

ON *APANTHURETTA LATHRIDIA* N. SP. (CRUSTACEA, ISOPODA, ANTHURIDEA) FROM CUBA

by

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ABSTRACT

Apanthuretta lathridia n. sp. (Crustacea: Isopoda: Anthuridea), the fifth species of the genus *Apanthuretta* Wägele, described from interstitial water of a Cuban beach. A high number of morphological similarities with *Apanthuretta pori* Wägele (Red Sea) is noted.

ZUSAMMENFASSUNG

Apanthuretta lathridia sp. n. (Crustacea: Isopoda: Anthuridea), die fünfte Art der Gattung *Apanthuretta* Wägele, wird aus interstitiellem Wasser eines kubanischen Strandes beschrieben. Eine hohe Zahl von morphologischen Übereinstimmungen mit *Apanthuretta pori* Wägele (Rotes Meer) konnte festgestellt werden.

INTRODUCTION

An astonishing number of Crustacea has been discovered in the hypogean waters of the Caribbean area, among them various isopods. Isopoda Anthuridea are known from this area mostly from marine and cave habitats (*Cyathura curassavica* Stork, 1940; *C. specus* Bowman, 1965) but also from the interstitial water of beaches (*Curassanthura* Kensley, 1981). The present species was discovered in the interstitial water of a Cuban beach and it is the first species of the genus *Apanthuretta* Wägele to be found in such a habitat: up to now only three marine Caribbean species of this genus and one species from the Red Sea were known (Wägele, in press).

LIST OF ABBREVIATIONS

A 1	antenna 1	P 1-7	pereopods 1-7
A 2	antenna 2	Plp 1-5	pleopods 1-5
Hy	hypopharynx	Tel	telson
Md	mandible	UEx	exopod of uropod
Mx	maxilla 1	UEn	endopod of uropod
Mxp	maxilliped	ZMA	Zoölogisch Museum Amsterdam

SYSTEMATICS

Holotype: non-reproductive adult, 2.7 mm, ZMA. Locus typicus: Cuba, Playa Siboney not far from Santiago de Cuba, on the shores of the Caribbean Sea, in interstitial water (temperature: 28° C) of a beach of coarse sand. Holes were dug in the sand, just above the water line, and interstitial water filling the holes was filtered through a net, enabling the collection of a very rich interstitial fauna (leg. L. Botosaneanu, 15.II.1973).

Description of the holotype. — Cephalothorax quadratic in dorsal view; small lateral eyes present. Relative length of pereonites: $1 \geq 2 > 3 < 4 = 5 > 6 > 7$. Pleon somewhat longer than pereonite 7 (fig. 1), pleonites 4 + 5 fused dorsally, the other sutures visible in dorsal view. Dorsal surface of pleon and pereon bearing no chromatophores. Flagellum of A 1 (fig. 2) 3-segmented; first article short, with 1 feather-like bristle, second article longer, third article small, with 3 aesthetascs and several (8) setae. Flagellum of A 2 short, with 3 articles bearing many short setae. Md with 3-segmented palp, last article short, with 3 setae. Pars incisiva with three notches, lamina dentata indistinctly serrated, pars molaris prominent. Lateral endite of Mx with 7 distal spine-like teeth, medial endite short, with 1 seta. Hy see fig. 2. Mxp (fig. 1) 4-segmented; last article fused with the third (fusion line visible), bearing 5 distal setae. P 1 (fig. 2) subchelate, propodus with a blade-like palm that ends distally with an angular projection, palm bearing 4 setae; medial side of propodus with 4 setae; claw longer than dactylus. P 2 and P 3 not subchelate, propodus long oval, palm bearing a medial stout seta and a distal sensory spine, medial side with 3 setae

