted egg sac).—B. Habitus, lateral view. Scale bar 30 μ m.

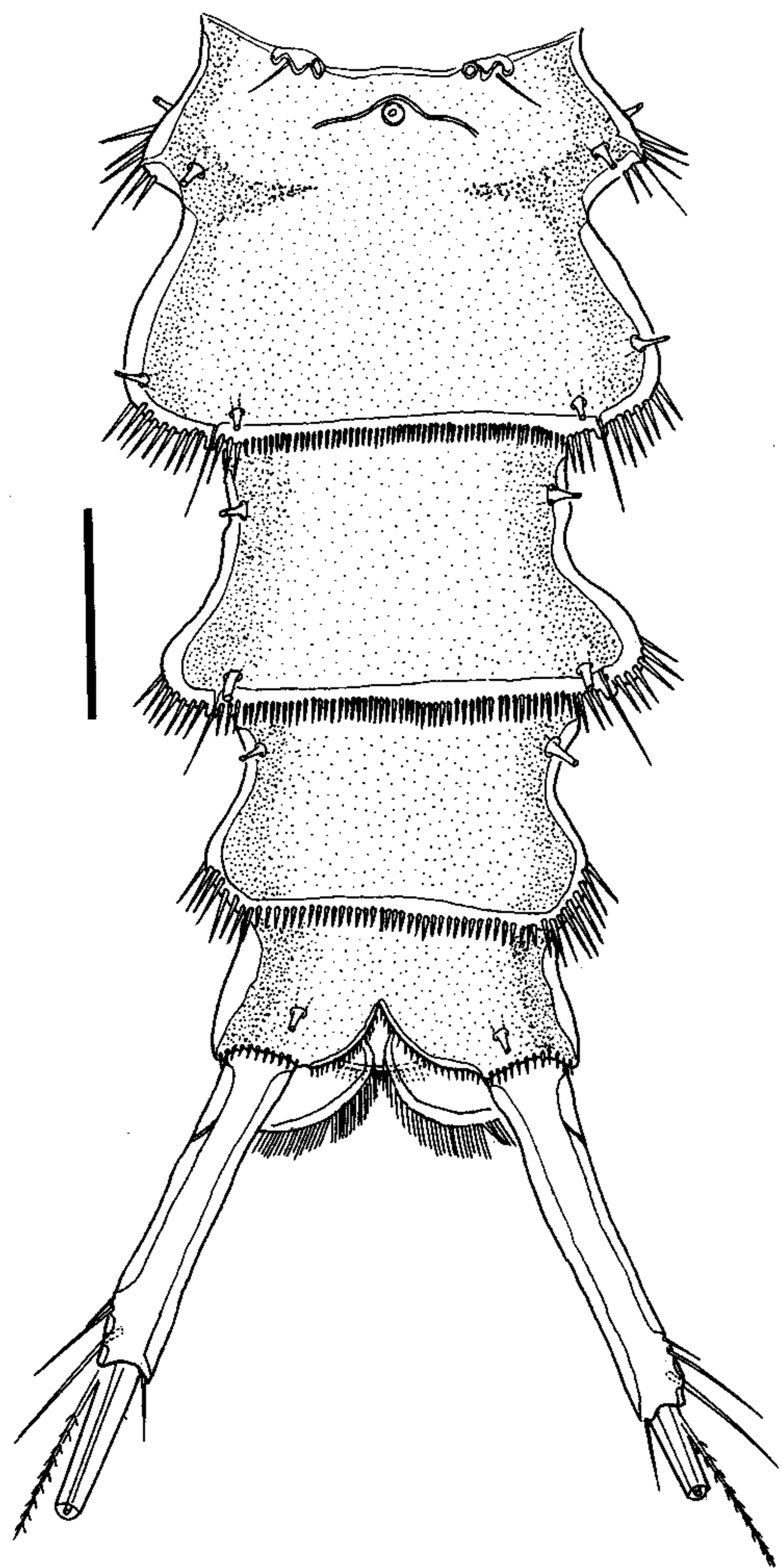


Fig. 9. *Laophontodes spongiosus* sp. n. Female. Abdomen, ventral view. Scale bar 30 μ m.

