

XI ON SOME NEW TERRESTRIAL
ISOPODS FROM THE ANDAMAN
ISLANDS AND SOUTHERN
INDIA

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(Plates xxiv and xxv.)

Amongst a collection of Asiatic Terrestrial Isopoda placed in my hands by Dr. Annandale for identification, there are two tubes, containing twenty-one specimens, collected in the Andaman Islands and S. India. They include three species, *viz.*, a new species of *Philoscia*, Latr., of which there are only two imperfect examples, a new species of *Paraperiscyphis*, Stebbing, and a new species of *Cubaris*, Brandt.

Gen. *Philoscia*, Latr.

Philoscia, sp.

The two examples from roots of ferns from Port Blair, 28-viii-08, No. 8571/10 (*H. Weskin*) are too imperfect to describe. I have received the same species from various parts of India and Burma.

Gen. *Paraperiscyphis*, Stebbing.

1911. *Paraperiscyphis*, Stebbing, Rec. Ind. Mus., vol. vi, p. 184.

Paraperiscyphis stebbingi, n. sp.

(Pl. xxiv, figs. 1-10.)

Body (fig. 1) oblong oval, dorsal face strongly convex, with numerous rounded tubercles. Cephalon small, flanked laterally by the lateral plates of the 1st segment of the mesosome. Ventrally carinate. Eyes sub-dorsal and well-developed. Antennulae small, 3-jointed, situated between the ventral carination of the cephalon and the base of antennae. Antennae (figs. 1, 2) moderately stout with 2-jointed flagellum, the first joint longer than the second. Mandibles (fig. 3), the outer cutting edge has three stout teeth and a blunt process on the inner side. 1st maxillae (figs. 4 and 5) have the outer lobe oblong and somewhat triangular in shape, distally terminating in seven incurved spines, on the outer margin there are a number of long, simple, hair-like setae. Inner

lobe small and narrow, situated basally. 2nd maxillae (fig. 6) slender, terminating distally in two setose plumes. The segments of the mesosome are strongly convex, lateral plates of 1st segment angularly produced backward, those of the 2nd, 3rd, and 4th less so, all tuberculated. Pronotum of 1st, 2nd and 3rd segments strongly pronounced. Maxillipedes (fig. 7) broad, the inner plate with numerous short simple setae, the outer palp terminates in three teeth consisting of a series of minute spinous processes (fig. 8); basally there is a raised portion minutely studded with small setae. Thoracic appendages fringed with numerous spines, 2nd appendages having on the apical border of the fifth joint two with obtuse plumose apices (fig. 9). Uropods (fig. 10), basal plate large, extending beyond telson, expanded and plate-like laterally; outer margin subcrenate, fringed with hair-like setae and tuberculated; exopodite on the inner margin, endopodite longer than exopodite and situated at the top of the inner margin of the basal plate, both covered with fine setae and extending slightly beyond the basal plate. Telson obtusely triangular, tuberculated.

Colour (in alcohol) a uniform dark brown. Length 17.5 mm.

Habitat.—Anamalai hills, Madras Pres., S. India, 4,000 feet, 22-1-1912, No. 8612/10 (*T. B. Fletcher*).

I have pleasure in associating the name of the Rev. T. R. R. Stebbing, F.R.S., with this interesting species.

The genus *Paraperiscyphis* was founded by Stebbing (6) for another S. Indian species *P. travancorensis*, Stebbing, which is separated from *Periscyphis*, Gerstaecker, by the following characters: "In the second antennae the first joint of the flagellum is not longer than the second; the telsonic segment is very obtusely triangular, not narrowly produced at the apex; the inner branch of the uropods is attached not to a projection of the peduncle's base, but to a notch far down the inner margin, while still further down is attached the outer branch, not especially small, both branches extending beyond the peduncle, and the peduncle itself extending beyond the telsonic segment."

