

Data on the chironomid fauna (Diptera, Chironomidae) of the mountain lakes of Cherskiy Ridge, Magadanskaya oblast of Russia

К фауне хирономид (Diptera, Chironomidae) горных озёр южных отрогов Хребта Черского (Магаданская область)

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Key words: Diptera, Chironomidae, fauna, Cherskiy ridge, Magadanskaya Oblast.

Ключевые слова: Diptera, Chironomidae, фауна, хребет Черского, Магаданская область.

Abstract. Based on the materials of the expedition of the Institute of Biological Problems of the North, Far Eastern Branch of the Russian Academy of Sciences (Magadan) (2020–2021), an annotated list of chironomines of lake-river systems of the southern part of the Chersky Ridge (Magadanskaya Oblast) is given. The fauna of non-biting midges of the subfamily Chironominae is represented by 39 species from 19 genera of 2 tribes. Species, *Tanytarsus latens* Gilka et al., 2018 and *T. lapponicus* Lindeberg, 1970, were first found in the Russian Federation. *Omisus caledonicus* (Edwards, 1932) was noted for the first time in the Russian Far East, previously known from Western Europe and the European part of Russia. *Neozavrelia kedrovaya* Orel, 2021 first record for the northeastern part of the Russian Far East. Fourteen species have been recorded for the fauna of the Magadanskaya Oblast for the first time. Holarctic species predominate (51.6 %), the rest of the species have Palaearctic distribution.

Резюме. По материалам экспедиции Института биологических проблем Севера ДВО РАН (г. Магадан) (2020–2021 гг.) приведён аннотированный список хирономин озёрно-речных систем южных отрогов Хребта Черского в Магаданской области. Фауна комаров-звонцов подсемейства Chironominae представлена 39 видами из 19 родов 2-х триб. Виды, *Tanytarsus latens* Gilka et al., 2018 и *T. lapponicus* Lindeberg, 1970, впервые найдены на территории Российской Федерации. Впервые для российского Дальнего Востока отмечен *Omisus caledonicus* (Edwards, 1932), ранее известный из Западной Европы и Европейской части России. *Neozavrelia kedrovaya* Orel, 2021 first record for the northeastern part of the Russian Far East. Четырнадцать видов впервые зарегистрированы для фауны Магаданской области (*Einfeldia pagana* (Meigen, 1838), *Microtendipes pedellus* (De Geer, 1776), *Parachironomus forceps* (Townes, 1945), *Paratendipes albimanus* (Meigen, 1818), *Synendotendipes impar* (Walker, 1856), *Cladotanytarsus* (*Cladotanytarsus*) *difficilis* Brundin, 1947, *Micropsectra borealis* (Kieffer, 1922), *Paratanytarsus lacophilus* (Edwards, 1929), *Rheotanytarsus fluminis* Kawai, Sasa, 1985, *Tanytarsus aculeatus* Brundin, 1949, *Tanytarsus aberrans* Lindeberg, 1970, *Tanytarsus anderseni* Reiss, Fittkau, 1971, *Tanytarsus usmaensis* Pagast, 1931 and *Zavrelia elenae* Zorina, 2008). По типам распространения

преобладают голарктические виды (51,6 %), остальные виды имеют палеарктические ареалы.

Introduction

The Chersky Range is a vast mountainous country in the northeast of Yakutia, lying in the space between the lower reaches of the Yana Rivers in the north and the upper reaches of the Kolyma in the south. The total length of the ridge reaches 1200 km, with most of it (approximately 3/4) lying within Yakutia, the rest in the north of the Magadanskaya Oblast. The main water arteries are the rivers Omulyovka, Urultun, Ui and Momontai, as well as lake-river systems located in the depression of the relief between the mountains Ohandya, Momontai, Omulyovskoe middle mountains and Ulakhan-Chistai — Darpir depression, with large lakes Darpir, Momontai, Malyk and Urultun, as well as a vast lake-river valley in the floodplain of the Ui, Momontai and Omulevka rivers.

