

New data on the distribution of spider wasps (Hymenoptera, Pompilidae)

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An annotated list of spider wasps collected in the circumpolar region of Western Siberia (Yamalo-Nenets Autonomous District) for the first time is given. The six species are listed, of them five species are newly recorded from Tyumen Province. The *Episyron rufipes* (Linnaeus, 1758) is newly recorded from Western Siberia.

Research ARTICLE

New data on the distribution of spider wasps

(Hymenoptera, Pompilidae)

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Introduction

The family Pompilidae is one of the largest families among the aculeate wasps. These wasps are distributed worldwide, but mostly in the tropical regions. Five subfamilies (Ctenocerinae, Notocyphinae, Ceropalinae, Pepsinae, and Pompilinae) are now recognized for Pompilidae, three latter are recorded from Russia. Number of taxa in Russian territory – 37 genus and 246 species (Antropov et al., 2017).

Due to the lack of information on the fauna of spider wasps of far north of Western Siberia emerges the relevance of our work. In the world scientific literature, so far there is no information on the fauna of Pompilidae of the circumpolar regions, for this reason we have planned and carried out this work.

Methods

The material was collected by the author in the locality (Tyumen Prov., Yamalo-Nenets Autonomous District, Purovsky District, the vicinity of the village of Khanymey, N 63°43'15.6" E 73°58'23.8", 69 m above sea level) from 7.07 to 31.07.2017, by yellow pan traps and sweeping net.

Systematics of Pompilidae, as well as information about their distribution are given in accordance with the Annotated catalogue of Hymenoptera of Russia (Antropov et al., 2017) and according to the web-site fauna-eu.org (Wahis, 2019). Species identification was carried out using a key to genera and species (Loktionov, Lelej, 2014).

The abbreviations used in the text refer to the distribution of species:

RUSSIA EUROPEAN PART (EP): North (N): Murmansk Prov., Arkhangelsk Prov., Karelian Rep., Vologda Prov., Komi Rep.; North-West (NW): Kaliningrad Prov., Leningrad Prov., Pskov Prov., Novgorod Prov.; Centre (C): Tver Prov., Yaroslavl Prov., Kostroma Prov., Smolensk Prov., Moscow Prov., Vladimir Prov., Ivanovo Prov., Nizhniy Novgorod Prov., Kaluga Prov., Tula Prov., Ryazan Prov., Mordovian Rep., Bryansk Prov., Orel Prov., Lipetsk Prov., Tambov Prov., Penza Prov., Kursk Prov., Belgorod Prov., Voronezh Prov.; East (E): Kirov Prov., Udmurt Rep., Mari El Rep., Chuvash Rep., Tatar Rep., Ulyanovsk Prov., Samara Prov., Saratov Prov.; South (S): Rostov Prov., Volgograd Prov., Kalmyk Rep., Astrakhan Prov.; North Caucasus (NC): Krasnodar Terr., Stavropol Terr., Adygei Rep., Karachayevo-Cherkess Rep., Ingush Rep., Kabardino-Balkarian Rep., North Ossetian Rep., Chechen Rep., Dagestan Rep.; Crimea (CR): Crimea Rep., Sebastopol.

URALS (UR): Perm Terr., Sverdlovsk Prov., Bashkir Rep., Chelyabinsk Prov., Orenburg Prov., Kurgan Prov.

WESTERN SIBERIA (WS): Tyumen Prov. (TM), Omsk Prov. (OM), Tomsk Prov. (TK), Altai (AL) (including Altai Rep. and Altai Terr.).

EASTERN SIBERIA (ES): Krasnoyarsk Terr. (KR), Irkutsk Prov. (IR), Buryat Rep. (BR), Yakutsk Rep. (YA), Zabaikalskii Terr. (ZB).

FAR EAST (FE): Amur Prov. (AM), Khabarovsk Terr. (including Jewish Autonomous Region) (KH), Primorskii Terr. (PR), Sakhalin (SA), Kamchatka Terr. (KA), Magadan Prov. (MG), Chukot Autonomous Area (CH).

CHINA: Northern Territory (NC).

Results

We found six species of Pompilidae from six genera in the studied area. All six species are reported for the first time for Yamalo-Nenets Autonomous District, of them, five species are newly recorded for Tyumen Prov, and one species - for Western Siberia.