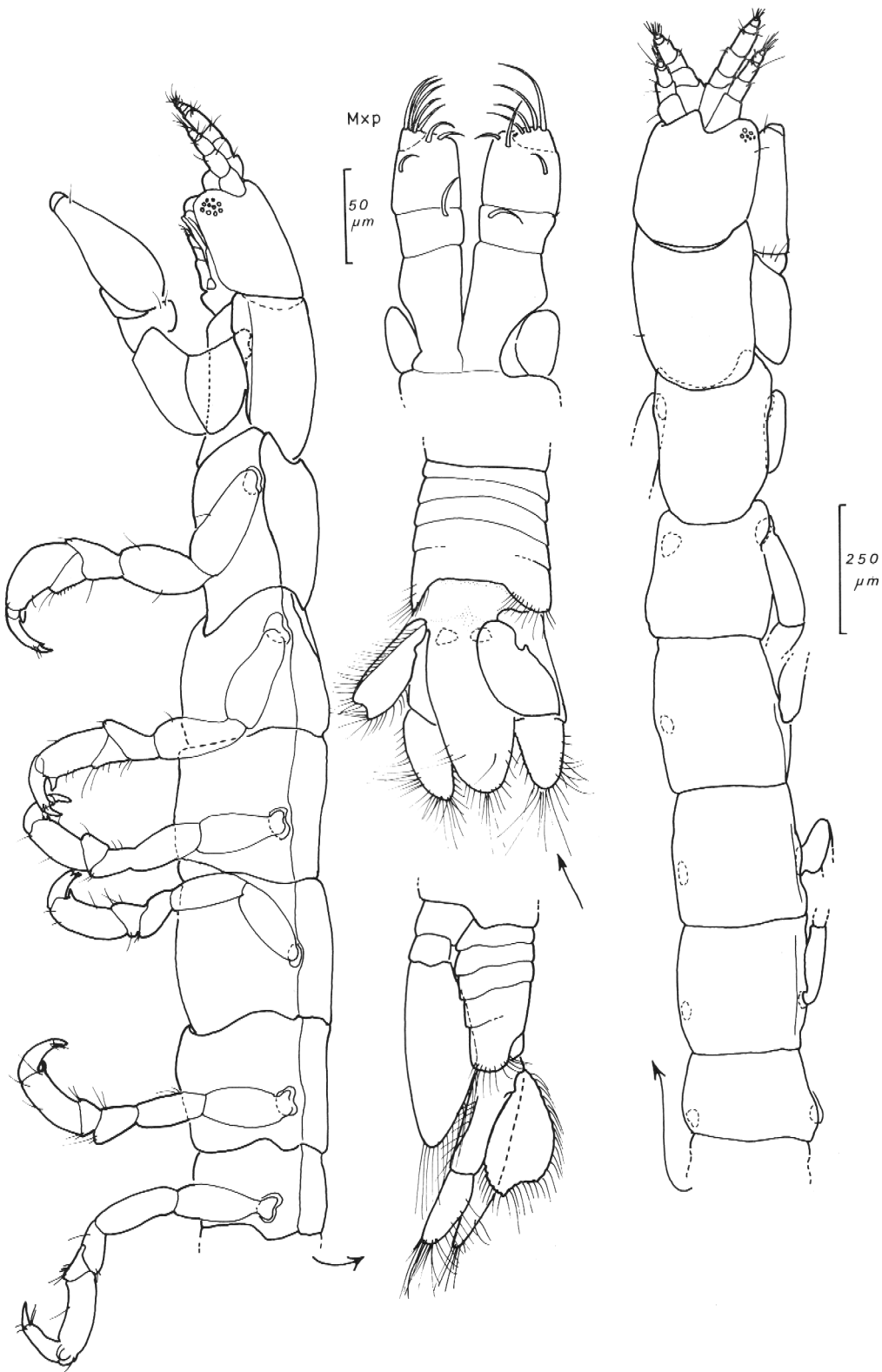


Fig. 1. *Apantchuretta lathridia* n. sp., non-reproductive adult, holotype, in dorsal and lateral view.

