

A NEW SPECIES OF SUBGENUS *PSILODORHA* OKADA, 1968 FROM TAIWAN (*DROSOPHILA*, *DROSOPHILIDAE*, *DIPTERA*)*

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ABSTRACT

F. J. Lin and H. C. Tseng (1972) *A New Species of Subgenus Psilodorha Okada, 1968 from Taiwan (Drosophila, Drosophilidae, Diptera)*. Bull. Inst. Zool., Academia Sinica 11(1): 9-11. The subgenus *Psilodorha* of the genus *Drosophila* was first described by Professor Toyohi Okada in 1968 with one male fly from Okinawa by monotype. This is the second species of the subgenus found from Taiwan and named *Drosophila (Psilodorha) toyohii*.

The subgenus *Psilodorha* of the genus *Drosophila* was first described by Okada with one male specimen from Okinawa Island by monotype. No specimen has been found since then. He described the subgenus with the *second antennal joint with a long seta reaching beyond the tip of third joint, periorbits broadened anteriorly, frons broader than its long, well developed prescutellars, acrostichal hairs in more than 10 rows, fore femora with two rows of long setae anteriorly, C-3 fringe on entire length, anal plate separated from genital arch, claspers in two sets with a few small teeth, anterior parameres fused to hypandria, with submedial spines*⁽¹⁾. The specimen collected from Chi-tou, Nan-Tou, Taiwan shows the characters fitting with the descriptions mentioned above. The fly was aspirated from where the ground covered with fermented leaves under a shadow of bushes by a stream. The name *toyohii* is for honoring

Professor Okada of Tokyo Metropolitan University, Japan for his great achievement in drosophilid systematics.

DESCRIPTION

Genus *Drosophila* Fallén
Subgenus *Psilodorha* Okada

Type species: *ancora* Okada (1968: 334)

Drosophila (Psilodorha) toyohii sp. nov.

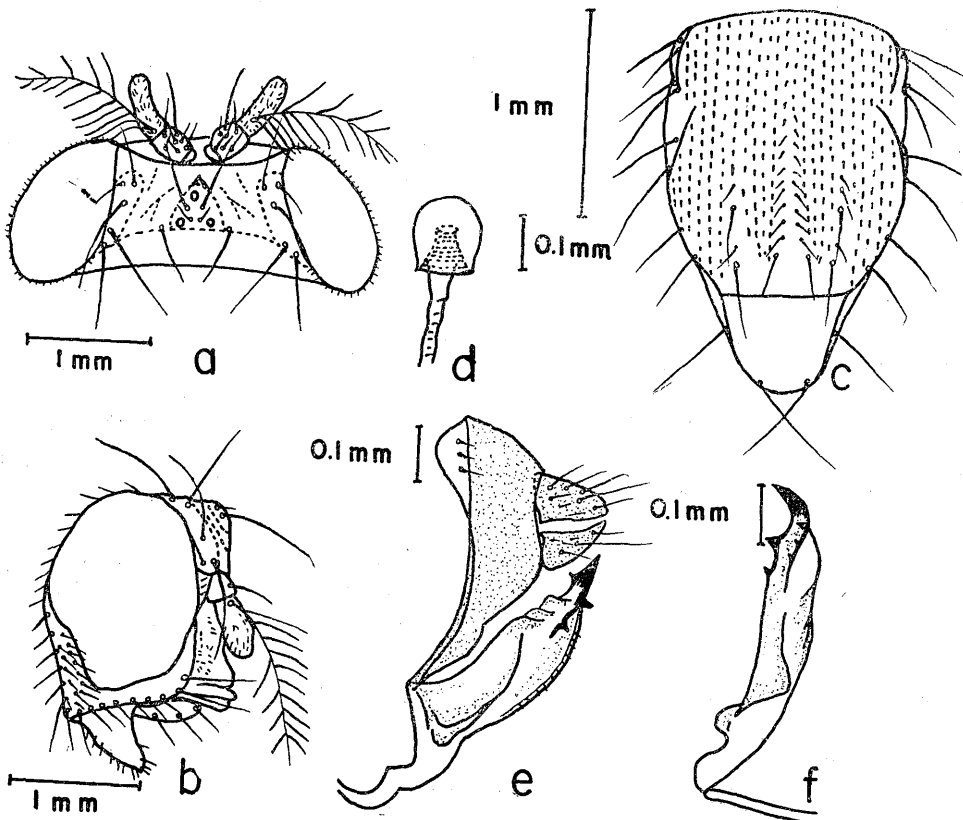
Antennae dark brownish black; second segment with one long seta reaching anterior tip of third antennal joint, one median and 5 to 6 short setae; third segment pollinose. Arista branches 10 above and 4 below in addition to a terminal fork. Front grayish black, width about twice as its middle length. Periorbits dark grayish black, relatively wide, anteriorly broadened, reach anterior 4/5 of front. No frontal hairs. *Orb-2* and *orb-3* at the same level, *orb-2* nearer to eye, *orb-2* 2/3 length of *orb-3* and

