

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

## Новый вид рода *Dolichopus* Latreille, 1796 из Таджикистана (Diptera: Dolichopodidae)

I. Ya. Grichanov  
И. Я. Гричанов

All-Russian Institute of Plant Protection, Podbelskiy roadway, 3, St. Petersburg, Pushkin 196608 Russia. E-mail: grichanov@mail.ru  
Всероссийский институт защиты растений, шоссе Подбельского, 3, Санкт-Петербург-Пушкин 196608 Россия

**Key words:** Diptera, Dolichopodidae, Dolichopodinae, Palearctic region, Tajikistan, *Dolichopus*, new species.

**Ключевые слова:** Diptera, Dolichopodidae, Dolichopodinae, Палеарктика, Таджикистан, *Dolichopus*, новый вид.

**Abstract.** A new peculiar species *Dolichopus medvedevi* Grichanov **sp. n.** is described from Tajikistan. It has a unique to Palearctic species of the genus modification of fore legs (male secondary sexual character), being close by this character to some species of dolichopodine genera *Sybistroma* Meigen, 1824 and *Tachytrechus* Haliday, 1851.

**Резюме.** Описан *Dolichopus medvedevi* Grichanov **sp. n.** из Таджикистана, отличающийся от всех палеарктических видов рода модификацией передних ног (вторичнополовой признак самцов), но похожий по этому признаку на некоторые виды родов *Sybistroma* Meigen, 1824 и *Tachytrechus* Haliday, 1851.

### Introduction

The genus *Dolichopus* Latreille, 1796, is the largest genus of Dolichopodidae with more than 600 mostly Holarctic species, but with a number of species still waiting description [Zhang and Yang, 2008; Negrobov et al., 2009].

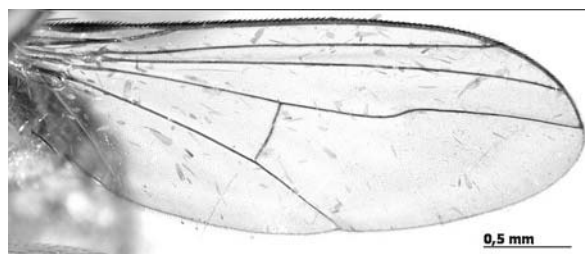
A male of peculiar *Dolichopus* species was collected by the author 25 years ago during a trip to the Southern Tajikistan. Unfortunately no new material was found later, while the type locality of the species is now under strong anthropogenic pressure, and the region at Tajik-Afghan border is hardly accessible by professional collectors.

A new species discovered is here described and illustrated. Morphological terminology follows Grichanov [2007]. The relative lengths of the podomeres should be regarded as representative ratios and not measurements. The holotype of the new species is deposited in the collection of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg (ZIN).

*Dolichopus medvedevi* Grichanov, **sp. n.**  
(Fig. 1–3)

**Type material.** Holotype ♂, S Tajikistan, Dusti vil. [env.: 37.32°N, 68.82°E], summer 1984, Grichanov [ZIN].

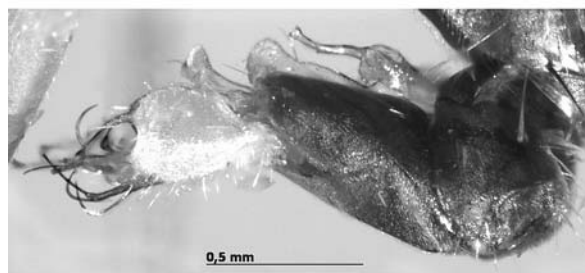
**Description.** Male. General coloration of body metallic copper-green. Head: frons shining green, weakly pollinose; face with yellowish-brown ground colour, white pollinose. Lower and lateral postocular setae white; ventral postcranium with several white setae. Eyes finely haired; face practically bare, with minute hairs on clypeus. Face narrowed towards clypeus; ratio of its width below antennae to width at clypeus to height, 18:7:45; clypeus not reaching lower margin of eyes, with straight margin. Antennae mostly broken, but scape apparently yellow.



1



2



3

Fig. 1–3. *Dolichopus medvedevi* Grichanov, **sp. n.**  
1 – wing; 2 – fore tibia and tarsus; 3 – hypopygium.

Рис. 1–3. *Dolichopus medvedevi* Grichanov, **sp. n.**,  
1 – крыло; 2 – передняя голень и лапка; 3 – гипопигий.

Thorax with mesonotum weakly pollinose; pleura whitish pollinose; metepimeron yellow; 6 dorsocentral setae, 2 rows of short acrostichals. Proepisternum with 1 strong black seta and light hairs above coxa, several upper light hairs. Scutellum with 2 strong setae and 2 lateral hairs.

Legs almost entirely yellow; mid coxa brown on outer side; tarsi brown or brownish from apex of 2<sup>nd</sup> segment. Fore coxa with light hairs and several black subapical setae. Fore femur simple, with fine posteroventral subapical seta. Fore tibia devoid of setulae on dorsal and posterior surface along entire length, with 2 long

fine white apicoventral setae. Fore basitarsus whitish, distinctly swollen along entire length, glabrous, with only double anterior row of setulae; 2<sup>nd</sup>–5<sup>th</sup> segments flattened dorsoventrally, glabrous, with 1–2 anterior rows of microsetulae; 5<sup>th</sup> segment with apical projection, with small claws and puvilli. Mid femur with 1 subapical anterior seta. Mid tibia with 4 anterodorsal, 2 posterodorsal, 1 short anteroventral and 5 apical setae. Mid tarsus simple. Hind femur with subapical anterior seta at 3/4. Hind tibia without tibial organ, with 4 anterodorsals, 4 posterodorsals, a row of short ventral, 3 apical setae. Hind basitarsus with 1 strong middorsal and 2 short apical setae. Tibia and tarsomere (from first to fifth) length ratio: fore leg: 89:61:31:25:18:16, mid leg: 120:63:31:25:18:15, hind leg: 125:45:52:32:20:17.

