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## A NEW SPECIES OF *DOLICHOPUS* (DIPTERA, DOLICHOPODIDAE) FROM JAPAN

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**A New Species of *Dolichopus* (Diptera, Dolichopodidae) from Japan.** Negrobov, O. P., Fursov, V. N., Selivanova, O. V. — *Dolichopus satoi* Negrobov, Fursov et Selivanova, sp. n. is described from Japan and compared with a closely related species, *D. mediovenus* Negrobov, 1977 which is recorded from Japan for the first time. The pictures of morphological features of both species are given.

**Key words:** *Dolichopus*, Dolichopodidae, Diptera, new species, Japan.

**Новый вид *Dolichopus* (Dolichopodidae, Diptera) из Японии.** Негрбов О. П., Фурсов В. Н., Селиванова О. В. — Из Японии описан *Dolichopus satoi* Negrobov, Fursov et Selivanova, sp. n., близкий к *D. mediovenus* Negrobov, 1977, впервые указанному для фауны Японии. Приведены изображения деталей морфологии гениталий и усиков этих видов.

**Ключевые слова:** *Dolichopus*, Dolichopodidae, Diptera, новый вид, Япония.

The fauna of the family Dolichopodidae of Japan is not fully studied until now, despite that currently more than 120 species are known from this area. While in the view of its boundary location between the Oriental and Palaearctic Regions the fauna of this area consists of about 300 species of the family Dolichopodidae.

By the present time only seven species of the genus *Dolichopus* Latreille were recorded from Japan: *Dolichopus crassicosta* Parent, 1926; *D. crinicornis* (Wiedemann, 1824); *D. gubernator* Mik, 1878; *D. nitidus* Fallen, 1823; *D. plumipes* (Scopoli, 1763); *D. ptenopedilus* Meuffels, 1981 and *D. tessellatus* Macquart, 1842 (Stackelberg, 1933, 1934; Shiraki, 1954; Meuffels, 1981; Hirashima, 1989; Tago, 2010).

Material of the genus *Dolichopus* was collected by the second author in Japan (in 1997 and 1999) with yellow pan traps and sweeping net. Additional comparative material was kindly loaned by Dr Masahiko Sato (Rishiri Town Museum, Hokkaido, Japan) whom we greatly appreciate. An illustrated description of a new species of the genus *Dolichopus* together with is given below.

### ***Dolichopus satoi* Negrobov, Fursov et Selivanova, sp. n. (fig. 1–3)**

**Material.** Holotype, ♂, Japan, Honshu, Nagoya, Shiogama-guchi, Tenpaku-ku, 29.05.1999 (coll. V. Fursov). Type is deposited in the collection of Zoological Institute of Russian Academy of Sciences (Saint-Petersburg).

**Diagnosis.** In the key to Palaearctic species (Negrobov et al., 2005) this species runs to *D. mediovenus* Negrobov, differing from it by the coloration and setation of the hind tarsus, coloration of face and structure of surstyli as given in a short key.

**Description.** Male. Body length: 5.0 mm, wing length: 4.7 mm. Frons bright, shiny green, with bronze tint without pollen around the edges. Face pale yellow, without hairs, not reaching lower margin of eyes, its width at middle barely wider than third antennal segment (1.13 : 1). Proboscis dark brown. Palp yellow with light hairs and one black bristle. 1st, 2nd and base of 3rd antennal segment yellow, most part

of 3rd segment brown. Third antennal segment long, with pointed apex, its length is greater than its width. Ratio of 3rd antennal segment length to its width and length of arista — 1 : 1.75 : 4.5. Arista closer to base of dorsal side of 3rd antennal segment, not expanding on top, with short hairs. Postero-ocular bristles light-yellow basally.

Thorax dark green. Mesonotum metallic shiny, bronze-tinged, with a bronze longitudinal stripe, with two bronze spots on each side, pleurae in gray pollen. Propleuron at the bottom with one strong black seta and two groups of small light hairs.

Legs, including coxae, yellow; segments of front and middle tarsus dark, except for most of 1st segments; middle coxa dark in most part; hind coxa black at base; hind tarsus black and apex of hind tibia black. Fore coxa with yellow hairs; all coxae on top with black bristles. Middle and hind femur with one strong antero-apical seta. Fore tibia without long apical-ventral seta, with 2 antero-dorsal, 2 postero-dorsal and 3 short postero-ventral setae.

