A NEW SPECIES OF THE GENUS DOLICHOPUS LATR. (DOLICHOPODIDAE, DIPTERA) FROM ALTAI REPUBLIC AND MONGOLIA

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A new species, Dolichopus ruchini sp. n., from Russian Altai and Mongolia are described. The new species is close to Dolichopus roborovskii Stackelberg, 1930, from which it differs in the morphology of the hypopygium, parallel R_4+5 and M_1+2 and thickened stigma on the wing. The lectotype of Dolichopus roborovskii is designated.

Key words: Diptera, Dolichopodidae, Dolichopus, Russian Altai, Mongolia, new species.

INTRODUCTION

The genus Dolichopus Latreille, 1796 the number of species is one of the largest in the family Dolichopodidae, and currently includes 644 species in the world fauna (Grichanov 2017). Most species of this genus are described in the Holarctic.

A revision of the Palaearctic species of Dolichopus was published by Stackelberg (1930). Parent (1938) published a review for France with a key to this genus for Europe. Yang et al. compiled keys for China (Yang 1996, 1998, Yang et al. 2011). Updated keys to the Palaearctic species of the genus Dolichopus have been published by Negrobov with co-authors (Negrobov et al. 2005, 2016).

Grichanov (2007) reported 32 species of Dolichopus from Altai, a territory in central Asia named after the Altai mountains that includes parts of Russia, China, Mongolia, and Kazakhstan. Later, Negrobov and Barkalov (2009) noted 38 species for this territory. To date, 53 species of Dolichopus are known from the Altai Mountains (Yang 1998, Negrobov et al. 2012, 2013). Eight species are recorded only from Altai: Dolichopus altayensis Yang, 1998, D. fursovi Negrobov et Barkalov, 2010, D. kurayensis Negrobov, Barkalov et Selivanova, 2011, D. ornamentarsis Negrobov et Barkalov, 2008, D. selivanovae Negrobov et Barkalov, 2010, D. tunicosta Negrobov, Grichanov et Barkalov, 2009, D. tundrensis Barkalov, Negrobov et Grichanov, 2009, D. ukokensis Negrobov et Barkalov, 2009.
For Mongolia, 44 species of Dolichopus have been documented (Negrobov 1973, 1974, 1976a, b, Negrobov & Barkalov 1977, Negrobov et al. 2014, Negrobov & Rodionova 2004, Negrobov et al. 2012). The following 12 species are to date known only from Mongolia: Dolichopus acutangulus Negrobov et Barkalov, 1976, D. albipalpus Negrobov, 1973, D. bayaticus Negrobov, 1976, D. brunneilineatus Negrobov, 1976, D. kozlovi Negrobov, 1973, D. longisetosus Negrobov, 1973, D. mongolicus Parent, 1926, D. nartshukae Negrobov, Selivanova et Maslova, 2012, D. negrobovi Gossieres, 1989, D. polychaetus Negrobov, 1973, D. tschernovi Negrobov, Barkalov et Selivanova, 2014, D. tumefactus Negrobov, 1973.

MATERIAL

The material of this paper is deposited in the collections of the Zoological Institute of the Russian Academy of Sciences and the Hungarian Natural History Museum.

RESULTS

Dolichopus roborovskii Stackelberg, 1930
(Figs 1–3)

This species was described from China (Stackelberg 1930) and it is also known from Mongolia (Negrobov 1974). Types are stored in the collection of the Zoological Institute of the Russian Academy of Sciences. A lectotype is designated in order to fix identity of the species: male, China, Eastern Tsaidam, Kurlyk, Bingol, 05.28.1895, RobKozlov (Roborovsky, Kozlov). Paralectotypes. 5 ♂, 1 ♀, East Tsaidam, Kurlyk, Bingol, May 16–28, 1895 (Roborovsky, Kozlov), 1 ♂, China, Northeast Tsaidam, Gobi, Bomin (Icherin), 06. 1895 (Roborovsky, Kozlov).

Dolichopus ruchini Negrobov, Maslova, Selivanova, sp. n.
(Figs 4–7)

Description. Male. Face silvery-white, shiny, without hairs, not reaching lower edge of eyes, its width in middle part barely more than width of postpedicel ratios – 1.0:0.9. Proboscis dark brown. Palps yellow with black hairs. Frons dark green with brilliant bronze tint. Antennae black. Postpedicel bud-shaped, with oval apex, longer than wide. Arista mid-dorsal, slender throughout. The ratio of length postpedicel to its width – 1.0:0.9. Postocular setae below pale yellow.

