

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

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

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**Key words:** Diptera, Dolichopodidae, Dolichopodinae, Palaearctic region, Turkey, *Dolichopus*, new species.

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

**Abstract.** A new peculiar species *Dolichopus zaitzevi* Grichanov **sp. n.** is described from Turkey. It is the closest to Palearctic *D. cinctipes* Wahlberg, 1850 by modification of mid tibia (male secondary sexual character), but keys to *D. vitripennis* Meigen, 1824. New data on the distribution of *D. cinctipes* and *D. vitripennis* are presented.

**Резюме.** Описан *Dolichopus zaitzevi* Grichanov **sp. n.** из Турции, похожий на палеарктический *D. cinctipes* Wahlberg, 1850 по модификации средних голеней (вторичнополовой признак самцов), но по существующим определителям идущий к *D. vitripennis* Meigen, 1824. Представлены новые материалы по распространению *D. cinctipes* и *D. vitripennis*.

### Introduction

The genus *Dolichopus* Latreille, 1796, is the largest genus of Dolichopodidae with about 630 mostly Holarctic species, but with a number of species still waiting description [Grichanov, 2003–2012; Zhang, Yang, 2008].

Males and females of peculiar *Dolichopus* species were collected by an expedition of the All-Russian Institute of Plant Protection (VIZR) during a trip to the Northern Turkey in 2003. As a result, a new species discovered is here described and illustrated. New data on the distribution of *D. cinctipes* and *D. vitripennis* are also presented. Morphological terminology and abbreviations follow Grichanov [2007a] and Cumming and Wood [2009]. The relative lengths of the podomeres should be regarded as representative ratios and not measurements. Photos were made by the author of this paper. The holotype and paratypes of the new species and other material cited are housed at the collection of the Zoological Institute of the Russian Academy of Sciences, St. Petersburg (ZIN). For information on global distribution for species listed see Grichanov [2003–2012].

*Dolichopus zaitzevi* Grichanov, **sp. n.**  
(Fig. 1–6)

*Dolichopus cinctipes* Wahlberg, 1850: Grichanov, 2007b: 144, misidentification.

**Material.** Holotype ♂, NE Turkey, Kaçkar Dağı, N Slope, Lakeshore, 2600 m, 14.07.2003, G. Davidyan [ZIN]. Paratypes 3♂, the same label; 1♂, 2♀ (in alcohol), NE Turkey, Kaçkar Dağı, N Slope, Lakeshore, 2700 m, 3.07.2003, G. Davidyan [ZIN].

**Description.** Male. General coloration of body black with greenish and violet shine. Head: frons black, weakly pollinose; face greyish white pollinose. Lower postocular setae white, usually with addition of few brown or black setae; ventral postcranium with several white setae. Eyes finely haired; face practically bare, with minute hairs on clypeus. Face narrowed towards clypeus, under antennae about as wide as height of postpedicel; clypeus not reaching lower margin of eyes, with straight margin. Antenna (Fig. 1) black; scape simple, with dorsal setae; postpedicel rounded, with distinct apex, slightly longer than high; stylus middorsal, densely shortly haired, with somewhat thickened 1<sup>st</sup> and 2<sup>nd</sup> segments. Length ratio of antennal segments and stylus (1<sup>st</sup> and 2<sup>nd</sup> segments), 10 : 10 : 19 : 17 : 35.

Thorax with mesonotum weakly pollinose; pleura grey pollinose; 6 dorsocentral setae, 2 rows of short acrostichals. Upper and lower part of propleuron with fine light hairs; lower part of propleuron with 1 strong black prothoracic seta; pleural surface in front of posterior spiracle with few very fine hairs; metepisternum bare. Scutellum with 2 strong setae, 2 short fine lateral setae and some dorsal and marginal hairs.

Legs mainly black; mid femur brown in basal half, lighter laterally; fore tibia brown; mid tibia brownish-yellow except black base and apex, with clear whitish-yellow dorsal area in distal third. Fore coxa with black hairs and several black subapical setae. Fore femur simple, with fine posteroventral subapical seta. Fore tibia with 2–3 anterodorsal, 2–3 posterodorsal, 1–2 posteroventral setae. Fore tarsus simple. Mid femur with 1 subapical anterior bristle. Mid tibia (Fig. 3) with 4 anterodorsal, 2 posterodorsal, 1 anteroventral and 5 apical setae, devoid of setulae on dorsal surface in distal third. Mid basitarsus (Fig. 4) inconspicuously thickened, densely covered with thickened setulae, somewhat longer on ventral side. Hind femur with subapical anterior seta at 3/4. Hind tibia without tibial organ, with 5 anterodorsals, 5–6 posterodorsals, a row of short ventrals, 1 strong ventral at 3/4, 2 apical setae. Hind basitarsus with posterobasal denticle, with 2 strong dorsal, 1 strong posterior and 1–2 short ventral setae. Tibia and tarsomere (from first to fifth) length ratio: fore leg: 71 : 31 : 14 : 12 : 10 : 11, mid leg: 100 : 38 : 22 : 18 : 12 : 13, hind leg: 104 : 40 : 40 : 28 : 17 : 15.