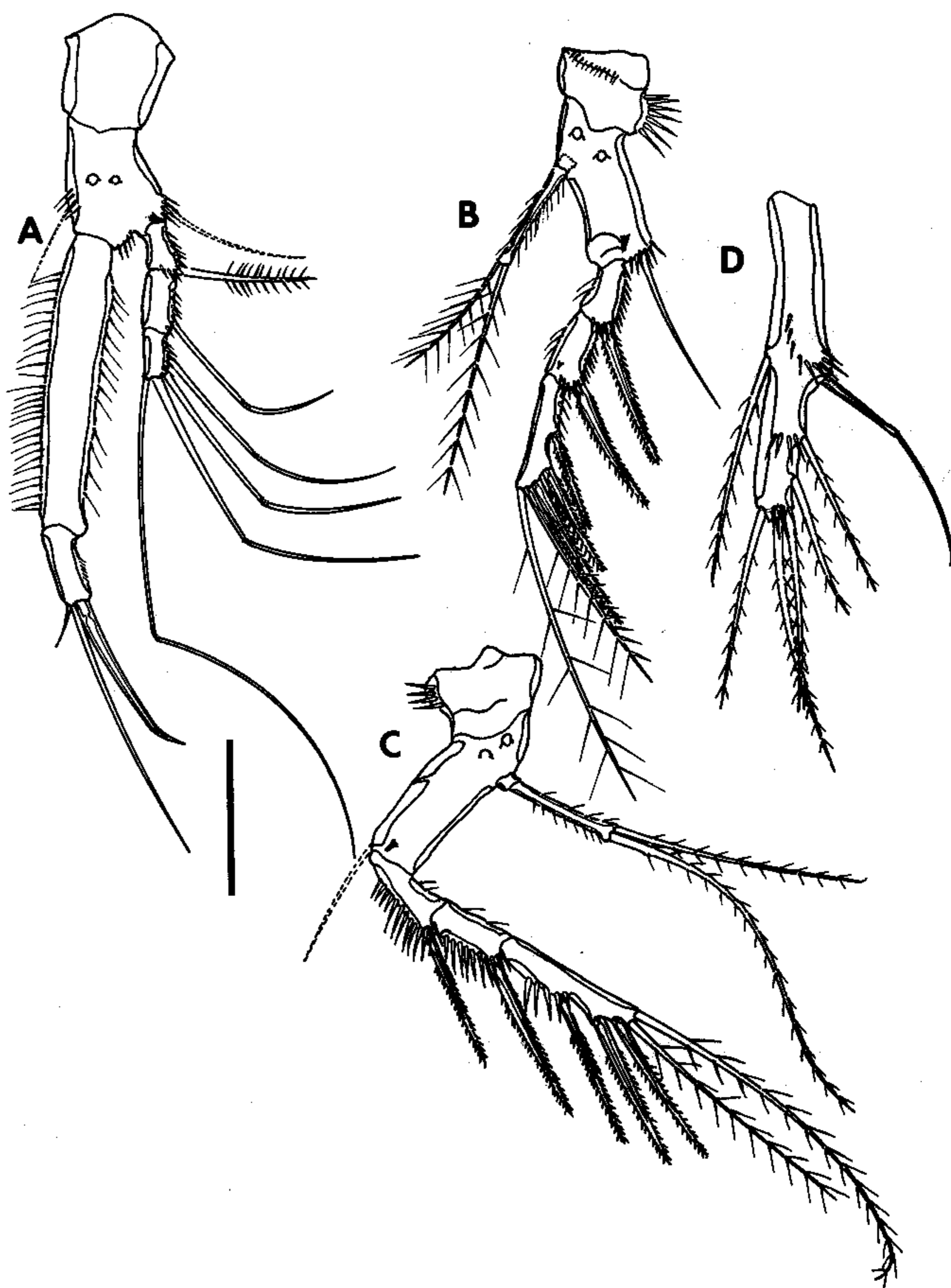


Fig. 11. *Laophontodes spongiosus* sp. n. Female.—A. P1.—B. P2.—C. P3.—D. P5. Scale bar 30 μ m.