Despite of the almost half-century history of studying the chironomid fauna of the Magadanskaya Oblast, the first data on the fauna of the subfamily Chironominae of reservoirs and watercourses of the Far Northeast Asia were published only in 2018 and included 71 species from 29 genera of 2 tribes, namely: Chironomini (32 species, 18 genera) and Tanytarsini (39 species, 8 genera) [Orel, 2018]. The list of chironomids was significantly expanded after studying the imaginal material collected during the expedition in 2020–2021 of the Institute of Biological Problems of the North, Far Eastern Branch of the Russian Academy of Sciences (Magadan) to the mountain lakes of the Darpir depression, Bolshoi and Malyi Darpir, Momontai, Ui, located in the river basin. Kolyma (Susumansky district of the Magadanskaya Oblast and Minsky district of the Republic of Sakha (Yakutia)), where 29 species from 16 genera were discovered [Makarchenko et al., 2019].

This work is a continuation of a series of works devoted to the study of the chironomid fauna of reservoirs

and watercourses of the southern spurs of the Chersky ridge of the Magadanskaya Oblast of Russia.

Material and Methods

The material for this work was the imaginal collections of bell mosquitoes made in July 2020, June and August 2021 by E.V. Khamenkova (Institute of Biological Problems of the North, Far Eastern Branch of the Russian Academy of Sciences) by mowing coastal vegetation with a net and collecting swarming individuals on lakes Ui, Yug, Valunnoye, Tor, Malyk, Sapog, Okhota, Kemkinya, Treugolnoe, Urultun, Ulbutakan, Uochat, Bliznitsy, Balgyt, Geologov, Razdelnoe, as well as the Bystry, Zima, Oburon and Okhandya streams, located at altitudes of 818–1234 m above sea level.

Imaginal material was fixed with 70 % ethanol for morphological studies and 96 % ethanol for DNA analysis. Molecular genetic studies of the collected chironomids have not yet been completed.

The descriptions of species use terminology and abbreviations according to Sæther [1980]. Types of distribution are given according to Gorodkov [1984]. Also, to clarify the distribution, the database of European chironomids was used [Sæther, Spies, 2013].

The list of chironomid species (Diptera, Chironomidae) collected from the mountain lakes of Cherskiy Ridge in Magadanskaya oblast of Russia is presented in the Appendix (p. 15–18).

The present work is registered in ZooBank (www.zoobank.org) under LSID urn:lsid:zoobank.org:pub:2E90FE24-E31E-4DC9-BE66-0F760C4755F3.

Conclusion

As a result of studying the material collected during the expedition of the Institute of Biological Problems of the North, Far Eastern Branch of the Russian Academy of Sciences (Magadan) (2020–2021), the species composition of chironomids of the subfamily Chironominae (Chironomidae, Diptera) of reservoirs and watercourses of the Chersky Ridge of the Magadanskaya Oblast was identified, which currently includes 39 species out of 19 genera of 2 tribes. The species, *Tanytarsus latens* Gilka et al., 2018 and *T. laponicus* Lindeberg, 1970, previously described from Finland, were found for the first time in the Russian Federation. For the first time, *Omisus caledonicus* (Edwards, 1932), previously known from Western Europe and the European part of Russia, was recorded for the Russian Far East. *Neozavrelia kedrovaya* Orel, 2021 first record for the northeastern part of the Russian Far East. Fourteen species, namely, *E. pagana* (Meig.), *M. pedellus* (De Geer), *P. forceps* (Town.), *P. albimanus* (Meig.), *S. impar* (Walk.), *C. (C.) diffici-*

lis Brun., *M. borealis* (Kieff.), *P. laccophilus* (Edw.), *R. fluminis* Kawai, Sasa, *T. aculeatus* Brun., *T. aber-rans* Lind., *T. anderseni* Reiss, Fitt., *T. usmaensis* Pag., *Z. elenae* Zor., were registered for the first time for the fauna of the Magadanskaya Oblast. Holarctic species predominate (51.6 %), the remaining species have Palearctic ranges.

