

**Wasps of the subfamily Philanthinae (Hymenoptera, Crabronidae)
in the collection of the Institute of Zoology, Ministry of Science and Education
of the Republic of Azerbaijan**

**Осы подсемейства Philanthinae (Hymenoptera, Crabronidae) в коллекции
Института зоологии Министерства науки и образования Азербайджана**

A.A. Mammadov

А.А. Мамедов

Institute of Zoology, Ministry of Science and Education of the Republic of Azerbaijan, A. Abasszade Str., Passage 1128, block 504 Baku AZ1004 Azerbaijan; Western Caspian University, Istiglaliyyat Str. 31, Baku AZ1001 Azerbaijan. E-mail: aydin.aydin.2021@mail.ru.
Институт зоологии Национальной академии наук Азербайджана, ул. А. Аббасзаде, 1128 проезд, 504 квартал, Баку AZ1004 Азербайджан; Западно-Каспийский университет, ул. Истиглалият 31, Баку AZ1001 Азербайджан.

Key words: Sand wasps, collection material, Azerbaijan.

Ключевые слова: песочные осы, материал коллекции, Азербайджан.

Abstract. Sand wasps (Crabronidae) from the genera *Philanthus* Fabricius, 1790 and *Cerceris* Latreille, 1802 are represented by 16 species in the collection of the Institute of Zoology, Baku. Of these nine species, *Philanthus coronatus* Thunberg, 1784, *Ph. coarctatus* Spinola, 1839, *Ph. venustus* Rossi, 1790, *Cerceris vagans* Radoszkowski, 1877, *C. quadri-fasciata* Panzer, 1799, *C. flavilabris* Fabricius, 1793, *C. albofasciata* Rossi, 1790, *C. capito* Lepeletier de Saint Fargeau, 1845 and *C. spinipectus accola* Kohl, 1916, are newly recorded for the fauna of Azerbaijan. Similarly, sixteen species are recorded from the territory of Azerbaijan, one from Iran and two species from the territory of Armenia. General geographic distribution is given for each species.

Резюме. Песочные осы (Crabronidae) из родов *Philanthus* Fabricius, 1790 и *Cerceris* Latreille, 1802 в коллекции Института зоологии в Баку представлены 16 видами. Из них 9 видов: *Philanthus coronatus* Thunberg, 1784, *Ph. coarctatus* Spinola, 1839, *Ph. venustus* Rossi, 1790, *Cerceris vagans* Radoszkowski, 1877, *C. quadri-fasciata* Panzer, 1799, *C. flavilabris* Fabricius, 1793, *C. albofasciata* Rossi, 1790, *C. capito* Lepeletier de Saint Fargeau, 1845 и *C. spinipectus accola* Kohl, 1916 отмечаются впервые для фауны Азербайджана. 16 видов приводятся для территории Азербайджана, 1 — для Ирана и 2 вида для Армении. Для каждого вида приводятся данные по распространению.

Introduction

Wasps of the family Crabronidae or burrowing (or sand) are found almost everywhere and number more than 10 thousand species worldwide. Two hundred thirty-two species are known for the fauna of Azerbaijan [Antropov et al., 2017; Mokrousov et al., 2019, 2020]. Currently study of wasps of the family Crabronidae in the collection of the Institute of Zoology presents 16 species of sand wasps, of which nine species, *Philanthus coronatus* Thunberg, 1784, *Ph. coarctatus* Spinola, 1839, *Ph. venustus* Rossi, 1790, *Cerceris vagans* Radoszkowski, 1877, *C. quadri-fasciata* Panzer, 1799, *C. flavilabris* Fabricius,

1793, *C. albofasciata* Rossi, 1790, *C. capito* Lepeletier de Saint Fargeau, 1845 and *C. spinipectus accola* Kohl, 1916, are recorded for Azerbaijan for the first time.

