

Far Eastern Entomologist

Дальневосточный энтомолог

Journal published by Far East Branch
of the Russian Entomological Society
and Laboratory of Entomology,
Institute of Biology and Soil Science,
Vladivostok

Number 264: 1-6

ISSN 1026-051X

June 2013

<http://urn:lsid:zoobank.org/pub:C2007B6C-C0DC-4CA4-922E-6EEE03179D54>

A NEW SPECIES OF THE GENUS *DOLICHOPUS* LATREILLE, 1796 FROM THE AMUR REGION WITH REDESCRIPTION OF *DOLICHOPUS ALBICINCTUS* SMIRNOV, 1948 (DIPTERA: DOLICHOPODIDAE)

O. P. Negrobov^{1, 2)}, O. O. Maslova²⁾, O. V. Selivanova²⁾

1) Belgorod State university, Belgorod, Pobedy, 85, 208015, Russia.

E-mail: negrobov@list.ru

2) Voronezh State University, Voronezh, Universitetskaya pl. 1, 394006, Russia.

Dolichopus soldatovi Negrobov, Selivanova et Maslova, **sp. n.** is described from Khabarovskii krai and Amurskaya oblast. The redescription and illustrations of *Dolichopus albicinctus* Smirnov, 1948 are given; the lectotype and paralectotypes of this species are designated.

KEY WORDS: Diptera, Dolichopodidae, *Dolichopus*, taxonomy, new species, Russian Far East.

О. П. Негробо́в^{1,2)}, О. О. Маслова²⁾, О. В. Селиванова²⁾. Новый вид рода *Dolichopus* Latreille, 1796 из Приамурья с переписанием *Dolichopus albicinctus* Smirnov, 1948 (Diptera: Dolichopodidae) // Дальневосточный энтомолог. 2013. N 264. С. 1-6.

Из Хабаровского края и Амурской области описан *Dolichopus soldatovi* Negrobov, Selivanova et Maslova, **sp. n.** Приведено иллюстрированное переписание *Dolichopus albicinctus* Smirnov, 1948; для этого вида обозначены лектотип и паралектотипы.

1) Белгородский государственный университет, Белгород, ул. Победы 85, 208015, Россия.

2) Воронежский государственный университет, Воронеж, 394006, Россия.

INTRODUCTION

The present paper contains description of one new species and redescription of one poorly known species of the genus *Dolichopus* Latreille, 1796 (Diptera: Dolichopodidae) from the Russian Far East. The material examined here is deposited at the Zoological Institute, Russian Academy of Sciences (St. Petersburg), the Zoological Museum of the Moscow State University (Moscow) and Voronezh State University (Voronezh).

TAXONOMY

Dolichopus albicinctus Smirnov, 1948

Figs 1–4

MATERIAL. Lectotype – ♂, Russia: Primorskii krai, Sudzukhinskii reserve (Lazovskii reserve), bay Kit, 7.VII 1946 (Sharov), here designated; deposited in the Zoological Museum of Moscow University. Paralectotypes: 1 ♂, 1 ♀, the same label as lectotype; 1 ♂, Okeanskaya station near Vladivostok, 12.VIII 1940 (Sharov) (all deposited in the Zoological Museum of Moscow University). Other material examined: Russia: Primorskii krai: Sudzukhinskii reserve (Lazovskii reserve), Turova Pad, 16.VIII 1960, 2 ♂ (Udovenko); Suputinskii reserve (Ussuriiskii reserve), Mokraya Pad, 6.VIII 1960, 1 ♂ (Udovenko); Gorno-Taezhnaya station, mixed forest, oak crown, 3.IX 1980, 1 ♂ (Kireyichuk).

NOTES. This species was described by E.S. Smirnov (1948) based on 22 specimens from Primorskii krai. In the collection of the Zoological Museum of Moscow University only fore type specimens is found, one of which is designated herein as lectotype. Males of *Dolichopus albicinctus* differ from other species of *Dolichopus* from the Russian Far East by white apical part of the mid legs (Negrobov et al., 2005). The redescription of this species is given below.

