

## ON THE DIVERSITY OF SOME SPIDERS (ARANEA : ARACHNIDA) FROM SERBIA

B. P. M. ĆURČIĆ,<sup>1</sup>C. C. DELTSHEV,<sup>1</sup>G. A. BLAGOEV,<sup>2</sup>S. B. ĆURČIĆ and V. T. TOMIC

*Institute of Zoology, Faculty of Biology, University of Belgrade, 11000 Belgrade, Serbia and Montenegro;*

*Centre for Biospeleology of Southeast Europe, 11000 Belgrade, Serbia and Montenegro;*

*and <sup>1</sup>Institute of Zoology, Bulgarian Academy of Sciences, 1000 Sofia, Bulgaria.*

**Abstract** - A total of 76 species from 16 families: Dysderidae (6), Theridiidae (3), Nesticidae (1), Linyphiidae (35), Tetragnathidae (1), Araneidae (1), Lycosidae (5), Agelenidae (3), Cybaeidae (1), Dictynidae (1), Amaurobiidae (5), Liocranidae (2), Clubionidae (3), Gnaphosidae (3), Thomisidae (3) and Salticidae (3) were established from 42 localities in Serbia. Ten species and three genera are new for the Serbian spider fauna. The most diverse is the family Linyphiidae, otherwise represented by 35 species.

UDC

### INTRODUCTION

The existing information on Serbian spiders is due to the efforts of many araneologists from different countries. The first information concerning the spiders of Serbia appeared at the end of 19th century in the paper of S p a s o j e v ić (1891). Three years later, C h y z e r and K u l c z y n s k i (1894, 1897) announced more precise data. The information concerned single localities in Northern Serbia. Much more information was reported by B r e s j a n č e v a (1907), who recorded 148 species. The first huge work came from S t o j ić e v ić (1929). He reported 432 species from 34 families, which constituted a revue of all literature available by that time. A considerable contribution was made by K r a t o - c h v í l (1934) who published the list of cave spiders in Yugoslavia. F a g e (1931) published a revue of cave spiders in Europe, where 71 species from the Balkan Peninsula (9 of which from Serbian caves) were reported. Some years later, D r e n s k y (1936) compiled all faunistic data about the spiders of the Balkan Peninsula mentioned in the literature and reported 447 species from 34 families for Serbia. In this period K o l o s v á r y (1938, 1940) published a list of spiders of Yugoslavia that included 40 species from the territory of Serbia. In the same period K r a t o c h v í l and M i l l e r (1938) continued their work of cave spiders from the Balkan countries, with an emphasis on research on the distribution of cave *Centromerus* species. Š i l - h a v ý (1944) described new species from the family Thomisidae. Much later, Ć u r č ić (1969) examined the cave spiders in the Iron Gate region and reported 17 species. Some data concerning Serbian spiders can be found in the papers of v a n H e l s d i n g e n (1969,

1970). Ten years later, N i k o l ić and P o l e n e c (1981) combined the data concerning Yugoslav spiders and reported 525 species from 35 families from Serbia. More recent publications list the cave fauna (D e e l e m a n - R e i n h o l d 1985; D e e l e m a n - R e i n h o l d and D e e l e m a n 1988; T h a l e r and Höf e r 1987; D e l t s h e v *et al.* 1996; D e l t s h e v and Ć u r č ić 1997; D e l t s h e v *et al.* 1997; D e l t s h e v *et al.* 1998; Ć u r č ić *et al.* 1999a) and leaf-litter spiders of Western and Eastern Serbia (D e l t s h e v *et al.* 1998; Ć u r č ić *et al.* 1999b; Ć u r č ić *et al.* 1999c; Ć u r č ić *et al.* 2000; D e l t s h e v and Ć u r č ić 2002).

Finally, 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 comparatively high compared with a number of spiders recorded from other countries from the Balkan Peninsula: the highest number of species is recorded for the territories of Bulgaria (910) (D e l t s h e v and B l a g o e v 2001), Greece (810) (B o s m a n s in press), Croatia (614) (D e l t s h e v 1999) and Macedonia (595). This reachness, however, depends not only on the size of the regions, but also on the degree of the explorations 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).

The goal of the present study is to give a critical systematic revue as well as a zoogeographical analysis of the spiders collected from 42 additional localities in Serbia, based on intensive field research and new data accumulated (Table 1).

Table 1. — List of established spider species in Serbia.

Abbreviations: f = female, ff = females, m = male, mm = males, juv. = juvenile(s).  
Species new to the fauna of Serbia in bold letters.

