



Far Eastern Entomologist

Дальневосточный энтомолог

Journal published by Far East Branch
of the Russian Entomological Society
and Laboratory of Entomology, Federal
Scientific Center of the East Asia
Terrestrial Biodiversity, Vladivostok

Number 521: 1-14

ISSN 1026-051X (print edition)
ISSN 2713-2196 (online edition)

April 2025

<https://doi.org/10.25221/fee.521.1>

<https://elibrary.ru/xsjmam>

<https://zoobank.org/References/E64F8A70-CF87-450D-926D-B957950C50BE>

NEW RECORDS OF DIGGER WASPS (HYMENOPTERA: SPHECIDAE, CRABRONIDAE) FROM ZABAIKALSKII KRAI, RUSSIA

D. N. Kochetkov^{1*}, O. V. Korsun^{1, 2)}

1) *Daurskii State Nature Reserve, Komsomolskaya St., 76, Nizhnii Tsasuchei, Zabaikalskii Krai 674480 Russia. *Corresponding author. E-mail: hydichrum@rambler.ru*

2) *Institute of Natural Resources, Ecology and Cryology, Siberian Branch of the Russian Academy of Sciences, Nedorezova Str. 16a. Chita 672014 Russia. E-mail: olegkorsun@mail.ru*

Summary. Two species of Sphecidae and 30 species of Crabronidae are listed as new records from the Zabaikalskii Krai. Of them, the genus *Ammoplanops* Gussakovskij, 1931 and species *A. mongolicus* Tsuneki, 1972, *Belomicrus multifasciatus* Tsuneki, 1972 are new records for Russia; *Ammoplanus gegen* Tsuneki, 1972, *Cerceris manchuriana* Tsuneki, 1961, *C. manflava* Tsuneki, 1971, *Oxybelus latro* Olivier, 1812, *Tachysphex consocius* Kohl, 1892, *T. nitidus* (Spinola, 1805) and *T. panzeri* (Vander Linden, 1829) are new records from Eastern Siberia. Currently 22 species in five genera of Sphecidae and 179 species in 42 genera of Crabronidae are known from the Zabaikalskii Krai, including *Cerceris lacinia* Tsuneki, 1961 and *Pemphredon tridentata* Gussakovskij, 1952, which are omitted in the last catalogue and should be added to the list of Russian fauna.

Key words: digger wasps, fauna, new records, Daurskii Reserve, Eastern Siberia.

Д. Н. Кочетков, О. В. Корсун. Новые находки роющих ос (Hymenoptera: Sphecidae, Crabronidae) в Забайкальском крае, Россия // Дальневосточный энтомолог. 2025. N 521. С. 1-14.

Резюме. Два вида Sphecidae и 30 видов Crabronidae впервые указываются из Забайкальского края. Из них род *Ammoplanops* Gussakovskij, 1931 и виды *A. mongolicus* Tsuneki, 1972, *Belomicrus multifasciatus* Tsuneki, 1972 являются новыми для России; *Ammoplanus gegen* Tsuneki, 1972, *Cerceris manchuriana* Tsuneki, 1961, *C. manflava* Tsuneki, 1971, *Oxybelus latro* Olivier, 1812, *Tachysphex consocius* Kohl, 1892, *T. nitidus* (Spinola, 1805) и *T. panzeri* (Vander Linden, 1829) впервые указываются для Восточной Сибири. В настоящее время список роющих ос из Забайкальского края включает 22 вида из пяти родов сем. Sphecidae и 179 видов из 42 родов сем. Crabronidae, включая *Cerceris lacinia* Tsuneki, 1961 и *Pemphredon tridentata* Gussakovskij, 1952, которые пропущены в последнем каталоге и должны быть добавлены в список роющих ос России.

INTRODUCTION

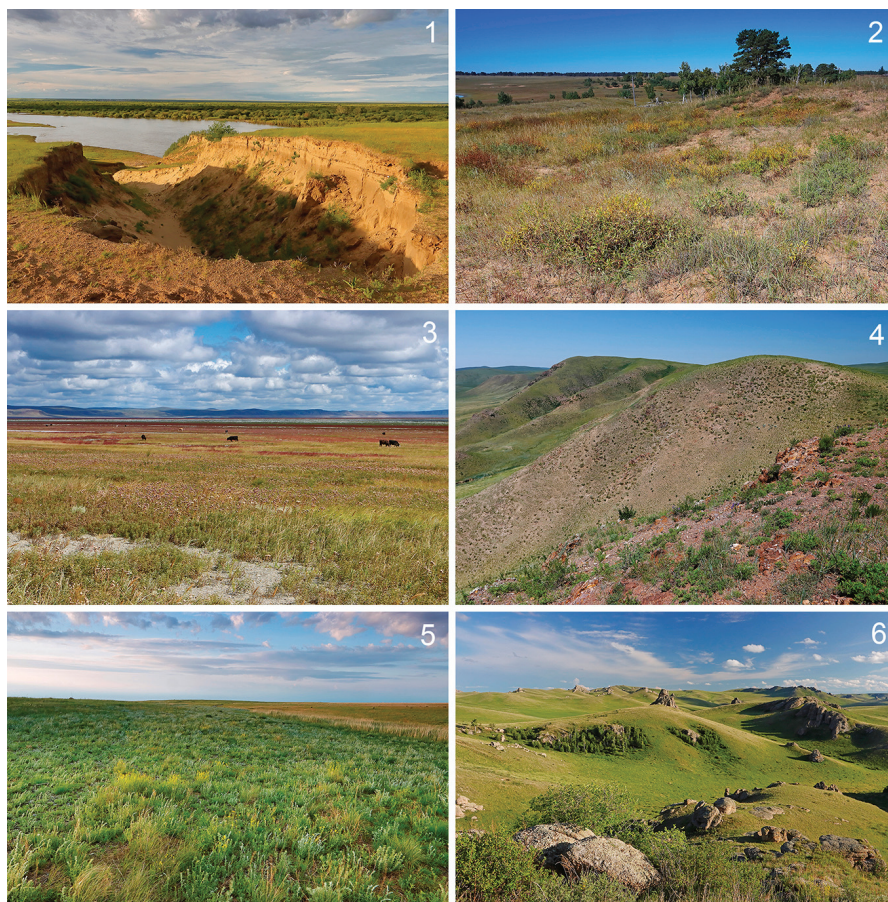
The Zabaikalskii Krai (before March 2008 – Chitinskaya Oblast and Aginskii Buryatskii Okrug) is a vast mountainous region that includes mountain tundra, taiga, forest-steppe and steppe landscapes. The high diversity of biotopes in this area results in a high species richness of digger wasps. One hundred and thirty-six species of digger wasps (Crabronidae – 118 species/34 genera, Sphecidae – 18/5) were known from Zabaikalskii Krai (Antropov *et al.*, 2017), of them 23 species of digger wasps were recorded for the first time from Zabaikalskii Krai, but *Tachysphex melas* Kohl, 1898 was omitted.

