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EDITED BY

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DESCRIPTION OF A NEW SPECIES OF ISOPODA OF
THE GENUS *PARIDOTEA*, STEBBING.

BY **WALTER E. COLLINGE, D.Sc., F.L.S.,**

Carnegie Fellow, and Research Fellow of the University of St. Andrews.

WITH PLATE VI.

FOR the opportunity to examine the species here described I am indebted to the kindness of Mr. W. H. Baker, F.L.S., of Adelaide, who some short time ago sent me a number of specimens of Isopoda belonging to the family Idoteidae from South Australia, amongst these there are three specimens which differ from any described species.

Casually examining them they might very easily be mistaken for small examples of the *Idotea peronii* of Milne Edwards, but a more careful scrutiny shows that there are a number of striking structural characters which easily separate them from that species. These differences occur in the form of the cephalon, antennulae, the first maxillae, the maxillipedes, the metasome, and in the general shape of the mesosomatic segments, all of which are precisely similar in both male and female specimens. I emphasise this, as Dr. Hansen¹ has recently stated that the mouth parts differ somewhat in the two sexes.

In one or two characters the species here described differs from the Genus *Paridotea*, Stebbing, but they are not such as to warrant the erection of a new genus for this species.

The genus *Paridotea* was described by Stebbing² in 1900 with the *Idotea unguolata* (Pallas) as the type. Later Barnard³ added three species from South Africa, viz., *P. reticulata*, *P. rubra*, and *P. fucicola*. The last mentioned in its linear form hardly agrees with the other species of the genus. Barnard (*op. cit.*, p. 429) suggests that it is allied to the *Idotea elongata*, in which case it belongs to the genus *Crabyzos*, Spence Bate.⁴ I hope to deal with this species in detail in a later paper treating of the genus *Crabyzos*.

I have much pleasure in associating with this interesting new species the name of Mr. W. H. Baker, F.L.S.

¹ Danish *Ingolf-Exped.*, 1916, vol. iii, pt. 5, p. 185.

² Mar. Inv. Sth. Afr., 1900, vol. i, p. 52.

³ Ann. Sth. Afr. Mus., 1914, vol. x, p. 429.

⁴ Proc. Zool. Soc. Lond., 1863, p. 504.

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***Paridotea bakeri*, n. sp.**

Pl. VI, figs. 1-8.

Body (fig. 1) oblong, with almost parallel sides, along the mid-dorsal line of both meso- and metasome is a strong keel, with slightly depressed areas laterally on each of the mesosomatic segments. Cephalon (fig. 1) rather more than twice as wide as long, anterior margin slightly excavate, lateral lobes prominent; dorsally strongly convex, with a deep transverse furrow posteriorly. Eyes of median size, oval, situated dorso-laterally at the outer side of the lateral cephalic lobe. Antennulae (fig. 2) with 1st joint expanded, globose, 2nd joint short and much smaller, 3rd joint elongated and wider distally; flagellum composed of a single joint, robust, and dorsally sharply angulated. Antennae (fig. 1) robust, 1st joint small, 2nd and 3rd short, but somewhat expanded, especially the former, 4th and 5th joints almost subequal and more elongated; flagellum with 11 joints and small terminal style. First maxillae (fig. 4), outer lobe with 12 stout curved spines, inner lobe with 4 setose spines, the innermost one being shorter than the outer three. Maxillipedes (fig. 5) elongated, the two divisions of the coxopodite normal, inner and outer margins of the basipodite almost parallel, distal inner lobe wide and extending slightly beyond the 3rd joint of the palp, terminally with 18 setose spines, palp 5-jointed, almost twice the length of the basipodite, 1st joint short, 2nd joint cup-shaped and expanded anteriorly on the inner side, 3rd joint large and expanded on both anterior margins, 4th joint twice the length of the 3rd, wide, but narrowing at its base, 5th joint conical and over half the length of the 4th joint; excepting the 1st joint all are setose on their inner margins. Epipodite wider than the basipodite, and extending as far as the middle of the 3rd joint of the palp, slightly incurved on the inner margin, terminal margin truncate. The segments of the mesosome are sharply keeled, especially 1 to 3, and excepting the 1st and last subequal; pleural plates of the 1st segment extending forwards and terminating in a blunt point just behind the eye. Coxal plates small, those on segment 2 situated at the anterior lateral margin, on 3 and 4 slightly more posteriorly, on 5 occupying almost the middle, and on 6 and 7 the posterior two-thirds, with their posterior angles rounded. The sterna of all the mesosomatic segments have on their anterior margins a series—14 to 17—of short, blunt, papillous spines (figs. 6 and 7). Thoracic appendages normal, first three pairs directed forward, remainder backward. Metasome (fig. 1) composed of a single segment, and three short, well-defined sutures at the base; terminal segment keeled, lateral margins almost parallel, diverging outwardly very

