



Three New Records for Spider (Arachnida: Araneae) Fauna of Türkiye^[*]

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Abstract: Bayburt Province has been insufficiently studied in terms of its spider fauna until now. As a result of this study conducted in Bayburt Province, three new records for Türkiye were identified. These species are *Agyneta fuscipalpus* (C. L. Koch, 1836), *Micaria lenzi* Bösenberg, 1899 and *Synaphris lehtineni* Marusik, Gnelitsa & Kovblyuk, 2005. The genus *Synaphris* Simon, 1894, belonging to the family Synaphridae, which has a very rare distribution, is represented by 11 species worldwide. Only 4 of these species are distributed in Europe. *Synaphris lehtineni* is extremely important as it represents the first recorded species of the family Synaphridae in Türkiye. The genus *Agyneta* Hull, 1911, belonging to the family Linyphiidae, one of the most diverse spider families in the world, comprises 201 species globally. Of these, 43 are also found in Europe. *Agyneta fuscipalpus* has been added as a new record to the genus, which previously had only three species in Türkiye. The genus *Micaria* Westring, 1851, of the family Gnaphosidae, which has a wide distribution, is represented by 124 species worldwide. Of these, 34 are also found in Europe. Prior to this study, 11 species of this genus had been identified from Türkiye. With this study, *Micaria lenzi* has been recorded for the first time in Türkiye. The specimens were collected from rocky habitats and beneath stones. The specimens were identified using a stereomicroscope and photographed using a digital camera. The morphological characteristics and photographs of the new records are presented with their detailed descriptions.

Keywords: Araneae, Bayburt, fauna, new records, Türkiye.

Türkiye'nin Örümcek (Arachnida: Araneae) Faunası İçin Üç Yeni Kayıt^[*]

Öz: Bayburt ili, örümcek faunası açısından bugüne kadar yeterince çalışılmamıştır. Bayburt ilinde gerçekleştirilen bu çalışma sonucunda Türkiye için üç yeni kayıt tespit edilmiştir. Bu türler; *Agyneta fuscipalpus* (C. L. Koch, 1836), *Micaria lenzi* Bösenberg, 1899 ve *Synaphris lehtineni* Marusik, Gnelitsa & Kovblyuk, 2005'dir. Oldukça nadir yayılış gösteren Synaphridae familyasına ait *Synaphris* Simon, 1894 cinsi dünya genelinde 11 tür ile temsil edilmektedir. Bu türlerden yalnızca 4'ü Avrupa'da dağılım göstermektedir. *Synaphris lehtineni*, Synaphridae familyasının Türkiye'de kaydedilen ilk türü olması açısından son derece önemlidir. Dünyadaki en çeşitli örümcek familyalarından biri olan Linyphiidae familyasına ait *Agyneta* Hull, 1911 cinsi dünya genelinde 201 tür içermektedir. Bu türlerin 43'ü Avrupa'da da bulunmaktadır. Türkiye'de yalnızca üç türü bulunan cinse, *Agyneta fuscipalpus* türü yeni kayıt olarak dahil edilmiştir. Geniş bir dağılıma sahip olan Gnaphosidae familyasının *Micaria* Westring, 1851 cinsi dünyada 124 tür ile temsil edilmektedir. Bu türlerden 34'ü Avrupa'da da bulunmaktadır. Bu çalışmadan önce Türkiye'den bu cinse ait 11 tür tespit edilmişti. Bu çalışma ile *Micaria lenzi* Türkiye'den ilk kez kaydedilmiştir. Örnekler kayalık habitatlardan ve taş altlarından toplanmıştır. Örnekler stereomikroskop kullanılarak teşhis edilmiş ve dijital kamera ile fotoğraflanmıştır. Yeni kayıtların morfolojik özellikleri ve fotoğrafları, detaylı tanımları ile birlikte sunulmuştur.

Anahtar kelimeler: Araneae, Bayburt, fauna, Türkiye, yeni kayıtlar.

INTRODUCTION

Based on the most recent data, there are 1282 spider species belonging to 57 families in Türkiye (Danışman et al., 2024).