The first data on wasps of Eastern Siberia are connected with B.I. Dybowski, A.L. Czekanowski, S.N. Rodionov (second half of the 19th century). In the 20th century wasps were collected here by V.V. Sovinsky, V.E. Marshakov, A.S. Lelej, N.V. Kurzenko, P.G. Nemkov and others. Nemkov (2009) catalogued the digger wasps, recording 96 species from 32 genera of Crabronidae and ten species from four genera of Sphecidae from the Zabaikalskii Krai. Unfortunately, Nemkov (2009) omitted the work of Nesterov (1992) with a list of 82 species collected in the Dauriskii Reserve. In the last decades V.V. Dubatolov, O.E. Kosterin, O.G. Berezina, Yu.N. Danilov collected digger wasps in Dauria and summarized the results (Danilov, 2011a, 2011b, 2014). One hundred and sixty-nine species of digger wasps (Sphecidae – 20, Crabronidae – 149) were known from Zabaikalskii Krai before our research. After the catalogue (Antropov *et al.*, 2017), our knowledge of Siberian digger wasps was updated (Mokrousov *et al.*, 2019, 2020a; Akulov *et al.*, 2020; Danilov *et al.*, 2021; Mokrousov & Proshchalykin, 2021, 2023; Antropov *et al.*, 2024), but only *Prionyx subfuscatus* (Dahlbom, 1845) was added to the fauna of the Zabaikalskii Krai (Danilov *et al.*, 2024).

The aim of the present study is to describe the fauna of digger wasps of Zabaikalskii Krai on the basis of specimens collected in the territory of the Dauriskii nature reserve and to analyze the data provided by Nesterov (1992).

MATERIAL AND METHODS

The paper is based on materials collected by the authors in 2011–2024 on the territory and in the vicinity of the Daurskii Nature Reserve, located in the south of Zabaikalskii Krai. The landscape of the reserve consists of a complex of steppe, forest, steppe communities and wetlands (Tkachuk & Zhukova, 2013). Materials were collected from the following sites: *Nizhnii Tsasuchei* village, Onon River valley, 50°30'47"N, 115°08'23"E, eroded psammophytic digressive steppe on alluvial sandy soils (Fig. 1); 18 km SSE of Nizhnii Tsasuchei, Yakshi Lakes, 50°21'57"N, 115°13'41"E, sparse steppe pine forest and feather grass steppe on alluvial-eolian sandy soils (Fig. 2); 60 km SE of Nizhnii Tsasuchei, Torey Depression, Teli Field



Figs 1–6. Sites for material collection. 1 – Nizhnii Tsasuchei, Onon River valley, 2 – Tsasuchei pine forest, Yakshi lakes, 3 – Torey depression, Teli field station, 4 – Kuku-Hadan Mount, 5 – Torey depression, Utochi field station, 6 – Adon-Chelon mountains.

Station, 50°06'25"N, 115°41'22"E, leymus steppe and forb halophytic pioneer community on a dry lake bed (Fig. 3); 67 km SE of Nizhnii Tsasuchei, Kuku-Hadan Mountain, 50°09'14"N, 115°53'03"E, petrophytic steppe and shrub-steppe community on the slopes of hills (Fig. 4); 70 km SE of Nizhnii Tsasuchei, Torey Depression, Utochi Field Station, 50°00'15"N, 115°43'13"E, petrophytic and feather-grass steppe on chestnut soils (Fig. 5); 35 km WNW of Borzuya, Adon-Chelon Mountains, 50°28'25"N, 116°03'21"E, grass-forb and meadow-rich mountain steppe (Fig. 6).

The material is deposited in the private collection of D.N. Kochetkov (Nizhnii Tsasuchei, Russia) and was identified by the first author using the keys (Tsuneki, 1972, Marshakov, 1976, Pulawski, 1978, Kazenas, 1978, Nemkov *et al.*, 1995, Bouček, 2001, Dollfuss, 2010, 2013, Danilov, 2014).

Classification of digger wasps follows Pulawski (2024), distribution follows Antropov *et al.* (2017). New records are marked with an asterisk (*). Abbreviations for collectors: DK – D.N. Kochetkov, OK – O.V. Korsun.