Genus and species	Locality	Collectors*
<b>DYSDERIDAE</b>		
<i>Dysdera adriatica</i> Kulczyński, 1897	Rimski Most, v. Kumanica, nr. Ivanjica, 4 ff, 1 m, 24 juv., 14. 05. 2001.	BPMC, SBC, BMM, SVD
<i>Dysdera ninni</i> (Canestrini, 1868)	Izvor Sakinac, Mt. Avala, nr. Belgrade, 1 f, 12 juv., 16. 04. 2001.	SBC
<i>Dysderocrates storkani</i> (Kratochvíl, 1935)	V. Osonica, Mt. Čemerno, nr. Ivanjica, 2 mm, 5 juv., 16-17. 08. 2001; nr. Lake Tičar (= Dajičko Jezero Lake), Mt. Golija, nr. Ivanjica, 1 m, August 2001; Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 1 m, 13. 08. 2001.	BPMC, SBC, BMM, SVD
<i>Harpactea rubicunda</i> (C. L. Koch, 1838)	Toranj, Mt. Avala, nr. Belgrade, 1 m, 23 juv., 16. 04. 2001.	SBC
<i>Harpactea saeva</i> (Herman, 1879)	In front of the Mala Pećina Cave, v. Rti, nr. Kotraža, 1 m, 9 juv., 02. 05. 2001.	BPMC, SVD
<i>Kaemis carnicus</i> Deeleman-Reinhold, 1993	Lovačka Česma, v. Ljepojevići, Mt. Javor (1350 m), 2 mm, 11-12. 08. 2001; v. Močioci, nr. Katići, Mt. Mučanj (1150 m), 2 ff, 2 mm, 09. 08. 2001.	BPMC, SBC, BMM, SVD
<b>THERIDIIDAE</b>		
<i>Euryopis flavomaculata</i> (C. L. Koch, 1836)	In front of the Mala Pećina Cave, v. Rti, nr. Kotraža, 1 f, 2 mm, 2 juv., 02. 05. 2001.	BPMC, SVD
<i>Robertus lividus</i> (Blackwall, 1836)	Golijska Reka, Mt. Golija, nr. Ivanjica, 1 f, 13 juv., 12. 05. 2001; Biser Vode, v. Koritnik, Mt. Golija (1300 m), 1 f, 7 mm, 3 juv., 07. 08. 2001; Lovačka Česma, v. Ljepojevići, Mt. Javor (1350 m), nr. Ivanjica, 5 ff, 5 mm, 11-12. 08. 2001; v. Osonica, Mt. Čemerno, nr. Ivanjica, 7 ff, 5 mm, 3 juv., 16-17. 08. 2001.	BPMC, SEM, SBC, BMM, SVD
<i>Pholcomma gibbum</i> (Westring, 1851)	Rimski Most, v. Kumanica, nr. Ivanjica, 1 m, 14. 05. 2001.	BPMC, SEM, SBC, BMM, SVD
<b>NESTICIDAE</b>		
<i>Nesticus cellularanus</i> (Clerck, 1757)	Petnička Pećina Cave, v. Petnica, nr. Valjevo, 8 ff, 1 m, 6 juv., 21. 06. 2001; Hadži-Prodanova Pećina Cave, v. Raščići, nr. Ivanjica, 1 f, 11. 05. 2001; Virovska Pećina Cave, v. Virovo, nr. Arilje, 5 ff, 6 juv., 30. 04. 2001; Disina Pećina Cave, v. Miroč, Mt. Miroč, 1 f, 2 juv., 18. 08. 2001.	BPMC, SEM, SBC, BMM, SVD, GC
<b>LINYPHIIDAE</b>		
<i>Bolyphantes alticeps</i> (Sundevall, 1833)	Lovačka Česma, v. Ljepojevići, Mt. Javor (1350 m), nr. Ivanjica, 1 f, 11-12. 08. 2001.	BPMC, SBC, BMM, SVD
<i>Bolyphantes kolosvaryi</i> (Capporiaco, 1936)	V. Osonica, Mt. Čemerno, nr. Ivanjica, 2 mm, 5 juv., 16-17. 08. 2001.	BPMC, SBC, BMM, SVD
<i>Centromerus cavernarum</i> (L. Koch, 1872)	Mala Pećina Cave, v. Rti, nr. Kotraža, 1 f, 2 juv., 12. 05. 2001; 8 ff, 5 juv., 30. 04. 2001; Hadži-Prodanova Pećina Cave, v. Raščići, nr. Ivanjica, 3 ff, 4 mm, 1 juv., 11. 05. 2001; 3 ff, 1 juv., 12. 05. 2001; Virovska Pećina Cave, v. Virovo, nr. Arilje, 1 m, 30. 04. 2001; Biser Vode, v. Koritnik, Mt. Golija (1300 m), nr. Ivanjica, 14 ff, 07. 08. 2001; A cave opposite to the Krstata Pećina	BPMC, SEM, SBC, BMM, SVD, GC

Table 1 — Continued.