The family Linyphiidae is represented by 4940 species belonging to 640 genera in the world (World Spider Catalog, 2025). In Türkiye, it contains 156 species belonging to 74 genera (Danışman et al., 2024). While the genus *Agyneta* belonging to this family is represented by

201 species in the world, there are only three species of the genus in Türkiye. These species are *Agyneta innotabilis* (O. Pickard-Cambridge, 1863), *Agyneta punctata* Wunderlich, 1995 and *Agyneta rurestris* (C. L. Koch, 1836) (Coşar et al., 2012; Danışman et al., 2024). Another species belonging to this genus was recorded from Türkiye by this study.

The family Gnaphosidae is represented by 2479 species belonging to 153 genera in the world. In Türkiye,

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it contains 163 species belonging to 34 genera. While the genus *Micaria* belonging to this family is represented by 124 species in the world, there are 11 species of this genus in Türkiye. These species are *Micaria albovittata* (Lucas, 1846), *Micaria bosmansii* Kovblyuk & Nadolny, 2008, *Micaria coarctata* (Lucas, 1846), *Micaria dives* (Lucas, 1846), *Micaria formicaria* (Sundevall, 1831), *Micaria fulgens* (Walckenaer, 1802), *Micaria pallipes* (Lucas, 1846), *Micaria pulicaria* (Sundevall, 1831), *Micaria rossica* Thorell, 1875, *Micaria silesiaca* L. Koch, 1875 and *Micaria sociabilis* Kulczyński, 1897 (Coşar & Danışman, 2021; Danışman et al., 2024; Demir et al., 2014; Demircan Aksan & Topçu, 2022; Demircan Aksan & Topçu, 2024; Efil et al., 2012; Topçu et al., 2007). With a new record from Bayburt Province, this number has increased to 12.

The family Synsphyridae is represented by 13 species belonging to three genera in the world. The presence of the family Synsphyridae in Türkiye is indicated by a genus record (*Synsphyris* sp.) (Marusik & Kunt, 2011; Danışman et al., 2024). In this study, *Synsphyris lehtineni* Marusik, Gnelitsa & Kovblyuk, 2005 was identified as both the first species record of the family and a new record for Türkiye.

MATERIAL AND METHOD

The specimens in this study were collected from Aydıntepe, Merkez and Demirözü Districts of Bayburt Province in 2024. *Agyneta fuscipalpus* and *Synsphyris lehtineni* were collected from rocky areas, while *Micaria lenzi* was collected from under stones. The specimens were examined using an Olympus SZX-16 stereomicroscope. Photographs of the new records were taken with a Canon EOS 500D camera and edited with PhotoScape. Measurements are given in millimetres (mm). The new records were preserved in 70% ethanol. The locations where the species were collected from Bayburt Province are shown in Figure 1. The online databases Nentwig et al., (2025) and World Spider Catalog, (2025) were used for identification and zoogeographic distribution of spider species. Copulatory organs of *A. fuscipalpus* were mainly compared with Lee and Merrett, (2001), Thaler, (1983), Thaler and Noflatscher, (1990) and Wiehle, (1956); The epigyne and vulva of *M. lenzi* were primarily compared with Heimer and Nentwig, (1991), Marusik et al., (2014), Reimoser, (1937) and Roberts, (1998); The pedipalp of *S. lehtineni* was mainly compared with Lecigne, (2023) and Marusik et al., (2005).

RESULTS

Family: Gnaphosidae Banks, 1892

Genus: *Micaria* Westring, 1851

Micaria lenzi Bösenberg, 1899

Material Examined: (BUAM GNA-04/04), Türkiye, Bayburt Province, Demirözü District, surroundings of Demirözü Dam, 1♀, 40°07'46.19"N 39°53'53.76"E, 1720 m., 15.07.2024, collected from beneath stone, leg. N. Demircan Aksan.

Description: Female (Figure 2a-e). Total length 3.0. Carapace length 1.2, width 0.8. Abdomen length 1.8, width 1.1. Prosoma and chelicerae reddish brown. Legs yellowish brown with dark brown femur. Abdomen brown. Epigyne and vulva as in Figure 2d, e.

Distribution: Caucasus, Europe, Russia (Europe to South and north-eastern Siberia), China, Iran, Central Asia (World Spider Catalog, 2025).

