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ANTHURIDS FROM INTERTIDAL AND SHALLOW INFRALITTORAL WATERS FROM SOUTHEASTERN BRAZIL (ISOPODA: ANTHURIDEA)[1]

Ana Maria S. Pires

ABSTRACT

Four new species of isopods of the suborder Anthuridea are described from the intertidal and shallow waters of São Paulo and Rio de Janeiro States, Brazil. *Paranthura urochroma*, new species, occurs in the Paranthuridae and three species (in two genera), *Heteranthura moreirai*, new species, *Mesanthura excelsa*, new species, and *Mesanthura callicera*, new species, in the Anthuridae. The described species in the Anthuridea from Brazil are discussed and a key to the species is included. The distribution and notes on the habitat of the four new species also are furnished.

The anthurids of the coast of Brazil are poorly known. Only *Accalathura crenulata* (Richardson, 1901), and two species of *Quantanthura* Menzies and George are reported from Brazil (Koening, 1972; Kensley and Koening, 1979). *Accalathura crenulata* and *Quantanthura menziesi* Kensley and Koening, 1979, were found in north and northeastern Brazil, in 1.2 to 120 m depth for *A. crenulata* and 1.4 to 94 m depth for *Q. menziesi*. *Quantanthura brasiliensis* Kensley and Koening, 1979, was found at 21 m depth in the northern and at 166 m depth on the southeastern continental shelf of Brazil. All were found on calcareous, sandy, and muddy bottoms.

Four new species of Anthuridea collected from benthic algae of hard bottoms never exceeding 6 m depth are described here from Itanhaem, Santos, Ubatuba (São Paulo State) and Arraial do Cabo (Rio de Janeiro State).

The following abbreviations are used: BMNH, British Museum (Natural History); j, juveniles; MZSP, Museu de Zoologia da Universidade de São Paulo; RJ, Rio de Janeiro State; SMNH, Swedish Museum of Natural History; SP, São Paulo State; and USNM, National Museum of Natural History (Smithsonian Institution).

KEY TO ANTHURIDEA FROM BRAZIL (BASED ON ADULT SPECIMENS)

1. Mouthparts tapered distally, adapted for sucking and piercing (Figs. 5–8) 2
   Mouthparts not tapered distally, adapted for biting and cutting (Figs. 37–38) 3
2. Telson with statocyst medial, distal margin crenulate. Uropodal endopod distinctly narrower than peduncle ..... *Accalathura crenulata* (Richardson, 1901)
   Telson lacking statocyst, distal margin smooth. Uropodal endopod nearly as wide as peduncle ..... *Paranthura urochroma*, new species
3. Pereonites I–IV with middorsal pit (Fig. 16). Pleonites 1–6 free (Fig. 31) ..... *Heteranthura moreirai*, new species
   All pereonites without middorsal pit. Pleonites 1–5 fused, pleonite 6 free (Figs. 32, 47) 4
4. Pleopod 1 with rami fused 5
   Pleopod 1 with rami free (Fig. 43) 6
5. Head with tiny dorsolateral eyes. Head and pereonites I–II with dorsolateral keel. Uropodal exopod distally notched ..... *Quantanthura menziesi* Kensley and Koening, 1979

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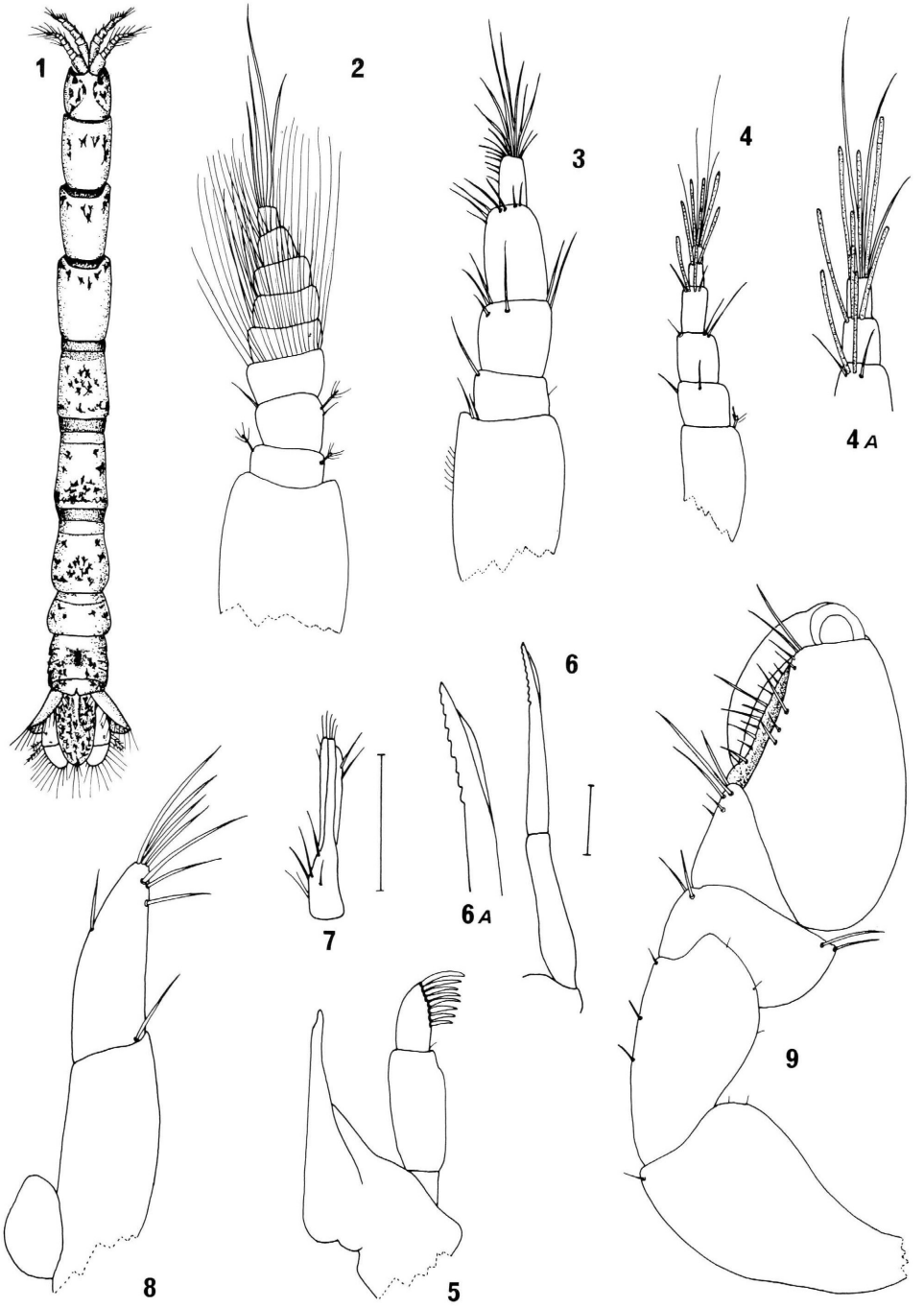


Figs. 1–9. *Paranthura urochroma,* new species. 1–3, 9, holotype, adult male, 7.2 mm long; 4, paratype, ovigerous female, 6.2 mm; 5–8, paratype, adult male, 6.9 mm. 1, body, dorsal view; 2, antenna 1; 3, antenna 2; 4, antenna 1; 4a, tip of antenna 1; 5, left mandible; 6, maxilla 1; 6a, detail of apex of maxilla 1; 7, hypopharynx; 8, maxilliped; 9, pereopod 1. The scales on Figs. 6 and 7 equal 0.1 mm.