Photographs were taken using a Canon EOS 90D digital camera and an Olympus SZX16 stereomicroscope, and Olympus DP74 digital camera. The images were combined using Helicon Focus software. The final illustrations were post-processed using Adobe® Photoshop® software to enhance contrast and brightness.

LIST OF THE SPECIES

Family Sphecidae

Podalonia chalybea (Kohl, 1906)

MATERIAL EXAMINED. *Utochi*, 20.VI 2004, 1♂, OK.

DISTRIBUTION. Russia: Eastern Siberia (Irkutsk Prov., *Zabaikalskii Krai). – Mongolia, China.

Sceliphron deforme (F. Smith, 1856)

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 23.VII 2023, 1♀, DK; *ibid*, 21.VIII 2024, 2♀, DK.

DISTRIBUTION. Russia: European part (Central, East, South, North Caucasus), Orenburg Prov., Western Siberia (Novosibirsk Prov.), Eastern Siberia (Krasnoyarskii Krai, *Zabaikalskii Krai), Far East (Amur Prov., Khabarovskii Krai, Primorskii Krai). – Europe, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China, Korean Peninsula, Japan, South-Eastern Asia, India.

Family Crabronidae

Belomicrus antennalis Kohl, 1899

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 23–24.VI 2022, 3♀, 2♂, DK; *Teli*, 26.VI 2022, 4♂, DK; *Adon-Chelon*, 05.VII 2022, 1♂, DK.

DISTRIBUTION. Russia: European part (South), Western Siberia (Altai), Eastern Siberia (Krasnoyarskii Krai, Irkutsk Prov., *Zabaikalskii Krai). – South-Eastern Europe, Kazakhstan, Mongolia.

***Belomicrus multifasciatus* Tsuneki, 1972**

(Figs 7–9)

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 23.VII 2023, 5♀, 3♂, DK; *Utochi*, 10.VII 2023, 1♀, DK; *Adon-Chelon*, 05.VII 2022, 1♀, DK.

DISTRIBUTION. *Russia: Eastern Siberia (Zabaikalskii Krai). – Mongolia.



Figs 7–9. *Belomicrus multifasciatus* Tsuneki, male: 7 – habitus, dorsal view; 8 – head, frontal view; 9 – mesosoma, dorsal view. Scale bars: 0.5 mm for 7; 0.1 mm for 8, 9.

***Bembix diversipes* F. Morawitz, 1889**

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 09.VII 2023, 1♂, DK; *Kuku-Hadan*, 27.VI 2022, 1♀, DK; *Utochi*, 2–3.VII 2022, 2♂, DK; *ibid*, 15.VII 2023, 2♀, 2♂, DK; *Adon-Chelon*, 07.VII 2022, 1♀, DK; *ibid*, 17–20.VII 2023, 3♂, DK.

DISTRIBUTION. Russia: Western Siberia (Altai), Eastern Siberia (Tyva, Krasnoyarskii Krai, Irkutsk Prov., Buryatia, *Zabaikalskii Krai), Far East (Amur Prov., Primorskii Krai). – Turkey, Iran, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China.

***Bembix niponica* F. Smith, 1873**

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 09.VII 2023, 1♀, 1♂, DK; *Utochi*, 13–15.VII 2023, 1♀, 2♂, DK.

DISTRIBUTION. Russia: Eastern Siberia (Tyva, Krasnoyarskii Krai, Buryatia, *Zabaikalskii Krai), Far East (Amur Prov., Khabarovskii Krai, Primorskii Krai). – Turkmenistan, Uzbekistan, Kazakhstan, Mongolia, China, Korean Peninsula, Japan.

***Cerceris manchuriana* Tsuneki, 1961**

MATERIAL EXAMINED. *Adon-Chelon*, 10–12.VII 2024, 9♀, DK.

DISTRIBUTION. Russia: *Eastern Siberia (Zabaikalskii Krai), Far East: (Primorskii Krai). – China.

***Cerceris manflava* Tsuneki, 1971**

MATERIAL EXAMINED. *Utochi*, 18.VII 2024, 1♀, DK; *Adon-Chelon*, 9.VIII 2013, 1♀, OK; *ibid*, 19.VII 2023, 1♀, DK; *ibid*, 10–11.VII 2024, 17♀, DK.

DISTRIBUTION. Russia: *Eastern Siberia (Zabaikalskii Krai), Far East (Amur Prov., Primorskii Krai). – Mongolia, China.

***Crossocerus (Blepharipus) annulipes* (Lepeletier de Saint Fargeau et Brullé, 1835)**

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 13.IX 2021, 1♀, DK; *ibid*, 23–24.VI 2022, 1♂, DK.

DISTRIBUTION. Russia: European part (North, Northwest, Central, East, South, North Caucasus), Ural, Western Siberia (Altai), Eastern Siberia (Irkutsk Prov., *Zabaikalskii Krai), Far East: (Amur Prov., Primorskii Krai). – North Africa, Europe, Abkhazia, Turkey, Israel, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, North America.

***Ammoplanops mongolicus* Tsuneki, 1972**

(Figs 10–15)

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 09, 23.VII 2023, 20♀, 72♂, DK; *Utochi*, 14–15.VII 2023, 2♀, 1♂, DK; *Adon-Chelon*, 16.VII 2022, 1♀, DK.

DISTRIBUTION. *Russia: Eastern Siberia (Zabaikalskii Krai). – Mongolia.

REMARKS. The genus *Ammoplanops* Gussakovskij, 1931 and *A. mongolicus* Tsuneki, 1972 are newly recorded from Russia.