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Appendix to the article: O.V. Orel. Data on the chironomid fauna (Diptera, Chironomidae) of the mountain lakes of Cherskiy Ridge (Magadanskaya oblast) (Euroasian Entomological Journal. 2024. Vol.23. No.1. P.50–51)

Приложение к статье: О.В. Орел. К фауне хирономид (Diptera, Chironomidae) горных озёр южных отрогов Хребта Черского (Магаданская область) (Евразийский энтомологический журнал. 2024. Т.23. Вып.1. С.50–51)

An annotated list of chironomid species (Diptera, Chironomidae) collected from the mountain lakes of Cherskiy Ridge in Magadanskaya oblast of Russia

Chironomini

Chironomus (Chironomus) spp.

Material. 3♂♂, Lake Yug source stream Bystry, N63°49'34.29" E147°40'21.50", 25.VI.2021; 1♂, N63°49'50.57" E147°40'59.47", a stream flowing from a small lake northwest of Lake Yug, 25.VI.2021; 4♂♂, river connecting lakes Valunnoye and Ui, 27.VI.2021; 6♂♂, N63°43'53.85" E148°29'42.33", lake on the right bank of the Urultun River, 18.VII.2021.

***Dicrotendipes pulsus* (Walker, 1856)**

Material. 4♂♂, N63°49'29.70", E147°47'52.69", junction of lakes Tor and Valunnoye, 26.VI.2021.

Distribution. Widespread Holarctic species.

***Einfeldia pagana* (Meigen, 1838)**

Material. 1♂, N63°43'53.85", E148°29'42.33", lake on the right bank of the Urultun River, 18.VIII.2021.

Distribution. Widespread Holarctic species. In the Russian Far East we found it in the Primorskii Krai and Khabarovskii Krai, Sakhalin Island [Orel, 2016]. It was recorded for the first time for the fauna of the Magadanskaya Oblast.

***Microtendipes pedellus* (De Geer, 1776)**

Material. 1♂, N63°43'53.85", E148°29'42.33", lake on the right bank of the Urultun River, 18.VIII.2021.

Distribution. Widespread Holarctic species. In the Russian Far East, we found it in the Primorskii Krai and on Sakhalin Island [Orel, 2016]. It was recorded for the first time for the fauna of the Magadanskaya Oblast.

***Omisus caledonicus* (Edwards, 1932)**

Material. 1♂, N63°49'50.57", E147°40'59.47", a stream flowing from a small lake northwest of Lake Yug, 25.VI.2021.

Distribution. Palaearctic species. Previously known from Western Europe, European Russia and Sakhalin Island [Sæther, Spies, 2013; Orel, 2016]. First record for the fauna of the Russian Far East.

***Parachironomus forceps* (Townes, 1945)**

Material. 1♂, Zima stream, 25.VIII.2021.

Distribution. Holarctic species. In the Russian Far East it was previously found in the Khabarovskii Krai, Amurskaya Oblast, Sakhalin Island [Orel, 2016]. First record for the fauna of the Magadanskaya Oblast.

***Paracladopelma nigrilum* (Goetghebuer, 1942)**

Material. 1♂, Lake Malyk, stream No.3, 25.07.2020; 1♂, Lake Malyk, 13.VIII.2021.

Distribution. Widespread Palearctic species.

***Paratendipes albimanus* (Meigen, 1818)**

Material. 1♂, Malyk lake basin, Lake Strashnoye, 30.VII.2020.

Distribution. Widespread Holarctic species. In the Russian Far East it was previously found only in the south of Primorskii Krai [Orel, 2016]. First record for the fauna of the Magadanskaya Oblast.