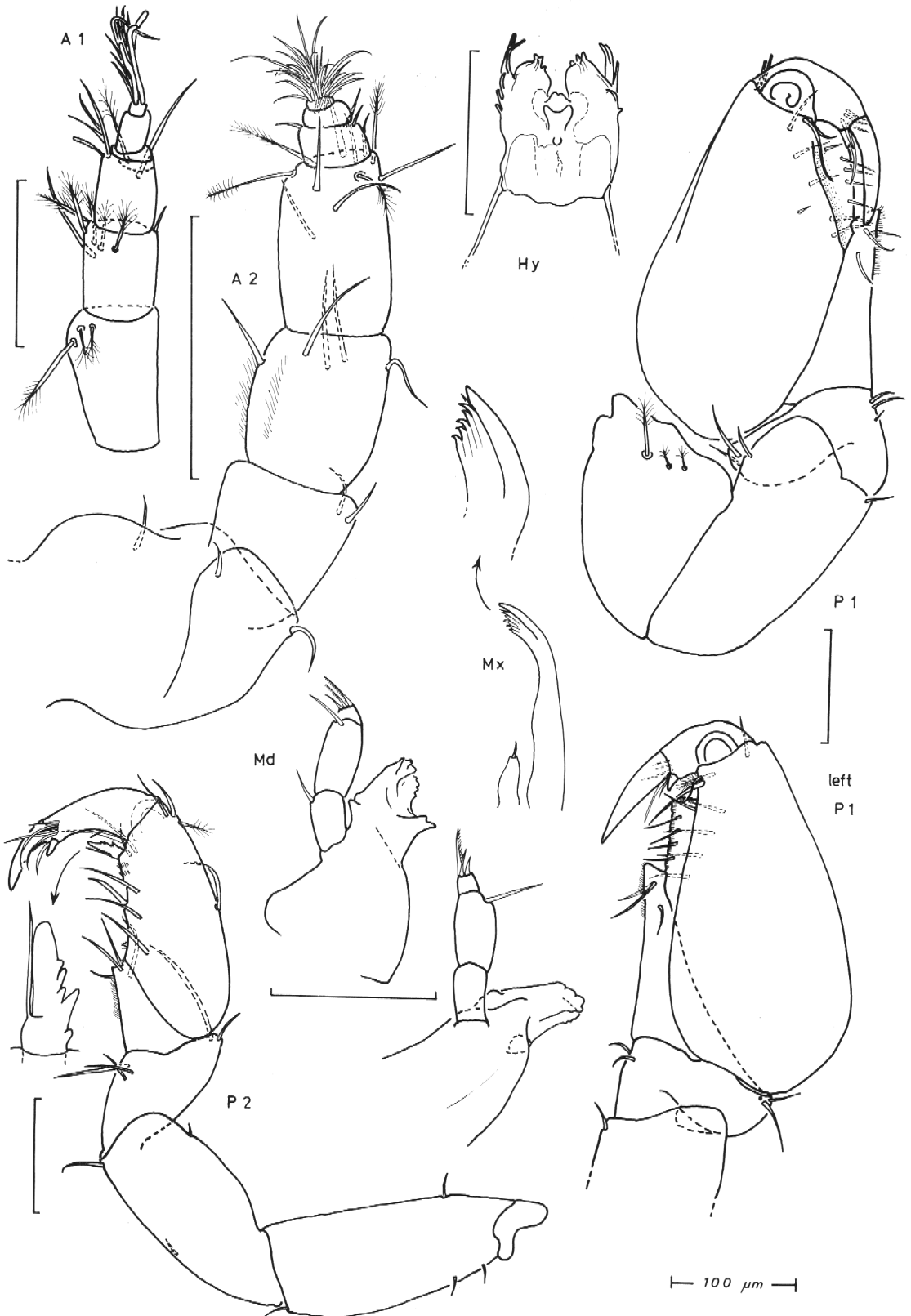


Fig. 2. *Apantburetta latbridia* n. sp., holotype.

