J. Insect Biodivers. Syst. 11 (2), 269–289 *https://jibs.modares.ac.ir*

OPEN ACCESS

Tarbiat Modares University Press | Research Article | https://doi.org/10.61186/jibs.11.2.269 | **ISSN**: 2423-8112
Entomological Society of Iran | Faunistic | *https://zoobank.org/urn:lsid:zoobank.org:0D2DDCCF-FAF4-40FF-B0B9-810B01EA8D5B*

New records of spiders (Arachnida: Araneae) from the Western Balkans

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ABSTRACT. In this study, we present new faunistic data on spiders (Arachnida: Araneae) from the Western Balkans. Our findings include the first records of six genera and 23 species for Kosovo: *Micaria* (2 species), *Nomisia* (2 species), *Allagelena* (1 species), *Alopecosa* (1 species), *Ballus* (1 species), *Cheiracanthium* (1 species), *Clubiona* (1 species), *Dipoena* (1 species), *Enoplognatha* (1 species), *Eresus* (1 species), *Hoplopholcus* (1 species), *Icius* (1 species), *Mendoza* (1 species), *Mimetus* (1 species), *Myrmarachne* (1 species), *Talavera* (1 species), *Tegenaria* (1 species), *Trochosa* (1 species), *Walckenaeria* (1 species), *Zodarion* (2 species), and *Zora* (1 species). Additionally, two genera and two species are newly recorded for Albania. One species each is newly recorded for Serbia and North Macedonia. Photographs of the habitus and copulatory organs are provided for all treated species, supporting identification and taxonomic comparisons.

Keywords: Albania, diversity, distribution, Kosovo, North Macedonia, Serbia

Received: *September 02, 2024*
Accepted: *November 21, 2024*
Published: *March 18, 2025*
Subject Editor: *Alireza Zamani*

Citation: Geci, D., Ibrahimi, H., Bilalli, A. & Musliu, M. (2025) New records of spiders (Arachnida: Araneae) from the Western Balkans. *Journal of Insect Biodiversity and Systematics*, 11 (2), 269–289.

INTRODUCTION

The Western Balkans, a region in Southeast Europe, is known for its diverse landscapes, including rugged mountain ranges such as the Albanian Alps, the Dinaric Alps, and the Sharr Mountains, as well as fertile plains and coastal areas along the Adriatic Sea. This region encompasses the countries of Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia. The spider fauna in the Western Balkans remains largely unexplored. Current reports indicate that Albania has 580 species, Bosnia and Herzegovina has 182 species, Kosovo has 244 species, North Macedonia has 834 reported species and Serbia has 774 reported species (Nentwig et al., 2024). This study aims to provide records on previously unreported spider species from Albania, Kosovo, North Macedonia, and Serbia.

MATERIAL AND METHODS

Spiders were collected from 26 sites across the Western Balkans using a variety of methods, including hand collecting, pitfall traps, sieving nets, sweep nets, beating tree branches, and an aspirator. The

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specimens were preserved in 70% ethanol for long-term storage and examined using an Olympus stereomicroscope by the first author. Digital images of the specimens were captured using the GXCAPTURE software program. Species identification was based on the online platform Spiders of Europe (Nentwig et al., 2024). To examine the female reproductive organs, which are crucial for species identification, copulatory organs were dissected and boiled in 10% KOH to soften the tissue. The geographical distribution of the collected species was mapped and visualized using the QGIS software (Fig. 1). The nomenclature of all species follows the World Spider Catalog (2024), and all taxa are listed alphabetically. The map was visualized using QGIS (Fig. 1). The nomenclature follows the World Spider Catalog (2024), and the taxa are listed alphabetically. New records are indicated with an asterisk (*). The studied specimens are deposited in the Department of Biology, University of Prishtina.

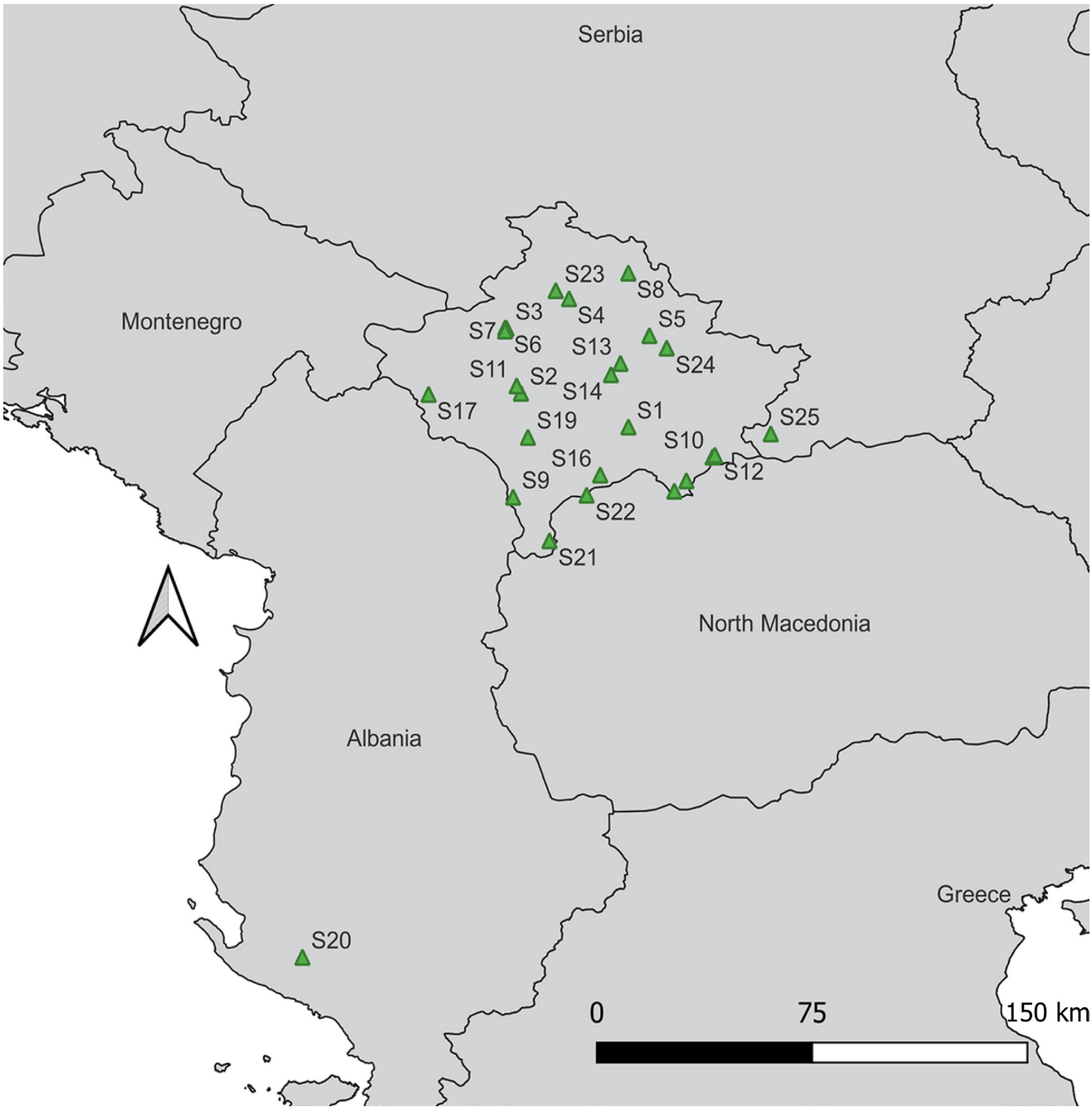

Figure 1. Map showing the locations of spider sampling sites across the study areas in the Western Balkans.

RESULTS

A total of 25 species belonging to 22 genera and 13 families were identified. Among them, six genera and 24 species are new to Kosovo, one genus and two species are new to Albania, and one species is new to Serbia and North Macedonia.

Taxonomic hierarchy

Class Arachnida Lamarck, 1801

Order Araneae Clerck, 1757

Family Agelenidae C. L. Koch, 1837

Genus *Allagelena* Zhang, Zhu & Song, 2006

***Allagelena gracilens* (C. L. Koch, 1841)** (Fig. 2A–F)*

Allagelena gracilens: Zhang et al., 2006:88, figs 23–28(♂♀). For a full list of 26 taxonomic entries, see WSC (2024).

Material examined. 2♂♂, 3♀♀, KOSOVO, Nerodime e Epërme, Ferizaj (42°21'49.32''N, 21°3'9.72''E, 691 m a.s.l.), 08-IX-2021, D. Geci., leg.

