

NEW RECORDS OF ARANEAE FROM ARMENIA

ZARIKIAN A N

Scientific Center of Zoology and Hydro-Ecology, National Academy of Sciences of the Republic of Armenia, P. Sevak str. 7, Yerevan, Armenia Email: nzarikian@gmail.com

ABSTRACT

This study reports new records of spiders under few families from Armenia. These add to the checklist of the families Cheiracanthiidae Wagner, 1887; Eresidae C L Koch, 1845; Gnaphosidae Pocock, 1898; and Pholcidae C L Koch, 1850. The results include twelve species of which six are new records from Armenia, and include *Eresus kollari* Rossi, 1846; *Pholcus alticeps* Spassky, 1932; *Holocnemus pluchei* (Scopoli, 1763); *Cheiracanthium erraticum* (Walckenaer, 1802); *Drassodes lapidosus* (Walckenaer, 1802); and *Aphantaulax cincta* (L. Koch, 1866). Notes on the habitat and distributions are given.

Key words: Araneae, Arachnida, Armenia, Caucasus, fauna, Cheiracanthiidae, Eresidae, Gnaphosidae, Pholcidae, Eresus kollari, Pholcus alticeps, Holocnemus pluchei, Cheiracanthium erraticum, Drassodes lapidosus, Aphantaulax cincta

Family Gnaphosidae includes a small number of exclusively Palaearctic species (Ovtsharenko et al. 1992). From 1895 onwards, data relating to the occurrence of the Gnaphosidae in Armenia can be seen in Kulczynski (1895). After this, Wershbitsky (1902) observed *Gnaphosa nigella* L. Koch (1878), considered as nomen dubium. Several species were recorded by Ovtsharenko and collaborators (Ovtsharenko et al. 1982; 1992; 1994). More data on the Gnaphosidae from the areas within the contemporary boundaries of Armenia have been published by Mikhailov (Mikhailov, 1988; 1997; 2000). The known fauna of Gnaphosidae listed from Armenia in the Caucasian spiders' database is very low and includes only 14 species (Otto, 2022). This is in comparison to those of the neighboring countries (46 for Georgia and 70 for Azerbaijan). Under the family Cheiracanthiidae only a lone species has been listed in the checklist of Otto (2022), and one species was recorded by Kulczynski (1895), while Georgia has 6 and and Azerbaijan with 7 species The family Eresidae has one record in Armenia (Otto, 2022), two in Azerbaijan and Georgia. The family Pholcidae has one record for Armenia (Zarikian et al. 2021). This study from Armenia reviews the spiders of Armenia with new records from these families.

MATERIALS AND METHODS

Spiders were collected from different habitats in Armenia during the spring, summer and autumn of 2019-2020 from 10 sites. The site no., name, GPS coordinates and altitude ((masl) are as follows:

1. Alibek Mount, 40.54028, 44.66669, 2439; 2. Ara Ler (mount Ara), 40.40073, 44.46875, 2200; 3. Dalarik, 40.22369, 43.7959, 1093; 4. Geghadir, 40.15466, 44.65141, 1780; 5. Gnishik, 39.65832, 45.2973, 2336; 6. Chambarak, 40.59308, 45.34308, 2005; 7. Lanjar, 39.82507, 44.99731, 1847; 8. Noravank, 39.6861, 45.2293, 1400; 9. Sevut, 40.09168, 44.63208, 1100; and 10. Yerevan, 40.18469, 44.49591, 980. Spiders were collected from under stones, ground, and plants by hand picking and sweeping methods. The collected material was preserved in 70% ethanol and it was identified by the collector (author) based on Jones-Walters (1989) and Nentwig et al. (2020). In the list of species, the order of families and species follows that of Otto (2022). The world distribution is taken from the World Spider Catalog (2020) and the distribution in the Caucasus from Otto (2022) and Nentwig et al. (2020). The data on habitats are based on the field observations by the author and do not refer to accurate collection sites, however, they match the Armenian habitat at the collecting time. Photographs were taken using a Bresser Advance ICD 10x-160x Zoom Stereo-Microscope with a Canon EOS 2000 camera. Gratuitous Permit (GP) was obtained from the Ministry of Environment of Republic of Armenia (No. 2/29.7/1803).

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RESULTS AND DISCUSSION

A total of 22 adult specimens (17 \circlearrowleft , 5 \circlearrowleft) were collected, and 12 species belonging to nine genera have been found. The results revealed the presence of 13 species under Gnaphosidae and Pholcidae. An

abbreviated checklist of Armenian spider species is given in Table 1. The details of the species collected under each family is given below:

A. Family Gnaphosidae Pocock, 1898

1. Aphantaulax cincta (L. Koch, 1866)

Material: Chambarak, Gegharkunik Province, $2 \Im \Im$, 24.VII.2021.

