

## *A Preliminary Checklist of the Spiders of Kosovo (Arachnida: Araneae)*

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**Abstract.** The Republic of Kosovo is the territory with the least known spider fauna within the Balkans. The present list of spiders is based on all published records available to the authors and also includes original unpublished data. The checklist comprises only 159 species belonging to 29 families and 108 genera. This low number is due to different reasons but mostly because the spiders herein has never been studied in their entirety and because we excluded all the records from the "Balkans", "Yugoslavia", "Serbia", and the border mountain "Kopaonik", for which cannot certainly be argued that relate to Kosovo, so we worked only with reports, containing reliable data on the spider fauna from there. The aim of this study is to presents annotated preliminary checklist of the spiders of Kosovo with additional faunistic data.

**Key words:** Balkans, catalogue, fauna, former Yugoslavia, Jugoslavia, Serbia.

### **Introduction**

The Republic of Kosovo is a small country in the Western part of the Balkans and has a total area of 10,908 km<sup>2</sup> with an altitude range from 265 m to 2656 m. The mountains of Kosovo belong to the Dinarides range with two major mountain massifs, Sharr (Šar) and Bjeshkët e Nemuna (Prokletije). They round the lowlands Rrafshi i Kosovës (Kosovo Polje plain) and Dukagjin, separated from the chain of mountain Carralevë.

The spider fauna of Kosovo has never been studied in its entirety, and remains one of the least explored in Europe. Our knowledge of this fauna originates from the beginning of 20<sup>th</sup> century when Bresjančeva

(1907) lists 9 species from 6 families for the territory of today's Kosovo (at that time still a part of the Ottoman Empire). Twenty two years later, in his extensive work on Serbian spiders, Stojićević (1929) provides 47 species that correspond to the current territory of Kosovo, 44 of which were first reports. In the following years, the list increased due to the papers of Kratochvíl (1935) with four species; Kolosvary (1938, 1940) with eleven more; Šilhavý (1944) with three; Deeleman-Reinhold (1974, 1986) with two; Wunderlich (1984) with one and Grimm (1985) with two more species. In the only recent work, Vrenozi & Jager (2013) added 19 more species and listed 106 spiders for Kosovo. One more species is under review (Geci &

Naumova, 2021). Addition data can be found in few other papers (Drensky, 1936, Nikolić & Polenec, 1981, Knoflach, 1996, Deltshv *et al.*, 2003, Rezac *et al.*, 2014, Mammola *et al.*, 2018, Naumova *et al.*, 2019a, 2019b) and that seems to be the final list for the moment.

The aim of this study is to summarize and presents all available data of the spiders of Kosovo, both from the literature and from original records by providing a preliminary checklist and an annotated catalogue of the spiders in Kosovo.

### **Material and Methods**

The presented list of the spiders of Kosovo is based on the critical review of the existing literature records on the distribution of spiders in the studied area. We excluded all the records from `Serbia`, `Yugoslavia` and `Balkans` for which cannot certainly be argued that relate to Kosovo, so we worked only with reports, contained reliable data on the spider fauna from there. We also excluded all the records from mount Kapaonik originated from Stojićević, (1929) and their later citations in Drensky (1936), Nikolić & Polenec (1981), Deltshv *et al.* (2003) and Vrenozi & Jager (2013), because they refer to specific localities in Serbia (Jelak nr. Brus, Jošanička Banja nr. Baljevac, Kriva reka, Srebrnac, Suvo Rudište (Pančičev Vrh)). Only two species (*Erigone atra* Blackwall, 1833 and *Mansuphantes mansuetus* (Thorell, 1875)) have been listed from `Kopaonik` without precise locations, but there is no evidence that Stojićević worked with material on the Kosovo`s part of the mountain, so we exclude them as well. Other excluded records (actually refer to North Macedonia) are: Kačanik (in Mammola *et al.*, 2018 after Drensky, 1935: Kačanik, cave in village Blace) and Gnjilane (in Drensky, 1936 after Stojićević, 1929: Končulj, nr. Gnjilane). Four other records (Šilhavý, 1944), may be located in both Kosovo and North Macedonia (`Sar - Bačila, 1700 m`, `Sar - Jezerska, 2000 m`, `Sar, Ljubotin` and `Sar - pod Ljubotinem u Nikolic`). They are

included herein as very probable and are marked with question mark in parentheses in the list of localities. The species, erroneously reported from Kosovo are presented in Table 1.

The localities were mapped on the basis of exact (taken in with a GPS-receiver) or approximate (on the basis of the location of the settlements/geographic objects) geographic coordinates (decimal), rounded to 4 decimal places (Fig. 1). The list of localities (alphabetically by districts and municipalities) includes the sites with numbers 1 to 50 (mapped), followed by site 51 (Kosovo, without precise locality; not mapped). Mapping and visualization of the map were done by ArcGIS 10.1 (ESRI, Redlands, California, USA).

The nomenclature follows the World Spider Catalog (2021) and the taxa are listed alphabetically. The newly recorded species are marked with an asterisk. The literature sources are listed chronologically (except in cases where the authors have more than one cited publications - then the years are listed after the first mention). The general distribution of the species is provided mainly according to World Spider Catalog (2021) and Nentwig *et al.* (2021). The additional sources were cited. The names of the collectors are abbreviated: AZ=Alexey Zhalov, BP=Boyan Petrov, DG=Donard Geci, MN=Maria Naumova. The material is deposited in the National Museum of Natural History-Sofia (collected from AZ, BP), the University of Prishtina (collected from DG) and in the Institute of Biodiversity and Ecosystem Research (collected from MN). Other abbreviations used: j=juvenile, jj = juveniles.

### **Results**

The preliminary spider checklist presented herein includes 159 species belonging to 108 genera and 29 families (Table 2). From them 63 species (marked with an asterisk), 42 genera and 9 families are newly discovered during this study.

**Table 1.** List of the localities (alphabetically per DISTRICTS and Municipalities: L1–L51 – numbers used in the Map (Fig. 1) and in the List of species. Arrangement: number; locality (alternative names and transliterations), Geographical object, coordinates (decimal), altitude (m)).

N	Locality	Object/area	Coordinates	Alt.
	FERIZAJ (Uroševac)			
	Ferizaj (Uroševac)			
L1	Nerodime (Nerodimlje)	Sharr (Šar) Mts.	N42.3605°, E21.0940°	690
L2a	Nerodime e Epërme (Gornje Nerodimlje) 1	Carralevë (Crnojëva) Mts.	N42.3671°, E21.0329°	714
L2b	Nerodime e Epërme (Gornje Nerodimlje) 2	Carralevë (Crnojëva) Mts.	N42.3637°, E21.0527°	666
L3	Sazli (Saslja, Saslija, Sazlija)	Rrafshi i Kosovës (Kosovo Polje plain)	N42.4060°, E21.1876°	570
	Kaçanik (Kačanik)			
L4	Doganaj village	Rrafshi i Kosovës (Kosovo Polje plain)	N42.2667°, E21.1822°	590
L5a	Kaçanik (Kačanik, Kachanik)	Karadak (Skopska Crna Gora) Mts	N42.2257°, E21.2674°	580
L5b	Kaçanik gorge (Kačaniska Klisura, Gryka e Kačanikut) Shtërpçë (Štrpce)	Karadak (Skopska Crna Gora) Mts	N42.2102°, E21.2491°	480
L6	Brezovicë	Sharr (Šar) Mts.	N42.2058°, E20.9532°	1090
L7	Firajë	Sharr (Šar) Mts.	N42.2485°, E21.0383°	690
L8	Gotovuse (Gotovuša) village, Ropotski Potok river	Sharr (Šar) Mts.	N42.2344°, E21.0767°	1140
L9	Livadh Lake (Strbacko Jezero, Liqeni i Malit Sharr "Gjoli")	Sharr (Šar) Mts.	N42.1909°, E21.0734°	200
L10a	(?) Luboten1 ('Sar, N Shar Mts, Ljubotin')	Sharr (Šar) Mts.	N42.2084°, E21.1153°	245
L10b	(?) Luboten2 ('Sar - pod Ljubotinem u Nikolic')	Sharr (Šar) Mts.	N42.2084°, E21.1153°	245
L11	Shtërpçë (Štrpce)	Carralevë (Crnojëva) Mts.	N42.2257°, E21.0092°	891
	Shtime (Štimlje)			
L12	Carralevë (Crnojëva) village	(Crnojëva) Mts.	N42.4574°, E20.9818°	640
L13	Petrove village, cave Shpella Devetakut	Carralevë (Crnojëva) Mts.	N42.3973°, E20.9722°	791
	GJILAN (Gnjilane)			
	Gjilan (Gnjilane)			
L14	Gjilan (Gnjilane)	Rrafshi i Kosovës (Kosovo Polje plain)	N42.4994°, E21.4605°	600
	Viti (Vitina)			
L15	Pozharan	Rrafshi i Kosovës (Kosovo Polje plain)	N42.3496°, E21.3496°	715
	MITROVICË (Mitrovica)			
	Mitrovicë (Mitrovica)			
L16a	Mitrovicë (Kosovska Mitrovica) 1	Rrafshi i Kosovës (Kosovo Polje plain)	N42.8913°, E20.8858°	540
L16b	Mitrovicë (Kosovska Mitrovica) 2	Rrafshi i Kosovës (Kosovo Polje plain)	N42.8687°, E20.8593°	548
L16c	Mitrovicë (Kosovska Mitrovica) 3	Rrafshi i Kosovës (Kosovo Polje plain)	N42.8698°, E20.8828°	503
L17	Vaganicë village	Rrafshi i Kosovës (Kosovo Polje plain)	N42.8489°, E20.8624°	621
L18	Zasellë	Kopaonik Mts.	N42.8854°, E20.8988°	671
	Zvečan (Zvečan)			
L19	Bajskë (Banjska, Banska)	Rogozna Mts.	N42.9700°, E20.7849°	590
L20	Zvečan (Zvečan, Zvechan)	Rogozna Mts.	N42.9076°, E20.8307°	535
	PEJË (Peć)			
	Deçan (Dečani)			
L21a	Deçan (Dečani)	Dukagjin	N42.5372°, E20.2849°	620
L21b	Manastiri i Deçanit (Visoki Deçani Monastery)	Bjeshket e Nemuna (Prokletije)	N42.54805°, E20.2663°	650