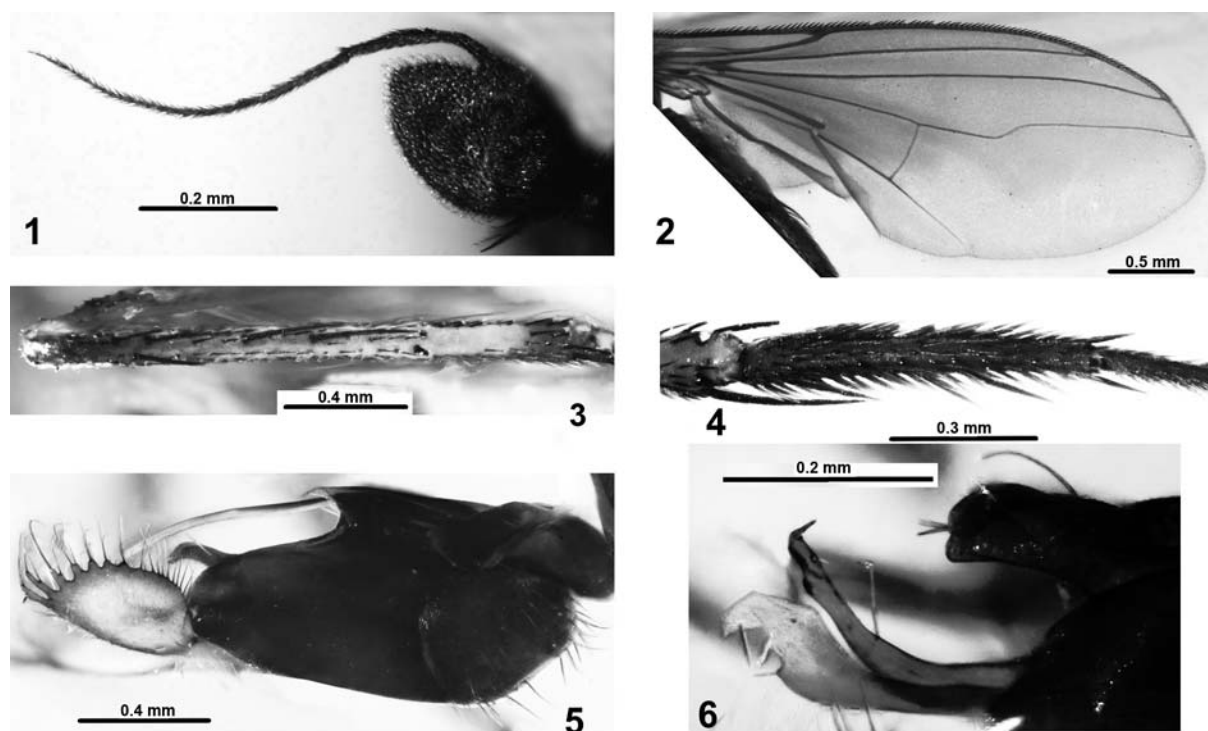


Fig. 1–6. *Dolichopus zaitzevi* Grichanov, *sp. n.*

1 – antenna; 2 – wing; 3 – mid tibia dorsally; 4 – mid basitarsus laterally; 5 – hypopygium left laterally; 6 – surstylus and epandrial lobe left laterally.

Рис. 1–6. *Dolichopus zaitzevi* Grichanov, *sp. n.*

1 – усик; 2 – крыло; 3 – средняя голень сверху; 4 – первый членик средней лапки сбоку; 5 – гипопигий слева; 6 – лопасти сурстилей и эпандрия слева.

Wing (Fig. 2) evenly brownish, lighter posteriorly; veins brown. Costal vein inconspicuously thickened at tip of  $R_1$ ,  $R_1$  1/3 length of wing.  $R_{2+3}$  and  $R_{4+5}$  almost straight, slightly curved anteriorly. Ratio of part of costa between  $R_{2+3}$  and  $R_{4+5}$  to this between  $R_{4+5}$  and  $M_{1+2}$ , 65 : 32.  $M_{1+2}$  in distal part with gentle flexion at 2/5, then almost straight and parallel to  $R_{4+5}$ , joining costal vein right before wing apex. Distal part of  $M_{1+2}$  1.4 times longer than proximal part. Crossvein *dm-cu* almost straight, oblique, 0.6 as long as apical part of  $CuA_1$ . Posterior wing margin broadly emarginated before  $CuA_1$ ; anal lobe enlarged; anal vein distinct; anal angle right. Lower calypter yellow, with black cilia. Halter yellow.

