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ГЛАСНИК ОДЈЕЉЕЊА ПРИРОДНИХ НАУКА, 23, 2019.

ЧЕРНОГОРСКАЯ АКАДЕМИЯ НАУК И ИСКУССТВ
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*Marjan Komnenov**

SUBTERRANEAN SPIDERS (ARACHNIDA, ARANEAE) OF MONTENEGRO

Abstract

A catalogue of subterranean spiders (troglobites and troglaphiles) from Montenegro is presented based on critical analysis of literature and unpublished data by the author. For each taxon the following data are displayed: type locality, collection records, new records, distribution, ecology and remarks. Subterranean spiders from Montenegro are composed of 33 species and 2 subspecies from 8 families: Agele-
nidae — 7, Anapidae — 1, Dysderidae — 6, Leptonetidae — 4, Linyphiidae — 10, Nesticidae — 2, Pholcidae — 2 and Tetragnathidae — 3.

A new species –*Tegenaria gordani* sp. nov. (♂) is described and illustrated. One new synonym is established: *Tegenaria animate* Kratochvíl & Miller, 1940 syn. nov. = *Tegenaria bosnica* Kratochvíl & Miller, 1940. The genus *Troglohyphantes* is the most numerous among troglobite spiders with 4 species. Troglobite spiders are present in five families: Agelenidae — 1, Dysderidae — 5, Leptonetidae — 2, Linyphiidae — 5 and Nesticidae — 2.

Keywords: caves, distribution, new species, troglobite, troglaphile, type locality, Montenegro

INTRODUCTION

Faunistic and taxonomic data of subterranean spiders from Montenegro are scarce and could be found in 41 publications. Record of the first spider species found in cave in Montenegro dates back to the beginning of the 20th century (Nosek 1904). In the most productive period, from 30s to 70s, Josef Kratochvíl

* Marjan Komnenov, Blvd. Kuzman Josifovski Pitu, 19/5/3, 1000 Skopje, Macedonia.
E-mail: mkomnenov@gmail.com

was the most prominent author, who published a series of taxonomic papers (Kratohvíl 1933, 1934, 1935, 1938a, 1938b, 1939, 1940, 1970, 1978; Kratochvíl & Miller 1938, 1939, 1940). From that period, additional data on distribution of subterranean spiders in Montenegro could be found in ten publications (Kulczyński 1914; Absolon & Strouhal 1932; Absolon & Kratochvíl 1933; Šilhavý 1936; Denis 1967; Senglet, 1971 and Deeleman-Reinhold, 1971, 1974, 1978a, 1978b). Characteristic of this period is the fact that from the total number of 35 taxa reported in this study, even 21 were described from Montenegro as new for science.

In following period, from the 80s to the present days, number of publications has decreased (Nikolić & Polenec, 1981; Deeleman-Reinhold, 1983, 1986, 1993; Pesarini, 1984; Deltshv, 1988, 2008; Thaler & Knoflach, 1998; Tomić et al., 2000; Deltshv & Ćurčić, 2002; Růžička et al., 2005; Ćurčić et al., 2008; Deltshv et al., 2011a, 2014; Bolzern et al., 2013; Ribera et al., 2014; Naumova et al., 2016; Pavlek & Ribera, 2017). In contrast to previous, in this period no one species was described from Montenegro.

From a total of 41 publications, only four are completely related to subterranean spider fauna of Montenegro (Kratohvíl, 1935; Deeleman-Reinhold, 1974; Tomić et al., 2000; Ćurčić et al., 2008).

The aim of this study is to summarize all published records concerning subterranean spider fauna of Montenegro, and to present new data and findings. Among new findings is a new species, *Tegenaria gordani* sp. nov., described and illustrated here.

MATERIAL AND METHODS

The material included in this study is based on critical analysis of 41 literature sources and new data obtained through field surveys by the author in the period of 2006–2018. In total, about 100 underground objects (caves and potholes) are analysed. Each taxon is listed by the following data: type locality, collection records, new records, distribution, ecology and remarks. The data from the cited sources are mostly presented in the original format, with the appropriate translation into English. Only troglobite and troglophile taxa are included in the study.

Specimens were examined using WILD M5 stereomicroscope. The new species was examined, measured and illustrated at the NHMW using a Nikon SMZ 25 stereomicroscope equipped with Nikon DS-Ri2 camera driven by NIS-Elements 5.2 Software. Left palp was illustrated. Descriptions of the male palp refer to the left one. Lengths of leg segments were measured on the lateral side. All measurements are given in millimetres. Taxonomic nomenclature follows World Spider Catalog (2019). The holotype has been deposited in the Arachnoidea

collection of NHMW. All material (except the holotype) is deposited in author's personal collection.

Abbreviations

Fe — femur

Pa — patella

Ti — tibia

Ta — tarsus

Me — metatarsus

d — dorsal

pd — prodorsal

rd — retrodorsal

v — ventral

pv — proventral

rv — retroventral

pl — prolateral

rl — retrolateral

RTA — retrolateral tibial apophysis

NHMW — Naturhistorisches Museum Wien, Austria.

RESULTS

So far, 33 species and 2 subspecies of subterranean spiders (troglobites and troglaphiles) from 8 families has been recorded in Montenegro: Agelenidae — 7, Anapidae — 1, Dysderidae — 6, Leptonetidae — 4, Linyphiidae — 10, Nesticidae — 2, Pholcidae — 2 and Tetragnathidae — 3. Among them, 15 taxa are endemic to Montenegro: *Barusia hofferi*, *Centromerus obenbergeri*, *Folkia mrazeki*, *Histopona krivosijana*, *Rhode magnifica*, *Sintula roeweri*, *Stalagtia monospina*, *S. skadarensis*, *Sulcia armata*, *S. mirabilis*, *S. montenegrina*, *Tegenaria bayeri*, *Tegenaria gordani* sp. nov., *Troglohyphantes boudewijni* and *Typhlonesticus absoloni*.

Of the total number of 35 taxa, 15 are troglobites and 20 troglaphiles. Troglobite spider taxa are present in five families: Agelenidae — 1, Dysderidae — 5, Leptonetidae — 2, Linyphiidae — 5 and Nesticidae — 2. The most common genus is *Troglohyphantes* with 4 species.

TABLE 1. List of subterranean spiders in Montenegro (Tph — troglophile, Tb — troglobite, Tbb — troglobite blind, LT — type locality in Montenegro, ME — endemic to Montenegro.

Family	Species	Ecology	LT	ME
Pholcidae	<i>Stygopholcus skotophilus</i> Kratochvíl, 1940	Tph	+	
Pholcidae	<i>Stygopholcus skotophilus montenegrinus</i> Kratochvíl, 1940	Tph	+	
Leptonetidae	<i>Barusia hofferi</i> (Kratochvíl, 1935)	Tph	+	+
Leptonetidae	<i>Sulcia armata</i> Kratochvíl, 1978	Tb	+	+
Leptonetidae	<i>Sulcia mirabilis</i> Kratochvíl, 1938	Tb	+	+
Leptonetidae	<i>Sulcia montenegrina</i> (Kratochvíl & Miller, 1939)	Tph	+	+
Dysderidae	<i>Folkia mrazeki</i> (Nosek, 1904)	Tbb	+	+
Dysderidae	<i>Rhode magnifica</i> Deeleman-Reinhold, 1978	Tph	+	+
Dysderidae	? <i>Stalagtia hercegovinensis</i> (Nosek, 1905)	Tb		
Dysderidae	<i>Stalagtia monospina</i> (Absolon & Kratochvíl, 1933)	Tbb	+	+
Dysderidae	<i>Stalagtia skadarensis</i> Kratochvíl, 1970	Tbb	+	+
Dysderidae	<i>Stalitella noseki</i> Absolon & Kratochvíl, 1933	Tbb		
Nesticidae	<i>Kryptonesticus arenstorffi</i> (Kulczyński, 1914)	Tbb		
Nesticidae	<i>Typhlonesticus absoloni</i> (Kratochvíl, 1933)	Tb	+	+
Anapidae	<i>Zangherella relictata</i> (Kratochvíl, 1935)	Tph	+	
Linyphiidae	<i>Centromerus obenbergeri</i> Kratochvíl & Miller, 1938	Tb	+	+
Linyphiidae	<i>Centromerus subcaecus</i> Kulczyński, 1914	Tb		
Linyphiidae	<i>Fageiella ensigera</i> Deeleman-Reinhold, 1974	Tph	+	
Linyphiidae	<i>Palliduphantes spelaeorum</i> (Kulczyński, 1914)	Tph		
Linyphiidae	<i>Palliduphantes trnovensis</i> (Drensky, 1931)	Tph		
Linyphiidae	<i>Sintula roeweri</i> Kratochvíl, 1935	Tph	+	+
Linyphiidae	<i>Troglohyphantes boudewijni</i> Deeleman-Reinhold, 1974	Tb	+	+
Linyphiidae	<i>Troglohyphantes lesserti</i> Kratochvíl, 1935	Tbb	+	
Linyphiidae	<i>Troglohyphantes pretneri</i> Deeleman-Reinhold, 1978	Tbb	+	
Linyphiidae	<i>Troglohyphantes troglodytes</i> (Kulczyński, 1914)	Tph		
Tetragnathidae	<i>Meta bourneti</i> Simon, 1922	Tph		
Tetragnathidae	<i>Meta menardi</i> (Latreille, 1804)	Tph		
Tetragnathidae	<i>Metellina merianae</i> (Scopoli, 1763)	Tph		
Agelenidae	<i>Histopona conveniens</i> (Kulczyński, 1914)	Tph		
Agelenidae	<i>Histopona dubia</i> (Absolon & Kratochvíl, 1933)	Tph		
Agelenidae	<i>Histopona krivosijana</i> (Kratochvíl, 1935)	Tb	+	+
Agelenidae	<i>Tegenaria annulata</i> Kulczyński, 1913	Tph		
Agelenidae	<i>Tegenaria bayeri</i> Kratochvíl, 1934	Tph	+	+
Agelenidae	<i>Tegenaria bosnica</i> Kratochvíl & Miller, 1940	Tph		
Agelenidae	<i>Tegenaria gordani</i> sp. nov.	Tph	+	+

Family PHOLCIDAE

Stygopholcus skotophilus Kratochvíl, 1940

Holocnemus (*Hoplopholcus*) *Absoloni* Kulczyński 1914: 355 (in part.)

Stygopholcus skotophilus Kratochvíl 1940: 16; Nikolić & Polenec 1981: 21; Deltshev 2008: 331.

Hoplopholcus scotophilus [sic!] Tomić et al. 2000: 35P.

TYPE LOCALITY. Montenegro, Kotor, Zvečava, cave “**Pećina u Ivici**”.

COLLECTION RECORDS. Caves: “Pećina u Ivici”, “Bobjerska pećina”, “Bobotuša [=Babatuša] pećina”, “Čora pećina”, “Elazova pećina”, “Golodražnica”, “Golubnjačka pećina”, “Izeta pećina”, “Lakičević pećina”, “Leskova pećina”, “Lopata pećina”, “Matjaševica pećina”, “Mijukovica pećina”, “Pećina na Jankovom vrhu”, “Pećina kod Blagojevića”, “Pećina kod Crkvice”, “Pećina kod Dvorečka ždriela”, “Pećina kod Šunjevca”, “Pećina za jankovim vrhom”, “Pećinis kod Napode”, “Pokljuka donja”, “Studena pećina”, “Tomova pećina”, “Vilna [=Vilina] pećina”, “Vodena pećina”, “Vranova jama”, “Grabova pećina kod Sedlara”, “Vodena peć kod Sedlara” (**Kratochvíl 1940** sub *Stygopholcus skotophilus*);

Nikšić: 1 ♂, Vidrovan, cave Vidrovanska, 05. 09. 2000, leg. A. Petrović, S. Čurčić & V. Pešić; 1 ♂ 3 ♀♀, Budoš, cave above Velja Peć cave, 06. 09. 2000, leg. A. Petrović, S. Čurčić & V. Pešić (**Tomić et al. 2000** sub *Hoplopholcus scotophilus*).