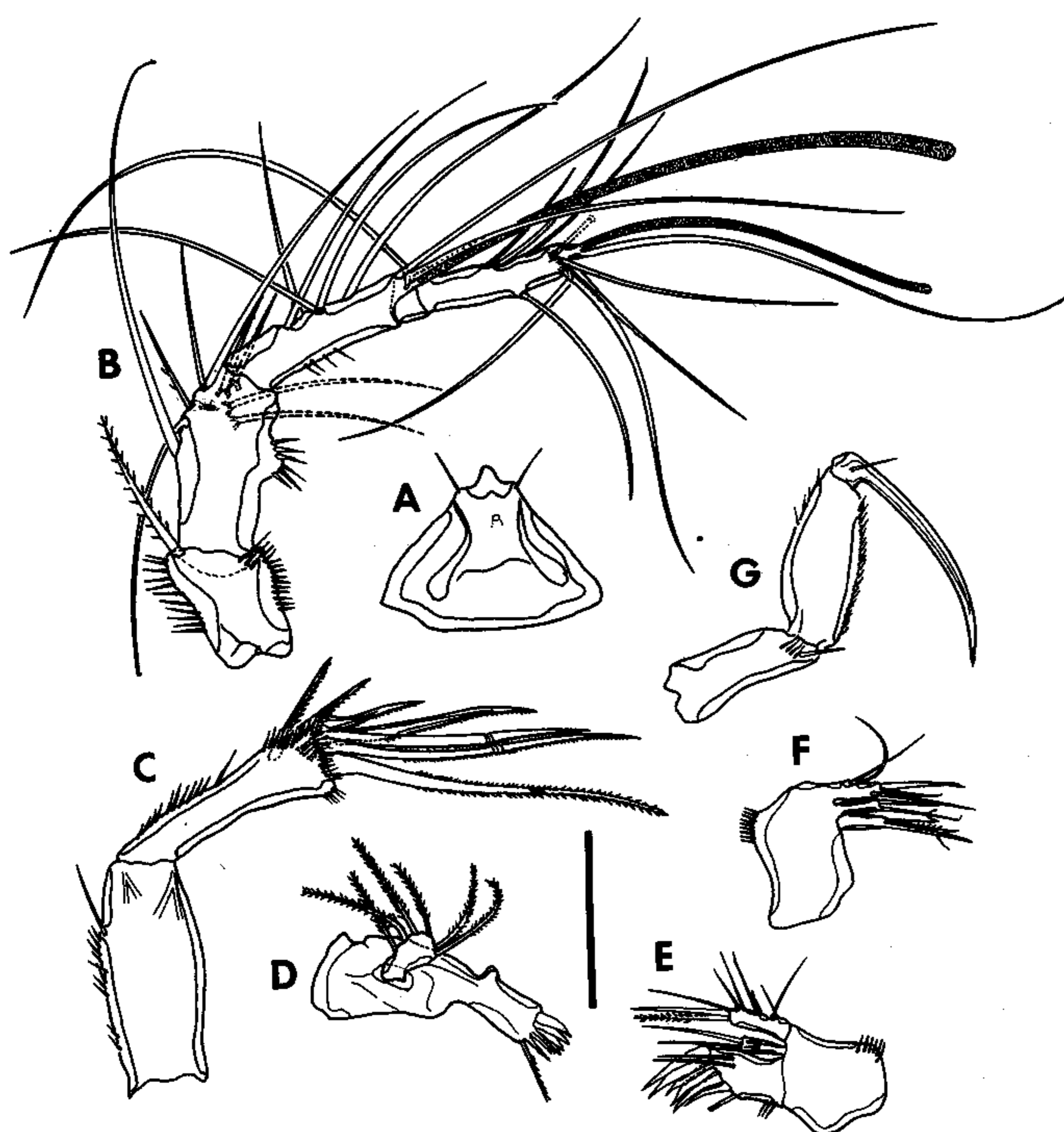


Fig. 10. *Laophontodes spongiosus* sp. n. Female.—A. Rostrum.—B. Antennule.—C. Antenna.—D. Mandible.—E. Maxillula.—F. Maxilla.—G. Maxilliped. Scale bar 30 μ m.

pinnate setae, and three terminal pinnate setae. Endopodal lobe with pore, represented by pinnate seta.

