

NEW RECORDS ABOUT BRAZILIAN STREPSIPTERA (Insecta)*

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(With 9 text-figures)

In our preceding work dealing with Brazilian Strepsiptera (OLIVEIRA & KOGAN, 1959), we have described *Halictophagus lopesi* and also have a new record of *Pseudoxenos piercei* (Brèthes, 1922). In addition to these data we give the descriptions of the first stage larvae of the above mentioned species, as well as the description of a new species of Halictophagidae found parasitizing a leaf-hopper from Cachimbo. Cachimbo is an emergency airport situated in an "island" of savannah ("cerrado") at the borderline of the Amazonic forest, in the State of Pará, Brazil.

Studying this larval material our attention was focused on the structure of the tentorium. This structure has been outlined without any description. On the other hand the literature on this subject is very scant, therefore, we want to stress our hope that further study of other material will place taxonomists in a better position to characterize species in their developmental stages.

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HALICTOPHAGIDAE Pierce, 1908

Halictophagus Dale, 1832

Halictophagus lappidae sp. n.

(Figs. 1-3)

Female — Cephalothorax pale brown, longer than broad, constricted at base.

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Clypeus quite evident both in dorsal and lateral view; mandibles closely adhered to the cephalic tegument making it difficult to distinguish clearly; mouth-opening conspicuous, rounded; alimentary canal visible by transparence, extended up to the inferior margin of the cephalothoracic membrane, with the same width as the mouth.

Cephalothoracic membrane narrow, slightly rounded in the frontal margin, reaching the lateral borders of the cephalothorax.

Thoracic spiracles very conspicuous placed on the $1/5$ of the distance between the base of the cephalothorax and the median line of the cephalothoracic membrane. Brood-canals opening near the base of the cephalothorax. The thoracic tegument at its basal constriction is finely wrinkled; basal collar expanded posteriorly without a sharp delimitation line.

Principal proportions: length of the cephalothorax 0,88 mm; width at the base of the cephalothorax 0,52 mm; width between the spiracles 0,69 mm; distance between the mandibles 0,19 mm; width of the head through the cephalothoracic membrane 0,60 mm; length of the head in the median line 0,28 mm.

Holotype — Female n.º 23, Cachimbo, Estado do Pará, Brazil, Travassos & Alvarenga, 6/21-VI-955, between the 6th and the 7th urites on the right side of the host. One male puparium n.º 24, between the 4th and the 5th urites on the left side of the host, in the collection of Strepsiptera of the section of Entomology of the Instituto Oswaldo Cruz.

Male and larva — Unknown.

Host — *Lappida armata* Melichar, 1912 (Homoptera, Dictyopharidae).

Discussion — *Halictophagus lappidae* sp. n. can be distinguished from *H. lopesi* Oliveira & Kogan by the shape and proportions of the cephalothoracic membrane, and general proportions of the cephalothorax.

Halictophagus lopesi Oliveira & Kogan, 1959

(Figs. 4-6)

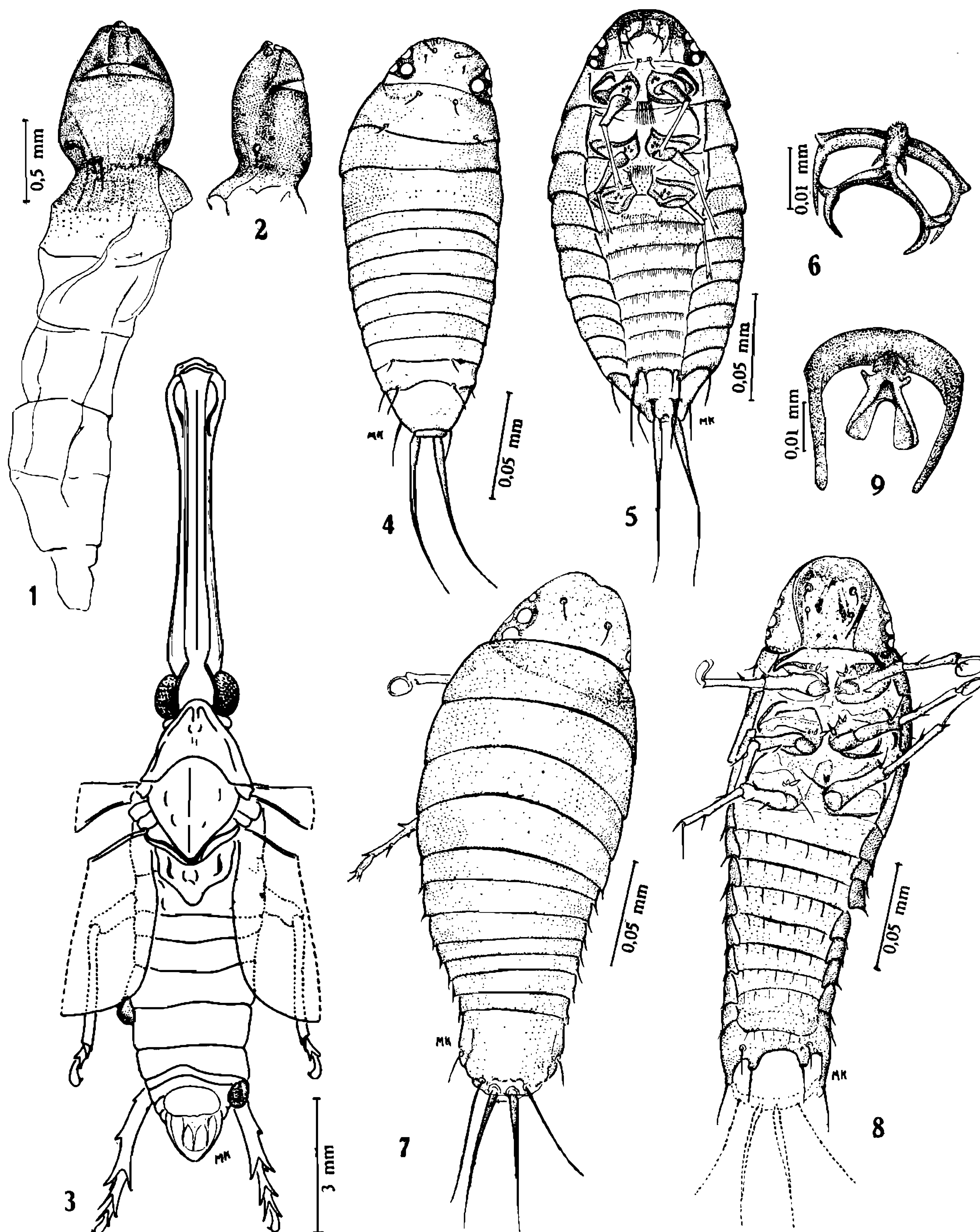
Halictophagus lopesi Oliveira & Kogan, 1959: 227