Distribution. West Palaearctic (WSC, 2024), Kosovo (**new generic record**). It was previously reported from Albania, Bosnia and Herzegovina, North Macedonia and Serbia (Nentwig et al., 2024).

Genus *Tegenaria* Latreille, 1804

***Tegenaria hasperi* Chyzer, 1897** (Fig. 2G–H)*

Tegenaria hasperi: Bolzern et al., 2013:802, fig. 15M-N (♂♀). For a full list of 18 taxonomic entries, see WSC (2024).

Material examined. 3♂♂, KOSOVO, Veriq i ri, Istog, 05-IX-2020, D. Geci, leg.; 3♂♂, KOSOVO, Panorc, Malishevë (42°29'45.24''N, 20°36'57.96''E, 538 m a.s.l.), 23-VIII-2020, A. Bilalli, H. Ibrahimi, leg.; 2♂♂, KOSOVO, Veriq, Istog (42°45'1.8''N, 20° 33'26.64''E, 538 m a.s.l.), 22-VI-2024, D. Geci, leg.; 1♂, KOSOVO, Kushtovë, Mitrovicë (42°52'2.64''N, 20°48'41.04''E, 520 m a.s.l.), 24.VII. 2023, M. Musliu, leg.; 2♂♂, KOSOVO, Mirushë, Malishevë (42°31'28.56''N, 20°35'54.96''E, 451 m a.s.l.), 15-VII-2023, Bilalli & party, leg.

Distribution. France to Turkey, Russia (Europe, Caucasus); introduced to Britain (WSC, 2024), Kosovo (**new record**). In the Western Balkans, it was previously reported from Albania, North Macedonia and Serbia (Nentwig et al., 2024).

Family Cheiracanthiidae Wagner, 1887

Genus *Cheiracanthium* C. L. Koch, 1839

***Cheiracanthium mildei* L. Koch, 1864** (Fig. 3A–E)*

Cheiracanthium mildei: Özkütük et al., 2019:185 fig. 1A–D (♂♀). For a full list of 35 taxonomic entries, see WSC (2024).

Material examined. 1♂, KOSOVO, Prishtinë, Bardhosh (42°43'18.12''N, 21°8'16.44''E, 580 m a.s.l.), 21-IV-2022, H. Ibrahimi, leg.; 2♂♂, 3♀♀, KOSOVO, Veriq, Istog (42°45'9''N, 20°33'7.56''E, 508 m a.s.l.), 15-VI-2020, D. Geci, leg.

Distribution. West Palaearctic; introduced to North America, Argentina (WSC, 2024), and Kosovo (**new record**). In the Western Balkans, it was previously reported from Albania, Montenegro, North Macedonia and Serbia (Nentwig et al., 2024).

Family Clubionidae Simon, 1878

Genus *Clubiona* Latreille, 1804

***Clubiona caerulescens* L. Koch, 1867** (Fig. 3F–H)*

Clubiona caerulescens: Ono & Hayashi, 2009:544, figs 154–156 (♂♀). For a full list of 40 taxonomic entries, see WSC (2024).

Material examined. 1♂, NORTH MACEDONIA, Tanushë, Kumanov (42°14'45.6''N, 21°23'41.28''E, 1077 m a.s.l.), 15-VII-2018, A. Bilalli & M. Musliu, leg.

Distribution. Europe to Far East (WSC, 2024), North Macedonia (**new record**). In the Western Balkans, it was previously reported from Albania, Bosnia and Herzegovina, Montenegro and Serbia (Nentwig et al., 2024).

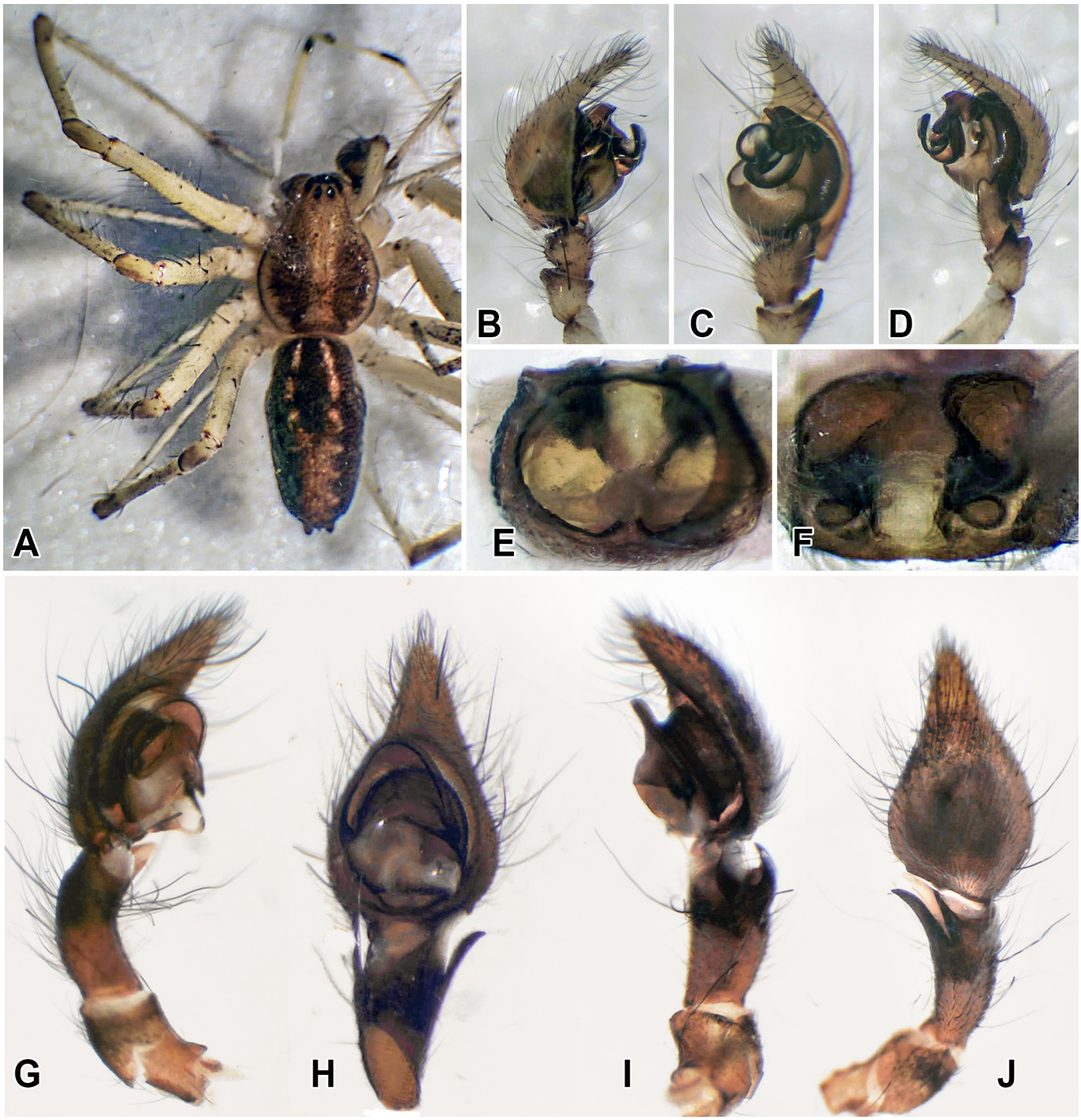

Figure 2. *Allagelena gracilens* (C. L. Koch, 1841) (A–F). **A.** Habitus, dorsal view; **B.** Male palp, prolateral view; **C.** Male palp, ventral view; **D.** Male palp, retrolateral view; **E.** Epigyne, ventral view; **F.** Vulva, dorsal view. *Tegenaria hasperi*, Chyzer, 1897 (G–J). **G.** Male palp, prolateral view; **H.** Male palp, ventral view; **I.** Male palp, retrolateral view; **J.** Male palp, dorsal view.

Clubiona neglecta O. Pickard-Cambridge, 1862 (Fig. 3I–K)*

Clubiona neglecta: O. Pickard-Cambridge, 1879:25, pl. 3, fig. 3(♂♀). For a full list of 52 taxonomic entries, see WSC (2024).

Material examined. 1♀, KOSOVO, Veriq, Istog (42°45'9"N, 20°33'7.56"E, 508 m a.s.l.), 15-XI-2023, D. Geci., leg.

Distribution. West Palaearctic (WSC, 2024), Kosovo (**new record**). In the Western Balkans, it was previously reported from North Macedonia and Serbia (Nentwig et al., 2024).