Description of male

Similar to female except in body size and ornamentation, antennule, P3 endopod, P5, and genital somites.

Body (Fig. 12A, B). Length (360 μ m). Body ornamentation varies slightly, especially in number and relative position of sensillae, but not in number and position of pores. Genital somites distinct.

Antennule (Fig. 13B). Five-segmented, sub-chirocer. Segment I almost square, with four to five rows of spinules and pinnate seta on anterior distal margin. Segment II twice as long as wide, with row of spinules and nine setae. Segment III with seven simple setae. Segment IV swollen, with 12 setae, a spine and aesthetasc. Segment V unguiform, with nine setae (some are articulate basally) and aesthetasc.

P2, P3 and P4 (Endopods are illustrated in Fig. 13C-E). P2-P4 same as in female except for P3 endopod three-segmented; P3 endopod-2 with small apophysis on distal margin.

P5 (Fig. 13F). Basis with row of spinules near cylindrical setophore. Exopod fused to basis, with two or three rows of spinules, two subterminal and two terminal pinnate setae. Endopodal lobe represented by pinnate seta.

P6 and spermatophore. Same as in *L. macclintocki*.

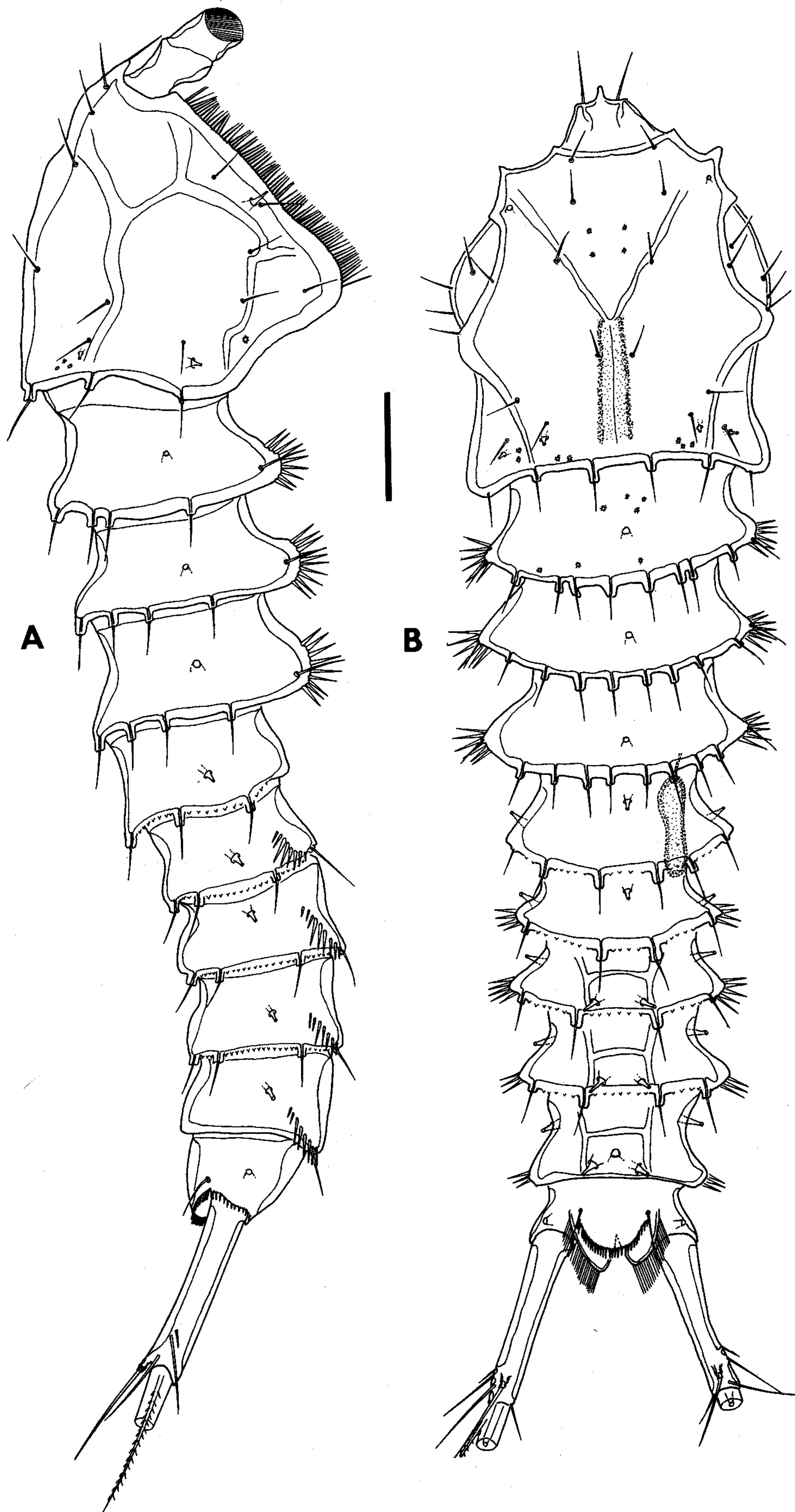


Fig. 12. *Laophontodes spongiosus* sp. n. Male.—A. Habitus, dorsal view.—B. Habitus, lateral view. Scale bar 30 μ m.

