

**BIODIVERSITY OF SPIDERS: ON SOME TAXA NEW TO SERBIA AND TO SCIENCE. <sup>1</sup>B. P. M. Ćurčić, <sup>2</sup>C. C. Deltshv, <sup>1</sup>V. T. Tomić and <sup>1</sup>S. B. Ćurčić. <sup>1</sup>Institute of Zoology, Faculty of Biology, University of Belgrade, 11000 Belgrade, Serbia; <sup>2</sup>Institute of Zoology, Bulgarian Academy of Sciences, 1000 Sofia, Bulgaria.**

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Recently, D e l t s h e v et al. (2003) concluded that the spider fauna of Serbia is represented by 618 species, belonging to 221 genera and 36 families. The number of species is relatively high

compared to the number of spiders recorded from other countries of the Balkan Peninsula where, the greatest number of species is recorded from Bulgaria (910), followed by Greece (810),

Table 1. List of newly-established and spider species new to science in Serbia. Abbreviations: m = male, mm = males, f = female, ff = females, juv. = juvenile(s), nr. = near, v. = village.

GENUS AND SPECIES	LOCALITY	AUTHORS
DYSDERIDAE		
<i>Dysderocrates silvestris</i> Deeleman-Reinhold, 1988	Stopiča Pečina Cave, v. Rožanstvo, Mt. Zlatibor, 1 m, 1 f, 27.10.2002.	Ćurčić et al. (2004)
<i>Harpactea</i> n. sp.	Nr. Ivanjica, Mt. Javor, 1 m, 1 f, 30.04.2004.	Present paper
THERIDIIDAE		
<i>Robertus mediterraneus</i> Eskov, 1987	V. Mlanča, Studenica River, by the metal bridge, nr. Ivanjica, Mt. Golija, 1 f, 28.05.2003.	Present paper
LINYPHIIDAE		
<i>Bolyphantes alticeps</i> (Sundevall, 1833)	Lovačka Česma, v. Ljepojevići, nr. Ivanjica, Mt. Javor (1350 m), 1 f, 11-12.08.2001.	Ćurčić et al. (2003)
<i>Bolyphantes kolosvaryi</i> (Caporiacco, 1936)	V. Osonica, nr. Ivanjica, Mt. Čemerno, 2 mm, 5 juv., 16-17.08.2001.	Ćurčić et al. (2003)
<i>Centromerus obenbergeri</i> (Kulczyński, 1891)	Česma, Mt. Goč, 2 ff, 3 juv., 28.09.2001.	Ćurčić et al. (2004)
<i>Formiphantes leptyphantiformis</i> (Kolosváry, 1907)	V. Osonica, nr. Ivanjica, Mt. Čemerno, 1 m, 16-17.08.2001; Zmajinac, v. Miliće, nr. Ivanjica, Mt. Radočelo, 2 mm, 13.08.2001.	Ćurčić et al. (2003)
<i>Suaristoa firma</i> (O. P.-Cambridge, 1900)	Goljiska Reka, nr. Ivanjica, Mt. Golija, 1 m, 01-03.05.2001.	Ćurčić et al. (2003)
<i>Tenuiphantes floriana</i> (van Helsdingen, 1977)	Mt. Avala, nr. Belgrade, 1 f, 1 m, 3 juv, 29.06.2001.	Ćurčić et al. (2003)
<i>Trichoncus hackmanni</i> Millidge, 1955	Rimski Most, v. Kumanica, nr. Ivanjica, Mt. Golija, 1 m, 1 f, 24 juv., 19.05.2001.	Ćurčić et al. (2003)
<i>Walckenaeria cucullata</i> (C. L. Koch, 1836)	Zmajinac, v. Miliće, nr. Ivanjica, Mt. Radočelo, 1 f, 13.08.2001.	Ćurčić et al. (2003)
<i>Walckenaeria furcillata</i> (Menge, 1868)	Mt. Avala, nr. Belgrade, 1 f, 09.06.2001.	Ćurčić et al. (2003)
ARANEIDAE		
<i>Araniella opistographa</i> (Kulczyński, 1905)	Goljiska Reka, nr. Ivanjica, Mt. Golija, 1 f, 27.05.2003.	Present paper
LYCOSIDAE		
<i>Pardosa cincta</i> (Kulczyński, 1897)	The Studenica Valley, nr. Ivanjica, Mt. Radočelo, 7 ff, 13.08.2005.	Present paper
<i>Pirata tenuitarsis</i> Simon, 1876	Dajičko Jezero Lake, nr. Ivanjica, Mt. Golija, 2 mm, 1 juv., 29.05.2005.	Present paper
<i>Trochosa hispanica</i> Simon, 1870	Ciganmala, Čačak, 1 m, 3 ff, 04.05.2002.	Ćurčić et al. (2004)
<i>Trochosa spinipalpis</i> (O. P.-Cambridge, 1835)	Brezovica, Vrnjačka Banja, 1 f, 20.08.2000.	Ćurčić et al. (2004)
AMAUROBIIDAE		
<i>Coelotes titaniacus</i> Brignoli, 1977	Goljiska Reka, nr. Ivanjica, Mt. Golija, 1 m, 01-03.05.2001.	Ćurčić et al. (2003)
CLUBIONIDAE		
<i>Clubiona saxatilis</i> L. Koch, 1866	V. Osonica, nr. Ivanjica, Mt. Čemerno, 1 f, 16-17.08.2001.	Ćurčić et al. (2003)
PHILODROMIDAE		
<i>Philodromus praedatus</i> O. P.-Cambridge, 1871	Lipovička Šuma Forest, nr. Belgrade, 7 ff, 29.06.2000.	Ćurčić et al. (2004)

