

New data on the distribution of spider wasps (Hymenoptera, Pompilidae) of the Polar region of West Siberia, Russia

Новые данные о распространении дорожных ос (Hymenoptera, Pompilidae) в заполярье Западной Сибири

R.T.O. Baghirov, A.V. Simakova
P.T.O. Багиров, А.В. Симакова

Tomsk State University, Lenina Prosp. 36, Tomsk 634050 Russia. E-mail: rbaghirov@yandex.ru, omikronlab@yandex.ru.
Томский государственный университет, проспект Ленина 36, Томск 634050 Россия.

Key words: Hymenoptera, Pompilidae, spider wasps, polar regions, West Siberia.

Ключевые слова: Hymenoptera, Pompilidae, дорожные осы, заполярье, Западная Сибирь.

Abstract. An annotated list of six spider wasp species from six genera of the family Pompilidae collected in the polar region of West Siberia at the southern coast of the Obskaya Guba of the Yamalo-Nenetskiy Autonomnyy Okrug of Russia is presented. Two species, *Ceropales* (*Ceropales*) *maculate maculate* (Fabricius, 1775) and *Anoplius* (*Anoplius*) *nigerrimus* (Scopoli, 1763) are recorded from Yamalo-Nenetskiy Autonomnyy Okrug of Russia for the first time.

Резюме. Представлен аннотированный список дорожных ос, включающий шесть видов из шести родов семейства Pompilidae, собранных в полярной части Западной Сибири на южном побережье Обской губы Ямало-Ненецкого автономного округа России. Два вида: *Ceropales* (*Ceropales*) *maculate maculate* (Fabricius, 1775) and *Anoplius* (*Anoplius*) *nigerrimus* (Scopoli, 1763) впервые отмечены для Ямало-Ненецкого автономного округа России.

Introduction

The family Pompilidae is one of the largest amongst the aculeate wasps. These wasps are distributed worldwide, with the preference of tropical regions. Currently five subfamilies, Ctenocerinae, Notocyphinae, Ceropalinae, Pepsinae, and Pompilinae, are included in Pompilidae, of them only three, Ceropalinae, Pepsinae, and Pompilinae, are recorded for Russia and included 246 species from 37 genus registered from Russia [Antropov et al., 2017].

The present paper includes materials collected from the Polar region of West Siberia, one of the poorly studied territories in terms of spider wasps. Lacks literature data on the Pompilidae distribution in the polar regions stimulated undertaking the presented work.

Material and methods

The material was collected by the first author the Yamalo-Nenetskiy Autonomnyy Okrug, Nadymskii Raion, vicinity of the village of Numgi, N66°44'54,35", E73°10'56,17", h~6 m a.s.l. during 7.VIII–11.VIII.2023, with the use of yellow pan traps and sweeping net.

Systematics of Pompilidae, as well as information about their distribution are given according to the Annotated catalogue of Hymenoptera of Russia [Antropov et al., 2017]. Species were identified using a key to genera and species of wasps [Loktionov, Lelej, 2014].