DISTRIBUTION. S-Bosnia & Herzegovina, S-Montenegro.

ECOLOGY. Troglophile.

REMARKS. Taxonomy of genus *Stygopholcus* is unclear and it is under revision. Deltshev (2008) wrongly treated *S. skotophilus* and *S. skotophilus montenegrinus* as troglobite taxa.

Stygopholcus skotophilus montenegrinus Kratochvíl, 1940

Stygopholcus montenegrinus Kratochvíl 1940: 20; Nikolić & Polenec 1981: 21.

Stygopholcus skotophilus montenegrinus Senglet 1971: 354; Růžička et al. 2005: 40; Deltshev 2008: 331; Naumova et al. 2016: 434.

TYPE LOCALITY. Montenegro, Nikšić, cave “**Studenačka pećina**”.

COLLECTION RECORDS. Cave “Studenačka pećina” and caves in southern Montenegro (**Kratochvíl 1940** sub *Stygopholcus montenegrinus*);

7 ♂♂ 8 ♀♀, Nikšić, Sudenacka (lapsus) [=Studenačka] cave, 16. 09. 1970, leg. A. Senglet; 2 ♂♂ 2 ♀♀, Cetinje, “Lipa Dobersko” [=Lipska cave], 16. 09. 1970, leg. A. Senglet (**Senglet 1971**);

1 ♂, 1 ♀, juv, Cetinje district, Cetinje town, unnamed cave above the Monastery, 25. 03. 2006, leg. B. Petrov & S. Lazarov; Nikšić district: 1 ♂, 1 ♀, juv, Grahovo vill, Gorno Krivošije, cave Dakovića Pećina [=pećina Vojvode Dakovića], 28. 03. 2006, leg. B. Petrov & S. Lazarov; 3 ♂♂, 1 ♀, juv, Podkita vill, Sirbaba cave, 28. 03. 2006, leg. B. Petrov & S. Lazarov; Risan district: 2 ♂♂, 1 ♀, Crkvice vill, Dolno Krivošije, 2 small potholes near Shuto Blagojević monastery, 17. 08. 2006, leg. B. Petrov & S. Lazarov; 5 ♀♀, juv, Crni Nugli vill, Dragalsko [=Dragaljsko] Polje, Gorno Krivošije, Selakov Dol place, Čora Pećina cave, 26. 03. 2006, leg. B. Petrov & S. Lazarov; 2 ♂♂, 2 ♀♀, juv, Crni Nugli vill, Dragalsko [=Dragaljsko] Polje, Gorno Krivošije, unnamed cave, 26. 03. 2006, leg. B. Petrov & S. Lazarov; 5 ♂♂, 6 ♀♀, juv, Dolno Krivošije, Pokljuka Gornja cave, 27. 03. 2006, leg. B. Petrov & S. Lazarov; Virpazar district: 1 ♂, 1 ♀, Seoca vill, Golubova Pećina cave, 12. 08. 2006, leg. B. Petrov & S. Lazarov; 5 ♂♂, 5 ♀♀, 1 juv, Trnovo vill, Baba Tuša [=Babatuša] cave, 24. 03. 2006, leg. B. Petrov & S. Lazarov (**Naumova et al. 2016**).

DISTRIBUTION. S-Bosnia & Herzegovina, S-Montenegro.

ECOLOGY. Troglophile.

REMARKS. See previous taxon.

Family LEPTONETIDAE

“*Barusia*” *hofferi* (Kratohvíl, 1935)

Paraleptoneta hofferi Kratochvíl 1935: 8; Kratochvíl & Miller 1939: 109.

Barusia hofferi Kratochvíl 1978: 22; Nikolić & Polenec 1981: 18; Růžička et al. 2005: 29; Deltšev 2008: 331.

TYPE LOCALITY. Montenegro, Krivošije, Crkvice, cave “**Pećina kod Blagojevića**”.

COLLECTION RECORDS. 1 ♀, type locality (**Kratochvíl 1935** sub *Paraleptoneta hofferi*);

1 ♀, same locality (**Kratochvíl & Miller 1939** sub *Paraleptoneta hofferi*).

DISTRIBUTION. SW-Montenegro.

ECOLOGY. Troglophile.

REMARKS. Known from type locality only. Taxonomic position of the species is uncertain as it is known by female only. Its dark pigment and scapus on the genital plate suggest close relationship to *Sulcia montenegrina*.

***Sulcia armata* Kratochvíl, 1978**

Paraleptoneta orientalis Absolon & Strouhal 1932: 27; Kratochvíl 1934: 174.
Sulcia armata Kratochvíl 1978 18; Růžička et al. 2005: 17; Deltshev 2008: 330.

TYPE LOCALITY. Montenegro, Krivošije, Bjeloš Mt., cave “**Pećina u Selakovom Dolu**”.

COLLECTION RECORDS. Type locality (**Kratochvíl 1934** sub *Paraleptoneta orientalis*).

DISTRIBUTION. SW-Montenegro.

ECOLOGY. Troglobite.

REMARKS. Known from type locality only. The species is known by male only. Its taxonomic status is unclear. Both genera, *Barusia* and *Sulcia*, need revision.

***Sulcia mirabilis* Kratochvíl, 1938**

(Figure 1)

Paraleptoneta orientalis Kratochvíl 1935: 6 (misidentification); Šilhavý 1936: 14.
Sulcia mirabilis Kratochvíl 1938b: 14; Kratochvíl 1978: 17; Nikolić & Polenec 1981: 19; Růžička et al. 2005: 39; Deltshev 2008: 330; Naumova et al. 2016: 432.

TYPE LOCALITY. Montenegro, Krivošije, Crni Nugli, Selakov Do, cave “**Čora pećina**”.

COLLECTION RECORDS. Caves: “Golubova pećina”, “Pokljuka gornja”, “Pećina na Jankovim vrhu”, “Čora pećina”, “Vodena pećina” (**Kratochvíl 1935** sub *Paraleptoneta orientalis*);

Kotor district: Crni Nugli, Selakov Do, cave “Čora pećina”; cave “Golubova pećina”, ca. 2 km E of the previous one; village Jankovo, cave “Pećina na Jankovom Vrh”; village Knezlaz, cave “Pokljuka gornja”; Nikšić district, village Grahovac, hill “Brdo Omutić”, cave “Vodena pećina” (**Kratochvíl 1938b**);

1 ♂ 3 ♀♀, juv, Risan district, Dolno Krivošije, cave Pokljuka Gornja, 27. 06. 2000, leg. B. Petrov & S. Lazarov (**Naumova et al. 2016**).

NEW RECORDS. 1 ♂ 1 ♀, Krivošije, Kameno More, Knezlaz, 719 m a. s. l, cave Gornja Pokljuka, 09. 08. 2009, leg. M. Komnenov.

DISTRIBUTION. SW-Montenegro.

ECOLOGY. Troglobite.



FIGURE 1. *Sulcia mirabilis*, male, Gornja Pokljuka cave.

REMARKS. Kratochvíl (1938b) noted that females from Kotor district differ from those in Nikšić area by the shape of copulatory organs, but by the shape of pedipalps males do not differ at all.

***Sulcia montenegrina* (Kratochvíl & Miller, 1939)**

(Figure 2)

Paraleptoneta montenegrina Kratochvíl & Miller, 1939: 110.

Sulcia montenegrina Kratochvíl 1978: 18; Nikolić & Polenec 1981: 19; Růžička et al. 2005: 40; Deltšev 2008: 330.

TYPE LOCALITY. Montenegro, cave “**Boljevići pećina**”.

COLLECTION RECORDS. ♂, type locality (**Kratochvíl & Miller 1939**).

NEW RECORDS. Numerous males and females, S-Montenegro, Čanj, *Carpinus* forest, under stones, 10. 05. 2008, leg. M. Komnenov.

DISTRIBUTION. S-Montenegro.

ECOLOGY. Troglophile

REMARKS. Hitherto only known from the type locality. Female of *S. montenegrina* is unknown. Kratochvíl & Miller (1939) didn't specify the exact location of the type locality. They only stated that the cave “Boljevići pećina” is



FIGURE 2. *Sulcia montenegrina*, male and female on the underside of the stone in *Carpinus* forest, Čanj.

situated in S-Montenegro. Most probably the type locality is located near the village Boljevići, ca. 2 km S of Virpazar.

In the works of Deltshev (2008) *S. montenegrina* is incorrectly categorized as troglobite species. It has fully developed eyes and dark colour, and even more, in nature it is more frequent under stones, than in caves. Its troglophile character has been already mentioned by Kratochvíl (1978).

Female of this species will be described in further taxonomic paper. Initial research reveals scapus on the genital plate in *S. montenegrina*, in similar shape and structures as in *B. hofferi*. It suggests that both species could be conspecific and synonymy is not excluded.

Family DYSDERIDAE

***Folkia mrazeki* (Nosek, 1904)**

(Figures 3, 4)

Stalita mrazeki Nosek 1904: 2.

Stalagtia mrazeki Kratochvíl 1970: 52; Nikolić & Polenec 1981: 17.

Folkia mrazeki Deeleman-Reinhold 1993: 121; Tomić et al. 2000: 35P; Růžička et al. 2005: 40; Ćurčić et al. 2008: 51; Deltshev 2008: 332.

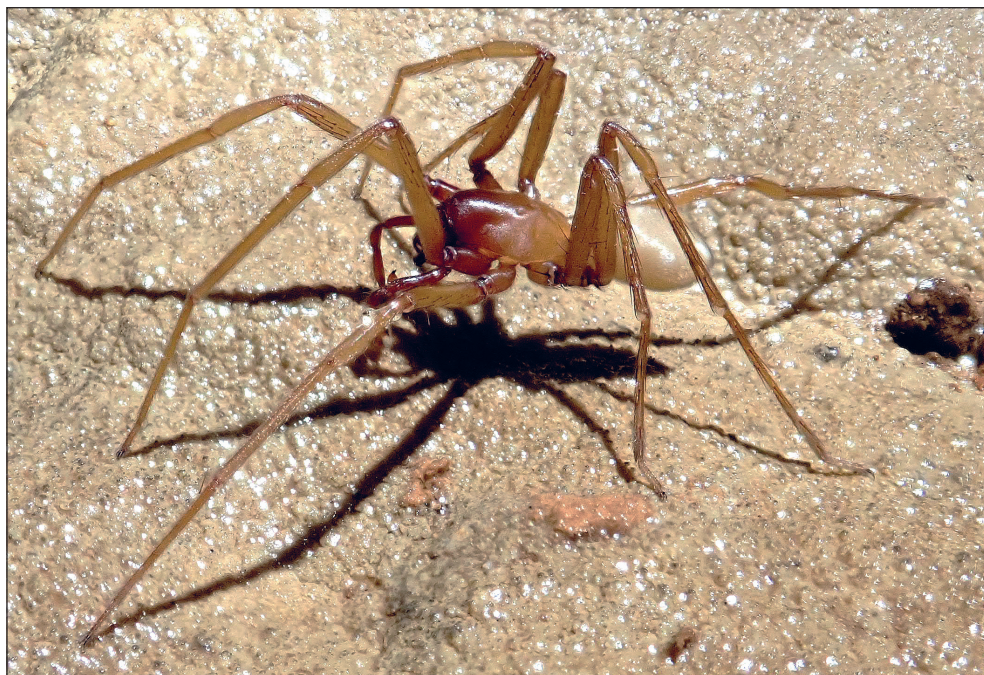


FIGURE 3. *Folkia mrazeki*, male, Lipska pećina Cave.

TYPE LOCALITY. Montenegro, Cetinje, Lipa, cave “**Lipska pećina**”.

