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(DIPTERA)

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ON A NEW SPECIES OF *DROSOPHILA* (*SOPHOPHORA*) FROM JAPAN
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Many flies, classified as a new species of *Drosophila* (*Sophophora*), were found among drosophilid flies collected at Mishima and Shizuoka by the authors during the past one year and half.

The authors wish to offer cordial thanks to Prof. Toyohi Okada, Tokyo Metropolitan University, Tokyo, Japan and Prof. Taek-Jun Lee, Chung-Ang University, Seoul, Korea, for their confirming the new species and reading the manuscript.

Drosophila (*Sophophora*) *oshimai* sp. nov. (Fig. 1)

Drosophila (*Sophophora*) sp., Nakamura, 1972. Suruga no Konchu, No. 78: 2271.

♂ and ♀: Body yellow, about 1.8 mm in length. Eyes red, with rough piles. Antenna yellow. Arista with about 8 branches including a small fork, 2 below it. Palpus yellow, narrow, and with a few prominent bristles. Ocellar triangle and periorbits yellow. Front yellow, about half as broad as head width. Clypeus yellow. Cheeks yellow, about 1/3 as broad as the greatest diameter of eyes. Carina broad and flat. Second orbital minute, about 1/4 or 1/5 size of the first. Second oral about 1/2 or 2/3 size of vibrissa. Occiput yellowish brown. Vertex yellow. ^{an apical} _{1/3 proclinate}

Mesonotum and Scutellum yellow. Thoracic pleura yellow. Humeral bristles 2, upper shorter. Acrostichal hairs in 4-6 somewhat irregular rows. No prescutellar bristles. Cross distance of dorsocentral bristles slightly shorter than twice the length distance. Anterior scutellars divergent. Sterno-index about 0.6. Legs yellow. Preapicals on all three tibia, apicals on middle. A comb of about 9 stout black teeth on the inner surface of the only first tarsal joint of male (Fig. 1-D). Wing hyaline, veins yellow, crossvein clear. Costal index about 3.0, 4V-index about 2.6, 4C-index about 1.1, 5x-index about 2.8, C1-bristle 2, subequal in size. 3rd costal section with heavy bristle on its basal 2/5. Halteres greyish yellow. Abdominal tergites yellow, with a brownish dark posterior band on 2-6 segments. Abdominal bristles pale yellow.

Periphallalic organ (Fig. 1-B): Genital arch pale yellow, tapering below. Upper margin with about 4 black hairs. Lower margin with about 20 black hairs. Clasper yellowish brown, quadrate, and with about five black teeth as well as about three secondary teeth. Anal plate pale yellow, separated from genital arch, prolonged at lower anterior tip and with about 18 hairs as well as a stout brownish black process.

Phallic organ (Fig. 1-A): Aedeagus pale yellow, bifid, nearly straight, apically rounded, with fine pubescence on inner side. Anterior parameres pale yellow, irregularly triangular, and with a few sensilla. Posterior parameres curved inward, as long as aedeagus. A pair of hook-like brownish processes at the lateral sides of aedeagus, basally connected with the apodeme of aedeagus. Phallosomal index about 1.0.

Egg-guide (Fig. 1-C): Lobe yellow, marginally orange brown, somewhat pointed apically, with about 15 marginal teeth, a long subterminal hair, and an ultimate marginal tooth. Basal isthmus narrow and short.

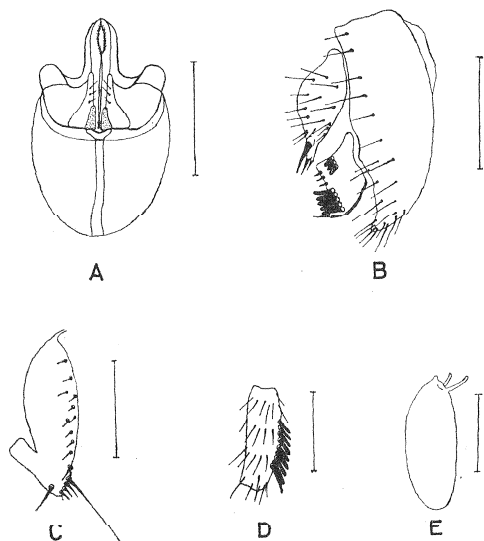


Fig. 1. *Drosophila (Sophophora) oshimai* sp. nov. A. Phallic organ; B.Periphallial organ; C. Egg guide; D. Leg; E. Egg. Scale: 0.1 mm in A-C, 0.2 mm in D-E.
 ↖ fore metatarsus

Remarks: Eggs have two filaments (Fig. 1-E). The authors failed to breed on a culture medium (cornmeal, sugar and yeast) in the laboratory. The holotype and allotype are deposited at the Department of Physiological Genetics, National Institute of Genetics, Mishima Japan.

It is considered that this species inhabits stands of camellia trees ("Tsubaki") from September to March. Choo, J.K. and M. Kawanishi collected it by sweeping at Mishima and K. Nakamura collected it by sweeping and fruit trap at Shizuoka.

The species name is dedicated to Dr. Chozo Oshima, of National Institute of Genetics, who leads and helps the authors in the researches by grants of Ministry of Environmental Agency and Ministry of Education.

Japanese name: Tsubaki-shôjôbae.

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Holotype ♂: Collected at Mishima (Tamazawa Temple), Japan, in Dec. 12, 1971.

Allotype ♀: Collected together with holotype.

Paratypes: Mishima (Tamazawa Temple): 11 ♂ 25 ♀, Sep.-Dec. 1971; 24 ♂ 64 ♀, Jan.-Mar. 1972; 19 ♂ 27 ♀, Nov.-Dec. 1972. Shizuoka (Rinsaiji Temple): 2 ♂ 18 ♀, Dec. 1971; 10 ♂ 68 ♀, Jan.-Feb. 1972. Kirishima: 1 ♂, Aug. 1965, collected by T. Okada. Ii. Ōshima: 2 ♀, Mar. 1973.

Distribution: Mishima, Shizuoka, Ii. Ōshima and Kirishima, Japan.

Relationship: This species belongs to the *melanogaster* species-group, closely resembling *D. (S.) unipectinata* Duda in the shape of male genitalia and in having a single longitudinal sex comb, but differs from the latter in having much shorter comb with fewer teeth and apically not truncate egg-guide lobes.