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AMAKUSANTHURA IBERICA N.SP., FIRST RECORD OF THE GENUS AMAKUSANTHURA IN EUROPE (CRUSTACEA, ISOPODA, ANTHURIDEA)

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CRUSTACEA ISOPODA
ANTHURIDAE
AMAKUSANTHURA IBERICA
NORTH-WESTERN SPAIN

CRUSTACÉS ISOPODES
ANTHURIDAE
AMAKUSANTHURA IBERICA
NORD-OUEST ESPAGNOL

ABSTRACT – *A. iberica*, a new species of the genus *Amakusanthura* Nunomura, 1977, is the first representative of this genus in Europe. It was found in north-western Spain. It is characterized by form and setation of the tail fan. The genus, until now, was known from the Caribbean, the Atlantic coast of North America and from several Indopacific localities, especially from Australia.

RÉSUMÉ – *A. iberica*, nouvelle espèce du genre *Amakusanthura* Nunomura, 1977, est le premier représentant du genre en Europe. Il provient du Nord-Ouest de l'Espagne. Il se caractérise par la forme et la chétotaxie de l'éventail caudal. Jusqu'à maintenant, le genre était connu de la région des Caraïbes, de la Côte Atlantique Nord-Américaine et de diverses localisations indopacifiques, notamment en Australie.

RESULT

Suborder Anthuridea Leach, 1814

Family Anthuridae Leach, 1814

Amakusanthura iberica n. sp.

Holotype : immature adult, 8.2 mm, in the collection of the Departamento de Biología Animal de la Universidad de Santiago de Compostela, Spain.

Type locality : north-west Spain, Ria de Ferrol, 43°23'18" N, 8°15'37" W, 13 m depth, collected on November 12th, 1987.

Paratypes : 1 immature adult, 10.8 mm; 1 immature adult, 9.5 mm; both from type locality.

Diagnosis

Amakusanthura with 3 free pleonites, pleonites 4 and 5 dorsally fused; pleotelson dorsally with 2 pairs of long setae and 4 pairs of setae on apical notch (Fig. 1 : T); uropodal exopod oval, with deep sinuosity on distal lateral margin (Fig. 3 : Urp Ex).

Description of holotype

Body about 10 times longer than wide. Cephalothorax elongate rectangular in dorsal view (Fig. 1), with small dorsolateral eyes. Relative dorsal length of somites : C < 1 = 2 > 3 < 4 < 5 = 6 > 7 = pleon. Relative width of somites : C < 1 < 2 < 3 < 4 = 5 > 6 > 7 > pleon.

The pleon is as long as pleonite 7, with first 3 pleonites separated by sutures, pleonites 4 and 5 only laterally separated by suture lines (Fig. 1).

Antennule (Fig. 1 : A1) with 3 peduncular and 3 flagellar articles. First flagellar article short, ring-like, with 1 feather-like bristle; second article the longest; third article small, bearing 3 aesthetascs and 3 simple setae. Antenna (Fig. 1 : A2) with 5 peduncular articles (article 1 not seen in Fig. 1), 3 short flagellar articles; last article bearing about 20 simple setae.

Mandible (Fig. 1 : Md) with short, blunt *pars molaris*, lamina dentata notched, but not distinctly serrated; *pars incisiva* with 3 teeth; palp of 3 articles, last article shortest, with 5 apical simple setae. First maxilla lost during preparation (there is little interspecific variation in this appendage). Maxilliped (Fig. 1 : Mxp) composed of 4 articles