COLLECTION RECORDS. 1 ♀ holotype, type locality (Nosek 1904 sub *Stalagtia mrazeki*); 1 ♀ holotype, same locality (Kratochvil 1970 sub *Stalagtia mrazeki*);

2 ♂♂, Cetinje, Cetinjska pećina cave, 29. 07. 1972, leg. M. Dekking; 1 ♂ 3 ♀♀, Rumija Mt., cave “pećina kod jame Gorana”, 31. 07. 1983, leg. A. P. B. Deeleman; 1 ♂ 1 ♀, Vraćenovići, Vuči Do, cave “Stanina pećina”, 23. 06. 1975, P. R. & C. L. Deeleman; 1 ♀ 1 juv, same locality, 20 and 22. 07. 1970, leg. P. R., A. P. B., C. L. Deeleman & M. Dekking; 1 ♂, Virpazar, cave “Grbočica pećina”, 2–3. 08. 1971, leg. P. R., A. P. B., C. L. Deeleman & G. Simons; 2 juv, Virpazar, cave “Babatuša pećina”; 1 subadult, Podgorica, Peuta, cave “pećina od Zavora”, 01. 11. 1963, leg. E. Pretner (Deeleman-Reinhold 1993);

1 ♀ 3 juv, Podgorica, cave Megara, leg. A. Perović, S. Čurčić & V. Pešić; 1 ♂ 2 ♀♀, Cetinje, Bokovo, cave Ladnica, leg. A. Perović, S. Čurčić & V. Pešić (Tomić et al. 2000).

NEW RECORDS. 1 ♂ 1 ♀, Cetinje, Lipa, Lipska cave, 13. 08. 2018, leg. M. Komnenov.

DISTRIBUTION. S-Montenegro.

ECOLOGY. Troglobite.

REMARKS. New finding of *F. mrazeki* from Lipska pećina cave represents a curiosity. The species was never recorded again from the type locality after its



FIGURE 4. *Folkia mrazeki*, female, Lipska pećina Cave.

original description, more than 100 years. The record of *Stalita mrazeki* from “Jama am Herupjelo” [=Jama kod Hrupjela] in Bosnia & Hercegovina (Kratochvíl 1934) was considered erroneous by Kratochvíl (1970).

***Rhode magnifica* Deeleman-Reinhold, 1978**

(Figure 5)

Rhode magnifica Deeleman-Reinhold 1978a: 255; Nikolić & Polenec 1981: 16; Pesarini 1984: 85; Deeleman-Reinhold 1993: 107; Deltshv 2008: 332.

TYPE LOCALITY. Montenegro, Nikšić, Trubjela, cave “**Ledena pećina na Kiti**”.

COLLECTION RECORDS. 1 ♀, type locality, 07. 08. 1969, leg. A. P. B. Deeleman (**Deeleman-Reinhold 1978a**);

1 ♂, Rumija Mt., “Obzovica”, pass at 700 m, along road Budva-Cetinje, under deeply embedded stones in deciduous forest, 02. 10. 1980, leg. P. R. Deeleman; several juveniles, Rumija Mt., “Pastrovačka Gora”, pass at 600 m on road Petrovac-Virpazar, under deeply embedded stones in oak forest, 3–5. 10. 1980, leg. P. R. Deeleman (**Deeleman-Reinhold 1993**).



FIGURE 5. *Rhode magnifica*, female, Cetinjska pećina cave.

NEW RECORDS. 1 ♀, Cetinje, Cetinjska pećina cave, 19. 05. 2018, leg. M. Komnenov.

DISTRIBUTION. S-Montenegro.

ECOLOGY. Troglophile.

REMARKS. Despite the fact that *Rhode magnificais* is troglophile species with fully developed eyes, and that it has been recorded under stones in deciduous forest (Deeleman-Reinhold, 1993), it was categorized as troglobite species by Deltshev (2008).

?*Stalagtia hercegovinensis* (Nosek, 1905)

? *Stalagtia (Stalagtia) folki* Kratochvíl 1970: 38.

Stalagtia hercegovinensis Čurčić et al. 2008: 51.

TYPE LOCALITY. Bosnia & Hercegovina, Popovo Polje, Zavala, **Vjetrenica cave**.

COLLECTION RECORDS. ♂ 1 subadult ♂, Grahovo, Osječnica, cave “Bobjerska pećina”, 20. 07. 1935, leg. J. Kratochvíl (**Kratochvíl 1970** sub *Stalagtia (Stalagtia) folki*).

DISTRIBUTION. S-Croatia, S-Bosnia & Hercegovina, SW-Montenegro?

ECOLOGY. Troglobite.

REMARKS. Presence of this species in Montenegro is questionable, as *S. hercegovinensis* has been never recorded from Montenegro. The only record for Montenegro comes indirectly, based on the synonymization of *S. folki* — described from a cave in SW-Montenegro. The synonymization of *S. folki* with *S. hercegovinensis* by Deeleman-Reinhold (1993) is not convincing. It is unclear on which basis she establishes synonymy. There is no any valuable and concrete proof to support synonymization. She declared that she has studied specimens from S-Montenegro: “*I have studied males and females from an area encompassing central and south Dalmatia, southern Hercegovina and southern Montenegro (map 1), covering a north-south distance of 300 km*”. But according to the list of localities presented in the material paragraph, it is clear that she examined material from Hercegovina and Croatia only. According to that, it is obviously that she didn't examine the holotype of *S. folki*, as well.

Among that material, she distinguishes two forms: “*In this material, comprising 13 males and 27 females and numerous subadults, two forms can be distinguished: the dominant form bears at least 4 spines on the anterior metatarsi, more on the tibiae, and the male palpal bulb is distinctly longer than wide (fig. 8). The other form involves 4 males and 1 female from the easternmost localities and 2 males in the central populations, all syntopic with specimens of the dominant form. In this other form, spines on anterior metatarsi are lacking and the bulb is almost round (fig. 10)*”. It is not emphasized which specimens from which locality comprise the “*dominant group*” and which ones comprise the “*other form*”. Also, it is indistinct which samples are from the “*eastern most localities*” and which ones are from the “*central populations*”. From taxonomical point of view, the most important information also remains unclear — to which form synonymized *S. folki* belongs.

Kratochvíl (1970) provide detailed description of *S. folki* and indicated several differences with *S. hercegovinensis*, not only by the shape of the male bulb, but also by other somatic characters: “*Stalagtia (Stalagtia) folki ist eine gute selbständige Art, die bisher aus einer einzigen Höhle im Binnenland des südwestlichen Teiles von Montenegro nahe der herzegovinischen Grenze bekannt ist. Sie wird nicht nur durch die Form des Kopulationsapparates des Männchens, die Form und Lage des hinteren Stigmenpaares, sondern auch durch weitere Merkmale charakterisiert*”. I completely accept Kratochvíl's statement that *S. folki* is a distinct species and in some of my further studies, its valid status will be formally revalidated.

The recent finding of *S. hercegovinensis* in Turkey, an endemic cave species from southern Hercegovina and southern Dalmatia, sounds as a sensation. Almost 2000 km far from its distribution area, this troglobite spider was recorded by Varol (2016) in artificial pine forest in semi-desert area of southern Turkey, close to Syrian border. It is obviously that the Varol's publication was published

without expert review. Positive is the fact that author provide digital photos of the habitus and the male bulbus, which clearly shows the incorrect identification of an epigeal species.

Stalagtia monospina (Absolon & Kratochvíl, 1933)

Stalita monospina Kratochvíl 1935: 10.

Stalagtia (Stalagtia) monospina Kratochvíl 1970: 35.

Stalagtia monospina Deltšev 2008: 332.

TYPE LOCALITY. Montenegro, Risan, **Golodražnica cave**.

COLLECTION RECORDS. Type locality (**Kratochvíl 1935** sub *Stalita monospina*); 1 ♂ holotype 1 ♀ allotype, same locality, 01. 08. 1917, leg. J. Hruboš; same locality, 4 ♂♂ 5 ♀♀ topotypes, 17. 07. 1935, leg. K. Kratochvíl (**Kratochvíl 1970**).

NEW RECORDS. 1 ♂, Krivošije, Kameno More, Knezlaz, 719 m a. s. l, cave “Izeta pećina”, 04. 08. 2010, leg. M. Komnenov.

DISTRIBUTION. SW-Montenegro.

ECOLOGY. Troglobite.

REMARKS. Holotype and allotype of this species have been destroyed in the bombing of the city of Brno during Second World War (Kratochvíl 1970).

Stalagtia skadarensis Kratochvíl, 1970

Stalagtia skadarensis Kratochvíl 1970: 53; Deltšev 2008: 332.

TYPE LOCALITY. Montenegro, Skadarsko jezero, Vranjina, cave “**pećina u Vranjino brdo**”.

COLLECTION RECORDS. 1 ♀, type locality, 30. 07. 1969, leg. J. Kratochvíl & J. Purkrábek (**Kratochvíl 1970**).

DISTRIBUTION. S-Montenegro.

ECOLOGY. Troglobite.

REMARKS. The species is known by one female only. Male is required to solve its unclear taxonomic status.

Stalitella noseki Absolon & Kratochvíl, 1933

Stalitella noseki: Absolon & Kratochvíl 1933 599; Kratochvíl 1970: 55; Deelman-Reinhold 1971: 112; Čurčić et al. 2008: 51.

TYPE LOCALITY. Bosnia & Hercegovina, Popovo Polje, Zavala, **Vjetrenica cave**.

COLLECTION RECORDS. 1 ♀, in mountain Orjen “*Montenegro, in montibus Orjen dictis*” (**Absolon & Kratochvíl 1933**);

1 ♀, 3 juv, Krivošije, Risan, cave “pećina kod Napode”, 10. 10. 1917, leg. A. Novotný (**Kratochvíl 1970**);

1 juv, Orjen Mt., Krivošije, Zvečava, cave “pećina na Pržini”, 27. 08. 1967, leg. E. Pretner (**Deeleman-Reinhold 1971**).

DISTRIBUTION. S-Bosnia & Hercegovina, SW-Montenegro.

ECOLOGY. Troglobite.

REMARKS. Absolon & Kratochvíl (1933) didn't indicated the type locality in the original description of this species. They just mentioned that the female comes from an unknown cave in Orjen Mt. in Montenegro. Later, Kratochvíl (1970) by subsequent designation selected Vjetrenica cave as type locality. Kratochvíl examined only females (4 ♀♀ and 1 juvenile) from Vjetrenica cave. According his statements, specimens in the collection of Karel Absolon were destroyed during the bombing of the city of Brno in 1943. Only one, topotype female remained in Kratochvíl collection, after which Kratochvíl (1970) made drawings. For some reason he did not investigate female genitalia and gave drawings of the female pedipalp only. From Karel Absolon collection, Kratochvíl (1970) examined one female and three juveniles from the cave “pećina kod Napode” in Montenegro, also destroyed during the Second World War.

The only male specimen of this species collected to date, described and illustrated by Deeleman-Reinhold (1971), was found in the cave Provalija near Nevesinje in southern Hercegovina, (30. 07. 1968, leg. E. Pretner). In the same work, Deeleman-Reinhold examined also one female collected from the same cave (23. 07. 1963, leg. P. R. & C. L. Deeleman). It is questionable whether specimens from Provalija cave are conspecific with specimens from the type locality — Vjetrenica cave.

Family NESTICIDAE

Kryptonesticus arenstorffi (Kulczyński, 1914)

(Figure 6)

Nesticus arenstorffi Kratochvíl 1933: 42; Kratochvíl 1935: 11; Šilhavý 1936: 209; Deeleman-Reinhold 1974: 13; Deltshv 2008: 333; Ribera et al. 2014: 101; Naumova et al. 2016: 434.

Kryptonesticus arenstorffi Pavlek & Ribera 2017: 14.



FIGURE 6. *Kryptonesticus arenstorffi*, female, Cetinjska pećina cave.

TYPE LOCALITY. Bosnia & Hercegovina, Trebinje, cave “**Laketiće**va pećina”.