The present work is registered in ZooBank (www.zoobank.org) under LSID urn:lsid:zoobank.org:p:pub:2B00FC91-40CB-4D88-A80C-01905B39A88D

Crabronidae: Philanthinae

***Philanthus* Fabricius, 1790**

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

Material. Azerbaijan: 1♂ — Baku, Surakhany, 7.VII.1936, on the *Eryngium*, Tertishnikov; 1♂ — Baku, Mardakany, 30.VI.1939, A. Bogachev; 1♂ — Samukh, Karagashly, 3.VI.1935, A. Bogachev; 1♀ — Mil's steppe, 15.VI.1934, A. Bogachev.

Distribution. Russia, Europe, N Asia, Turkey, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China, Korean Peninsula [Antropov et al., 2017].

Remarks. First record for Azerbaijan.

***Philanthus triangulum* (Fabricius, 1775)**

Material. Azerbaijan: 1♀ — Eli-su (now Ilisu), distr. Kakh, 29.VII.1934, A. Bogachev; ♂ — same place, 13.VIII.1934, A. Bogachev; 1♀ — Lenkoran, 4.VIII.1936, A. Bogachev; 1♀ — Baku, Botanical garden, 25.VI.1984, Pashenko; 1♂ — Kutkashen (now Gabala), 8.VIII.1935, on the *Eryngium*, M. Vinovsky; 1♀ — Nuha's distr. (now Sheki), Kishlak village, 27.VII, Alishov; 1♀ — Lerik, Galabyn, 21.VII.1976, H. Aliev; 1♀ — Nakchivan, Geynuk, 08.VI.2021, G. A. Huseynzade.

Distribution. Russia, Europe, N Africa, Georgia, Azerbaijan, Turkey, Syria, Japan, Israel, Saudi Arabia, Yemen, Iran, Iraq, Afghanistan, Central Asia, Kazakhstan [Antropov et al., 2017].

***Philanthus coarctatus* (Spinola, 1839)**

Material. Azerbaijan: 3♀♀ — Lerik, Kosmalyan, 4.VII.1985, H. Aliev; 1♀ — Lerik, Lalakeran, 1500 m a.s.l., 6.VII.1985, H. Aliev; 2♀♀ — Absheron, Shuvelyan, 28.VII.1985, H. Aliev; 2♀♀ — Baku, Injirnaya, 1.IX.1985, O. Aliev, 1♀ — 9.IX.1985, S. Kerimova; 1♀ — Zakataly, Gabizbara, 29.VI.1986, H. Aliev; 1♀ — Baku, Shikhovo, 9.VII.1986, H. Aliev, 2♀♀ — 6–12.VII.1986, H. Aliev.

Distribution. Oman, Saudi Arabia, United Arab Emirates, Yemen, Chad, Ethiopia, Iran, Iraq, Israel, Jordan, Mali,

Niger, North Africa, Palestine, Sudan, Turkey [Dollfuss, 2017; Gadallah et al., 2020].

Remarks. First record for Azerbaijan.

Philanthes venustus (Rossi, 1790)

Material. Azerbaijan, Baku: 1♀ — Shikhovo, 9.VII.1986, H. Aliev; 2♂♂, 3♀♀ — Injirnaya, 1.IX.1985, O. Aliev, 9♂♂ — on the *Foeniculum*, 24.VIII.1985, N. Alieva, 1♀ — on the *Foeniculum*, 28.VIII.1985, O. Aliev, 1♀, 1♂ — 25.VIII.1986, H. Aliev; *Lerik:* 1♂ — Kosmalyan, 1.VIII.1985, H. Aliev; 1♂ — Gilidara, 27.VII.1976, H. Aliev; 3♀♀ — Galabyn, 6.VII.1983, H. Aliev; 1♀ — Kumurkoy 2400 m a.s.l., 10.VII.1983, H. Aliev; *Zakataly:* 1♀ — Perzivan, 24.VII.1986, H. Aliev; *Lenkoran:* 1♀ — Avrora, 2.10. 1984, H. Aliev; *Kakh:* 1♂, 2♀♀ — Eli-su, 1700 m a.s.l., 29.VII.1934, A. Bogachev.