Thorax green with bronze tint. Mesonotum green, metallic and glossy with bronze tint. Pleura with gray pollen. Propleura with 1 strong black bristle below and 2 groups fine black hairs. Posterior margin of scutellum with 2 long, 2 short setae and fine hairs. Legs, including coxae, black with black setae. Fore coxae black with silver pruinosity, with white
hairs, with black setae apically. Mid and hind femora with 1 strong outer preapical seta. Femora without long ventral setae, tarsus of all legs not extended. Fore tibia with long apicoventral seta, its length is approximately equal to half length of fore basitarsus, with 3 anterodorsal, 2 posterodorsal and 1 anteroventral setae. The ratio of length of fore tibia and length of segments of fore tarsus (from the 1st to the 5th) is 4.3:2.5:0.9:0.8:0.6:0.7. Mid tibia with 3 anterodorsal, 2 posterodorsal and 1 anteroventral setae. Mid basitarsus without strong dorsal seta. Ratio of length of mid tibia to length of segments of mid tarsus (from the 1st to the 5th) is 10.0:6.8:3.4:1.7:0.7:0.8. Hind tibia simple, not twisted or thickened, with a small rounded tibial organ at apex, with 4 anterodorsal, 3 posterodorsal and 1 ventral setae. Hind basitarsus with 1 long dorsal seta. The ratio of length of hind tibia to the length of segments of the hind tarsus (from the 1st to the 5th) is 7.5:3.2:2.8:1.9:1.0:1.0.

Wings (Fig. 7) hyaline. Costal vein with wide oval thickening on meeting point with subcosta. R_{4+5} and M_{1+2} parallel near wing margin. M_{1+2} sharply curved in apical part, without rudimentary M_{2}. Ratio of length of segment of costal vein between R_{2+3} and R_{4+5} and its segment between R_{4+5} and M_{1+2} is 4.0:2.4. Apical part M_{3+4} longer than posterior transverse vein (tp) ratios – 6.3:3.5. Anal angle blunt. Lower calypter yellow with black hairs. Halter yellow.

Figs 1–3. Dolichopus roborovskii Stackelberg: 1 = habitus, lateral, 2 = apex of hypopygium, lateral, 3 = hypopygium, lateral
Abdomen dark green, shiny with bronze tint. Surstylus dark yellow. Apicoventral lobe of epandrium wide, its length greater than width. Cerci (Fig. 4) oval, black, with serrated edges apically, their length barely greater than width.

Female not known.

Body length 2.4–2.5 mm, wing length 2.3–2.4 mm.

Material. Holotype: male, Russia, Altai Republic, southeastern Altai, Ulandrik River, 07.12.1964 (Grunin). Deposited in the collection of the Zoological Institute of the Russian Academy of Sciences.

Paratype: male, Mongolia, Chövsgöl aimak, zwischen Somon Cecerleg und Somon Bajan-ul, 65 km W von Cecerleg, 1700 m. exp. Dr. Z. Kaszab, 1968. No. 1002, 06/22/1968. In the collection of the Hungarian Natural History Museum.

Etymology. The name of the species is dedicated to the director of the Mordovia Reserve and editor of the journal “Nature Conservation Research” Alexander Borisovich Ruchin.

According to the key of Palaearctic species of the genus *Dolichopus* (Negrobov et al. 2005) and the key of this genus in China (Yang 1996, 1998, Yang et al. 2011), the new species is closest to *Dolichopus roborovskii* Stackelberg. The following key will separate these species.

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**Figs 4–7.** *Dolichopus ruchini*, sp. n.: 4 = hypopygium, lateral, 5 = apex of hypopygium, lateral, 6 = medial lobe of surstylus, ventral, 7 = wing
Wing (Fig. 1) with $R_{4+5}$ and $M_{1+2}$ convergent near wing margin; costal vein with stigma long and narrow; apical half of $M_{1+2}$ smoothly curved

*Dolichopus roborovskii* Stackelberg

Wing (Fig. 7) with $R_{4+5}$ and $M_{1+2}$ parallel near wing margin; costal vein with stigma wide, thick; apical half of $M_{1+2}$ sharply curved

*Dolichopus ruchini* sp. n.

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