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L22	Prilep village Istog (Istok)	Dukagjin	N42.4955°, E20.3087°	547
L23	Istog (Istok)	Mokna (Mokra Gora) Mts.	N42.7908°, E20.4740°	700
L24	Veriq village Klinë (Klina)	Dukagjin	N42.7511°, E20.5518°	505
L25	Deiq village	Dukagjin	N42.6121°, E20.5592°	383
L26	Dollc village	Dukagjin	N42.5947°, E20.5923°	394
L27	Ujëvarët e Mirushës (Mirusha Waterfalls, Slapovi Miruše)	Dukagjin	N42.5241°, E20.5999°	455
L28	Zajm village Pejë (Peć)	Dukagjin	N42.5930°, E20.5552°	411
L29	Bellopojë	Dukagjin	N42.6409°, E20.2891°	514
L30	Kopranik (Koprivnik) Mts	Bjeshket e Nemuna (Prokletije)	N42.6367°, E20.2552°	1140
L31	Novosellë (Novo selo)	Dukagjin	N42.7311°, E20.3381°	505
L32	Pejë (Peć, Pech, Pedgh, Ipek)	Dukagjin	N42.6551°, E20.2859°	535
L33a	Peje: Rugova Canyon: cave Gryka e Madhe (Great Canyon cave)	Bjeshket e Nemuna (Prokletije)	N42.6647°, E20.2025°	637
L33b	Peje: Rugova Canyon: cave Shpella e Karamakazit (cave Karamakis, Black Scissors cave)	Bjeshket e Nemuna (Prokletije)	N42.6661°, E20.2001°	830
L34a	Shpella e Drinit Bardhë cave(Radaci Cave, Sleeping Beauty cave; Bukuroshja e Fjetur; Shpella Radacit-Cave, Radove (Radovac) cave)	Bjeshket e Nemuna (Prokletije): Zhleb Mt.	N42.7370°, E20.3066°	627
L34b	White Drin falls (Drini i Bardhë)	Bjeshket e Nemuna (Prokletije): Zhleb Mt.	N42.7390°, E20.3072°	585
L35	Zhleb (Zljeb, Zleb, Zljb) Mt PRISHTINË Fushë Kosovë (Kosovo Polje)	Bjeshket e Nemuna (Prokletije)	N42.7148°, E20.2653°	1480
L36	Henc wetland Lipjan (Lipljan)	Rrafshi i Kosovës (Kosovo Polje plain)	N42.5822°, E21.0486°	538
L37	Konjuh	Rrafshi i Kosovës (Kosovo Polje plain)	N42.5388°, E21.1407°	562
L38	Ribar i Vogël village Prishtinë (Priština)	Rrafshi i Kosovës (Kosovo Polje plain)	N42.5144°, E21.0679°	573
L39	Gazimestan	Rrafshi i Kosovës (Kosovo Polje plain)	N42.6906°, E21.1237°	652
L40a	Germia Protected landsacape	Gollak (Goljak) Mts.	N42.6760°, E21.2028°	773
L40b	Gollakë (Gollaku, Malësinë e Gollakut)	Rrafshi i Kosovës (Kosovo Polje plain)	N42.6853°, E21.1809°	617
L41	Lebane (Labjani)	Gollak (Goljak) Mts.	N42.7425°, E21.1523°	630
L42	Prishtinë PRIZEREN (Prizren) Dragash (Dragaš)	Rrafshi i Kosovës (Kosovo Polje plain)	N42.6381°, E21.1334°	561
L43	(?) Baçila (Sharr-Baçila Staletoviçova, most N Shar Mts, Sharr (Šar) Mts. 1700 m`)		N42.2966°, E21.0408°	1650
L44	(?) Jezerska (Šar - Jezerska, 2000 m`)	Sharr (Šar) Mts.	N42.0978°, E20.7878°	2000
L45	Plavë (Plave, Plava, Plavenica) village Prizren (Prizren)	Sharr (Šar) Mts.	N42.0959°, E20.6477°	950
L46	Lubiqevë (Ljubičevo, Ljubichevo)	Sharr (Šar) Mts.	N42.1523°, E20.7386°	730
L47	Prizren (Prizren)	Dukagjin	N42.2162°, E20.7370°	541
L48	Sredskë (Sredska, Sretska) Suharekë (Suva reka)	Sharr (Šar) Mts.	N42.1721°, E20.8561°	740

L49	Carralevë (Mali i Carralevës) 1	Carralevë (Crnoljeva) Mts	N42.4275°, E20.9036°	795
L50a	Carralevë (Mali i Carralevës) 2	Carralevë (Crnoljeva) Mts	N42.4446°, E20.9157°	759
L50b	Carralevë (Mali i Carralevës) 3	Carralevë (Crnoljeva) Mts	N42.4416°, E20.9165°	720
	Without precise locality			
L51	Kosovo (Kosovo, Kossowo)			