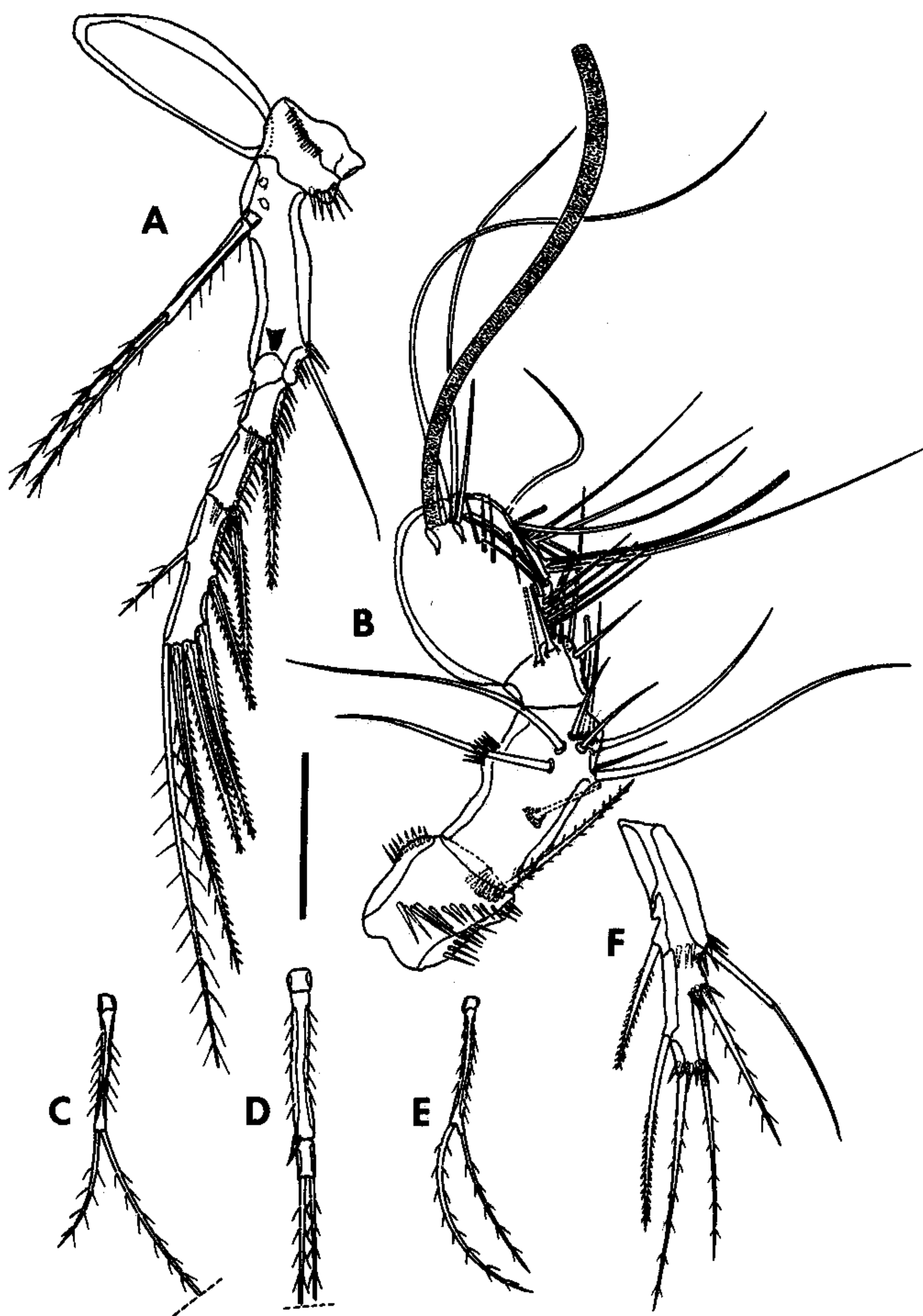


Fig. 13. *Laophontodes spongiosus* sp. n. Female.—A. P4. Male.—B. Antennule.—C. P2 endopod.—D. P3 endopod.—E. P4 endopod.—F. P5. Scale bar 30 μ m.

Remarks

The macroinvertebrate community of McMurdo Sound is unusual in the predominance of benthic sponges (Dayton & Oliver 1977; McClintock 1987; McClintock *et al.* 1988). The nearly permanent, thick, snow-covered ice most of the year results in very low levels of benthic primary production at the type habitat (McClintock *et al.* 1988). Both harpacticoid species were present in core samples from the sponge spicule substrate but neither was present in samples from a nearby mud substrate, suggesting that they may be restricted to the spicule substrate. The meiofauna community of the spicule mat had a relatively low density in our small number of samples (119 ± 112 adult and copepodite harpacticoids. 10 cm^{-2} , mean \pm standard error, $n = 3$), but was otherwise not different from the mud substrate fauna. Nematodes were the most abundant taxon, followed by harpacticoid copepods, represented by approximately 12 species, and ostracods.

We have updated the summary of characters of Ancorabolidae presented by Gee & Fleeger (1986). Two new genera (*Algensilla* Cottarelli & Baldari and *Probosciphontodes* Fiers) and eight new species, including the two copepods from this paper, have been described since. The family Ancorabolidae currently consists of 37 species including the present descriptions, belonging to 12 genera, with the genus *Laophontodes* being the most speciose (Table I).