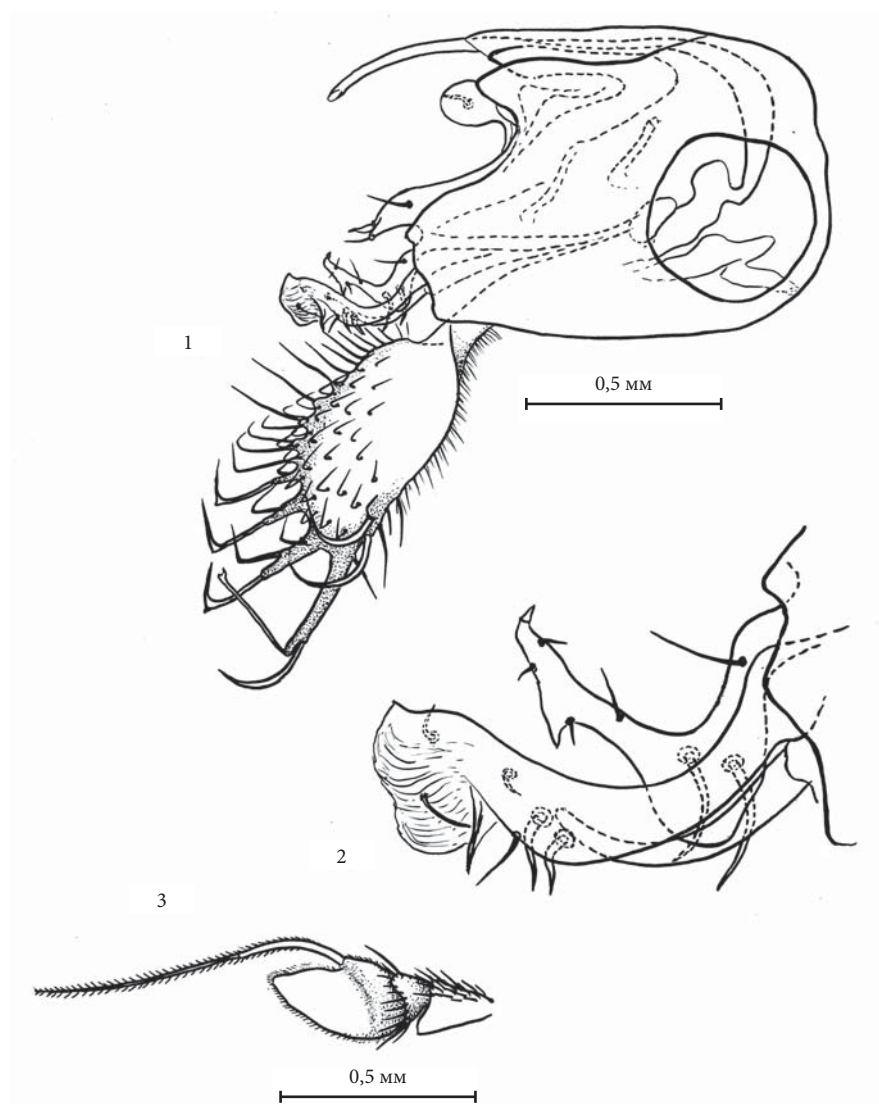


Fig. 1–3. *Dolichopus satoi*, sp. n.: 1 — hypopygium; 2 — surstylus; 3 — antenna.

Рис. 1–3. *Dolichopus satoi*, sp. n.: 1 — гипопигий; 2 — сурстили; 3 — усик.

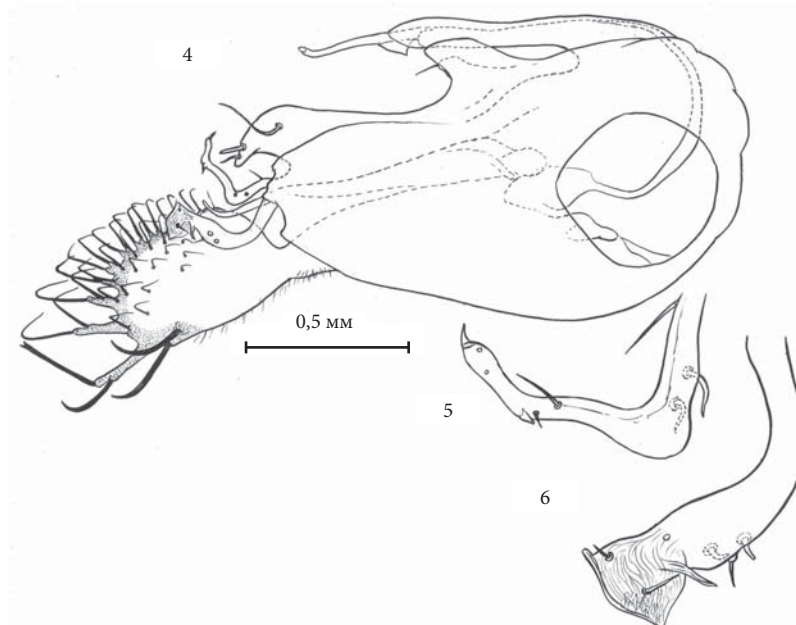


Fig. 4–6. *Dolichopus mediovenus*: 4 — hypopygium; 5 — dorsal lobe of surstylus; 6 — ventral lobe of surstylus.

