TO THE KNOWLEDGE OF EUMENINE WASPS (HYMENOPTERA: VESPIDAE: EUMENINAE) OF NAKHCHIVAN AUTONOMOUS REPUBLIC OF AZERBAIJAN

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Summary. The data on 25 species of eumenine wasps collected in Nakhchivan Autonomous Republic of Azerbaijan in July, 2018 are given. Ten species are new for Azerbaijan; other 5 species are new for Nakhchivan Autonomous Republic. The known fauna of this republic numbers 66 species of eumenine wasps. A new synonymy is proposed for Eustenancistrocerus tegularis (Morawitz, 1885) = E. israelensis Giordani Soika, 1952, syn. n.; the lectotype of Lionotus tegularis Morawitz, 1885 is designated.

Key words: potter wasps, distribution, synonymy, Caucasus, Palaearctic region.

INTRODUCTION

The subfamily Eumeninae is the most diverse group of vespid wasps. More than 3750 species of eumenine wasps are known in the World and about 1000 species occur in the Palaearctic region (Perrard et al., 2017; Antropov & Fateryga, 2017). There is no published
list of eumenine wasps of Azerbaijan but there is a paper with the list of these wasps in Nakhchiván Autonomous Republic containing 50 species (Aliyeva, 2010). One of them, *Eumenes lunulatus* Fabricius, 1804, is currently a synonym of another species, *E. coarctatus* (Linnaeus, 1758) (see Antropov & Fateryga, 2017), also reported from there. However, at least two additional species, *Leptocheilus nacrocephalus* (Kostylev, 1940) and *Odynerus fulvitarsis* (Morawitz, 1895), must be added to the list published by Aliyeva (2010) since they were described from Ordubad (van der Vecht & Fischer, 1972). The purpose of the present investigation is to report new records of eumenine wasps collected in Nakhchiván Autonomous Republic of Azerbaijan.

**MATERIAL AND METHODS**

Studied material included 120 eumenine wasp specimens collected in July, 2018 in 14 localities. Geographical coordinates and administrative locations of collection sites are as follows: Azerbaijan: Nakhchiván Autonomous Republic: Babek, Shikhmagomed, 39°15′N 45°25′E, 940 m; Julfa, 9 km N Julfa, 39°02′N 45°36′E, 900 m; Julfa, Gazanchi, 39°13′N 45°41′E, 1300 m; Julfa, Gulistan, 38°58′N 45°36′E, 740 m; Julfa, Milakh, 39°15′N 45°43′E, 1430 m; Ordubad, Aghdara, 39°06′N 45°54′E, 2000 m; Ordubad, Nurgut, 39°13′N 45°53′E, 1900 m; Shakhbuz, Ayrinj, 39°25′N 45°35′E, 1240 m; Shakhbuz, Kechili, 39°22′N 45°43′E, 1800 m; Shakhbuz, 4 km SE Kechili, 39°20′N 45°45′E, 2300 m; Shakhbuz, Kolani, 39°28′N 45°43′E, 1300 m; Shakhbuz, Shakhbuz, 39°23′N 45°32′E, 1160 m; Shakhbuz, Shakhbuzkend, 39°23′N 45°32′E, 1140 m; Shakhbuz, Zamatin, 39°31′N 45°46′E, 1550 m. All specimens were collected by M.Yu. Proshchalykin, Kh.A. Aliyev, and M.M. Maharramov (thus, the information on the collectors is not repeated in the text). Specimens were deposited in the collection of the Federal Scientific Center of the East Asia Terrestrial Biodiversity of the Far East Branch of the Russian Academy of Sciences, Vladivostok, Russia [FSCV] and the collection of A.V. Fateryga (T.I. Vyazemsky Karadag Scientific Station – Nature Reserve of the Russian Academy of Sciences, Feodosiya, Russia) [CAFK]. Distribution of species generally follows Antropov & Fateryga (2017) and references therein. New records are asterisked (*).

**LIST OF SPECIES**

*Alastor (Alastor) mocsaryi* (Andrě, 1884)

MATERIAL EXAMINED. Ordubad, Aghdara, 28.VII 2018, 1 ♀ [FSCV].