COLLECTION RECORDS. Krivošije, Risan district, cave Jamutina (**Kratochvíl 1933** sub *Nesticus arenstorffi*);

Krivošije, Kotor district, caves: “Čora pećina”, “Deverička [=Teferička] pećina”, “Golodražnica”, “Golubova pećina”, “Izeta pećina”, “Matjaševica pećina”, “Mijukovica pećina”, “Pećina kod Blagojevića”, “Pećina kod Dvorečka ždrijela”, “Pećina kod Šunjevca”, “Pokljuka Gornja”, “Studena pećina”, “Vilna [=Vilina] pećina”; Nikšić district, caves: “Golubnjačka pećina”, “Leskova pećina”, “Meradova pećina”, “Vodena pećina” (**Kratochvíl 1935** sub *Nesticus arenstorffi*);

1 ♂ 1 ♀, Nikšić, Podbožur, Rudine, cave “Pećina na Troglav” (**Deeleman-Reinhold 1974** sub *Nesticus arenstorffi*); Risan district: 1 ♀, 3 juv, Crni Nugli vill, Dragalsko [=Dragaljsko] Polje, Gorno Krivošije, Selakov Dol place, Čora Pećina cave, 26. 03. 2006, leg. B. Petrov & S. Lazarov; 1 ♀, juv, Crni Nugli vill, Dragalsko [=Dragaljsko] Polje, Gorno Krivošije, unnamed cave, 26. 03. 2006, leg. B. Petrov & S. Lazarov; 3 ♀♀, juv, Dolno Krivošije, Pokljuka Gornja cave, 27. 03. 2006, leg. B. Petrov & S. Lazarov; Virpazar district: 1 ♀, Trnovo vill, Baba Tuša [=Babatuša] cave, 24. 03. 2006, leg. B. Petrov & S. Lazarov (**Naumova et al. 2016** sub *Nesticus arenstorffi*);

Dragaljsko polje, Crni nugli, Selakov do, 750 m, cave “Čora pećina”; 2 ♂♂, 2 juv. ♂♂, 3 juv, Risan, cave Golodražnica, 24. 04. 2010, leg. J. Bedek; 1 ♀, 1 ♂, 1 juv. ♂, same locality, 24. 04. 2010, leg. J. Bedek; 1 ♀, 1 ♂, 1 juv. ♂, 1 juv, same locality, 24. 04. 2010, leg. A. Kirin; 2 ♂♂, 2 ♀♀, 1 juv, same locality, 31. 03. 2012, leg. A. Komerički; 1 ♀, 1 juv. ♂, 1 juv, same locality, 31. 03. 2012, leg. M. Lukić; 4 ♀♀, same locality, 31. 03. 2012, leg. J. Bedek; 1 ♀, 1 juv. ♂, same locality, 31. 03. 2012, leg. J. Bedek, M. Lukić & A. Komerički; 1 ♂, Dragaljsko polje, cave “Pećina kod Dvoriškog ždrijela”, 03. 12. 2014, leg. M. Pavlek; 1 ♂ 2 ♀♀, same locality, 03. 12. 2014, leg. M. Pavlek; 1 ♂ 1 ♀, cave Golodražnica, 04. 12. 2014, leg. M. Lukić; 3 ♂♂ 2 ♀♀, Cetinje, cave “Cetinjska pećina”, 28. 10. 2015, leg. M. Pavlek; 1 ♂ 1 ♀, same locality, 28. 10. 2015, leg. M. Pavlek; 1 ♂, 3 ♀♀, 2 juv, same locality, 28. 10. 2015, leg. V. Sudar; 1 ♀, 1 ♂, Dragaljsko polje, cave “Vilina pećina”, 30. 10. 2015, leg. M. Pavlek; 1 ♂, Grahovo, cave “pećina Vojvode Dakovića”, 06. 11. 2015, leg. M. Lukić (**Pavlek & Ribera 2017**).

NEW RECORDS. 1 ♂ 1 ♀, Cetinje, Cetinjska pećina cave, 19. 05. 2018, leg. M. Komnenov.

DISTRIBUTION. S-Croatia, S-Bosnia & Hercegovina, SW-Montenegro.

ECOLOGY. Troglobite.

Typhlonesticus absoloni (Kratohvíl, 1933)

(Figure 7)

Typhlonesticus speluncarum Kulczyński 1914: 379.

Nesticus absoloni Kratochvíl 1933: 52; Deeleman-Reinhold 1974: 10; Nikolić & Polenec 1981: 30.

Nesticus vej dovskyi Kratochvíl 1939: 280.

Typhlonesticus absoloni Růžička et al. 2005: 51; Čurčić et al. 2008: 51; Deltshhev 2008: 333; Deltshhev et al. 2014: 467; Ribera et al. 2014: 101; Naumova et al. 2016: 434.

TYPE LOCALITY. Montenegro, Krivošije, in unspecified cave.

COLLECTION RECORDS. 1 ♀, Krivošije, in unspecified cave (**Kulczyński 1914** sub *Typhlonesticus speluncarum*);

1 ♂ 1 ♀, in a cave in southern Montenegro (**Kratochvíl 1939** sub *Nesticus vej dovskyi*); 2 ♂♂ 1 ♀ several juv, Cetinje, cave “Cetinjska pećina”, 20. 07. 1972; 1 ♀ several juv, Virpazar, Trnovo, cave “Grbočica pećina”, 02–03. 08. 1971 (**Deeleman-Reinhold 1974** sub *Nesticus absoloni*);

2 ♀♀ 3 subadult ♂, Cetinje, cave “Cetinjska pećina”, 22. 08. 2012, leg. D. Antić (**Deltshhev et al. 2014**);



FIGURE 7. *Typhlonesticus absoloni*, male, Cetinjska pećina cave.

1 ♀ 1 juv, Trnovo vill, cave Baba Tuša [=Babatuša], 24. 03. 2006, leg. B. Petrov & S. Lazarov (Naumova et al. 2016).

NEW RECORDS. 1 ♂ 1 ♀, Cetinje, Cetinjska pećina cave, 19. 05. 2018, leg. M. Komnenov.

DISTRIBUTION. SW-Montenegro.

ECOLOGY. Troglobite.

REMARKS. The type locality is unknown, but most probably located in Krivošije. (see remarks under *Centromerus obenbergeri*).

Family ANAPIDAE

Zangherella relict (Kratochvíl, 1935)

Pseudanapis relict Kratochvíl 1935: 18; Nikolić & Polenec 1981: 65.

Zangherella relict Thaler & Knoflach 1998: 74; Růžička et al. 2005: 48; Deltšev 2008: 334; Deltšev et al. 2011a: 36.

TYPE LOCALITY. Montenegro, Risan, cave **Golodražnica**.

COLLECTION RECORDS. ♂♀, Risan district, cave Golodražnica (**Kratochvíl 1935** sub *Pseudanapis relictus*);

1 ♂ 1 ♀, Kotor district, Herceg Novi, Monastir Savina, N42°27'7.2" E18°33'12.5", 50 m a. s. l, 11. 05. 2006, leg. A. Schönhofer (**Deltshev et al. 2011a**).

DISTRIBUTION. Montenegro, Macedonia, Bulgaria.

ECOLOGY. Troglophile.

REMARKS. It is really unclear on which basis Deltshev et al. (2011a) treated this species as troglobite. The same authors in their work gave record from forest area near Monastir Savina in Herceg Novi.

Family LINYPHIIDAE

Centromerus obenbergeri Kratochvíl & Miller, 1938

(Figure 8)

Centromerus subcaecus Kratochvíl 1934: 188 (misidentification); Tomić et al. 2000: 35P (misidentification).

Centromerus obenbergeri Kratochvíl & Miller 1938: 113; Deeleman-Reinhold 1974: 17; Tomić et al. 2000: 35P; Deltshev & Čurčić 2002: 174.

Centromerus cavernarum Tomić et al. 2000: 35P (misidentification).

TYPE LOCALITY. Montenegro, unknown cave.

COLLECTION RECORDS. ♂, Risan district, Boka Kotorska, cave Jamutina (**Kratochvíl, 1934** sub *Centromerus subcaecus*);

♂, unknown cave in southern Montenegro (**Kratochvíl & Miller 1938**); 2 ♂♂, Cetinje, Lipa, Lipska cave, 30. 07. 1972 (**Deeleman-Reinhold 1974**);

1 ♀, same locality, 08. 09. 2000, leg. A. M. Petrović, S. B. Čurčić & V. M. Pešić (**Tomić et al. 2000** sub *Centromerus cavernarum*);

1 ♂ 1 ♀, same locality, 08. 09. 2000, leg. A. M. Petrović, S. B. Čurčić & V. M. Pešić (**Tomić et al. 2000**);

1 ♂, Cetinje, Bokovo, Ladnica cave, 08. 09. 2000, leg. A. M. Petrović, S. B. Čurčić & V. M. Pešić (**Tomić et al. 2000** sub *Centromerus subcaecus*);

1 ♂ 1 ♀, same locality 08. 09. 2000, leg. S. B. Čurčić, A. M. Petrović & V. M. Pešić (**Deltshev & Čurčić, 2002**).

NEW RECORDS. 1 ♂ 1 ♀, Cetinje, Lipa, Lipska cave, 13. 08. 2018, leg. M. Komnenov.

DISTRIBUTION. S-Montenegro.

ECOLOGY. Troglobite.



FIGURE 8. *Centromerus obenbergeri*, male, Lipska pećina cave.

REMARKS. The type locality of *C. obenbergeri* is unknown. Kratochvíl & Miller (1938) indicated that it could be the same cave from where *Nesticus absoloni* comes from “*C’est la meme grotte d’on provient Nesticus Absoloni que nous ne connaissons que par le type*”. As distribution of *N. absoloni*, Kratochvíl (1933) presented only one locality — Krivošije. If the information provided by Kratochvíl & Miller (1938) that *C. obenbergeri* and *T. absoloni* share the same type locality is correct, then the type locality of *C. obenbergeri* should be located in Krivošije — a relatively large mountainous karst region in SW-Montenegro, rich with caves and potholes.

Centromerus subcaecus Kulczyński, 1914

(Figure 9)

Centromerus subcaecus Kratochvíl 1935: 16; Kratochvíl & Miller 1938: 109; Nikolić & Polenec 1981: 33; Deltshev 2008: 334.

Centromreus [sic!] *subcaecus* Šilhavý 1936: 210.

TYPE LOCALITY. Bosnia & Hercegovina, Trebinje, cave “**Ilijina pećina**”.

COLLECTION RECORDS. Kotor district, cave “Pokljuka Gornja”, cave “Pećinis kod Napode”; Nikšić district, cave “Vranova Jama” (**Kratochvíl 1935**);

Kotor district: Knezlac[=Knezlaz], cave “Gornja Pokljuka”; Risan, cave “Jamutina”; Crkvice, cave “Pećina kod Napode”; Nikšić district, cave “Vranova Jama” (**Kratochvíl & Miller 1938**).

NEW RECORDS. 1 ♂ 1 ♀, Krivošije, Kameno More, cave Gornja Pokljuka, 31. 07. 2010, leg. M. Komnenov.

DISTRIBUTION. S-Croatia, S-Bosnia & Hercegovina, SW-Montenegro.

ECOLOGY. Troglobite.

REMARKS. Taxonomic status and distribution of this poorly known species is confusing as result of some recent works. Distribution given as “Europe” by World Spider Catalog (2019) is incorrect. This species was described from S-Hercegovina, and known also from Montenegro and S-Croatia. First mentioning of this species in central European fauna was done by Thaler & Höfer (1988). In that work specimens from Germany, collected in beech forest, were identified as *Centromerus* sp. prope *subcaecus*. According the figures of male and female genitalia, it is clear that they belong to some other species. All published records of *C. subcaecus* from Germany, Italy, Austria and Serbia are based on misidentifications. Distribution of this species presented by Deltšev (2008) is incomplete.