Head without eyes. Head and pereonites I–II without keel. Uropodal exopod distally ovate ..... *Quantanthura brasiliensis* Kensley and Koening, 1979

6. Dactylus of pereopod I with one accessory spine, unguis bluntly pointed (Fig. 39). Uropodal exopod distally excavate (Fig. 45), endopod projecting beyond posterior margin of telson ..... *Mesanthura excelsa,* new species

Dactylus of pereopod I without accessory spine; unguis elongate, acutely pointed (Fig. 52). Uropodal exopod distally ovate (Fig. 57), endopod reaching posterior margin of telson ..... *Mesanthura callicera,* new species

Family Paranthuridae

Paranthura urochroma, new species

Figs. 1–15

Description.—Male holotype 7.2 mm long. Body nearly 14 times longer than wide, white or yellow with dark brown chromatophores spread over dorsal surface. All pereonites with longitudinal midventral ridge.

Head almost as long as wide, slightly narrower distally, frontal margin excavate under antennae 1, anterolateral angles acute. Eyes small, dorsal and brown.

Pereonites I–III subequal in length; pereonites IV and V slightly longer than others; pereonite VII shortest. Pereonites I–V subequal in width, VI slightly wider; pereonite VII widest.

Pleonites 2–5 fused middorsally with lateral margins free. Pleonites 1 and 6 free, latter with posterior border centrally cleft.

Telson nearly 1.5 times longer than broad, lateral margins smooth with many small setae, posterior margin rounded bearing 4 long and 4 short setae.

Antenna 1 sexually dimorphic. Male with peduncle of 3 segments, segment 1 largest; flagellum with 6 short wide articles each bearing very long aesthetasc around distal margin. Female with peduncle of 3 segments, flagellum with 3 articles, first two bearing 2 aesthetascs, terminal article bearing 3 aesthetascs.

Antenna 2 morphologically similar in both sexes. Peduncle with 5 segments, segment 2 nearly 3 times longer than shortest segment 3; flagellum with 1 article bearing many apical and lateral setae.

Mandible characteristic for genus. Palp with 3 articles, apical one with 8 stout spines.

Maxilla 1 slender with 9 teeth.

Maxilliped with 3 segments, terminal segment elongate with setae distally.

Pereopod I similar in males and females. Propodus enlarged, dorsal side with longitudinal narrow depression near inner margin; ventral side with row of 19–21 small setae ending on convex margin.

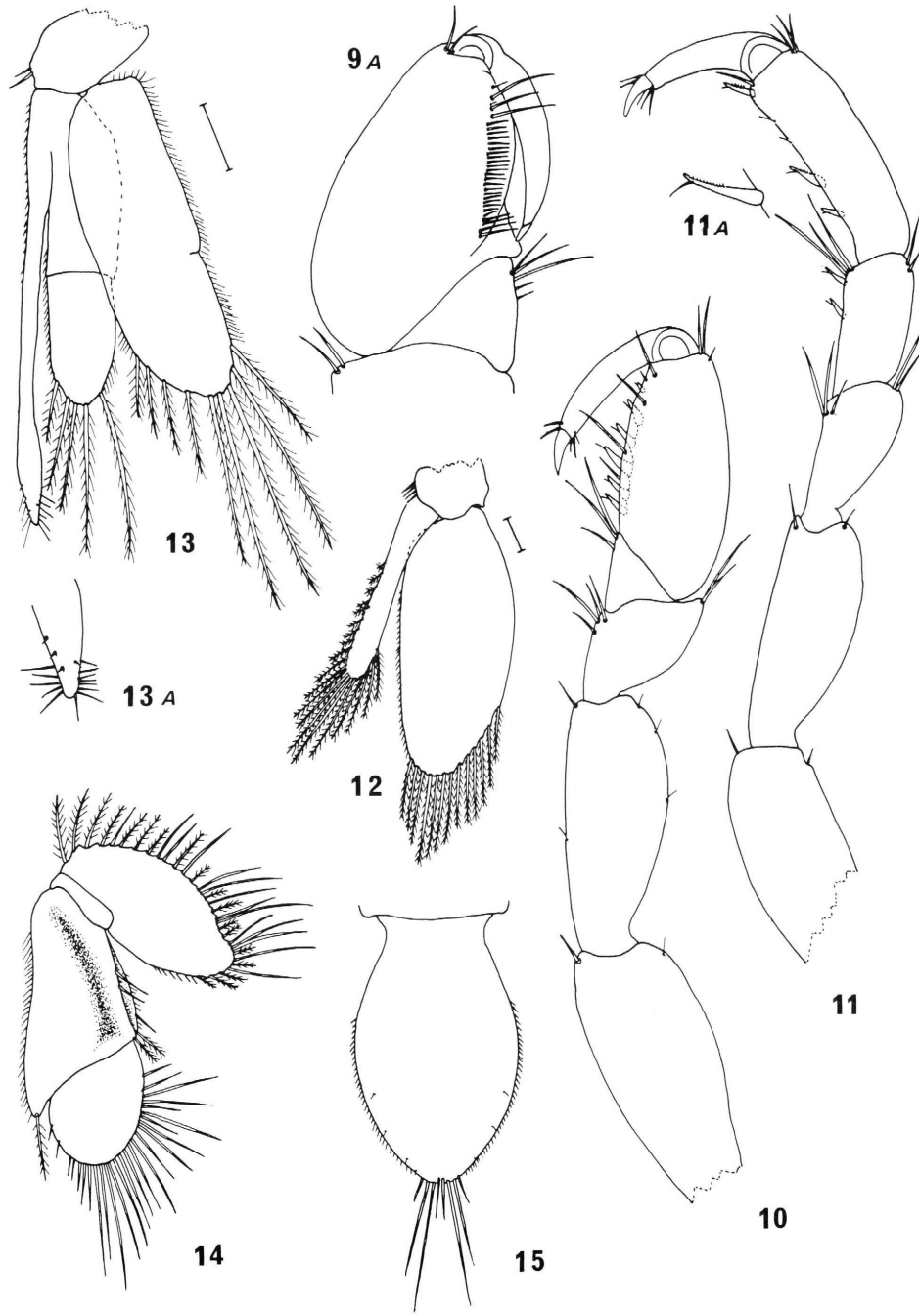
Pereopod II similar to pereopod III. Propodus on II narrower than on I; inner margin of propodus with 6 stout sensory setae.

Pereopods IV–VII similar. All with propodus straight, inner margin with 3 sensory setae; all with carpus subrectangular, inner margin bearing 2 distally placed sensory setae.

Pleopod 1 with exopod operculiform with many long plumose setae on distal margin; endopod ¾ length and nearly $^1/_5$ width of exopod, bearing many long plumose setae distally and 9 short plumose setae on distal ⅔ of inner margin.