***Sergentia* sp.**

Material. 1♂, Malyk lake basin, Lake Strashnoye, 30.VII.2020; 10♂♂, N63°49'07.22", E147°54'04.99", Lake Wee (southern part), 23.VI.2021; 1♂, N63°49'15.72", E147°42'20.82", Bystry stream, 25.VI.2021; 2♂♂, N63°49'50.57", E147°40'59.47", a stream flowing from a small lake northwest of Lake Yug, 25.VI.2021; 2♂♂, N63°49'29.70", E147°47'52.69", junction of lakes Tor and Valunnoye, 26.VI.2021; 1♂, N63°49'19.98", E147°52'42.33", river connecting lakes Valunnoye and Ui, 28.VI.2021; 2♂♂, N63°44'18.03", E147°26'09.41", Lake No.01, 18.VIII.2021; 1♂, N63°44'15.50", E148°28'36.00", Ulbutakan River, 18.VIII.2021.

***Stictochironomus* sp.**

Material. 15♂♂, Kolyma River basin, Lake Sapog, 22–23.VII.2020; 10♂♂, Ohandya River, 25.VII.2020; 2♂♂, Lake Malyk basin, Oburon stream, 25.VII.2020; 10♂♂, Lake Malyk, at the confluence of the Ohandya stream, 25.VII.2020; 5♂♂, Lake Malyk, collecting from ice, 25.VII.2020; 1♂, Lake Malyk basin, stream No.3, 25.VII.2020; 1♂, N63°49'15.72", E147°42'20.82", Bystry stream, 25.VI.2021; 3♂♂, N63°49'50.57", E147°40'59.47", a stream flowing from a small lake northwest of Lake Yug, 25.VI.2021; 1♂, N63°49'19.98", E147°52'42.33", river connecting lakes Valunnoye and Ui, 28.VI.2021.

***Synendotendipes impar* (Walker, 1856)**

Material. 1♂, N63°49'15.72", E147°42'20.82", Bystry stream, 25.VI.2021; 3♂♂, river connecting lakes Valunnoye and Ui, 27.VI.2021.

Distribution. Widespread Palearctic species. In the Russian Far East it was previously found on the Kamchatka Peninsula, Sakhalin Island and in the Amurskaya Oblast [Orel, 2016]. First recorded for the fauna of the Magadanskaya Oblast. Tanytarsini

***Cladotanytarsus (Cladotanytarsus) difficilis*
Brundin, 1947**

Material. 1♂, N63°42'57.10", E148°30'24.81", Lake Kemkinya, 18.VIII.2021.

Distribution. Palaearctic species. Previously noted in the Chukotka Autonomous Okrug and the Republic of Sakha (Yakutia) [Orel, 2018; Makarchenko et al., 2019]. First recorded for the fauna of the Magadanskaya Oblast.

***Cladotanytarsus (Cladotanytarsus) saetheria*
Gilka, 2018**

Material. 2♂♂, Malyk lake basin, Lake Strashnoye, 30.VII.2020; 3♂♂, N63°49'19.98", E147°52'42.33", river connecting lakes Valunnoye and Ui, 28.VI.2021.

Distribution. Palaearctic species. Widely distributed in the Russian Far East [Orel, 2016, 2018].

Cladotanytarsus (Cladotanytarsus) sp.

Material. 1♂, river connecting lakes Valunnoye and Ui, 27.06.2021.

***Constempellina brevicosta* (Edwards, 1937)**

Material. 1♂, N63°49'07.22", E147°54'04.99", Lake Wee (southern part), 23.VI.2021; 1♂, N63°49'29.70", E147°47'52.69", junction of lakes Tor and Valunnoye, 26.VI.2021.

Distribution. Holarctic species. Widely distributed in the Russian Far East [Orel, 2016, 2018; Makarchenko et al., 2019].

Micropsectra borealis (Kieffer, 1922)

Material. 6♂♂, Lake Malyk basin, Oburon stream, 25.VII.2020; 1♂, Lake Malyk, at the confluence of the Ohandya stream, 25.VII.2020; 1♂, Lake Malyk, 21, 30.VII.2020.