Genus and species	Locality	Collectors*
<i>Centromerus silvicola</i> (C. L. Koch, 1834)	Cave, v. Trudovo, Mt. Javor, nr. Nova Varoš, 1 f, 1 juv., 22. 08. 2001; v. Močioci, nr. Katići, Mt. Mučanj (1150 m), 2 ff, 09. 08. 2001; Pećina Banja Cave, v. Miroč, Mt. Miroč, 1 f, 17. 08. 2001; Disina Pećina Cave, v. Miroč, Mt. Miroč, 6 ff, 7 juv., 18. 08. 2001. Virovska Pećina Cave, v. Virovo, nr. Arijje, 1 f, 30. 04. 2001.	BPMC, SEM, SBC, BMM, SVD
<i>Ceratinella brevis</i> (Wider, 1834)	V. Osonica, Mt. Čemerno, nr. Ivanjica, 1 f, 1 m, 16-17. 08. 2001.	BPMC, SEM, SBC, BMM, SVD
<i>Diplocephalus picinus</i> (O.P.-Cambridge, 1875)	Mt. Avala, nr. Belgrade, 1 f, 1 m, 09. 06. 2001; Rimski Most, v. Kumanica, nr. Ivanjica, 2 ff, 14. 05. 2001; Goljska Reka, Mt. Golija, nr. Ivanjica, 14 ff, 2 mm, 1-03. 05. 2001 ; 7 ff, August 2001 ; Lake Tičar, Mt. Golija, nr. Ivanjica, 1 f, August 2001; Biser Vode, v. Koritnik, Mt. Golija (1300 m), nr. Ivanjica, 2 ff, 07. 08. 2001; Lovačka Česma, v. Ljepojevići, Mt. Javor (1350 m), nr. Ivanjica, 13 ff, 6 mm, 11-12. 08. 2001; v. Močioci, nr. Katići, Mt. Mučanj (1150 m), 2 mm, 09. 08. 2001; Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 1 f, 13. 08. 2001 .	BPMC, SEM, SBC, BMM, SVD
<i>Diplocephalus foraminifer</i> (Blackwall, 1841)	Mt. Avala, nr. Belgrade, 1 f, 09. 06. 2001; Buronov Ponor Cave, v. Miroč, Mt. Miroč, 1 f, 1 m, 13. 08. 2001; Krstata Pećina Cave, v. Debelja, Mt. Javor, nr. Nova Varoš, 4 ff, 1 m, 21. 08. 2001; Velika Gradišnica Cave, v. Miroč, Mt. Miroč, 11 ff, 4 mm, 16.08.2001. Lake Tičar, Mt. Golija, nr. Ivanjica, 1 m, August 2001.	SBC, BMM, GC
<i>Diplocephalus latifrons</i> (O.P.-Cambridge, 1863)	Rimski Most, v. Kumanica, nr. Ivanjica, 1 f, 14. 05. 2001; Izvor Ladne Vode, Mt. Avala, nr. Belgrade, 1 m, 16. 04. 2001; cave en route v. Močioci - v. Jasenova, Mt. Mučanj, nr. Katići, 1 f, 24. 08. 2001.	BPMC, SBC, BMM, SVD
<i>Diplostyla concolor</i> (Wider, 1834)	"Pećina u Velikom Kršu" Cave, v. Maskova, nr. Kušići, Mt. Javor, 2 ff, 19. 08. 2001.	BPMC, SEM, SBC, BMM, SVD
<i>Drapetisca socialis</i> (Sundevall, 1833)	Rimski Most, v. Kumanica, nr. Ivanjica, 1 m, 14. 05. 2001.	SBC, BMM
<i>Entelecara acuminata</i> (Wider, 1834)	Lovačka Česma, v. Ljepojevići, Mt. Javor (1350 m), nr. Ivanjica, 1 f, 11-12. 08. 2001.	SBC, BMM
<i>Erigone dentipalpis</i> (Wider, 1834)	V. Osonica, Mt. Čemerno, nr. Ivanjica, 1 m, 16-17. 08. 2001; Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 2 mm, 13. 08. 2001.	SBC, BMM
<i>Formiphantes leptyphantiformis</i> (Kolosváry, 1907)	Goljska Reka, Mt. Golija, nr. Ivanjica, 4 ff, 2 mm, August 2001 ; Lake Tičar, Mt. Golija, nr. Ivanjica, 1 f, 2 mm, August 2001; Biser Vode, v. Koritnik, Mt. Golija (1300 m), nr. Ivanjica, 1 f, 1 m, 07. 08. 2001; v. Močioci, nr. Katići, Mt. Mučanj (1150 m), 8 ff, 3 mm, 09. 08. 2001; Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 1 f, 13.08.2001.	BPMC, SVD
<i>Gonatium orientate</i> Page, 1931	V. Osonica, Mt. Čemerno, nr. Ivanjica, 1 f, 16-17. 08. 2001.	BPMC, SBC, BMM, SVD
<i>Gonatium paradoxum</i> (L. Koch, 1869)	Goljska Reka, Mt. Golija, nr. Ivanjica, 1 f, August 2001; Lake Tičar, Mt. Golija, nr. Ivanjica, 6 ff, August 2001; Biser Vode, v. Koritnik, Mt. Golija (1300 m), nr. Ivanjica, 3 ff, 2 mm, 07. 08. 2001; v. Močioci, nr. Katići, Mt. Mučanj (1150 m), 1 f, 09. 08. 2001; v. Osonica, Mt. Čemerno, nr. Ivanjica, 2 ff, 2 mm, 16-17. 08. 2001 ; Zmajinac, v.	BPMC, SVD
<i>Leptyphantes centromerooides</i> Kulczyński, 1914		BPMC, SBC, BMM, SVD

Table 1 — Continued.