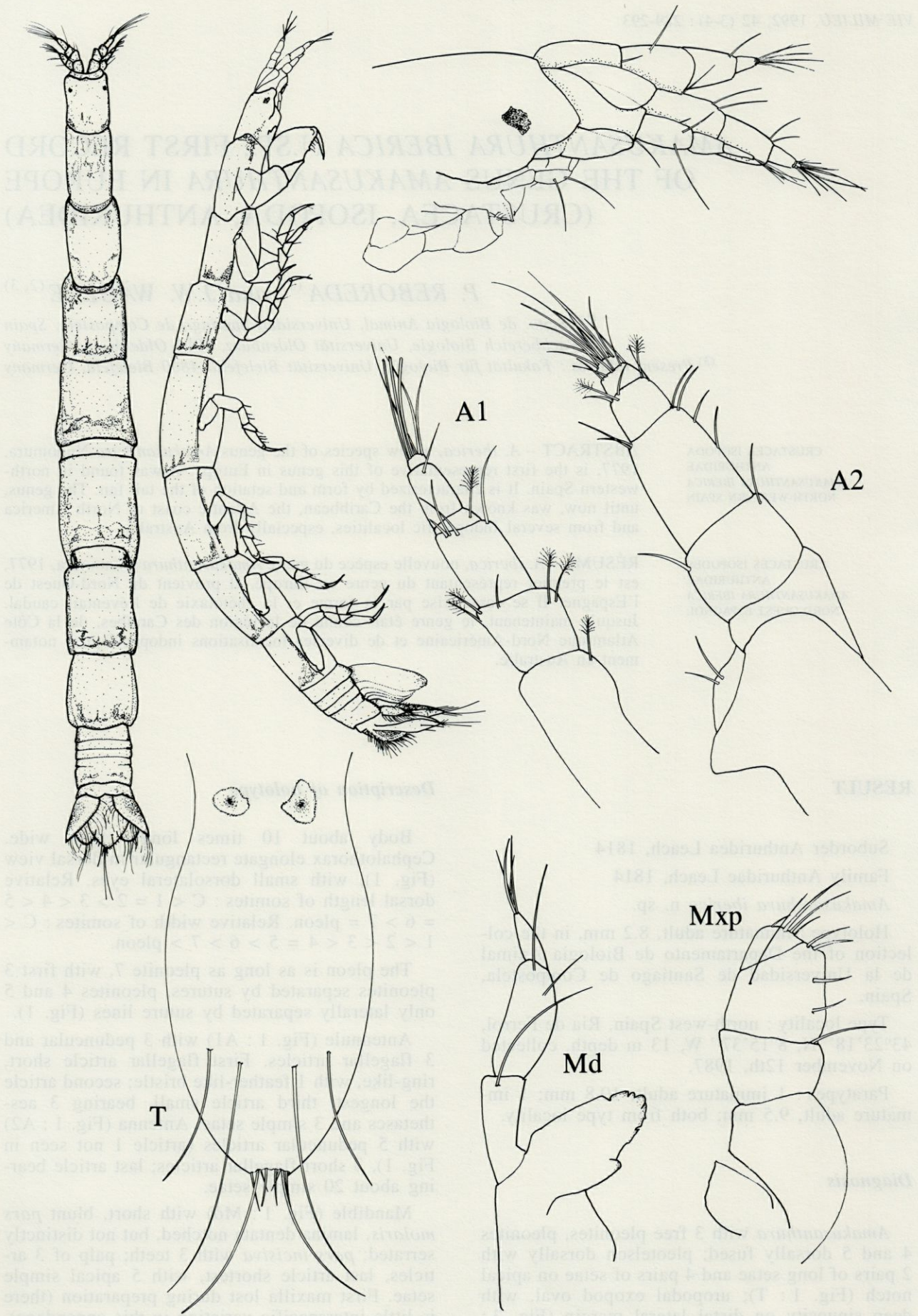


Fig. 1. — *Amakusanthura iberica* n. sp., 8.2 mm holotype (immature adult) in dorsal and lateral view, cephalothorax in lateral view, antennae (A1, A2), mouthparts (Md, Mxp) and pleotelson (T), with 2 proximal statocysts.