Distribution. Russia, Europe, N Africa, Turkey, Syria, Israel, Kazakhstan, Mongolia [Antropov et al., 2017].

Remarks. First record for Azerbaijan.

Philanthes variegatus (Spinola, 1839)

Material. Azerbaijan: 1♀ — Ganja, Garjadgi village, 08.VIII.2015, A. Mammadov; 1♀ — Baku, distr. Zikh, 19.VII.2016, A. Mammadov.

Distribution. Russia, N Africa, Azerbaijan, Turkey, Syria, Armenia, Israel, Saudi Arabia, Kuwait, United Arab Emirates, Oman, Iran, Iraq, Afghanistan, Pakistan, Central Asia, Kazakhstan, China [Antropov et al., 2017].

Cerceris Latreille, 1802

Cerceris vagans (Radoszkowski, 1877)

Material. Azerbaijan: 2♀♀ — Kirovabad (now Ganja), 5.VIII.1932, M. Vinovsky.

Distribution. Eastern Mediterranean area, Central Asia, Iran [Schmidt 2000], UAE [Guichard 1993].

Remarks. First record for Azerbaijan. In the collection this species is identified as *Cerceris turkestanica* Radoszkowski, 1893.

Cerceris rybyensis (Linnaeus, 1771)

Material. Azerbaijan: 1♂ — Samukh, Karagashly, 5.VI.1935, A. Bogachev, 1♂ — 8.VI.1935, on the *Euphorbia*, M.F. Vinovsky; 3♂♂ — Mil's steppe, 10–15.VI.1934, A. Bogachev, 1♂ — 26.V.1034, A. Bogachev; 1♀ — Kutkashen (now Gabala), 10.VIII.1935, on the *Eryngium*, M. Vinovsky. Armenia: 2♂♂ — Delijan, 15.VI.–15.VII.?

Distribution. Russia, Europe, N Africa, Georgia, Azerbaijan, Armenia, Turkey, Syria, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, Korean Peninsula, Japan, India [Antropov et al., 2017].

Cerceris sabulosa (Panzer, 1799)

Material. Azerbaijan: 1♂ — Kirovabad (now Ganja), IX.1939, on the *Gossypium*, A. Bogachev; 2♂♂ — Baku, hortus bot., 8.VII.1946, A. Bogachev; 1♂ — Nakhchivan, 31.V.1933, A. Bogachev; 4♂♂ — Mil's steppe, 10, 12.VI.1934, A. Bogachev; 1♂ — Mil's sovkhoz, V.1934, third khutor, A. Bogachev; 1♂ — Shemakha, Sagyan, 27.V.1950, A. Bogachev; 1♂ — environs of Shusha, 20.VIII.1933, V. Rusanova; 1♀ — Shemakha, 25.VI.1937, N. Tertishnikov; Armenia: 1♀ — Delijan, 15.VI.–15.VII.?

Distribution. Afghanistan, Albania, Algeria, Armenia, Austria, Bulgaria, China, Croatia, Cyprus, Czech Republic, Egypt, France, Georgia, Germany, Great Britain, Greece, Hungary, Iran, Iraq, Israel, Italy, Kazakhstan, Libya, Malta, Mongolia, Montenegro, Morocco, Netherlands, Oman, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Switzerland, Tajikistan, Tunisia, Turkmenistan, Uzbekistan. [Jahantigh et al., 2017].

Cerceris rubida (Jurine, 1807)

Material. Azerbaijan: 1♀ — Mil's steppe, V.1934, A. Bogachev; 1♂ — Absheron, Amiradjan, 12.VI.1933, V. Rusanova; 1♀ — Baku, Botanical garden, Azfin, 10.VII.1937, M. Vinovsky; 1♂ — Mil's sovkhoz, 10.VI.1934, M. Rusanova.