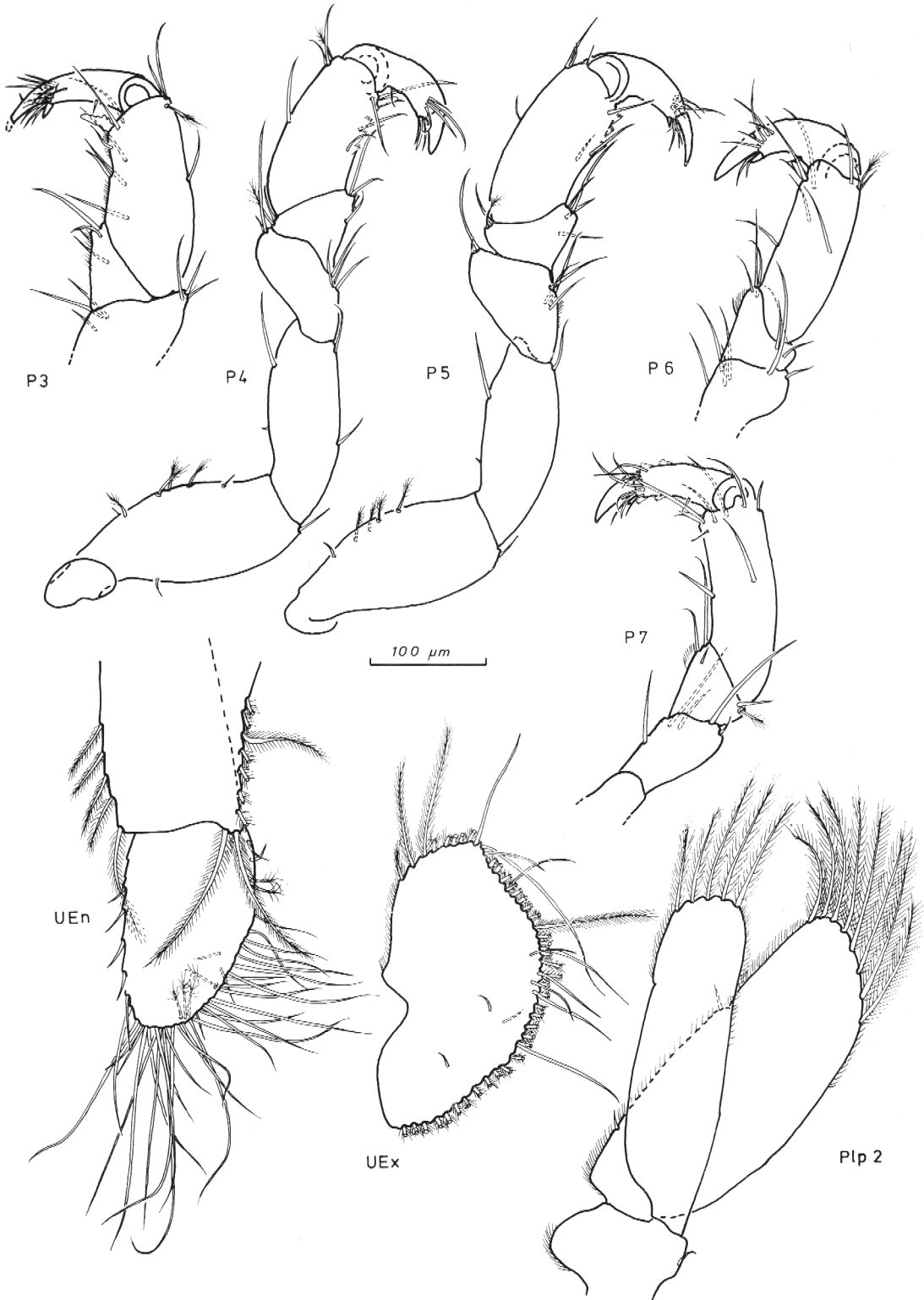


Fig. 3. *Apantburettetta lathridia* n. sp., holotype. Some plumose setae of UEn and UEx cut off.

(figs. 2, 3). Carpus of P 4-P 7 short, trapezoidal, propodus long oval, setation see fig. 3. Plp 1 operculiform, exopod with 29, endopod with 6 swimming setae (fig. 4). Exopod of Plp 2 with 8, endopod with 5 swimming setae (fig. 3). Uropods not surpassing telson, UEx (fig. 3) oval with slight distal concavity on outer margin, UEn shorter than sympod, longly oval, setation see fig. 3. Telson dorsally slightly convex, with 2 statocysts, distal margin with 4 pairs of setae (fig. 4).

REMARKS

Many descriptions of species of isopods are incomplete, "like badly preserved fossils" *: Science only knows the structure of some parts of the animals, the parts varying from author to author. The taxonomist then has severe difficulties in finding the generic features in such a group of

* Expression due to Prof. H. K. Schminke, Oldenburg.

species, a task that per se is not easy. Such a "difficult" genus is *Apanthura* Stebbing, 1900. The genus *Apanthuretta* Wägele (in press) is very similar to *Apanthura* in the form and setation of antennae, maxillipeds, pereopods and telson. *Apanthuretta* is distinguished by the fusion of pleonites 4 + 5 (suture line not visible) and the lacking endite of the Mxp. Other and better generic features are not known, as most of the descriptions are incomplete. In this situation the discovery of another species with the same generic features supports the supposition, that these species must have an own history in comparison with the *Apanthura*-group.