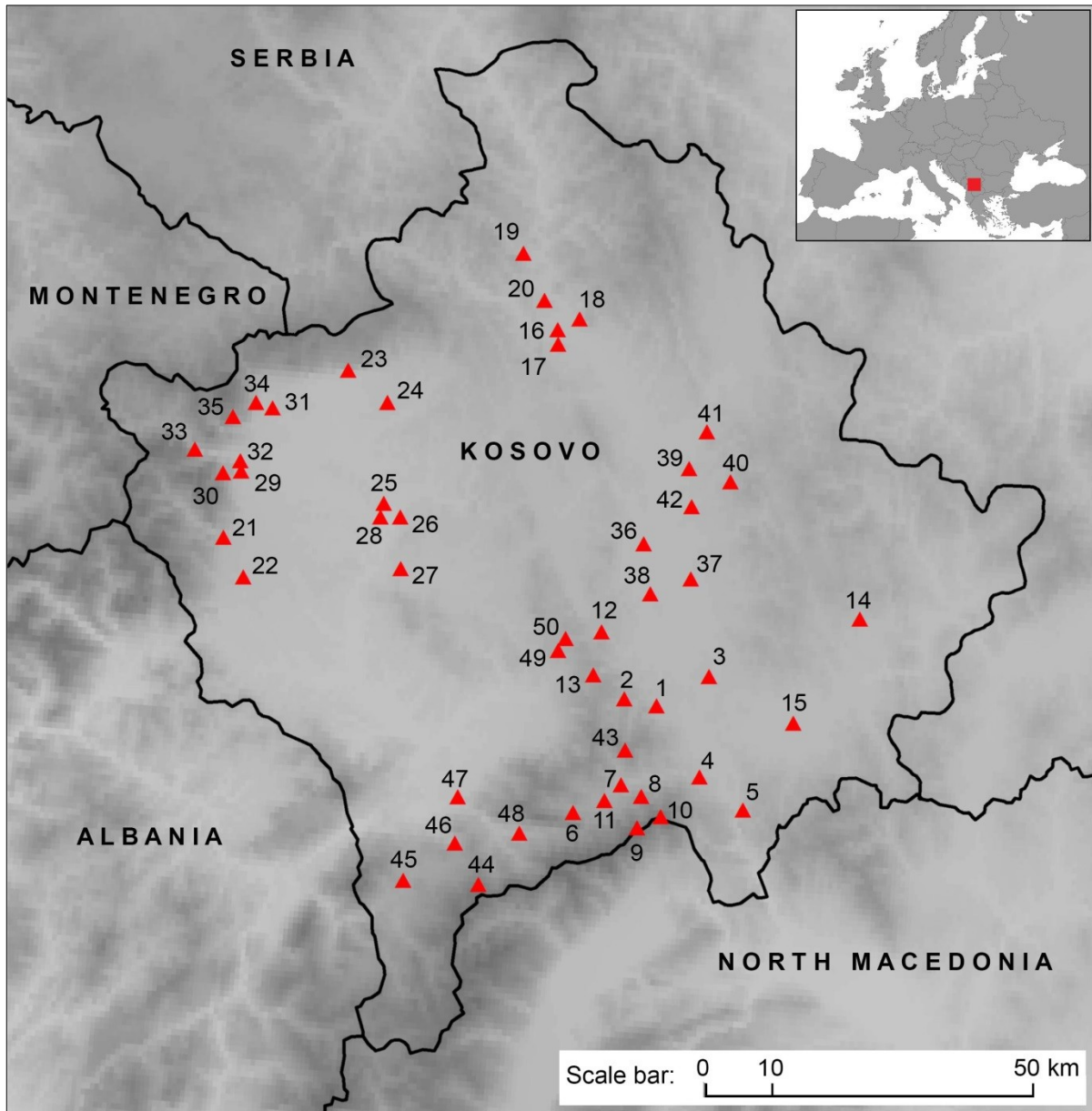


Fig. 1. Map with localities of the spiders in Kosovo. For details, see List of localities.

**Annotated list & catalogue of the spiders in Kosovo:**

AGELENIDAE

\**Eratigena agrestis* (Walckenaer, 1802)

New data: L16 (1 ♂, 29.VII.2020, DG).

Global distribution: Palearctic, introduced to USA and Canada.

\**Histopona torpida* (C. L. Koch, 1837)

New data: L37 (2♂, 24.V.2019, DG).

Global distribution: West Palearctic.

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*Inermocoelotes falciger* (Kulczyński, 1897)

Literary data: L31 (sub *Coelotes f.*: Kolosvary 1940), L32 (sub *Coelotes f.*: Kolosvary 1938, Deltshv *et al.*, 2003, sub *Inermocoelotes f.*: Vrenozi & Jäger, 2013).

New data: L40a (5♂, 1♀, 27.IV.2019, DG).

Global distribution: Balkans, Hungary, Romania, Ukraine.

*Inermocoelotes inermis* (L. Koch, 1855)

Literary data: L30 (sub *Coelotes i.*: Kolosvary, 1938, Deltshv *et al.*, 2003, sub *Inermocoelotes i.*: Vrenozi & Jäger, 2013), L32 (sub *Coelotes i.*: Kolosvary, 1940, Deltshv *et al.*, 2003, sub *Inermocoelotes i.*: Vrenozi & Jäger, 2013).

Global distribution: Europe.

\**Inermocoelotes kulczynskii* (Drensky, 1915)

New data: L2b (2♂, 1♀, 15.V.2019, DG).

Global distribution: Balkan endemic known from Bulgaria and North Macedonia.

*Lycosoides coarctata* (Dufour, 1831)

Literary data: L35 (Vrenozi & Jäger, 2013).

Global distribution: Mediterranean.

\**Tegenaria bosnica* Kratochvíl & Miller, 1940

New data: L33a (2♀, 27-29.I.2008, BP).

Global distribution: Balkan endemic, known from Albania, Bosnia and Herzegovina, Croatia, Montenegro and North Macedonia.

\**Tegenaria campestris* (C. L. Koch, 1834)

New data: L15 (7♂, 3♀, 06.VI.2019, DG).

Global distribution: Western Palearctic.

\**Tegenaria domestica* (Clerck, 1757)

New data: L16b (1♀, 29.VII.2020, DG; 1♀, 18.X.2020, DG), L24 (1♂, 10.X.2020, DG), L27(1♂, 1♀, 25.VII.2020, DG), L34a (1♂, 2♀, 27.VIII.2020, DG).

Global distribution: Palearctic, introduced to Australia, New Zealand, North and South America.

AMAUROBIIDAE

\**Amaurobius phaeacus* Thaler & Knoflach, 1998

New data: L40a (2♂, 27.IV.2019, DG).

Global distribution: Balkan endemic, known from Albania, Greece and North Macedonia.

ANYPHAENIDAE

\**Anyphaena accentuata* (Walckenaer, 1802)

New data: L40a (2♀, 18.V.2019, DG).

Global distribution: Palearctic.

ARANEIDAE

*Aculepeira ceropegia* (Walckenaer, 1802)

Literary data: L32 (Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Agalenatea redii* (Scopoli, 1763)

Literary data: L16a (sub *Araneus r.*: Kolosvary, 1938, 1940, sub *Agalenatea r.*: Deltshv *et al.*, 2003, Vrenozi & Jäger, 2013).

New data: L7 (1♂, 7♀, 27.V.2019, DG), L15 (4♀, 27.V.2019, DG), L17 (9♂, 35♀, 04.X-06.XI.2020, DG), L23 (1♀, 04.XI.2018, MN), L40a, (3♀, 09.V.2018, DG).

Global distribution: Palearctic.

*Araneus angulatus* Clerck, 1757

Literary data: L32 (Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Araneus circe* (Audouin, 1826)

Literary data: L32 (Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Araneus quadratus* Clerck, 1757

New data: L17 (4♀, 17.X.2020, DG), L47 (1♀, 04.X.2019, MN).

Global distribution: Palearctic.

*Araniella cucurbitina* (Clerck, 1757)

Literary data: L1 (sub *Aranea c.*: Stojićević, 1929), L5a (Stojićević, 1929), L32 (Vrenozi & Jäger, 2013), L46 (sub *Epeira c.*: Bresjančeva, 1907).

Global distribution: Palearctic.

*Araniella opisthographa* (Kulczyński, 1905)

Literary data: L32 (Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Cyclosa conica* (Pallas, 1772)

Literary data: L5a (Stojićević, 1929, Vrenozi & Jäger, 2013), L20 (Stojićević, 1929).  
New data: L40a (1♀, 14.IV.2019, DG).  
Global distribution: Holarctic.

\**Gibbaranea bituberculata* (Walckenaer, 1802)  
New data: L40a (1♀, 18.V.2019, DG).  
Global distribution: Palearctic.

*Hypsosinga albovittata* (Westring, 1851)  
Literary data: L3 (sub *Singa a.*: Stojićević, 1929, sub *Hypsosinga a.*: Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).  
Global distribution: Palearctic.

*Hypsosinga pygmaea* (Sundevall, 1831)  
Literary data: L14 (sub *Singa p.*: Stojićević, 1929, sub *Hypsosinga p.*: Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).  
Global distribution: Holarctic.

*Hypsosinga sanguinea* (C. L. Koch, 1844)  
Literary data: L3 (sub *Singa s.*: Stojićević, 1929, sub *Hypsosinga s.*: Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013), L51 (sub *Singa s.*: Drensky, 1936).  
Global distribution: Palearctic.

\**Larinioides patagiatus* (Clerck, 1757)  
New data: L11 (1♂, 2♀, 27.V.2019, DG).  
Global distribution: Holarctic.

\**Larinioides suspicax* (O. P.-Cambridge, 1876)  
New data: L49 (1♂, 3♀, 06.VI.2019, DG).  
Global distribution: Palearctic.

\**Leviellus thorelli* (Ausserer, 1871)  
New data: L16b (1♀, 18.IX.2020, DG).  
Global distribution: Europe.

*Mangora acalypha* (Walckenaer, 1802)  
Literary data: L1 (Stojićević, 1929, Vrenozi & Jäger, 2013), L14 (Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).  
New data: L2a (2♂, 5♀, 06.VI.2019, DG), L40a (4♀, 18.V.2019, DG).  
Global distribution: Palearctic.

*Neoscona byzanthina* (Pavesi, 1876)

Literary data: L17, L22, L25, L26, L28, L36 (Geci & Naumova, 2021).  
Global distribution: Western Palearctic.

\**Nuctenea umbratica* (Clerck, 1757)  
New data: L6 (2♀, 27.V.2019, DG), L7 (1♀, 27.V.2019, DG), L16b (2♂, 1♀, 29.VII.2020, DG), L18 (1j, 02.VIII.2020, DG), L40a (1♀, 27.IV.2019, DG).  
Global distribution: Palearctic.

*Singa hamata* (Clerck, 1757)  
Literary data: L1 (Stojićević, 1929, Drensky, 1936, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013), L46 (Bresjančeva, 1907, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).  
New data: L2a (1♀, 06.VI.2019, DG), L49 (2♀, 06.VI.2019, DG).  
Global distribution: Palearctic.