Pleopod 2 with exopod slightly longer than endopod, with long plumose setae on distal margin and small setae on outer margin on endopod; endopod having suture on $^3/_5$ of lamina and long plumose setae on posterior margin; stylet 1.4 times longer than endopod, apex with tiny setae and 3 short spines.

Uropod with exopod generally ovate, outer margin slightly sinuous, plumose and long simple setae along minutely serrate outer and distal margins. Endopod



Figs. 9a–15. *Paranthura urochroma*, new species. 9a–13, holotype, adult male, 7.2 mm long; 14–15, paratype, adult male, 6.9 mm. 9a, pereopod I, inner side; 10, pereopod II; 11, pereopod VII; 11a, detail of setae from inner margin of propodus; 12, pleopod 1; 13, pleopod 2; 13a, distal part of pleopod 2; 14, uropod; 15, telson. Scales on Figs. 12 and 13 equal 0.1 mm.

projecting slightly beyond apex of telson, distal margin broadly ovate with long setae. Basis with longitudinal ridge on ventral margin of proximal ⅔ of lamina.

Type-locality.—Enseada do Flamengo, Ubatuba, SP.

Distribution.—Itanhaem, Santos, Ubatuba (São Paulo State) and Arraial do Cabo (Rio de Janeiro State).

Etymology.—The specific name is derived from the Greek "ura"—tail, "chroma"—color, and refers to the conspicuously brown colored telson of the animal.

Habitat.—The species was found among algae (*Jania capillacea, Jania adhaerens, Amphiroa beauvoisii, Dictyopteris delicatula* and *Ulva* sp.) in the intertidal and shallow infralittoral at 6 m depth.

Material Examined.—HOLOTYPE: ♂ 7.2 mm, April, 1975, A. M. S. Pires and S. A. Vanin coll., MZSP. PARATYPES: Enseada do Flamengo, Ubatuba, SP, 1 ♂, 13 ♀, 1 j, April and September, 1975, A. M. S. Pires and S. A. Vanin coll.; same locality, 2 ♂, 15 ♀, 22 j, April and May, 1965, P. S. Moreira coll.; Ilha Porchat, Santos, SP, 1 ♀, 28-10-1978, S. A. Vanin coll.; Itanhaem, SP, 5 ♀, July, 1979, A. S. Tararam coll.; Praia do Forno, Arraial do Cabo, RJ, 12 ♀, 06-02-1980, F. Fernandes, S. A. Vanin and A. M. S. Pires coll. 8 paratypes in MZSP, 4 paratypes in SMNH, 4 paratypes in BMNH and 4 paratypes in USNM.

Remarks.—*Paranthura urochroma* in general resembles *P. astrolabium* Kensley, 1979, from Fiji Islands, differing in the sculptures of the pereonites, morphology of pleopod 1, uropods and telson, which is wider in *P. urochroma*. It also resembles *P. ostergaardi* Miller and Menzies, 1952, from Hawaii, but differs in the morphology of male antenna 1 and 2, pleopod 1, uropod and width of telson.

Family Anthuridae
Heteranthura moreirai, new species
Figs. 16–31

Description.—Ovigerous female holotype 2.7 mm long. Body long, 7.7 times longer than wide; white. Head slightly narrower than all pereonites. Pereonites II–VI with dorsal pit, pereonite II with transverse ridge. Antenna 2 when folded back reaching to about anterior ⅓ of pereonite II. Marsupium with 4 pairs of oostegites.

Head almost as wide as long; frontal margin slightly excavate under antennae 1, with anterolateral angles round; rostrum short, broadly rounded; eyes dorsolateral, large, with few scattered ommatidia without pigmentation.

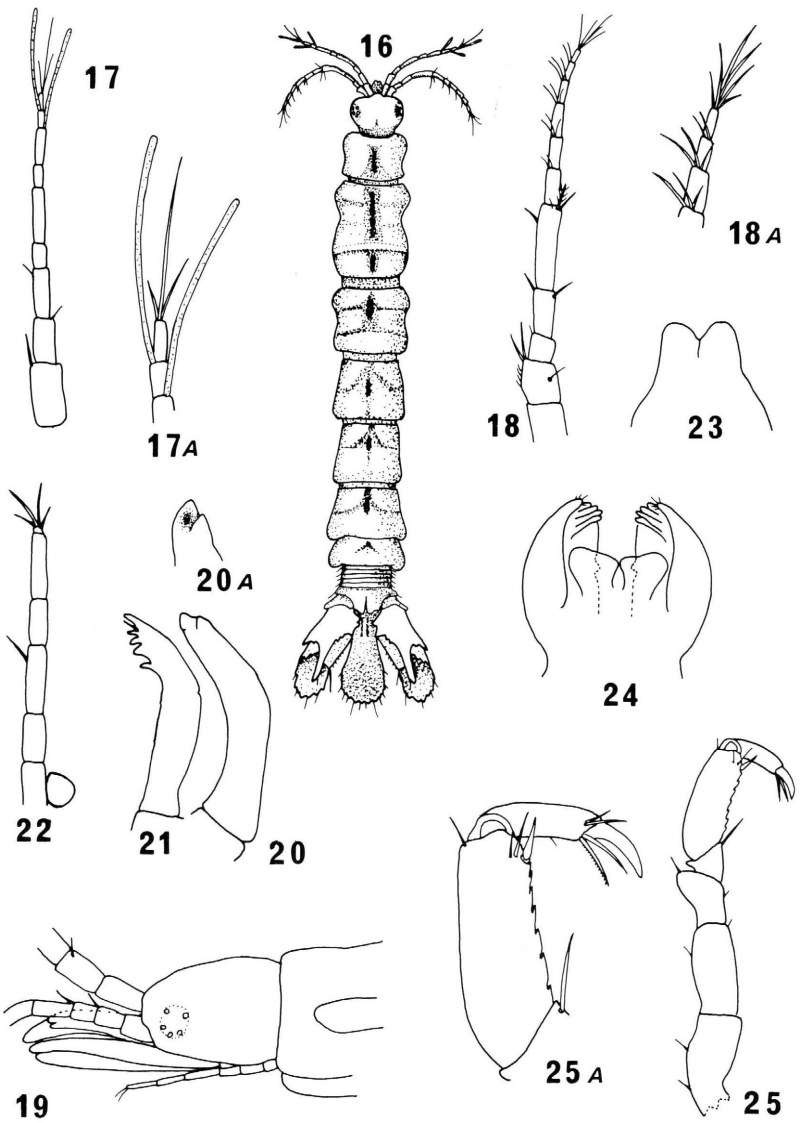
Pereonite I wider than head and narrower than following pereonites; pereonite II longest, twice length of pereonite I and 4 times length of shortest pereonite VII. Pereonites I–III, lateral margin with anterior constriction. Pereonites I–VI with middorsal pit; pereonite II with transverse ridge on distal ⅗ of segment.

Pleon with 6 free segments, each with laterally placed plumose seta; pleonites 1–5 subequal, 6 as long as the 1–5 combined and cleft middorsally. Telson nearly twice length of pleon, broadened distally, with 2 very low and short middorsal ridges; distal margin serrate, bearing 2 elongate plumose setae and some short and long setae.