DISTRIBUTION. Europe, Russia, Armenia, Azerbaijan (*new for Nakhchivan AR), Turkey, Syria, Lebanon.

*Ancistrocerus gazella* (Panzer, 1798)

MATERIAL EXAMINED. Ordubad, Aghdara, 28.VII 2018, 1 ♂ [FSCV].

DISTRIBUTION. Europe, N Africa, Russia, *Azerbaijan, Turkey, Cyprus, Israel, Iran, Afghanistan, ?Pakistan. Introduced into N America and New Zealand.

*Ancistrocerus parietum* (Linnaeus, 1758)

MATERIAL EXAMINED. Ordubad, Nurgut, 29.VII 2018, 3 ♂ [FSCV].

DISTRIBUTION. Europe, N Africa, Russia, Armenia, Azerbaijan, Turkey, Iran, Kazakhstan, Mongolia, Korean Peninsula, Japan.

*Antepipona deflenda* (S. Saunders, 1853)

DISTRIBUTION. Europe, N Africa, Russia, Georgia, Armenia, Azerbaijan, Turkey, Cyprus, Jordan, Lebanon, Israel, Iraq, Iran, Turkmenistan, Tajikistan, Uzbekistan, Kazakhstan, China.

**Antepipona specifica** (Morawitz, 1895)

MATERIAL EXAMINED. Ordubad, Aghdara, 28.VII 2018, 1 ♂; Babek, Shikhmakhmud, 30.VII 2018, 2 ♀ [CAFK].
DISTRIBUTION. *Azerbaijan, Iraq, Iran, Turkmenistan, Uzbekistan, Kyrgyzstan.

**Eumenes (Eumenes) coarctatus** (Linnaeus, 1758)

DISTRIBUTION. Europe, N Africa, Russia, Armenia, Azerbaijan, Turkey, Cyprus, Syria, Jordan, Israel, Iran, Central Asia, Kazakhstan, Mongolia, China, Japan.

**Eumenes (Eumenes) coronatus** (Panzer, 1799)

DISTRIBUTION. Europe, Russia, *Azerbaijan, Turkey, Israel, Iran, Central Asia, Kazakhstan, Mongolia, China, Korean Peninsula, Japan.

**Eumenes (Eumenes) dubius** de Saussure, 1852

DISTRIBUTION. Europe, N Africa, Russia, Azerbaijan, Turkey, Cyprus, Syria, Jordan, Lebanon, Israel, Iraq, Iran, Turkmenistan, Tajikistan, Kazakhstan. Introduced into S America.

**Eumenes (Eumenes) jarkandensis** Blüthgen, 1938

DISTRIBUTION. *Azerbaijan, Turkey, Lebanon, Iran, Turkmenistan, Tajikistan, Kyrgyzstan, Mongolia.

**Eumenes (Eumenes) mediterraneus** Kriechbaumer, 1879

DISTRIBUTION. Europe, N Africa, Russia, Armenia, Azerbaijan, Turkey, Cyprus, Syria, Jordan, Lebanon, Israel, Saudi Arabia, Yemen, UAE, Oman, Iraq, Iran, Afghanistan, Pakistan, Central Asia, Kazakhstan, Mongolia, China, Korean Peninsula. Introduced into Tahiti.
Eumenes (Eumenes) papillarius (Christ, 1791)

MATERIAL EXAMINED. Shakhbuz, Kolani, 24.VII 2018, 1 ♂ [FSCV].
DISTRIBUTION. Europe, Russia, *Azerbaijan, Turkey, Syria, Lebanon, Israel, Iran, Pakistan, Central Asia, Kazakhstan, Mongolia.

Eumenes (Eumenes) pomiformis (Fabricius, 1781)

MATERIAL EXAMINED. Ordubad, Agodka, 28.VII 2018, 1 ♂ [FSCV].
DISTRIBUTION. Europe, N Africa, Russia, Armenia, Azerbaijan, Turkey, Lebanon, UAE, Pakistan, Central Asia, Kazakhstan, China, Korea, Korean Peninsula, India.