The abbreviations used in the text refer to the distribution of species as follows: **RUSSIA, EP** — **European Part of Russia, North (N):** Murmanskaya Oblast, Arkhangelskaya Oblast, Republic of Karelia, Vologodskaya Oblast, Republic of Komi; **North-West (NW):** Kaliningradskaya Oblast, Leningradskaya Oblast, Pskovskaya Oblast, Novgorodskaya Oblast; **Central regions (C):** Tverskaya Oblast, Yaroslavl'skaya Oblast, Kostromskaya Oblast, Smolenskaya Oblast, Moscovskaya Oblast, Vladimirskaya Oblast, Ivanovskaya Oblast, Nizhegorodskaya Oblast, Kaluzhskaya Oblast, Tuskaya Oblast, Ryazanskaya Oblast, Republic of Mordovia, Bryanskaya Oblast, Orlovskaya Oblast, Lipetskaya Oblast, Tambovskaya Oblast, Penzenskaya Oblast, Kurskaya Oblast, Belgorodskaya Oblast, Voronezhskaya Oblast; **East (E):** Kirovskaya Oblast, Udmurtskaya Oblast, Republic of Mari El, Republic of Chuvashia, Republic of Tatarstan, Ulyanovskaya Oblast, Samarskaya Oblast, Saratovskaya Oblast; **South (S):** Rostovskaya Oblast, Volgogradskaya Oblast, Republic of Kalmykia, Astrakhsanskaya Oblast; **North Caucasus (NC):** Krasnodarskii Krai, Stavropolskii Krai, Republic of Adygeya, Republic of Karachayevo-Cherkessiya, Republic of Ingushetiya, Republic of Kabardino-Balkaria, Republic of North Ossetia, Chechen Republic, Republic of Dagestan; **Crimea (CR):** Sebastopol. **UR** — **The Urals:** Permskii Krai, Sverdlovskaya Oblast, Republic of Bashkortostan, Chelyabinskaya Oblast, Orenburgskaya Oblast, Kurganskaya Oblast. **WS** — **West Siberia:** Tyumenskaya Oblast (**TM**), Omskaya Oblast (**OM**), Tomskskaya Oblast (**TK**), Altai (**AL**), including Republic of Altai and Altaiskii Krai. **ES** — **East Siberia:** Krasnoyarskii Krai (**KR**), Khakassia (**KK**), Irkutskaya Oblast (**IR**), Republic of Buryatia (**BR**), Republic of Sakha (Yakutia) (**YA**), Zabaikalskii Krai (**ZB**). **FE** — **the Russian Far East:** Amurskaya Oblast (**AM**), Khabarovskii Krai, in-

cluding Evreiskaya Autonomnaya Oblast, (KH), Primorskiy Krai (PR), Sakhalinskaya Oblast (SA), Kamchatkiy Krai (KA), Magadanskaya Oblast (MG), Chukotskiy Autonomnyy Okrug (CH). CHINA: Northern Territories (NC). REPUBLIC OF KOREA (KR).

The present work is registered in ZooBank (www.zoobank.org) under LSID urn:lsid:zoobank.org:pub:835A317F-1457-43E0-9257-FFF0D39AD0E1.

Results

Six Pompilidae species from six genera have been found in the studied region, of which two species, *Ceropales* (*Ceropales*) *maculate maculate* (Fabricius, 1775) and *Anoplius* (*Anoplius*) *nigerrimus* (Scopoli, 1763) are recorded from Yamalo-Nenetskiy Autonomnyy Okrug for the first time.

LIST OF SPIDER WASP SPECIES COLLECTED FROM THE POLAR REGION OF WEST SIBERIA, RUSSIA

Pompilidae Latreille, 1804

Ceropalinae Radoszkowski, 1888

Ceropales Latreille, 1796

1. *Ceropales* (*Ceropales*) *maculata maculata* (Fabricius, 1775)

- = *Evagetes maculata* Fabricius, 1775;
- = *Ceropales semiannulatus* Curtis 1839;
- = *Ceropales tristis* Tournier 1889;
- = *Ceropales balearica* Costa 1893.

Material. 3♀♀, 1♂.

Distribution. Russia: EP, ES (IR, BR, ZB, YA), FE (CH, MG, SA, AM, KH, PR). KR, NC. A widespread Palearctic species.

Pepsinae Lepeletier de Saint Fargeau, 1845

Prionemini Banks, 1934

Priocnemis Schiødte, 1837

2. *Priocnemis* (*Priocnemis*) *parvula* Dahlbom, 1845

- = *Priocnemis parvulus* Dahlbom, 1845

Material. 1♀.

Distribution. Russia: EP (N, NW, C, E, S, NC, CR), WS (OM, TK, TM), ES (IR), FE (AM, KH, PR, SA, MG). Europe (WE, NE, SE, EE). Turkey. Tunisia, Jordan, Uzbekistan, Kyrgyzstan.

Pompilinae Latreille, 1804

Episyronini Haupt, 1950

Episyron Schiødte, 1837

3. *Episyron rufipes* (Linnaeus, 1758)

- = *Sphex laevigata* Rossius 1794;
- = *Pompilus gracilis* Lepeletier 1845;
- = *Pompilus septemmaculatus* Wesmael 1851;
- = *Pompilus argyrolepis* Costa 1887;
- = *Pompilus aequatus* Tournier 1889;
- = *Pompilus compressus* Tournier 1889;
- = *Pompilus fuscatus* Tournier 1889.
- = *Pompilus pygidialis* Tournier 1889;
- = *Pompilus deuterus* Dalla Torre 1897;
- = *Pompilus ephialtes* Dalla Torre 1897;
- = *Episyron sardous* Wolf 1961;

Material. 5♂♂, 14♀♀.