slightly posteriorly, and then terminating in a wide obtuse point. Uropoda (fig. 8) strongly convex, with wide margin on the inner border of the basal plate, anterior border sloping towards the hinge, outer border somewhat wider posteriorly; exopodite proximally slightly narrower than the basal plate, inner margin almost straight, posteriorly angulated, setose, and terminating in a blunt point, outer border extending outwards from the distal to the proximal end.

Length, 20 mm. Colour (in alcohol), brownish-grey, with yellow mottling on the pleural and coxal plates, appendages yellow.

Habitat.—Adelaide, South Australia (W. H. Baker).

As previously remarked, this interesting species somewhat resembles in external appearance the *Idotea peronii* of Milne Edwards, which has been placed by Stebbing¹ in the genus *Paridotea*, but as I have elsewhere shown² *I. peronii* has only four joints in the palp of the maxillipede, whereas all the members of the genus *Paridotea* have five. I have therefore removed it to a new genus.

In *P. bakeri* the lateral cephalic lobes extend forward to a greater degree than in any other member of the genus. The peculiar short terminal style of the antenna is also very characteristic. This species agrees with *P. unguolata* (Pallas) in possessing four setose spines on the inner lobe of the first maxilla.

Both the mesosome and metasome are strongly keeled. The anterior margin of the sterna of all the mesosomatic segments have a number (14 to 17) of short, blunt, papillous spines (Pl. VI, figs. 6 and 7), a feature I have not met with in any other species of the family. These were present in both male and female specimens.

The first suture of the metasome is entirely hidden, and the second almost so, by the overlapping coxal plate of the last segment of the mesosome.

The uropoda are strongly convex, a wide margin rising from the inner border of the basal plate and forming its apex near to the anterior border. The point of attachment or hinge is rather more anterior than usual.

EXPLANATION OF PLATE VI.

Illustrating Dr. Walter E. Collinge's paper, "Description of a new Species of Isopoda of the genus *Paridotea*, Stebbing.

***Paridotea bakeri*, n. sp.**

Fig. 1. Dorsal view of ♂ specimen. × 4.