***Ammoplanus gegen* Tsuneki, 1972**

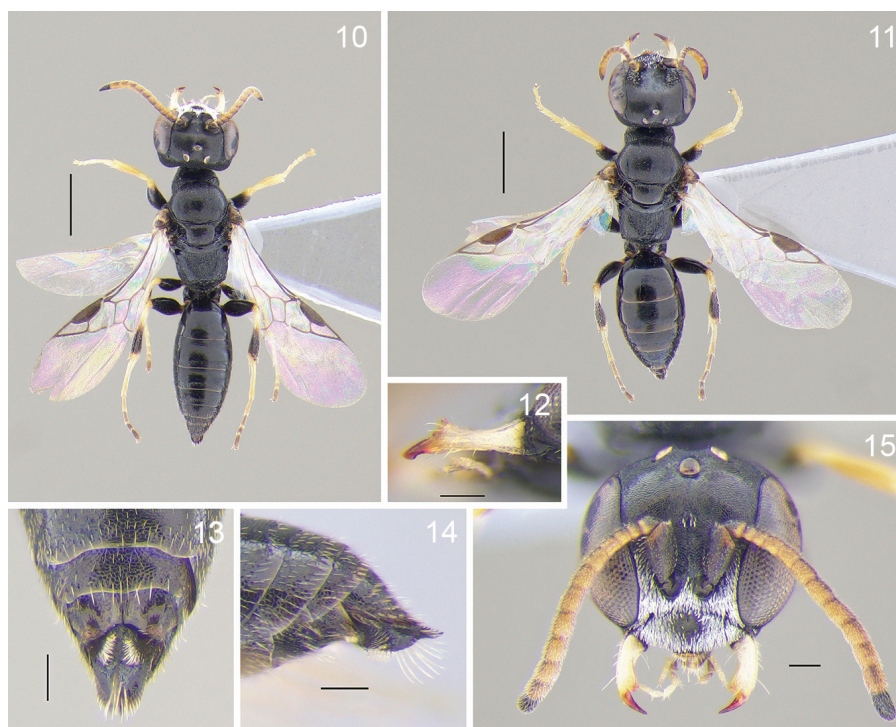
MATERIAL EXAMINED. *Utochi*, 12.VII 2023, 1♂, DK; *Adon-Chelon*, 20–21.VII 2023, 5♀, DK.

DISTRIBUTION. Russia: European part (Volgograd Prov.), *Eastern Siberia (Zabaikalskii Krai). – Europe, Cyprus, Jordan, Turkmenistan, Tajikistan, Mongolia.

***Ammoplanus kaszabi* Tsuneki, 1972**

MATERIAL EXAMINED. *Utochi*, 14–15.VII 2023, 2♀, DK; *Adon-Chelon*, 20–21.VII 2023, 7♀, DK.

DISTRIBUTION. Russia: European part (Volgograd Prov.), Ural, Western Siberia (Altai), Eastern Siberia (Krasnoyarskii Krai, Irkutsk Prov., *Zabaikalskii Krai), Far East: (Khabarovskii Krai). – Europe, Turkey, Kazakhstan, Mongolia.



Figs 10–15. *Ammoplanops mongolicus* Tsuneki, female: 11 – habitus, dorsal view; male: 10 – habitus, dorsal view; 12 – mandible, lateral view; 13–14 – apical part of metasoma, ventral view (13), lateral view (14); 15 – head, frontal view. Scale bars: 0.5 mm for 10–11; 0.1 mm for 12–15.

***Diodontus hyalipennis* Kohl, 1892**

MATERIAL EXAMINED. *Yaksha lakes*, 13.IX 2021, 1♀, DK; *Kuku-Hadan*, 27.VI 2022, 2♂, DK; *Teli*, 25–26.VI 2022, 2♂, DK; *Utochi*, 29.VI 2022, 1♀, DK; *ibid*, 12.VII 2022, 1♀, DK; *Adon-Chelon*, 21.VII 2023, 1♀, DK.

DISTRIBUTION. Russia: European part (South, North Caucasus), Western Siberia (Altai), Eastern Siberia (Tyva, Buryatia, *Zabaikalskii Krai). – North Africa, Europe, Azerbaijan, Iran, Kazakhstan, Mongolia.

***Ectemnius (Clytochrysus) sexcinctus* (Fabricius, 1775)**

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 23.VII 2023, 2♀, DK.

DISTRIBUTION. Russia: European part (Northwest, Central, Crimea), Western Siberia (Kemerovo Prov., Altai), Eastern Siberia (Tyva, Krasnoyarskii Krai, Irkutsk

Prov., Buryatia, *Zabaikalskii Krai), Far East: (Primorskii Krai). – North Africa, Europe, Turkey, Iran, Afghanistan, Pakistan, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China, India, North America.

***Gorytes aino* Tsuneki, 1963**

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 23–24.VI 2022, 1♀, DK.

DISTRIBUTION. Russia: Eastern Siberia (Khakassia, Buryatia, *Zabaikalskii Krai), Far East (Amur Prov., Primorskii Krai, Sakhalin, Kuril Islands: Kunashir). – China, Japan.

***Gorytes ambiguus* Handlirsch, 1888**

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 23.VII 2023, 2♀, DK; *Utochi*, 3–4.VI 2000, 2♀, 1♂, OK; *Adon-Chelon*, 4–7.VII 2022, 1♀, 1♂, DK; *ibid*, 18.VII 2023, 1♀, 1♂, DK.

DISTRIBUTION. Russia: Chelyabinsk Prov., Western Siberia (Altai), Eastern Siberia (Khakassia, Krasnoyarskii Krai, Irkutsk Prov., *Zabaikalskii Krai), Far East (Amur Prov., Khabarovskii Krai, Primorskii Krai). – Tajikistan, Uzbekistan, Kazakhstan, Mongolia, China.