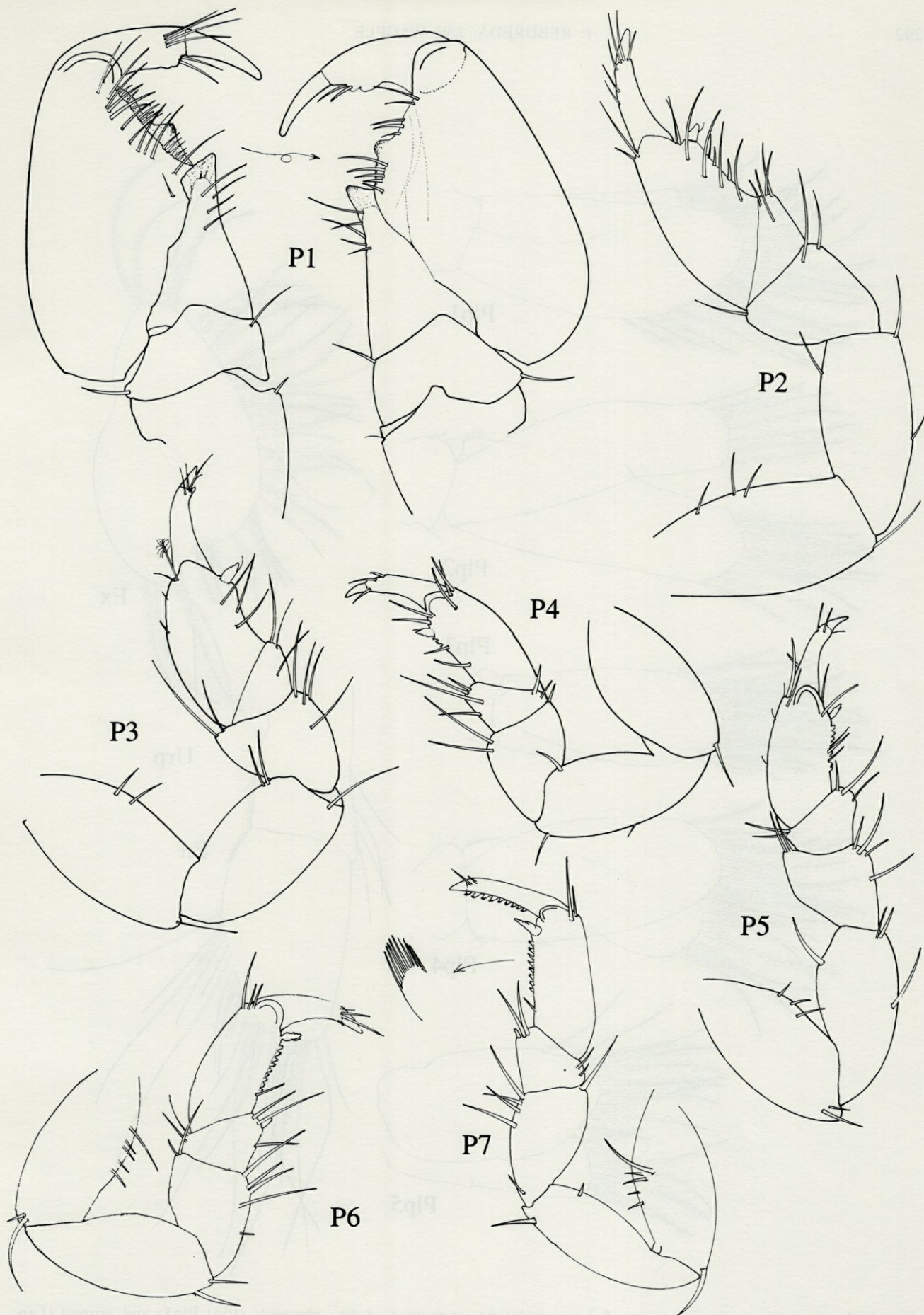


Fig. 2. — *Amakusanthura iberica* n. sp., 8.2 mm holotype (immature adult) : pereopods (P1-P7); pereopod 1 : only distal articles shown, in 2 views.