Genus and species	Locality	Collectors*
<i>Lepthyphantes leprosus</i> (Ohlert, 1865)	Miliće, Mt. Radočelo, nr. Ivanjica, 4 ff, 13. 08. 2001 A cave en route v. Močioci - v. Jasenova, Mt. Mučanj, nr. Katići, 1 f, 24. 08. 2001; Mala Pećina Cave, Čolovica Stijena, v. Ojkovica, nr. Nova Varoš, 1 f, 24. 08. 2001.	BPMC, SVD
<i>Lepthyphantes pallidus</i> (O.P.-Cambridge, 1871)	V. Močioci, nr. Katići, Mt. Mučanj (1150 m), 1 f, 09. 08. 2001; v. Osonica, Mt. Čemerno, nr. Ivanjica, 1 f, 16-17. 08. 2001.	BPMC, SVD
<i>Lepthyphantes trinovensis</i> (Drensky, 1931)	Buronov Ponor Cave, v. Miroč, Mt. Miroč, 3 ff, 2 mm, 1 juv., 13. 08. 2001.	GC
<i>Macrargus rufus</i> (Wider, 1834)	Golijska Reka, Mt. Golija, nr. Ivanjica, 1 f, 9 juv., 12. 08. 2001; 1 f, August 2001; Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 1 f, 1 m, 13. 08. 2001.	BPMC, SEM, SBC, BMM, SVD
<i>Maso sundevallii</i> (Westring, 1851)	Golijska Reka, Mt. Golija, nr. Ivanjica, 15 ff, 1-03. 05. 2001; 4 ff, August 2001; Lake Tičar, Mt. Golija, nr. Ivanjica, 1 f, August 2001; Lovačka Česma, v. Ljepojevići, Mt. Javor (1350 m), 1 f, 11-12. 08. 2001; v. Močioci, nr. Katići, Mt. Mučanj (1150 m), 28 ff, 09. 08. 2001; v. Osonica, Mt. Čemerno, nr. Ivanjica, 28 ff, 16-17. 08. 2001; Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 22 ff, 13. 08. 2001.	BPMC, SEM, SBC, BMM, SVD
<i>Meioneta rurestris</i> (C. L. Koch, 1836)	Golijska Reka, Mt. Golija, nr. Ivanjica, 1 f, August 2001; v. Močioci, nr. Katići, Mt. Mučanj (1150 m), 10 ff, 2 mm, 09. 08. 2001; v. Osonica, Mt. Čemerno, nr. Ivanjica, 10 ff, 2 mm, 16-17. 08. 2001; Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 10 ff, 2 mm, 13. 08. 2001.	BPMC, SEM, SBC, BMM, SVD
<i>Micrargus herbigradus</i> (Blackwall, 1854)	Rimski Most, v. Kumanica, nr. Ivanjica, 1 f, 2 mm, 14. 05. 2001; Golijska Reka, Mt. Golija, nr. Ivanjica, 1 f, August 2001; Lake Tičar, Mt. Golija, nr. Ivanjica, 32 ff, 4 mm, August 2001; v. Močioci, nr. Katići, Mt. Mučanj (1150 m), 28 ff, 6 mm, 09. 08. 2001; v. Osonica, Mt. Čemerno, nr. Ivanjica, 39 ff, 16 mm, 16-17. 08. 2001; Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 1 f, 13. 08. 2001.	SBC, BMM
<i>Microneta viaria</i> (Blackwall, 1841)	Golijska Reka, Mt. Golija, nr. Ivanjica, 24 ff, 01-03. 05. 2001; 20 ff, 1 m, August 2001; 4 ff, August 2001; Mt. Avala, nr. Belgrade, 20 ff, 1 m, 09. 06. 2001; Rimski Most, v. Kumanica, nr. Ivanjica, 3 ff, 11 juv., 14. 05. 2001; Izvor Ladne Vode, Mt. Avala, nr. Belgrade, 2 ff, 4 mm, 16. 04. 2001; Izvor Sakinac, Mt. Avala, nr. Belgrade, 5 ff, 3 mm, 5 juv., 16. 04. 2001; Čarapićev Brest, Mt. Avala, nr. Belgrade, 4 ff, 16. 04. 2001; Lake Tičar, Mt. Golija, nr. Ivanjica, 44 ff, August 2001; Biser Vode, v. Koritnik, Mt. Golija (1300 m), nr. Ivanjica, 4 ff, 07. 08. 2001; Lovačka Česma, v. Ljepojevići, Mt. Javor (1350 m), nr. Ivanjica, 4 ff, 11-12. 08. 2001; v. Močioci, nr. Katići, Mt. Mučanj (1150 m), 15 ff, 3 mm, 09. 08. 2001; v. Osonica, Mt. Čemerno, nr. Ivanjica, 21 ff, 14 mm, 16-17. 08. 2001; Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 39 ff, 8 mm, 13. 08. 2001.	BPMC, SBC, BMM, SVD
<i>Porrhomma convexum</i> (Westring, 1851)	Petnička Pećina Cave, v. Petnica, nr. Valjevo, 2 ff, 24 juv., 21. 06. 2001; Virovska Pećina Cave, v. Virovo, nr. Arilje, 2 mm, 30. 04. 2001; Buronov Ponor Cave, v. Miroč, Mt. Miroč, 3 ff, 2 mm, 13. 08. 2001; Mala Gradišnica Cave, v. Miroč, Mt. Miroč, 1 f, August 2001; a cave opposite the Arsovića Krš, v. Maskova, nr. Kušići, Mt. Javor, 1 f, 2 juv., 20. 08. 2001; "Pećina pod	BPMC, SEM, SBC, BMM, SVD, GC

Table 1 — Continued.