The combination of the following morphological characters allocate *L. macclintocki* sp. n. and *L. spongiosus* sp. n. to the genus *Laophontodes*: (a) three outer setae on the terminal exopod segment of P2–P4, (b) presence of two endopod segments in each swimming leg, (c) prehensile P1 endopod and, (d) transversely elongated basis of P2–P4. Although *L. macclintocki* and *L. spongiosus* are sympatric and were extracted from the same core samples, they seem to be less related to each other than to other members of the genus.

Laophontodes spongiosus is the only species of the genus with no inner setae on all exopods except for the P4 exopod-3 (Table I). *Laophontodes spongiosus* is similar to *L. typicus* T. Scott with respect to the general body shape and P5. However, *L. spongiosus* possesses a two-segmented P4 endopod in contrast to the one-segmented P4 endopod of *L. typicus*. Additionally, *L. spongiosus* resembles *L. hedgpethi* Lang in body shape and ornamentation, but differences in the chaetotaxy and the morphology of P5 distinguish these species.

Laophontodes macclintocki most clearly resembles *L. hedgpethi*; the only difference in the chaetotaxy is the presence on P4 endopod-2 of four and two setae in *L. macclintocki* and *L. hedgpethi*, respectively. They also have different P5 types (Table I). *Laophontodes macclintocki* has the same number of endopod and exopod segments and exopodal inner setae as *L. gracilipes* Lang, but the setal formula of P2–P4 endopod-2 is distinctive (2:2:4 for *L. macclintocki* vs 1:1:1 for *L. gracilipes*). The taxonomic significance of the conspicuous dorsal and lateral pores observed on both sexes of *L. macclintocki* and *L. spongiosus* is as yet unknown. A similar pattern of pores was observed in *L. hedgpethi* and *L. armatus* (Lang 1965). None of the other members of the genus *Laophontodes* appear to have these pores, however they may have been overlooked. Special attention to pores and their arrangement should be given to future taxonomic studies involving ancorabolid copepods.