***Hoplisoides distinguendus* (Yasumatsu, 1939)**

MATERIAL EXAMINED. *Kuku-Hadan*, 20.VII 2024, 2♂, DK; *Utochi*, 17–18.VII 2024, 4♂, DK; *Adon-Chelon*, 16–17.VII 2023, 2♀, DK; *ibid*, 10.VII 2024, 2♀, 1♂, DK.

DISTRIBUTION. Russia: Eastern Siberia (Buriatia, *Zabaikalskii Krai), Far East (Amur Prov., Primorskii Krai). – Kazakhstan, Mongolia, China (Inner Mongolia, Beijing, Jilin), Korean Peninsula.

***Lestica camelus* (Eversmann, 1849)**

MATERIAL EXAMINED. *Kuku-Hadan*, 27.VI 2022, 1♂, DK; *Adon-Chelon*, 5.VII 2022, 1♂, DK.

DISTRIBUTION. Russia: European part (Central, East), Urals, Western Siberia (Novosibirsk Prov., Kemerovo Prov., Altai), Eastern Siberia (Khakassia, Krasnoyarskii Krai, Irkutsk Prov., Buryatia, *Zabaikalskii Krai, Yakutia), Far East: (Amur Prov., Khabarovskii Krai, Primorskii Krai, Sakhalin). – Turkey, Kazakhstan, Mongolia, China, Korean Peninsula, Japan.

***Miscophus ater* Lepeletier de Saint Fargeau, 1845**

MATERIAL EXAMINED. *Utochi*, 03.VI 2000, 1♀, OK; *ibid*, 20.VI 2004, 1♀, OK; *Adon-Chelon*, 20–21.VII 2023, 2♀, DK.

DISTRIBUTION. Russia: European part (Central, South), Western Siberia (Altai), Eastern Siberia (Tyva, Krasnoyarskii Krai, Irkutsk Prov., *Zabaikalskii Krai), Far East: (Amur Prov., Primorskii Krai). – North Africa, Europe, Azerbaijan, Turkey, Iran, Kazakhstan.

***Miscophus niger* Dahlbom, 1844**

MATERIAL EXAMINED. *Utochi*, 29–30.VI 2022, 1♀, DK.

DISTRIBUTION. Russia: European part (North, Central, East, South), Ural, Eastern Siberia (Krasnoyarskii Krai, Irkutsk Prov., *Zabaikalskii Krai, Yakutia), Far East: (Amur Prov., Primorskii Krai, Sakhalin). – North Africa, Europe, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan.

***Miscophus transcaspicus* de Andrade, 1960**

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 13.IX 2021, 1♀, DK; *Yaksha lakes*, 13.IX 2021, 1♀, DK.

DISTRIBUTION. Russia: Eastern Siberia (Buryatia, *Zabaikalskii Krai). – Turkmenistan, Kazakhstan.

***Nysson tridens* Gerstaecker, 1867**

MATERIAL EXAMINED. *Utochi*, 2–3.VII 2022, 1♀, 2♂, DK.

DISTRIBUTION. Russia: European part (Central, South), Western Siberia (Altai), Eastern Siberia (Krasnoyarskii Krai, *Zabaikalskii Krai), Far East (Amur Prov., Primorskii Krai). – Western Europe, Turkey, Kazakhstan, Uzbekistan, Tajikistan, Mongolia.

***Oxybelus haemorrhoidalis* Olivier, 1812**

MATERIAL EXAMINED. *Kuku-Hadan*, 27.VI 2022, 1♂, DK; *Teli*, 25–26.VI 2022, 1♀, DK; *Utochi*, 10.VII 2023, 1♂, DK.

DISTRIBUTION. Russia: European part (Northwest, Central, East, South), Ural, Western Siberia (Novosibirsk Prov., Altai), Eastern Siberia (Tyva, Krasnoyarskii Krai, Irkutsk Prov., *Zabaikalskii Krai), Far East: (Amur Prov., Khabarovskii Krai, Primorskii Krai). – North Africa, Europe, Azerbaijan, Turkey, Syria, Israel, Iran, Afghanistan, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China, Korean Peninsula, Japan.

***Oxybelus latro* Olivier, 1812**

MATERIAL EXAMINED. *Utochi*, 10–13.VII 2023, 2♀, 1♂, DK.

DISTRIBUTION. Russia: European part (East, South, Crimea, North Caucasus), Ural, Western Siberia (Altai), *Eastern Siberia (Zabaikalskii Krai). – Europe, North Africa, Turkey, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China.

***Oxybelus subspinosus* Klug in Walzl, 1835**

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 23–24.VI 2022, 1♀, DK; *Kuku-Hadan*, 27.VI 2022, 4♀, DK; *Teli*, 25–26.VI 2022, 3♀, 6♂, DK; *Utochi*, 29.VI–3.VII 2022, 6♀, 4♂, DK; *ibid*, 10.VII 2023, 1♀, 1♂, DK; *Adon-Chelon*, 5.VII 2022, 1♀, DK.

DISTRIBUTION. Russia: European part (Central, East, South, Crimea), Western Siberia (Altai), Eastern Siberia (Krasnoyarskii Krai, Irkutsk Prov., *Zabaikalskii Krai), Far East: (Primorskii Krai). – North Africa, Europe, Armenia, Saudi Arabia, Turkey, Syria, Jordan, Israel, Iran, Afghanistan, Central Asia, Kazakhstan, China.

***Pemphredon mortifer* Valkeila, 1972**

MATERIAL EXAMINED. *Yaksha lakes*, 13.IX 2021, 2♀, DK.