Distribution. Holarctic species. Previously noted in Primorskii Krai and Khabarovskii Krai [Orel, 2016]. First recorded for the fauna of the Magadanskaya Oblast.

Micropsectra radialis Goetghebuer, 1939

Material. 1♂, N63°49'15.72", E147°42'20.82", Bystry stream, 25.VI.2021.

Distribution. Palaearctic species. In the Russian Far East it is also noted on the Kamchatka Peninsula and the Chukotka Autonomous Okrug [Orel, 2016].

Micropsectra sp. (gr. *atrofasciata*)

Material. 1♂, N63°49'07.22", E147°54'04.99", Lake Wee (southern part), 23.VI.2021.

Remarks. The species appears to be new to science. The male we found on Lake Ui, according to morphometric data, belongs to the *atrofasciata* group and is most similar to *M. pallidula* (Meigen, 1830), but differs from the latter in the shape of the superior volsella. Thus, the superior volsella of the males of *M. pallidula* is semicircular in shape with a smooth apicomedial edge, whereas in our male the apicomedial edge of the superior volsella is concave. In addition, we found males with similar morphological characteristics on Sakhalin Island and the Khabarovskii Krai (the basin of the Bira and Bidzhan rivers). A mature pupa of *Micropsectra* sp. (gr. *atrofasciata*) was found on the Kamchatka Peninsula (Kol River), which differs from the description of the pupa of *M. pallidula* given in the work of Stur and Ekrem [2006], in the following characters: cephalic tubercle 45 µm long, thoracic horn 440 µm long, lateral spines on tergite III 66 µm long, spines on tergite IV 54 µm long, tergite V with spines, microtrichia between the lateral stripes of spines on tergite III absent.

Micropsectra agg. *insignilobus*

Material. 1♂, N63°49'15.72", E147°42'20.82", Bystry stream, 25.VI.2021.

Differential diagnosis. Dark brown male, wing 2.76 mm long, antennae and tarsi absent, Ac 16, Dc 10, Pa 2–3, microtrichia between the anal crosses and at the base of the superior volsella are absent, stem of median volsella 69 µm long. It is impossible to determine the species, since the only male is missing antennae and legs.

Micropsectra sp. (gr. *nana*)

Material. 2♂♂, N63°49'19.98", E147°52'42.33", river connecting lakes Valunnoye and Ui, 27–28.VI.2021.

Neozavrelia kedrovaya Orel, 2021

Material. 2♂♂, Lake Malyk basin, stream No.3, 25.VII.2020; 2♂♂, N63°49'19.98", E147°52'42.33", river connecting lakes Valunnoye and Ui, 28.VI.2021.

Distribution. Eastern Palearctic species [Orel, 2021]. First record for the northeastern part of the Russian Far East.

Paratanytarsus hyperboreus Brundin, 1949

Material. 12♂♂, Lake Malyk, 13.VIII.2021; 4♂♂, N63°48'36.57", E147°13'24.93", Lake Bezymyanoye, 15.VIII.2021; 25♂♂, N63°44'18.03", E147°26'09.41", Lake No.01, 18.VIII.2021; 7♂♂, N63°43'24.52", E147°29'37.73", Lake Okhota, 18.VIII.2021; 15♂♂, N63°42'57.10", E148°30'24.81", Lake Kemkinya, 18.VIII.2021; 35♂♂, N63°48'50.05",

E148°17'26.69", Lake Urultun, 15–18.VIII.2021; 6♂♂, same data, 19–20.VIII.2021; 5♂♂, N63°44'15.50", E148°28'36.00", Ulbutakan River, 18.VIII.2021; 10♂♂, Treugolnoe, 21.VIII.2021; 15♂♂, Lake Whachat, 21.VIII.2021; 15♂♂, Lake Bliznetsy, 21.VIII.2021; 15♂♂, N63°45'01.43", E147°56'58.80", Lake Balgyt, 25.VIII.2021; 1♂, N63°40'57.97", E148°00'09.08", Lake Razdelnoe, 27.VIII.2021.