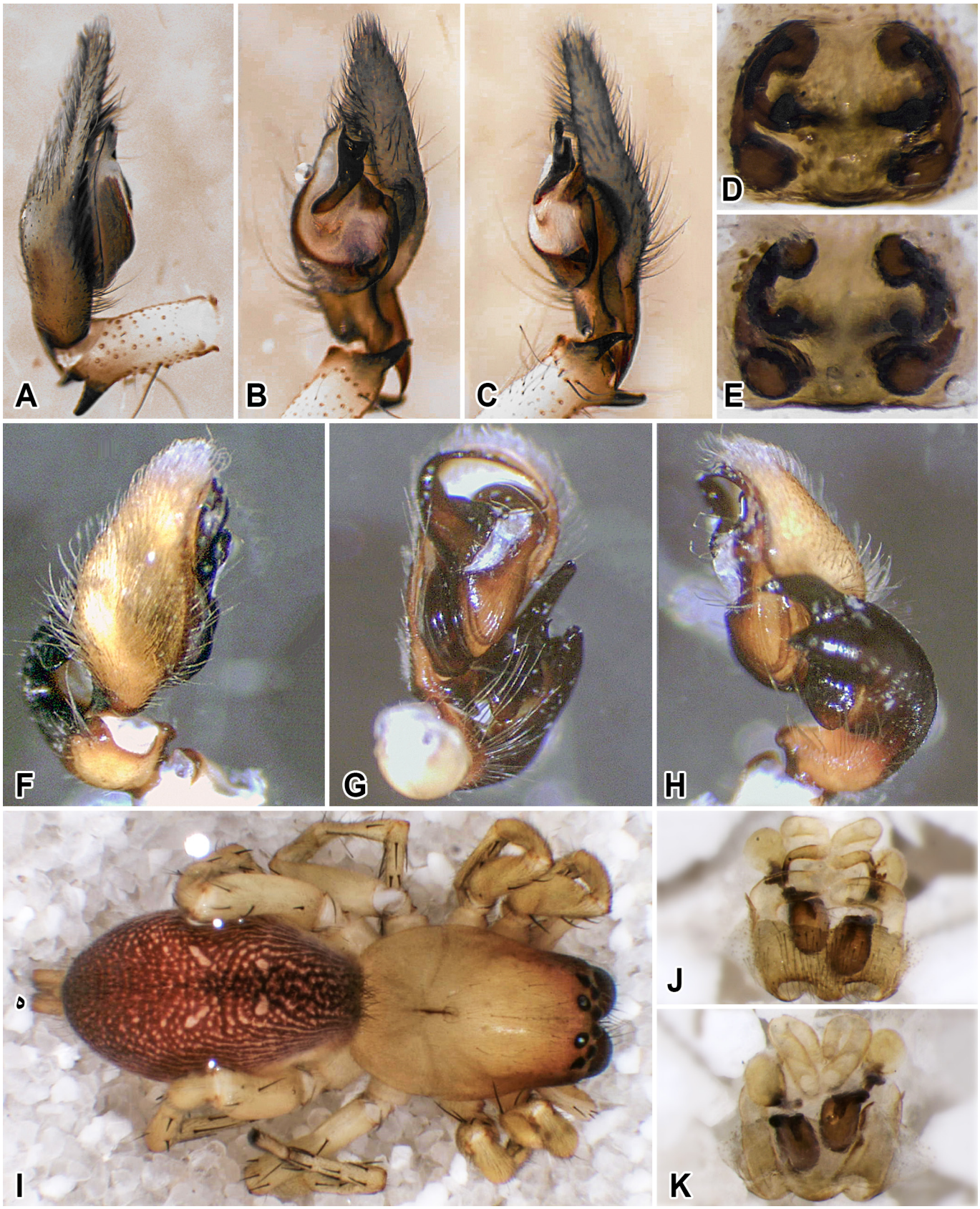

Figure 3. *Cheiracanthium mildei* L. Koch, 1864 (A–E). **A.** Male palp, prolateral view; **B.** Male palp, ventral view; **C.** Male palp, retrolateral view; **D.** Epigyne, ventral view; **E.** Vulva, dorsal view. *Clubiona caerulescens* L. Koch, 1867 (F–H). **F.** Male palp, prolateral view; **G.** Male palp, ventral view; **H.** Male palp, retrolateral view. *Clubiona neglecta* Pickard-Cambridge, 1862 (I–K). **I.** Habitus, dorsal view; **J.** Epigyne, ventral view; **K.** Vulva, dorsal view.

Family Eresidae C. L. Koch, 1845

Genus *Eresus* Walckenaer, 1805

Eresus moravicus Řezáč, 2008 (Fig. 4A–G)*

Eresus moravicus: Řezáč et al., 2008:274, figs 2K–Q, 3K–Q, 4B, E, H, K, 5B, E (d-♂♀). *Eresus moravicus*: Naumova & Deltshev, 2021:65, figs 3–7 (♂♀). For a full list of 10 taxonomic entries, see WSC (2024).

Material examined. 5♂♂, 2♀♀, KOSOVO, Bajgorë, Mitrovicë (42°58'4.44''N, 21°3'8.64''E, 1361 m a.s.l.), 06-VI-2021, D. Geci, leg.; 1♂, KOSOVO, Koretnik, Dragash (42°5'19.68''N, 20°35'3.84''E, 191 m a.s.l.), 15-V-2021, D. Geci, leg.

Distribution. Europe (WSC, 2024), Kosovo (**new record**). In the Western Balkans, it was previously reported from Albania and Serbia (Nentwig et al., 2024).

Family Gnaphosidae Banks, 1892

Genus *Micaria* Westring, 1851

Micaria coarctata (Lucas, 1846) (Fig. 4H–K)*

Micaria coarctata: Chatzaki et al., 2002:577, figs 24–25, 31–32 (♂♀). For a full list of 17 taxonomic entries, see WSC (2024).

Material examined. 1♂, KOSOVO, Mirushë, Malishevë (42°31'28.56''N, 20°35'54.96''E, 461 m a.s.l.), 25-VII-2020, Bilalli & party, leg.

Distribution. Europe to Far East (WSC, 2024) Kosovo (**new record**). In the Western Balkans, it was previously reported from Albania, Montenegro and North Macedonia (Nentwig et al., 2024).

Genus *Nomisia* Dalmas, 1921

Nomisia exornata (C. L. Koch, 1839) (Fig. 5A–D)*

Nomisia exornata: Chatzaki, 2010:9, figs 24–27 (♂♀). For a full list of 21 taxonomic entries, see WSC (2024).

Material examined. 1♂, KOSOVO, Veriq, Istog (42°45'1.8''N, 20°33'26.64''E, 538 m a.s.l.), 11-VII-2024, D. Geci., leg.

Distribution. West Palaearctic (WSC, 2024), Kosovo (**new record**). In the Western Balkans, it was previously reported from Albania, North Macedonia and Serbia (Nentwig et al., 2024).

Nomisia levyi Chatzaki, 2010 (Fig. 5E–G)*

Nomisia levyi: van Helsdingen et al., 2018:15, fig. 5 (♀). For a full list of 3 taxonomic entries, see WSC (2024).

Material examined. 2♀♀, KOSOVO, Krëvenik, Hani i Elezit (42°6'44.64''N, 21°14'21.84''E, 581 m a.s.l.), 27-V-2023, D. Geci, leg.

Distribution. Albania (Kůrka et al., 2020) and Greece (Nentwig et al., 2024), Kosovo (**new record**). In the Western Balkans, it was previously reported only from Albania (Nentwig et al., 2024).

Family Linyphiidae Blackwall, 1859

Genus *Walckenaeria* Blackwall, 1833

Walckenaeria monoceros (Wider, 1834) (Fig. 6A–E)*

Walckenaeria monoceros: Seropian et al., 2023:257, figs 62–63 (♂). For a full list of 25 taxonomic entries, see WSC (2024).

Material examined. 1♂, KOSOVO, Dëbëlldeh, Viti (42°15'11.88''N, 21°24'13.68'', 1053 m a.s.l. E), 25-VI-2020, Bilalli & party, leg.

Distribution. West Palaearctic (WSC, 2024), Kosovo (**new record**). In the Western Balkans, it was previously reported from Albania and North Macedonia (Nentwig et al., 2024).

Figure 4. *Eresus moravicus* Řezáč, 2008 (A–G). **A.** Male habitus, dorsal view; **B.** Male palp, prolateral view; **C.** Male palp, ventral view; **D.** Male palp, retrolateral view; **E.** Female habitus, dorsal; **F.** Epigyne, ventral view; **G.** Vulva, dorsal view. *Micaria coarctata* (Lucas, 1846) (H–K). **H.** Habitus, dorsal view; **I.** Male palp, prolateral view; **J.** Male palp, ventral view; **K.** Male palp, retrolateral view.