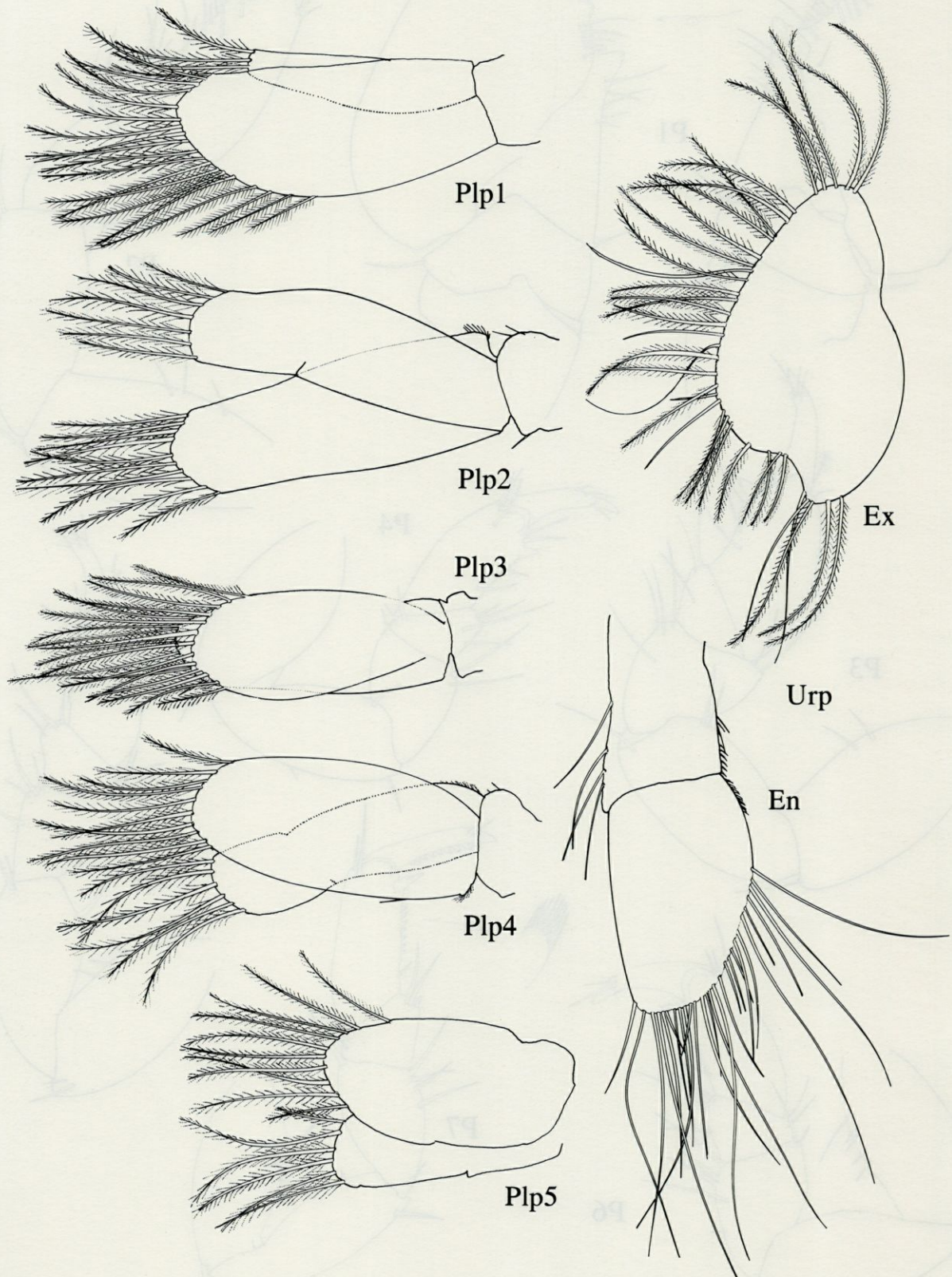


Fig. 3. *Amakusanthura iberica* n. sp., 8.2 mm holotype (immature adult) : pleopods (Plp1-Plp5) and uropod (Urp; Ex : exopod; En : endopod).

and a short epipod; third article bearing 1 long lateral seta on ventral surface and 4 setae on medial margin; last article shortest, subtriangular, with 4 apical setae.