Euodynerus (Euodynerus) dantici (Rossi, 1790)

MATERIAL EXAMINED. Shakhbuz, Zarnatun, 25.VII 2018, 1 ♂ [FSCV].
DISTRIBUTION. Europe, N Africa, Russia, Georgia, Armenia, Azerbaijan, Turkey, Syria, Jordan, Lebanon, *Israel, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China, Korean Peninsula, Japan, SE Asia.

Euodynerus (Pareuodynerus) posticus (Herrich-Schäffer, 1841)

MATERIAL EXAMINED. Shakhbuz, Kechili, 22.VII 2018, 3 ♂; Ordubad, Nurgut, 29.VII 2018, 1 ♂ [FSCV].
DISTRIBUTION. Europe, N Africa, Russia, Georgia, Armenia, Azerbaijan (*new for Nakhchivan AR), Turkey, Israel, Iran.

Eustenancistrocerus (Eustenancistrocerus) jerichoensis (von Schulthess, 1928)

MATERIAL EXAMINED. Shakhbuz, Shakhbuzkend, 22.VII 2018, 1 ♂, 1 ♂ [CAFk, FSCV].
DISTRIBUTION. *Azerbaijan, Turkey, Syria, Jordan, Israel, Iran.

Eustenancistrocerus (Eustenancistrocerus) tegularis (Morawitz, 1885)

Figs 1–4


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DISTRIBUTION. Europe, Armenia, Azerbaijan (*new for Nakhchivan AR), Turkey, Syria, Israel, Iran, Central Asia, Kazakhstan. The recent record from Russia (Fateryga et al., 2017) is erroneous.

REMARKS. Eustenancistrocerus israelensis was initially synonymized with E. tegularis by Blüthgen (1955). Giordani Soika (1957) then rejected this synonymy. After that, Blüthgen (1963) confirmed the synonymy of these two species again. Gusenleitner (1970) then rejected this synonymy again and provided schematic sketches of male last flagellomeres of E. israelensis and E. tegularis (Gusenleitner, 1970: 116). According to his sketches, the last flagellomere of E. israelensis is slightly broadened distally (Fig. 3b in Gusenleitner, 1970) but that of E. tegularis is slightly narrowed distally (Fig. 3c in Gusenleitner, 1970). Gusenleitner also reported that the male of E. tegularis studied by him had been compared by Giordani Soika with the type specimen. In the same year, Giordani Soika (1970) provided illustration of female tegulae of the both species (Giordani Soika, 1970: 92). He also reported that the specimen of E. tegularis studied by him had been compared with the holotype. According to the illustrations, E. israelensis has broader and more densely punctured tegula (Fig. 19 in Giordani Soika, 1970) than E. tegularis (Fig. 21 in Giordani Soika, 1970).
Thus, *E. israelensis* and *E. tegularis* were considered to be two distinct species since 1970 (van der Vecht & Fischer, 1972) that was already after Blüthgen’s death. The problem is, however, that there was no “holotype” of *E. tegularis*, although there is a female specimen with Giordani Soika’s label “Lectoholotypus” and Kurzenko’s lectotypification label (Fig. 3). We did not find any of these designations in the published papers. Thus, we hereby designate formally this specimen as a lectotype (see above). Examination of the lectotype showed that tegula of *E. tegularis* (Fig. 1) corresponds rather to Giordani Soika’s illustration of *E. israelensis* than *E. tegularis*. We examined also a huge material of *E. tegularis* from the Caucasus and Central Asia and found no specimens with such tegula as in the Giordani Soika’s illustration of *E. tegularis* (Fig. 21 in Giordani Soika, 1970). Unfortunately, the male paralectotype of *E. tegularis* has broken tips of the both antennae. Anyway, we also did not find any specimen with the last flaggellomere as in the Gusenleitner’s sketch of *E. tegularis* (Fig. 3c in Gusenleitner, 1970). All male specimens examined by us had parallel sided last flaggellomere that was somewhat intermediate between Gusenleitner’s sketches of *E. israelensis* and *E. tegularis* but more similar to *E. israelensis*. Thus, we consider that Blüthgen (1955, 1963) was absolutely correct in the synonymy of *E. israelensis* with *E. tegularis*.

