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A new species of *Dolichopus* Latreille, 1796 (Diptera: Dolichopodidae) from Japan

Новый вид *Dolichopus* Latreille, 1796 (Diptera: Dolichopodidae) из Японии

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

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

Abstract. The new species from Japan *Dolichopus kumazawai* Maslova, Negrobov et Fursov, **sp. n.** is described. The species is close to *Dolichopus vaillanti* Parent, 1927 and can be distinguished from latter by wings without stigma, postpedicel 1.7 times greater than its width, hind basitarsus mostly yellow.

Резюме. Описан новый вид *Dolichopus kumazawai* Maslova, Negrobov et Fursov, **sp. n.**, близкий к *Dolichopus vaillanti* Parent, 1927, от которого отличается следующими признаками: крыло без стигмы, постпедикел в 1.7 раза больше своей ширины, задний базитарсус в большей части желтый.

The genus *Dolichopus* Latreille, 1796 is the largest genus of Dolichopodidae with more than 600 species worldwide. No revision of the genus in the Palearctic region was published after the monograph of Stackelberg [1930]. The last key to males of species of the genus *Dolichopus* was published by Negrobov et al. [2005].

In Japan, the following six species of the genus were previously known: *Dolichopus crassicosta* Parent, 1926 was described from Japan [Parent, 1926]; *Dolichopus gubernator* Mik, 1878 was recorded from Japan by Wada et al. [2007]; *Dolichopus nitidus* Fallén, 1823 was reported from Japan [A check list..., 1989]; *Dolichopus plumipes* (Scopoli, 1763) was recorded from Hokkaido [The Insects..., 1983]; *Dolichopus ptenopedilus* Meuffels, 1981 was described from Hokkaido [Meuffels, 1981]; *Dolichopus satoi* Negrobov, Fursov et Selivanova, 2014 [Negrobov, Fursov, Selivanova, 2014].

The materials for this study were collected by Dr. V.N. Fursov (Schmalhausen Institute of Zoology of National Academy of Sciences Ukraine) from Japan and Mr. T. Tago from Saitama Prefecture and Tokyo (Japan).

Holotype and paratypes of the new species are deposited in the Zoological Institute of the Russian Academy of Sciences (ZIN, Saint Petersburg, Russia) with part of the paratypes housed in the collections of

Schmalhausen Institute of Zoology of National Academy of Sciences Ukraine (IZU), Osaka Museum of Natural History (OMNH, Japan) and Voronezh State University (VSU, Russia).

Dolichopus kumazawai Maslova, Negrobov
et Fursov, **sp. n.**
(Figs 1–4)

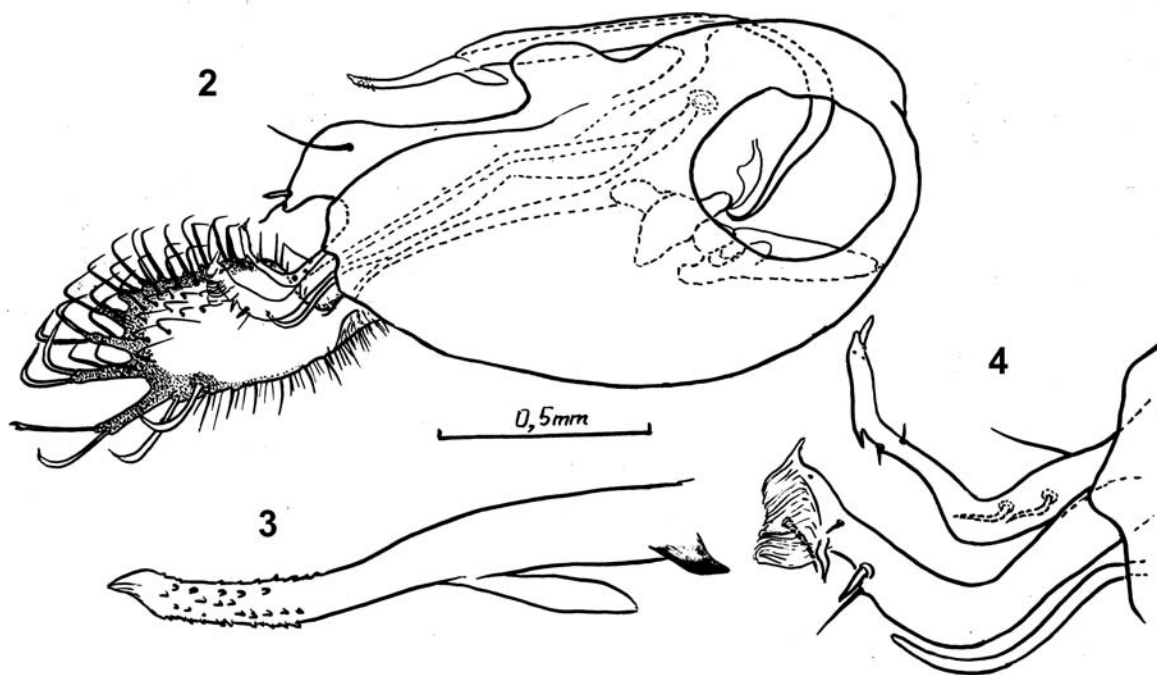
Dolichopus sp. 5 sensu Tago [2010].