Croatia (614), and Macedonia (FYROM) (595) (Ćurčić et al., 2003). Species richness, however, depends not only on the size of regions, but also on the extent of exploration by araneologists. Best represented are the families Linyphiidae (156 species), Lycosidae (62 species), Gnaphosidae (59 species), Salticidae (49 species), Araneidae (48 species), Theridiidae (42 species), and Thomisidae (37 species) (Ćurčić et al., 2003).

The goal of the present study is to give a critical systematic revue and zoogeographic analysis of spiders collected from 15 localities in Serbia, based on intensive field research and new data accumulated (Table 1). All collected spider species are new to the araneofauna of Serbia, and one species is new to science.

Altogether, 20 species classified into 17 genera and eight families (Dysderidae, Theridiidae, Linyphiidae, Araneidae, Lycosidae, Amaurobiidae, Clubionidae, and Philodromidae) were collected during these field studies. The total number of spider species presently known from Serbia is now 638 (or 3.24 % more than identified by Deltshv et al., 2003) while the number of genera is now 17, or 8.09 % more. The newly collected Dysderidae represent 11.70 % of the species mentioned by Deltshv et al. (2003). For other families, these figures as follows: Theridiidae – 2.38 %, Linyphiidae – 5.76 %, Araneidae – 2.08 %, Lycosidae – 6.45 %, Amaurobiidae – 11.11 %, Clubionidae – 6.25 %, and Philodromidae – 5.26 % (Table 1).

The material collected is classified into eight families (or 4.94 % of the total families known in Serbia) and 17 genera (or

8.09 % of the total genera) (Ćurčić et al., 2003, 2004; Deltshv et al., 2003).

Spiders are well represented on the territory of Serbia, but the species are distributed unequally in different areas and districts. As we have already indicated, the number of established species (635), genera (224), and families (36) in Serbia is relatively high compared to the number of spiders recorded from other countries of the Balkan Peninsula. The diversity of the Serbian araneofauna underlines the fact that the Balkans are characterized by enormous species richness, including forms of different age and origin. Zoogeographically, widely distributed taxa dominate; this fact points to an intensive process of constant colonization. Endemic species both reflect the local character of the fauna and emphasize the decisive influence exerted by the genesis and evolution of relief of the Balkan Peninsula on the origin and historical development of its spider fauna. The phenomenon of endemism can be regarded as a result of numerous paleo-environmental changes in the area studied since the Mesozoic era.

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