Figure 5. *Nomisia exornata* (C. L. Koch, 1839) (A–D). **A.** Habitus, dorsal view; **B.** Male palp, prolateral view; **C.** Male palp, ventral view; **D.** Male palp, retrolateral view. *Nomisia levyi* Chatzaki, 2010 (E–G). **E.** Habitus, dorsal view; **F.** Epigyne, ventral view; **G.** Vulva, dorsal view.

Family Lycosidae Sundevall, 1833

Genus *Alopecosa* Simon, 1885

Alopecosa cursor (Hahn, 1831) (Fig. 6F–H)*

Alopecosa cursor: Marusik et al., 2018:350, figs 1A–C, 2A, 3A–B, 4A–B, 5A–F, 7A–B, 8A (♂♀). For a full list of 35 taxonomic entries, see WSC (2024).

Material examined. 3♂♂, KOSOVO, Golesh, Fushë Kosovë (42°34'6.96''N, 20°58'54.84''E, 980 m a.s.l.), 12-X-2020, A. Bilalli & D. Geci, leg.

Distribution. Europe to Far East (WSC, 2024), Kosovo (**new record**). In the Western Balkans, it was previously reported from Albania, North Macedonia and Serbia (Nentwig et al., 2024).

Genus *Trochosa* C. L. Koch, 1847

Trochosa hispanica Simon, 1870 (Fig. 7A–E)*

Trochosa hispanica: Marusik & Nadolny, 2020:58, figs 1A–D, 2A–K, 3C, 4A–J, 5A–D, 6A–I, 7A–I, 8A–J, 9A–G, 10A–B, 12A–H (♂♀). For a full list of 20 taxonomic entries, see WSC (2024).

Material examined. 1♂, KOSOVO, Sllatinë, Fushë Kosovë (42°36'45.72''N, 21°1'13.44''E, 622 m a.s.l.), 20-VII-2021, D. Geci, leg.

Distribution. West Palaearctic (WSC, 2024), Kosovo (**new record**). In the Western Balkans, it was previously reported from Albania, North Macedonia and Serbia (Nentwig et al., 2024).

Family Mimetidae Simon, 1881

Genus *Mimetus* Hentz, 1832

Mimetus laevigatus (Keyserling, 1863) (Fig. 7F–H)*

Mimetus laevigatus: Purgat et al., 2024:764, figs 8A–D, 9A–C, 10 (♂♀). For a full list of 19 taxonomic entries, see WSC (2024).

Material examined. 5♂♂, KOSOVO, Veriq, Istog (42°45'9''N, 20°33'7.56''E, 508 m a.s.l.), 15-VII-2023, D. Geci., leg.

Distribution. West Palaearctic (WSC, 2024), Kosovo (**new record**). In the Western Balkans, it was previously reported from Albania, Montenegro and Serbia (Nentwig et al., 2024).

Family Miturgidae Simon, 1886

Genus *Zora* C. L. Koch, 1847

Zora nemoralis (Blackwall, 1861) (Fig. 7I–J)*

Zora nemoralis: Menge, 1875:401, pl. 68, figs 227 (♂♀). For a full list of 28 taxonomic entries, see WSC (2024).

Material examined. 2♀♀, Kosovo, Prevallë, Prizeren (42°10'32.52''N, 20°56'17.52''E, 1229 m a.s.l.), 15-VII-2023, D. Geci., leg.

Distribution. West Palaearctic (WSC, 2024), Kosovo (**new record**). In the Western Balkans, it was previously reported from Albania, Montenegro, North Macedonia and Serbia (Nentwig et al., 2024).

Family Pholcidae C. L. Koch, 1850

Genus *Hoplopholcus* Kulczyński, 1908

Hoplopholcus forskali (Thorell, 1871) (Fig. 8A–C)

Hoplopholcus forskali: Huber, 2020:44, figs 194–197, 200–245 (♂♀). For a full list of 11 taxonomic entries, see WSC (2024).

Material examined. 1♂, 1♀, KOSOVO, Veriq, Istog (42°45'1.8''N, 20°33'26.64''E 508 m a.s.l.), 16-XI-2020, D. Geci, leg.

Distribution. Slovakia, Hungary, Croatia, Serbia, Romania, North Macedonia, Bulgaria, Turkey (WSC, 2024), Kosovo (**new generic record**). In the Western Balkans, it was previously reported from Albania, North Macedonia and Serbia (Nentwig et al., 2024).

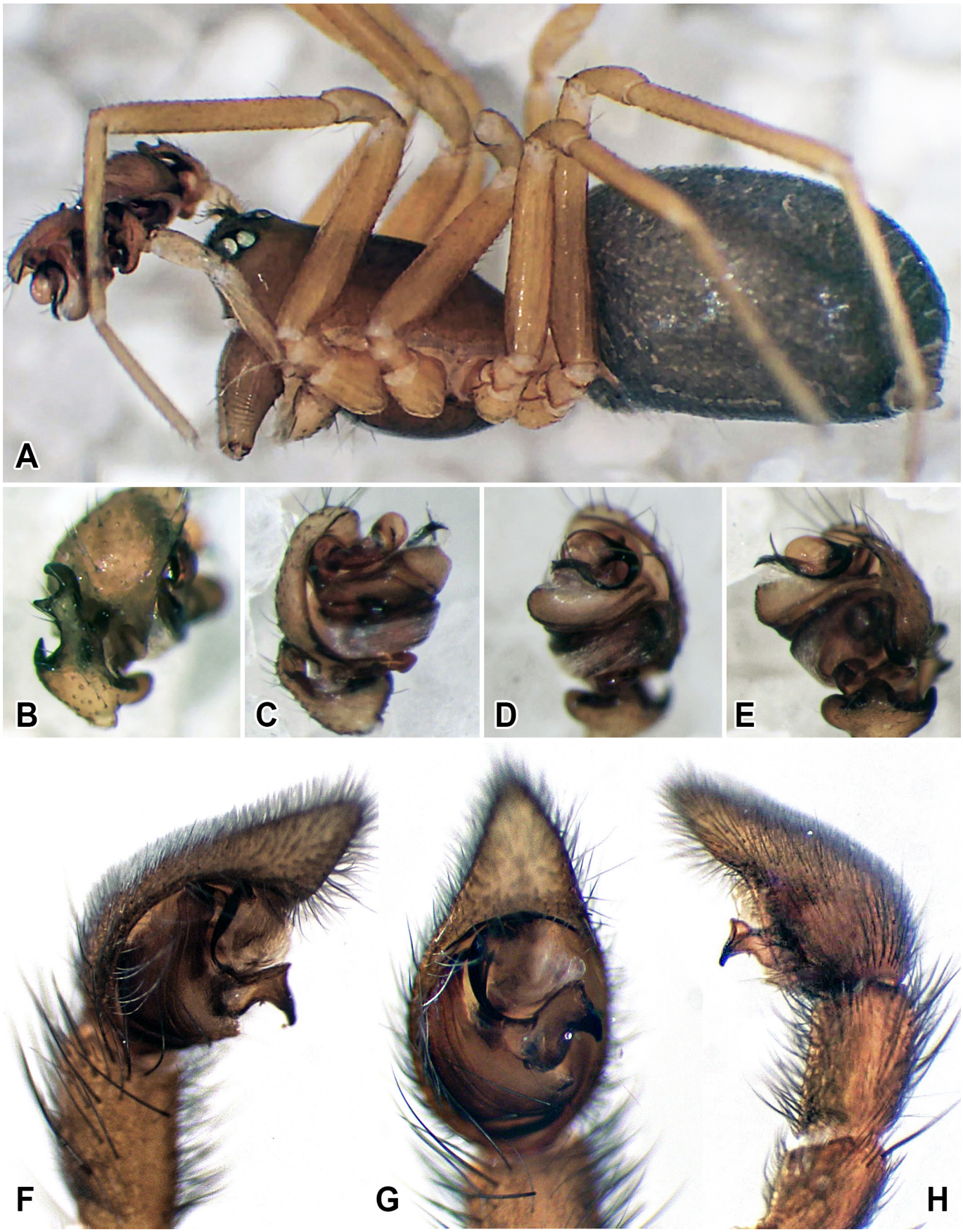

Figure 6. *Walckenaeria monoceros* (Wider, 1834) (A–E). **A.** Habitus, lateral view; **B.** Male palp prodorsal view; **C.** Male palp, prolateral view; **D.** Male palp, ventral view; **E.** Male palp, retrolateral view. *Alopecosa cursor* (Hahn, 1831) (F–H). **F.** Male palp, ventral view; **G.** Male palp, prolateral view; **H.** Male palp, retrolateral view.