\**Zilla diodia* (Walckenaer, 1802)  
New data: L4 (2♀, 27.V.2019, DG), L7 (1♂, 16.VI.2019, DG), L40a (1♂, 18.V.2019, DG).  
Global distribution: Palearctic.

*Zygiella keyserlingi* (Ausserer, 1871)  
Literary data: L32 (Kolosvary, 1938, 1940, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).  
Global distribution: Western Palearctic.

#### ATYPIDAE

*Atypus piceus* (Sulzer, 1776)  
Literary data: L47 (Stojićević, 1929, Drensky, 1936, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).  
Global distribution: Western Palearctic and Iran.

#### CHEIRACANTHIIDAE

*Cheiracanthium elegans* Thorell, 1875  
Literary data: L47 (sub *Chiracanthium e.*: Stojićević, 1929, sub *Cheiracanthium e.*: Drensky, 1936, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).  
Global distribution: Palearctic.

#### CLUBIONIDAE

*Clubiona stagnatilis* Kulczyński, 1897  
Literary data: L32 (Vrenozi & Jäger, 2013).

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Global distribution: Palearctic.

\**Clubiona terrestris* Westring, 1851

New data: L50b (2♂, 1♀, 16.VI.2019, DG).

Global distribution: Western Palearctic.

\**Porrhoclubiona genevensis* (L. Koch, 1866)

New data: L11 (1♂, 2♀, 06.VI.2019, DG).

Global distribution: Palearctic.

#### DICTYNIDAE

\**Brigittea latens* (Fabricius, 1775)

New data: L2a (6♂, 7♀, 24.VI.2019, DG), L15

(1♂, 3♀, 24.VI.2019, DG).

Global distribution: Palearctic.

*Dictyna uncinata* Thorell, 1856

Literary data: L5a (Stojićević, 1929).

Global distribution: Palearctic.

\**Nigma flavescens* (Walckenaer, 1830)

New data: L32 (1♂, 01.X.2019, MN).

Global distribution: Palearctic.

#### DYSDERIDAE

\**Dysdera crocata* C. L. Koch, 1838

New data: L2a (2♂, 24.VI.2019, DG), LL49 (3♂, 27.V.2019, DG), L50a (1♂, 27.V.2019, DG), L50b (2♂, 27.V.2019, DG).

Global distribution: Western Palearctic, introduced to North America, Chile, Brazil, South Africa, Australia, New Zealand and Hawaii.

*Dysdera longirostris* Doblina, 1853

Literary data: L35 (Vrenozi & Jäger, 2013).

Global distribution: Central to Eastern Europe, Turkey, Caucasus.

*Dysderocrates storkani* (Kratochvíl, 1935)

Literary data: L9 (sub *Harpactocrates* s.: Kratochvíl, 1935).

Global distribution: Balkan endemic, known from Albania, Croatia, Montenegro, North Macedonia and Serbia.

\**Harpactea hombergi* (Scopoli, 1763)

New data: L15 (4♂, 27.V.2019, DG), L40a (5♂, 2♀, 14.IV.2019, DG), L49 (2♂, 27.V.2019, DG),

L50a (3♂, 27.V.2019, DG), L50b (1♂, 06.VI.2019, DG).

Global distribution: Europe.

\**Harpactea nausicaae* Brignoli, 1976

New data: L34b (1♀, 01.X.2019, MN).

Global distribution: Balkan endemic, known from Albania, Greece and North Macedonia.

\**Harpactea saeva* (Herman, 1879)

New data: L40a (4♂, 3♀, 27.IV.2019, DG), L50a (4♂, 18.VI.2019, DG).

Global distribution: Eastern Europe.

#### GNAPHOSIDAE

*Berlandina plumalis* (O. P.-Cambridge, 1872)

Literary data: L32 (Vrenozi & Jäger, 2013).

Global distribution: West Africa, Mediterranean to Central Asia and Iran.

\**Callilepis cretica* (Roewer, 1928)

New data: L40a (1♂, 13.V.2018, DG).

Global distribution: North-eastern Mediterranean and Azerbaijan.

\**Drassodes cupreus* (Blackwall, 1834)

New data: L40a (1♀, 07.VII.2017, DG).

Global distribution: Palearctic.

*Drassodes lapidosus* (Walckenaer, 1802)

Literary data: L5a (Stojićević, 1929).

New data: L40a (2♂, 14.IV.2019, DG).

Global distribution: Palearctic.

\**Drassyllus villicus* (Thorell, 1875)

New data: L15 (1♂, 3♀, 18.VI.2019, DG), L40a (3♂, 1♀, 24.V.2019, DG).

Global distribution: Western Palearctic.

*Micaria pulicaria* (Sundevall, 1831)

Literary data: L21a (Kolosvary, 1938, 1940), L21b (Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).

Global distribution: Holarctic.

*Nomisia aussereri* (L. Koch, 1872)

Literary data: L35 (Grimm, 1985).

Global distribution: Palearctic.

*Scotophaeus blackwalli* (Thorell, 1871)



Literary data: L39 (Stojićević, 1929, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013), L51 (Drensky, 1936).

Global distribution: Palearctic, introduced to North America, Peru and Hawaii.

\**Zelotes apricorum* (L. Koch, 1876)

New data: L15 (3♀, 27.V.2019, DG), L40a (1♀, 27.IV.2019, DG).

Global distribution: Palearctic.

*Zelotes longipes* (L. Koch, 1866)

Literary data: L20 (sub *Z. serotinus*: Stojićević, 1929, sub *Z. longipes*: Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Zelotes oblongus* (C. L. Koch, 1833)

Literary data: L5a (Stojićević, 1929, Drensky, 1936, Deltshev *et al.*, 2003), L39 (Stojićević, 1929, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).

Global distribution: Western Palearctic.

*Zelotes similis* (Kulczyński, 1887)

Literary data: L32 (Grimm, 1985, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).

Global distribution: Western Palearctic.

#### HAHNIIDAE

\**Hahnia pusilla* C. L. Koch, 1841

New data: L49 (1♂, 27.V.2019, DG).

Global distribution: Palearctic.

#### LINYPHIIDAE

*Agyneta fuscipalpa* (C.L. Koch, 1836)

Literary data: L3 (sub *Micryphantes fuscipalpus*: Stojićević, 1929, Drensky, 1936, sub *Meioneta f.*: Deltshev *et al.*, 2003, sub *Agyneta f.*: Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Erigone dentipalpis* (Wider, 1834)

Literary data: L3 (Stojićević, 1929, Drensky, 1936, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).

Global distribution: Palearctic, introduced to North America (Buckle *et al.*, 2001, Jennings & Graham, 2007).

*Fageiella ensigera* Deeleman-Reinhold, 1974

Literary data: L34a (Deeleman-Reinhold, 1974, Vrenozi & Jäger, 2013), L51 (Naumova *et al.*, 2019b).

New data: L34a (1♀, 30.I.2008, BP).

Global distribution: Balkan endemic, known from Kosovo, Montenegro and Serbia.

\**Frontinellina frutetorum* (C. L. Koch, 1835)

New data: L40a (1♀, 24.V.2019, DG).

Global distribution: Palearctic.

\**Linyphia triangularis* (Clerck, 1757)

New data: L16b (1♀, 08.XI.2020, DG), L18 (1♀, 02.II.2020, DG), L34b (3♀, 01.X.2019, MN).

Global distribution: Palearctic, introduced to Canada and USA.

\**Neriere montana* (Clerck, 1757)

New data: L7 (2♂, 3♀, 06.06.2019, DG).

Global distribution: Palearctic, introduced to North America (Paquin & Dupérré, 2003).

*Oedothorax gibbosus* (Blackwall, 1841)

Literary data: L14 (sub *Stylothorax tuberosa*, Stojićević, 1929, sub *O. tuberosus*: Drensky, 1936, sub *Oedothorax g.*: Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Palliduphantes trnovensis* (Drensky, 1931)

Literary data: L33b (Deeleman-Reinhold, 1986, Deltshev *et al.*, 1996, Vrenozi & Jäger, 2013).

Global distribution: Balkan endemic, known from Albania, Bulgaria, Kosovo, Montenegro, North Macedonia and Serbia.

*Porrhomma pygmaeum* (Blackwall, 1834)

Literary data: L3 (Stojićević 1929, Drensky, 1936, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Styloctetor compar* (Westring, 1861)

Literary data: L3 (sub *Lophomma stativum*, Stojićević, 1929, sub *Anacotyle stativa*, Nikolić & Polenec, 1981, sub *S. stativus*, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).

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Global distribution: Holarctic.

\**Tenuiphantes tenebricola* (Wider, 1834).  
New data: L32 (4♀, 01.X.2019, MN).  
Global distribution: Palearctic.