Abdomen metallic bronze-black, whitish pollinose, with black hairs and marginal setae; 8<sup>th</sup> segment black, with black cilia. Epandrium (Fig. 5) black, elongate-triangular, as long as 4<sup>th</sup>–6<sup>th</sup> terga combined, with light brown appendages; basoventral epandrial lobe weakly developed, triangular; basoventral epandrial seta present; apicoventral epandrial lobe (Fig. 6) well-developed, prominent, thin in lateral view, with keel-like dorsoapical extension, with 2 setae; aedeagus thin and simple; two pairs of surstylus (Fig. 6), covered with sparse setae; ventral lobe digitiform and curved ventrally, without dorsal hump, with 1 long seta at middle and 1 strong apical spine; dorsal lobe thin, flared apically, with 1 preapical lateral seta, with dorsal surface notched preapically; postgonite reduced to a short spike; cercus (Fig. 5) dirty-white, narrowly blackish along margin; elongate-ovate, incised in distal half; each process bearing 2 long curved black bristles; at least one bristle on apical process flattened and truncate at apex.

Female similar to male except as follows. Face wider, under antennae nearly 2 times as wide as height of postpedicel; antennal stylus with inconspicuously thickened 1<sup>st</sup> segment; mid tibia brown, black at base and at apex; few

short ventral setae present on mid basitarsus; wing simple.

Length (mm): body 4.7, wing 4.2, antenna 1.2, hypopygium 1.9.

**Etymology.** The species is named after the late Russian dipterist, Vadim Filippovich Zaitzev.

**Diagnosis.** Based on the presence of mainly black femora and white postoculars, the new species is included in group I [Stackelberg, 1930; Parent, 1938] and keys to *D. vitripennis* Meigen, 1824 [Negrobov et al., 2005; Grichanov, 2007a], that has simple legs, different leg setation and hypopygium morphology. Nevertheless, *D. zaitzevi sp. n.* is close to arctoboreal *D. cinctipes* Wahlberg, 1850 (group III), being the second Palearctic species of the genus with clear white or yellow dorsal area on mid tibia (male secondary sexual character), differing in smaller and differently shaped distal and basal epandrial lobes, rather distinct ventral setae on mid basitarsus, dark legs, antennae and wings. The presence of slightly modified mid basitarsus in the new species suggests that both *D. zaitzevi sp. n.* and *D. cinctipes* belong to *D. plumipes* (Scopoli, 1763) group of species distinguishing by distinctly modified mid basitarsus and usually mid tibia in males. It is also worth noting that *D. zaitzevi sp. n.* and *D. plumipes* were collected together [Grichanov, 2007b].

## New records

### *Dolichopus cinctipes* Wahlberg, 1850

**Material.** 4♂, Russia: Komi, Sivaya Maska station, 3 km S, 17.07.1961, Gorodkov / marsh; 1♀, Russia: Komi, Sivaya Maska station, 5 km NW, 14.07.1961, Gorodkov / marsh; 1♂, Russia: Chukotka, Bolshaya River upper stream, 63°01' / 171°50' E, 16.07.1959, Gorodkov / Chosenia macrolepis forest, 330 m; 2♂, Russia: Chukotka, Bilibino, marsh, 5.07.1971, Gorodkov [ZIN].

**Type locality.** Sweden: Rubo Chamaemaemoro, Gaskaivo, Quickjock, Njunnas.

**Distribution.** Finland, Norway, Sweden, Russia (Murmansk, Komi, "North Ural", Buryatia, Amur and Magadan Regions, Khabarovsk and Primorskii Provinces, Chukotka). New for Komi and Chukotka. Here excluded from the fauna of Turkey.

*Dolichopus vitripennis* Meigen, 1824

**Material.** 1♂, Russia: Yakutia, Ebelyakh, Anabar River shore, willow, 22.07.1988, Gorodkov; 1♂, Russia: Yakutsk, 18.07.1969, Sychevskaya [ZIN].

**Type locality.** Not given.

**Distribution.** Austria, Belgium, Czech, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Spain, Sweden, Switzerland, UK, Russia (Karelia, Leningrad, Moscow, Orenburg Regions, Yakutia), North Kazakhstan. New for Yakutia.

### Acknowledgments

The author expresses sincerely grateful to Dr. G.E. Davidyan (VIZR) who collected the type series and to Dr. E.P. Nartshuk and L.A. Kuznetsova (ZIN) for their kindness in furnishing an opportunity to study

the collections of their museum. This work was partly supported by the grant of the Russian Foundation for Basic Research N 11-04-01051-a to Oleg P. Negrobov (Voronezh University).

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