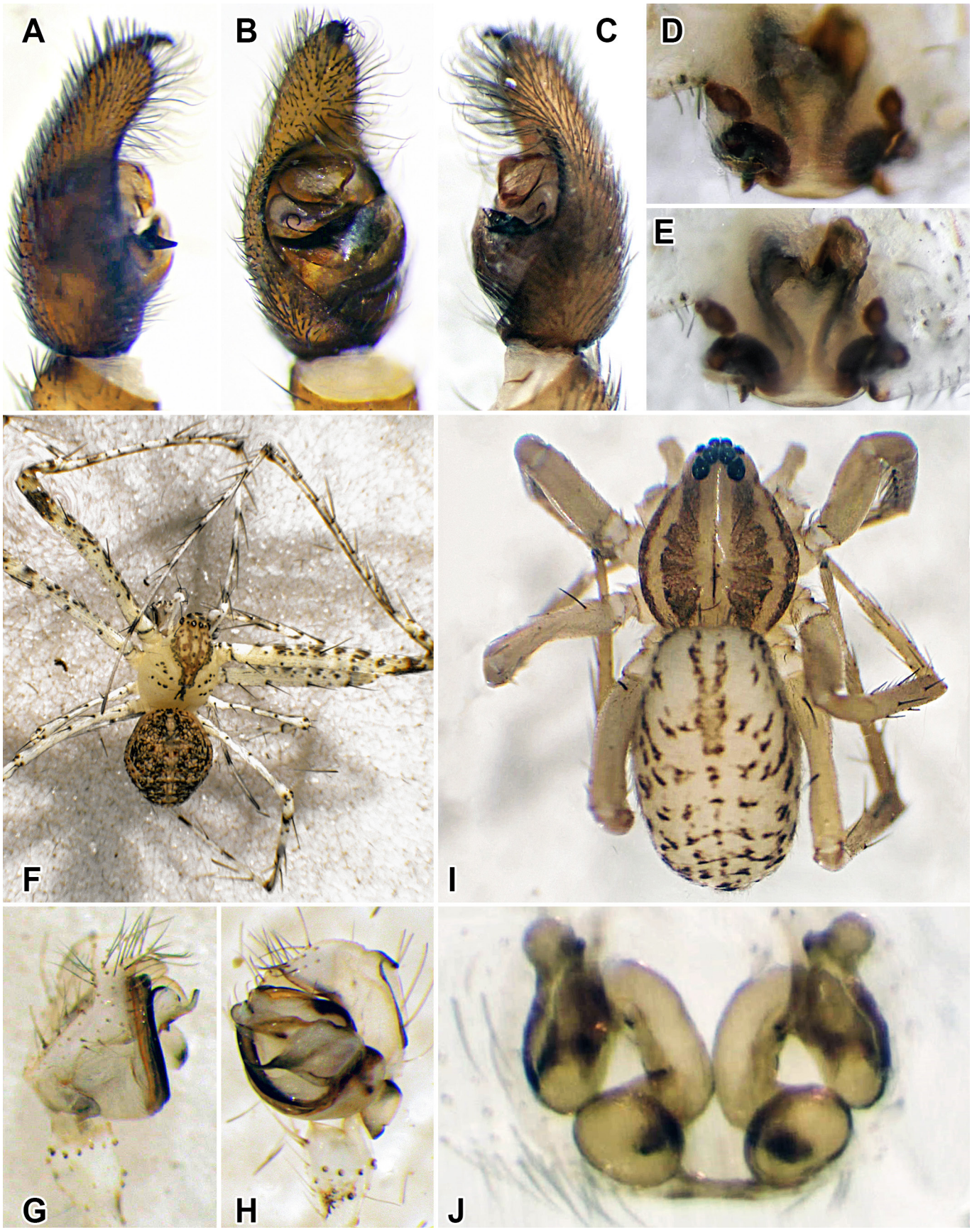

Figure 7. *Trochosa hispanica* Simon, 1870 (A–E). **A.** Male palp, prolateral view; **B.** Male palp, ventral view; **C.** Male palp, retrolateral view; **D.** Vulva, dorsal view; **E.** Epigyne view. *Mimetus laevigatus* (Keyserling, 1863) (F–H). **F.** Habitus, dorsal view; **G.** Male palp, prolateral view; **H.** Male palp, retrolateral view. *Zora nemoralis* (Blackwall, 1861) (I–J). **I.** Habitus, dorsal view; **J.** Vulva, dorsal view.

Family Salticidae Blackwall, 1841

Genus *Ballus* C. L. Koch, 1850

Ballus chalybeius (Walckenaer, 1802) (Fig. 8D–G)*

Ballus chalybeius: Azarkina & Haddad, 2020:16, figs 25–30, 442, 445 (♂). For a full list of 59 taxonomic entries, see WSC (2024).

Material examined. 1♂, KOSOVO, Gjocaj, Junik (42°29'29.76''N, 20°14'26.88''E, 1006 m a.s.l.), 24-VII-2018, D. Geci., leg.

Distribution. West Palaearctic (WSC, 2024), Kosovo (**new generic record)**. In the Western Balkans, it was previously reported from Albania, Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia (Nentwig et al., 2024).

Genus *Mendoza* G.W. Peckham & E.G. Peckham, 1894

Mendoza canestrinii (Ninni, 1868) (Fig. 8H–G)*

Mendoza canestrinii: Prószyński, 2017:33, figs 14Q, 17J (♂♀). For a full list of 86 taxonomic entries, see WSC (2024).

Material examined: 1♂, KOSOVO, Krushë e madhe, Gjakovë (42°19'23.88''N, 20°38'40.2''E,398 m a.s.l.), 24-VII-2018, D. Geci, leg.

Distribution. Europe to Far East (WSC, 2024), Kosovo (**new generic record)**. In the Western Balkans, it was previously reported from Albania, North Macedonia and Serbia (Nentwig et al., 2024).

Genus *Myrmarachne* MacLeay, 1839

Myrmarachne formicaria (De Geer, 1778) (Fig. 9A–D)*

Myrmarachne formicaria: Gall & Edwards, 2016:3, fig. 2A–D (♂♀). For a full list of 91 taxonomic entries, see WSC (2024).

Material examined. 1♂, KOSOVO, Pustenik, Hani i Elezit (42°9'10.44''N, 21°17'17.88''E,480 m a.s.l.), 24-V-2017, D. Geci, leg.; 1♂, ALBANIA, Shushicë, Himarë (40°17'6.36''N, 19°43'42.24''E,381 m a.s.l.), 17-V-2024, D. Geci., leg.

Distribution. Macaronesia, Europe, Turkey, Caucasus, Russia (Europe, Caucasus, Far East), Iran, China, Korea, Japan; introduced to USA, Canada (WSC, 2024), Albania and Kosovo (**new generic record)**. In the Western Balkans, it was previously reported from Bosnia and Herzegovina, North Macedonia and Serbia (Nentwig et al., 2024).

Genus *Icius* Simon, 1876

Icius hamatus (C. L. Koch, 1846) (Fig. 9E–F)*

Icius hamatus: Rozwałka & Czaja, 2021:1, fig. 1a–e (♂♀). For a full list of 32 taxonomic entries, see WSC (2024).

Material examined. 1♀, KOSOVO, Shutman. Dragash (41°55'4.44''N, 20°43'55.92''E, 2143 m a.s.l.), 01-VII-2023, D. Geci., leg.

Distribution. Atlantic Is., North Africa, Southern Europe, Turkey, Georgia, introduced to Western and Central Europe (WSC, 2024), Kosovo (**new generic record)**. In the Western Balkans, it was previously reported from Albania and Serbia (Nentwig et al., 2024).

Genus *Talavera* G.W. Peckham & E.G. Peckham, 1909

Talavera petrensis (C. L. Koch, 1837) (Fig. 10A–E)*

Talavera petrensis: Logunov & Kronestedt, 2003:1144, figs 1, 5, 7, 12, 17–18, 23, 45–46, 143–148 (♂♀). For a full list of 43 taxonomic entries, see WSC (2024).

Material examined. 1♂, KOSOVO, Shutman. Dragash (41°55'4.44''N, 20°43'55.92''E, 2143 m a.s.l.), 01-VIII-2023, H. Ibrahimi, leg.

Distribution. West Palaearctic, China (WSC, 2024), Kosovo (**new generic record)**. In the Western Balkans, it was previously reported only from North Macedonia (Nentwig et al., 2024).