*Trichoncus affinis* Kulczyński, 1894  
Literary data: L3 (Stojićević 1929, Drensky, 1936, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013), L51 (Nikolić & Polenec, 1981, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).  
Global distribution: Western Palearctic.

#### LIOCRANIDAE

\**Apostenus fuscus* Westring, 1851  
New data: L15 (3♂, 06.VI.2019, DG), L40a (1♂, 27.IV.2019, DG).  
Global distribution: Europe.

*Sagana rutilans* Thorell, 1875  
Literary data: L30, (sub *Liocranum r.*: Kolosvary, 1940, Deltshev *et al.*, 2003, sub *Sagana r.*: Vrenozi & Jäger, 2013), L32, (sub *Liocranum r.*: Kolosvary, 1938, Deltshev *et al.*, 2003, sub *Sagana r.*: Vrenozi & Jäger, 2013).  
New data: L40a (1♂, 24.V.2019, DG).  
Global distribution: Western Palearctic.

#### LYCOSIDAE

*Alopecosa aculeata* (Clerck, 1757)  
Literary data: L32 (Vrenozi & Jäger, 2013).  
Global distribution: Holarctic.

*Alopecosa albofasciata* (Brullé, 1832)  
Literary data: L5b (Stojićević, 1929).  
Global distribution: Mediterranean to Central Asia.

\**Alopecosa cuneata* (Clerck, 1757)  
New data: L49 (2♂, 06.VI.2019, DG).  
Global distribution: Palearctic.

*Alopecosa trabalis* (Clerck, 1757)  
Literary data: L41 (sub *Tarentula t.*: Stojićević, 1929, sub *Alopecosa t.*: Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013), L42, L47 (sub *Tarentula t.*: Drensky, 1936), L48 (sub *Tarentula t.*: Stojićević, 1929, sub *Alopecosa t.*: Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Arctosa cinerea* (Fabricius, 1777)  
Literary data: L14 (Stojićević, 1929, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013), L42 (Drensky, 1936).  
Global distribution: Palearctic, Kongo.

*Arctosa leopardus* (Sundevall, 1833)  
Literary data: L3 (Stojićević, 1929, Drensky, 1936, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).  
Global distribution: Palearctic.

*Hogna radiata* (Latreille, 1817)  
Literary data: L31 (sub *Tarentula r.*: Kolosvary, 1940), L32 (sub *Tarentula r.*: Kolosvary, 1938, sub *Hogna r.*: Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).  
New data: L16b (1♀, 29.VII.2020, DG, 1♀, 08.XI.2020, DG), L18 (1♀, 02.VII.2020, DG).  
Global distribution: Palearctic.

*Pardosa agrestis* (Westring, 1861)  
Literary data: L3 (Stojićević, 1929, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013), L14 (Drensky, 1936, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).  
Global distribution: Palearctic.

*Pardosa alacris* (C. L. Koch, 1833)  
Literary data: L32 (sub *P. pseudolugubris*: Wunderlich, 1984, Vrenozi & Jäger, 2013).  
Global distribution: Western Palearctic.

*Pardosa amentata* (Clerck, 1757)  
Literary data: L30 (Vrenozi & Jäger, 2013).  
Global distribution: Palearctic.

*Pardosa fulvipes* (Collett, 1876)  
Literary data: L8 (Kratohvíl, 1935).  
Global distribution: Palearctic.

*Pardosa hortensis* (Thorell, 1872)  
Literary data: L1 (sub *Lycosa h.* & *L. saccata*: Stojićević, 1929), L1 (Deltshev, 2003), L5a, (sub *Lycosa h.* & *L. saccata*: Stojićević, 1929), L14 (Drensky, 1936, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Pardosa lugubris* (Walckenaer, 1802)

Literary data: L5a (sub *Lycosa chelata*: Stojićević, 1929), L32 (Wunderlich, 1984).

New data: L7 (4♂, 2♀, 24.V.2019, DG), L15 (3♀, 27.V.2019, DG), L40a (8♂, 27.IV.2019, DG).

Global distribution: Palearctic.

*Pardosa mixta* (Kulczyński, 1887)

Literary data: L9, L10a, L43, L44 (sub *Lycosa m.*: Kratochvíl, 1935).

Global distribution: Western Palearctic.

*Pardosa morosa* (L. Koch, 1870)

Literary data: L21a (sub *Lycosa furva*: Kolosvary, 1938, 1940), L21b (Deltshev *et al.*, 2003, Vrenozí & Jäger, 2013).

Global distribution: Palearctic.

*Pardosa paludicola* (Clerck, 1757)

Literary data: L3 (Stojićević, 1929, Drensky, 1936, Deltshev *et al.*, 2003, Vrenozí & Jäger, 2013).

Global distribution: Palearctic.

*Pardosa prativaga* (L. Koch, 1870)

Literary data: L32 (Vrenozí & Jäger, 2013).

Global distribution: Palearctic.

*Pardosa pullata* (Clerck, 1757)

Literary data: L1, L14 (sub *Lycosa p.*: Stojićević, 1929), L14 (Drensky, 1936, Deltshev *et al.*, 2003, Vrenozí & Jäger, 2013).

Global distribution: Palearctic.

*Pardosa riparia* (C. L. Koch, 1833)

Literary data: L5a (sub *Lycosa r.*: Stojićević, 1929)

Global distribution: Palearctic.

*Pardosa saltuaria* (L. Koch, 1870)

Literary data: L9, L10a (sub *Lycosa s.*: Kratochvíl, 1935).

Global distribution: Western Palearctic.

*Pirata piscatorius* (Clerck, 1757)

Literary data: L14 (Stojićević, 1929, Deltshev *et al.*, 2003, Vrenozí & Jäger, 2013).

Global distribution: Palearctic.

\**Trochosa robusta* (Simon, 1876)

New data: L2a (4♀, 18.VI.2019, DG).

Global distribution: Palearctic.

\**Trochosa ruricola* (De Geer, 1778)

New data: L15 (2♀, 18.VI.2019, DG).

Global distribution: Palearctic, introduced to North America, Cuba, Puerto Rico and Bermuda.

*Xerolycosa miniata* (C. L. Koch, 1834)

Literary data: L39 (Stojićević, 1929, Deltshev *et al.*, 2003, Vrenozí & Jäger, 2013), L50 (Drensky, 1936).

Global distribution: Palearctic.

\**Xerolycosa nemoralis* (Westring, 1861)

New data: L12 (2♂, 2♀, 18.VI.2019, DG), L50a (3♀, 18.VI.2019, DG).

Global distribution: Palearctic.

\*MITURGIDAE

\**Zora manicata* Simon, 1878

New data: L2b (3♂, 18.VI.2019, DG), L12 (4♂, 2♀, 18.VI.2019, DG), L15 (2♀, 18.VI.2019, DG), L40a (1♀, 14.IV.2019, DG), L50b (1♂, 18.VI.2019, DG).

Global distribution: Western Palearctic.

\**Zora silvestris* Kulczyński, 1897

New data: L15 (4♂, 3♀, 06.VI.2019, DG).

Global distribution: Western Palearctic.

\*NESTICIDAE

\**Nesticus cellulanus* (Clerck, 1757)

New data: L34a (1♀, 30.I.2008, BP).

Global distribution: Western Palearctic, introduced to North America.

OXYOPIDAE

*Oxyopes ramosus* (Martini & Goeze, 1778)

Literary data: L46 (Bresjančeva, 1907, Drensky, 1936, Deltshev *et al.*, 2003, Vrenozí & Jäger, 2013).

Global distribution: Palearctic.

\*PHILODROMIDAE

\**Rhysodromus histrio* (Latreille, 1819)

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New data: L17 (2♀, 17.X.2020, DG).

Global distribution: Holarctic.

\*PHOLCIDAE

\**Holocnemus pluchei* (Scopoli, 1763)

New data: L32 (1♂, 1♀, 2jj, 01.X.2019, MN).

Global distribution: Western Palearctic, introduced to USA, Argentina and Australia.

\**Pholcus opilionoides* (Schrank, 1781)

New data: L40a (1♂, 18.V.2019, DG).

Global distribution: Palearctic.

\**Pholcus phalangioides* (Fuesslin, 1775)

New data: L16b (1♂, 2♀, 29.VII.2020, DG), L24 (1♂, 2♀, 11.VII.2020, DG), L38 (1♂, 1♀, 02.VII.2020, DG).

Global distribution: Western Asia, but almost cosmopolitan due to human activity.

\*PHRUROLITHIDAE

\**Phrurolithus szilyi* Herman, 1879

New data: L15 (1♂, 3♀, 27.V.2019, DG).

Global distribution: Europe.