Antenna 1 with peduncle of 4 segments. First 3 times longer than fourth; flagellum of 5 articles, third and fourth with aesthetascs, apical one with few long and short setae.

Antenna 2 with peduncle of 5 segments; segment 3 shortest, segment 5 longest and 3.5 times longer than segment 3. Flagellum with 6 articles: 1–5 bearing 2 or 3 short setae on distal margin, apical one with several setae.

Mouthparts elongate, projecting beyond frontal margin of head (lateral view).



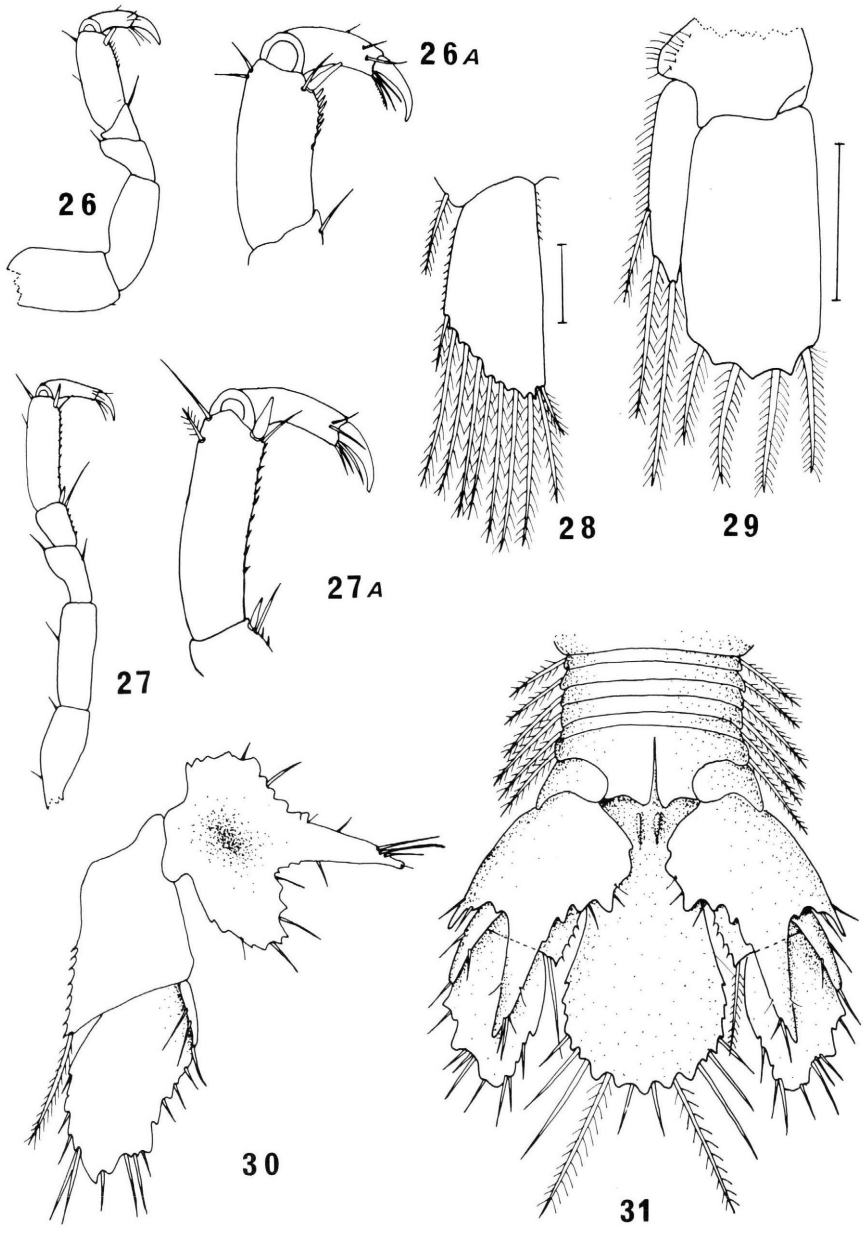
Figs. 16–25. *Heteranthura moreirai*, new species. 16–19, holotype, adult female, 2.7 mm long; 20–25, paratype, adult female, 2.7 mm. 16, body, dorsal view; 17, antenna 1; 17a, tip of antenna 1; 18, antenna 2; 18a, tip of antenna 2; 19, lateral view of head showing mouthparts; 20, right mandible; 20a, detail of incisor of right mandible; 21, maxilla 1; 22, maxilliped; 23, clypeus; 24, hypopharynx; 25, pereopod I; 25a, dactylus and propodus of pereopod 1.

Clypeus (dorsal view between antennae) elongate, distal margin bilobed.

Mandible without palp; elongate, curved, and indurate, incisor with 2 teeth.

Maxilliped slender, nearly 13 times longer than wide; palp with 7 articles, terminal one very small with few apical setae, sixth article longest.

Pereopod I with triangular carpus; propodus elongate, with 7 scales along inner margin and one long stout distal spine; unguis nearly $^3/_5$ length of dactylus.



Figs. 26–31. *Heteranthura moreirai*, new species. 26–30, paratype, adult female, 2.7 mm long; 31, holotype, adult female, 2.7 mm. 26, pereopod II; 26a, dactylus and propodus of pereopod II; 27, pereopod VII; 27a, dactylus and propodus of pereopod VII; 28, pleopod 1; 29, pleopod 2; 30, uropod; 31, dorsal view of pleotelson with uropods. Scales on Figs. 28 and 29 equal 0.1 mm.

Pereopod II with triangular carpus; propodus elongate, inner margin with 7 short spines and one long and stout spine distally placed.

Pereopod VII with subrectangular carpus, inner margin with 5 short and 1 long stout distal spine; propodus elongate with row of 10 short spines along inner margin and 1 large, very stout spine distally.

Pleopod 1 operculiform, exopod and endopod fused with plumose setae on distal margin.

Pleopod 2 with exopod longer and 3 times wider than endopod, long plumose setae on distal margin of both rami.

Uropod indurate with exopod folding over telson, bipartite, ventrolateral part nearly ovate, margin serrate with few setae; dorsal part showing outer elongate section with smooth margins and tuft of 3 distal setae, and inner round section with serrate margins and few setae. Endopod ovate, reaching to apex of telson, distal margin with large serrations and many setae. Basis subrectangular with $^3/_5$ of inner margin serrate, inner apical angle bearing one long plumose seta.

Type-locality.—Praia do Flamenguinho, Enseada do Flamengo, Ubatuba, SP.

Distribution.—The species is known only from the type-locality.

Etymology.—The species is named after Dr. Plínio S. Moreira, who collected the holotype.

Habitat.—*Heteranthura moreirai* was obtained among algae, *Sargassum* and *Galaxaura*, at 3 m depth.

Material Examined.—HOLOTYPE: ♀ ovigerous, April, 1965, P. S. Moreira coll., MZSP. PARATYPES: type-locality, 2 ♀, April, 1965, P. S. Moreira coll.; Praia do Lázaro, Enseada da Fortaleza, Ubatuba, SP, 1 j, 14-01-1980, M. Flynn coll.