Comparing *Apanthuretta latbridia* n. sp. with the type species *A. pori* Wägele (in press) a conformity in setation is found. The blind *A. pori* has longer antennae. The Mxp are nearly identical, the fusion line between the articles 3 and 4 is less distinct in *A. latbridia* n. sp. The mandibular palp of *A. pori* has only 2 setae. Both species have 3 aesthetasc-like growths on the lateral lobes of

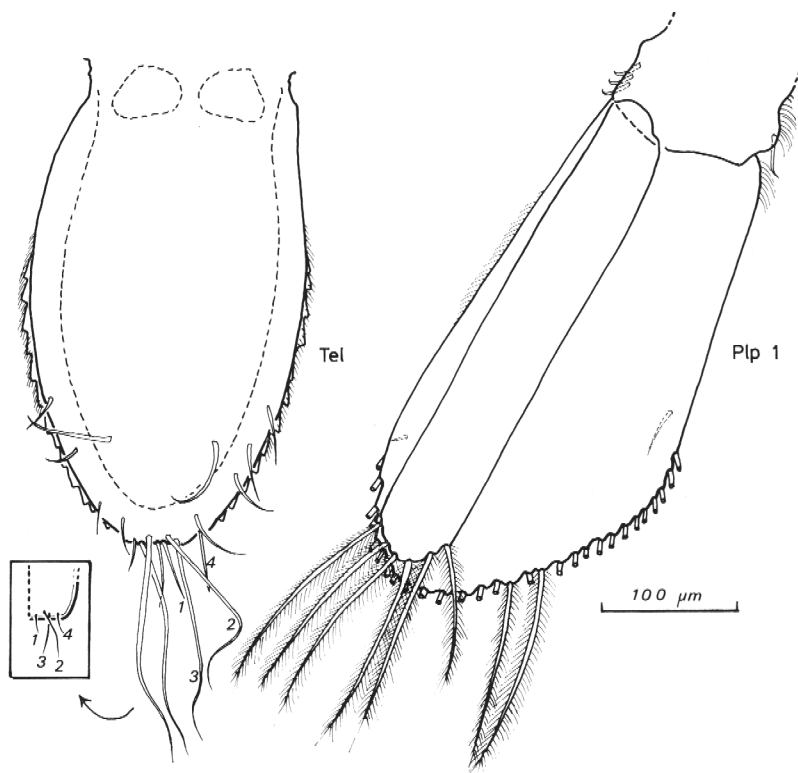


Fig. 4. *Apanthuretta latbridia* n. sp., holotype. Some swimming setae of Plp 1 cut off.

the Hy, the palm of P 1 has the same contour in the non-reproductive adult. The juvenile of *A. pori* has no distal projection on the palm. *A. pori* has no medial stout seta on the palm of P 2 and P 3. Though being less than half as long as *A. pori*, *A. latbridia* n. sp. has nearly the same number of setae on the pleopods. The telson of *A. pori* has only 3 distal pairs of setae.

The other species of *Apanthuretta* are difficult to compare. All of them have eyes; *A. signata* (Menzies & Glynn, 1968) has dorsal chromatophores. The projection on the palm of P 1 of *A. magnifica* (Menzies & Frankenberg, 1966) is situated more proximally, males have an acute tooth (Menzies & Frankenberg, 1966; Kensley, 1980). The descriptions of the setation of the Mxp are variable, but the third article always has an additional medial seta. Kensley (1980) found on a SEM picture an endite of the Mxp, but no direct connection of the endite with the basipodite is visible (the endite resembles very much the medial endite of the Mx, which is connected with the Mxp by the medioventral sclerite (Scheloske, 1977)); it remains uncertain whether some species of *Apanthuretta* still have an endite of the Mxp. The P 2 of *A. magnifica* has more setae (Schultz, 1979) than in *A. latbridia* n. sp. The telson of *A. magnifica* seems to bear many long setae (Kruczynski & Myers, 1976; Schultz, 1979). *A. signata* (Paul & Menzies, 1971) has no marked projection on the palm of P 1, the palp of the Md has 2 long setae on the second article. The P 1 of *A. signata* (Menzies & Glynn, 1968) is similar to that of *A. latbridia* n. sp., the Mxp has more setae.

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