PISAURIDAE

*Pisaura mirabilis* (Clerck, 1757)

Literary data: L1, L3 (sub *P. listeri* Stojčević, 1929, sub *P. mirabilis*: Deltšev *et al.*, 2003, Vrenozi & Jäger, 2013), L5a (sub *P. listeri* Stojčević, 1929, sub *P. mirabilis*: Deltšev *et al.*, 2003), L21a (sub *P. listeri* Kolosvary, 1938, 1940), L21b (Deltšev *et al.*, 2003, Vrenozi & Jäger, 2013), L46 (Bresjančeva, 1907, Drensky, 1936, Deltšev *et al.*, 2003, Vrenozi & Jäger, 2013), L51 (Drensky, 1936).

New data: L4 (3♀, 27.V.2019, DG), L6 (2♂, 2♀, 27.V.2019, DG), L15 (2♂, 27.V.2019, DG), L40a (3♀, 18.V.2019, DG), L49 (7♀, 27.V.2019, DG), L50a (3♀, 27.V.2019, DG).

Global distribution: Palearctic.

SALTICIDAE

\**Attulus floricola* (C. L. Koch, 1837)

New data: L49 (1♂, 19.VI.2019, DG).

Global distribution: Holarctic.

*Attulus pubescens* (Fabricius, 1775)

Literary data: L1 (sub *Sitticus p.*: Stojčević, 1929, Deltšev *et al.*, 2003, sub *Attulus p.*:

Vrenozi & Jäger, 2013), L5a (sub *Sitticus p.*: Stojčević, 1929), L29, L32 (sub *Sitticus p.*: Vrenozi & Jäger, 2013), L51 (Drensky, 1936).  
Global distribution: Western Palearctic, introduced to USA and Canada.

\**Carrhotus xanthogramma* (Latreille, 1819)

New data: L15 (7♂, 2♀, 27.V.2019, DG).

Global distribution: Palearctic.

*Dendryphantès rudis* (Sundevall, 1833)

Literary data: L41 (Stojčević, 1929; Deltšev *et al.*, 2003; Vrenozi & Jäger, 2013), L42 (Drensky, 1936).

Global distribution: Palearctic.

*Evarcha falcata* (Clerck, 1757)

Literary data: L47 (sub *E. blancardi*: Stojčević, 1929, sub *E. falcata*: Deltšev *et al.*, 2003, Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Heliophanus auratus* C.L. Koch, 1835

Literary data: L32 (Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Heliophanus cupreus* (Walckenaer, 1802)

Literary data: L32 (Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

\**Heliophanus dampfi* Schenkel, 1923

New data: L15 (2♂, 06.VI.2019, DG).

Global distribution: Palearctic.

*Heliophanus flavipes* (Hahn, 1832)

Literary data: L3, L5a (Stojčević, 1929, Deltšev *et al.*, 2003, Vrenozi & Jäger, 2013), L32 (Vrenozi & Jäger, 2013), L51 (Drensky, 1936).

Global distribution: Palearctic.

\**Marpissa muscosa* (Clerck, 1757)

New data: L7 (3♀, 27.V.2019, DG).

Global distribution: Palearctic.

\**Neon levis* (Simon, 1871)

New data: L40a (1♀, 24.V.2019, DG).

Global distribution: Palearctic.

*Pellenes nigrociliatus* (Simon, 1875)

Literary data: L47 (Stojićević 1929, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).

New data: L40a (5♂, 14.IV.2019, DG).

Global distribution: Palearctic.

\**Pellenes seriatus* (Thorell, 1875)

New data: L6 (3♂, 1♀, 06.VI.2019, DG).

Global distribution: Palearctic.

*Philaeus chrysops* (Poda, 1761)

Literary data: L5a (Stojićević, 1929).

Global distribution: Palearctic.

*Phlegra fasciata* (Hahn, 1826)

Literary data: L29 (Vrenozi & Jäger, 2013).

Global distribution: Palearctic.

*Salticus cingulatus* (Panzer, 1797)

Literary data: L5a (Stojićević, 1929).

Global distribution: Palearctic.

\**Sibianor aurocinctus* (Ohlert, 1865)

New data: L50a (2♂, 24.V.2019, DG).

Global distribution: Palearctic.

*Synageles dalmaticus* (Keyserling, 1863)

Literary data: L29 (Vrenozi & Jäger, 2013).

Global distribution: Western Palearctic.

\*Scytodidae

\**Scytodes thoracica* (Latreille, 1802)

New data: (1♀, 29.VII.2020, DG).

Global distribution: Palearctic, introduced to North America, Argentina, South Africa, India, Australia and New Zealand.

\*Segestriidae

\**Segestria senoculata* (Linnaeus, 1758)

New data: L6 (2♀, 24.V.2019, DG).

Global distribution: Western Palearctic.

SPARASSIDAE

*Micrommata virescens* (Clerck, 1757)

Literary data: L32 (sub *M. viridissima*: Kolosvary 1938, 1940, sub *M. virescens*: Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013), L46 (Bresjančeva 1907, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).

New data: L15 (1♀, 06.VI.2019, DG), L50a (1♂, 2♀, 18.VI.2019, DG).

Global distribution: Palearctic.

TETRAGNATHIDAE

\**Meta menardi* (Latreille, 1804)

New data: L13 (2jj, 18.IV.2018, AZ), L34a (1♀, 1j, 30.I.2008, BP).

Global distribution: Western Palearctic.

*Metellina merianae* (Scopoli, 1763)

Literary data: L45 (Vrenozi & Jäger, 2013).

New data: L40a (1♀, 14.IV.2019, DG).

Global distribution: Palearctic.

*Metellina segmentata* (Clerck, 1757)

Literary data: L19 (sub *Meta* s.: Kolosvary, 1940, Deltshev *et al.*, 2003, sub *Metellina* s.: Vrenozi & Jäger, 2013).

Global distribution: Palearctic, introduced to Canada.

*Pachygnatha degeeri* Sundevall, 1830

Literary data: L5a (Stojićević, 1929).

Global distribution: Palearctic.

*Tetragnatha extensa* (Linnaeus, 1758)

Literary data: L14 (Stojićević, 1929, Vrenozi & Jäger, 2013).

Global distribution: Holarctic.

THERIDIIDAE

\**Asagena meridionalis* Kulczyński, 1894

New data: L40a (2♂, 27.IV.2019, DG).

Global distribution: Western Palearctic.

*Asagena phalerata* (Panzer, 1801)

Literary data: L3 (sub *Asagena p.*: Stojićević, 1929, Drensky, 1936, sub *Steatoda p.*: Deltshev *et al.*, 2003), L35 (Knoflach, 1996).

New data: L40a (1♂, 27.IV.2019, DG).

Global distribution: Palearctic.

*Crustulina guttata* (Wider, 1834)

Literary data: L3 (Stojićević, 1929, Deltshev *et al.*, 2003), L51 (Drensky, 1936).

New data: L7 (1♀, 18.VI.2019, DG), L40a (1♂, 3♀, 18.VI.2019, DG), L49 (1♀, 14.IV.2019, DG).

Global distribution: Palearctic.

*Enoplognatha ovata* (Clerck, 1757)

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Literary data: L46 (sub *Phyllonethis lineata*: Bresjančeva, 1907, Drensky, 1936).  
Global distribution: Palearctic, introduced to North America.

*Phylloneta sisypchia* (Clerck, 1757)  
Literary data: L46 (sub *Theridium sisiphum*: Bresjančeva, 1907, Drensky, 1936).  
Global distribution: Palearctic.

\**Platnickina nigropunctata* (Lucas, 1846)  
New data: L40a (2♀, 16.VI.2019, DG).  
Global distribution: Mediterranean.

*Robertus arundineti* (O. P.-Cambridge, 1871)  
Literary data: L1 (Stojićević, 1929, Deltšev *et al.*, 2003), L51 (Drensky, 1936, Nikolić & Polenec, 1981).  
Global distribution: Palearctic.

\**Steatoda triangulosa* (Walckenaer, 1802)  
New data: L16b (3♀, 29.VII.2020, DG), L37 (1♂, 2♀, 12.VII.2020, DG).  
Global distribution: Palearctic, introduced to Canada, USA and Canary Is.

*Theridion pictum* (Walckenaer, 1802)  
Literary data: L32 (Vrenozi & Jäger, 2013).  
Global distribution: Holarctic.

#### THOMISIDAE

*Diaea livens* Simon, 1876  
New data: L40a (1♂, 24.V.2019, DG), L40b (1♂, 03.X.2019, MN).  
Global distribution: Western Palearctic, introduced to USA.