DISTRIBUTION. Russia: European part (Northwest, Central, East, South, North Caucasus), Ural, Western Siberia (Tomsk Prov., Altai), Eastern Siberia (Krasnoyarskii Krai, Irkutsk Prov., Buryatia, *Zabaikalskii Krai), Far East: (Amur Prov., Khabarovskii Krai, Primorskii Krai, Sakhalin). – Europe, Turkey, Azerbaijan, Korean Peninsula, Japan, North America.

***Philanthus coronatus* (Thunberg, 1784)**

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 6–7.VII 2024, 2♀, DK; *Utochi*, 7.VI 2004, 1♀, OK; *ibid*, 12.VII 2023, 1♂, DK; *Adon-Chelon*, 10–12.VII 2024, 1♀, 2♂, DK.

DISTRIBUTION. Russia: European part (Central, East, South, Crimea, North Caucasus), Ural, Western Siberia (Novosibirsk Prov., Altai), Eastern Siberia (Tyva, Krasnoyarskii Krai, *Zabaikalskii Krai). – North Africa, Europe, Turkey, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China, Korean Peninsula.

***Tachysphex consocius* Kohl, 1892**

MATERIAL EXAMINED. *Kuku-Hadan*, 27.VI 2022, 13♂, DK; *Teli*, 25–26.VI 2022, 4♂, DK; *Utochi*, 20.VI 2004, 2♀, OK; *ibid*, 29.VI–3.VII 2022, 2♀, 19♂, DK; *Adon-Chelon*, 5–7.VII 2022, 5♂, DK.

DISTRIBUTION. Russia: European part (Central, South, Crimea, North Caucasus), *Eastern Siberia (Zabaikalskii Krai). – Europe, Abkhazia, Azerbaijan, Turkey, Syria, Iran, Afghanistan, Saudi Arabia, Oman, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, India, Africa.

***Tachysphex ctenophorus* Pulawski, 1971**

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 23–24.VI 2022, 3♀, DK.

DISTRIBUTION. Russia: European part (South), Eastern Siberia (Buryatia, *Zabaikalskii Krai), Far East: (Primorskii Krai). – Kazakhstan.

***Tachysphex nitidus* (Spinola, 1805)**

MATERIAL EXAMINED. *Nizhnii Tsasuchei*, 23–24.VI 2022, 1♂, DK; *Kuku-Hadan*, 27.VI 2022, 4♂, DK; *Utochi*, 2–3.VII 2022, 1♀, DK.

DISTRIBUTION. Russia: European part (North, Central, East, South, Crimea, North Caucasus), Western Siberia (Novosibirsk Prov., Altai), *Eastern Siberia (Zabaikalskii Krai). – North Africa, Europe, Turkey, Israel, Kuwait, Oman, Turkmenistan, Tajikistan, Kazakhstan, China.

***Tachysphex panzeri* (Vander Linden, 1829)**

MATERIAL EXAMINED. *Utochi*, 2–3.VII 2022, 1♀, DK.

DISTRIBUTION. Russia: European part (Central, East, South, Crimea, North Caucasus), Ural, *Eastern Siberia (Zabaikalskii Krai). – North Africa, Turkey, Syria, Israel, Jordan, Saudi Arabia, Yemen, Bahrain, United Arab Emirates, Djibouti, Iran, Pakistan, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Mongolia, India, Sri Lanka.

***Tachytes panzeri orientis* Pulawski, 1962**

MATERIAL EXAMINED. *Kuku-Hadan*, 27.VI 2021, 4♂, DK; *Adon-Chelon*, 5.VII 2022, 1♂, DK.

DISTRIBUTION. Russia: *Eastern Siberia (Zabaikalskii Krai), Far East (Amur Prov., Primorskii Krai). – China.

DISCUSSION

Two species of Sphecidae and 30 species of Crabronidae are newly recorded from Zabaikalskii Krai, Russia. *Ammoplanops mongolicus* and *Belomicrus multifasciatus* were recorded for the first time from Russia. Seven species: *Ammoplanus gegen*, *Cerceris manchuriana*, *Cerceris manflava*, *Oxybelus latro*, *Tachysphex consocius*, *Tachysphex nitidus*, and *Tachysphex panzeri* are recorded for the first time from Eastern Siberia. The new species of these wasps may also be found to like dryinid wasps (Kochetkov, 2024b).

Nesterov (1992) recorded three species in two genera of Sphecidae and 79 species in 33 genera collected in Dauriskii Reserve, of them two species were identified to the generic level. Thirty-one species which are recorded from Dauriskii Reserve were omitted in the Catalogue (Antropov *et al.* 2017): *Ammophila campestris* Latreille, 1809, *Alysson pertheesi* Gorski, 1852, *Ammoplanus marathroicus* (De Stefani Perez, 1887), *A. serratus* Tsuneki, 1972, *Astata minor* Kohl, 1885, *Bembix rostrata* (Linnaeus, 1758), *Cerceris bicincta* Klug in Walzl, 1835, *C. hortivaga* Kohl, 1880, *C. lacinia* Tsuneki, 1961, *C. quadricolor* F. Morawitz, 1889, *Crabro peltarius* (Schreber, 1784), *Crossocerus denticoxa* (Bischoff, 1932), *C. dimidiatus* (Fabricius, 1781), *C. megacephalus* (Rossi, 1790), *C. wesmaeli* (Vander Linden, 1829), *Ectemnius martjanowi* (F. Morawitz, 1892), *Entomognathus brevis* (Vander Linden, 1829), *Gorytes quinquefasciatus* (Panzer, 1798), *Harpactus formosus* (Jurine, 1807), *Hoplisoides punctuosus* (Eversmann, 1849), *Lestica clypeata* (Schreber, 1759), *Mimesa lutaria* (Fabricius, 1787), *Nysson niger* Chevrier, 1868, *Oxybelus bipunctatus* Olivier, 1812, *Oxybelus quatuordecimnotatus* Jurine, 1807, *Pemphredon tridentata*

Gussakovskij, 1952, *Psenulus pallipes* (Panzer, 1798), *Rhopalum coarctatum* (Scopoli, 1763), *Stigmus solskyi* Morawitz, 1864, *Tachysphex psammobius* (Kohl, 1880) and *Trypoxylon clavicerum* Lepeletier de Saint Fargeau et Audinet-Serville, 1828. Of them *Cerceris lacinia* Tsuneki, 1961, and *Pemphredon tridentata* Gussakovskij, 1952 should be added to the list of Russian fauna.

