

First records of Dolichopodidae (Diptera) from Kurgalsky Nature Reserve, and new records for Leningrad Region, Russia

Первые указания Dolichopodidae (Diptera) из Кургальского заповедника и новые находки для Ленинградской области, Россия

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KEY WORDS: Dolichopodidae, Russian North-West, Leningrad Region, Kurgalsky Nature Reserve, new records.

КЛЮЧЕВЫЕ СЛОВА: Dolichopodidae, северо-запад России, Ленинградская область, Кургальский природный заказник, новые указания.

ABSTRACT. During recent short-term survey conducted in the Kurgalsky Nature Reserve, a wetland site designated to be of international importance under the Ramsar Convention, 17 species of Dolichopodidae (Diptera: Brachycera: Dolichopodidae) were collected. All species are found for the first time in the Reserve. *Dolichopus austriacus* Parent, 1927 and *Gymnopternus blankaartensis* (Pollet, 1991) are found in the north-western Russia for the first time. *Dolichopus lineatocornis* Zetterstedt, 1843 is a new species for the Leningrad Region. This paper provides also distribution pattern for each collected species. The Dolichopodidae fauna of the Leningrad Region and Saint Petersburg contains now 228 species.

РЕЗЮМЕ. В ходе трёхдневного обследования, проведенного в Кургальском природном заказнике, имеющем международное значение согласно Рамсарской конвенции о водно-болотных угодьях, собрано 17 видов мух-зеленушек (Diptera: Brachycera: Dolichopodidae). Все виды найдены впервые в заказнике. *Dolichopus austriacus* Parent, 1927 и *Gymnopternus blankaartensis* (Pollet, 1991) впервые обнаружены на северо-западе России. *Dolichopus lineatocornis* Zetterstedt, 1843 – новый вид для Ленинградской области. В статье приведено также общее распространение для каждого отловленного вида. Фауна Dolichopodidae Санкт-Петербурга и Ленинградской области включает теперь 228 видов.

The Kurgalsky Nature Reserve is located on the lowland Kurgalsky Peninsula and adjacent coast of the Narva Bay in southern part of the Gulf of Finland, 125 km west of St. Petersburg; it borders Estonia to the

south. The site is rather swampy and contains two large and several small lakes, heterogeneous marshes and natural stands of oak, maple, alder, elm, ash, lime, pine and spruce. The coastal strip is rich in a variety of vegetation associations, including steppe coastal meadows [Gaginskaya et al., 1999]. The Kurgalsky Peninsula is located in the Sarmatic Mixed Forests ecoregion in contrast to the most part of the Leningrad Region belonging to the Taiga ecoregion [see Ecoregions, 2017].

The long-legged fly fauna of Leningrad Region is one of the well-studied regions of Russia and numbers 225 dolichopodid species [Grichanov, Ovsyannikova, 2017; Ovsyannikova, Grichanov, 2021], including doubtful records of *Lamprochromus bifasciatus* (Macquart, 1827) and *Syntormon pumilus* (Meigen, 1824). Nevertheless, the protected areas of that Region and Saint Petersburg remains undercollected. The work devoted to dolichopodids of the West Kotlin Nature Reserve is an exception [Grichanov, Ovsyannikova, 2017]. Two species are included into the Red Book of the Leningrad Region [Przhiboro, 2018]: *Telmaturgus tumidulus* (Radatz, 1873) was reported from the Rakovyye Ozyora Nature Reserve; *Liancalus virens* (Scopoli, 1763) inhabits waterfalls of the Sablinsky and Reka Ragusha Nature Reserves.

The material for this study was collected by the authors of this paper during a short-term visit to the Kurgalsky Reserve by use of standard sweep net mainly, and then mounted on pins. Some specimens (*Medetera* sp. and *Neurigona* sp.) were collected by use of a specimen jar from tree trunks. The specimens will be deposited at the Zoological Institute of the Russian Academy of Sciences, St. Petersburg (ZISP).