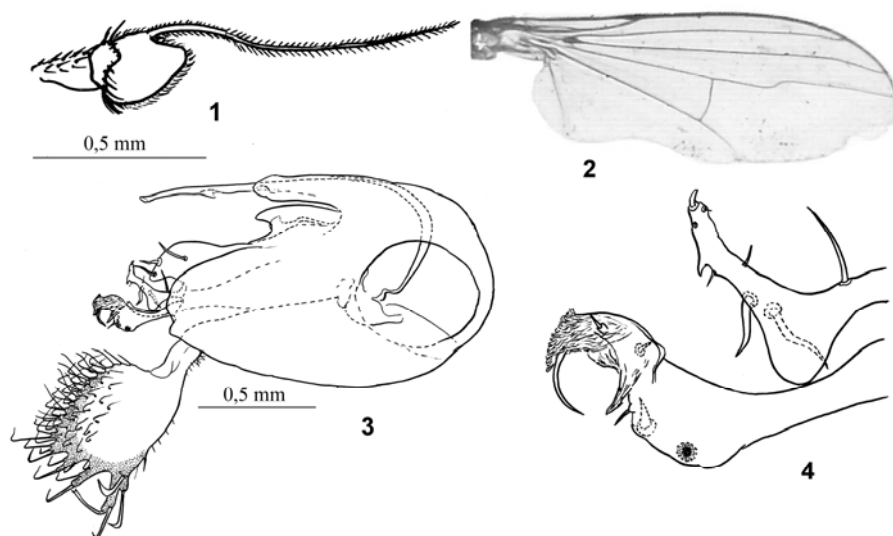
DESCRIPTION. Male. Body length 4.1–4.3 mm, wing length 4.2–4.3 mm.

Face ochre-yellow, not reaching the bottom edge of eyes, its width on the average part is a little more (0.9 : 0.7) than the width of postpedicel width at the base. Proboscis dark-brown. Palpus yellow, with yellow hairs and one black seta. Frons shining metallic green, almost with white pollen at the edges.

Antennae yellow, postpedicel slightly darkened at apex. Postpedicel reniform with oval top, stylus dorsal, its length more than its width. Ratio of postpedicel length to its width to stylus length 1.3 : 0.8 : 2.5. Stylus dorsal, with short hairs. Lower post-ocular setae in the bottom part of a head yellow.

Thorax metallic, mesonotum green, with bronze shade, with a longitudinal bronze stripe, with 2 bronze spots on each side, pleuron grey sputtering, propleuron with 1 strong black seta below, small hairs white. Scutellum with 2 black setulae and small fine hairs along the edges.

Legs mainly yellow, pulvilli snow-white, mid and hind coxa, 4th and 5th tarsomere of fore legs, mid tarsus, hind tarsus from apex of 1th tarsomere black, apical part of mid tibia yellowish-white, without hairs. Coxa with black hairs and bristles. Femur without long hairs, mid and hind femora with 1 preapical bristles. Tarsomere not expanded. Fore tibia with 2 anterodorsal, 2 posterodorsal and 3 posteroventral setae, at top without long apicoventral bristle. Tarsomere of fore tarsus length ratio (from first to fifth): 5.8 : 2.8 : 1.3 : 1.0 : 0.8 : 0.7. Mid tibia with 3 anterodorsal, 2 posterodorsal, 2 anteroventral and 1 anteroventral bristle. Mid basitarsus without long dorsal bristle. Tarsomere of mid tarsus length ratio (from first to fifth): 8.0 : 3.7 : 2.0 : 1.4 : 0.9 : 0.8. Hind tibia not incrassate, with 4 anterodorsal, 4 posterodorsal, 1 ventral and numerous short ventral setae. Hind basitarsus with 2-3 setae and short ventral bristle. Tarsomere of hind tarsus length ratio: 8.0 : 3.4 : 2.2 : 2.1 : 2.4 : 1.0.



Figs. 1-4. *Dolichopus albicinctus*. 1 – antenna; 2 – wing; 3 – hypopygium; 4 – gonopods.

