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XXXVII. *Description of the immature state of a Ceylonese insect apparently belonging to an undescribed genus.*
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[Read October 5th, 1881.]

PLATE XXII., FIG. 1, AND DETAILS.

THE accompanying figure and details represent an immature insect, of which several specimens were taken in the spring of the present year, running about on the surface of the earth in a garden flower-pot covered with very short moss, by G. H. K. Thwaites, Esq., of Fairieland, Kandy, Ceylon, who, remembering the attention which I had formerly bestowed on the species of *Embia*, and thinking this insect was allied to that group, kindly sent me the specimens for examination and description. The specimens were very active, and not easily caught uninjured, and were placed in spirits of wine.

They are narrow, linear, and depressed in form, like a *Staphylinus*, a quarter of an inch long, the body being terminated by two very long slender anal filaments, like those of an *Ephemera*, which are formed of numerous (more than fifty) minute articulations. These filaments are 8 lines long, and are consequently nearly three times the length of the entire insect. The head is depressed and rather larger than the prothorax, with prominent lateral eyes. The clypeus is very short and narrowed, the labrum shortly semicircular and furnished with a frontal row of fine setæ. The mandibles are short, triangular, strong, and armed at the tips with two teeth, the apical one being the larger; the outer edge is rounded and armed with three strong setæ. The maxillæ are regularly galeated, the internal lobe slender, curved, acutely pointed at the tip, below which, on the inner margin, it is rather dilated, and furnished with two setæ; the outer lobe is shorter than the inner, curved and obtuse at its tip. The blade of the maxillæ is oblong, with a series of strong muscles inserted transversely on its inner side; the maxillary palpi are about half the length of the head, five-jointed, the two basal joints very

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short, the three terminal ones cylindrical and of nearly equal length, each being about equal to the outer lobe of the maxillæ in length. The mentum is a transverse thin plate, with the sides rounded and narrowed towards the front margin, which is nearly straight. The labium is formed of two lobes rounded at the tips, each having a slender division or inner lobe uniting in the middle; the labial palpi are cylindrical, each arising from a short basal scape, and are four-jointed, the two basal joints very short, and the two terminal ones longer, sub-cylindrical, setose, the terminal joint not longer than the preceding, and obtuse at its extremity. The antennæ are about half the length of the body, composed of fifteen cylindrical joints, the basal joint being the largest, followed by four short joints, the remaining being longer, of nearly equal length, somewhat oval in form, and finely setose.

The three thoracic segments are nearly equal in size and rather broader than the abdominal ones; the first, or prothorax, is rounded in front; the second, or mesothorax, is rather shorter, transverse, rounded at the sides, the dorsum entire, without any trace of mesothoracic appendages; the third, or metathorax, is also transverse, rounded at the sides, but with a deep incision on its hind margin, probably indicating the future development of a pair of wings from this segment. The abdomen is formed of a series of depressed transverse joints, the terminal ones gradually narrowed, and the apical one terminated by the long slender articulated filaments above described. The legs are of moderate length and uniform in structure, rather slender, the anterior femora alone being thickened towards the base, and armed with rather strong short bristles on its inner edge. The tibiæ of all the legs are straight and slender, without any terminal spur, and the tarsi are two-jointed, the basal joint larger than the second, which is affixed on the oblique extremity of the preceding joint; the ungues are rather long, slender, and acute at the tips.

The colour has probably been modified by the immersion of the insects in spirits of wine; they are at present dark brown, with the limbs paler, the four posterior femora dusky in the middle; the prothorax has two large pale patches occupying the posterior angles, the emarginate hinder margin of the metathorax is narrowly edged with pale colour; the abdomen is pale-coloured, with two narrow transverse dark bands near the base, and the

terminal portion of the abdomen is also transversely banded with dark colour.

At first sight the insect in this state at once reminds the observer of the genus *Campodea*, which, like it, runs about in garden ground, and is furnished with two very long anal setæ (cf. *Campodea staphylinus*, Westw., Trans. Ent. Soc. Lond. iii., 232; 1842); but this relationship is quite superficial. The structure of the mouth of the insect brings it to the great division of mandibulated insects undergoing an active state preceding the assumption of the imago form, and possessing galeated maxillæ and articulated filamentous anal appendages. The *Perilidæ*, amongst the Neuroptera, possess these characters, but the terrestrial habits of this insect removes it from that family. The structure of the legs and tarsi, and the very elongated anal filaments, separate it from the genus *Embia*, to which its habits assimilate it, whilst its simple hind legs and linear form remove it from the saltatorial *Orthoptera* and *Blattidæ*. In its general form it puts one much in mind of an immature earwig, but the horny exarticulate anal appendages of the *Forficulidæ* prevent us from regarding it as belonging to that family. The discovery of the imago state will alone enable us to determine the group to which the insect is referable.

For the sake of identification, I venture to apply a name to the insect above described, which, from the difficulty attending the present determination of its relations and its most peculiar characteristic, may be termed *Dyscritina longisetosa*.

EXPLANATION OF PLATE XXII.

FIG. 1. *Dyscritina longisetosa*, magnified.

- 1a. Natural size of ditto.
- 1b. Head and base of antennæ.
- 1c. Labrum.
- 1d. Mandible.
- 1e. Maxilla.
- 1f. Mentum, labium, and labial palpi.
- 1g. Antenna.
- 1h. Fore leg.
- 1i. Hind leg.



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