Distribution. Russia: EP (N, NW, C, E, S, NC, CR), UR, *WS (TM), ES (IR, BR, ZB), FE (AM, KH, PR, SA, KA, MG). Europe (WE, SE, NE, EE). Morocco, Turkey, Cyprus, Jordan Syria, Saudi Arabia, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Yemen, Sudan, Ethiopia.

Pompilini Latreille, 1804

Arachnospila Kincaid, 1900

4. *Arachnospila* (*Ammosphex*) *trivialis* (Dahlbom, 1843)

- = *Pompilus aerumnatus* Tournier 1889;
- = *Psammochares corruptor* Haupt 1927;
- = *Ammosphex michalki* Bluthgen 1961;
- = *Pompilus insubricus* Wolf 1965

Material. 1♂, 6♀♀.

Distribution. Russia: EP (N, NW, C, S, NC), WS (AL, *TM), FE (AM, KA, MG, CH). Europe (WE, NE, SE, EE). Turkey, Near East, Kyrgyzstan, Tajikistan, Kazakhstan, Mongolia.

Anopliini Ashmead, 1902

Anoplius Dufour, 1834

5. *Anoplius* (*Anoplius*) *nigerrimus* (Scopoli, 1763)

- = *Sphex nigra* Fabricius 1775;
- = *Pompilus incisus* Tischbein 1850;
- = *Pompilus melanarius* Schenck 1857;
- = *Pompilus difficilis* Tournier 1889;
- = *Pompilus excerptus* Tournier 1889;
- = *Pompilus kohli* Verhoeff 1892.

Material. 1♀.

Distribution. Russia: EP, ES (IR, BR, YA), FE (SA, PR, AM, KH, KA). Europe: (EE), Ukraine, Belarus. S America.

6. *Anoplius* (*Arachnophroctonus*) *viaticus* (Linnaeus, 1758)

- = *Sphex fusca* Linnaeus 1761;
- = *Pompilus paganus* Dahlbom 1843;
- = *Pompilus propinquus* Smith 1879;
- = *Pompilus delatorius* Tournier 1890;
- = *Pompilus immixtus* Tournier 1890;
- = *Pompilus macrurus* Tournier 1890;
- = *Pompilus pleropicus* Tournier 1890;
- = *Pompilus tibialis* Tournier 1890;
- = *Pompilus valesicus* Tournier 1890;
- = *Pompilus holomelas* Mantero 1905;
- = *Anoplius haupti* Guiglia 1941.

Material. 9♀♀.

Distribution. Russia: EP (N, NW, C, E, S, NC, CR), UR, WS (TM, OM, TK, AL), ES (KR, IR, BR, YA, ZB), FE (AM, KH, PR, SA). Europe (WE, SE, NE, EE). Egypt, Georgia, Turkey, Cyprus, Jordan, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China (North), Korean Peninsula, Japan (Hokkaido, Honshu, Kyushu).

Conclusion

In result of the study, a check-list of spider wasp species occur in polar region of West Siberia is presented.

Obviously, it includes less than 30 % of Pompilidae species may be found in the Polar area of Russia.

Acknowledgements

The authors declare financial support was received for the research, authorship, and publication of this article. This work was supported by Grant No. 075-15-2022-1152 (Resolution No.619 of April 8, 2022).

The study was performed within the framework of a state assignment of the Ministry of Science and Higher Education of the Russian Federation (project No. FSWM-2020-0019).

References

- 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., Proschalykin M.Yu., Rosa P., Sidorov D.A., Sundukov Yu.N., Yusupov Z.M., Zaytsev L.A. 2017. Annotated catalogue of Hymenoptera of Russia. Vol. 1. Symphyta and Apocrita: Aculeata // Proceedings of the Zoological institute RAS, Suppl.6. P.1–475.
- Loktionov V.M., Lelej A.S. 2014. [Spider wasps (Hymenoptera: Pompilidae) of the Russian Far East]. Vladivostok: Dalnauka 470 p. [In Russian].

Поступила в редакцию 18.8. 2023