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# A New Species, *Microdrosophila chejuensis* (Diptera; Drosophilidae) from Korea

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韓國產 Microdrosophila 屬 초파리 1 新種

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#### 摘 要

1987年 8月 濟州島에서 採集된 초파리를 同定한 결과 Microdrosophila屬에 속하는 1新種이 確認되어 Microdrosophila chejuensis, 제주꼬마초파리로 命名하며記載한다. 이로써 韓國에서의 Microdrosophila屬 초파리는 本新種을 包含하여 7種이 알려지게 된다.

Key words: Drosophilidae, Microdrosophila, new species, Korea

# **INTRODUCTION**

In his world list of Drosophilidae, Wheeler(1981) enumerated 33 species of the genus *Microdrosophila* Malloch. Since then, 26 species were added to this genus by Bock(1982), Okada(1985) and Zhang(1989).

The authors have had an opportunity to examine one interesting species of *Microdrosophila* collected by means of net sweeping in Cheju Is., South Korea, in August, 1987. After a detailed study, it was found that this was a new species of the genus *Microdrosophila*. The description of which is given in the present paper.

All six species in the genus *Microdrosophila* have been known from Korea until now. They are as follows: *Microdrosophila* (Oxystyloptera) fuscata Okada, *M.*(O.) latifrons Okada, *M.*(O.) matsudairai Okada, *M.*(O.) urashimae Okada, *M.*(Microdrosophila) cristata Okada and *M.*(M.) purpurata Okada (Lee and Kim, 1987).

## **DESCRIPTION**

v Microdrosophila (Microdrosophila) chejuensis, n, sp. 제주꼬마초파리(신청)(Fig. 1A-C)

Material examined: One male (Holotype), Mt. Halla, Cheju Is., in August 1987, N. W. Kim. The holotype is deposited in the Department of Biology, Chung-ang University.

Description of the holotype: Body about 2.6 mm. yellowish brown. Head slightly broader than thorax. Eyes dark red, pilose. Antennae with second segment dark yellowish brown, large: third narrower, pale yellowish brown, with long pubescence. Arista with five dorsal and two ventral branches and a moderate terminal fork. Palpus pale yellowish brown, with a few stout black apical setae. Ocellar triangle pale yellowish grey, black within ocelli. Frons greyish white, yellowish orange anteriorly. Face pale yellowish white, somewhat narrowing below. Carina high, long, yellowish white. Cheeks pale yellowish white, its greatest width about 1/3 the greatest diameter of eye. Occiput yellowish brown.  $orb_2$  minute, situated just inside  $orb_3$ .  $orb_3$  slightly shorter than  $orb_1$ . Only one long stout apical oral.

Mesonotum and scutellum yellowish brown. Acrostichal hairs in about 10 irregular rows. Only one humeral. Sterno index about 0.6. Halters yellowish white. Pleura yellow, with a dark longitudinal stripe above.

Legs yellow, preapicals on all three tibiae, apicals prominent on mid leg: fore femur with a row of about 6 stout bristles inside distally; hind trochanter with three stout, black setae medially.

Wings hyaline, veins brown, crossvein clear; C-index about 1,4; 4V-index about 4.0; 4C-index about 2.0; 5x-index about 5.0; Ac-index about 3.0. C1-bristles 2; C3-fringe on entire length.

Abdominal tergites dark brown, 1T orange-brown.

Periphallic organs (Fig. 1B); genital arch pale yellow, bare, slightly broaden below. Clasper apparently absent. Anal plate large, pale yellow, pubescent, and narrowly prolonged downward, and with about 25 hairs. Phallic organs (Fig. 1C); aedeagus triangular with pubescence. Anterior parameres elongate, pale yellow, with a row of a few sensilla.

Relationship: Somewhat resembles *Microdrosophila (Microdrosophila) maculata* Okada, 1960 from Japan, but differs from it in having about 10 irregular rows of acrostichal hairs (6 in *maculata*) and in the shape of aedeagus.

**Ethymology**: specific name of this species is based upon the Cheju Is. where the type specimens were collected.

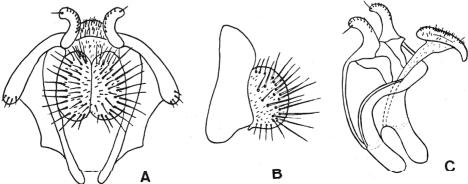


Fig. 1. Microdrosophila (Microdrosophila) chejuensis, n. sp. A, Male genitalia (caudal aspect); B, Periphallic organs (lateral aspect); C, Phallic organs (lateral aspect).

## **ABSTRACT**

One species of Korean Drosophilidae, *Microdrosophila* (*Microdrosophila*) chejuensis, n. sp. was described as new to science and the male genitalia was illustrated. All seven species in the genus *Microdrosophila* including the new species are known to be distributed in Korea at present.

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#### REFERENCES

- Bock, I. R., 1982. Drosophilidae of Australia. V. Remaining genera and synopsis (Insecta: Diptera). Austr. J. Zool., Suppl. Ser., 89: 1-164.
- Lee, T. J. and N. W. Kim, 1987. Systematic study of the Drosophilidae in Korea, Chung-ang Univ. J. Nat. Sci., 1: 113-129.
- Okada, T., 1960. The genus *Microdrosophila* MALLOCH from Japan (Diptera: Drosophilidae). Kontyu, Tokyo, **28**: 211.222
- Okada, T., 1985. A revision of the genus *Microdrosophila* with descriptions of ten new species (Diptera: Drosophilidae). Int. J. Ent., **27**: 310-326.
- Wheeler, M. K., 1981. The Drosophildae: a Taxonomic overview. In "The Genetics and Biology of *Drosophila*", **3a**. 1-97. Academic Press, New York.
- Zhang, W. X., 1989. The genus *Microdrosophila* MALLOCH (Diptera: Drosophilidae) in Yunnan, China, with Descriptions of eleven new species. Proc. Japn. Soc. Zool., **40**: 55-82.

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