All the above characters hold good in the species I am here about to describe, excepting the first, viz., the first joint of the flagellum in the antennae is longer than the second, otherwise there can be no question but that the present species finds its proper place in this genus.

The foundation of the genus *Paraperiscyphis* makes it necessary to re-consider the diagnostic characters of the genus *Periscyphis*, Gerstaecker, who described it in 1873 (5). The diagnosis is as follows:—

"*Periscyphis*, nov. gen."

(Trib. Armadillini.)

"Antennae 7 articulatae, articulis duobus apicalibus elongatis, gracilibus, ultimo setifero. Caput margine frontali nullo, supra oculos utrinque leviter carinatum. Annulus corporis primus mar-

gine laterali antice tantum reflexo. Annulus postabdominalis sextus subito angustatus et triquetro acuminatus. Pedes spurii ultimi paris articulo terminali parvo styliformi in apice articuli basalis lati, extus rotundati inserto."

In 1901 (4) Budde-Lund gave a further description as he restricted it, but in my opinion, he had not true species of *Periscyphis* before him, but those of an allied though totally different genus. Unfortunately this author does not seem at all clear regarding the limits of the genus, for although it was known to him in 1885, in his *Crustacea Isopoda Terrestria* (1, p. 293) he describes two Isopods from Egypt, which he placed in a new genus *Cercocytonus* (*convexus* and *albescens*), but later he referred these to *Periscyphis*, em. Budde-Lund (4). In the same paper he expresses the opinion that the species he had previously brought into the genus *Periscyphis*, Gerst. (4, p. 10) are not all rightly placed, some seeming to be more akin to the genus *Synarmadillo*, Dollfus. It is quite certain that many of the species described by Budde-Lund cannot remain in the genus *Periscyphis* as defined by Gerstaecker. The two *P. convexus* and *P. albescens* are probably not true *Periscyphis*, Gerst. s. str., and as the genus *Periscyphis*, Budde-Lund, is simply an emended description of *Cercocytonus*, Budde-Lund, they must be referred to that genus. The mouth-parts, on which this author placed such great reliance, are so totally different from those in *Periscyphis*, that they almost alone would be sufficient to separate them.

There are numerous other species which have been referred by Budde-Lund (3) and other authors to this genus which seem to me wrongly placed.

Gen. **Cubaris**, Brandt.

Cubaris fragilis, n. sp.

(Pl. xxv, figs. 1-10.)

Body oblong oval with the lateral margins of all the segments angulate and overlapping one another; finely punctated and with rows of longitudinal tubercles at each side of mid-dorsal line. Cephalon (fig. 2) narrow, almost straight in front with small triangular lateral lobes; median lobe absent. Eyes subdorsal, fairly large. Antennae (fig. 3) short, first four joints tuberculated, flagellum two-jointed, distal joint two and a half times longer than proximal joint. Mandibles (fig. 4), outer cutting edge with trifold blunt tooth, with flattened one on the inner side. 1st maxillae (figs. 5, 6). Outer lobe oblong, pointed proximally, terminating distally in nine incurved spines; short, simple, hair-like setae on the outer margin; inner lobe distally terminating in a rounded lobe with two setaceous tufts on the inner side. 2nd maxillae small and plate-like. The segments of the mesosome strongly convex, with three to seven raised longitudinal tubercles on each side of the mid-dorsal line, finely punctated, the lateral plates of 1-5 well separated and slightly revolute. Maxillipeds

(fig. 7), outer palp with two teeth, inner plate with single spine. Thoracic appendages (fig. 8) robust and provided with short blunt spines on the inner border. Uropods (fig. 9), basal plate somewhat triangular in shape, not extending beyond the telson; exopodite small and on the inner margin, endopodite large and situated at the top of the inner margin of the basal plate and not extending beyond the basal plate. Telson (fig. 10) contracted laterally, posterior margin almost straight.

Habitat.—From roots of ferns from Port Blair, Andamans, 28-viii-08, No. 8571/10 (*H. Weskin*).

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