Distribution. Palaearctic species. In the Russian Far East, found in the north of Primorskii Krai, Kamchatka Peninsula, Chukotka Autonomous Okrug and Magadanskaya Oblast [Orel, 2016; Makarchenko et al., 2019].

Paratanytarsus laccophilus (Edwards, 1929)

Material. 2♂♂, Malyk lake basin, Lake Strashnoye, 30.VII.2020.

Distribution. Holarctic species. In the Far East of Russia, it was previously found on the islands of Sakhalin and Paramushir, the Kamchatka Peninsula [Orel, 2016]. First recorded for the fauna of the Magadanskaya Oblast.

Paratanytarsus natvigi (Goetghebuer, 1933)

Paratanytarsus inopertus (Walker, 1856): Makarchenko et al., 2019: 76 (misidentification).

Material. 2♂♂, Lake Malyk basin, Oburon stream, 25.VII.2020; 2♂♂, Lake Malyk, 21.VII.2020; 1♂♂, N63°49'29.70", E147°47'52.69", junction of lakes Tor and Valunnoye, 26.VIII.2021.

Distribution. Holarctic species. In the Russian Far East, we previously noted it on Lake Achchen (Chukotka Autonomous Okrug).

Remarks. Males found at Lake Little Darpir and Lake Ui, mistakenly identified as *P. natvigi*, belong to another species, *P. inopertus* (Walker, 1856).

Paratanytarsus penicillatus (Goetghebuer, 1928)

Paratanytarsus setisimanus (Goetghebuer, 1933): Makarchenko et al., 2019: 76 (misidentification).

Material. 1♂, Kolyma River basin, Lake Sapog, 22.VII.2020; 5♂♂, Lake Malyk, collecting from ice, 25, 30.VII.2020; 5♂♂, Malyk lake basin, source of Siena stream, 28.VII.2020; 5♂♂, Lake Malyk, 29.VII.2020; 1♂, Lake Yug source of the Bystry stream, N63°49'34.29", E147°40'21.50", 25.VI.2021; 1♂, N63°49'29.70", E147°47'52.69", junction of lakes Tor and Valunnoye, 26.VI.2021; 1♂, Lake Wee, 28.VI.2021.

Distribution. Holarctic. In the Russian Far East, it was previously recorded in the Chukotka Autonomous Okrug and the Magadanskaya Oblast (Lake Big Darpir) [Orel, 2018; Makarchenko et al., 2019].

Paratanytarsus tenuis (Meigen, 1830)

Material. 1♂, Kolyma River basin, Lake Sapog, 23.VII.2020; 1♂, Lake Malyk, 29.VII.2020; 1♂, N63°49'29.70", E147°47'52.69", junction of lakes Tor and Valunnoye, 26.VI.2021.

Distribution. Holarctic species. Quite common in the Russian Far East [Orel, 2016; Makarchenko et al., 2019].

Rheotanytarsus fluminis Kawai, Sasa, 1985

Material. 13♂♂, N63°49'19.98", E147°52'42.33", river connecting lakes Valunnoye and Ui, 28.VI.2021.

Distribution. Eastern Palearctic species. In the Russian Far East, it was previously found in the Primorskii Krai and Sakhalin Island [Orel, 2016]. First recorded for the fauna of the Magadanskaya Oblast.

Rheotanytarsus pentapoda (Kieffer, 1909)

Material. 1♂, N63°49'29.70", E147°47'52.69", junction of lakes Tor and Valunnoye, 26.VI.2021; 2♂♂, N63°49'19.98", E147°52'42.33", river connecting lakes Valunnoye and Ui, 27–28.VI.2021.

Distribution. Palaearctic species. Found everywhere in the Russian Far East [Orel, 2016, 2018].