Recent dubious finding of species *Centromerus europaeus* from the cave “Golubova pećina” near village Gornja Seoca in Montenegro by Naumova et al. (2016) need to be commented. According to my knowledge and revision of museum



FIGURE 9. *Centromerus subcaecus*, male, Gornja Pokljuka cave.

materials of *Centromerus* species from the Balkan Peninsula and North Africa (especially material from caves), all records of *C. europaeu* from the Balkans are based on misidentifications.

***Fageiella ensigera* Deeleman-Reinhold, 1974**

(Figure 10)

Fageiella ansiger [sic!] Deeleman-Reinhold 1974: 14.

Fageiella ensigera Deltshv 1988: 295; Deltshv 2008: 335.

TYPE LOCALITY. Montenegro, 1445 m a. s. l, *Abies-Picea* forest, nameless potholes on either side of the road Rožaje-Peć.

COLLECTION RECORDS. 2 ♂♂, type locality, 30. 07. 1971; 4 ♂♂ 5 ♀♀, same locality, 22. 07. 1972 (**Deeleman-Reinhold 1974** sub *Fageiella ansiger*); 1 ♂, same locality, 22. 07. 1972, leg. C. Deeleman-Reinhold (**Deltshv 1988**).

NEW RECORDS. 1 ♂ 1 ♀, Prokletije Mt., Čaf Bora, 1662 m a. s. l, no name cave, 01. 08. 2017, leg. M. Komnenov; 1 ♀, Prokletije Mt., Čaf Bora, 1812 m a. s. l, rocky debris on subalpine pasture, under stones, 28. 07. 2018, leg. M. Komnenov.

DISTRIBUTION. E-Montenegro, W-Serbia.

ECOLOGY. Troglophile.



FIGURE 10. *Fageiella ensigera*, male, Prokletije Mt., Čaf Bora, no name cave.

REMARKS. In description of this species some inconsistency occurred in using two different names for the same species by Deeleman-Reinhold (1974). At the page 14, where she provides description of the species, she used the name “*F. ansiger*”, but on the page 24, in the figure legend text she presented different name “*F. ensiger*”. Brignoli (1983) in his catalogue “*A catalogue of the Araneae described between 1940 and 1981*”, used the second name “*F. ensiger*” and changed it to “*F. ensigera*”. From that time, World Spider Catalog use the name “*ensigera*” as valid name for this species and the name “*ensiger*” as name under which Deeleman-Reinhold (1974) described the species.

Deltshev (2008) wrongly treated this species as troglobite, despite the fact that it has fully developed eyes and normal, dark pigment. The new finding under stones in subalpine pasture in Prokletije Mt., is in concordance to its real ecology, being troglophile species.

***Palliduphantes spelaeorum* (Kulczyński, 1914)**

(Figure 11)

Leptyphantes[sic!] *spelaeorum* Kratochvíl 1935: 16.

Lepthyphantes spelaeorum Deeleman-Reinhold 1974: 18; Nikolić & Polenec 1981: 37; Deeleman-Reinhold 1986: 39.

Palliduphantes spelaeorum Deltshev 2008: 335.

TYPE LOCALITY. Not specified, but must probably a cave near the village of Jasenik, Gacko, Bosnia & Hercegovina.

COLLECTION RECORDS. Nikšić district, cave “Elazova pećina” (**Kratochvíl 1935** sub *Leptyphantes spelaeorum*);

3 ♂♂ 3 ♀♀, Osječenica, cave “Bobjerina [=Bobjerska] pećina”, 30. 07. 1969; 1 ♀, Snježnica, Troglro, snow cave (1800 m) on mountain Vojnik, Praga, 24. 07. 1971 (**Deeleman-Reinhold 1974** sub *Lepthyphantes spelaeorum*);

Osjecenice [=Osječenica], Bobjerska cave (**Deeleman-Reinhold 1986** sub *Lepthyphantes spelaeorum*).

NEW RECORDS. Nikšić district: 1 ♂ 1 ♀, Oputna Rudina, Vuči Do, cave “Stanina Jama”, 09. 08. 2011, leg. M. Komnenov; 1 ♀, Osječenica, Bobjer, cave “Bobjerska pećina”, 1108 m a. s. l, 07. 08. 2018, leg. M. Komnenov.

DISTRIBUTION. S-Croatia, S-Bosnia & Hercegovina, W-Montenegro. The records from Slovenia, Serbia, Bulgaria and Greece are suspicious and should be revised. All old records of *P. spelaeorum* from Macedonia are considered misidentifications. After detailed research of many caves in Macedonia, I never found this species.

ECOLOGY. Troglophile.



FIGURE 11. *Palliduphantes spelaeorum*, female, cave „Bobjerska pećina“.

REMARKS. Taxonomic status of this species is problematic. Kulczyński (1914) didn't designate the holotype nor specify the type locality. In the last sentence of his description, he mentions that he examined females from the cave “Bazgovača špilja” in Brač island, Dalmatia and males and females from an unspecified cave near Jazenik [=Jasenik] in north-eastern Hercegovina. Taking into account the big distance between these two sites, of about 150 km air distance, Deeleman-Reinhold (1974) noted that the specimens from the two caves could be not conspecific. On an unclear basis and without explanation, Kratochvíl (1978: 36) declared the cave “Bazgovača špilja” as type locality. The following facts, that it is unclear whether Kulczyński used the females from Brač or Jasenik as a model of his description and the statement by Deeleman-Reinhold (1974) that specimens from the two regions could be **not conspecific**, are in inconsistency with “designation” or using the cave “Bazgovača špilja” as type locality. For that reason, maybe Deeleman-Reinhold (1986) in his revision of species of *Lepthyphantes* group *pallidus* from Yugoslavia, Greece and Cyprus did not follow Kratochvíl (1978) in this respect and left the question about the type locality still open. However, by my opinion, reason for mention the cave “Bazgovača špilja” as type locality, could be explained

by the fact that, Kratochvíl as type locality, he simply has picked the first locality that was listed in Kulczyński (1914), which in this case it was “Bazgovača špilja”.

Having in mind that from the cave near Jasenik in Hercegovina, Kulczyński (1914) examined **both sexes**, males and females, and at least we are sure that description and the figures of the male is based on samples from this cave, there is great possibility to believe that the description of the female could be based on the same cave too. This is supported by the fact that the female epigyne presented in Kulczyński (1914) by shape is more similar to populations from Hercegovina than from Croatia. In manner of stabilization of taxonomy of this species, I propose the cave near Jasenik as type locality for *P. spelaeorum*.

The records of this species in ground floor in leaf-litter (Deeleman-Reinhold 1986) demonstrate that the categorization of this species as troglomite provided by Deltšev (2008) is incorrect.

Palliduphantes trnovensis (Drensky, 1931)

Lepthyphantes trnovensis Deeleman-Reinhold 1986: 42.

Palliduphantes trnovensis Deltšev 2008: 335.

TYPE LOCALITY. Bulgaria, Veliko Tarnovo, village Arbanasi, cave **Lyaskovska**.

COLLECTION RECORDS. Unspecified cave near Cetinje (**Deeleman-Reinhold 1986** sub *Lepthyphantes trnovensis*).

DISTRIBUTION. Serbia, Montenegro, Macedonia, Bulgaria.

ECOLOGY. Troglophile.

Sintula roeweri Kratochvíl, 1935

Sintula roeweri: Kratochvíl 1935: 11; Denis 1967: 378; Nikolić & Polnec 1981: 40; Růžička et al. 2005: 48.

TYPE LOCALITY. Montenegro, Krivošije, Kameno More, Knezlaz, cave “**Izeta pećina**”.

COLLECTION RECORDS. Kotor district, caves: ♂♀, “Izeta pećina”, “Pećina na Velu gredu”, “Deverička [=Teferička] pećina”, “Pećina kod Šunjevca”, “Matjaševica pećina”; Nikšić district, cave “Vranova jama” (**Kratochvíl 1935**); 1 ♀ (cotype), Krivošije, in unspecified cave (**Denis 1967**).

NEW RECORDS. 1 ♀, Krivošije, Kameno More, Knezlaz, 719 m a. s. l, cave “Izeta pećina”, 09. 08. 2009, leg. M. Komnenov.

DISTRIBUTION. SW-Montenegro.

ECOLOGY. Troglophile.

***Troglohyphantes boudewijni* Deeleman-Reinhold, 1974**

Troglohyphantes boudewijni Deeleman-Reinhold 1974: 20; Deeleman-Reinhold 1978b: 37; Nikolić & Polenec 1981: 41; Deltshev 2008: 337.

TYPE LOCALITY. Montenegro, Skadar Lake, Vranjina, cave “**pećina kod Vranjino Brdo**”.

COLLECTION RECORDS. 6 ♂♂ 12 ♀♀, type locality, 07.1969, leg. J. Kratochvíl; 4 ♂♂ 1 ♀, Titograd [=Podgorica], cave “pećina u Pješatici”, 01. 07. 1971; 2 ♀♀, Peuta, cave “pećina od zavora”, 19. 07. 1972; Virpazar: 1 ♂ 1 ♀, Donja Seoca, cave Goluspa, 04. 07. 1971; 3 juv, Trnovo-Komarno, cave Babotusa [=Babatuša], 03. 08. 1971 (**Deeleman-Reinhold 1978b**).

NEW RECORDS. 1 ♂ 2 ♀♀, Virpazar, Vranjina, cave Golubja [=pećina near Vranjino Brdo], 102 m a. s. l, 23. 05. 2018, leg. M. Komnenov.

DISTRIBUTION. S-Montenegro.

ECOLOGY. Troglobite.

REMARKS. The ecology of the species is poorly known. *T. boudewijni* has fully developed eyes and so far, the species has not been found outside caves.

***Troglohyphantes lesserti* Kratochvíl, 1935**

(Figure 12)

Troglohyphantes lesserti Kratochvíl 1935: 13; Deeleman-Reinhold 1974: 19; Deeleman-Reinhold 1978b: 128; Nikolić & Polenec 1981: 44; Tomić et al. 2000: 35P;

Troglohyphantes lesserti [sic!] Deltshev 2008: 336.

TYPE LOCALITY. Montenegro, Nikšić district, Osječenica, cave “**Bobjerska pećina**”.

COLLECTION RECORDS. ♂♀, type locality; cave “Vodena pećina” (**Kratochvíl 1935**);

Nikšić district: Stubica, cave “Bijela pećina”; Nikšić, Carev Most, cave “Velja pećina”; Rudine-Podbožur, cave “pećina na Troglav”; Trubjela, cave “Ledena pećina na Kita”; Ubli, Borak, cave “Boračka pećina”; Krstac (Crni Vrh), Javljen, cave “Stoška pećina”; Milančiči, cave “pećina Cista Vlada”; Vračenovići, Vući Do, cave “Stanina pećina”; Vračenovići, Vući Do, cave “Gnjatova pećina”; Podgorica district: Peuta, Titograd [=Podgorica], cave “Dutica pećina” (**Deeleman-Reinhold 1974**);

1 ♂ 1 ♀, type locality; 5 ♀♀, type locality 30. 07. 1969 and 05. 08. 1969; 1 ♂, Podbožur (between Osječenica and Nikšić) on mountain Troglav near Rudine,



FIGURE 12. *Troglolyphantes lesserti*, male, cave „Bobjerska pećina“.

cave “pećina I”, 07. 08. 1969; 1 ♂ 6 ♀♀, same locality, cave “pećina II”, 07. 08. 1969; 1 ♀, Trubjela, cave “pećina Ledenica na Kita”, 29. 07. 1969; Nikšić district: (2 ♀♀, Grahovac, cave “Vodena pećina” on brdo Omutić; 1 ♂, Carev Most, cave “Velja pec”, 26. 07. 1969; 4 ♀♀, Stubica, cave “Bjela pećina”, 23. 07. 1971; 2 ♂♂ 8 ♀♀, Ubli, Borak, cave “Boračka pećina”, 27. 07. 1971); 2 ♀♀, Krivošije, Svečava [=Zvečava], cave “pećina na Pržini”, 18. 07. 1973; 1 ♀ Krivošije, Dragaljsko polje, Selakov Do, cave “Matjaševica pećina”; 2 ♀♀, Vračenići, Vući Do, Gnjatova pećina, 22. 07. 1970; juveniles, same locality and date, cave “Stanina pećina”; 1 ♂ 3 ♀♀, Velimje, Milančići, cave “pećina Cista Vlada”, 27. 07. 1970; 2 ♂♂, Golija Mt., Krstac, Javljen, cave “Stoška pećina” on the Crni Vrh, 23, 25. 07. 1969; 1 ♀, Podgorica district, Titograd [=Podgorica], Peuta, cave “Dučića pećina”, 01. 09. 1963, leg. E. Pretner (**Deeleman-Reinhold 1978b**);

1 ♂ 2 ♀♀, Nikšić, Miločani, cave “Vilina pećina”, 05. 09. 2000, leg. A. M. Petrović, S. B. Ćurčić & V. M. Pešić (**Tomić et al. 2000**).