Remarks.—The genus *Heteranthura* was erected by Kensley (1980) for a species from Madagascar, *Heteranthura anomala*. The most striking characteristic of this genus is the unusual mouthparts. They are elongate, narrow, and produced anteriorly, resembling a paranthurid when viewed laterally; however, the maxilla is of the anthurid type. The species of this genus are certainly adapted to a specialized form of feeding (Kensley, 1980), which distinguishes them from the other anthurids. For these reasons the genus *Heteranthura* is very peculiar within the family Anthuridae.

The characters of *Heteranthura moreirai* agree nicely with those forming the definition of the genus. This species resembles *Heteranthura anomala*, but the main differences are: *H. moreirai* has the body broader, the head narrower than pereonite I, dorsolateral eyes, pereonite II with a dorsal transverse ridge, propodus of all pereopods with fewer spines on inner margin, ridge of telson weaker and shorter, no statocysts visible, pleopod 1 without slit on distal margin, distal margin of pleonite 6 with middorsal lobes small, acute.

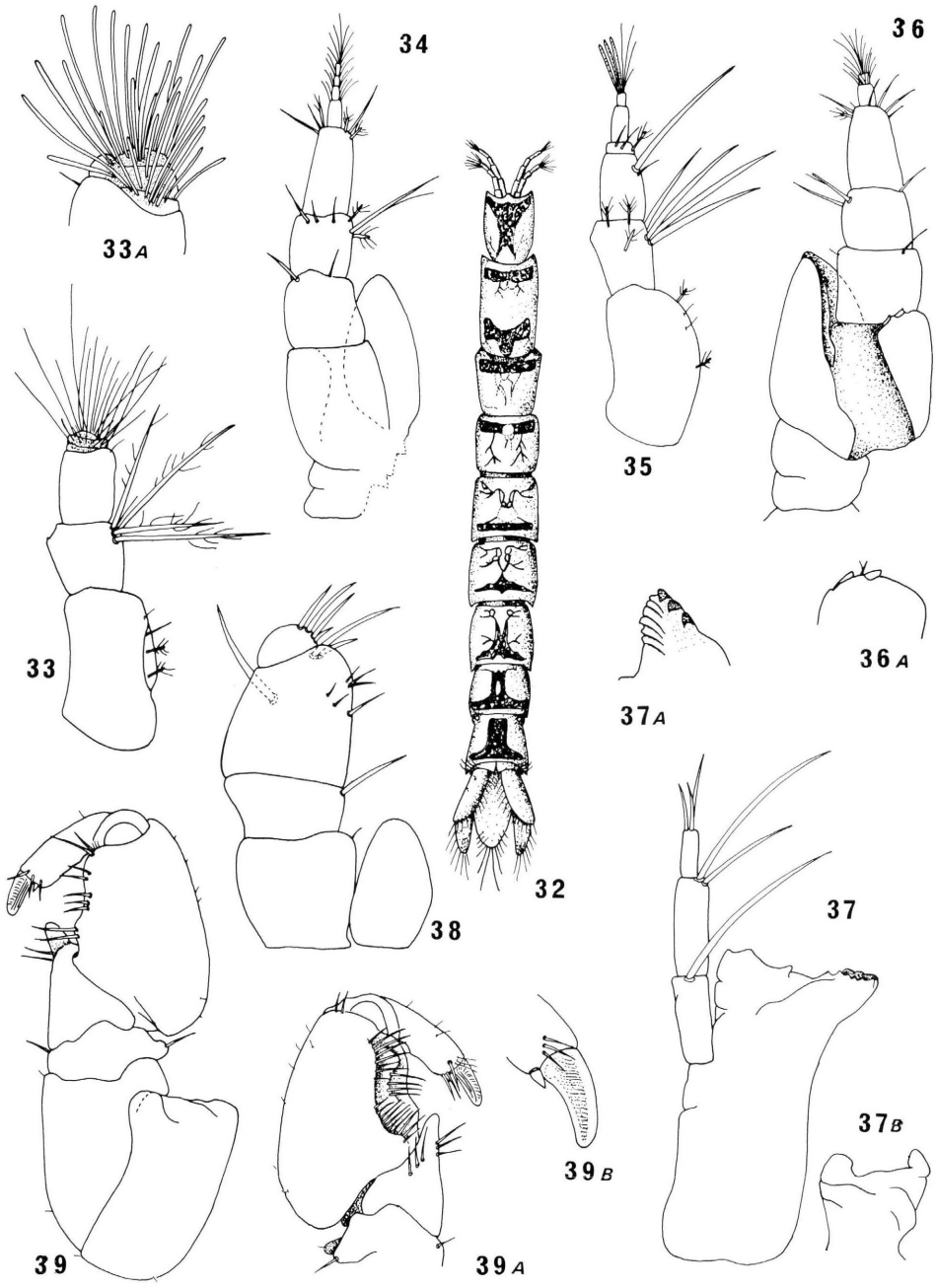
Mesanthura excelsa, new species
Figs. 32–46

Description.—Male holotype 7.5 mm long. Body nearly 10 times longer than wide. Color pattern: body white or light yellow with dark brown bands dorsally placed as follows: head with large T-shape band; pereonites I–III with horizontal band near anterior margin; pereonites IV–V with horizontal band near distal margin; pereonites VI–VII and pleon with T-shape band inverted. Head slightly narrower than pereonites; pereonite I longest, nearly twice length of pereonite VII; all pereonites with strong longitudinal midventral ridge.

Head longer than wide; frontal margin excavate under antennae 1, anterolateral angles acute; rostrum short, rounded; eyes relatively small, anterolateral, brown.

Pereonite I longer than head, nearly twice longer than shortest pereonite VII; pereonites II–VI subequal in length.

Pleon constricted proximally, pleonites 1–5 fused, distal margin of pleonite 5



Figs. 32–39. *Mesanthura excelsa*, new species. 32–34, 37–39, holotype, male, 7.5 mm long; 35, 36, paratype, adult female, 8.4 mm. 32, body, dorsal view; 33, antenna 1; 33a, tip of antenna 1; 34, antenna 2, dorsal view; 35, antenna 1; 36, antenna 2, ventral view; 36a, detail of distal margin of segment 2 of antenna 2; 37, left mandible; 37a, incisor and lamina dentata of mandible; 37b, molar process of mandible; 38, maxilliped; 39, pereopod I; 39a, inner side of manus of male pereopod I; 39b, detail of unguis with accessory spine of pereopod I.

with setae laterally; pleonite 6 free, posterior margin cleft middorsally. Telson distally ovate with many long and short setae on both distal margin and dorsal surface. No statocysts visible.

Antenna 1 with peduncle of 3 segments, basal segment 2.5 times longer than segment 2, which has 4 long and stout setae on distal lateral angle; segments 2 and 3 subequal in length. Flagellum with 3 flattened articles with numerous long aesthetascs; article 1 shorter and narrower than article 2.

Antenna 2 with peduncle of 5 segments; segment 2 ventrally grooved, nearly equal in length to segments 3 and 4 together; distal segment narrow and slightly longer than segment 3. Flagellum with 4 articles.

Mandible with palp of 3 segments, segment 1 twice length of apical segment; incisor with 3 teeth, lamina dentata with 6 teeth; molar widening distally.

