

A BLIND MECOPTERA LARVA FROM RESERVA DUCKE, MANAUS, BRAZIL

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While evaluating soil and litter arthropods collected in March, 1981, in Reserva Florestal Adolpho Ducke (Manaus-Itacoatiara State Highway (AM-010), km 26), one of us (J.A.) encountered two larvae which appear to be second or early third instar Bittacids (Mecoptera). Three different species of Bittacidae have been collected from Reserva Ducke, all taken during a survey of the insect fauna of the Reserve (Penny & Arias, 1982a). These are: *Issikiella byersi* Penny & Arias, 1982b (four specimens), *Nannobittacus souzalopesi* Penny & Arias, 1982b (one specimen), and one female of an undescribed species of *Bittacus*.

This species of bittacid larva is interesting in several respects. There are no vestiges whatsoever of the simple ocelli, indicating that this species is blind. Secondly, there are numerous elongate, swollen protuberances covering the thorax and abdomen (Fig. 1). By a process of deduction, these larvae would appear to be *Issikiella byersi*, as all known species of *Bittacus* have simple eyes and thoracic and abdominal spines (Setty, 1940), while the larva of *Nannobittacus souzalopesi* has already been described as having a small transparent area where the simple eyes normally are, and membranous, ovoid, balloon-like protuberances on all parts of the body (Penny & Arias,

1981). There are no other genera of Bittacidae known from the Central Amazon, and although it is possible that other species of *Issikiella* and *Nannobittacus* exist in the region (as for example *Nannobittacus elegans*, from Santarém), they have not been collected in the Manaus area after more than seven years of field collecting.

These two larvae of Mecoptera were taken from the soil (0 – 3.5 cm depth) in a shaded, moist, sandy area close to the bank of the small stream "Igarapé Barro Branco" (Adis & Schubart, in press). Like other bittacid larvae, they must be saprophagous on small terrestrial animals, and because of their lack of vision, food must be located by means of receptors of volatile chemicals.

This collection constitutes only the second record of bittacid larvae in the Neotropical region, although nannochoristid larvae have also been collected in the mountains of Chile (Flint, 1977).

Resumo

As larvas, que se presume serem de *Issikiella byersi*, (Mecoptera: Bittacidae) coletadas na Reserva Ducke. Estas são sem olhos e provavelmente sentem a presença de comida por receptores olfatórios.

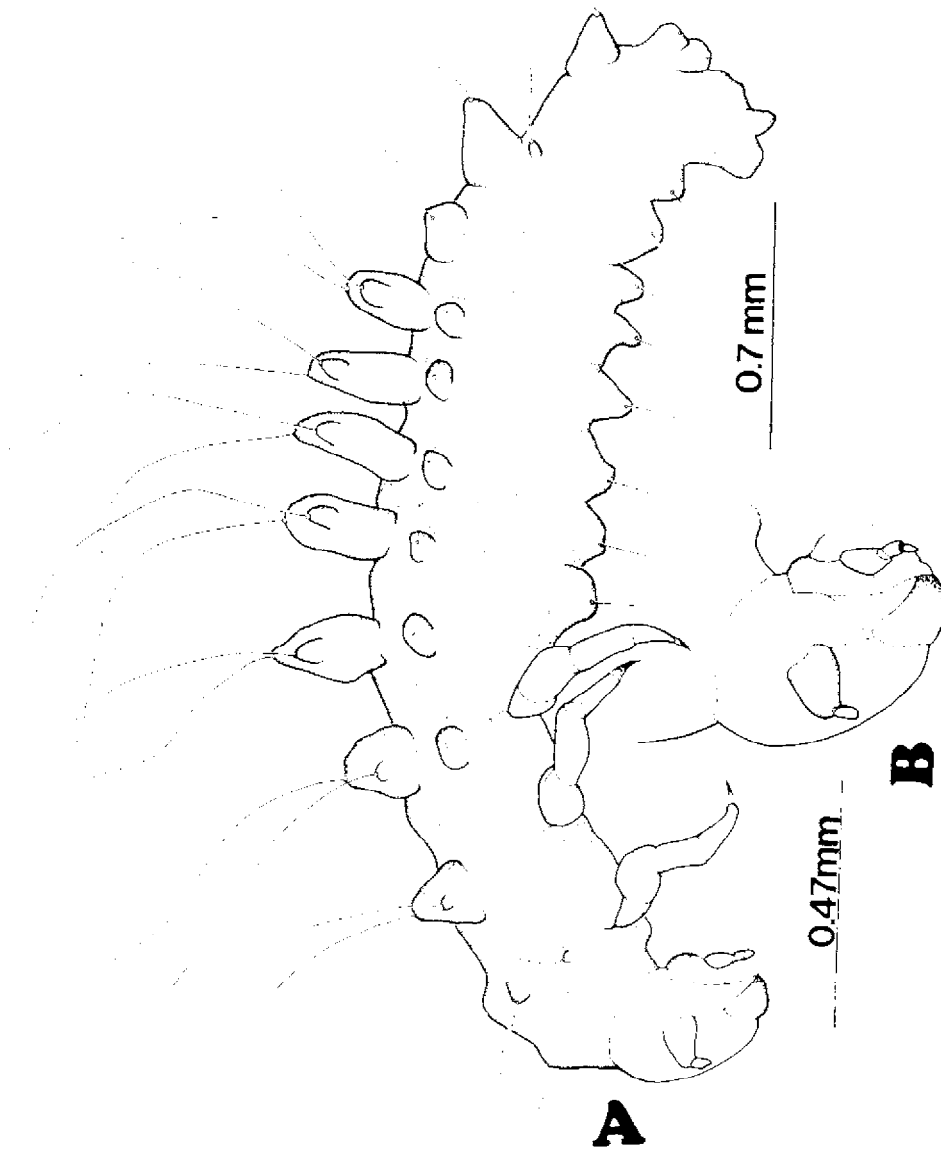


Fig. 1. Presumed second instar larva of *Issikiella byersi* Penny & Arias, 1982b. A – lateral view; B – lateral view of head capsúte (Drawing by Artêmio Coelho da Silva).

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(Aceito para publicação em 16/12/83)