NEW RECORDS. 1 ♂ 1 ♀, Nikšić district, Osječenica, Bobjer, cave “Bobjerska pećina”, 1108 m a. s. l, 07. 08. 2018, leg. M. Komnenov.

DISTRIBUTION. SE-Bosnia & Hercegovina, S-Montenegro.

ECOLOGY. Troglobite.

REMARKS. Distribution given by World Spider Catalog (2019) as “SE Europe (Balkans)” is incorrect.

***Troglohyphantes pretneri* Deeleman-Reinhold, 1978**

(Figure 13)

Troglohyphantes pretneri Deeleman-Reinhold 1978b: 131; Nikolić & Pole-
nec 1981: 44.

TYPE LOCALITY. Montenegro, Prokletije Mt., Katun Bjelić [=Belić], 1650
m, cave “**Špela Korun**”.

COLLECTION RECORDS. 1 ♂, type locality, 07.1973, leg. E. Pretner (**Deele-
man-Reinhold 1978b**).

NEW RECORDS. 1 ♂ 1 ♀, Prokletije Mt., Belić, 2153 m a. s. l, Melon cave,
30. 07. 2017, leg. M. Komnenov.

DISTRIBUTION. SE-Montenegro, N-Albania.

ECOLOGY. Troglobite.

REMARKS. On 05 August 2018, I have chance to explore the type locality
of this species — cave Špela Korun. In fact, it is a vertical pit about 15 m deep,
with very small room at the bottom of only few meters. In August, the air temper-
ature at the bottom was + 4° C. After detailed research, I was unable to find any



FIGURE 13. *Troglohyphantes pretneri*, male and female, Melon cave.

specimen of *T. pretneri*. I only found two females of unidentified *Troglohyphantes* sp. which in contrast to anophthalmic *T. pretneri* has fully developed eyes.

***Troglohyphantes troglodytes* (Kulczyński, 1914)**

(Figure 14)

Troglohyphantes troglodytes Kratochvíl 1934: 203; Kratochvíl 1935: 14; Šilhavý 1936: 210; Deeleman-Reinhold 1974: 20; Deeleman-Reinhold 1978b: 32; Nikolić & Polenec 1981: 46; Deltšev 2008: 336; Naumova et al. 2016: 433.

TYPE LOCALITY. Bosnia & Hercegovina, Trebinje, cave “**Vilina pećina**”.

COLLECTION RECORDS. Cave “Pećina Han-Pass” (**Kratochvíl 1934**);

Kotor district: caves: “Golodražnica”, “Pokljuka gornja”, “Izeta pećina”, “Pećina u Ivici”, “Vilina pećina”, “Pećinis kod Napode”, “Pećina kod Blagojevića”, “Pećina kod Šunjevca”, “Devericka [=Teferička] pećina”, “Pećina na Jankovom vrhu”, “Jankova pećina”, “Pećina kod Dvorečka zdrijela”, “Golubova pećina”, “Matjaševica pećina”, “Čora pećina”, “Mijukovica pećina”, Lakičević pećina”, “Tomova pećina”; Nikšić district: caves: “Golubnjačka pećina”, “Leskova pećina”, “Vranova jama”, “Kaloperska pećina”, “Vodena pećina” (**Kratochvíl 1935**);

Nikšić district: Stubica, cave “Bijela pećina”; Osječenice, cave “Bobjerina pećina”; Zagora (Osječenice), cave “Elesova pećina”; Grahovo, cave “Đakovica pećina”; [=pećina Vojvode Dakovića]; Trubjela, cave “Ledenica na Kita”; Rudine-Podbožur, cave “pećina na Troglav”; Nikšić, cave “Budoška pećina”; Nikšić, cave “Velja pećina”; Javljen, Krstac, cave “Stoška pećina”; Borak, Ubli, cave “Boračka pećina”; Snježnica, Trogrlo, Vojnik mountain, snow cave at 1800 m; Dragalj, Han, cave “Bor pećina”; Dragalj, Han, cave “Nilova pećina”; cave “Strmena pećina”; Cetinje district: Cetinje, cave “Cetinjska pećina” (**Deeleman-Reinhold 1974**);

Kotor district, Krivošije: Dragalj, Han, cave “Bor pećina”; caves “Nilova pećina” and “Strmena pećina”; Crkvice, cave “Vilina pećina u Napode”; Svečava [=Zvečava], cave “pećina na Pržini”; Ledenice, cave “pećina u Manitoj Rup”; Nikšić district: Praga (Mountain Vojnik), cave “Snježnica na Trogrlo” (1800 m); Stubica, cave “Bjela pećina”; Podbožur, cave “pećina u Troglav I and II near Rudine”; Trubjela, cave “Ledenica na Kita”; Osječenice, cave “pećina Elesova”; Grahovo, cave “Đakovica pećina” [=pećina Vojvode Dakovića]; Carev Most, cave “Velja pećina”; Ubli, cave “Boračka pećina”; Nikšić, cave “Budoška pećina”; Krstac, Javljen, cave “Stoška pećina”; Cetinje district: cave “Cetinjska pećina iznad manastira” (**Deeleman-Reinhold 1978b**);

1 ♂, Grahovo vill, Gorno Krivošije, cave Dakovića Pećina [=pećina Vojvode Dakovića], 28. 03. 2006, leg. B. Petrov & S. Lazarov; 1 ♂, Podkita vill, Sirbaba cave, 28. 03. 2006, leg. B. Petrov & S. Lazarov; 1 ♂ 1 ♀, Risan district, Crni Nugli vill, Dragalsko [=Dragaljsko] Polje, Gorno Krivošije, Selakov Dol



FIGURE 14. *Troglolyphantes troglodytes*, male, cave „Izeta pećina“.

place, Čora Pećina cave, 26. 03. 2006, leg. B. Petrov & S. Lazarov (Naumova et al. 2016).

NEW RECORDS. Krivošije, Kameno More, Knezlaz, cave “Izeta pećina”, 23. 07. 2017, leg. M. Komnenov.

DISTRIBUTION. S-Croatia, S-Bosnia & Hercegovina, S-Montenegro.

ECOLOGY. Troglophile.

REMARKS. The record from Durmitor Mt., in rocky debris at about 1900–2000 m altitude by Růžička (1992) represent a misidentification of still undetermined *Troglolyphantes* sp. Deltshev (2008) gives incorrect data about ecology of this species, treated it as troglobite. *T. troglodytes* is a troglophile species with normal eyes, already reported outside cave — between boulders and rotting wood (Deeleman-Reinhold 1978b).

Family TETRAGNATHIDAE

Meta bourneti Simon, 1922

Meta bourneti Deeleman-Reinhold 1974: 13; Deltshev 2008: 338.

TYPE LOCALITY. S-France, Ardèche, in unspecified cave.

COLLECTION RECORDS. 1 ♀, Titograd [=Podgorica], Tološi, cave Megara, 21. 07. 1971; Nikšić, Vir, cave Kučarada, 28. 07. 1969 (**Deeleman-Reinhold 1974**).

DISTRIBUTION. S-Europe.

ECOLOGY. Troglophile.

***Meta menardi* (Latreille, 1804)**

(Figure 15)

Meta menardi Tomić et al. 2000: 35P; Deltshv 2008: 338.

TYPE LOCALITY. NW-France, Le Mans, in unspecified cave.

COLLECTION RECORDS. 4 juv, Podgorica, Tološko Polje, cave Megara, 08. 09. 2000, leg. A. Petrović, S. Čurčić & V. Pešić (**Tomić et al. 2000**).

NEW RECORDS. 1 ♂, Nikšić district, Osječnica, Bobjer, cave “Bobjerska pećina”, 1108 m a. s. l, 16. 05. 2018, leg. M. Komnenov.

DISTRIBUTION. Europe, Turkey, Iran.

ECOLOGY. Troglophile.



FIGURE 15. *Meta menardi*, male, cave „Bobjerska pećina“.

Metellina merianae (Scopoli, 1763)
(Figure 16)

Meta merianae Deeleman-Reinhold 1974: 14.

Metellina merianae Deltšev 2008: 338; Naumova et al. 2016: 434.

TYPE LOCALITY. Slovenia (Carniola), among moss.

COLLECTION RECORDS. ♂♀, Nikšić, Carev Most, cave “Budoška pečina”, 26. 07. 1969; 2 ♂♂, Skadar lake, Vranjino [=Vranjina], cave “pečina kod Vranjino Brdo”, 28. 07. 1969, leg. J. Kratochvíl (**Deeleman-Reinhold 1974** sub *Meta merianae*);

Nikšić district: 1 ♂, juv, Grahovo vill, Gorno Krivošije, cave Dakovića Pečina [=pečina Vojvode Dakovića], 28. 03. 2006, leg. B. Petrov & S. Lazarov; 1 ♂, 1 ♀, juv, Podkita vill, Sirbaba cave, 28. 03. 2006, leg. B. Petrov & S. Lazarov; Risan district: 1 ♀, Crkvice vill, Dolno Krivošije, 2 small potholes near Shuto Blagojević monastery, 17. 08. 2006, leg. B. Petrov & S. Lazarov; 1 ♀, Crkvice vill, Dolno Krivošije, art. gallery on the road to Han vill, 17. 08. 2006, leg. B.



FIGURE 16. *Metellina merianae*, male, Vidrovanska pečina cave.

Petrov & S. Lazarov; 1 ♂, 3 ♀♀, juv, Crni Nugli vill, Dragalsko [=Dragaljsko] Polje, Gorno Krivošije, Selakov Dol place, Čora Pećina cave, 26. 03. 2006, leg. B. Petrov & S. Lazarov; 8 ♀♀, Crni Nugli vill, Dragalsko [=Dragaljsko] Polje, Gorno Krivošije, unnamed cave, 26. 03. 2006, leg. B. Petrov & S. Lazarov; juv, Dolno Krivošije, Pokljuka Gornja cave, 27. 06. 2000, leg. B. Petrov & S. Lazarov; Virpazar district: 1 ♀, Seoca vill, Golubova Pećina cave, 12. 08. 2006, leg. B. Petrov & S. Lazarov; 5 ♀♀, juv, Trnovo vill, Baba Tuša [=Babatuša] cave, 24. 03. 2006, leg. B. Petrov & S. Lazarov (**Naumova et al. 2016**).

NEW RECORDS. 1 ♂, Virpazar, Donja Seoca, cave “Ivanina spilja”, 03. 04. 2007, leg. M. Komnenov; 1 ♂ 1 ♀, Cetinje, Cetinjska pećina cave, 23. 09. 2008, leg. M. Komnenov; 1 ♂ 1 ♀, Nikšić, Vidrovan, Vidrovanska cave, 15. 05. 2018, leg. M. Komnenov.

