

THE
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EDITED BY

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DESCRIPTION OF A NEW SPECIES OF
MARINE ISOPODA OF THE GENUS *PENTIAS*,
RICHARDSON.

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WITH PLATE III.

THE genus *Pentias* was founded by Miss Richardson,¹ in 1904, for the reception of a Japanese species of Isopoda belonging to the family Idoteidae, characterized by the following structural features:—

The flagellum of the antenna consists of six short joints, the maxillipede has a five-jointed palp, and the metasome is composed of a single segment.

In describing the type, *P. hayi*, the authoress remarks that the "genus differs from all other known genera of Idoteidae except *Glyptidotea*, Stebbing, and *Crabyzos* in having the maxillipedes with a five-jointed palp." This feature, however, is common to the genus *Zenobiana*, Stebbing,² and is since known to occur in *Mesidotea*, Richardson, *Pentidotea*, Richardson, *Cleantiella*, Richardson, and *Engidotea*, Barnard.

For the opportunity to examine the species here described, and many other members of the Idoteidae in the collection of University College, Dundee, I am indebted to the kindness of Professor D'Arcy W. Thompson, C.B., whose name I have pleasure in associating with the present new species as a slight acknowledgment of his many kindnesses.

***Pentias thompsoni*, n. sp.**

Pl. III, figs. 1—10.

Body oblong ovate, mesosome wider than the metasome, convex dorsally. Cephalon (fig. 1) wider than long, and wider anteriorly than posteriorly; anterior margin curved inwards, surface rough. Eyes much wider than long, situated laterally in front of the transverse median line. Antennulae (fig. 2) short, 1st joint widely expanded, 2nd and 3rd

¹Proc. U.S. Nat. Mus., 1904, vol. xxvii, p. 47, 2 figs.

²Miss Richardson's statement that *Z. occidentalis* (Richardson) and *Z. heathi* (Richardson) have 4-jointed palps requires confirmation. (Bull. No. 54, U.S. Nat. Mus., 1905, pp. 406, 407).

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joints small; flagellum a short, oval, single joint. Antennae (fig. 3) comparatively short, 1st joint very small, 2nd stout, 3rd small, 4th and 5th longer and wider distally; flagellum with six short joints. First maxillae (fig. 4), outer lobe with eleven stout, curved, terminal spines, arranged in four rows, setaceous on the inner side; inner lobe with three setose spines, and setule on the distal outer border; setaceous on the inner side. Maxillipedes (fig. 5) elongate, with 5-jointed palp, basal plate short, epipodite short and wide, divisions of the coxopodite large. The segments of the mesosome (fig. 6) more or less subequal, pleural plates of the 1st extending forwards and partly flanking the cephalon, anteriorly they are bluntly pointed, posteriorly cut away and overlapping the 2nd segment. Coxal plates small, occupying the anterior marginal half of segments 2—7; each plate anteriorly extends beyond the segment. Appendages of the mesosome (figs. 7 and 8) somewhat slender, 2nd to 4th short, 5th to 8th much longer. Metasome (fig. 9) composed of a single segment and two lateral sutures indicating coalesced ones, in addition to a third suture extending across the metasome; terminal segment gradually widening until posteriorly the lateral margins are produced as blunt points, beyond which the posterior margin slopes acutely, terminating as a blunt point. Uropoda (fig. 10) short, inner margin straight, outer margin curved in slightly and narrower anteriorly than posteriorly; endopodite somewhat triangular in shape, setose style short.

Length, 19.5 mm. Colour (in alcohol), deep rusty brown.

Habitat.—Yokohama, Japan.

Type.—In the Museum of University College, Dundee.

Remarks.—*P. thompsoni* differs from *P. hayi* in its wider and more robust mesosome, in the shape of the cephalon and 1st mesosomatic segment, in the development of the coxal plates, the form of the maxillipede, and in the expanded form of the metasome.

The form of the antennulae and antennae are quite unlike those of any other genus of the family. In the outer lobe of the 1st maxillae the terminal spines are arranged in rows; in the first two rows there are three spines in each, in the third row there are also three, but not so symmetrically placed, whilst the fourth and outermost row has only two spines.