Genus and species	Locality	Collectors*
<i>Saaristoa firma</i> (O.P.-Cambridge, 1900)	Kapilijama" Cave, v. Trudovo, Mt. Javor, nr. Nova Varoš, 4 ff, 1 mm, 4 juv., 19. 08. 2001; a cave in the Arsovića Krš, v. Maskova, nr. Kušići, Mt. Javor, 20 ff, 20 mm, 16 juv., 20. 08. 2001; Pećina Banja Cave, v. Miroč, Mt. Miroč, 6 ff, 2 mm, 17. 08. 2001; Velika Gradišnica Cave, v. Miroč, Mt. Miroč, 2 ff, 16. 08. 2001.	BPMC, SBC, BMM, SVD
<i>Scotargus pilosus</i> Simon, 1913	Golijska Reka, Mt. Golija, nr. Ivanjica, 1 m, 01-03. 12. 05. 2001.	BPMC, SBC, BMM, SVD
<i>Stemonyphantes lineatus</i> (Linnaeus, 1758)	Golijska Reka, Mt. Golija, nr. Ivanjica, 1 f, 1 m, August 2001; Biser Vode, v. Koritnik, Mt. Golija (1300 m), nr. Ivanjica, 1 m, 07. 08. 2001; v. Osonica, Mt. Čemerno, nr. Ivanjica, 1 m, 16-17. 08. 2001; Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 1 f, 13. 08. 2001.	BPMC, SBC, BMM, SVD
<i>Tenuiphantes flavipes</i> (Blackwall, 1854)	Golijska Reka, Mt. Golija, nr. Ivanjica, 1 f, 12. 05. 2001; v. Osonica, Mt. Čemerno, nr. Ivanjica, 1 f, 16-17. 08. 2001.	BPMC, SBC, SVD
<i>Tenuiphantes floriana</i> (van Helldingen, 1977)	Mt. Avala, nr. Belgrade, 1 f, 09. 06. 2001; in front of the Mala Pećina Cave, v. Rti, nr. Kotraža, 1 f, 4 juv., 02. 05. 2001.	BPMC, SBC
<i>Tenuiphantes tenebricola</i> (Wider, 1834)	Mt. Avala, nr. Belgrade, 1 f, 1 m, 3 juv., 09. 06. 2001.	SBC
<i>Trichoncus hackmani</i> Millidge, 1955	Golijska Reka, Mt. Golija, nr. Ivanjica, 1 f, 2 mm, August 2001; Lake Tičar, Mt. Golija, nr. Ivanjica, 3 ff, 2 mm, August 2001; Biser Vode, v. Koritnik, Mt. Golija (1300 m), nr. Ivanjica, 1 f, 07. 08. 2001; Lovačka Česma, v. Ljepojevići, Mt. Javor (1350 m), nr. Ivanjica, 4 ff, 1 m, 11-12. 08. 2001; v. Močioci, nr. Katići, Mt. Mučanj (1150 m), 2 ff, 09. 08. 2001; v. Osonica, Mt. Čemerno, nr. Ivanjica, 7 ff, 5 mm, 16-17. 08. 2001; Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 22 ff, 12 mm, 13.08.2001.	BPMC, SEM, SBC, BMM, SVD
<i>Walckenaeria cucullata</i> (C. L Koch, 1836)	Rimski Most, v. Kumanica, nr. Ivanjica, 1 f, 1 m, 24 juv., 14. 05. 2001.	BPMC, SEM, SBC, BMM, SVD
<i>Walckenaeria furcifata</i> (Menge, 1868)	Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 1 f, 13. 08. 2001.	BPMC, SEM, SBC, BMM, SVD
<i>Walckenaeria mitrata</i> (Menge, 1868)	Mt. Avala, nr. Belgrade, 1 f, 09. 06. 2001.	SBC
	Golijska Reka, Mt. Golija, nr. Ivanjica, 1 f, 1 m, 01-03. 05. 2001; Lake Tičar, Mt. Golija, nr. Ivanjica, 1 f, August 2001; Biser Vode, v. Koritnik, Mt. Golija (1300 m), nr. Ivanjica, 1 f, 07. 08. 2001.	BPMC, SEM, SBC, BMM
<b>TETRAGNATHIDAE</b>		
<i>Meta menardi</i> (Latreille, 1804)	Mala Pećina Cave, v. Rti, nr. Kotraža, 3 ff, 30. 04. 2001; A cave opposite to the Krstata Pećina Cave, v. Trudovo, Mt. Javor, nr. Nova Varoš, 1 m, 5 juv., 22. 08. 2001; Krstata Pećina Cave, v. Debela, Mt. Javor, nr. Nova Varoš, 1 f, 5 juv., 21. 08. 2001; Velika Gradišnica Cave, v. Miroč, Mt. Miroč, 10 juv., 16. 08. 2001.	SEM, SBC, BMM, GC
<b>ARANEIDAE</b>		
<i>Cercidia prominens</i> (Westring, 1851)	Rimski Most, v. Kumanica, nr. Ivanjica, 1 f, 14. 05. 2001.	BPMC, SEM, SBC, BMM, SVD

Table 1 — Continued.