Family Pompilidae Latreille, 1804

Subfamily Pepsinae Lepeletier de Saint Fargeau, 1845

Tribe Priocnemi Banks, 1934

Genus *Caliadurgus* Pate, 1946

1. *Caliadurgus fasciatellus* (Spinola, 1807)

Pompilus fasciatellus Spinola, 1808; *P. calcaratus* Dahlbom, 1829; *P. maculipennis* Dahlbom, 1829; *P. albispinus* Herrich-Schäffer, 1830; *P. curtus* Zetterstedt, 1838; *Priocnemis gyllenhali* Dahlbom, 1843; *Anoplius labiatus* Lepeletier, 1845; *A. unimacula* Lepeletier, 1845; *Calicurgus odontellus* Lepeletier, 1845; *Priocnemis fasciatellus* Eversmann, 1849; *Pompilus bivirgulatus* Costa, 1881; *Priocnemis fuscopennis* Verhoeff, 1892; *Calicurgus duplonota* Blüthgen, 1961; *C. strittianus* Wolf, 1972; *C. hyalinatus* Tobias, 1978.

MATERIAL: 2♀, 2♂

DISTRIBUTION: Russia: EP (N, NW, C, E, S, NC), UR, WS (AL, *TM), ES (IR, BR, YA), FE (AM, KH,

PR, SA, KA). - Europe (WE, NE, SE, EE), Turkey, Cyprus, Kyrgyzstan, Kazakhstan, Mongolia, N America.

Genus *Priocnemis* Schiødte, 1837

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

Priocnemis mocsaryi: Gussakovskij, 1930; *P. minor*: Gussakovskij, 1930; Tobias, 1978.

MATERIAL: 9♀

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.

Subfamily Pompilinae Latreille, 1804

Tribe Episyronini Haupt, 1950

Genus *Episyron* Schiødte, 1837

3. *Episyron rufipes* (Linnaeus, 1758)

Pompilus rufipes Linnaeus, 1758; *Sphex laevigata* Rossius, 1794; *Pompilus gracilis* Lepeletier, 1845; *P. septemmaculatus* Wesmael, 1851; *P. argyrolepis* Costa, 1887; *P. aequatus* Tournier, 1889; *P. compressus* Tournier, 1889; *P. fuscatus* Tournier, 1889; *P. pygidialis* Tournier, 1889; *P. deuterus* Dalla Torre, 1897; *P. ephialtes* Dalla Torre, 1897; *P. karafutonis* Matsumura, 1911; *Episyron sardous* Wolf, 1961.

MATERIAL: 5♀.

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.

Tribe Pompilini Latreille, 1804

Genus *Arachnospila* Kincaid, 1900

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

Pompilus trivialis Dahlbom, 1843; *P. aerumnatus* Tournier, 1889; *Psammochares corruptor* Haupt, 1927; *Ps. gibbus*: Gussakovskij, 1932; *Ammosphex michalki* Blüthgen, 1961; *P. insubricus* Wolf, 1965.

MATERIAL: 1♂, 3♀.

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.

Genus *Evaetes* Lepeletier de Saint Fargeau, 1845

5. *Evaetes trispinosus* (Kohl, 1886)

Pompilus trispinosus Kohl, 1886

MATERIAL: 5♀.

DISTRIBUTION: Russia: WS (AL, *TM). – Europe (WE, SE, EE), Tunisia, Armenia, Azerbaijan, Georgia, Turkey, Cyprus, Israel, Jordan, Lebanon, Syria, Iraq, Iran, Kyrgyzstan, Kazakhstan, Mongolia.

Anopliini Ashmead, 1902

Genus *Anoplius* Dufour, 1834

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

Sphex viaticus Linnaeus, 1758; *S. fusca* Linnaeus, 1761; *Pompilus paganus* Dahlbom, 1843; *P. propinquus* Smith, 1879; *P. delatorius* Tournier, 1890; *P. immixtus* Tournier, 1890; *P. macrurus* Tournier, 1890; *P. pleropicus* Tournier, 1890; *P. tibialis* Tournier, 1890; *P. valesicus* Tournier, 1890; *P. holomelas* Mantero, 1905; *P. ogumae* Matsumura, 1911; *Anoplius* (*Arachnoproctonus*) *haupti* Guiglia, 1941.

MATERIAL: 5♂.

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

As a result of our study, the checklist of circumpolar region of West Siberian species of spider wasps was compiled. That apparently makes up less than 30% of actual Pompilidae fauna of the area.

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Citation:

Baghirov R.T-o.(2019). New data on the distribution of spider wasps (Hymenoptera, Pompilidae).

Acta Biologica Sibirica, 5 (3), 12-14.

Submitted: 10.07.2019. **Accepted:**06.09.2019



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