Maxilliped with 5 segments; segment 4 largest, twice longer than segment 3, with 2 stout setae dorsally; distal segment rounded with 5 setae at outer margin.

Pereopod I subchelate. Basal corner of basis with rounded expansion that fits exactly into a winglike projection on ischium. Carpus triangular. Propodus enlarged, inner margin sinuous, few setae on dorsal surface, with setose concavity ventrally placed. Dactylus elongate, 3 times length of unguis, distal margin with few setae and accessory spine.

Pereopod II. Outer margin of ischium bearing long setae; merus with elongate setae on distal and inner margins. Carpus triangular, inner margin setose, distal part narrowly rounded, bearing minute spine on inner side. Propodus somewhat expanded, inner margin setose, with sensory spine placed on distal angle. Dactylus elongate, nearly 2.4 times length of unguis, distal margin with setae and short spine on inner side.

Pereopod VII with all segments armed with long setae. Carpus and propodus with scales on inner margin, latter segment with inner distal angle bearing 2 serrate spines dorsally and 1 stout sensory spine ventrally. Dactylus elongate, nearly 3 times longer than unguis, inner and outer margins with flattened large scales.

Pleopod 1 with exopod operculiform, ovate, having many long plumose setae on distal margin; endopod shorter and nearly 2.5 times narrower than exopod, with 6 distal plumose setae. Basis with yellow rounded area on outer part.

Pleopod 2 with exopod ⅔ wider and nearly same length as endopod. Distal margin of endopod with 7 plumose setae and copulatory stylet elongate and acutely pointed extending beyond tips of both rami.

Uropod with exopod ovate, shallowly notched distally, margins serrate with many long plumose and simple setae. Endopod projecting beyond apex of telson, posterior margin of endopod round with many simple setae. Basis folded down and bearing many plumose setae.

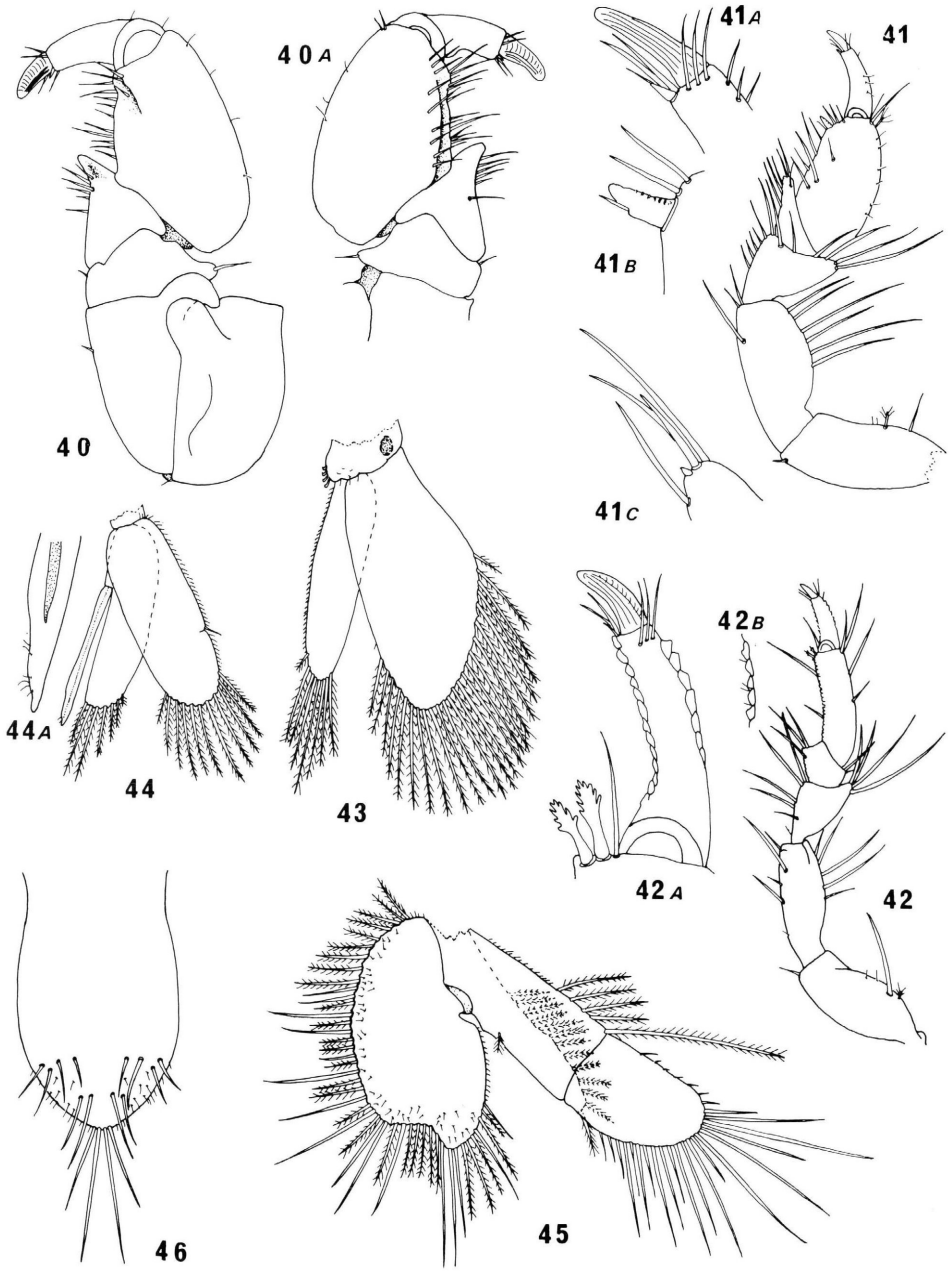
Female similar to male, except in few aspects: eyes slightly smaller; antenna 1, peduncle segment 3 narrower and segment 4 larger than in males, flagellum with 2 elongate articles, terminal one bearing 3 aesthetascs; antenna 2 with flagellum of 2 articles; pereopod I with dactylus twice length of unguis, propodus with ventral surface bearing few setae and shallow, not bilobed, concavity.

Color pattern similar for males, females and juveniles.

Type-locality.—Praia do Poço, Itanhaem, southern São Paulo State.

Distribution.—The species is known only from the type-locality.

Etymology.—The specific name *excelsa* is the Latin word for "distinguished" and refers to the particular appearance of the animal.



Figs. 40–46. *Mesanthura excelsa*, new species. 40, 41, 45, 46, paratype, adult female, 8.4 mm long; 42–44, holotype, adult male, 7.5 mm. 40, pereopod I; 40a, inner side of manus of female pereopod I; 41, pereopod II; 41a, detail of unguis with accessory spine of pereopod II; 41b, detail of spine from distal angle of propodus; 41c, detail of carpus showing small spine on distal margin; 42, pereopod VII; 42a, dactylus of pereopod VII; 42b, detail of scales from inner margin of propodus; 43, pleopod 1; 44, pleopod 2; 44a, tip of copulatory stylet; 45, uropod; 46, telson.

Habitat.—*Mesanthura excelsa* was found among *Ulva* in the littoral zone.