DISTRIBUTION. Algeria, Tunisia, Morocco, Europe, Turkey, Lebanon, Georgia, Azerbaijan.

ECOLOGY. Troglophile.

Family AGELENIDAE

Histopona conveniens (Kulczyński, 1914)

(Figure 17)

Histopona conveniens Deeleman-Reinhold 1983: 329; Deltshev 2008: 339.

Histopona palaeolithica Naumova et al. 2016: 432 (misidentification).

TYPE LOCALITY. Bosnia & Hercegovina, Zavala, cave “Belušica [=Bjelušica] pećina”.

COLLECTION RECORDS. Velimije, cave “Cista vlada”; Krstac, cave “Kerovacka pećina near Nešiste”; Titograd [=Podgorica], cave “Dučica pećina near Peuta” (**Deeleman-Reinhold 1983**);

1 ♀, Virpazar district, Seoca vill, Golubova Pećina cave, 12. 08. 2006, leg. B. Petrov & S. Lazarov (**Naumova et al., 2016** sub *Histopona palaeolithica*).

NEW RECORDS. 1 ♂, Nikšić, cave “Vilina pećina”, 13. 05. 2017, leg. M. Komnenov; 2 ♂♂ 1 ♀, Virpazar, Dujeva, Lisinj, cave “Golubinja pećina”, 18. 05. 2018, leg. M. Komnenov.

DISTRIBUTION. S-Bosnia & Hercegovina, S-Montenegro.

ECOLOGY. Troglophile.

REMARKS. Deltshev (2008) treated this species as troglobite, despite the fact that it has normal eyes. The recent record of *Histopona palaeolithica* by Naumova et al. (2016), an endemic cave species to NE-Italy, is considered as misidentification of *H. conveniens*.



FIGURE 17. *Histopona conveniens*, male, cave „Vilina pećina“.

***Histopona dubia* (Absolon & Kratochvíl, 1933)**

Hadites (Roweriana) dubius Kratochvíl 1938a: 16.

Histopona dubia Deeleman-Reinhold 1983: 332; Deltšev 2008: 339.

TYPE LOCALITY. Croatia, Cavtat, cave “Šipun špilja”.

COLLECTION RECORDS. Orjen Mt., Vrbanje, cave “Vučja pećina” (**Kratochvíl 1938** sub *Hadites (Roweriana) dubius*).

DISTRIBUTION. S-Croatia, S-Bosnia & Hercegovina, W-Montenegro.

ECOLOGY. Troglophile.

***Histopona krivosijana* (Kratochvíl, 1935)**

(Figure 18)

Hadites bidens krivošijanus Kratochvíl 1935: 21.

Hadites (Roweriana) krivošijanus Kratochvíl 1938a: 21.

Hadites krivošijanus Nikolić & Polnec 1981: 68.

Histopona krivosijana Deeleman-Reinhold 1983: 333; Deltšev 2008: 339.

TYPE LOCALITY. Montenegro, Krivošije, Crni Nugli, Selakov Do, cave “**Golubova pećina**”.

COLLECTION RECORDS. Krivošije, Kotor district, caves: “Studena pećina”, “Pećina u ivici”, “Pećina kod Blagojevića”, “Pećina na Jankovom vrhu”, “Lopata pećina”, “Golubova pećina”, “Matjaševica pećina”, “Čora pećina”; Nikšić



FIGURE 18. *Histopona krivosijana*, female, Cetinjska pećina cave.

district, caves: “Elazova pećina”, “Vodena pećina” (**Kratochvíl 1935** sub *Hadites bidens krivošijanus*); same localities (**Kratochvíl 1938a** sub *Hadites (Rowleriana) krivošijanus*);

1 ♀, Krivošije, cave “Strmena pećina” near Selo Han, 07.1969, leg. J. Kratochvíl (**Deeleman-Reinhold 1983**).

NEW RECORDS. 1 ♀, Grahovo, cave “pećina Vojvode Dakovića”, 19. 09. 2006, leg. M. Komnenov; 1 ♀, Cetinje, Cetinjska pećina cave, 19. 05. 2018, leg. M. Komnenov.

DISTRIBUTION. SW-Montenegro. The single record from Croatia is dubious (see below).

ECOLOGY. Troglobite.

REMARKS. The male of this species is still unknown. The record of *H. krivosijana* by Brignoli (1980) from the cave “Vilina pećina” near Dubrovnik in S-Croatia is doubtful. According shapes and structures of female genitalia, *H. krivosijana* might be confused with closely related *H. dubia*. I examined large cave material from the area near Dubrovnik, and only *H. dubia* and *H. conveniens* were recorded. Almost certainly the record by Brignoli (1980) refers to *H. dubia*.

***Tegenaria annulata* Kulczyński, 1913**

(Figures 19, 20)

Tegenaria annulata Kratochvíl 1934: 211; Nikolić & Polenec 1981: 69; Bolzern et al. 2013: 783.

Tegenaria animata Naumova et al. 2016: 432 (in part, misidentification).

TYPE LOCALITY. Bosnia & Hercegovina, Trebinje, Gluha [=Gluva] Smokva, cave “**Vučja pećina**”.

COLLECTION RECORDS. Unknown cave in the mountains of Krivošije (**Kratochvíl 1934**);

4 ♀♀, juv, Grahovo vill, Gorno Krivošije, cave Dakovića Pećina [=pećina Vojvode Dakovića], 28. 03. 2006, leg. B. Petrov & S. Lazarov (**Naumova et al. 2016** sub *Tegenaria animata*).

NEW RECORDS. 2 ♂♂ 3 ♀♀, Grahovo, cave “pećina Vojvode Dakovića”, 24. 09. 2008, leg. M. Komnenov; 1 ♂ 1 ♀, Nikšić, Vidrovan, Vidrovanska cave, 17. 08. 2011, leg. M. Komnenov.

DISTRIBUTION. S-Croatia, S-Bosnia & Hercegovina, SW-Montenegro.

ECOLOGY. Troglophile.

REMARKS. In original description, the type locality of *T. annulata* was not specified by Kulczyński (1913). According to Karel Absolon's assumption, the female described by Kulczyński comes from the easily accessible cave “Vučja pećina” in the area of Gluva Smokva near Trebinje (Kratochvíl & Miller 1940). Nowadays, this area is not accessible for additional research due extensive mine-fields along Popovo Polje left after the last war. The male has been described from the cave “Baba pećina” near Zavala in Popovo Polje (Kulczyński 1914).

In Montenegro, *T. annulata* seems to be very rare. So far, it is recorded in three caves only. It could suggest its narrow distribution in south-western part of Montenegro.

***Tegenaria bayeri* Kratochvíl, 1934**

(Figures 21, 22, 23)

Tegenaria bayeri Kratochvíl 1934: 212; Kratochvíl 1935: 20; Nikolić & Polenec 1981: 69; Bolzern et al. 2013: 788; Naumova et al. 2016: 432.

Pseudotegenaria bayeri Růžička et al. 2005: 18; Deltšev 2008: 339.

TYPE LOCALITY. Montenegro, Kotor district, cave “**Pećina Napode**”.

COLLECTION RECORDS. 1 ♀, type locality (**Kratochvíl 1934**);

Kotor district, Krivošije, caves: “Pećina u Ivici”, “Tomova pećina”, “Pećina kod Blagojevića”, “Vilna [=Vilina] pećina” (**Kratochvíl 1935**);



FIGURE 19. *Tegenaria annulata*, male, cave „pećina Vojvode Dakovića“.



FIGURE 20. *Tegenaria annulata*, female, cave „pećina Vojvode Dakovića“



FIGURE 21. *Tegenaria bayeri*, female, Babatuša cave.



FIGURE 22. *Tegenaria bayeri*, male, Viluštica cave.



FIGURE 23. *Tegenaria bayeri*, female, Viluštica cave.

1 ♀, Trnovo vill, Baba Tuša [=Babatuša] cave, 24. 03. 2006, leg. B. Petrov & S. Lazarov (Naumova et al. 2016).

NEW RECORDS. 1 ♂ 1 ♀, Risan, Han, cave “Tomova pećina”, 19. 09. 2006, leg. M. Komnenov; 1 ♂, same locality, 05. 08. 2009, leg. M. Komnenov; 2 ♂♂ 3 ♀♀, Njeguši, Mrajanik, cave Viluštica, 1080 m a. s. l, 17. 08. 2017, leg. M. Komnenov; 1 ♂ 2 ♀♀, Njeguši, Petrova Ljut, 950 m a. s. l, cave PL-11, 17. 08. 2017, leg. M. Komnenov; 1 ♂ 1 ♀, Virpazar, Trnovo, Babatuša cave, 19. 08. 2018, leg. M. Komnenov.

DISTRIBUTION. SW-Montenegro.

ECOLOGY. Troglophile.

REMARKS. The record from Bosnia & Hercegovina by Komnenov (2009) is based on the citation of Nikolić & Polenec (1981). The origin of this record by Nikolić & Polenec is uncertain. In this work, I treat the record from Bosnia & Hercegovina as doubtful.

***Tegenaria bosnica* Kratochvíl & Miller, 1940**

(Figures 24, 25)

Tegenaria animata Kratochvíl & Miller 1940: 196; Nikolić & Polenec 1981: 69; Tomić et al. 2000: 35P; Bolzern et al. 2013: 781; Naumova et al. 2016: 432.

Syn. n.

Pseudotegenaria bosnica Růžička et al. 2005: 19.

Pseudotegenaria animate [sic!] Deltšev 2008: 339.

Tegenaria bosnica Bolzern et al. 2013: 788.

TYPE LOCALITY. Not specified. The male is described from Bosnia & Hercegovina, Tomislavgrad, Donji Brišnik, cave “**pećina kod Donjeg Brišnika**” and the female from Croatia, Dinara Mt., Vilanić [=Vinalić], cave “**Boduljak-ova velika pećina**”.

COLLECTION RECORDS. 1 ♀, Montenegro, Virpazar, Trnovo, cave “Bobotuša [=Babatuša] pećina” (type locality for *Tegenaria animata*); 1 ♀, Kotor district, Dragaljsko Polje, Crni Nugli, Selakov Do, cave “Lakičević pećina” (**Kratochvíl & Miller, 1940** sub *Tegenaria animata*);

2 ♂♂ 1 ♀, Nikšić district, Budoš, a cave above “Velja peć” cave (**Tomić et al., 2000** sub *Tegenaria animata*);

1 ♀, juv, Nikšić district, Podkita vill, Sirbaba cave, 28. 03. 2006, leg. B. Petrov & S. Lazarov; 2 ♀♀, juv, Risan district, Crni Nugli vill, Dragaljsko [=Dragaljsko] Polje, Gornjo Krivošije, unnamed cave, 26. 03. 2006, leg. B. Petrov & S. Lazarov (**Naumova et al., 2016** sub *Tegenaria animata*).

NEW RECORDS. 2 ♀♀, Risan, Han, cave “Tomova pećina”, 19. 09. 2006, leg. M. Komnenov; 2 ♂♂ 2 ♀♀, Cetinje, Cetinjska pećina cave, 23. 09. 2008, leg. M. Komnenov; 1 ♂ 1 ♀, Podgorica, Tološi, cave Megara, 13. 10. 2008, leg. M. Komnenov; 4 ♂♂ 3 ♀♀, Nikšić, Slivje, Kunak, in the tunnel of the nuclear bunker, 19. 08. 2011, leg. M. Komnenov; 1 ♂ 1 ♀, National Park Lovćen, Krstac, 1234 m a. s. l, cave Krstac, 13. 08. 2017, leg. M. Komnenov; 1 ♂, National Park Lovćen, Jezerski Vrh, 1505 m a. s. l, cave “Jezerski Vrh pećina”, 16. 08. 2017, leg. M. Komnenov; 3 ♂♂, Njeguši, Mrajanik, cave Viluštica, 1080 m a. s. l, 17. 08. 2017, leg. M. Komnenov; 2 ♂♂ 4 ♀♀, Njeguši, Petrova Ljut, 950 m a. s. l, cave PL-11, 17. 08. 2017, leg. M. Komnenov; 1 ♂, Nikšić, Carev Most, cave “Velja pećina”, 06. 08. 2018, leg. M. Komnenov; 1 ♂, Cetinje, Bokovo, cave Ladnica, 16. 08. 2018, leg. M. Komnenov; 1 ♂, Virpazar, Trnovo, Babatuša cave, 19. 08. 2018, leg. M. Komnenov; 3 ♀♀, Nikšić, Carev Most, a cave above “Velja pećina”, 01. 12. 2018, leg. M. Komnenov.