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New records for 17 species are listed below, collected in the Kurgalsky Nature Reserve, Leningrad Region. These data and authors' names are not repeated in the text. In addition, a new for the Leningrad Region *Dolichopus lineatocornis* Zetterstedt, 1843 has been found in old ZISP collection. The information on the global distribution for each species follows Grichanov [2017]. The type localities are provided and the country lists are arranged alphabetically. The words "Region" (Oblast) and "Territory" (Krai) are omitted from the list of Russian regions.

New Records

Campsicnemus curvipes (Fallén, 1823)

MATERIAL EXAMINED. 2♀, Tiskolovo env., 59.73°N, 28.04°W, 12.06.2021.

DISTRIBUTION. Type locality: not given [Sweden]. Trans-Palaearctic species (except for arid regions).

Campsicnemus scambus (Fallén, 1823)

MATERIAL EXAMINED. 1♂, Lipovo env., 59.78°N, 28.18°W, 12.06.2021; 1♀, Belye Lake env., 59.70°N, 28.14°W, 13.06.2021.

DISTRIBUTION. Type locality: Sweden: Esperod. Trans-Palaearctic species (except for arid regions).

Dolichopus austriacus Parent, 1927

MATERIAL EXAMINED. 3♂♂, 3♀♀, Tiskolovo env., 59.73°N, 28.04°W, 12.06.2021.

DISTRIBUTION. Type locality: Austria: Gmunden. Austria, Estonia, Finland, Germany, Iran, Kyrgyzstan, Romania, Russia (Astrakhan, Volgograd), Sweden, Turkey, Uzbekistan. First record for the Leningrad Region and northwestern Russia.

Dolichopus discifer Stannius, 1831

MATERIAL EXAMINED. 1♂, Lipovo env., 59.78°N, 28.18°W, 12.06.2021; 1♀, Belye Lake env., 59.70°N, 28.14°W, 13.06.2021.

DISTRIBUTION. Type locality: Germany. Holarctic species (except for arid regions).

Dolichopus lepidus Staeger, 1842

MATERIAL EXAMINED. 1♀, Bolshoe Kuzemkino env., 59.58°N, 28.18°W, 14.06.2021.

DISTRIBUTION. Type locality: Denmark: "Leersoen i Slutningen" [Lersoen nearby Copenhagen]. Trans-Palaearctic species (except for arid regions). The species was once reported from Oriental China.

Dolichopus lineatocornis Zetterstedt, 1843

MATERIAL EXAMINED. 1♂, Luzhsky district, Yashchera, 18.07.1970, A. Stackelberg leg.

DISTRIBUTION. Type locality: Sweden: Lund. Palaearctic: Belgium, Czech, Denmark, Estonia, Finland, Germany, Kazakhstan, Latvia, Lithuania, Netherlands, Russia (Krasnodar, Lipetsk, Mordovia, Pskov, Tatarstan, Tver, Voronezh, Yakutia), Sweden, UK. First record for the Leningrad Region.

NOTES. The species seems to be rare in collections. The junior author saw only few specimens collected from Mordovia, central Yakutia, Pskov Region (Velikie Luki) of Russia, and in northern Kazakhstan (near Nur-Sultan). Studying old literature, he noted a remarkable similarity of pictures of wing and hypopygium provided by Mik [1880] for single male of *Dolichopus thalassinus* Mik, 1880 (nec Haliday, 1832) and those in *D. lineatocornis*. Unfortunately, a short

diagnosis for this male had no important diagnostic characters, e.g. slightly swollen hind tibia on basal half. Parent [1938] did not see Mik's or new material, but gave a new name *Dolichopus miki* for *D. thalassinus* Mik (nec Haliday) and redrawn Mik's pictures. Both Mik [1880] and Parent [1938] compared that male (from "France") with *Dolichopus simplex* Meigen, 1824 having simple hind tibia and simple wing in male. We think that the slightly swollen hind tibia was overlooked by Mik, and that male of *D. miki* belongs to *D. lineatocornis*. As we know, nobody studied old or new material for *D. miki*. *D. lineatocornis* is yet unknown from France, but being reported from the neighboring countries and such warm region as Black Sea coast in the Krasnodar Territory.

