

✓ **Two Unrecorded Species of *Microdrosophila***
(Diptera, Drosophilidae) from Korea

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Two Unrecorded Species of *Microdrosophila* (Diptera, Drosophilidae) from Korea

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In the present paper are described two species of the genus *Microdrosophila*, which are new members to the drosophilid fauna of Korea.

The authors wish to offer cordial thanks to Dr. Toyohi Okada, Tokyo Metropolitan University, Japan, for his helpful and valuable advice.

Description

✓ *Microdrosophila (Microdrosophila) cristata* Okada

Microdrosophila (Microdrosophila) cristata Okada, 1900. *Koniyu*, 28 : 214.

Male and female: Body about 2.4mm, yellowish brown. Eye red and pubescent. Antenna yellowish grey. Arista with about 8 branches, 2 or 3 below fork. Palpus yellow, triangular and with a few prominent subapical bristles. Front broad, about half as broad as head width, slightly narrowing below and without frontal hairs. Clypeus pale brown. Carina long and high, reaching buccal margin. Occiput black. Cheeks yellow, its greatest width about 1/3 the greatest diameter of eye.

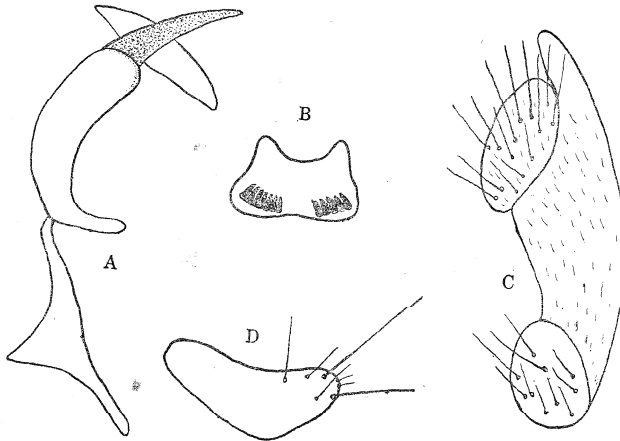


Fig. 1. *Microdrosophila (Microdrosophila) cristata* Okada

- A. Aedeagus (lateral aspect). B. 6th sternite of male.
C. Periphallic organ (lateral aspect). D. Egg-guide.

Mesonotum and scutellum dark yellowish brown. Sterno-index about 0.5. Humeral only one. Acrostichal hairs in about 6-8 somewhat irregular rows.

Legs yellow. preapicals on all three tibiae, apicals on fore and middle. Wings hyaline, slightly angular at tip. Crossveins clear, veins yellowish grey. C-index about 2.1, 4v-index about 5.5, 4c-index about 3.8, 5x-index about 5.0. 3rd costal section with heavy bristles on its basal 4/5. Halteres yellowish white.

Abdominal tergites pale yellow, each with a broad black caudal band, which is not interrupted at middle. Abdominal sternite pale yellowish brown. 6th sternite in male with a pair of crest-like tran-

verse combs, each composed of about 5 black stout teeth (Fig.1. B).

Periphallic organs (Fig.1, C): Genital arch pale yellow, pubescent. Clasper pale yellow, oval, and with about 10 hairs. Anal plate yellow, semicircular, pubescent and with about 14 long hairs.

Phallic organs (Fig.1, A); Aedeagus trilobed, lateral lobe black, and basally curved dorsally. Apodeme of aedeagus shorter than aedeagus and medioventrally projected triangularly.

Egg-guides (Fig.1, D); Lobes separated from each other, pale yellow, and apically with a few setae.

Specimens examined: Mt. Joreyong, 26 July-15 Aug., 1966, 2 males, 2 females.

Distribution: Korea, Japan.

***Microdrosophila (Oxystyloptera) latifrons* Okada**

Microdrosophila (Oxystyloptera) latifrons Okada, 1965. Kontyu, 33 : 332.