A pattern of pores similar to that of *Laophontodes* was illustrated in *Paralaophontodes exopoditus* Mielke, *P. echinatus* (Willey) in Fiers (1986), *Probosciphontodes stellata* Fiers and *P. ptenopostica* Fiers. Fiers (1988) postulated that the long hyaline tubes present on the two *Probosciphontodes* species may be an adaptation allowing the copepods to secrete adhesive substances by which filaments adhere to pleurotergites. Similar elongated hyaline tubes have been observed on a *Laophontodes* sp. from Prince William Sound, Alaska (personal observation). Although secretory tubes may be elongated for that function, all of our specimens of *Laophontodes* spp. were devoid of any coating material or detritus, but possessed relatively long secretory tubes.

Acknowledgements

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Table I. Swimming leg segmentation, setation and body ornamentation of recognized species in the family Ancorabolidae. The P5 types are illustrated in Gee & Fleeger (p. 156, Fig. 7, 1986). Classes of body ornamentation according to Gee & Fleeger (1986); 1, dorsal chitinous hooks or processes with epimeral plates expanded; 2, no dorsal processes but with epimeral plates expanded; 3, no dorsal processes and epimeral plates not expanded. (Modified from Gee & Fleeger 1986)

	P1			P2-P4					Body		Source
	Elongate basis	Number segments exo:end	Endopod clawed prehensile	Exopod segments	Endopod segments	Outer setae exopod-3	Inner setae exopod-3	Inner setae exopod-2	P5 type	ornamen.	
<i>Ancorabolus mirabilis</i>	+	2:2	-	3:3:3	2:2:2	2:2:2	0:0:0	1:1:1	1	1	Lang (1948)
<i>Arthroposyllus serratus</i>	+(?)	2:2	-	3:3:3	2:2:2	2:2:2	0:0:0	0:0:0	1	2	Lang (1948)
<i>Arthroposyllus s. spinifera</i>	+(?)	2:2	-	3:3:3	2:2:2	2:2:2	0:0:0	0:0:0	1	2	Lang (1948)
<i>Echinocletodes armatus</i>	+(?)	3:2	-	3:3:3	2:2:2	2:2:2	0:0:0	1:1:1	1	3	Lang (1948)
<i>Echinocletodes bodini</i>	+(?)	3:2	-	3:3:3	2:2:2	2:2:2	0:0:0	1:1:1	2	3	Dinet (1974)
<i>Echinocletodes walvisi</i>	+(?)	3:2	-	3:3:3	2:2:2	2:2:2	0:0:0	1:1:1	2	3	Dinet (1974)
<i>Echinopsyllus normani</i>	+	3:1	-	3:3:3	1:1:1	2:2:2	0:0:0	1:1:1	4a	1	Lang (1948)
<i>Ceratonotus gorbunovi</i>	+	2:1	-	3:3:3	1:1:1	2:2:2	1:2:1	1:1:1	4a	1	Smirnov (1946)
<i>Ceratonotus pectinatus</i>	+	2:2	-	3:3:3	1:1:0	2:2:2	1:2:1	1:1:1	4a	1	Lang (1948)
<i>Ceratonotus p. elaphus</i>	+	2:2	-	3:3:3	1:1:1	2:2:2	1:2:1	1:1:1	4a	1	Por (1965)
<i>Ceratonotus coineau</i>	+	2:2	-	3:3:3	2:2:1	2:2:2	1:2:1	1:1:1	3	1	Soyer (1964)
<i>Dorsiceratus triarticulatus</i>	+	3:2	-	3:3:3	2:2:2	2:2:2	1:2:1	1:1:1	4a	1	Coull (1973)