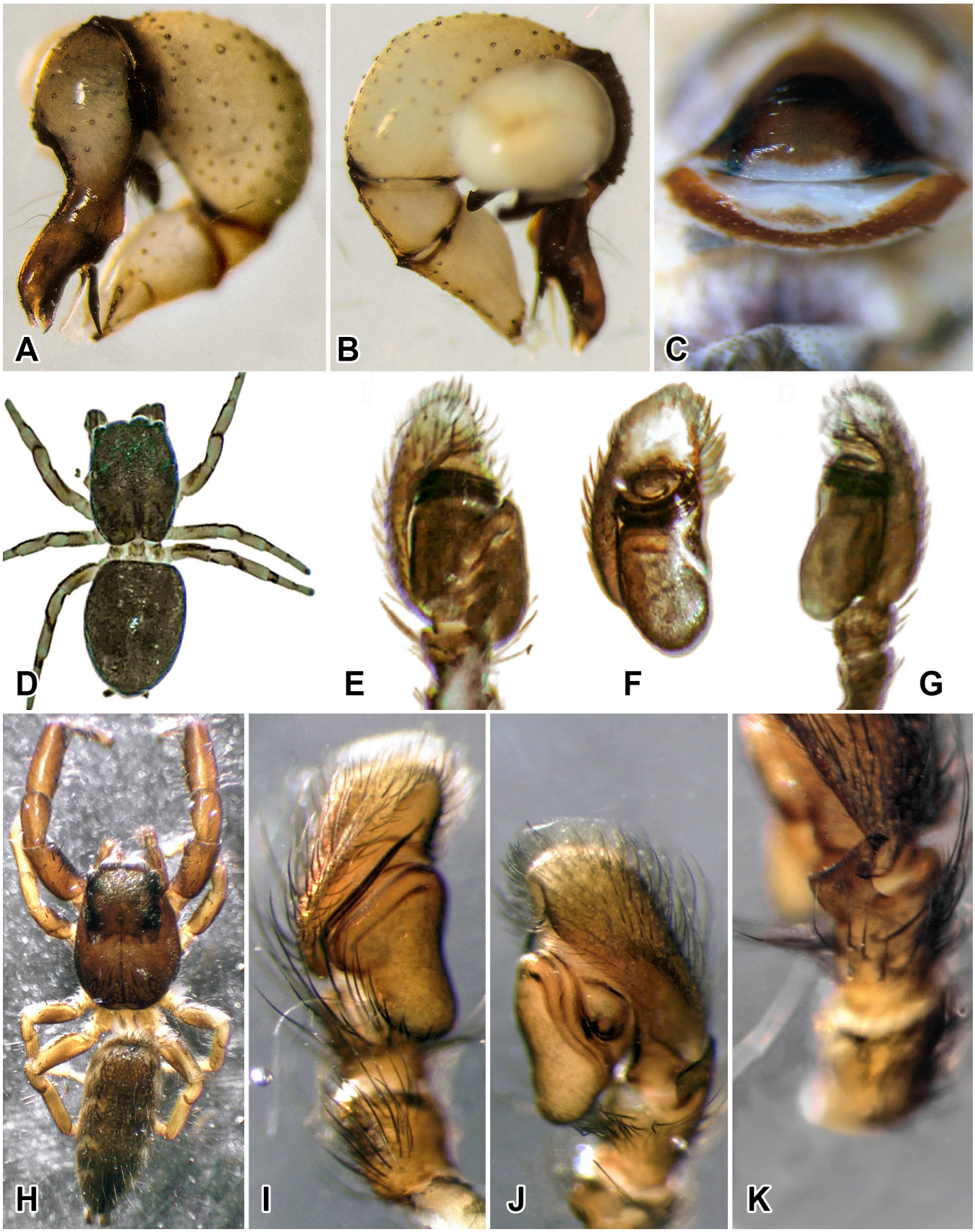

Figure 8. *Hoplopholcus forskali* (Thorell, 1871) (A–C). **A.** Male palp, prolateral view; **B.** Male palp, retrolateral view; **C.** Epigyne, ventral view. *Ballus chalybeius* (Walckenaer, 1802) (D–G). **D.** Habitus, dorsal view; **E.** Male palp, prolateral view; **F.** Male palp, ventral view; **G.** Male palp, retrolateral view. *Mendoza canestrinii* (Ninni, 1868) (H–K). **H.** Habitus, dorsal view; **I.** Male palp, provental view; **J.** Male palp, retrolateral view; **K.** Retrolateral tibial apophysis.

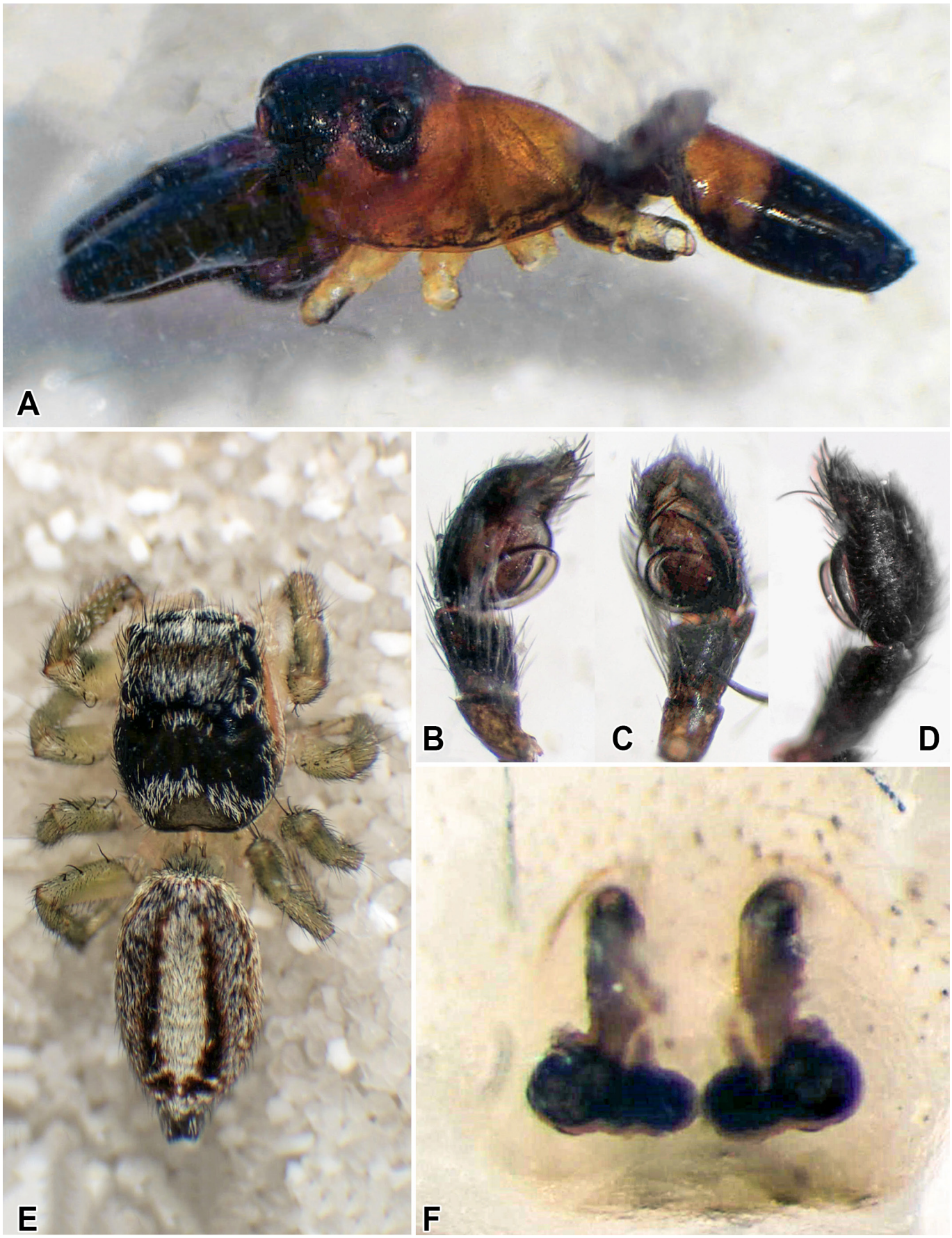

Figure 9. *Myrmarachne formicaria* (De Geer, 1778) (A–D). **A.** Habitus, lateral view; **B** Male palp, proventral view; **C.** Male palp, ventral view; **D.** Male palp, retrolateral view. *Icius hamatus* (C. L. Koch, 1846) (E–F). **E.** Habitus, dorsal view; **F.** Vulva, dorsal view.

Family Theridiidae Sundevall, 1833

Genus *Dipoena* Thorell, 1869

Dipoena torva (Thorell, 1875) (Fig. 10F–I)*

Dipoena torva: Seropian et al., 2023:282, figs 122–124 (♂). For a full list of 35 taxonomic entries, see WSC (2024).