Distribution. Afghanistan, Albania, Algeria, Austria, Bulgaria, China, Croatia, Cyprus, Czech Republic, France, Greece, Hungary, Iran, Iraq, Israel, Italy, Japan, Jordan, Kazakhstan, Mongolia, Morocco, Romania, Russia, Serbia, Slovakia, Spain, Switzerland, Syria, Tajikistan, Turkey, Turkmenistan, Ukraine, Uzbekistan [Jahantigh et al., 2017].

Cerceris quadrifasciata (Panzer, 1799)

Material. Azerbaijan: 1♂, 1♀ — Eli-su, 21.VII.1934; 1♂ — Talysh, Alekseyevka, 28.05.1936, A. Bogachev; 1♂ — Kutkashen (now Gabala), 10.VIII.1935, M. Vinovsky.

Distribution. Albania, Austria, Bulgaria, Czech Republic, Finland, Germany, Hungary, Italy, Kazakhstan, Mongolia, Slovakia, Turkey, Ukraine [Dollfuss, 2019].

Remarks. First record for Azerbaijan.

Cerceris flavilabris (Fabricius, 1793)

Material. Azerbaijan: 2♀♀ — Mil's steppe, 15.VI.1934, A. Bogachev; 1♀ — Baku, Surakhany, 13.VI.1933, A. Bogachev; 2♂♂ — Kutkashen (now Gabala), on the *Eryngium*, 10.VIII.1935, M. Vinovsky; 1♀ — Ganja, on the onion's flowers, 29.VI.1933, M. Vinovsky; 1♂ — Agdjabedy, 5.VI.1934, A. Bogachev.

Distribution. Austria, Bulgaria, Czech Republic, Cyprus, France, Germany, Greece, Iran, Italy, Morocco, Kyrgyzstan, Slovakia, Turkey [Dollfuss, 2019].

Remarks. First record for Azerbaijan.

Cerceris flavigornis (Brullé, 1833)

Material. Azerbaijan: 1♂ — Nukha (now Sheki), 19.VII.1935, M. Vinovsky; 1♂ — Absheron, Amiradjan, 12.VI.1933, V. Rusanova; 2♂♂ — Mil's steppe, 10.VI.1934, A. Bogachev. Iran: 1♂ — Kuru-chay, Ungut-Mugan, 2.VI.1927, Bocharnikov.

Distribution. Bulgaria, Croatia, France, Greece, Kazakhstan, Kyrgyzstan, Ukraine, Uzbekistan [Dollfuss, 2019].

Cerceris albofasciata (Rossi, 1790)

Material. Azerbaijan: 1♀, 1♂ — Mil's steppe, 10.VI.1934, A. Bogachev, 1♀ — 12.VI.1934, A. Bogachev; 1♀ — Ganja, 29.VI.1933, on the onion's flowers, M. Vinovsky.

Distribution. Russia, Europe, Turkey, Iran, Tajikistan, Uzbekistan, Kyrgyzstan, Kazakhstan, Mongolia, China, Korean Peninsula, Japan [Antropov et al., 2017].

Remarks. First record for Azerbaijan.

Cerceris capito

(Lepeletier de Saint Fargeau, 1845)

Material. Azerbaijan: 1♂ — Baku, Surakhany, 7.VII.1936, on the *Eryngium*, N. Tertishnikov.

Distribution. Morocco, Tunisia [Dollfuss, 2018].

Remarks. First record for Azerbaijan.

Cerceris spinipectus accola (Kohl, 1916)

Material. Azerbaijan: 1♀ — Baku, Surakhany, 7.VII.1936, on the *Eryngium*, N. Tertishnikov.

Distribution. Kyrgyzstan, Tajikistan, Turkmenistan [Dollfuss, 2018].

Remarks. First record for Azerbaijan.

Cerceris bicincta (Klug, 1835)

Material. Azerbaijan: 1♀ — Ganja, on the onion's flowers, 28.VI.1933, M. Vinovsky.