The digger wasp fauna of the Zabaikalskii Krai currently includes 201 species of 47 genera (Sphecidae – 22; Crabronidae – 179). For comparison, 170 species are known in the Krasnoyarskii Krai, 171 species in the Irkutsk Province, and 189 species in the Amur Province (Antropov *et al.*, 2017, 2024; Jacobs & Liebig, 2018; Akulov *et al.*, 2020; Kochetkov, 2023, 2024a). It is assumed that the species diversity of digger wasps in Zabaikalskii Krai is much higher and can be compared to that of Altai, where, according to recent studies, 271 species have been recorded (Mokrousov & Proshchalykin, 2023). We expect that some species found in Mongolia, northern China and adjacent regions of Russia will also be found in Transbaikalia.

ACKNOWLEDGEMENTS

The authors would like to express their gratitude to the administration of the Daurkii Nature Reserve for providing the opportunity to collect material. They would also like to thank V.M. Loktionov (Federal Scientific Center "Biodiversity" of the Far Eastern Branch of the Russian Academy of Sciences, Vladivostok) and V.G. Chemyreva (Zoological Institute, St. Petersburg) for his valuable comments on the initial draft of this paper and for editing the English. We would also like to thank A.V. Antropov (Zoological Museum of Moscow State University, Moscow) for his help in identifying some species of digger wasps and A.S. Lelej for the review and editing of the text.

REFERENCES

- Akulov, E.N., Proshchalykin, M.Yu. & Mokrousov, M.V. 2020. New records of digger wasps (Hymenoptera: Sphecidae, Crabronidae) from Krasnoyarsk territory. *A.I. Kurentsov's Annual Memorial Meetings*, 31: 43–52. [In Russian] DOI: 10.25221/kurentzov.31.4
- Antropov, A.V., Astafurova, Yu.V., Belokobylskij, S.A., Byvaltsev, A.M., Danilov, Yu.N., Dubovikoff, D.A., Fadeev, K.I., Fateryga, A.V., Kurzenko, N.V., Lelej, A.S., Levchenko, T.V., Loktionov, V.M., Mokrousov, M.V., Nemkov, P.G., Proshchalykin, M.Yu., Rosa, P., Sidorov, D.A., Sundukov, Yu.N., Yusupov, Z.M. & Zaytseva, L.A. 2017. *Annotated Catalogue of the Hymenoptera of Russia. Volume I. Symphyta and Apocrita: Aculeata. (Proceedings of the Zoological Institute RAS, Supplement 6)*. 475 pp. DOI: 10.31610/trudyzin/2017.supl.6.5. Available: https://www.zin.ru/journals/trudyzin/doc/vol_321_s6/tz_321_6_supplement_belokobylskij-lelej.pdf
- Antropov, A.V., Danilov, Yu.N. & Efimov, D.A. 2024. New records of wasps (Hymenoptera: Aculeata) from Siberia (Russia). *Russian Entomological Journal*, 33(3): 354–362. DOI:10.15298/rusentj.33.3.07
- Bouček, Z. 2001. Palaearctic species of *Ammoplanus* (Hymenoptera: Sphecidae). *Journal of Natural History*, 35: 849–929. DOI: 10.1080/00222930152123648