Dolichopus plumipes (Scopoli, 1763)

MATERIAL EXAMINED. 3♂♂, Tiskolovo env., 59.73°N, 28.04°W, 12.06.2021.

DISTRIBUTION. Type locality: Slovenia: "Carnioliae indigena". Mainly Holarctic species; Neotropical: Mexico; Oriental: China, India (Kashmir).

Gymnopternus aerosus (Fallén, 1823)

MATERIAL EXAMINED. 1♂, 2♀♀, Lipovo env., 59.78°N, 28.18°W, 12.06.2021; 1♂, 1♀, Tiskolovo env., 59.73°N, 28.04°W, 12.06.2021; 4♀♀, Belye Lake env., 59.70°N, 28.14°W, 13.06.2021; 2♀♀, Tikhoe Lake env., 59.51°N, 28.08°W, 14.06.2021.

DISTRIBUTION. Type locality: not given [Sweden]. Trans-Palaearctic species (except for arid regions); Oriental: Taiwan.

Gymnopternus angustifrons (Staeger, 1842)

MATERIAL EXAMINED. 1♀, Tiskolovo env., 59.73°N, 28.04°W, 12.06.2021; 1♀, Belye Lake env., 59.70°N, 28.14°W, 13.06.2021.

DISTRIBUTION. Type locality: Denmark: "Flere Hanner paa Valdplanter". Trans-Palaearctic species (except for the Far East and arid regions).

Gymnopternus blankaartensis (Pollet, 1991)

MATERIAL EXAMINED. 1♂, Tiskolovo env., 59.73°N, 28.04°W, 12.06.2021.

DISTRIBUTION. Type locality: Belgium: West Flanders, Woumen, De Blankaart Nature Reserve. Azerbaijan, Belgium, Czech Republic, France, Germany, Hungary, Iran, Netherlands, Russia (Crimea, Krasnodar), Sweden, Switzerland, Turkey, UK, Ukraine. First record for the Leningrad Region and northwestern Russia.

Gymnopternus metallicus (Stannius, 1831)

MATERIAL EXAMINED. 1♂, 1♀, Lipovo env., 59.78°N, 28.18°W, 12.06.2021; 3♂♂, 5♀♀, Belye Lake env., 59.70°N, 28.14°W, 13.06.2021.

DISTRIBUTION. Type locality: Germany: "Umgegend von Hamburg". Trans-Palaearctic species (except for arid regions).

Medetera pseudoapicalis Thuneberg, 1955

MATERIAL EXAMINED. 2♀♀, Belye Lake env., 59.70°N, 28.14°W, 13.06.2021.

DISTRIBUTION. Type locality: Finland: Joutseno. Belgium, Estonia, Finland, Netherlands, Norway, Russia (Leningrad, N Caucasus, Novosibirsk, Buryatia), Sweden.

Neurigona quadrispasciata (Fabricius, 1781)

MATERIAL EXAMINED. 1♂, 2♀♀, Belye Lake env., 59.70°N, 28.14°W, 13.06.2021.

DISTRIBUTION. Type locality: Germany. Whole Europe; Urals, Krasnoyarsk, Baikal.

Rhaphium caliginosum Meigen, 1824

MATERIAL EXAMINED. 2♀, Lipovo env., 59.78°N, 28.18°W, 12.06.2021.

DISTRIBUTION. Type locality: not given. Trans-Palaearctic species (except for the Far East and arid regions).

Rhaphium fasciatum Meigen, 1824

MATERIAL EXAMINED. 1♂, Lipovo env., 59.78°N, 28.18°W, 12.06.2021.

DISTRIBUTION. Type locality: not given. Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Ireland, Latvia, Netherlands, Norway, Poland, Romania, Russia (Kabardino-Balkaria, Karachai-Cherkessia, Leningrad, Pskov, "Siberia"), Slovakia, Sweden, Switzerland, UK.