Genus and species	Locality	Collectors*
<b>LYCOSIDAE</b>		
<i>Pardosa amentata</i> (Clerck, 1757)	V. Močioci, nr. Katići, Mt. Mučanj (1150 m), 1 f, 09. 08. 2001.	BPMC, SVD
<i>Pardosa hortensis</i> (Thorell, 1872)	Rimski Most, v. Kumanica, nr. Ivanjica, 1 f, 14. 05. 2001.	BPMC, SVD
<i>Pardosa lugubris</i> (Walckeaer, 1802)	Mt. Avala, nr. Belgrade, 1 f, 1 juv., 12. 06. 2001; Mt. Avala, (roadfork to Zuce and Beli Potok), nr. Belgrade, 1 f, 1 juv., 16. 04. 2001.	SBC
<i>Pirata knorri</i> (Scopoli, 1763)	Vršački Breg Hill, nr. Vršac, 1 f, 30. 05. 2001.	SBC
<i>Trochosa terricola</i> Thorell, 1856	A cave en route v. Močioci - v. Jasenova, Mt. Mučanj, nr. Katići, 1 f, 24. 08. 2001; v. Osonica, Mt. Čemerno, nr. Ivanjica, 2 ff, 16-17. 08. 2001.	BPMC, SBC, BMM, SVD
<b>AGELENIDAE</b>		
<i>Histopona luxurians</i> (Kulczyński, 1897)	Izvor Sakinac, Mt. Avala, nr. Belgrade, 2 ff, 5 juv., 16. 04. 2001; 1 f, 5 juv., 16. 06. 2001; Mt. Avala, nr. Belgrade, 2 ff, 5 juv., 09. 06. 2001; Golijska Reka, Mt. Golija, nr. Ivanjica, 3 ff, 2 mm, 01-03. 05. 2001; 2 ff, 4 juv., 12. 05. 2001; 6 ff, 2 juv., August 2001; Lovačka Česma, v. Ljepojevići, Mt. Javor (1350 m), nr. Ivanjica, 6 ff, 1 m, 11-12. 08. 2001; v. Močioci, nr. Katići, Mt. Mučanj (1150 m), 3 ff, 1 m, 09. 08. 2001; v. Osonica, Mt. Čemerno, nr. Ivanjica, 5 ff, 23 juv., 16-17. 08. 2001; Zmajinac, v. Miliće, Mt. Radočelo, nr. Ivanjica, 12 ff, 2 mm, 13. 08. 2001.	BPMC, SEM, SBC, BMM, SVD
<i>Histopona torpida</i> (C. L. Koch, 1837)	Biser Vode, v. Koritnik, Mt. Golija (1300 m), nr. Ivanjica, 2 ff, 07. 08. 2001.	BPMC, BMM, SVD
<i>Tegenaria domestica</i> (Clerck, 1757)	Petrička Pećina Cave, v. Petrica, nr. Valjevo, 1 f, 21. 06. 2001.	SBC
<b>CYBAEIDAE</b>		
<i>Cybaeus balkanus</i> Deltshev, 1997	Krstata Pećina Cave, v. Debelja, Mt. Javor, nr. Nova Varoš, 1 f, 1 m, 21. 08. 2001.	SBC, BMM
<b>DYCTINIDAE</b>		
<i>Dictyna arundinacea</i> (Linnaeus, 1758)	Golijska Reka, Mt. Golija, nr. Ivanjica, 1 m, 01-03. 05. 2001.	BPMC, SBC, BMM, SVD
<b>AMAUROBIIDAE</b>		
<i>Amaurobius pallidus</i> L. Koch, 1868	Izvor Sakinac, Mt. Avala, nr. Belgrade, 1 f, 1 m, 16. 04. 2001; 1 f, 2 juv., 16. 06. 2001; Mt. Avala, nr. Belgrade, 1 f, 2 juv., 12. 06. 2001; roadfork to v. Zuce, v. Beli Potok and v. Pinosava, Mt. Avala, nr. Belgrade, 1 f, 2 juv., 16. 04. 2001.	SBC
<i>Coelotes inermis</i> (L Koch, 1855)	Golijska Reka, Mt. Golija, nr. Ivanjica, 1 m, August 2001; Lovačka Česma, v. Ljepojevići, Mt. Javor (1350 m), 3 mm, 11-12. 08. 2001.	BPMC, SBC, BMM, SVD
<i>Coelotes jurinitschi</i> (Drensky, 1915)	Krstata Pećina Cave, v. Debelja, Mt. Javor, nr. Nova Varoš, 1 f, 21. 08. 2001.	SBC, BMM
<i>Coelotes titanicus</i> Brignoli, 1977	Golijska Reka, Mt. Golija, nr. Ivanjica, 1 m, 01-03. 05. 2001.	BPMC, SEM, SBC, BMM, SVD

Table 1 — Continued.