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1/3 length of *orb-1*. *Orb-1* nearer to *orb-3* than to inner vertical bristles. Second oral bristle as long as first one, following with a row of long vibrissae. Carina broadly carinated, dark brownish black, reach anterior 4/5 of face. Face dark brownish black, plainly but with lower margin convexed. Clypeus black. Palpus black, with three setae ventrally. Proboscis dark brownish black. Ocellar triangle black, quite wide, anteriorly almost reach anterior margin of front. Ocellars arising from the margin of triangle. Eyes dark brownish red with relatively long black piles. Cheek dark brownish black, width about 1/10 of eye greatest diameter. Postvertical bristles strong and long, length equal to

orb-3. Occiput black.

Mesonotum and scutellum dark brownish black. Acrostichal hairs in 10 rows, middle two rows diverged apically as shown in Figure c. Anterior dorsocentral bristles 3/4 length of posterior ones. Cross distance between anterior dorsocentrals about 1.5 times of the distance from anterior to posterior ones. A short bristle-like acrostichal hair preceded dorsocentral bristles. Prescutellar bristles one pair, diverged (Fig. c). Pleurae dark brownish black. Humeral bristles 2, in equal length. Sterno-index about 0.90. Anterior scutellar bristles divergent, length equal to posterior ones. Posterior ones crossed. Halteres dark brownish black.



Figures. *Drosophila (Psilodorha) toyohii* n. sp.

- a. Upper aspect of head. b. Lateral aspect of head. c. Mesonotum and scutellum. d. Spermatheca. e. Lateral aspect of genital arch and egg guide. f. Upper aspect of egg guide and ithmus.

Legs grayish black. Outer side of fore femur with 2 rows of long hairs. All tarsi short. Apical bristle on middle tibia only. Pre-apical bristles on all three tibiae.

Abdominal tergites brownish black with black patterns scattered. Sternites grayish black.

Spermatheca weakly chitinized. The process of anterior upper margin of genital arch with 3 fine hairs. Heel protruded. Egg guide, lobe light brown with 3 stout spines, one at the tip of lobe and two on the outer side of lobe sub-apically. Ithmus belt-like.

Wings hyaline with a little brownish feeling. Veins reddish dark brown. C-1 bristles 2, in equal length. C-3 fringe on entire section. Costal index about 1.90. 4V index about 2.00. 5 X index about 2.43. Ac index about 3.00.

Body length: 2.90 mm (dry specimen). Wing length: 3.20 mm.

Holotype: ♀, Chi-tou, Nan-Tou, Taiwan; X 1, 1971 (Lin & Tseng). Abdomen was dissected and mounted on slide no. D-199 ♀, together with specimen (deposits in Institute of Zoology, Academia Sinica).

Relationships: Differs from *Drosophila (Psilodorha) ancora* Okada in having arista branches 10/4 +1, acrostichal hairs in 10 rows and middle two rows of acrostichal hairs diverged.

REFERENCE

1. Okada, T. (1968) Addition to the fauna of the family Drosophilidae of Japan and adjacent countries (Diptera). II. Genera *Paramycodrosophila*, *Mycodrosophila*, *Liodrosophila* and *Drosophila*, including a new subgenus *Psilodorha*. *Koutyû*, 36(4): 324-340.

果蠅科昆蟲 *Drosophila* 屬 *Psilodorha* 亞屬

之一新種 *Drosophila toyohii*

林飛棧 曾和枝

本亞屬最先由岡田豐日教授於 1968 年根據琉球產之一隻雄蠅而描述建立的。只此並沒有第二種發現。本文描述另一新種由臺灣中部溪頭森林區採到的一隻雌蟲，為了紀念岡田教授在果蠅科分類方面的偉大成就，特以他的名字，命此種之種名。