*Ebrechtella tricuspidata* (Fabricius, 1775)  
Literary data: L1 (sub *Misumena t.*: Stojićević 1929, sub *Misumenops t.*: Deltšev *et al.*, 2003, sub *Ebrechtella t.*: Vrenozi & Jäger, 2013), L32 (sub *Misumena t.*: Kolosvary 1938, 1940, sub *Misumenops t.*: Deltšev *et al.*, 2003, sub *Ebrechtella t.*: Vrenozi & Jäger, 2013), L51 (sub *Misumena t.*: Drensky, 1936).  
New data: L15 (1♀, 06.VI.2019, DG), L16c (1♀, 02.VIII.2020, DG).  
Global distribution: Palearctic.

*Misumena vatia* (Clerck, 1757)

New data: L47 (1♀, 04.X.2019, MN).  
Global distribution: Holarctic.

*Ozyptila praticola* (C. L. Koch, 1837)  
Literary data: L21b (Kolosvary 1938, 1940, Deltšev *et al.*, 2003, Vrenozi & Jäger, 2013).  
Global distribution: Palearctic, introduced to Canada, USA and Argentina.

*Psammritis sabulosus* (Hahn, 1832)  
Literary data: L10a (sub *Xysticus s.*: Šilhavý, 1944).  
Global distribution: Palearctic.

*Runcinia grammica* (C. L. Koch, 1837)  
Literary data: L46 (sub *R. lateralis*: Bresjančeva 1907).  
New data: L17 (1♀, 06.XI.2020, DG).  
Global distribution: Palearctic, introduced to South Africa and St. Helena.

*Synema globosum* (Fabricius, 1775)  
Literary data: L32 (Vrenozi & Jäger, 2013)  
New data: L2a (3♀, 06.VI.2019, DG), L12 (2♀, 27.V.2019, DG), L16b (1♀, 06.XI.2020, DG), L40a (1♀, 14.IV.2019, DG).  
Global distribution: Palearctic.

*Thomisus onustus* Walckenaer, 1805  
Literary data: L32 (Vrenozi & Jäger, 2013), L46 (sub *T. albus*: Bresjančeva, 1907, Drensky, 1936, sub *T. onustus*: Deltšev *et al.*, 2003, Vrenozi & Jäger, 2013).  
New data: L16b (2♀, 18.X.2020, DG), L40a (1♀, 21.IV.2018, DG).  
Global distribution: Palearctic.

*Tmarus piger* (Walckenaer, 1802)  
Literary data: L32 (Vrenozi & Jäger, 2013).  
New data: L2a (2♂, 06.VI.2019, DG).  
Global distribution: Palearctic.

\**Xysticus acerbus* Thorell, 1872  
New data: L12 (1♂, 27.V.2019, DG).  
Global distribution: Palearctic.

*Xysticus audax* (Schrank, 1803)  
Literary data: L32 (Vrenozi & Jäger, 2013)  
Global distribution: Palearctic.

*Xysticus cristatus* (Clerck, 1757)  
 Literary data: L8, L9 (Šilhavý, 1944), L32 (Vrenozi & Jäger, 2013).  
 Global distribution: Palearctic, introduced to Canada and USA.

Literary data: L3, L20 (Stojićević, 1929, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013), L10a (Šilhavý, 1944), L32 (Vrenozi & Jäger, 2013).  
 Global distribution: Palearctic.

*Xysticus ferrugineus* Menge, 1876  
 Literary data: L10 (Šilhavý, 1944), L31 (Kolosvary 1940), L32 (Kolosvary, 1938, Nikolić & Polenec, 1981, Deltshev *et al.*, 2003, Vrenozi & Jäger, 2013).  
 Global distribution: Palearctic.

*Xysticus lanio* C. L. Koch, 1835  
 Literary data: L10b (Šilhavý, 1944).  
 Global distribution: Palearctic.

*Xysticus kochi* Thorell, 1872

\*TRACHELIDAE  
 \**Paratrachelas maculatus* (Thorell, 1875)  
 New data: L16b (1♀, 18.X.2020, DG).  
 Global distribution: Western Palearctic.

**Table 2.** A taxonomic count of the spiders in Kosovo.

Family	Genus	Species	Family	Genus	Species
Agelenidae	5	9	Nesticidae	1	1
Amaurobiidae	1	1	Oxyopidae	1	1
Anyphaenidae	1	1	Philodromidae	1	1
Araneidae	15	21	Pholcidae	2	3
Atypidae	1	1	Phrurolithidae	1	1
Cheiracanthiidae	1	1	Pisauridae	1	1
Clubionidae	2	3	Salticidae	13	18
Dictynidae	3	3	Scytodidae	1	1
Dysderidae	3	6	Segestriidae	1	1
Gnaphosidae	8	12	Sparassidae	1	1
Hahniidae	1	1	Tetragnathidae	4	5
Linyphiidae	12	12	Theridiidae	8	9
Liocranidae	2	2	Thomisidae	10	15
Lycosidae	7	25	Trachelidae	1	1
Miturgidae	1	2	<b>29</b>	<b>108</b>	<b>159</b>

**Table 3.** Species, excluded from the checklist due to the erroneous interpretation of their localities.

Family/Species: reference	Actually refers to	Reference for designation: page
Araneidae <i>Araneus diadematus</i> Clerck, 1757: Drensky, 1936	Serbia	Stojićević (1929): 19, present paper
Dysderidae <i>Dasumia kusceri</i> (Kratochvíl, 1935): Nikolić & Polenec, 1981	North Macedonia	Naumova <i>et al.</i> , (2019a): 471
<i>Dysdera ninnii</i> Canestrini, 1868: Nikolić & Polenec, 1981	*rejected	Rezác <i>et al.</i> (2014): 464
Linyphiidae		

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<i>Bathypantes approximatus</i> (O. P.-Cambridge, 1871): Serbia Nikolić & Polenec 1981		Stojićević (1929): 22, present paper
<i>Erigone atra</i> Blackwall, 1833: Stojićević, 1929	Serbia	present paper
<i>Macrargus rufus</i> (Wider, 1834): Nikolić & Polenec, Serbia 1981		Stojićević (1929): 26, present paper
<i>Mansuphantes mansuetus</i> (Thorell, 1875): Stojićević, Serbia 1929		present paper
<i>Oedothorax gibbosus</i> (Blackwall, 1841): Drensky, 1936	Serbia	present paper
<i>Troglohyphantes kratochvili</i> Drensky, 1935: Mammola <i>et al.</i> , 2018 (supl.)	North Macedonia	Drensky (1935): 101, present paper
Lycosidae		
<i>Xerolycosa nemoralis</i> (Westring, 1861): Drensky, 1936	North Macedonia	Stojićević (1929): 50, present paper
Theridiidae		
<i>Steatoda bipunctata</i> (Linnaeus, 1758): Drensky, 1936	Serbia	Stojićević (1929): 14, present paper
<i>Steatoda castanea</i> (Clerck, 1757): Drensky, 1936	Serbia	Stojićević (1929): 14, present paper
Zodariidae		
<i>Zodarion aculeatum</i> Chyzer, 1897: Drensky, 1936	Serbia	Stojićević (1929): 41, Bosmans (2009): 226

\* Distribution range of *Dysdera ninnii* is restricted to north-eastern Italy, Slovenia, western Croatia and Switzerland, according to Rezac *et al.* (2014).

### Discussion

According to the results of the present study, the spider fauna of Kosovo is the least investigated in the Balkans. An original faunistic data can be found in barely eleven literary sources and the total numbers of published species is only 96. Even in Bosnia & Herzegovina (179 species), Montenegro (289 species), European Turkey (313 species) and Albania (571 species), which are also still in their early stage of researches, spider faunas are more species-rich (Helsdingen, 2013, 2020, Kúrka *et al.*, 2020, Naumova *et al.*, 2016, 2019b, Nentwig *et al.*, 2021, Stanković & Ćurčić, 2020). Most of the species in the current checklist of Kosovo have Palearctic distribution. Only seven species (*Amaurobius phaeacus*, *Dysderocrates storkani*, *Fageiella ensigera*, *Harpactea nausicaae*, *Inermocoelotes kulczynskii*, *Palliduphantes trnovensis* and *Tegenaria bosnica*) can be defined as endemics for the Balkans. As a landlocked territory with a complex historical and recent political environment, Kosovo was not the most appetizing destination for either vacation or

work trips, and until recently there was no arachnologist born and working there, but that is slowly changing. The provided comprehensive national checklist is the first purposeful study of the spiders in Kosovo. The established number of 159 spider species is just the beginning, considering the geographical position in the Balkans `biodiversity hotspot` (Griffits *et al.*, 2004, Cuttelod *et al.*, 2008), the diverse relief and climate and especially given the complete lack of study of the cave systems.

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### References

Bosmans, R. (2009). Revision of the genus *Zodarion* Walckenaer, 1833, part III.