Data on the chironomid fauna of the mountain lakes of Cherskiy Ridge

Tanytarsus aculeatus Brundin, 1949

Material. 1♂, N63°43'24.52", E147°29'37.73", Lake Okhota, 18.VIII.2021; 10♂♂, Lake Treugolnoe, 21.VIII.2021; 1♂, N63°44.068", E148°15.769", Lake Bliznetsy, 21.VIII.2021; 1♂, Lake Goelogov, 24.VIII.2021; 3♂♂, N63°41'57.82", E148°03'10.11", lake without name, 27.VIII.2021.

Distribution. Palearctic species. In the Russian Far East it was previously found only on Sakhalin Island [Orel, 2016]. First record for the fauna of the Magadanskaya Oblast.

Tanytarsus aberrans Lindeberg, 1970

Material. 1♂, Kolyma River basin, Lake Sapog, 22.VII.20; 1♂, Urultun River, 18.VIII.2021; 1♂, N63°43'53.85", E148°29'42.33", lake on the right bank of the Urultun River, 18.VIII.2021.

Distribution. Palearctic species. In the Russian Far East it was previously found on Sakhalin Island [Orel, 2016]. First record for the fauna of the Magadanskaya Oblast.

Tanytarsus anderseni Reiss, Fittkau, 1971

Tanytarsus norvegicus (Kieffer, 1924): Orel, 2016: 194 (misidentification).

Material. 1♂, N63°49'29.70", E147°47'52.69", junction of lakes Tor and Valunnoye, 26.VI.2021.

Distribution. Holarctic species. In the Russian Far East, it was previously found in the Khabarovskii Krai and the Kamchatka Peninsula [Orel, 2016]. First record for the fauna of the Magadanskaya Oblast.

Tanytarsus bathophilus Kieffer, 1911

Material. 2♂♂, Kolyma River basin, Lake Sapog, 23.VII.2020; 10♂♂, Ohandya River, 25.VII.2020; 4♂♂, Lake Malyk, 26, 30.VII.2020; 1♂, same data, 13.VIII.2021; 5♂♂, Malyk lake basin, source of Siena stream, 28.VII.2020; 10♂♂, Lake Malyk at the confluence of the Ohandya River, 25.VII.2020; 10♂♂, Lake Malyk, collecting ice, 21, 25, 30.VII.2020;

1♂, Lake Malyk, stream No.3, 25.VII.2020; 2♂♂, N63°49'15.72", E147°42'20.82", Bystry stream, 25.VI.2021; 1♂, N63°49'34.29", E147°40'21.50", Lake South source of the Bystry stream, 25.VI.2021; 2♂♂, Lake Wee, 28.VI.2021; 2♂♂, N63°29.165", E147°50.665", Lake Sapog, 13.VIII.2021; 1♂, N63°34'02.80", E148°09'51.80", road from Lake Malyk to Lake Urultun, 15.VIII.2021; 1♂, N63°44'15.50", E148°28'36.00", Ulbutakan River, 18.VIII.2021; 2♂♂, Lake Urultun, 19–20.VIII.2021; 1♂, N63°50.403', E148°21.128', Lake Whatat, 21.VIII.2021; 2♂♂, N63°40'57.97", E148°00'09.08", Lake Razdelnoe, 27.VIII.2021.

Distribution. Widespread Palearctic species.

Tanytarsus brundini Lindeberg, 1963

Material. 1♂, Lake Malyk basin, Oburon stream, 25.VII.2020; 1♂, Lake Malyk, 29.VII.2020; 1♂, N63°49'29.70", E147°47'52.69", junction of lakes Tor and Valunnoye, 26.VI.2021; 1♂, N63°49'19.98", E147°52'42.33", river connecting lakes Valunnoye and Ui, 28.VI.2021.

Distribution. Holarctic species. Widely distributed in the Russian Far East [Orel, 2016; Makarchenko et al., 2019].