Distribution. Bulgaria, China, Croatia, Greece, Jordan, Kazakhstan, Kyrgyzstan, Morocco, Slovakia, Spain, Syria, Tajikistan, Tunisia, Turkey, Turkmenistan, Uzbekistan [Dollfuss, 2018].

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., Laktionov 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. Vol. I. Symphyta and Apocrita: Aculeata // Proceedings of the Zoological Institute RAS. Suppl.6. 475 p.
- Dollfuss H. 2017. The Philanthinae wasps of the «Biologiezentrum Linz» — Collection in Linz, Austria including the Genera *Aphilanthops* Patton, *Clypeadon* Patton, *Odontosphex* Arnold, *Philanthinus* De Beaumont, *Philanthus* Fabricius, *Pseudoscolia* Radoszkowski and *Trachypus* Klug (Hymenoptera, Apoidea, Crabronidae) // Linzer Biologische Beiträge. Vol.49. No.2. p.1245–1274.
- Dollfuss H. 2018. The sphecid wasps of the genus *Cerceris* Latreille, 1802 of the «Biologiezentrum Linz» — collection in Linz, Austria, from the Palearctic Region (part I). (Hymenoptera, Apoidea, Crabronidae) // Linzer biologische Beiträge. Vol.50. NO.2. P.1125–1170.
- Dollfuss H. 2019. The Sphecid Wasps of the genus *Cerceris* Latreille, 1802 of the «Biologiezentrum Linz» — Collection in Linz, Austria, from the Palearctic Region (part II). (Hymenoptera, Apoidea, Crabronidae) // Linzer biologische Beiträge Vol.51. No.2. P.831–874.
- Gadallah N.S., Brothers D.J., Williams K.A. 2020. Biodiversity of the aculeate wasps (Hymenoptera; Aculeata) of the Arabian Peninsula: Apoidea (Spheciformes), Crabronidae // Zootaxa. Vol. 4754. No.1. P.5–7. <https://doi.org/10.11646/zootaxa.4754.1.3>
- Guichard K.M. 1993. The genus *Cerceris* (Hymenoptera: Sphecidae) in Arabia // Fauna of Saudi Arabia. Vol.13. P.152–169.
- Jahantigh F., Rakhsani E., Mokhtari A., Ramroodi S. 2017. Catalogue of Ampulicidae, Crabronidae and Sphecidae of Iran (Hymenoptera, Apoidea) // Zootaxa. Vol.4307. No.1. P.1–96. <https://doi.org/10.11646/zootaxa.4307.1.1>
- Mokrousov M.V., Proshchalykin M.Yu., Aliyev Kh.A., Maharramov M.M. 2019. To the knowledge of digger wasps (Hymenoptera: Crabronidae) of Nakhchivan Autonomous Republic of Azerbaijan // Far Eastern Entomologist. Vol.394. P.1–24. <https://doi.org/10.25221/fee.394.1>
- Mokrousov M.V., Proshchalykin M.Yu., Maharramov M.M. 2020. Digger wasps of the genus *Hoplisoides* Gribodo (Hymenoptera, Crabronidae, Bembicinae) from the Palearctic region, with description of two new species // Journal of Hymenoptera research. Vol.79. P.213–233. <https://doi.org/10.3897/jhr.79.56839>
- Schmidt K. 2000. Bestimmungstabelle der Gattung *Cerceris* Latreille, 1802, in Europa, dem Kaukasus, Kleinasien, Palästina und Nordafrika (Hymenoptera, Sphecidae, Philanthinae) // Stafzia. Vol.71. 1251 p.
- Schmid-Egger Ch., Dollfuss H. 2022. New records of *Cerceris* Latreille, 1802 (Hymenoptera, Spheciformes) from the United Arab Emirates // Linzer Biologische Beiträge. Vol.54. No.1. P.291–302. <https://doi.org/10.5281/zenodo.7507480>

Поступила в редакцию 10.10.2023