STUDIES ON THE SUCKING LICE IN JAPAN (PART 3)

DESCRIPTION OF POLYPLAX SHIMIZUI n. sp. (HOPLOPLEUROIDAE, ANOPLURA) FROM CROCIDURA DSINEZUMI CHISAI

BY

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During the epidemiological investigations of scrub typhus in Japan, members of the investigative team collected many specimens of sucking lice from three Dsinezumi-Shrews (Crocidura dsinezumi chisai Thomas, 1906) trapped at three different places in Honshu, Japan. The species of louse belongs to the genus Polyplax and seems to be undescribed heretofore. In the present paper, description and drawing of this species will be given.

POLYPLAX SHIMIZUI n. sp.

(Male Fig. I, 2)

Body length: 0.86 to 1.0 mm.

Head: As broad as long, broadly rounded in front of the antennal bases; with the post-antennal angles prominent and rounded, the first segment of the antenna largest, the third segment strongly modified.

Thorax: Much longer and broader than the head, the lateral margins rather roundly convex; sternal plate (Fig. II, 4) with a very slender anterior process and with the blunt posterior end; legs of the ordinary form.

Abdomen: Elongate egg-shaped; pleural plate (Fig. II, 3) as follows:

Plate of the second segment divided into a narrow ventral and a slightly broader dorsal piece, each with a small apical seta; plates of the third to fifth segments rounded triangular, plate of the third segment with a pair of short setae, fourth and fifth segments each with a ventral short and dorsal long setae; plate of the sixth with a pair of short setae, the ventral seta longer; plates of the seventh and eighth each with a pair of long setae; spiracles on the pleural plates small.

Dorsal chitinized plates very well developed, reaching nearly to pleurites and occupying the greater part of the surface, most dorsal plates with eight to ten setae at the posterior margin, slender and stout setae widely spaced. Submarginal seta absent most sternal plates with six to seven setae; submarginal seta absent.

Genitalia: Closely related to Polyplax serrata and Polyplax reclinata.

Female (Fig. I, 1)

Body length: 1.1 to 1.4 mm.

Head: Similar to that of male, but the third segment of antenna not modified.

Thorax: Closely related to male, but wanting a slender anterior process of sternal plate (Fig. II, 2).

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Fig. 1. *Polyplax shimizui* n. sp.

1. Female

   Dorsal : left and ventral : right half.

2. Male

Abdomen: Dorsal and ventral abdominal sclerites more numerous than those of male, the greater part of the last segments occupied by large genital plate. Pleural plate Fig. II, I as follows: Plates of the second and third segments each with a pair of short setae, fourth and fifth each with a dorsal long seta, and a ventral short seta.

Remarks

This new species is related to *Polyplax serrata* (Burmeister, 1839), *Polyplax reclinata* (Nitzsch. 1864), *Polyplax deltoides* Fahrenholz. 1939 and *Polyplax gerbilli* Ferris. 1923, but the new species differs from the latters in the under-described characteristics:
Fig. II. Sternal and Pleural Plates of n. sp.

1. Female, Pleural plates.
2. Female, Sternal plates.

It differs from *Polyplax serrata* in having a much longer dorsal seta on the pleural plates of the fourth and fifth segments instead of only on the fourth segment.

Also it differs from *Polyplax reclinata* and *Polyplax deltoides* in having a pair of short setae on the pleural plate of the sixth segment instead of a pair of long setae, and thoracic sternal plate of male with a slender anterior process. *Polyplax gerbilli* has a very slender anterior process of the sternal plate in both sexes, but pleural plates of the third to sixth segments of *P. gerbilli* each with a much broader and longer projection at the ventral angle, those of the third and the fourth segments with a short ventral and a very long dorsal setae. and therefore *P. gerbilli* is easily distinguished from the new species.

The specific trivial name "shimizui" was dedicated to Prof. Dr. Fumihiko Shimizu, Department of Bacteriology, Tokyo Medical and Dental Univer-
sity, who has been engaged in the epidemiological studies on scrub typhus in Japan with the author since November 1950 and has been very helpful in carrying out this study.

**TYPE**

Holotype male and allotype female from a *Crocidura dsinezumi chisai* Thomas. 1906; Ina-city, Nagano Prefecture; February 24, 1957, coll. K. Kaneko. Paratypes: 3 males and 2 females from the same host of holotype; 1 female from *C. dsinezumi chisai*; Aichi Prefecture, March 12, 1956; 1 male and 2 females from *C. dsinezumi chisai*; Okayama Prefecture, March 10, 1957. All type specimens are deposited in the Department of Medical Zoology, Tokyo Medical and Dental University.

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**LITERATURE**

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