Wing infusate. Costal vein at R_1 with an oval thickening. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} is 1.8 : 1.2. M_{1+2} without M_2 . Distal part of CuA_1 longer than m-cu (2.6 : 1.8). Anal lobe well developed. Wings with a deep notch on the posterior edge of the wing between the anal vein and the top of M_{3+4} . Lower calypter yellow, with black cilia. Halter yellow.

Abdomen metallic green, bright shining, with bronze stripes along segments, sides with silver sputtering, with black bristles, from below with white hairs. Epandrium longer than wide. Apicoventral surstyli yellow, large oblong-oval, with pointed apex, its length is approximately 2 times longer than the width. Phallus in apical part with tooth-like ventral process. Dorsal gonopod lobe with wide plate. Cerci dirty-white, at top with wide black border, oval, with some finger-like marginal processes.

DISTRIBUTION. Russia: Primorskii krai.

***Dolichopus soldatovi* Negrobov, Selivanova et Maslova, sp. n.**

Figs 5–7

MATERIAL. Holotype – ♂, Russia: Khabarovskii krai, lower reach of Amur River, Nizhnev'yatskoe, 26.VI 1910 (Soldatov); deposited in the Zoological Institute the Russian Academy of Sciences (St.-Petersburg). Paratypes: 1 ♂ (specimen without head), the same label as holotype; 1 ♂, Amurskaya oblast, 40 km W Svobodnyi, Klimoutzy, larch forest, 10.VII 1958 (Zinovjev); both paratypes are deposited in Zoological Institute the Russian Academy of Sciences.

DESCRIPTION. Male. Body length 3.7 mm, wing length 3.6–3.8 mm.

Face ochre-yellow, brilliant, not reaching the bottom edge of eyes, its width on the average part is less (0.7 : 0.9) than width of postpedicel width at the base. Proboscis dark-brown. Palpus yellow, with yellow hairs and 1 black setae. Frons shining metallic green or bronze, almost with white pollen. Antennae black, scape yellow. Postpedicel reniform, 1.5 times as long as wide. Ratio of postpedicel length to its width to stylus length 0.9 : 0.7 : 3.1. Stylus dorsal, with short hairs. Lower postocular setae in the bottom part of head yellow.

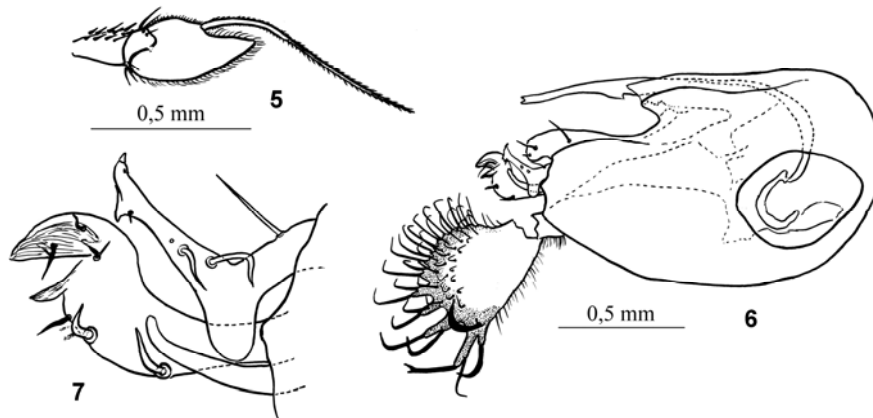
Thorax metallic, mesonotum green, with bronze shade, with a longitudinal bronze stripe, with 2 bronze spots on each side, pleuron grey pollinose, propleuron with 1 strong black seta below, small hairs white. Scutellum with 2 black setulae and small fine hairs along the edges.