Distribution: Europe, Turkey, North Africa, Israel

Distribution in Armenia: First record for Armenia and Caucasus.

Habitat: Open to partially shaded areas, stones, forests.

2. Drassodes lapidosus (Walckenaer, 1802)

Material: Ara Ler, Aragatsotn Province, 2♀♀, 20.VI.2020, Alibek, Kotayk Province, 1♀,

18.VII.2020, Geghadir, Kotayk Province, 1♀, 18.IV.20.

Distribution: Europe, Turkey, Caucasus, Russia (Europe to the Far East), Israel, Iran, Central Asia, China, Korea, Japan.

Distribution in Armenia: First record for Armenia. Habitat: Stone-covered steps and old buildings.

3. Gnaphosa lucifuga (Walckenaer, 1802)

Material: Gnishik, Vayotsdzor Province, 1♀, 31.V.2020.

General Distribution: Europe, Turkey, Caucasus, Iran, Russia (Europe to South Siberia), Kazakhstan, China.

Distribution in Armenia: Gukasyan (Ovtsharenko et al. 1992, Mikhailov, 1997).

Habitat: Shrublands, rural areas.

Table 1. Checklist of the fauna of Gnaphosidae, Eresidae, Pholcidae and Cheiracanthidae from Armenia

Species	Distribution	Reference/s
Family Gnaphosidae		
Aphantaulax cincta (Koch, 1866)	Chambarak	New record
Callilepis nocturna (L. 1758)	Dilizhan	Kulczynski (1895)
		Mikhailov (1997)
Drassodes lapidosus (Walckenaer, 1802)	Ara Ler, Alibek, Geghadir	New record
Gnaphosa lucifuga (Walckenaer, 1802)	Gukasyan	Ovtsharenko et al. (1992)
	-	Mikhailov (1997)
Gnaphosa nigella (Koch, 1878)	Sardarabad	Described by Wershbitsky (1902)
		but nomen dubium, (WSC)
Haplodrassus dalmatensis (Koch, 1866)	AU	Mikhailov (2000)
Haplodrassus signifer (Koch, 1839)	Sardarapat	Mikhailov (1997),
	-	Ovtsharenko (1982)
Micaria albovittata (Lucas, 1846)	Sevan Lake (Goktsha)	Mikhailov (1988)
Micaria formicaria (Sundevall, 1831)	Sevan Lake (Goktsha)	Mikhailov (1988)
Micaria kopetdaghensis Mikhailov, 1984	Sevan Lake (Goktsha)	Mikhailov (1988)
Micaria lenzi Bösenberg, 1899	Sevan Lake (Goktsha)	Mikhailov (1988)
Micaria pulicaria (Sundevall, 1831)	Spitak	Mikhailov (1988)
Nomisia aussereri (Koch, 1872)	AU	Mikhailov (2000)
Synaphosus palearcticus Ovtsharenko,	Echmiadzin, Dzhararat,	Ovtsharenko et al. (1994)
Levy & Platnick, 1994	Sardarapat	Mikhailov (2000)
Zelotes petrensis (Koch, 1839)	Ditavan	Ovtsharenko (1982)
Family Cheiracanthidae		
Cheiracanthium erraticum (Walck., 1802)	Sevut	New record
Cheiracanthium pelasgicum (Koch, 1837)	Fantan, Dilizan	Kulczynski (1895)
Family Eresidae		, , ,
Eresus kollari Rossi, 1846	Ara Ler	New record
Stegodyphus lineatus (Latreille, 1817)	Dilizhan	Otto (2022)
Family Pholcidae		•
Holocnemus pluchei (Scopoli, 1763)	Chambarak	New record
Pholcus alticeps Spassky, 1932	Chambarak	New record
Pholcus phalangioides (Fuesslin, 1775)	Chambarak, Yerevan	Zarikian and Kalashian (2021)

4. Haplodrassus signifer C. L. Koch, 1839

Material: Geghadir, Kotayk Province, 2♂♂ 1♀, 30.X.2019.

Distribution: North America, Europe, North Africa, Turkey, Caucasus, Russia (Europe to the Far East), Israel, Iran, Central Asia, China, Korea.

Distribution in Armenia: Sardarapat, Armavir province (Mikhailov, 1997).

Habitat: Dry hillsides.

5. Micaria albovittata (Lucas, 1846)

Material: Lanjar, Ararat Province, 299, 13.VI.2020.