Genus and species	Locality	Collectors*
<i>Urocoras longispinus</i> (Kulczyński, 1897)	Izvor Sakinac, Mt. Avala, nr. Belgrade, 2 ff, 12 juv., 16. 04. 2001; en route Izvor Sakinac - Toranj, Mt. Avala, nr. Belgrade, 1 f, 2 juv., 16. 04. 2001; en route v. Zuce — v. Beli Potok, Mt. Avala, nr. Belgrade, 1 f, 3 juv., 16. 04. 2001.	SBC
<b>LIOCRANIDAE</b>		
<i>Liocranum rupicola</i> (Walckenaer, 1830)	Mala Pećina Cave, Čolovića Stijena, v. Ojkovica, nr. Nova Varoš, 1 m, 24. 08. 2001.	SBC, BMM
<i>Liocranum rutilans</i> (Thorell, 1875)	Mt. Avala, nr. Belgrade, 1 f, 12. 06. 2001; roadfork to v. Zuce, v. Beli Potok and v. Pinosava, Mt. Avala, nr. Belgrade, 1 f, 16. 04. 2001.	SBC
<b>CLUBIONIDAE</b>		
<i>Clubiona comta</i> (C. L. Koch, 1839)	V. Osonica, Mt. Čemerno, nr. Ivanjica, 2 ff, 16-17. 08. 2001.	BPMC, SBC, BMM, SVD
<i>Clubiona saxatilis</i> L. Koch, 1866	V. Osonica, Mt. Čemerno, nr. Ivanjica, 1 f, 16-17. 08. 2001.	BPMC, SBC, BMM, SVD
<i>Clubiona terrestris</i> Westring, 1851	Mt. Avala, nr. Belgrade, 1 f, 1 juv., 09. 06. 2001; en route Izvor Sakinac - Toranj, Mt. Avala, nr. Belgrade, 1 f, 16. 04. 2001.	SBC
<b>GNAPHOSIDAE</b>		
<i>Callilepis nocturna</i> (Linnaeus, 1758)	Rimski Most, v. Kumanica, nr. Ivanjica, 1 f, 14. 05. 2001.	BPMC, SEM, SBC, BMM, SVD
<i>Micaria fulgens</i> (Walckenaer, 1802)	Rimski Most, v. Kumanica, nr. Ivanjica, 1 m, 14. 05. 2001.	BPMC, SEM, SBC, BMM, SVD
<i>Zelotes apricorum</i> (L. Koch, 1876)	V. Osonica, Mt. Čemerno, nr. Ivanjica, 1 f, 16-17. 08. 2001.	BPMC, SVD
<b>THOMISIDAE</b>		
<i>Ozyptila blackwalli</i> Simon, 1875	Mt. Avala, nr. Belgrade, 1 m, 6 juv., 09. 06. 2001; in front of the Mala Pećina Cave, v. Rti, nr. Kotraža, 1 f, 1 m, 7 juv., 02. 05. 2001; en route v. Zuce — v. Beli Potok, Mt. Avala, nr. Belgrade, 1 m, 1 juv., 16. 04. 2001.	SBC
<i>Xysticus lanio</i> C. L. Koch, 1835	Mt. Avala, nr. Belgrade, 1 m, 12. 10. 2001; roadfork to v. Zuce, v. Beli Potok and v. Pinosava, Mt. Avala, nr. Belgrade, 1 m, 16. 04. 2001.	SBC
<i>Xysticus sabulosus</i> (Menge, 1875)	V. Osonica, Mt. Čemerno, nr. Ivanjica, 1 m, 16-17. 08. 2001.	BPMC, SBC, BMM, SVD
<b>SALTICIDAE</b>		
<i>Ballus chalybeius</i> (Walckenaer, 1802)	Toranj, Mt. Avala, nr. Belgrade, 1 m, 16. 04. 2001.	SBC
<i>Heliophanus cupreus</i> (Walckenaer, 1802)	Rimski Most, v. Kumanica, nr. Ivanjica, 2 ff, 14. 05. 2001.	BPMC, SBC, BMM, SVD
<i>Neon reticulatus</i> (Blackwall, 1853)	Izvor Sakinac, Mt. Avala, nr. Belgrade, 2 ff, 2 mm, 1 juv., 16. 04. 2001; 1 f, 1 juv., 16. 04. 2001; Mt. Avala, nr. Belgrade, 9 ff, 2 mm, 2 juv., 09. 06. 2001; Rimski Most, v. Kumanica, nr. Ivanjica, 5 ff, 1 juv., 14. 05.	BPMC, SBC, BMM, SVD

**Table 1 — Continued.**

Genus and species	Locality	Collectors*
	2001; in front of Virovska Pećina Cave, v. Virovo, nr. Arilje, 1 m, 30. 04. 2001; Toranj, Mt. Avala, nr. Belgrade, 1 m, 3 juv., 16. 04. 2001; v. Močioci, nr. Katići, Mt. Mučanj (1150 m), 2ff, 09. 08. 2001.	

\*Collectors: BPMC = Božidar P. M. Ćurčić, SBC = Srećko B. Ćurčić, BMM = Bojan M. Mitić, SVD = Sonja V. Djukić, SEM = Slobodan E. Makarov, GC = Gorčin Cvijanović.

## CONCLUSION

The spider fauna of Serbia is well represented on the territory of Serbia but the species are distributed unequally in different areas and districts. The number of established species (628) and genera (224) is comparatively high to the number of spiders recorded from other countries from the Balkan Peninsula. The faunistic diversity of Serbian spiders shows that the Balkan Peninsula is a territory of considerable species reachness. In the zoogeographical respect, the widely distributed spiders are dominant, which shows that the process of colonization is considerable. The endemic species represent the local character of this fauna and point to the main role of the genesis of the Balkan Peninsula in its origin and evolution. This phenomenon can be regarded as a result of numerous paleo-environmental changes since the Mesozoic.

**Acknowledgements.** - We acknowledge the financial help from the Serbian Ministry for Science, Technologies and Development (Grant 1547).