<i>Dorsiceratus octocornis</i>	+	2:2	-	3:3:3	2:2:2	2:2:2	1:2:1	1:1:1	4b	1	Drzycimski (1967)
<i>Tapholaophontodes rollandi</i>	-	3:2	+	3:3:3	0:1:0	2:2:2	1:2:1	0:0:0	4b	3	Soyer (1974)
<i>Tapholaophontodes remotus</i>	-	2:2	+	3:3:3	0:1:0	2:2:2	0:0:0	0:0:0	4a	3	Cottarelli & Baldari (1987)
<i>Tapholaophontodes laurenceae</i>	-	3:2	+	3:3:3	0:1:1	3:3:3	0:0:0	0:0:0	4b	3	Bodiou & Colomines (1988)
<i>Paralaophontodes exopoditus</i>	-	2:2	+	3:3:3	0:s:0	3:3:3	0:0:0	0:0:0	4b	2	Mielke (1981)
<i>Paralaophontodes echinatus</i>	-	2:2	+	3:3:3	0:s:0	3:3:3	0:0:0	0:0:0	4b	2	Willey (1930); Fiers (1986)
<i>Paralaophontodes robustus</i>	-	2:2	+	3:3:3	0:0:0	3:3:3	0:0:0	0:0:0	4b	2	Bozic (1964)
<i>Paralaophontodes elegans</i>	-	2:2	+	3:3:3	0:s:0	3:3:3	0:0:0	0:0:0	4b	2	Baldari & Cottarelli (1986)
<i>Patagoniaella vervoorti</i>	-	2:2	-	3:3:3	2:2:0	3:3:3	0:0:0	0:0:0	4a	3	Pallares (1968)
<i>Algeniella boitanii</i>	-	3:2	+	3:3:3	0:1:1	3:3:3	0:0:0	0:0:0	4b	3	Cottarelli & Baldari (1987)
<i>Probosciphontodes stellata</i>	-	3:2	+	3:3:3	0:0:0	2:2:3	0:0:0	0:0:0	3	1	Fiers (1988)
<i>Probosciphontodes ptenopostica</i>	-	3:2	+	3:3:3	0:0:0	2:2:3	0:0:0	0:0:0	3	1	Fiers (1988)
<i>Laophontodes ornatus</i>	-	3:2	+	3:3:3	1:1:1	3:3:3	1:1:1	0:0:0	4a	2	Gee & Fleeger (1986)
<i>Laophontodes hamatus</i>	-	3:2	+	3:3:3	1:1:1	3:3:3	1:2:2	1:1:1	4a	2	Lang (1948)
<i>Laophontodes bicornis</i>	-	3:2	+	3:3:3	1:1:1	3:3:3	1:2:2	1:1:1	4a	2	Lang (1948)
<i>Laophontodes expansus</i>	-	3:2	+	3:3:3	1:1:1	3:3:3	0:0:0	0:0:0	4b	2	Lang (1948)
<i>Laophontodes hedgpethi</i>	-	3:2	+	3:3:3	2:2:2	3:3:3	1:1:1	1:1:1	4a	2	Lang (1965)
<i>Laophontodes armatus</i>	-	3:2	+	3:3:3	2:2:2	3:3:3	0:0:0	0:0:0	4b	2	Lang (1948)
<i>Laophontodes whitsoni</i>	-	3:2	+	3:3:3	1:1:1	3:3:3	1:2:2	1:1:1	4a	2	Lang (1948)
<i>Laophontodes gracilipes</i>	-	3:2	+	3:3:3	2:2:2	3:3:3	1:1:1	1:1:1	4b	3	Lang (1948)
<i>Laophontodes typicus</i>	-	3:2	+	3:3:3	2:2:1	3:3:3	0:0:0	0:0:0	4a	3	Lang (1948)
<i>Laophontodes propinquus</i>	-	3:2	+	3:3:3	1:1:1	3:3:3	??:0	??:0	4b	3	Lang (1948)
<i>Laophontodes psammophilus</i>	-	3:2	+	3:3:3	2:2:2	3:3:3	0:1:1	0:0:0	4a	3	Soyer (1974)
<i>Laophontodes macropodia</i>	-	3:2	+	3:3:3	2:2:2	3:3:3	0:0:0	0:0:0	5b	3	Gee & Fleeger (1986)
<i>Laophontodes macclintocki</i>	-	3:2	+	3:3:3	2:2:2	3:3:3	1:1:1	1:1:1	4a	3	This paper
<i>Laophontodes spongiosus</i>	-	3:2	+	3:3:3	2:2:2	3:3:3	0:0:1	0:0:0	4b	2	This paper

Notes: +(?) indicates a moderately elongate basis; s indicates that a segment is represented by a seta only.

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