**Eustenancistrocerus (Parastenancistrocerus) amadanensis** (de Saussure, 1855)


**DISTRIBUTION.** Europe, N Africa, Russia, Azerbaijan, Turkey, Cyprus, Syria, Israel, Saudi Arabia, Iraq, Iran, Pakistan, Central Asia, Kazakhstan.

**Jucancistrocerus (Jucancistrocerus) caspicus** Giordani Soika, 1970


**DISTRIBUTION.** Europe, Russia, Georgia, Armenia, Azerbaijan (*new for Nakhchivan AR), Turkey, Iran, Kazakhstan.

**REMARKS.** This species has been only recently reported from Azerbaijan (Fateryga, 2017); the previous records of *J. jucundus* (Mocsáry, 1883) (Aliyeva, 2010) may actually refer to *J. caspicus*.

**Katamenes sichelii** (de Saussure, 1852)


**DISTRIBUTION.** Europe, N Africa, Russia, Armenia, Azerbaijan, Turkey, Jordan, Israel, Saudi Arabia, UAE, Iraq, Iran, Afghanistan, Central Asia, Kazakhstan, Mongolia, China, India.

**Microdynerus (Alastorynerus) microdynerus** (Dalla Torre, 1889)

MATERIAL EXAMINED. Shakhbuz, 4 km SE Kechili, 21.VII 2018, 1 ♀ [FSCV].

**DISTRIBUTION.** Europe, Russia, Georgia, Armenia, *Azerbaijan, Turkey, Jordan, Iran, Tajikistan, Kazakhstan.
Parodontodynerus ephippium (Klug, 1817)

MATERIAL EXAMINED. Ordubad, Nurgut, 29.VII 2018, 1 ♂ [FSCV].
DISTRIBUTION. Europe, Russia, Armenia, Azerbaijan, Turkey, Lebanon, Iran, Turkmenistan, Uzbekistan, Kazakhstan.

Raphiglossa eumenoides S. Saunders, 1850

MATERIAL EXAMINED. Shakhbuz, Zamatin, 25.VII 2018, 2 ♀, 1 ♂ [CAFK, FSCV].
DISTRIBUTION. Europe, Armenia, *Azerbaijan, Turkey, Lebanon, Iran.

Stenodynerus chevrieranus (de Saussure, 1855)

MATERIAL EXAMINED. Shakhbuz, Shakhbuzkend, 30.VII 2018, 1 ♀ [FSCV].
DISTRIBUTION. Europe, *Azerbaijan, Russia, Turkey, Iran, Central Asia, Kazakhstan.

Stenodynerus chitgarensis Giordani Soika, 1970

DISTRIBUTION. *Azerbaijan, Turkey, Iran, Uzbekistan, Kyrgyzstan.

Tachyancistrocerus schmidtii (Kokujev, 1913)

MATERIAL EXAMINED. Babek, Shikhmakhmud, 30.VII 2018, 1 ♂ [FSCV].
DISTRIBUTION. Armenia, Azerbaijan (*new for Nakhchivan AR), Turkey, Iran, Uzbekistan, Kyrgyzstan.

DISCUSSION

Only 10 species of the 25 ones listed above were previously reported for Nakhchivan Autonomous Republic (Aliyeva, 2010): Ancistrocerus parietum, Antepipona deflenda [as Odynerus parvulus Lepeletier de Saint-Fargeau, 1841], Eumenes coarctatus, E. dubius, E. mediterraneus, E. pomiformis, Euodynerus dantici, Eustenancistrocerus amadanensis [as E. transitorius (Morawitz, 1867)], Katamenes sichelii [as Eumenes baerii Radoszkowski, 1865], and Parodontodynerus ephippium. Fifteen remaining species are new for Nakhchivan. Among them, 10 species are new for Azerbaijan. Five of them (Ancistrocerus gazella, Eumenes coronatus, E. papillarius, Microdynerus microdynerus, and Stenodynerus chevrieranus) were previously reported for the “Caucasus” (Antropov & Fateryga, 2017) that meant three countries: Georgia, Armenia, and Azerbaijan (see Belokobylskij & Lelej, 2017), although their presence in Azerbaijan were not documented by specimen-based records. Thus, 66 species of eumenine wasps are known in Nakhchivan Autonomous Republic today but several previous reports require confirmation.

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REFERENCES