Male and female: Body about 2.4mm, pale yellow. Head broader than thorax. Eye red, with rough piles. Arista with about six upper and two lower branches besides a small fork. Palpus yellowish brown, broad, rounded at tip, with a long and two shorter stout apical setae. Carina high, broad, long. Cheek orange yellow, darker above, narrow below, wider posteriorly, about 1/5 as broad as the greatest diameter of eye. Vibrissa strong, other orals fine. Proclinate orbital inside others, slightly shorter than posterior reclinate; anterior reclinate small but distinct, half as long as proclinate, nearer to proclinate than to posterior reclinate.

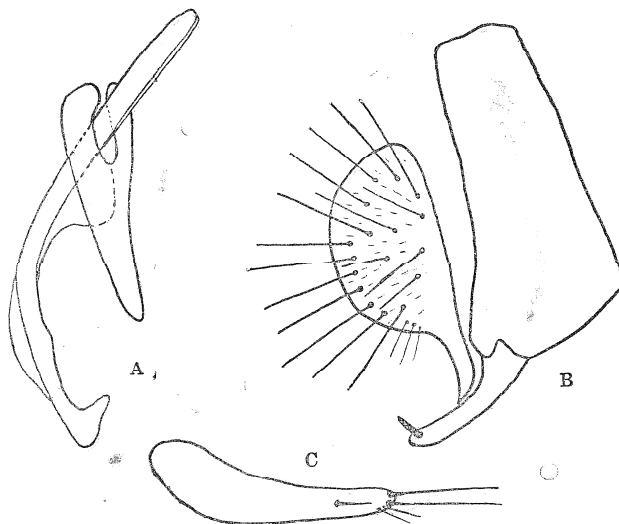


Fig. 2. *Microdrosophila (Oxystyloptera) latifrons* Okada
A. Phallic organ B. Periphallic organ C. Egg-guide.

Mesonotum and scutellum yellowish orange. Thoracic pleura yellowish brown. Sterno-index about 0.8. Humeral only one. Acrostichal hairs in 8-10 somewhat irregular rows. Legs yellow. Preapicals on mid and hind legs, apicals on mid leg. Wing hyaline, pointed at tip. C-index about 1.7, 4v-index about 4.2, 4c-index about 2.4, 5x-index about 4.5. 3rd costal section with bristles on its entire length. Abdomina tergites yellow, with diffuse broad brown caudal bands, medially not interrupted. Halteres yellow.

Periphallic organs (Fig 2. B): Genital arch pale yellow, broaden below. Clasper pale brown, exceedingly narrow, and with a stout bristle near tip. Anal plate large, pale yellow, pubescent, and narrowly prolonged downward, and with about 20 hairs.

Phallic organs (Fig. 2, A); Aedeagus slender, pale grey, bifid. Apodeme of aedeagus curved ventrally. Novasternum triangular, notched distally and weakly pointed proximally. A narrow curved vertical rod is projected from the base of aedeagus to be contiguous with the novasternum at the bottom of the median notch. Parameres seem to be absent.

Egg-guides (Fig. 2, C); Lobe pale grey, and apically with about 2 stout long setae and a few minute hairs.

Specimens examined: Mt. Sokli, June-August, 1965. 32 males, 26 females. Mt. Joreyong, 26 July-15 Aug., 1966, 5 males, 4 females.

Distribution. Korea, Okinawa.

Remarks: Closely resembles *Microdrosophila (Oxystyloptera) matsudairai* Okada, in general bodily characters, and closely resembles *Microdrosophila (Microdrosophila) fuscata* Okada, in genitalia. *M. latifrons* was described as a new species by Okada (1965) based on only a female specimen from Okinawa.

References

- Lee, T.J. 1964. Taxonomy, and geographical distribution of Drosophilidae (Diptera) in Korea. Chungang Univ. Theses Collection, 9 : 425-459.
- Okada, T. 1956. Systematic study of Drosophilidae and allied families of Japan. Gihodo Co., (Tokyo): 1-183.
- Okada, T. 1960. The genus *Microdrosophila* Malloch from Japan (Diptera, Drosophilidae). Kontyu, 28 : 211-223.
- Okada, T. 1965. Drosophilidae of the Okinawa Islands. Kontyu, 33 : 327-350.
- Takada, H., and Lee, T.J. 1958. A preliminary survey of the Drosophilidae from Kongju and its adjacent localities, South Korea. Annot. Zool. Jap., 31 : 113-116.

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