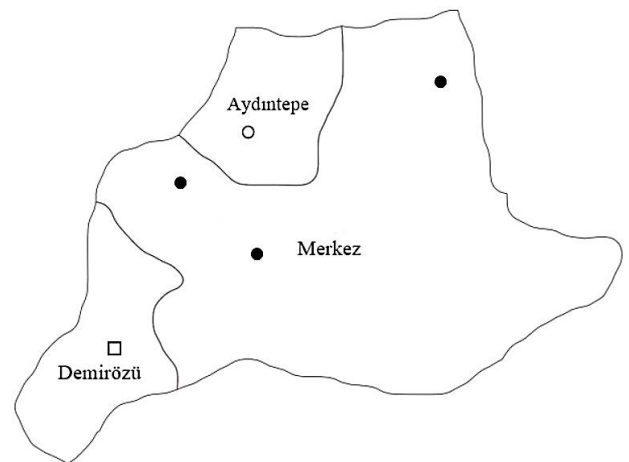


Figure 1. Collected locations of new records from Bayburt Province □ *Micaria lenzi* Bösenberg, 1899 ● *Agyneta fuscipalpus* (C. L. Koch, 1836) ○ *Synsphyris lehtineni* Marusik, Gnelitsa & Kovblyuk, 2005.

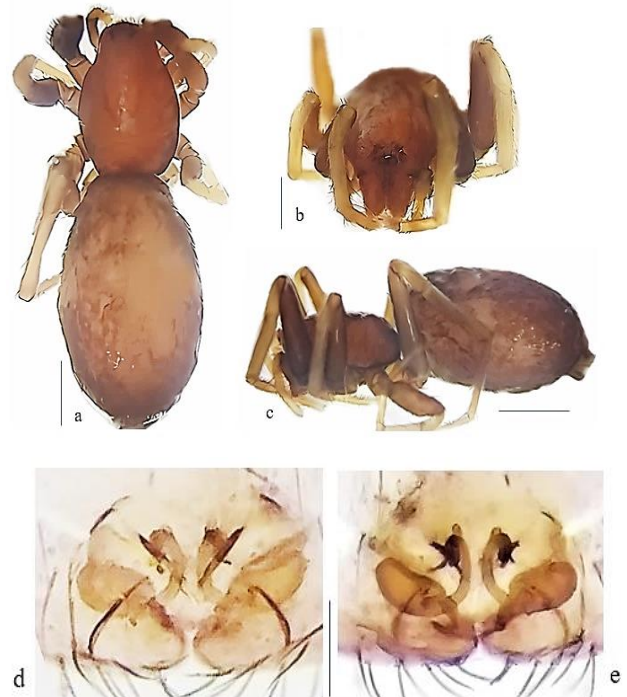


Figure 2. *Micaria lenzi* Bösenberg, 1899 (♀) Habitus, a. dorsal view b. frontal view c. lateral view; Epigyne d. ventral view e. dorsal view (Scale: a-c. 0.5 mm, d, e. 0.1 mm).

Family: Linyphiidae Blackwall, 1859

Genus: *Agyneta* Hull, 1911

Agyneta fuscipalpus (C. L. Koch, 1836)

Material Examined: (BUAM LIN-01/03), Türkiye, Bayburt Province, Merkez, Akşar Village road, around Korgan Bridge, 1♂, 40°20'11.04"N 40°00'03.68"E, 1636 m., 29.08.2024; Bayburt Province, Merkez, Yoncalı Village road, 1♂, 40°29'38.47"N 40°33'42.26"E, 2300 m., 01.09.2024; Bayburt Province, Merkez, surroundings of Danişment Pond, 1♂, 3♀, 40°14'48.91"N 40°09'59.77"E, 1650 m., 14.09.2024, collected from the rocky area, leg. N. Demircan Aksan.

Description: Male (Figure 3a, c-e) Total length 2.1. Carapace length 0.9, width 0.7. Abdomen length 1.2, width 0.6. Prosoma and chelicerae brown. Legs yellowish brown. Abdomen dark brown. Pedipalp with broad lamella characteristic as in Figure 3c-e.