Material examined. 1♂, KOSOVO, Gjocaj, Junik (42°29'29.76''N, 20°14'26.88''E, 1006 m a.s.l.), 24-VII-2018, D. Geci, leg.

Distribution. West Palaearctic (WSC, 2024), Kosovo (**new generic record)**. This report marks the first record of the species in the Western Balkans.

Figure 10. *Talavera petrensis* (C. L. Koch, 1837) (A–E). **A.** Habitus, dorsal view; **B.** Prosoma, frontal view; **C.** Male palp, proventral view; **D.** Male palp, ventral view; **E.** Male palp, retrolateral view. *Dipoena torva* (Thorell, 1875) (F–I). **F.** Habitus, lateral view; **G.** Male palp, prolateral view; **H.** Male palp, ventral view; **I.** Male palp, retrolateral view.

Genus *Enoplognatha* Pavesi, 1880

Enoplognatha latimana Hippa & Oksala, 1982 (Fig. 11A–E)*

Enoplognatha latimana: Hippa & Oksala, 1982:217, figs 4–6, 12–13, 17–20 (D♂♀).For a full list of 22 taxonomic entries, see WSC (2024).

Material examined. 1♂, 1♀, KOSOVO, Prishtinë, Taukbashqe (42°39'55.8''N, 21°10'54.12''E, 627 m a.s.l.), 15-IV-2019, D. Geci, leg.

Distribution. West Palaearctic (WSC, 2024), Kosovo (**new record**). It was previously reported from Albania, Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia (Nentwig et al., 2024).

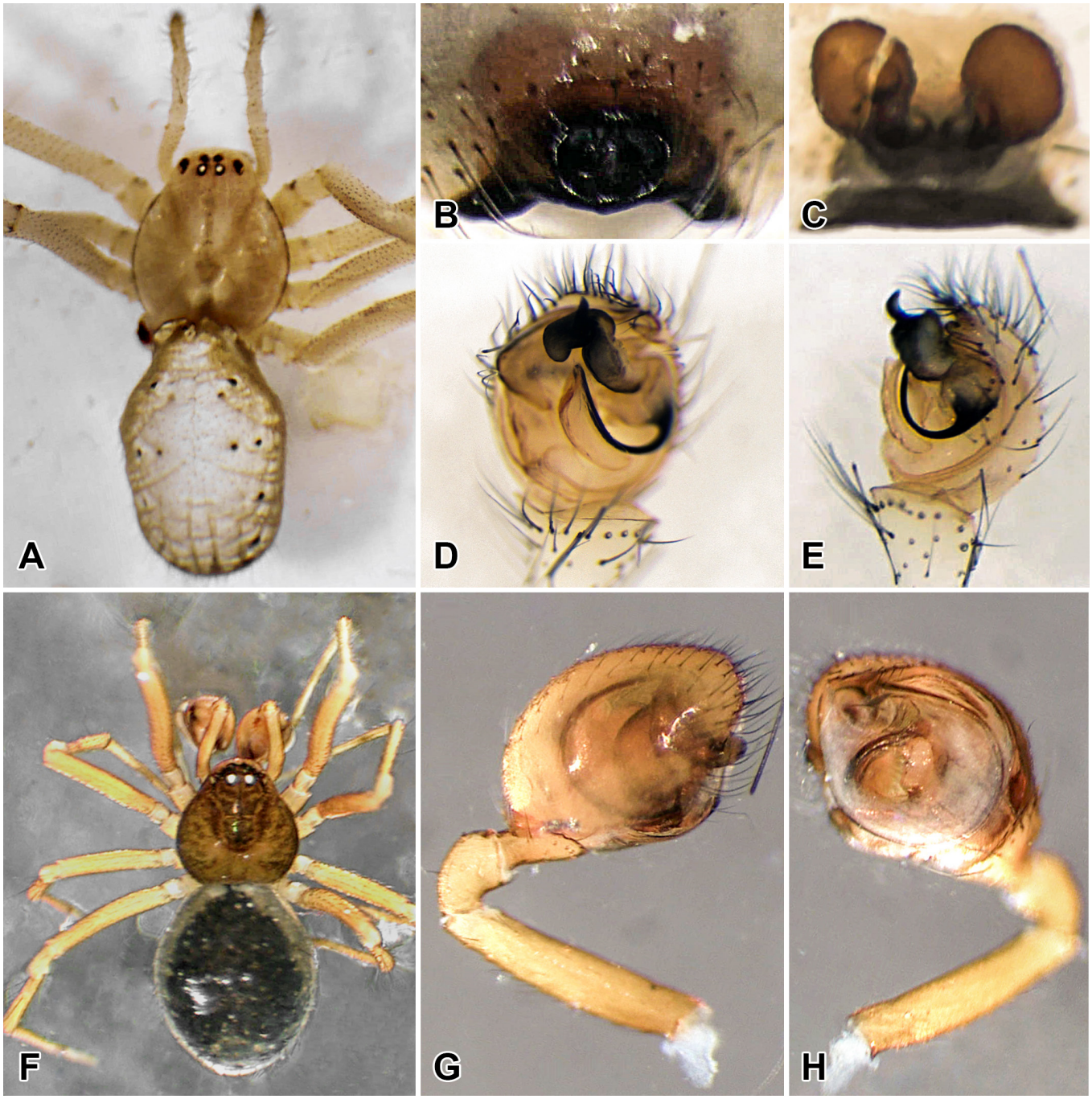

Figure 11. *Enoplognatha latimana* Hippa & Oksala, 1982 (A–E). **A.** Female habitus, dorsal view; **B.** Epigyne, ventral view; **C.** Vulva, dorsal view; **D.** Male palp, ventral view; **E.** Male palp, retrolatral view. *Sardinidion blackwalli* (O. Pickard-Cambridge, 1871) (F–H). **F.** Habitus, dorsal view; **G.** Male palp, retrodorsal view; **H.** Male palp, ventral view.

Genus *Sardinidion* Wunderlich, 1995

Sardinidion blackwalli (O. Pickard-Cambridge, 1871) (Fig. 11F–H)*

Sardinidion blackwalli Wunderlich, 2008:394, figs 570–578. For a full list of 22 taxonomic entries, see WSC (2024).

Material examined. 1 ♂, ALBANIA, Shushicë, Himarë (40°17'6.36''N, 19°43'42.24''E, 381 m a.s.l.), 17-V-2024, D. Geci., leg.

Distribution. Europe, North Africa, Turkey, Georgia (WSC, 2024), Albania (**new generic record**). In the Western Balkans, it was previously reported only from Serbia (Nentwig et al., 2024).

Family Zodariidae Thorell, 1881

Genus *Zodarion* Walckenaer, 1826

Zodarion ohridense Wunderlich, 1973 (Fig. 12A–C)*

Zodarion ohridense: Lazarov, 2007:134, figs 6–9 (♂♀). For a full list of 5 taxonomic entries, see WSC (2024).

Material examined. 1♂, Kosovo, Kobilica, Dragash, (42°5'48.12''N, 20°52'58.8''E, 2428 m a.s.l.), 15-VII-2023, D. Geci., leg.

Distribution. Europe (WSC, 2024), Kosovo (**new record**). In the Western Balkans, it was previously reported from Albania, and North Macedonia (Nentwig et al., 2024).