Legs mainly yellow, pulvilli snow-white, mid and hind coxa (except yellow top), 4th and 5th tarsomere of fore legs, mid and hind tarsus, apical part of hind tibia and hind tarsus black, apical part mid tibia yellowish-white, without hairs. Coxa with black hairs and bristles. Femur without long hairs, mid and hind femora with 1 preapical bristles. Tarsomere not expanded. Fore tibia with 3 anterodorsal, 2 posterodorsal and 1 posteroventral setae, at top without long apicoventral bristle. Tarsomere of fore tarsus length ratio (from first to fifth) 4.8 : 2.6 : 1.2 : 1.0 : 0.8 : 0.5. Mid tibia with 3 anterodorsal, 2 posterodorsal and 1 anteroventral bristle. Mid basitarsus without long dorsal bristle. Tarsomere of mid tarsus length ratio (from first to fifth) 7.1 : 3.4 : 1.6 : 1.4 : 0.9 : 0.7. Hind tibia not incrassate, with 4 anterodorsal, 4 posterodorsal, 1 ventral and numerous short ventral setae. Hind basitarsus with 3–4 setae and short ventral bristle. Tarsomere of hind tarsus length ratio 6.6 : 3.0 : 2.7 : 1.4 : 1.1 : 0.8.

Wing infusate. Costal vein at R_1 with an oval thickening. Ratio of part of costa between R_{2+3} and R_{4+5} to this between R_{4+5} and M_{1+2} is 1.9 : 0.8. R_{4+5} and M_{1+2} at the top almost convergent. M_{1+2} without M_2 . Distal part of CuA_1 longer than $m-cu$ (1.9 : 0.8). Lower calypter yellow, with black cilia. Halter yellow.

Abdomen metallic green, bright shining, with bronze stripes along segments, sides with silver sputtering, with black bristles, from below with white hairs. Epandrium longer than wide. Apicoventral surstyli yellow, large oblong-oval, with a rounded apex, its length is approximately 2 times longer than the width. Phallus in apical part with tooth-like ventral process. Cerci dirty-white, at top with a wide black border, oval, with some finger-like marginal processes.

Female unknown.



Figs. 5-7. *Dolichopus soldatovi* sp. n. 5 – antenna; 6 – hypopygium; 7 – gonopods.

DIAGNOSIS. In the key to males of *Dolichopus* (Negrobov et al., 2005) new species is keyed to *D. albicinctus*. Both species are very similar in the general morphology, structure of mid tibia and hypopygium morphology, but differ in following characters:

- 1(2) Postpedicel more than 1.5 times as long as wide. Apex of hind tibia and the base of hind tarsus black. Surstyli rounded at apex. Width of face in the average part is less than width of postpedicel near the base. Fore tibia with 3 anterodorsal, 2 posterodorsal and 1 posteroventral setae. Mid tibia with 3 anterodorsal, 2 posterodorsal and 1 anteroventral bristle. Distal part of CuA_1 two times longer than $m-cu$ ***D. soldatovi* sp. n.**
- 2(1) Postpedicel slightly longer than wide. Apex of hind tibia and the base of hind tarsus yellow. Surstyli acuminate at apex. Width of face in the average part is more than width of postpedicel near the base. Fore tibia with 2 anterodorsal, 2 posterodorsal and 3 posteroventral setae. Mid tibia with 3 anterodorsal, 2 posterodorsal, 2 anteroventral and 1 anteroventral bristle. Distal part of CuA_1 1.5 times longer than $m-cu$ ***D. albicinctus***

DISTRIBUTION. Russia: Khabarovskii krai, Amurskaya oblast.

ETIMOLOGY. The species is named in honor of V.K. Soldatov, who collected the type specimens in the Lower Amur basin.

ACKNOWLEDGEMENTS

We thank Dr. A.L. Ozerov (Zoological Museum of the Moscow State University) and Dr. O.G. Ovchinnikova (Zoological Institute, Russian of Academy of Sciences) for the loan of specimens. This work is supported by the Russian Foundation for Basic Research (grant No 11-04-01051-a).

REFERENCES

Negrobov, O.P., Radionova, S.Ju., 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.

Smirnov, E.S. 1948. Materials to the fauna of *Dolichopus* Latr. of the Russian Far East. I [Materialy k faune *Dolichopus* Latr. Daljnego Vostoka. I]. *Nauchno-metodicheskie zapiski Glavnogo upravleniya po zapovednikam*, 2: 223–229. (In Russian).