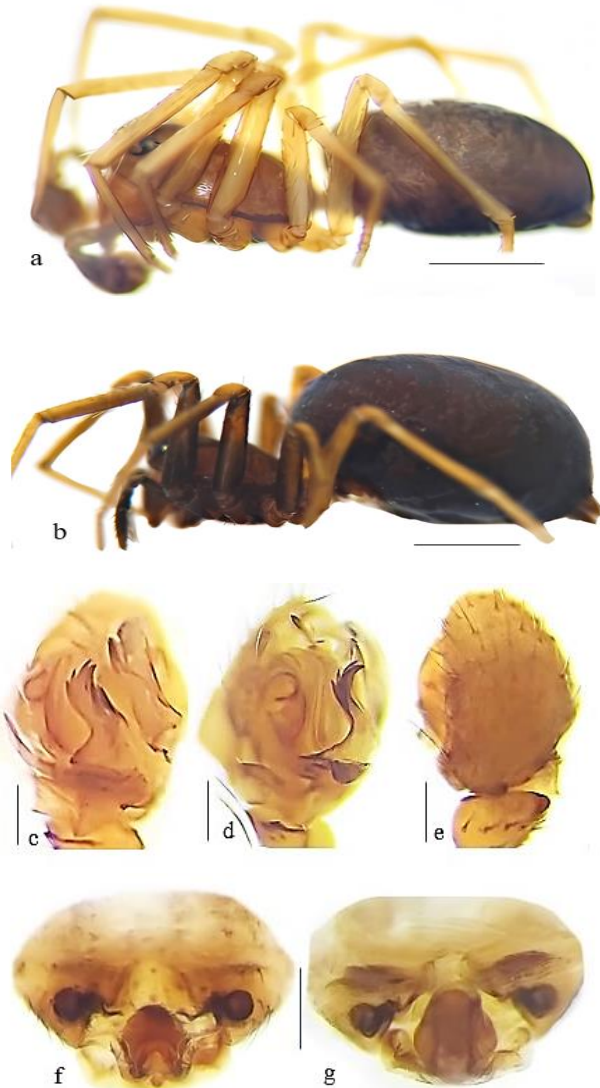


Figure 3. *Agyneta fuscipalpus* (C. L. Koch, 1836) (♂, ♀) Habitus, a. male, lateral view b. female, lateral view; Pedipalp c. ventral view d. retrolateral view e. dorsal view; Epigyne f. ventral view g. dorsal view (Scale: a, b. 0.5 mm, c-g. 0.1 mm).

Female (Figure 3b, f-g) Total length 2.5. Carapace length 0.8, width 0.9. Abdomen length 1.7, width 1.1. Prosoma and chelicerae brown. Legs yellowish brown. Abdomen dark brown. Epigyne and vulva as in Figure 3f-g.

Distribution: Azores, Cape Verde, Europe, North Africa, Caucasus, Russia (Europe to South Siberia), Central Asia, Iran (World Spider Catalog, 2025).

Family: Synsphyridae Wunderlich, 1986

Genus: *Synsphyris* Simon, 1894

Synsphyris lehtineni Marusik, Gnelitsa & Kovblyuk, 2005

Material Examined: (BUAM SYN-01/01), Türkiye, Bayburt Province, Aydıntepe District, around Aydıntepe Plateau, 1♂, 40°25'47.62"N 40°07'47.77"E, 2240 m., 14.07.2024, collected from rocky and sparse vegetation, leg. N. Demircan Aksan.

Description: Male (Figure 4a-f) Total length 1.0. Carapace length 0.4, width 0.5. Abdomen length 0.6, width 0.5. Prosoma and chelicerae brown. Legs yellowish brown. Abdomen dark brown. Pedipalp with long embolus as in Figure 4d-f.

Distribution: Bulgaria, Romania, Ukraine, Greece (World Spider Catalog, 2025).



Figure 4. *Synsphyris lehtineni* Marusik, Gnelitsa & Kovblyuk, 2005 (♂) Habitus, a. dorsal view b. frontal view c. lateral view; Pedipalp d. prolateral view e-f. retrolateral view (Scale: a-c. 0.2 mm, d-f. 0.1 mm).

CONCLUSION

As a result, this study has provided important contributions to the araneofauna of Türkiye. Three new records have been added to the spider fauna of Türkiye in the current study. It is expected that the microclimatic characteristics of Bayburt Province will significantly contribute to the spider diversity with the studies to be carried out.

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