Material Examined.—HOLOTYPE: ♂ 7.5 mm, July, 1979, A. S. Tararam coll., MZSP. PARATYPES: type-locality, 3 ♂, 18 ♀, 24 j, July and December, 1979, A. S. Tararam coll. 6 paratypes in MZSP, 4 paratypes in USNM.

Remarks.—*Mesanthura excelsa* differs from the other species of the genus in many aspects. The most obvious characteristics are: conspicuous color pattern; antenna 1, in males, shorter than antenna 2 with flagellum of few articles. In all other species where males are illustrated antenna 1 is longer than antenna 2 and the flagellum is multiarticulate. The eyes in males of *Mesanthura excelsa* are also smaller than in other described species, except for *M. hieroglyphica* Miller and Menzies, 1952.

Mesanthura callicera, new species
Figs. 47–58

Description.—Male holotype 4.6 mm. Body nearly 12 times longer than wide. Color white or yellow, dark brown bands of pigment dorsally distributed as follows: longitudinal band acutely pointed anteriorly and trilobed posteriorly placed on head; horizontal band near anterior margin of pereonite I; pereonites II and III with two horizontal bands at proximal and distal margins, respectively, united middorsally; pereonites IV–VI with large horizontal band along distal margin; pereonite VII almost brown; pleon with middorsal band with 5 lateral rami arising from each side; uropods and telson with few scattered brown spots. Ventral surface with brown spots. Longitudinal ridge on each sternite.

Head slightly longer than wide, width equals that of pereonite I, frontal margin excavate under antennae 1, rostrum acutely pointed; eyes dark brown and very large, interocular distance equaling diameter of 2 ommatidia.

Pereon with pereonites I, III–VI subequal in length, pereonite II slightly longer than others, pereonite VII nearly $^3/_5$ length of II. Pereonite I slightly narrower than others. Pereonites all nearly of same width.

Pleon twice length and equal in width to pereonite VII. Pleonites 1–5 fused; pleonite 6 free with some setae laterally, distal margin entire, broadly rounded. Telson nearly $^3/_5$ length of pleon, with 2 proximal statocysts, posterior margin rounded bearing 2 short centrally placed plumose setae, followed by 3 long simple setae on each side.

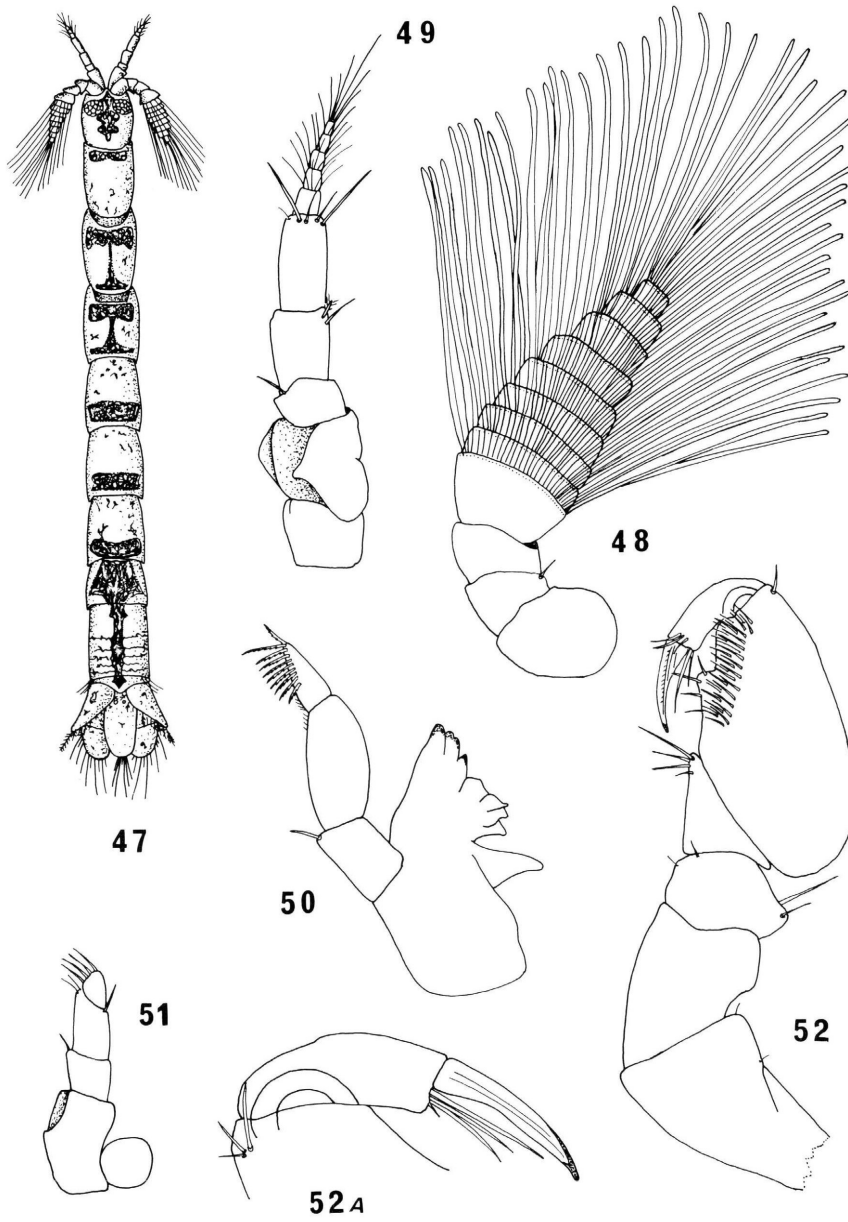
Antenna 1 well-developed with peduncle of 3 segments, first as long as segments 2 and 3 together. Flagellum brushlike with 9 flat articles bearing many very long aesthetascs; basal segment longest, almost 3 times longer than following segment.

Antenna 2 with peduncle of 5 segments, segment 2 broadest with ventral groove, segment 3 half length of segment 5, segment 5 with elongate setae distally placed; flagellum with 5 articles, each with many long setae on distal margin.

Mandibular palp of 3 segments, segments 1 and 3 subequal in length, segment 2 longest, distal segment with 10 serrate setae. Incisor with 3 teeth, lamina dentata with 4 large serrations; molar narrowing distally, distal margin rounded.

Maxilliped small, with 5 segments; segment 2 longest, nearly equal to length of segments 3 and 4 together; distal margin of apical segment rounded bearing 4 elongate setae at outer margin.