- South East Europe and Turkey (Araneae: Zodariidae). *Contributions to Natural History*, 12, 211–295.
- Bresjančeva, J. (1907). Prilog za poznavanje srpske aranejske faune. *Travaux Faits au Laboratoire de Zoologie à l'Université de Belgrade*, 1(2-3), 1–16. (In Serbian).
- Buckle, D.J., Carroll, D., Crawford, R.L. & Roth, V.D. (2001). Linyphiidae and Pimoidae of America north of Mexico: checklists, synonymy, and literature. Part 2. In: P. Paquin & D.J. Buckle (Eds.) *Contributions à la connaissance des Araignées (Arachnida) d'Amérique du Nord. Fabriques, Supplément 10*, 89–191.
- Cuttelod, A., Garcia, N., Abdul Malak, D., Temple, H. & Katariya, V. (2008). The Mediterranean: a biodiversity hot spot under threat. In: J-C. Vie, C. Hilton-Taylor & S.N. Stuart (Eds): *The 2008 Review of The IUCN Red List of Threatened Species*. – Gland: IUCN.
- Deeleman-Reinhold, C.L. (1974). The cave spider fauna of Montenegro (Araneae). *Glasnik Republickog Zavoda za Zastitu Prirode i Prirodnjackog Muzeja Titogradu*, 6, 9–33.
- Deeleman-Reinhold, C.L. (1986). Contribution à la connaissance des *Lepthyphantes* du groupe *pallidus* (Araneae, Linyphiidae) de Yougoslavie, Grece et Chypre. *Mémoires de Biospéologie*, 12(for 1985), 37–50. [publ. in April 1986]
- Deltshev, C., Ćurčić, B.P.M., Dimitrijević, R., Makarov, S. & Lučić, L. (1996). Further report on cave- and litter-dwelling spiders (Araneae, Arachnida) from Serbia, Yugoslavia. *Archives of Biological Sciences*, 48(3-4), 25–26.
- Deltshev, C., Ćurčić, B.P.M. & Blagoev, G. (2003). *The spiders of Serbia*. Committee for Karst and Speleology – Serbian Academy of Sciences and Arts; Institute of Zoology –Bulgarian Academy of Sciences; Institute of Zoology – Faculty of Biology – University of Belgrade; Institute for Biological Research “Siniša Stanković” (co-publishers), Belgrade – Sofia. 833 p.
- Drensky, P. (1935). Paiatsi (Araneae) sabirani ot Dr Stanko Karaman v Jougoslavia i osobeno v Makedonia. *Izvestiya na Tsarskite Prirodonauchni Instituti v Sofia*, 8, 97–110. (In Bulgarian).
- Drensky P. (1936). Katalog der echten Spinnen (Araneae) der Balkanhalbinsel. *Sbornik na Balgarskata akademija na naukite*, 32, 1–223.
- Geci, D. & Naumova, M. (2021). The spotted orb-weaver *Neoscona byzanthina* (Pavesi, 1876) – an enigmatic but common species on the Balkans (Araneae: Araneidae). *Ecologia Balkanica*, Special Edition 4, 1-9.
- Griffiths, H.I., Kryštufek, B. & Reed, J.M. (Eds.) (2004). *Balkan Biodiversity - Pattern and Process in the European Hotspot*. Springer. doi: [10.1007/978-1-4020-2854-0](https://doi.org/10.1007/978-1-4020-2854-0)
- Grimm, U. (1985). Die Gnaphosidae Mitteleuropas (Arachnida, Araneae). *Abhandlungen des Naturwissenschaftlichen Vereins in Hamburg (NF)*, 26, 1–318.
- Helsdingen, P.J. van. (2013). A quick scan of the spider fauna of the European part of Turkey. *Nieuwsbrief SPINED*, 33, 29–38.
- Helsdingen, P.J. van. (2020). Spiders (Araneae). In: *Fauna Europaea*. (Version 2020). Retrieved from [europeanarachnology.org](http://europeanarachnology.org).
- Jennings, D.T. & Graham, F. (2007). *Spiders (Arachnida: Araneae) of Milbridge, Washington County, Maine*. 204 p. doi: [10.2737/NRS-GTR-16](https://doi.org/10.2737/NRS-GTR-16).
- Knoflach, B. (1996). Die Arten der *Steatoda phalerata*-Gruppe in Europa (Arachnida: Araneae, Theridiidae). *Mitteilungen der Schweizerischen Entomologischen Gesellschaft*, 69(3-4), 377–404. doi: [10.5169/seals-402640](https://doi.org/10.5169/seals-402640).
- Kolosvary, G. (1938). Sulla Fauna Arachnologica della Jugoslavia. *Rassegna Faunistica*, 16(3-4), 3–23.
- Kolosváry, G. (1940). Explorationes zoologicae ab E. Csiki in Albania peractae. *A Magyar Tudományos Akadémia Balkán-Kutatásainak*

- Tudományos Eredményei*. Budapest I (XIX), 330–332.
- Kratochvíl, J. (1935). Araignées nouvelles ou non encore signalées en Yougoslavie. Première partie. *Folia Zoologica et Hydrobiologica, Rigā*, 8, 10–25.
- Kúrka, A., Naumova, M., Indzhov, S. & Deltshev, C. (2020). New faunistic and taxonomic data on the spider fauna of Albania (Arachnida: Araneae). *Arachnologische Mitteilungen*, 59, 8–21.
- Mammola, S., Cardoso, P., Ribera, C., Pavlek, M. & Isaia, M. (2018). A synthesis on cave-dwelling spiders in Europe. *Journal of Zoological Systematics and Evolutionary Research*; 56(2): 301–316. doi: [10.1111/jzs.12201](https://doi.org/10.1111/jzs.12201).
- Naumova, M.V., Lazarov, S., Petrov, B. & Deltshev, C. (2016). New faunistic data on the cave-dwelling spiders in the Balkan Peninsula (Araneae). *Ecologia Montenegrina*, 7, 425–438.
- Naumova, M., Indzhov, S., Dimitrov, D. & Deltshev, C. (2019a). Redescription of *Dasumia kusceri* (Kratochvíl, 1935), with the first description of the female and notes on the genus *Dasumia* Thorell, 1875 (Araneae: Dysderidae) in Bulgaria. *Acta zoologica bulgarica*, 71, 467–472.
- Naumova, M., Lazarov, S. & Deltshev, C. (2019b). Faunistic diversity of the spiders in Montenegro (Arachnida: Araneae). *Ecologia Montenegrina*, 22, 50–89.
- Nentwig, W., Blick, T., Bosmans, R., Gloor, D., Hänggi, A. & Kropf, C. (2021). *Spiders of Europe*. Version {1}.2021. Retrieved from [araneae.nmbe.ch](https://araneae.nmbe.ch), accessed on {31 January 2021}. doi: [10.24436/1](https://doi.org/10.24436/1).
- Nikolić, F. & Polenec, A. (1981). *Catalogus Faunae Jugoslaviae*. Ljubljana. 3(4), 1–135.
- Paquin, P. & Dupérré, N. (2003). Guide d'identification des araignées de Québec. *Fabriques, Supplement 11*, 1–251.
- Řezáč, M., Gasparo, F., Král, J. & Heneberg, P. (2014). Integrative taxonomy and evolutionary history of a newly revealed spider *Dysdera ninnii* complex (Araneae: Dysderidae). *Zoological Journal of the Linnean Society*, 172(2), 451–474. doi: [10.1111/zoj.12177](https://doi.org/10.1111/zoj.12177).
- Šilhavý, V. (1944). De Araneis familiae Thomisidae in Balcano occidentali viventibus. *Sborník Klubu Přírodovědeckého v Brně*, 25, 90–95.
- Stanković, M. & Ćurčić, M. (2020). New species in the arachnofauna of Bosnia and Herzegovina from the protected habitat of Gromište, Velino Selo. *Archives for Technical Sciences*, 22, 67–78.
- Stojićević, D. (1929). [Les araignées de Serbie. Araneae Sund.]. *Glasnevin Museum de Historia Natural, Beograd*, 19, 1–65.
- Vrenozi, B. & Jager, P. (2013). Spiders (Araneae) from Albania and Kosovo in the collection of Carl Friedrich Roewer. *Arachnologische Mitteilungen*, 46, 17–26.
- World Spider Catalog. (2021). *World Spider Catalog*. Version 22.0. Natural History Museum Bern, Retrieved from [wsc.nmbe.ch](https://wsc.nmbe.ch), accessed on {31 January 2021}. doi: [10.24436/2](https://doi.org/10.24436/2).
- Wunderlich, J. (1984). Beschreibung der Wolfsspinnne *Pardosa pseudolugubris* n. sp. und Revision der *Pardosa amentata*-Gruppe, zugleich ein Beitrag zur Kenntnis der innerartlichen Variabilität bei Spinnen (Arachnida: Araneae: Lycosidae). *Neue Entomologische Nachrichten*, 10, 1–15.

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