Рис. 4–6. *Dolichopus mediovenus*: 4 — гипопигий; 5 — дорсальная лопасть сурстилей; 6 — вентральная лопасть сурстилей.

Tarsal segments not expanded. Top of 4th and all 5th segment of fore leg with short spiky hairs. Ratio of length of front tarsus and length of segments of fore tarsus (from 1st to 5th) — 6.4 : 3.4 : 1.8 : 1.3 : 0.8 : 0.6. Mid tibia with 4 antero-dorsal, 2 postero-dorsal and 2 antero-ventral setae. First segment of mid tarsus with one strong seta on frontal side and small setae on ventral side. Ratio of length of mid tibia to length of mid tarsal segments (from 1st to 5th) — 10.9 : 6 : 3 : 2.13 : 1.38 : 1.

Femora without long ventral setae. Hind tibia not thickened, with antero-dorsal, 5 postero-dorsal, 5 strong ventral setae and a number of small ventral setae. First segment of hind tarsus with 3 strong setae and group of small setae on ventral side. Ratio of length of hind tibia to length of segments of hind tarsus (from 1st to 5th) — 9.4 : 4.1 : 3.2 : 2.2 : 1.4 : 0.8. Notum with 2 strong black setae at edge and 2 small setae on sides.

Wing weakly darkened. Costal vein at apex of subcostal vein with oval thickening. Veins  $R_{4+5}$  and  $M_{1+2}$  parallel at top. Vein  $M_{1+2}$  sharply curved in apical part, with rudimentary vein  $M_2$ . Ratio of lengths of costal vein sections between  $R_{2+3}$  and  $R_{4+5}$  and between  $R_{4+5}$  and  $M_{1+2}$  — 1.85 : 1. Apical section of  $M_{3+4}$  1.68× times as long as crossvein dm-cu. Anal lobe well developed. Anal angle obtuse. Calypters yellow with black hairs. Halter yellow.

Abdomen metallic green, shining, with bronze strips on edges of tergites and with silver-white pollen on sides. Apico-ventral surstylus yellow, rostrum shaped, with one strong seta on top, approximately 2× as long as wide. Phallus in apical part without teeth-shaped ventral process. Cercus yellow, elongated-oval, with black border at edges, much longer than wide, on top with serrated edges and long crescent bristles.

Female unknown.

Ethymology. The species is named in the honor of Dr. Masahiko Sato (Rishiri Town Museum, Hokkaido, Japan), with whom O. P. Negrobov is fruitfully collaborating for a long time in the study of taxonomy of the family Dolichopodidae.

**Key for closely related species of the genus *Dolichopus***

1. Basal segments of hind tarsus yellow. 1st segment of hind tarsus with one strong bristle. 1st segment of mid tarsus without strong bristle. Basal surstyli developed only at left side, triangular. Face silvery white. Cercus 1.5× as long as wide. .... *D. mediovenus* Negrobov
- Basal segments of hind tarsus dark. 1st segment of hind tarsus with three strong and a few weaker bristles. 1st segment of mid tarsus with one strong bristle. Basal surstyli well developed, asymmetric, on left side of triangular shape and on right side of oval shape. Face pale yellow. Cercus ca. 2× as long as wide. .... *D. satoi* sp. n.

***Dolichopus mediovenus* Negrobov, 1977 (fig. 4–6)**

Negrobov, 1977: 96.

**Material.** 1 ♂, Japan, Honshu: Aichi Pref., Nagoya, Shiogama-guchi, Tenpaku-ku, 29.05.1999; 1 ♂, Nagoya, Nagakute-cho Park, 13.04.1997; 1 ♂, Kanto Ibaraki Park, Tsukuba, Shishitsuka Lake, 15.06.1997 (Fursov); 1 ♂, Hokkaido, 3.06.1932 (H. Yaku).

**Type locality.** Far East of Russia: Suputinski [= Ussuriyskii] Reserve, Maritime Territory. Palearctics: Russia.

**First record from Japan.** Previously known only from Far East Russia (Maritime Territory).

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