- Danilov, Yu.N. 2011a. New records of digger wasps of the family Sphecidae (Hymenoptera, Apoidea) from the Asian part of Russia. *Eurasian Entomological Journal*, 10(2): 188–190. [In Russian]
- Danilov, Yu.N. 2011b. Digger wasps of the family Sphecidae (Hymenoptera: Apoidea) of Daurskii reserve. *A.I. Kurentsov's Annual Memorial Meetings*, 22: 199–206. [In Russian]
- Danilov, Yu.N. 2014. Review of Sphecidae wasps (Hymenoptera: Apoidea) of Siberia. Part 1. List of species. *Eurasian Entomological Journal*, 13(5): 422–429. [In Russian]
- Danilov, Yu.N., Odintseva, A.A. & Odintsev, O.A. 2021. New data on digger wasps of the family Crabronidae (Hymenoptera: Apoidea) from Omsk Province, Russia. *Far Eastern Entomologist*, 427: 20–24. DOI: 10.25221/fee.427.2
- Danilov, Yu.N., Odintsev, O.A. & Kobets, A.S. 2024. A taxonomic study on the genus *Prionyx* Vander Linden, 1827 (Hymenoptera: Sphecidae: Prionychini). Subgenus *Harpactopus* F. Smith, 1856. *Zootaxa*, 5551(2): 263–298. DOI: 10.11646/zootaxa.5551.2.3
- Dollfuss, H. 2010. A Key to Wasps of the Genus *Podalonia* Fernald 1927 (Hymenoptera: Apoidea: Sphecidae) of the Old World. *Linzer Biologische Beiträge*, 42(2): 1241–1291.
- Dollfuss, H. 2013. Revision of the wasp genus *Ammophila* Kirby 1798 (Hymenoptera: Apoidea: Sphecidae) of the Palearctic Region and India. *Linzer Biologische Beiträge*, 45(1): 383–564.
- Jacobs, H.-J. & Liebig, W.-H. 2018. Records of digger wasps from Eastern Siberia and the Far East of Russia (Hymenoptera: Sphecidae, Crabronidae). *Beiträge zur Entomologie*, 68(1): 133–149.
- Kazenas, V.L. 1978. *The digger wasps of Kazakhstan and Middle Asia. The determinant*. Nauka of KazSSR, Alma-Ata. 172 pp. [In Russian]
- Kochetkov, D.N. 2023. To the fauna of the digger wasps family Sphecidae (Hymenoptera: Apoidea) of the Khingan Nature Reserve, Amurskaya Oblast. *A.I. Kurentsov's Annual Memorial Meetings*, 34: 186–194. [In Russian] DOI: 10.25221/kurentzov.34.14
- Kochetkov, D.N. 2024a. Contribution to the Crabronid wasps fauna (Hymenoptera: Apoidea) of the Khingan Nature Reserve, Amur Region. *A.I. Kurentsov's Annual Memorial Meetings*, 35: 157–171. [In Russian] DOI: 10.25221/kurentzov.35.12
- Kochetkov, D.N. 2024b. New records of pincer wasps (Hymenoptera: Dryinidae) from Russia, with description of a new species of *Bocchus* Ashmead, 1893. *Far Eastern Entomologist*, 498: 1–12. DOI: 10.25221/fee.498.1
- Marshakov, V.G. 1976. Digger wasps of the genera *Eremiaspecium* Kohl, *Ammoplanus* Gir., *Ammoplanops* Guss., and *Anomiapteryx* Guss. (Hymenoptera, Sphecidae) of the fauna of the USSR and Mongolia. *Entomologicheskoe Obozrenie*, 55(3): 668–683. [In Russian]
- Mokrousov, M.V. & Proshchalykin, M.Yu. 2021. New and little-known digger wasps (Hymenoptera: Ampulicidae, Sphecidae, Crabronidae) from Russia. *Zootaxa*, 4952(2): 314–330. DOI: 10.11646/zootaxa.4952.2.6
- Mokrousov, M.V. & Proshchalykin, M.Yu. 2023. New records of digger wasps (Hymenoptera: Crabronidae) from Altai, with taxonomical notes on *Crossocerus mongolensis* Tsuneki, 1972, stat.n. *Russian Entomological Journal*, 32(4): 410–415. DOI: 10.15298/rusentj.32.4.07
- Mokrousov, M.V., Proshchalykin, M.Yu. & Aibek, U. 2020a. Review of the Palearctic species of *Lestiphorus* Lepeletier de Saint Fargeau (Hymenoptera: Crabronidae: Bembicinae). *Far Eastern Entomologist*, 416: 18–28. DOI: 10.25221/fee.416.4
- Mokrousov, M.V., Proshchalykin, M.Yu. & Maharramov, M.M. 2020b. Review of the Palearctic species of *Hoplisoides* Gribodo (Hymenoptera: Crabronidae: Bembicinae), with description of two new species. *Journal of Hymenoptera Research*, 79: 213–233. DOI: 10.3897/jhr.79.56839

- Mokrousov, M.V., Shorenko, K.I. & Shlyakhtenok, A.S. 2019. New data on the Palaearctic digger wasps (Hymenoptera: Sphecidae, Crabronidae). *Far Eastern Entomologist*, 396: 10–16. DOI: 10.25221/fee.396.2
- Nemkov, P.G. 2009. Annotated catalogue of digger wasps (Hymenoptera; Sphecidae, Crabronidae) of Asian part of Russia. Vladivostok, Dalnauka. 193 pp. [In Russian]
- Nemkov, P.G., Kazenas, V.L., Budrys, E.R. & Antropov, A.V. 1995. Superfamily Sphecoidea. 67. Fam. Sphecidae – Digger wasps. P. 368–480. In: *Key to the insects of Russian Far East. Vol. IV, pt 1*. Nauka, Sankt Peterburg. 606 pp. [In Russian]
- Nesterov, M.A. 1992. Digger wasps (Hymenoptera, Sphecidae) of the Daurian Nature Reserve. P. 83–85. In: *Nasekomye Daurii i sopredel'nykh territorii. (Sbornik nauchnykh trudov). Vyp. 1*. TSNIL okhotnich'iego khozyaistva i zapovednikov, Moscow. 141 pp. [In Russian]
- Pulawski, W.J. 1978. Superfamily Sphecoidea. 1. Fam. Sphecidae – Digger wasps. P. 173–279. In: *Key to the insects of European part of the USSR. Vol. 3. Hymenoptera. Pt. 1*. Nauka, Leningrad. 584 p. [In Russian]
- Pulawski, W.J. 2024. *Catalog of Sphecidae*. Available from: <https://www.calacademy.org/scientists/projects/catalog-of-sphécidae> (accessed 25 December 2024).
- Tkachuk, T.E. & Zhukova, O.V. 2013. Dynamics of vegetation of the Daurian Nature Reserve. *Scientific notes of the Transbaikalian State Humanitarian and Pedagogical University named after N.G. Chernyshevsky*, 48(1): 46–57. [In Russian]
- Tsuneki, K. 1972. Ergebnisse der zoologischen Forschungen von Dr. Z. Kaszab in der Mongolei. 280. Sphecidae (Hymenoptera). IV–V. *Acta Zoologica Academiae Scientiarum Hungaricae*, 18: 147–232.