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On *Mycodrosophila koreana* sp. nov. from South Korea

With 5 Text-figures

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(Communicated by S. MAKINO)*

Knowledge concerning the drosophilid fauna in Korea has, until recently, consisted of records of several species of *Drosophila* reported by Kikkawa and Peng (1938), and Nakayama and Okamoto (1940). In the last few years this group of insects in Korea has attracted the attention of taxonomists and geneticists, and several surveys carried out by Chung *et al.* (1955, 1956) Okada (1956), Makino, Takada and Lee (1957), Paik and Kim (1957), and Takada and Lee (1958) have added many species to the list of Korean drosophilids. Paik and Kim (1957) devised a key to 51 species of the Drosophilidae occurring in South Korea. Takada and Lee (1958) recorded 23 species new to the Korean fauna. While dealing with the Survey of drosophilid flies in South Korea, the authors have had an opportunity to examine one interesting species of *Mycodrosophila* collected by the junior author (T. J. L.) at Mt. Key Lyong, South Korea, in September, 1957. After a detailed study, it was found that this is a new species of the genus *Mycodrosophila*, the description of which is given in the present paper.

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Mycodrosophila koreana sp. nov. (Figs. 1-5)

Japanese name; Kôrai-Kinoko-Shôjôbae.

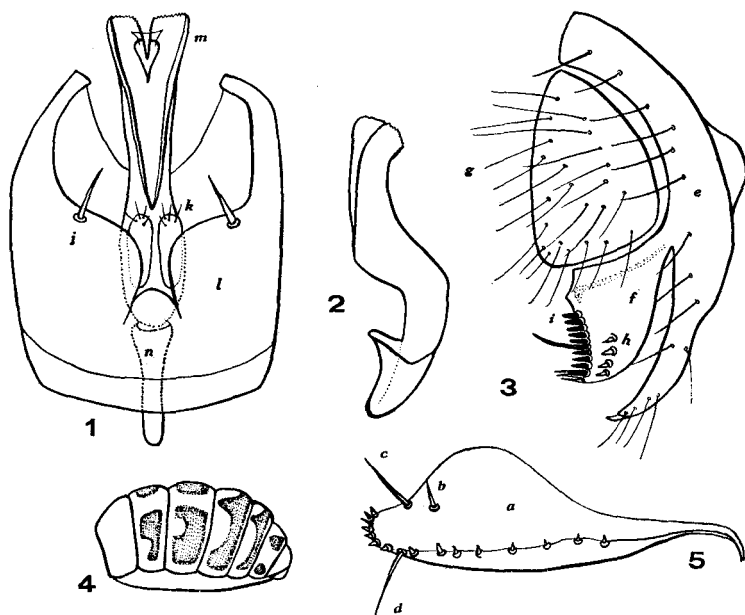
Mycodrosophila sp., Takada, H. and T. J. Lee 1958. Annot. Zool. Japon., 31, 2: 113-116.

♂ and ♀: Body about 2.3 mm., yellow, with blackish brown patches. Head, antenna yellow. Arista with about 7 branches, one below. Ocellar triangle and periorbits blackish brown. Front about half as broad as head-width, dark orange, and posteriorly blackish brown. Pulpus yellow, with a long apical seta, as well as several shorter setae. Clypeus blackish brown. Carina yellowish orange, high and narrow. Cheeks yellowish orange, about 1/4 as broad as the greatest diameter of eye. Middle orbital minute. Only one prominent oral. Eye dark red, bare.

Mesonotum and scutellum blackish brown. Thoracic pleura yellow, with

blackish brown patches on upper margin of mesepisternum. Humeral bristles 3, long. Acrostichal hairs in about 10 irregular rows. Anterior scutellar convergent, short. Sterno-index about 0.7.

Legs yellow, preapicals on hind tibia, apicals on fore and middle. Wings hyaline, veins yellow and black at the end of 1st costal section, crossveins clear. Costal index about 1.4; 4V-index about 2.0; 4c-index about 1.5; 5x-index about 1.7, a long bristle at the end of 1st costal section, 3rd costal section with heavy bristles on its basal 3/5. Halteres yellow, with black patch on the underside of each knob.



Figs. 1-5. *Mycodrosophila koreana* sp. nov. 1. Phallic organs (ventral aspect). 2. Aedeagus (lateral aspect). 3.Periphallal organs (lateral aspect). 4. Male abdomen. 5. Egg-guide. a, egg-guide lobe. b, discal tooth. c, ultimate marginal tooth. d, subterminal hair. e, genital arch. f, clasper. g, anal plate. h, secondary teeth. i, primary teeth. j, submedian spine. k, apical sensilla of anterior parameres. l, ventral fragma. m, aedeagus. n, basal apodeme of aedeagus.

Abdominal tergites pale yellow, with brownish black bands broadly interrupted at middle of 2nd-3rd tergites. 4th-5th tergites with caudal band projected at middle and at both lateral sides to reach anterior margin. 6th tergite with triangular spots at middle and both lateral sides.

Periphallal organs: Genital arch yellowish white, narrow and tapering below, with about 6 upper marginal and 9 lower marginal hairs. Clasper yellowish white, narrowing proximally, and distally with about 10 black primary teeth, as well as 3-4 secondary teeth. Anal plate yellowish white, somewhat triangular, and with about 20 long hairs.

Phallic organs: Aedeagus apically broaden and bilobed, with dorsal fine

serrations. Curved ventrad near base. Anterior parameres minute, each with about 3-4 apical sensilla. Posterior parameres seem to be absent. Ventral fragma quadrate. P. I.—2.9.

Egg-guides: Lobe medially swollen, apically narrowing, yellow, with about 15 yellowish marginal teeth, and a discal tooth and ultimate marginal ones being longest. There is a subterminal long hair on each lobe.

Holotype: ♂, Kongju, Chŏngnam, South Korea, 15 Sept. 1957 (Lee).
Deposited at the College of Education, Kongju.

Allotype: ♀, collected together with holotype. Deposited at the Zoological Institute, Hokkaido University.

Paratype: Buyeo, Korea, 3 ♂♂ and 4 ♀♀, 21 Aug. 1958; Muju, Korea, 2 ♂♂ and 5 ♀♀, 25 Sept. 1958; Kongju, Korea, 4 ♂♂ and 7 ♀♀, 10 Sept. 1958.

Other specimens examined: Asakawa, Tokyo, 1 ♀, 20 May 1951 (Okada); Nanasawa, Kanagawa Pref., 1 ♂, 18 May 1958 (Okada).

Distribution: South Korea, Honshu (Japan).

Collecting methods: Net sweeping and attracted apple baits.

Relationships: Closely allied to *Mycodrosophila palmata* Okada 1956, from Kirishimayama, but differs from it in having neither finger-like processes of aedeagus nor phallosomal index about 1.0. The present species is identical in thoracic and abdominal colorations with *M. poecilogastra* (Loew 1874) from Hokkaido, while it differs from the latter in having neither a long process in upper half of clasper nor ventral fragma basally rounded.

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