Material. Holotype ♂, Japan, Honshu, Aichi Pref., Nagoya, Nagakute-cho Park, 15.06.1999 (leg. V. Fursov) (ZIN). Paratypes: 6♂, Japan, Honshu, Aichi Pref., Nagoya, Nagakute-cho Park, 15.06.1999 (leg. V. Fursov), 2♂, Japan, Saitama Pref., Edogawa River bank, Misato City, 9.09.2006 (leg. T. Tago), 4♂, Japan, Tokyo, Mizumoto, Katsushika ward, 26.07.2009 (leg. T. Tago) (ZIN, IZU, OMNH, VSU).



Fig. 1. *Dolichopus kumazawai* sp. n., general view.

Рис. 1. *Dolichopus kumazawai* sp. n., общий вид.



Figs 2–4. *Dolichopus kumazawai* sp. n., details of structure.

2 – hypopygium, lateral view; 3 – apex of aedeagus; 4 – surstylus and postgonite, lateral view.

Рис. 2–4. *Dolichopus kumazawai* sp. n., детали строения.

2 – гипопигий, латерально; 3 – вершина эдегуса; 4 – сурстили и постгонит, латерально.

Diagnosis. Face silvery-white. Antenna yellow. Postpedicel reniform with pointed apex, 1.7 times longer than wide. Stylus is located in middle part of postpedicel. Fore tibia without apicoventral seta. Tarsomeres of fore and mid legs simple. Hind femur without long ventral hairs. Mid basitarsus without strong setae. Hind basitarsus with 3 strong setae. Wing finely infuscate anteriorly, most intensively dark in the front and middle parts at top, without thickening on costal vein near apex of subcostal vein. Aedeagus on top with small spines in the apical part in two long ventral processes. Cerci yellow, with wide black border at apex.

Description. Male. Face silvery-white, without hairs, not reaching lower margin of eyes, its width in the middle part narrower than width of postpedicel (0.8 : 1). Proboscis dark-brown. Palpus yellow with yellow hairs and one long black seta. Frons shining green with purple tint and grey pollination along margins. Antenna yellow. Postpedicel reniform with pointed apex, 1.7 times longer than wide. Stylus located in middle part of postpedicel, with very short hairs. Ratio of postpedicel length to its width to stylus length 1.7 : 1 : 3.8. Postocular bristles in ventral part of head light yellow, on upper part of head black.

Thorax green with blue shade, pleura grey pollinose. Mesonotum shining metallic, with bronze stripes, pleura grey pollinose. Proepisternum with one black seta and white hairs. Six strong dorsocentral bristles. Acrostichal setae well developed. Scutellum with 2 strong, 2 small black marginal bristles and with small hairs.

