AN UNRECORDED SPECIES OF THE GENUS *LEUCOPIS* MEIGEN (Dipt., Chamaemyiidae) FROM JAPAN

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Recently, the author had the pleasure of examining an interesting species belonging to the family Chamaemyiidae (=Ochthiphilidae) which has been hitherto unrecorded from Japan. The fly has been identified as *Leucopis puncticornis* MEIGEN which is widely distributed in Europe. However, the Japanese specimens which were examined by the author seem to be slightly different from the European form in several points, especially in their markings, so a detailed description of the Japanese form of the fly will be given in the following lines.

Leucopis puncticornis MEIGEN

Leucopis puncticornis MEIGEN, S. B., VI, 134, 2 (1830); SCHINER, F. A., II, 294 (1864); BECKER, Kat. d. Paläarkt. Dipt., IV, 236 (1905); CZERNY, Die Flieg., 51: Chamaemyiidae, 16 (1936).

Syn. : *Anthomyza griseola* FALLEN, p. p., Dipt. Suec. Agromyz., 8, 4 (1823); *Leucopis albipuncta* ZETTERSTEDT, Dipt. Scand., XII, 4810 (1855); *L. aphidivora* RONDANI, Bull. Entomolog., VI, 263 (1874); *L. aphidiperda* RONDANI, l. c., 264 (1874); *L. talaria* RONDANI, l. c., 264 (1874). (after L. CZERNY 1936).

♂♀. Whitish grey. Head, viewed laterally, hemispherical, height nearly 1.7 times the width. Eyes perpendicularly short, oval; cheeks nearly 1/3.6 the length of the eyes. Frons about one-third the breadth of the head, almost parallel margined; frontal vitta with two broad dark stripes along the sides, these stripes generally widening below and often coalescing with each other in the lower part. Antennae generally black, in some specimens brownish black, with whitish pruinescence; second antennal segment about one-third the length of the third, inside of the second antennal segment with more or less stronger whitish reflection than any other part of the antennae; third antennal segment round, minutely pubescent; arista black or brownish black, the stout second segment of arista about one-third the length of the slender third; palpi black, labella yellow. Mesonotum, viewed from front and above, with two broad, pale brownish lateral stripes and two narrow, slightly dark median stripes, continuing to and ending at about the line of the prescutellar dorsocentral bristles. All the specimens, collected in the Tokyo district, present a peculiar variation in the colour of the stripes; namely, the brownish tinge of

the laterel stripes is not conspicuous and in some specimens being scarcely distinctive from the colour of the dark median stripes. The fore part of each median stripe bears one row which immediately widens into two rows, of small bristles along the sides, and the posterior two-thirds of the stripe generally with three, or sometimes, in some portions with four, rows of more or less irregularly arranged small bristles reaching up to near the line of the prescutellar dorsocentral bristles, no short bristles on area behind the line of the prescutellar dorsocentral bristles. Three whitish zones between the two dark median stripes, and the brownish lateral stripes, with only anterior portions distinct; the middle one slightly narrowed in the posterior two-thirds and bare throughout its entire length; the two laterals narrowed and interrupted by the inclusion of short bristles in the posterior half. The colour of scutellum the same as the ground colour of the other parts of mesonotum. Coxae, trochanters, and large part of femora, generally black, greyish pollinose; in some specimens the fore and mid trochanters brownish black. Tips of all femora distinctly yellow; tibiae, except yellow base, black or brownish black; colour of tarsi variable. Generally the fore tarsi black or brownish black, but basal part or basal half of metatarsi always yellow or yellowish brown. Mid and hind tarsi yellow, but apical two or three segments always brown or darker, gradually to the tips. Wing hyaline, irridescent; hind margin, especial'y alulae infused with milky white; veins yellow, more or less brownish or darker near the tips. R_{4+5} and M slightly converging towards the tip, anterior cross-vein arises at about the hind third of discoidal cell, posterior cross-vein slightly shorter than the distance between the two cross-veins. Squamae white, fringed with minute whitish hairs; halters pale yellow. Abdomen, in general, with two dark spots dorsally on the third segment and basal half of the second abdominal segment suffused blackish or brownish. In some specimens from Niigata prefecture, these spots are very faint and inconspicuous; on the other hand, all the specimens collected in Tokyo and its adjacent districts have very distinct spots and wedge-shaped, slightly dark median stripes in the middle of the fourth and fifth abdominal segments. Some Tokyo specimens have a faint median stripe, like a sweep of the brush, on the sixth abdominal segment.

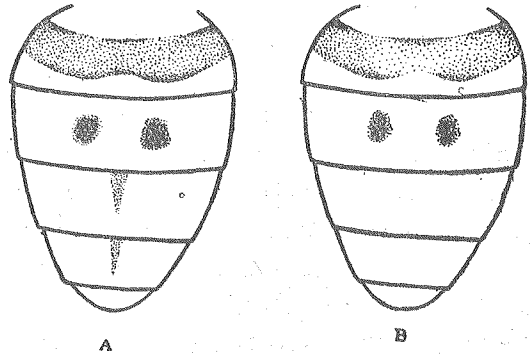

Fig. 1. *Leucopis punctipennis* MEIGEN.
Abdomen showing variations of markings on the dorsum:
A. ♀ collected at Nishigahara, Tokyo (1. VII, 1938).
B. ♂ collected at Shindo-mura, Niigata (2. VII, 1938).

Length: 2.1—2.3 mm.

Habitat: 3 ♂♂, 3 ♀♀, 2/VII, 1948, M. MOCHIZUKI, Shindo-mura, Nakakubiki-gun, Niigata; 3 ♂♂, 3 ♀♀, VI-VII, 1948, S. TAKAGI, Suyoshi-mura, Koshi-gun, Niigata; 1 ♂, 8/V, 1938, H. ISHITANI, Angyo, Saitama; 2 ♂♂, 4 ♀♀, 1/VI, 1938, H. ISHITANI, Nishigahara, Tokyo; 1 ♂, 2 ♀♀,

25/VI, 1938, H. ISHITANI, Fuchû, Tokyo.

General Distribution: Europe and Japan.

This is the first record of the Chamaemyiidae from Japan. According to Mr. M. MOCHIZUKI, entomologist in the Hokuriku Branch Station of the National Agricultural Experiment Station, the larvae of this species seem to be important predators of aphids on soy beans in Niigata prefecture. The collection at Nishigahara includes one male and three female specimens collected by the late Mr. H. ISHITANI, a promissing young entomologist, labelled "aphid on citrus" as a host of the fly.

The author wishes to thank Mr. M. MOCHIZUKI for the observations on this predator in the field and for sending the specimens to the author for identification. Thanks are also due to Mr. H. YUASA, chief of the Division of Entomology of the National Agricultural Experiment Station, who brought other specimens from Niigata Prefectural Agricultural Experiment Station affording the author the opportunity to study these interesting flies for the first time in Japan.