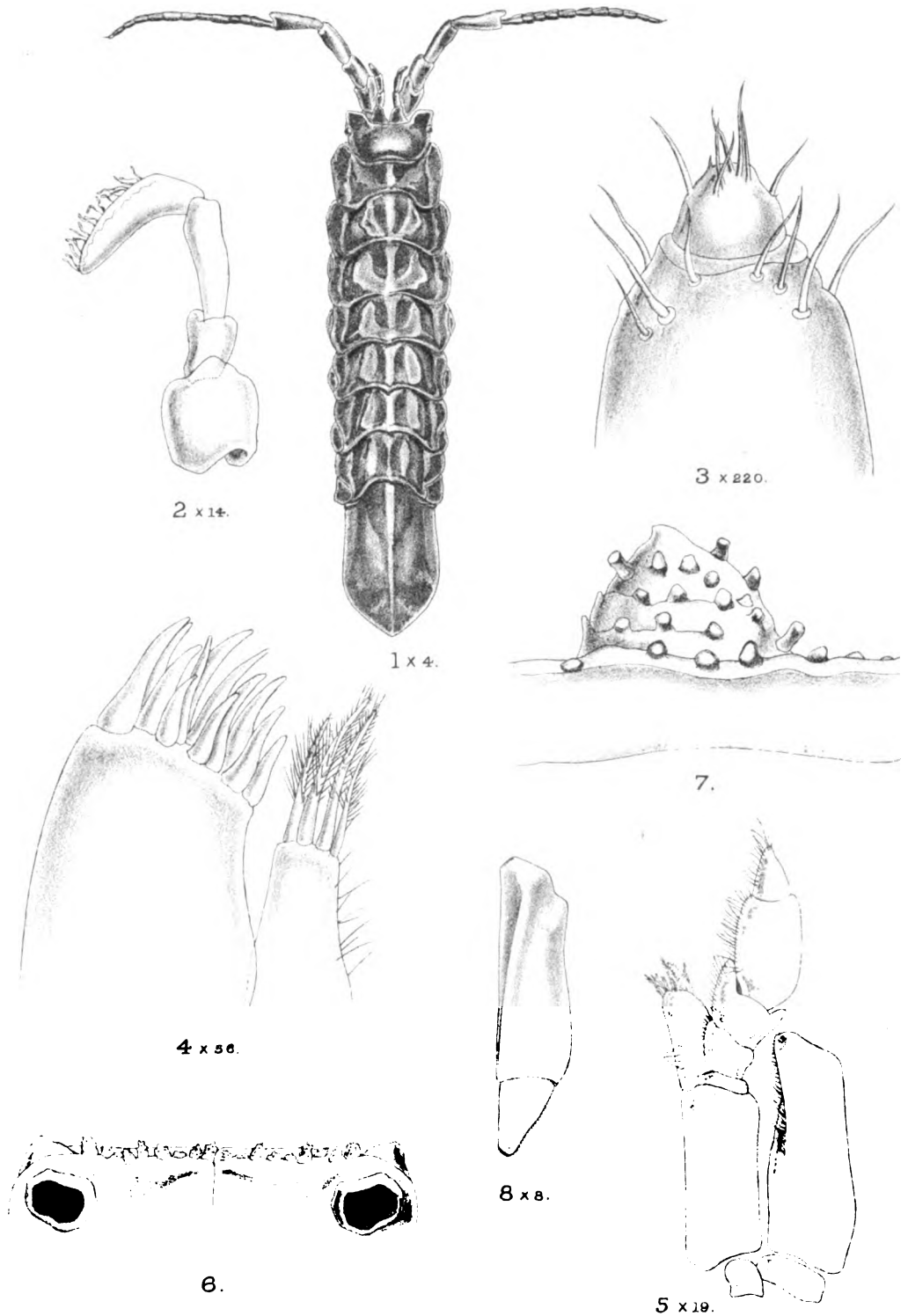
Fig. 2. Dorsal view of the left antennule. × 14.

¹ Ann. Stb. Afr. Mus., 1910, vi, p. 433.

² Journ Linn. Soc. (Zool.), 1917.

- Fig. 3. Terminal style of the antenna. $\times 220$.
Fig. 4. Ventral side of the terminal portions of the inner and outer lobes of the right 1st maxilla. $\times 56$.
Fig. 5. Ventral side of the left maxillipede. $\times 19$.
Fig. 6. Anterior margin of the sternum of the 4th mesosomatic segment, enlarged.
Fig. 7. Papillous spine, enlarged.
Fig. 8. Left uropod. $\times 8$.
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A. J. J. del. ad nat.

Huth, London.

PARIDOTEA BAKERI, n. sp.