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On two species of Drosophilidae (Diptera) described by O. Duda from Russian Far East

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Two species of Drosophilidae described by Duda from Russian Far East are revised. Male and female genitalia of *Scaptomyza* s. str. *subsplendens* (Duda, 1935) are studied. A new synonymy is proposed: *Hirtodrosophila ussurica* (Duda, 1935) = *H. pirka* (Toda, 1989).

Keywords: Drosophilidae, revision, new synonymy, Russian Far East.

INTRODUCTION

Oswald Duda (1934-35) described in "Die Fliegen der paläarktischen Region" eight new species and varieties of Drosophilidae from the Russian Far East. The type specimens of four of them are deposited in the collection of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia.

Through the courtesy of Dr. Emilia P. Nartshuk, curator of Diptera's collection, type specimens of two species described by O. Duda, together with one specimen identified by him, were loaned to me for study. In the present paper the results of this study are given, including drawings of male and female genitalia of *Scaptomyza* (s. str.) *subsplendens*. Some specimens from my collection have been included in the study.

RESULTS

Scaptomyza (Scaptomyza) subsplendens (Duda)

Drosophila (Scaptomyza) subsplendens Duda, 1935:70. Scaptomyza (Scaptomyza) subsplendens (Duda); Hackman, 1959:63.

The holotype specimen was compared with the description of Duda (1935) and the comments of Hackman (1959).

Male. Arista with four upper and one lower rays, in addition to apical fork. Antenna yellow. Frons yellow. Width of frons greater than length, lateral margins slightly convergent anteriorly. Orbital bristles equal in size. Facial carina low, short and yellow. Face yellow, without transverse groove. Genae whitish-yellow, greatest width about 1/5 of the longest diameter of eye. Palpi normal, yellow, with two apical bristles. Eye dark red, with pale pilosity. Two humerals, almost equal in size. Mesonotum with distinct "Scaptomyza pattern". Acrostichals in 2 regular rows. Posterior scutellars almost parallel, anterior scutellars convergent and bent upright. Chaetotaxy of scutellum similar to S. graminum (Fallén). 1st sternopleural bristle 1/2 as long as 3rd sternopleural one, the 2nd 1/8 as long as 3rd. Legs yellow; preap-

icals developed on all tibiae, apicals not preserved. Wing length 2.1-2.3 mm. Wing indices: C - 3.2; 4V - 1.5; 4C - 0.7; 5X - 1.5; C3 - 0.4. Halteres grayish brown.

Abdominal tergites brownish black. Periphallic organs (Fig. 1): epandrium narrow, with about four bristles in lower part. Anal cerci large, with numerous long bristles. Surstylus (Fig. 2) small, oblong, with numerous bristles arranged in a concave row and about three bristles below. Phallic organs (Figs 3 and 4): aedeagus compact, flattened apically. Anterior parameres minute, without sensillae. Posterior parameres seem to be absent. Hypandrium rounded, with a pair of slender submedian processes which are slightly convergent apically.

Female almost indistinguishable from male. Wing indices: C - 3.6; 4C - 0.7; 4V - 1.6; 5X - 1.5; C3 - 0.4. Lobe of egg-guides (Fig. 5) with a black patch near tip, the black patch is contiguous to a black stripe along ventral margins of lobe, with about four marginal bristles and about five marginal teeth. Spermatheca almost semicircular (Fig. 6).

Material examined. ♂ Holotype, Jakovlevka, Spassk district, Ussuri region, 30. VI. 1927 (Stackelberg) / 611 / Scaptomyza subsplendens Duda ♂, det. O. Duda Typus (Duda's handwriting on white label) / Holotypus Scaptomyza subsplendens Duda (red label); 1 ♂, same collection data as holotype / 608 / Scaptomyza spec.? nahe subsplendens det. Dr. O. Duda; 1 ♀, Primorye, Vysokaya Mt., 1500 m, 1-2. IX. 1990 (Sidorenko).

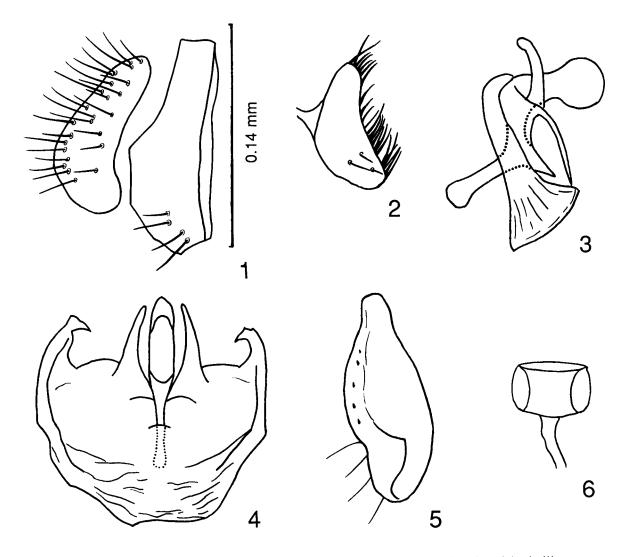
Scaptomyza subsplendens (Duda) is closely related to Scaptomyza graminum (Fallén) in having submedian processes of hypandrium and chaetotaxy of epandrium (upper part bare) but differs from it by the presence of two rows of acrostichals and the chaetotaxy of the egg-guides.

Hirtodrosophila ussurica (Duda) n.stat.

Drosophila (Drosophila) trivittata var. ussurica Duda, 1935:98; Wheeler, 1959:199. Drosophila (Hirtodrosophila) trivittata var. ussurica Duda; Okada, 1967:12. Drosophila (Hirtodrosophila) trivittata ussurica Duda; Wheeler, 1981:54. Drosophila (Hirtodrosophila) pirka Toda, 1989: 375; syn.n.

The lectotype and three paralectotype specimens were compared with the descriptions of several species of the *quadrivittata* species-group. The detailed description of *Drosophila* (*Hirtodrosophila*) pirka Toda, 1989, completely corresponds to the description of *Hirtodrosophila ussurica* (Duda) which is herewith given species rank. Meanwhile Prof. M.J. Toda compared Duda's types with type specimens of *D.* (*H.*) pirka; he confirmed my proposal about the possible synonymy of these species.

Material examined. The type series of *H. ussurica* consists of twelve specimens $(2 \ \delta \ \delta, 10 \ \varsigma \ \varsigma)$. I have studied four of them $(2 \ \delta \ \delta, 2 \ \varsigma \ \varsigma)$. Types deposited in the Zoological Institute, St.-Petersburg, Russia. Lectotype δ (by present designation), Tigrovaja, Sutchan district, Ussuri region, 9. VI. 1927 (Stackelberg) / 7 / *Drosophila 3vittata* Strobl var. *ussurica* n.var. δ , d. Duda Type (Duda's handwriting on white label) / Syntypus *Drosophila trivittata* var. *ussurica* Duda, 1934 (red label) / Lectotypus *Hirtodrosophila ussurica* (Duda, 1935), design. Sidorenko; $1 \ \delta$, $2 \ \varsigma \ \varsigma$ (paralectotypes), same data as lectotype; $2 \ \delta \ \delta$, $2 \ \varsigma \ \varsigma$, Japan, Hokkaido, Sapporo, 14. VIII. 1987 (M.J. Toda) / *Drosophila (Hirtodrosophila) pirka* Toda (det. M.J. Toda).



Figs 1-6. *Scaptomyza subsplendens* (Duda): 1, periphallic organs; 2, surstylus; 3 and 4, phallic organs; 5, egg-guides; 6, spermatheca.

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