

A PARASITE OF *SCIUROPTERUS VOLANS* L.

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(With 1 Figure in the Text)

SOME time ago I received for identification a microscopic preparation of parasites taken, on 11 March 1929, from a flying squirrel (*Sciuropterus volans* L. in the neighbourhood of Agraz, Tartar Republic. The preparation mounted in Canada balsam contained one male and two females. Later I examined a rather large collection of flying squirrels in the Division of Mammals of the Zoological Institute of the Academy of Sciences of U.S.S.R. In one jar containing a flying squirrel from Verchoijansk, Yakutia, 67° 33' N, 133° 51' E, I found, among the debris on the bottom, a single specimen of the same parasite.

The parasites were sent to me under the name of "mites", and at first sight they closely resembled a mite allied to the genus *Myobia* which usually parasitize small rodents. After a short examination I found that the preparation contained insects, not mites. Fig. 1 shows the exact form of the insect, but the examination and drawing of some of its characters proved to be difficult.

At first sight the insect seems to be headless, as its head, pro- and mesothorax are bent back, but whether onto the dorsal or the ventral side is difficult to decide in preparations. Thus the animal appears as if folded in two. Since such a position of the fore part of the body is to be seen in all four specimens obtained from different localities, it is to be regarded as normal for the insect.

The antennae (*a*) are strongly developed, their dimensions being not inferior to those of the legs; they are five jointed and geniculate, with the apical joint much widened and provided with spine-shaped setae.

The three pairs of legs (1, 2 and 3) are decreasingly less developed from the first to third. The first and second pairs are very similar to one another in structure and differ only in their dimensions. The femora and tibiae of all the legs are very short and have only a few short setae; the tarsi of the first two pairs are much widened, and have rather long claws and a row of short spine-like setae; the tarsi of the third pair are terminated with a large hook-like claw, with an opposite appendage on the apical joint. One of the specimens of the preparation has the right leg clasping a piece of hair of the flying squirrel. Thus, it is evident that the third pair of legs of this insect are the main organs of attachment to the hairs of the host. In general, the legs are short and do not project from under the body of the insect.

The boundaries of the abdominal segments are almost indiscernible and may be determined only by means of their chaetotaxy. The setae are very scanty and are concentrated mainly on the dorsal surface and on the pleural plates of the body. The setae are similar, being slightly enlarged in the middle

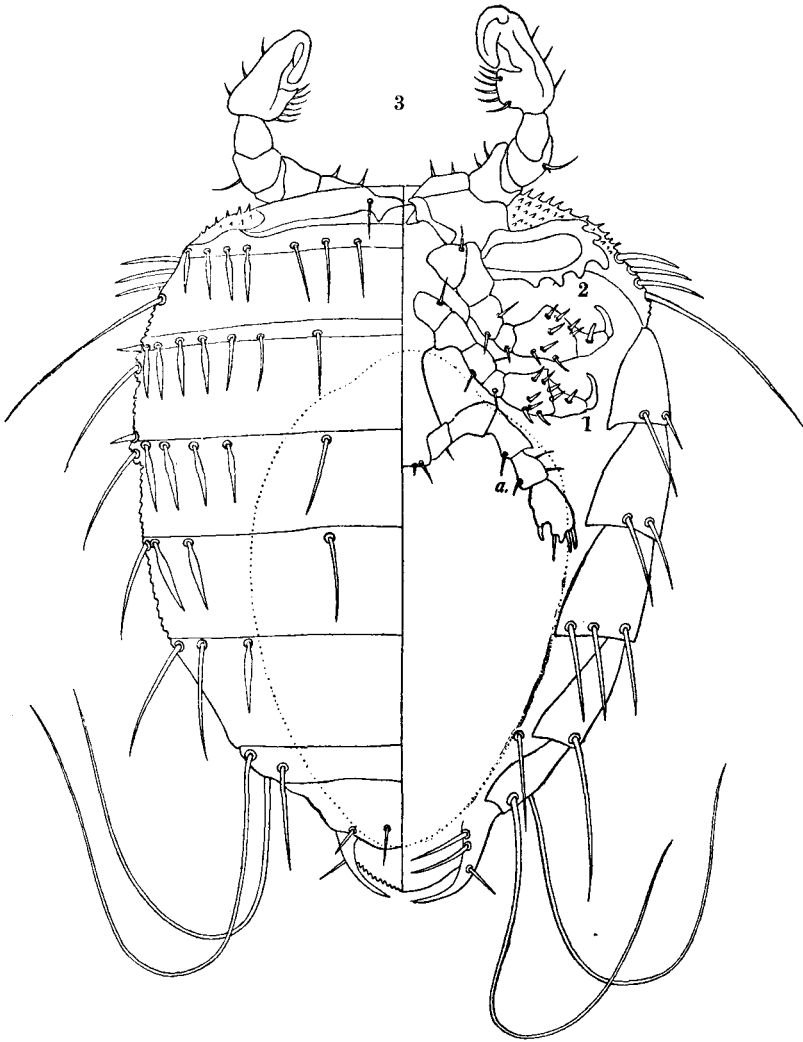


Fig. 1. *Enderleinellus replicatus*, sp.n., female; dorsal (on the left) and ventral view (on the right). a, antennae; 1, 2, 3, first, second and third pair of legs.

with sharp or spear-like apices. They are located in transverse rows on the tergites and number 7, 7, 5, 3, 3, 2 and 2 on tergites 1-7 respectively. The front margin of the abdomen bears three short ventral setae on both sides; the notum has but one much longer seta. The pleurites on their inner margins are not denticulated; the inner ventral tooth may be seen only on the first

pleurite. The posterior margins of pleurites 1-5 bear 2, 2, 3, 1 and 1 spine-like setae respectively, the last of which is very long, like its nearest dorsal seta.

Each side of the apex of the female abdomen bears a sharp hook-like appendage, with two setae on its base.

The integument of the body has a scale-like structure, the distal part of the scales being slightly raised; this feature may be seen easily from the side, when the scales are viewed in profile. The anterior part of the abdomen is covered with small spinules.

On the ventral side of the metanotum, laterally, is placed a strongly chitinized ring-like structure with six different obtuse spines on its margin.

The abdomen of the female contains an exceedingly large egg, shown in the figure by the dotted line.

Measurements: male 0.368 × 0.288 mm., female 0.352 × 0.320 mm.

The structure of the mouth-parts, the legs, especially their claws, the pleurites, the apex of abdomen, the shape of setae and their arrangement, the size and the form of the egg, are all characters which connect this very interesting insect with the order Anaplura.

I name this insect *Enderleinellus replicatus*, sp.n., belonging to the family Haematopinidae.