The maxillipedes are elongated, with the 5-jointed palp fully half again as long as the basal plate. The divisions of the coxopodite are comparatively large. I cannot help but think that Miss Richardson's figure¹ of the maxillipede of *P. hayi* is incorrect.

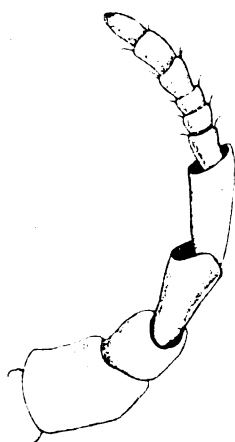
¹ *Op. cit.*, p. 48, fig. 25.



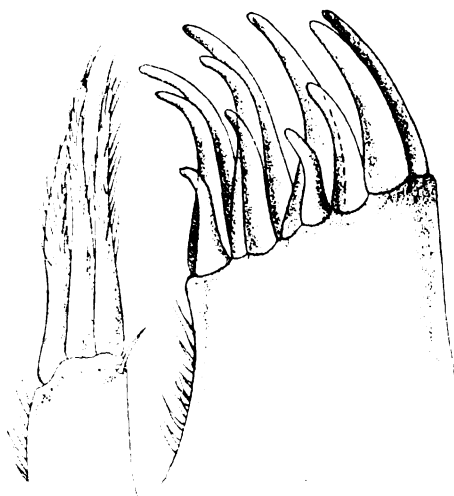
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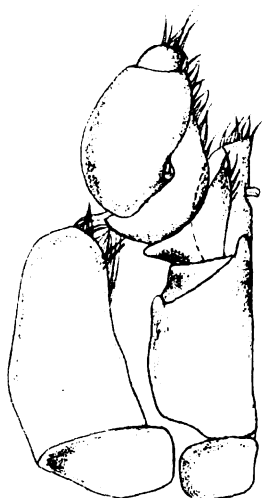
2 x 18.



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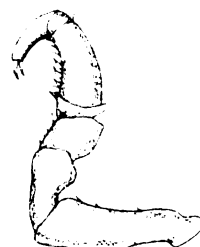
4 x 95.



5 x 30.



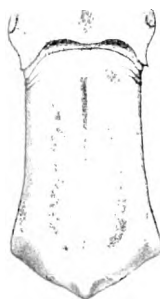
6 x 10.



7 x 10.



8 x 7.



9 x 5.



10 x 6.

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PENTIAS THOMPSONI, n. sp.

The coxal plates are visible dorsally on all the segments of the mesosome excepting the first, and occupy the anterior half only of each segment. In *P. hayi* they are largest on the 6th and 7th segments, where they occupy the whole of the lateral margin. In *P. thompsoni* they are largest on the 2nd and 3rd segments, becoming smaller posteriorly.

The metasome is rather narrower than the mesosome, and is composed of a single segment with a transverse suture passing from side to side. At first sight this has the appearance of a second segment, but I have fully satisfied myself that this line is quite superficial; there are also two lateral sutures at the commencement of the terminal segment.

DESCRIPTION OF PLATE III.

Illustrating Mr. Walter E. Collinge's paper, "Description of a new Species of Marine Isopoda of the Genus *Pentias*, Richardson."

***Pentias thompsoni*, n. sp.**

- Fig. 1. Dorsal view of the cephalon. $\times 6$.
- Fig. 2. Dorsal view of the left antennule. $\times 18$.
- Fig. 3. Dorsal view of the left antenna. $\times 9$.
- Fig. 4. Ventral side of the terminal portions of the inner and outer lobes of the left 1st maxilla. $\times 95$.
- Fig. 5. Ventral side of the right maxilliped. $\times 30$.
- Fig. 6. Dorsal view of the lateral portions of the mesosomatic segments, showing the coxal plates. $\times 10$.
- Fig. 7. Ventral view of the 2nd thoracic appendage. $\times 10$.
- Fig. 8. Ventral view of the 8th thoracic appendage. $\times 6$.
- Fig. 9. Dorsal view of the metasome. $\times 5$.
- Fig. 10. Left uropod. $\times 7$.