DISTRIBUTION. S-Croatia, S-Bosnia & Hercegovina, S-Montenegro, Albania, W-Macedonia.

ECOLOGY. Troglophile.



FIGURE 24. *Tegenaria bosnica*, male, Ladnica cave.

REMARKS. *Tegenaria animate* and *Tegenaria bosnica* have been described in the same paper by Kratochvíl & Miller (1940). The holotypes of both species are thought to be lost (Růžička et al., 2005). *T. Animate* is described from Babatuša cave in S-Montenegro and it is known by female sex only. When describing *T. animata*, Kratochvíl & Miller had only two females available: holotype female from the type locality and another female from the cave “Lakičevića pećina”.

In August 2018, I explored Babatuša cave, the type locality of *T. animata*. After five hours of detailed investigation of the entire cave, I found two species of *Tegenaria*: *T. bayeri* and *T. bosnica*. Both species were collected in the entrance zone of the cave.

T. bayeri having pale colour and almost depigmented body, in terms of morphological appearance looks very different from much darker *T. animata*.

Comparing *T. bosnica* with *T. animata* on basis original descriptions, I found great resemblances between these two species. The most striking similarities were observed in female genitalia. Judging by the figures 2 and 4 of Kratochvíl & Miller (1940), the female genitalia of both species looks almost identical. These great similarities between *T. Animate* and *T. Bosnica* were already indicated by Kratochvíl & Miller (1940). They stated that according to the body colour, both



FIGURE 25. *Tegenaria bosnica*, female, Ladnica cave.

species look almost identical “*In der Färbung fast mit der vorigen Art übereinstimmend*”. They noted only slight differences in the shapes of female genitalia in both species. Examining a large material of *T. bosnica* across its wider distributional range in the southern Dinarides and Scardo-Pindic mountain system, allow me to conclude that these minor differences in its female genitalia, can be explained by intraspecific variation.

Having in mind that from the type locality of *T. animata* I registered only two species of *Tegenaria*: *T. bayeri* and *T. bosnica*, whereby *T. bayeri* is very different from *T. animata*, and taking into consideration the great similarity of *T. bosnica* with *T. animata*, it logically implies that *T. animata* and *T. bosnica* should be synonymized. Because the both species are described in the same paper and *T. bosnica* is mentioned first in the text, according to the principle of priority (Article 23 of the ICZN) follows that *Tegenaria animate* Kratochvíl & Miller, 1940 is a junior synonym of *Tegenaria bosnica* Kratochvíl & Miller, 1940.

Categorization of *T. bosnica* as troglobite species by Deltshvov (2008) is erroneous. In addition to the entrance of the caves, the species can be found outside caves, under rocks in forest, artificial buildings (basements), etc.

TAXONOMIC PART

Family AGELENIDAE

Tegenaria gordani. sp. nov.

(Figures 27–34)

Material examined. Holotype. 1 ♂ (NHMW), Montenegro, National Park Lovćen, Kuk, cave “Benčina pećina” (Ana pećina), 13. 08. 2017, leg. M. Komnenov.

Etymology. It is my pleasure to name this new species in honour to my dear professor, Academician Gordan S. Karaman.

Diagnosis. *Tegenaria gordani* sp. nov. differs from all other species by the distinctive RTA, the bifurcated medial apophysis and the distinctive conductor.

Description. Male (holotype). Total length 4.5. Carapace 2.49 long, 1.91 wide, with longitudinal dark symmetrical bands, which ends at the beginning of the head region. Cheliceral promargin and retromargin both with four teeth. Sternum 1.33 long, 1.25 wide, with distinct pale median band and lateral three symmetrical pale dots fused with the median band. Abdomen 2.08 long, 1.41 wide; dorsally pale greyish, with darker band anteromedially, continuing in narrow chevrons posteriad.

Male palp (Figs. 30–34): Femur, patella and tibia armed with long hairs and spines. RTA with two branches of the same length; lateral branch triangular and pointed; dorsal branch rectangular, strongly sclerotized. Median apophysis originating at 6 o'clock position in relation to centre of bulb axis; strongly protruding, distally with bifid plate-like sclerite, one part narrow and needle-shaped, the other part broadly pointed. Embolus originating at 8 o'clock position, distal tip at 5 o'clock position. Distal part of the embolus passes between bifurcated sclerites of the median apophysis. Conductor parallel to cymbium, with distal part elongated, longer than wide, folded along its entire retrolateral margin.

Legs pale yellowish, not annulated (Figs. 27–29). Leg formula 1423. Leg measurements and leg spination are given in Table 2 and Table 3.

Female unknown.

TABLE 2. Leg measurements of *Tegenaria gordani* sp. nov. (male holotype). Backslash indicates structure not present.

	Fe	Pa	Ti	Me	Ta	TL
Palp	1.33	0.48	0.68	/	1.08	3.57
Leg I	4.52	1.08	5.76	5.08	2.16	18.6
Leg II	3.8	1.08	3.88	4.32	1.8	14.88
Leg III	3.32	0.88	3.12	3.76	1.44	12.52
Leg IV	4.04	1	4.88	5	1.72	16.64

Natural History. *Tegenaria gordani* sp. nov. was collected at the end of the main room, on about 30 m from the entrance of the cave, from where the cave continues vertically. The spider was collected resting at the ground. When it was disturbed, it started moving very slowly, it seems due to very low air temperature in the cave. Even it was middle of August, the air temperature was only 5 degrees and 88% of humidity. *Tegenaria gordani* sp. nov. has normal developed eyes and pigmented body, suggesting that it is a troglophile species with possible findings outside caves.

Distribution. Only known from the type locality (Fig. 26).

TABLE 3. Leg spination of *Tegenaria gordani* sp. nov. (male holotype).
Backslash indicates structure not present.

	d	pd	pl	rd	rl	pv	rv	v	total
Fe I	2	1–2	2	1–2	2	/	/	/	8–10
Pa I	2	/	/	/	/	/	/	/	2
Ti I	2	/	/	/	/	1	1–2	/	4–5
Me I	/	/	/	/	/	3	3	1	7
Fe II	2	1–2	/	0–2	/	/	/	/	3–6
Pa II	2	/	/	/	/	/	/	/	2
Ti II	0–1	/	/	0–1	/	0–1	0–2	/	0–5
Me II	/	1	1	/	1	3	3	1	10
Fe III	2	2	/	2	/	/	/	/	6
Pa III	2	/	/	/	/	/	/	/	2
Ti III	1	1–2	/	2	/	3	2	/	9–10
Me III	/	3	/	2–3	/	3	3	/	11–12
Fe IV	1	1	/	/	/	/	/	/	2
Pa IV	2	/	/	/	/	/	/	/	2
Ti IV	2	2	/	2	/	3	1–2	/	10–11
Me IV	/	3	/	3	/	3	3	/	12

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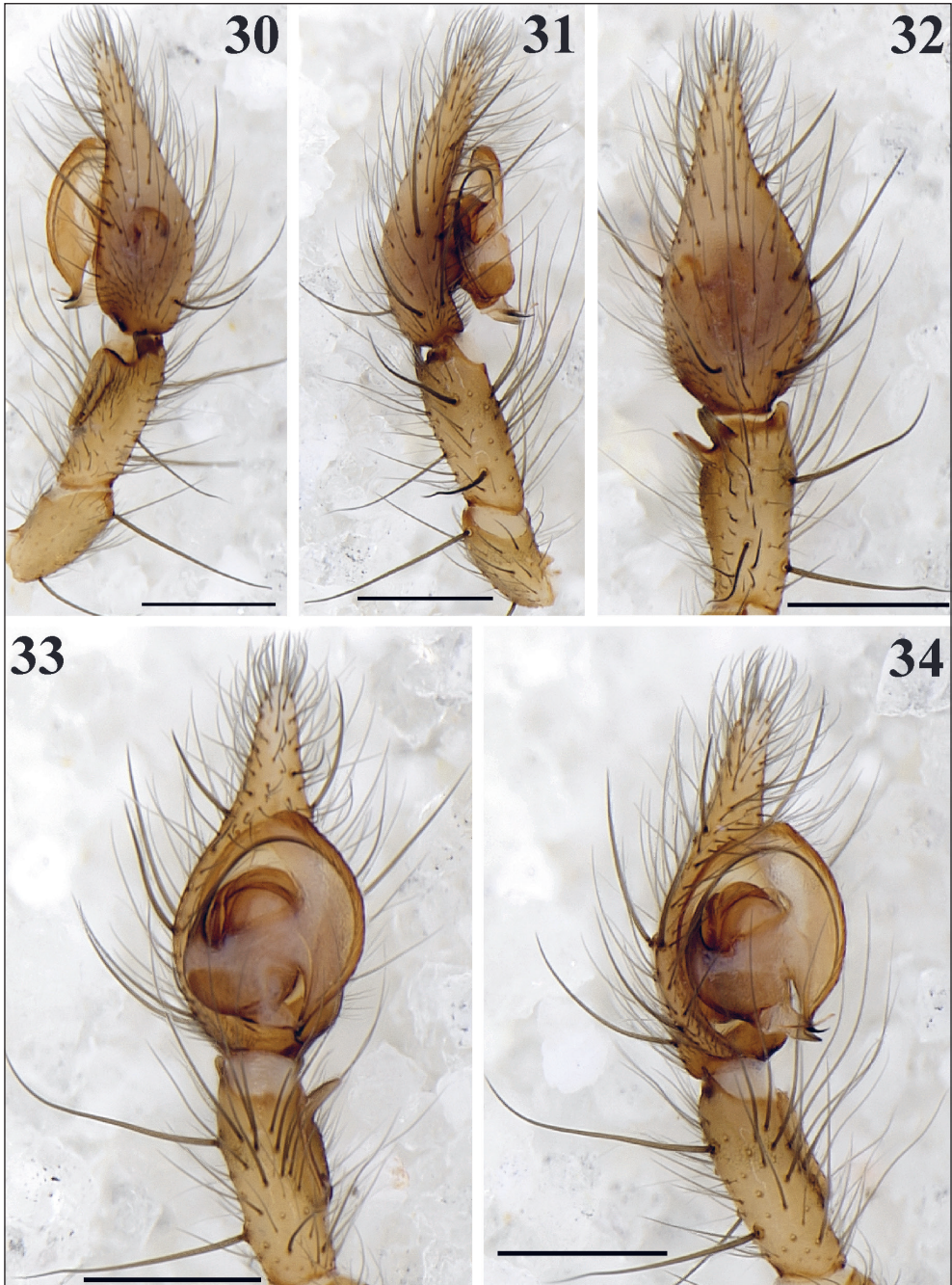
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Figure 26. Entrance of the cave „Benčina pećina“, type locality of *Tegenaria gordani* sp. nov.



FIGURES 27–29. *Tegenaria gordani* sp. nov. male holotype. 27 — habitus, dorsal view; 28 — same, ventral view; 29 — same, lateral view. Scale bar: 1 mm.



FIGURES 30–34. *Tegenaria gordani* sp. nov. male holotype. **30** — palp, retrolateral view; **31** — same, prolateral view; **32** — same, dorsal view; **33** — same, ventral view; **34** — same, prolateral-ventral view. Scale bar: 0.5 mm.

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