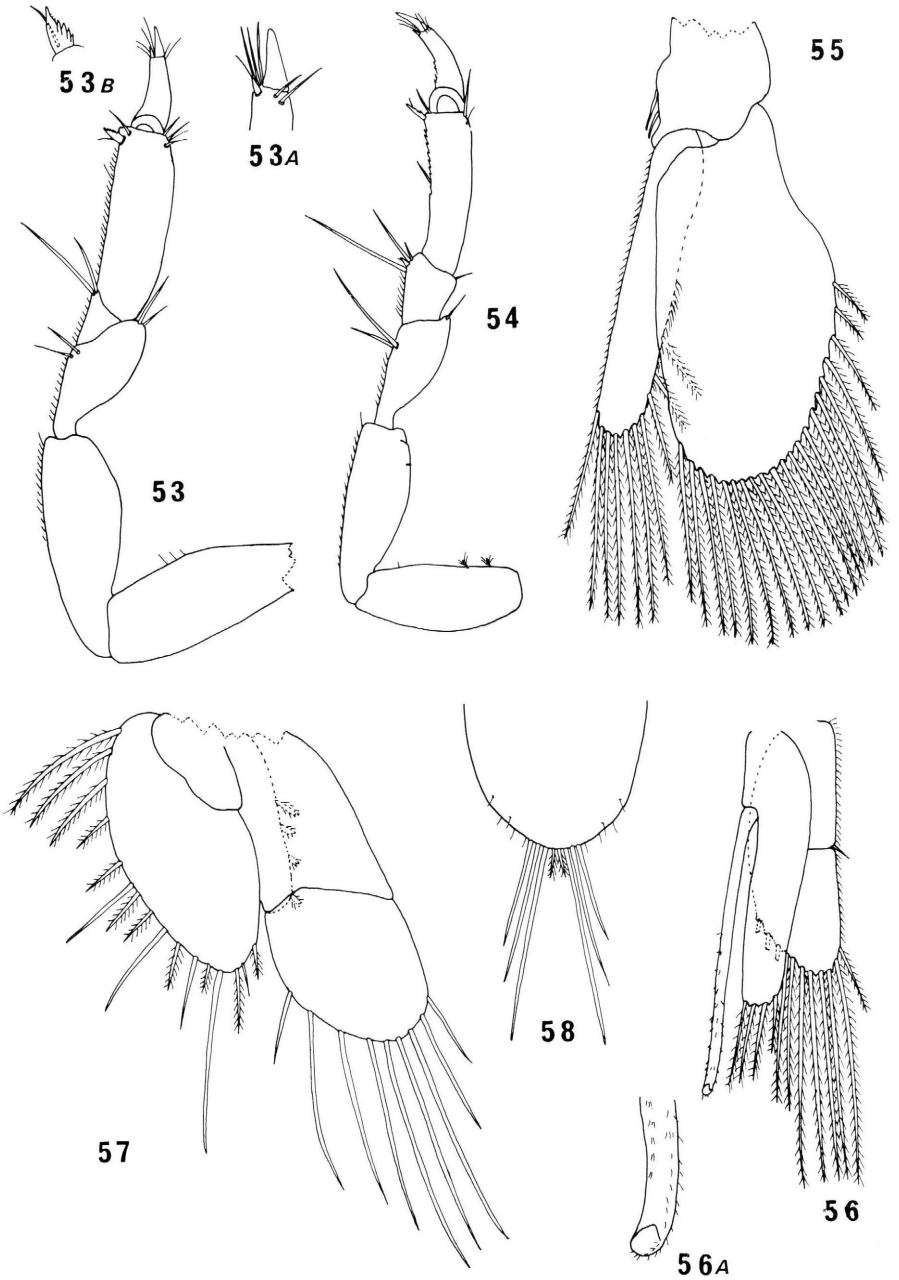
Pereopod I subchelate. Propodus enlarged, inner margin with rounded lobe, dorsal surface bearing longitudinal area densely setose near inner margin, ventral surface bare; dactylus elongate, almost of same length as unguis, distal margin with 3 long and 1 very short setae.



Figs. 47–52. *Mesanthura callicera*, new species, holotype, male, 4.6 mm long. 47, body, dorsal view; 48, antenna 1; 49, antenna 2; 50, left mandible; 51, maxilliped; 52, pereopod 1; 52a, dactylus of pereopod 1.

Pereopods II and III similar. Inner margins of ischium, merus, carpus and propodus setose, with last segment bearing stout sensory spine at distal margin; dactylus 2.5 times longer than unguis, distal margin with setae and one short spine.

Pereopod VII similar to IV, V and VI. Inner margins of ischium, merus and



Figs. 53–58. *Mesanthura callicera*, new species. 53–56, 58, holotype, adult male, 4.6 mm long; 57, paratype, juvenile, 2.1 mm. 53, pereopod II; 53a, detail of dactylus of pereopod II; 53b, detail of spine on inner distal margin of propodus; 54, pereopod VII; 55, pleopod 1; 56, pleopod 2; 56a, tip of copulatory stylet; 57, uropod; 58, telson.

carpus setose, of propodus and dactylus with minute scales; distal margin of carpus with 2 long setae and 1 short sensory spine, distal margin of propodus with 1 stout sensory spine; that of dactylus with 1 small spine; unguis nearly ⅓ length of dactylus.

Pleopod 1 with operculate exopod, 3.5 times wider and somewhat longer than endopod, distal margin with many long plumose setae; endopod with inner margin setose, distal margin with 10 elongate plumose setae.

Pleopod 2 with exopod nearly 2 times wider and somewhat shorter than endopod, distal margin with many plumose setae. Endopod with distal margin with 4 plumose setae; copulatory stylet extending beyond distal margin of endopod, bearing many small setae on lower ⅔ of length, apex rounded and curved upwards.

Uropod with exopod ovate, lateral outer margin and apex bearing many plumose and some simple setae. Endopod reaching apex of telson, distal margin with long setae; basis with inner margin folded ventrally and bearing 4 plumose setae.

Female and juvenile with distinct pigment pattern consisting of large horizontal band on anterior half of head; scattered chromatophores on pereon and pleon both dorsally and ventrally.

Female similar to male, except eyes smaller (interocular distance nearly equal to diameter of 7 ommatidia). Antenna 1 sexually dimorphic, flagellum with 2 segments and several aesthetascs; antenna 2 with flagellum of 4 segments; mandibular palp with 10 setae on apical segment; pereopod I without longitudinal row of setae.

Type-locality.—Praia do Lázaro, Enseada da Fortaleza, Ubatuba, SP.

Distribution.—*Mesanthura callicera* is known only from the type-locality.

Etymology.—The specific name is derived from the Greek "kalos," meaning beautiful, and "keros," meaning horn, and refers to the beautiful antenna 1 of the male.

Habitat.—The species was obtained from *Sargassum* and *Galaxaura* in 4 m depth.

Material Examined.—HOLOTYPE: ♂ 4.6 mm, 14-01-1980, M. Flynn coll., MZSP. PARATYPES: type-locality, 1 j, 14-01-1980, M. Flynn coll.; same locality, 2 ♀, 12-05-1980, M. Flynn coll.; Praia Domingas Dias, Enseada da Fortaleza, Ubatuba, SP, 1 ♀, 11-05-1980, M. Flynn coll. 1 paratype ♀ in USNM.

Remarks.—*Mesanthura callicera* to some extent resembles *M. childi* Kensley, 1979, from the Fiji Islands, mainly in the relatively small length of the body, the longitudinal band of setae on the propodus of the male pereopod I and in the morphology of the copulatory stylet.

It differs, however, from *M. childi* in several characteristics, specifically in body proportions, color pattern, lack of an endite on the maxilliped, morphology of the uropods, setal distribution on the distal margin of telson and proportional length between telson and the uropodal endopod.

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Address: Instituto Oceanográfico, Universidade de São Paulo, C. P. 9075 01000 São Paulo, Brazil.