First stage larva — Body elongated, sub-oval. General colour dark brown. Total length without apical stylets: 0,19 mm; greatest width: 0,09 mm.

Head: Wider than long, ocular areas placed on the latero-posterior region, contiguous to the prothorax. These areas extend from dorsal to the ventral side, bearing apparently 4 ommatidia: 1 dorsal, 2 median and 1 ventral. Dorsally there are 2 pairs of small setae, the anterior

("setola frontale", SILVESTRI) is longer and stouter than the posterior ("setola adoculare", SILVESTRI). Ventrally arise 2 other pairs of setae the stouter one, arises near the frontal edge, the other very thin arises closely to the cephaloprosternal suture. Tentorium as in fig. 6.

Thorax: The width of the segments increases from pro to metathorax. The pronotum presents 2 pairs of small setae, the other



Halictophagus lappidae sp. n., female cephalothorax, holotype — Fig. 1: Dorsal view; fig. 2: lateral view. Fig. 3: *Lappida armata* Melichar stylopedicel by *H. lappidae* sp. n. — *Halictophagus lopesi* Oliveira & Kogan, first stage larva — Fig. 4: Dorsal view; fig. 5: ventral view; fig. 6: ventral view of the tentorium. *Pseudozenos piercei* (Brèthes), first stage larva — Fig. 7: Dorsal view; fig. 8: ventral view; fig. 9: ventral view; of the tentorium.

segments do not show special structures. Prosternum presenting a row of very fine hairs between the coxal cavities. Such hairs can also be observed between the median and posterior pair of coxae.

Abdomen: First segments sub-equal getting narrower posteriorly. 10th segment very reduced. 8th urotergite with a pair of small setae, 9th urotergite with 2 pairs of such setae. Urosternites with a row of very fine hairs on the intersegmental sutures. 8th and 9th urosternites with a pair of lateral setae in the apical edge. There are ventrally 2 other pairs of setae which arise from 2 lobes, closely to the basal edge. The outer pair is longer and stouter than the inner one. Stylets with approximately 0,07 mm length.

Legs: Sub-equal, with broad coxae, presenting a group of 3 very thin spines near the internal edges. Femora and tibiae moderately developed. Tarsi setiform, very slender and difficult to observe.

STYLOPIDAE Kirby, 1813

Pseudoxenos piercei (Brèthes, 1922)

(Figs. 7-9)

Pseudoxenos piercei Oliveira & Kogan, 1959: 230

First stage larva — Body elongated, broad anteriorly and slightly constricted at the last abdominal segments. General colour brown. Total length without apical stylets: 0,25 mm; greatest width: 0,11 mm.

Head: Almost as long as wide at base. Ocular areas placed on the latero-posterior region. These areas extend from dorsal to the ventral side, bearing apparently 4 ommatidia. There are dorsally 1 pair of setae and ventrally 3 pairs. The anterior longer than the two others, the posterior very thin. Tentorium as in fig. 9.

Thorax: Segments sub-equal, tergites without noticeable structures. Metasternum with a pair of setae arising from the inner posterior angle of the coxal cavities.

Abdomen: The segments are progressively narrowed and a slight constriction is observed due to a moderately tightening of 8th and 9th urites. Latero-posterior angles of the tergites with small setae, 9th tergite with 2 pairs of such setae, the hinder one almost as long as the stylets. Urosternites with a row of 5-6 thin hairs on the intersegmental sutures. 9th urosternite with 2 pairs of setae, arising from lobated processes. Stylets with approximately 0,07 mm length.

Legs: With broad coxae, presenting groups of 3 leaflike spines, near the inner edges. Femora of the 3 pairs sub-equal, each of them bearing 2 or 3 setae. Tibiae of the 3 pairs also sub-equal, with 1 or 2 setae. Hind tibia with a third seta apically. Front and mid tarsi unisegmented, discoid, hind tarsi unisegmented, setiform.

RESUMO

Além de descreverem uma nova espécie de Halictophagidae, *Halictophagus lappidae*, baseados em uma fêmea encontrada parasitando um exemplar de *Lappida armata* Melichar, 1912 (Homoptera, Dictyopharidae) proveniente de Cachimbo, Pará, os AA. fazem a descrição das larvas do 1.º estadio de *Halictophagus lopesi* Oliveira & Kogan, 1959, e de *Pseudoxenos piercei* (Brèthes, 1922) (Stylopidae), as primeiras larvas de Strepsiptera descritas do Brasil.

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