Rhaphium lanceolatum Loew, 1850

MATERIAL EXAMINED. 1♀, Beloye Lake env., 59.70°N, 28.14°W, 13.06.2021.

DISTRIBUTION. Type locality: Germany. Trans-Palaearctic species (except for arid regions).

Syntormon pallipes (Fabricius, 1794)

MATERIAL EXAMINED. 1♀, Tiskolovo env., 59.73°N, 28.04°W, 12.06.2021.

DISTRIBUTION. Type locality: Germany. The species is widely distributed in the Palaearctic, Afrotropical and Oriental Regions.

Syntormon metathesis (Loew, 1850)

MATERIAL EXAMINED. 1♀, Bolshoe Kuzemkino env., 59.58°N, 28.18°W, 14.06.2021.

DISTRIBUTION. Type locality: Germany. Austria, Belgium, Bulgaria, Czech Republic, Estonia, Finland, France, Germany, Hungary, Latvia, Macedonia, Netherlands, Poland, Romania; Russia (Krasnodar, Leningrad, Ryazan, Saratov, "Ural", Voronezh), Spain, Sweden, Switzerland, Slovakia, Turkey.

Conclusion

As a result of this study, 17 Dolichopodidae species are recorded in the Kurgalsky Nature Reserve for the first time. Most of the collected species are common and widespread across Europe or even across Palaearctic

Region. *Dolichopus austriacus* and *Gymnopternus blankaartensis* are found in the northwestern Russia for the first time. *Dolichopus lineatocornis* is a new species for the Leningrad Region. *Dolichopus miki* known from single male collected in 19th century from "France" is a possible synonym of *D. lineatocornis*. The Dolichopodidae fauna of the Leningrad Region and Saint Petersburg contains now 228 species.

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References

- Ecoregions. 2017 [Online]. Available at: <https://ecoregions2017.appspot.com> (accessed on 30.09.2021).
- Gaginskaya A.R., Noskov G.A., Simachev V.I. 1999. [Kurgalsky] // Fokin Yu.V., Botch M.S. (eds.). Krasnaya kniga prirody Leningradskoi oblasti. T.1. Osobo okhranyaemye prirodnye territorii. St-Petersburg: Aktioner i K. P.200–201 [in Russian].
- Grichanov I.Ya. 2017. Alphabetic list of generic and specific names of predatory flies of the epifamily Dolichopodoidea (Diptera). 2nd ed. Saint Petersburg: All-Russian Research Institute of Plant Protection. 563 p. DOI: 10.5281/zenodo.884863.
- Grichanov I.Ya., Ovsyannikova E.I. 2017. First data on Dolichopodidae (Diptera) of the West Kotlin Nature Reserve (Saint Petersburg, Russia) // Acta Biologica Sibirica. Vol.3. No.2. P.52–57.
- Mik J. 1880. Dipterologische Mittheilungen. I. Ueber einige Dipteren aus der Sammlung Dr. Emil Gobert's in Mont-de-Marsan // Verhandlungen der Kaiserlich-Königlichen Zoologisch-Botanischen Gesellschaft in Wien. 30 (Abh.). S.587–602.
- Ovsyannikova E.I., Grichanov I.Ya. 2021. [Predatory long-legged flies in apple ecosystems of North-West Russia] // Zashchita i karantin rastenii. No.4. P.43–46 [in Russian].
- Parent O. 1938. Diptères Dolichopodidés // Faune de France. L'Académie des Sciences de Paris. Vol.35. P.1–720.
- Przhiboro A. 2018. [Dolichopodidae: *Telmaturgus tumidulus* (Radatz, 1873); *Liancalus virens* (Scopoli, 1763)] // Publichenko Yu.N., Golubkov S.M., Kiyashko P.V. (eds.). Krasnaya kniga Leningradskoi oblasti. Zhivotnye. St. Petersburg: Papirus. P.107–109 [in Russian].