Pereopod 1 (Fig. 2 : P1) subchelate, carpus with pointed distoventral edge, propodus broad oval, with distinct tooth in the center of palm, setation as in Fig. 1; length of claw about 1/3 of length of dactylus. Pereopods 2 and 3 (Fig. 2 : P2, P3) subsimilar, with relatively short merus, subtriangular carpus, elongate, bean-shaped propodus; 1 sensory spine distally on propodal palm; dactylus distally with 1 strong and 1 tiny claw. Pereopods 4 to 7 (Fig. 2 : P4-P7) somewhat more slender than anterior pereopods; articles subsimilar to those of anterior pereopods, but carpus trapezoidal, not subtriangular, propodus with slightly concave or straight palm, bearing small cuticular scales (Fig. 2). First pleopod (Fig. 3 : Plp1) with enlarged operculiform exopod and much narrower and shorter endopod; exopod with about 20, endopod with 4 swimming setae on distal margin. Pleopods 2 to 5 (Fig. 3 : Plp2-5) smaller than pleopod 1, setation as in Fig. 3. Pleotelson (Fig. 1 : T) long oval, broadest at half of length, about 2.2 times longer than wide, dorsally convex, margins proximally concave in area of the pair of statocysts, more distally convex, apex with shallow notch; median lateral margin with short cuticular hairs. Dorsally 2 pairs of very long setae (Fig. 1) and 8 setae inserting in apical notch. Uropods (Fig. 3 : Urp) with marginal simple and plumose setae; endopod (En) longer than wide and about as long as sympod; exopod (Ex) ovate; 1.5 times longer than wide, distolateral margin with deep sinuosity (Fig. 3).

DISCUSSION

The genus *Amakusanthura* was erected by Nunomura (1977) for a species (*A. longiantennata*) where all pleonites are dorsally fused. The original descriptions did not allow a comparison with other species of the *Apanthurra*-group. Of the latter all those with dorsally fused pleonites 4 and 5 and a maxilliped without endite were placed in the genus *Apanthuretta* by Wägele (1981). Poore & Lew Ton (1988) examined the type species of

Amakusanthura and in a study of 13 new species from Australia, they came to the conclusion that the genus *Apanthuretta* (Wägele, 1981) must be synonymized with *Amakusanthura* (Nunomura, 1977). In their new diagnosis Poore & Lew Ton (1988 : 108) state that the maxilliped bears an acute endite with a terminal seta, as in species of the genus *Apanthura*, but unfortunately they do not show the mouthparts of a single of the 13 new species. The maxillipedal endite is absent in *Amakusanthura iberica* n. sp. as well as in other species of « *Apanthuretta* » (Wägele, 1981); it is present in some species described earlier by Poore & Lew Ton (1985). Some characters that remain to uphold the genus *Amakusanthura* and that are visible in the new species are the pleon, which is longer than wide, and the dorsal fusion of at least pleonites 4 and 5.

In comparison with other species of the genus, *A. iberica* n. sp. has a typical setation of the pleotelson (Fig. 1 : T), also the outline of the uropodal exopod (Fig. 3 : Ex) is not seen in other species. The genus was not known until now from any European coast; it seems to be absent in the Mediterranean; the majority of species occurs in Australia, further localities are Japan, the Red Sea, the Caribbean and the east coast of North America.

REFERENCES

- NUNOMURA N., 1977. Marine Isopoda from Amakusa, Kyushu (I). *Publ. Amakusa Mar. Biol. Lab.* **4** : 71-90.
- POORE G.C.B. & H.M. LEW TON, 1985. *Apanthura*, *Apanthuretta* and *Apanthuropsis* gen-nov. (Crustacea : Isopoda : Anthuridae) from south-eastern Australia. *Mem. Mus. Victoria* **46** : 103-151.
- POORE G.C.B., H.M. LEW TON, 1988. *Amakusanthura* and *Apanthura* (Crustacea : Isopoda : Anthuridae) with new species from tropical Australia. *Mem. Mus. Victoria* **49** : 107-147.
- WAGELE J.W., 1981. Study of the Anthuridae (Crustacea : Isopoda : Anthuridae) from the Mediterranean and the Red Sea. *Isr. J. Zool.* **30** : 113-159.

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