Distribution: Europe, Turkey, Caucasus, Russia (Europe to Central Asia), Iran, Turkmenistan, China

Distribution in Armenia: Sevan Lake (Goktsha) (Mikhailov, 1988)

Habitat: Dry hillsides.

6. Micaria coarctata (Lucas, 1846)

Material: Noravank, Vayotsdzor Province, 1♀, 13.VI.2020.

Distribution: Mediterranean, Eastern Europe, Caucasus, Russia (Europe to Far East), Iran, Kazakhstan, Central Asia.

Distribution in Armenia: First record for Armenia. Habitat: Open places and riversides.

7. Micaria pulicaria (Sundevall, 1831)

Material: Ara Ler, Aragatsotn Province, $2 \stackrel{\frown}{\hookrightarrow} \stackrel{\frown}{\hookrightarrow}$, 20.VI.2020.

Distribution: USA, Canada, Europe, Georgia, Russia (Europe to Far East), Kazakhstan, China, Japan, Turkey.

Distribution in Armenia: Spitak (Mikhailov, 1988) Habitat: Hot dry region vegetation.

8. Nomisia aussereri (L. Koch, 1872)

Material: Dalarik, Armavir Province, 1♀, 13.XI.2019.

Distribution: Mediterranean, Eastern Europe, Turkey, Middle East, Caucasus, Russia (Europe to South Siberia), Kazakhstan, Central Asia, China.

Distribution in Armenia: The distribution is not mentioned but included in Armenian spiders' checklist (Otto, 2022)

Habitat: Semi-arid vegetation areas.

B. Family Cheiracanthiidae Wagner, 1887

9. Cheiracanthium erraticum (Walckenaer, 1802)

Material: Sevut, Ararat Province, 16, 16.V.2020.

Distribution: Europe, Turkey, Caucasus, Russia (Europe to Far East), Iran, Central Asia, China, Korea, Japan.

Distribution in Armenia: First record for Armenia. Habitat: Rough vegetation and heather.

C. Family Pholcidae C L Koch, 1850

10. Holocnemus pluchei (Scopoli, 1763)

Material: Chambarak, Gegharkunik, 1♀, 21.IX.2020.

Distribution: Europe, North Africa, Turkey, Azerbaijan. Introduced to USA, Argentina, Australia

Distribution in Armenia: First record for Armenia. Habitat: Exposed abandoned area.

11. Pholcus alticeps Spassky, 1932

Material: Chambarak, Gegharkunik, 1♀, 07.IX.2020.

Distribution: Germany to Ukraine, Russia (Europe to West Siberia), Caucasus, Iran and Tadjikistan.

Distribution in Armenia: First record for Armenia. Habitat: Damp places, basements and barns.

12. Pholcus phalangioides (Fuesslin, 1775)

Material: Yerevan near area, 2♀♀, 16.VI.2020, Chambarak, Gegharkunik, 1♀, 15.IX.2020.

Distribution: Western Asia. Introduced to both Americas, Europe, Africa, Asia, Australia and New Zealand.

Distribution in Armenia: Lori, Vayotsdzor and Yerevan (Zarikian and Kalashian, 2021).

Habitat: Houses and abandoned corners.

D. Family Eresidae C. L. Koch, 1845

13. Eresus kollari Rossi, 1846

Material: Ara Ler, Aragatsotn Province, 200 08.XI.2019.

Distribution: Europe, Turkey, Caucasus, Iran, Russia.

Distribution in Armenia: First record for Armenia Habitat: Warm lands covered by low herbaceous

vegetation.

Thus, 13 species have been detected of which six

species have been recorded for the first time for Armenia (Fig. 1). The new records include: E. kollari. P.alticeps, H.pluchei, C.erraticum, D. lapidosus and A.cincta. Still few species in the checklist are arguable, like *Gnaphosa* nigella described by Wershbitsky (1902) from Sardarabad and considered nomen dubium, according to World Spider Catalog- because the type material cannot be found (Ovtsharenko et al. 1992). The newest records are not surprising since these species have been found in neighbouring countries, with A. cincta being the eastern most record. It is anticipated that more new Armenian records will be found in the future for these families. The morphometrics and characteristics of these species are not different from their European or Caucasus specimens.



Eresus kollari



Holocnemus pluchei



Drassodes lapidosus



Pholcus alticeps



Cheiracanthium erraticum



Aphantaulax cincta

Fig. 1. New records of species (epigynes/ pedipalps)

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CONFLICT OF INTERESTS

The author has no conflicts of interest to declare.

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