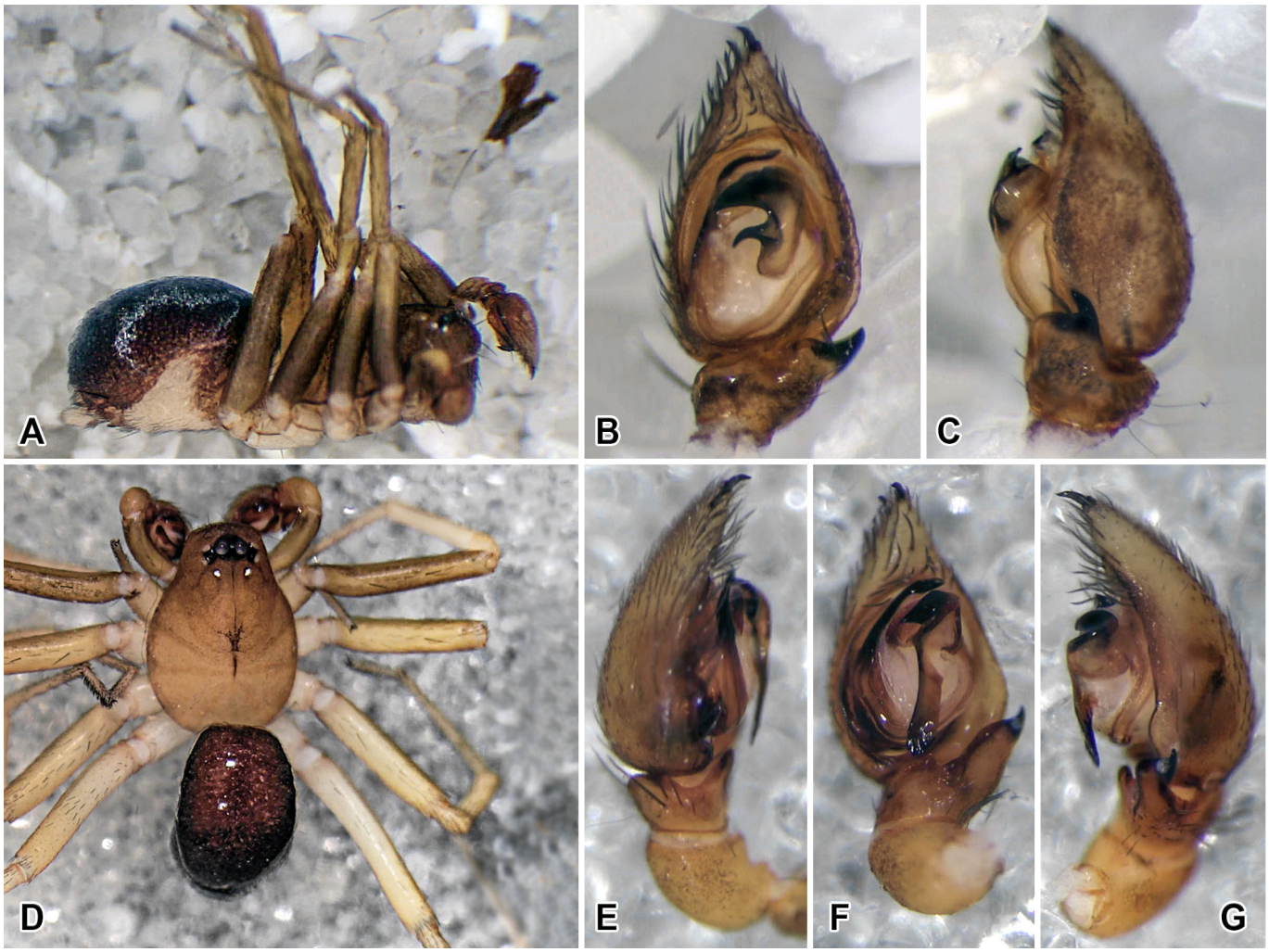

Figure 12. *Zodarion ohridense* Wunderlich, 1973 (A–C). **A** Habitus, lateral view; **B.** Male palp, ventral view. **C.** Male palp, retrolateral view. *Zodarion scutatum* Wunderlich, 1980 (D–G). **D.** Habitus, dorsal view; **E.** Male palp, prolateral view; **F.** Male palp, ventral view; **G.** Male palp, retrolateral view.

***Zodarion scutatum* Wunderlich, 1980** (Fig. 12D–G)*

Zodarion scutatum: Deltshev et al., 2022:255, figs 57–60 (♂). For a full list of 4 taxonomic entries, see WSC (2024).

Material examined. 3♂♂, KOSOVO, Veriq, Istog (42°45'1.8''N, 20°33'26.64''E, 530 m a.s.l.), 22-VI-2024, D. Geci, leg., 11-VII-2024; 1♂, KOSOVO, Çaber, Mitrovicë (42°53'57.12''N, 20°45'27''E, 589 m a.s.l.), 23-V-2023, D. Geci, leg.; 1♂, KOSOVO, Prishtinë, Germia park (42°40'22.44''N, 21°12'30.24''E, 825 m a.s.l.), 15-VI-2018, D. Geci, leg.; 1♂, SERBIA, Preshevë, Preshevë (42°20'12.84''N, 21°37'51.6''E, 690 m a.s.l.), 24-IX-2021, D. Geci., leg.

Distribution. Europe (WSC, 2024) Kosovo and Serbia (**new record**). In the Western Balkans, it was previously reported only from Montenegro (Nentwig et al., 2024).

DISCUSSION

This study enhances our understanding of spider diversity in the Western Balkans, documenting six genera and 23 species newly recorded for Kosovo, as well as additional new records for Albania, Serbia, and North Macedonia. *N. levyi*, previously thought to be confined to Albania, is now documented at its northernmost range, while *D. torva* is reported for the first time in the Western Balkans. These records expand known species distributions and highlight the region's underexplored biodiversity. Although recent studies have addressed spider diversity in parts of the Balkans (e.g., Blick, 2018; Kůrka et al., 2020; Naumova, 2020; Geci & Naumova, 2021; Naumova & Deltshev, 2021; Grapci-Kotori et al., 2022; Geci et al., 2022; Deltshev et al., 2022; Matevski et al., 2022; Geci et al., 2023; Ibrahimi et al., 2024), areas such as Kosovo and Bosnia and Herzegovina remain insufficiently studied. This study underscores the need for continued faunal surveys, which may reveal further undiscovered taxa.

AUTHOR'S CONTRIBUTION

The authors confirm their contribution to the paper as follows: D. Geci, H. Ibrahimi, A. Bilalli & M. Musliu: Fieldwork and collecting the specimens D. Geci, H. Ibrahimi, A. Bilalli & M. Musliu: Identification of specimens, photography, and writing the manuscript; D. Geci, H. Ibrahimi, A. Bilalli & M. Musliu: Writing, and reviewing. All authors approved the final version of the manuscript.

FUNDING

This research is supported by The European Society of Arachnology through the European Arachnid Biodiversity Research Fund.

AVAILABILITY OF DATA AND MATERIAL

The specimens listed in this study are deposited in the Department of Biology, Faculty of Mathematics and Natural Sciences, University of Prishtina "Hasan Prishtina", Prishtinë, Kosovo, under the name 'Spiders of Kosovo' and are available upon request.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

This study only included arthropod material, and all required ethical guidelines for the treatment and use of animals were strictly adhered to in accordance with international, national, and institutional regulations. No human participants were involved in any studies conducted by the authors for this article.

CONSENT FOR PUBLICATION

Not applicable.

CONFLICT OF INTERESTS

The authors declare that there is no conflict of interest regarding the publication of this paper.

ACKNOWLEDGMENTS

We extend our sincere thanks to the anonymous peer reviewers whose dedication and expertise significantly enriched this manuscript. Their thoughtful feedback and rigorous assessment played an indispensable role in shaping the final version of this work. Our deepest appreciation goes to the Editor-in-Chief and the Subject Editor of the journal for their invaluable support and guidance throughout the review process.

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گزارش‌های جدید عنکبوت‌ها (Arachnida: Araneae) از غرب بالکان

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| **تاریخ دریـافت:** ۱۲ شهریور ۱۴۰۳ | **تاریخ پذیرش:** ۰۱ آذر ۱۴۰۳ | **تاریخ انتشار:** ۲۸ اسفند ۱۴۰۳ |

چکیـده: در این تحقیق، اطلاعات جدیدی از فون عنکبوت‌های (Arachnida: Araneae) بالکان غربی ارایه کردیم. یافته‌های ما شامل ثبت اولین گزارش شش جنس و ۲۳ گونه شامل: *Micaria* (۲ گونه)، *Nomisia* (۲ گونه)، *Allagelena* (۱ گونه)، *Alopecosa* (۱ گونه)، *Ballus* (۱ گونه)، *Cheiracanthium* (۱ گونه)، *Clubiona* (۱ گونه)، *Dipoena* (۱ گونه)، *Enoplognatha* (۱ گونه)، *Eresus* (۱ گونه)، *Hoplopholcus* (۱ گونه)، *Icius* (۱ گونه)، *Mendoza* (۱ گونه)، *Mimetus* (۱ گونه)، *Myrmarachne* (۱ گونه)، *Talavera* (۱ گونه)، *Tegenaria* (۱ گونه)، *Trochosa* (۱ گونه)، *Walckenaeria* (۱ گونه)، *Zodarion* (۲ گونه) و *Zora* (۱ گونه) برای کوزوو است. همچنین، دو جنس و دو گونه برای اولین بار برای کشور آلبانی و یک گونه از صربستان و مقدونیه شمالی ثبت شد. تصاویر نمای عمومی و ضمایم جفت‌گیری تمام گونه‌های بررسی شده که شناسایی و مقایسه‌های تاکسونومیک بر اساس آنها انجام گردیده، ارایه شد.

واژگـان کلیدی: آلبانی، تنوع، توزیع، کوزوو، مقدونیه شمالی، صربستان