Tanytarsus heliomesonictios Langton, 1999

Material. 2♂♂, N63°49a07.22", E147°54'04.99", Lake Wee, 23.VI.2021.

Distribution. Holarctic species. Known from Ellesmere Island in the Canadian Arctic and the archipelagos of Spitsbergen and Jan Mayen (Norway), as well as from Finnmark (northern Norway). In Russia it was first found in lakes Momontay (Magadanskaya Oblast) and Bolshoi Darpir (Republic of Sakha (Yakutia)) [Orel, Semenchenko, 2019].

Tanytarsus lapponicus Lindeberg, 1970

Figs 1–2.

Material. 1♂, Kolyma River basin, Lake Sapog, 23.VII.2020.

Distribution. Holarctic species. In the Palearctic it was previously known only from Finland. It is indicated for the first time for the fauna of Russia.



Figs 1–2. Details of the structure of the male hypopygium of *T. lapponicus* Lindeberg, 1 — total view of hypopygium; 2 — superior, median and inferior volsellae of the hypopygium. Scale bar 20 µm.

Рис. 1–2. Детали строения гипопигия самца *T. lapponicus* Lindeberg. 1 — общий вид гипопигия; 2 — верхний, медиальный и нижний придатки гипопигия. Масштабная линейка 20 мкм.

Differential diagnosis. The male *T. laponicus* is dark brown in color, body 4.0 mm long, wing 2.6 mm long. Frontal tubercles cylindrical, 15 µm long, 9 µm wide; antennae are lost; clypeus with 11 setae, 11 ventral setae. Length of the last 4 segments of the maxillary palp (in µm): 72: 200: 160: 184. Thorax with 8 acrostichal, 13 dorsocentral, 1 prealar and 8 scutellar setae. LRP₁ 1.34, BRP₁ 5.0. Gonostylus 165 µm long, expanded in the proximal third; gonocoxite 180 µm long, with 3–4 internal setae; anal point with 9 spines, microtrichia between the anal crosses; tergite IX without medial setae; anterior margin of tergite IX with biapical processes; the superior volsella rounded-quadrangular in shape with a small dorsolateral process, 10–13 dorsal setae and 2–3 dorsomedial setae, microtrichia absent; digitus wide (18 µm), 45 µm long; median volsella short (45 µm), with lanceolate setae (Figs 1–2).

Tanytarsus latens Gilka et al., 2018

Material. 1♂, N63°43'24.52", E147°29'37.73", Lake Okhota, 18.VIII.2021; 1♂, N63°43'53.85", E148°29'42.33", lake on the right bank of the Urultun River, 18.VIII.2021.

Distribution. Palearctic species. First recorded for the fauna of Russia, previously known only from the type habitat of Ostrobothnia Borealis, Finland.

Tanytarsus agg. *lestagei*

Material. 1♂, N63°48'50.05", E148°17'26.69", Lake Urultun, 15–18.VIII.2021.

Замечания. Males are found everywhere in the Russian Far East [Orel, 2016].

Tanytarsus usmaensis Pagast, 1931

Material. 6♂♂, N63°49'29.70", E147°47'52.69", junction of lakes Tor and Valunnoye, 26.VI.2021; 8♂♂, N63°44'18.03", E147°26'09.41", Lake No.01, 18.VIII.2021.

Distribution. Holarctic species. In the Russian Far East it was previously recorded only on the Sakhalin Island [Orel, 2016]. First record for the fauna of the Magadanskaya Oblast.

Zavrelia elenae Zorina, 2008

Material. 2♂♂, N63°49'29.70", E147°47'52.69", junction of lakes Top and Valunnoye, 26.VI.2021.

Distribution. Eastern Palearctic species. In the Russian Far East it was previously found in the Primorskii Krai and Khabarovskii Krai [Zorina, 2008; Orel, 2016]. First record for the fauna of the Magadanskaya Oblast.