Legs. Coxae with black setae. Legs yellow, basal part of mid coxae, apex of front and middle tarsus, apex of hind basitarsus and 2–5th segments of hind tarsus dark, pulvilli white. Tarsomeres of fore and mid legs simple. Fore femur without long ventral hairs.

Mid and hind femora with 1 strong preapical setae. Fore tibia without apicoventral seta, with 2 anterodorsal, 3 posterodorsal and 2 posteroventral setae. Length ratio of fore tibia and tarsus (from 1st to 5th) 5.8 : 2.7 : 1.4 : 1.2 : 0.7 : 0.7. Mid tibia with 3 anterodorsal, 2 posterodorsal and 1 posteroventral setae. Mid basitarsus without strong setae on the ventral side and with few small bristles. Length ratio of mid tibia and tarsus (from 1st to 5th) 7.4 : 4.1 : 2.2 : 1.6 : 0.9 : 0.8. Hind femur without long ventral hairs, with 1 strong preapical seta. Mid tibia with 4 anterodorsal, 5 posterodorsal and 1 posteroventral setae. Mid basitarsus without strong setae on the ventral side, with few small bristles. Length ratio of mid tibia and tarsus (from 1st to 5th) 8.5 : 3 : 3.3 : 2 : 1.4 : 1. Hind femur without long ventral setae. Hind tibia with strong 4 anterodorsal, 6 posterodorsal, 1 anteroventral setae and short ventral setae. Hind basitarsus with 3 strong setae. Length ratio of hind tibia and tarsus (from 1st to 5th) 9.4 : 3.9 : 4 : 2.7 : 1.8 : 1.1.

Wing finely infuscate anteriorly, most intensively dark in the front and middle parts at top, without thickening on costal vein near apex of subcostal vein. R_{4+5} and M_{1+2} divergent at apex. M_{1+2} with rudiment of M_2 . Ratio of part of costa between R_{2+3} and R_{4+5} and that between R_{4+5} and M_{1+2} 2.2 : 1.6. Apical part of CuA_1 longer than $dm-cu$ (2.8 : 2.3). Anal angle obtuse. Lower calypter yellow with black hairs. Halter yellow.

Abdomen shining green with bronze tint and with dark bronze stripes along margins of segments, covered with black setae, sides with a whitish-silvery pollen. Hypopygium large. Epandrium brown, oblong-oval with long appendage at base. Apicoventral epandrial lobe yellow, narrow, oval, with a pointed apex, with 2 strong setae at apex. Aedeagus on top with small spines in the apical part in two long ventral processes. Cerci yellow, with wide black border at apex, with serrated margin and sickle-shaped setae, triangular from ventral aspect.

Body length 2.7–2.8 mm, wing length 2.5–2.7 mm.

Female unknown.

Etymology. The new species is named for Mr. Tatsunori Kumazawa from Osaka Museum of Natural History (Japan).

Remarks. In the key of Palearctic species [Negrobov et al., 2005] the new species runs to *Dolichopus vaillanti* Parent, 1927 and can be distinguished from latter by following characters:

- Wings with well-developed stigma. Postpedicel 2.5 times greater than its width. Hind basitarsus black
..... *Dolichopus vaillanti*
- Wings without stigma. Postpedicel 1.7 times greater than its width. Hind basitarsus mostly yellow
..... *Dolichopus kumazawai* **sp. n.**
- Wings with stigma, finely infuscate anteriorly, most intensively dark in the front and middle parts at top. Fore tibia with 3 posterodorsal setae. Mid tibia with 2 posterodorsal setae. Hind tibia with 6 posterodorsal setae
..... *Dolichopus kumazawai* **sp. n.**
- Wings without stigma, hyaline. Fore tibia with 2 posterodorsal setae. Mid tibia with 3 posterodorsal setae. Hind tibia with 4 posterodorsal setae
..... *Dolichopus vaillanti*

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