Wing practically hyaline, without distinct spots; veins light-brown. Costal vein with elongate thickening between humeral crossvein and tip of  $R_1$ .  $R_1$  1/4 length of wing.  $R_{2+3}$  and  $R_{4+5}$  almost straight. Ratio of part of costa between  $R_{2+3}$  and  $R_{4+5}$  to this between  $R_{4+5}$  and  $M_{1+2}$ , 32:17.  $M_{1+2}$  in distal part with gentle flexion at 2/5, then parallel to  $R_{4+5}$ , joining costal vein at wing apex. Distal part of  $M_{1+2}$  1.5 times longer than proximal part. Crossvein *m-cu* straight, oblique, nearly half as long as apical part of  $CuA_1$  (26:46). Anal vein distinct, almost reaching to wing margin; anal angle obtuse. Lower calypter yellow, with white cilia. Halter yellow.

Abdomen metallic bronze-green, whitish pollinose, with narrow blackish bands along sutures, mainly black hairs and marginal setae; 1<sup>st</sup>–2<sup>nd</sup> terga and ventrum with mainly light hairs. 8<sup>th</sup> segment black-green, with light cilia. Epandrium greenish-black, brown distally, elongate-triangular, as long as 4<sup>th</sup>–6<sup>th</sup> terga combined, with light yellow appendages. Aedeagus with small dorsal denticle. Epandrial lobe prominent, rounded at apex, with 2 setae. Two pairs of surstylus, covered with sparse setae. Postgonite very narrow, hook-like. Cercus white, rounded-ovate, with 3–4 long narrow brownish distal processes, each bearing 2 long flat curved black bristles.

Length (mm): body 3.5, wing 3.5/1.2, hypopygium 1.3.

Female unknown.

**Etymology.** The species is named after the late President of the Russian Entomological Society, Gleb Sergeevich Medvedev.

**Diagnosis.** Based on the presence of yellow femora and white postoculars, the new species is included in group III [Stackelberg, 1930; Parent, 1938] and keys to *D. platylepis* Negrobov et Grichanov, 1979 [Negrobov et al., 2005], that has simple legs except flattened and widened fore basitarsus, different leg setation and hypopygium morphology. Nevertheless, *D. medvedevi* has a unique to Palearctic species of the genus modification of fore legs (apparently male secondary sexual character), remarkably resembling by this character some species of the other dolichopodine genera, e.g., *Sybistroma sinaiensis* (Grichanov, 2000) and *Tachytrechus beckeri* Lichtwardt, 1917.

## References

- Grichanov I.Ya. 2007. A checklist and keys to Dolichopodidae (Diptera) of the Caucasus and East Mediterranean. St. Petersburg: VIZR RAAS. 160 p.
- Negrobov O.P., Grichanov I.Ya., Barkalov A.V. 2009. The *Dolichopus latipennis* species group (= *Hygroceleuthus* Loew) in the Palearctic Region (Diptera: Dolichopodidae) // Zootaxa. 2087: 37–45.
- Negrobov O.P., Rodionova S.Yu., Maslova O.O., Selivanova O.V. 2005. Key to the males of the Palearctic species of the genus *Dolichopus* Latr. (Diptera, Dolichopodidae) // International Journal of Dipterological Research. 16(2): 133–146.
- Parent O. 1938. Diptères Dolichopodidés // Faune de France. 35. L'Académie des Sciences de Paris, Paris. 720 p.
- Stackelberg A.A. 1930. 29. Dolichopodidae // Die Fliegen der Palaearktischen Region (Lindner E. ed.). 4(5), Lief. 51: 1–64.
- Zhang L., Yang D. 2008. New species of *Dolichopus* Latreille, 1796 from China (Diptera: Dolichopodidae) // Journal of Natural History. 42(39–40): 2515–2535.

## References

- Grichanov I.Ya. 2007. A checklist and keys to Dolichopodidae (Diptera) of the Caucasus and East Mediterranean. St. Petersburg: VIZR RAAS. 160 p.
- Negrobov O.P., Grichanov I.Ya., Barkalov A.V. 2009. The *Dolichopus latipennis* species group (= *Hygroceleuthus* Loew) in the Palearctic Region (Diptera: Dolichopodidae). *Zootaxa*. 2087: 37–45.
- Negrobov O.P., Rodionova S.Yu., Maslova O.O., Selivanova O.V. 2005. Key to the males of the Palearctic species of the genus *Dolichopus* Latr. (Diptera, Dolichopodidae). *International Journal of Dipterological Research*. 16(2): 133–146.
- Parent O. 1938. Faune de France. 35. Dipteres Dolichopodides. Paris: L'Academie des Sciences de Paris. 720 p.
- Stackelberg A.A. 1930. 29. Dolichopodidae. *In*: Die Fliegen der Palaearktischen Region (E. Lindner ed.). 4(5), Lief. 51: 1–64.
- Zhang L., Yang D. 2008. New species of *Dolichopus* Latreille, 1796 from China (Diptera: Dolichopodidae). *Journal of Natural History*. 42(39–40): 2515–2535.