## REFERENCES

- Bosmans, R. (in press). The spiders of Greece. A critical review of the literature concerning the spiders of Greece.
- Bresjančeva, J. (1907). Prilog za poznavanje srpske aranejske faune. *Radovi iz Zoološkog Instituta u Univerzitetu* 1 (2-3), 1-16, Beograd.
- Chyzer, C., Kulczyński, W. (1894). Araneae Hungariae 1, 1-151, Budapest.
- Chyzer, C., Kulczyński, W. (1897). Araneae Hungariae 2, 151-366, Budapest.
- Ćurčić, B. P. M. (1969). On some distributional characteristics of Araneae found in the caves of north-eastern Serbia – the Iron Gate Region. *Abhandlungen, V Internationalen Kongress der Speläologie (Stuttgart 1969)*, Sektion Biospeläologie 4, 1-10, Stuttgart.
- Ćurčić, B. P. M., Deltshov, C., Tomić, V. (2000). On some some leaf-litter spiders (Araneae, Arachnida) from Western Serbia, Yugoslavia. Part Two. *Archives of Biological Sciences* 52 (3), 29P-30P, Belgrade.
- Ćurčić, B. P. M., Deltshov, C., Dimitrijević, R. N., Karamata, O. S., Tomić, V. T., Ćurčić, S. B., Ćurčić, N. B. (1999a). On some cave-dwelling spiders (Araneae, Arachnida) from Serbia, Yugoslavia. *Archives of Biological Sciences* 51 (1), 7P-8P, Belgrade.
- Ćurčić, B. P. M., Deltshov, C., Makarov, S. E., Karamata, O. S., Tomić, V. T. (1999b). First report on some leaf-litter spiders (Araneae, Arachnida) from Serbia. *Archives of Biological Sciences* 51 (1), 15P-16P, Belgrade.
- Ćurčić, B. P. M., Deltshov, C., Makarov, S. E., Tomić, V. T., Ćurčić, S. B., Ćurčić, N. B. (1999c). On some some leaf-litter spiders (Araneae, Arachnida) from West Serbia, Yugoslavia. *Archives of Biological Sciences* 51 (1), 21P-22P, Belgrade.
- Deeleman-Reinhold, C., Deeleman, P. (1988). Revision des Dysderinae (Araneae, Dysderidae), les espèces Méditerranéennes occidentales exceptées. *Tijdschrift voor Entomologie* 131, 141-269, Amsterdam.
- Deeleman-Reinhold, C. L. (1985). Contribution à la connaissance des Leptiphantes du groupe pallidus (Araneae, Linyphiidae) de Yougoslavie, Grèce et Chypre. *Mémoires de Biospéologie* 12, 37-50, Moulis.
- Deltshov, C. (1999). A Faunistic and Zoogeographical Review of the Spiders (Araneae) of the Balkan Peninsula. *The Journal of Arachnology* 27 (1), 255-266, Washington.
- Deltshov, C., Blagoev, G. (2001). A critical check list of Bulgarian spiders (Araneae). *Bulletin of the British Arachnological Society* 12 (3), 110-138, Loughborough.
- Deltshov, C., Ćurčić, B. (1997). Contribution to the knowledge of the group europaeus of *Centromerus Dahl* (Linyphiidae, Araneae) in the Balkan Peninsula. *Revue suisse de Zoologie* 104 (1), 49-55, Geneva.
- Deltshov, C., Ćurčić, B. (2002). Contribution to the study of the genus *Centromerus Dahl* (Araneae, Linyphiidae) in caves of the Balkan Peninsula. *Revue suisse de Zoologie* 109 (1), 1-10, Geneva.
- Deltshov, C., Ćurčić, B., Dimitrijević, R., Makarov, S., Lučić, L., Tomić, V. (1997). Additional report on cave-dwelling spiders (Araneae, Arachnida) from Serbia, Yugoslavia. *Archives of Biological Sciences* 49 (3-4), 37P-38P, Belgrade.
- Deltshov, C., Ćurčić, B., Dimitrijević, R., Makarov, S., Lučić, L., Tomić, V. (1998). On cave- and litter-dwelling spiders (Araneae, Arachnida) from east Serbia, Yugoslavia. *Archives of Biological Sciences* 50 (1), 3P-4P, Belgrade.
- Deltshov, C., Ćurčić, B. P. M., Dimitrijević, R. N., Makarov, S., Lučić, L. (1996). Further report on cave-dwelling spiders (Araneae, Arachnida) from Serbia, Yugoslavia. *Archives of Biological Sciences* 48 (3-4), 25P-26P, Belgrade.

## О РАЗНОВРСНОСТИ НЕКИХ ПАУКОВА (ARANEA : ARACHNIDA) У СРБИЈИ

Б. П. М. ЂУРЧИЋ,<sup>1</sup> Х. Х. ДЕЛЧЕВ,<sup>1</sup> Г. А. БЛАГОЕВ, С. Б. ЂУРЧИЋ и В. Т. ТОМИЋ

*Институти за зоологију, Биолошки факултет, Универзитет у Београду, 11000 Београд, Србија и Црна Гора;*

*Центар за биосистематичне истраживања Европе, 11000 Београд, Србија и Црна Гора;*

*и<sup>1</sup> Институти за зоологију, Бугарска академија наука, 1000 Софија, Бугарска.*

Фауни паукова Србије, према резултатима изнетих истраживања, припада 628 врста из 224 рода и 36 фамилија. Најзаступљеније породице су: Linyphiidae (164 врста или 26.11 %), Lycosidae (62 врсте или 9.87 %), Gnaphosidae (59 врста или 9.39 %), Salticidae (49 врста или 7.80 %), Araneidae (48 врста или 7.64 %), Theridiidae (42 врсте или 6.69 %) и Thomisidae (37 врста или 5.89 %). Укупно десет врста (или 13.16 % од свих дијагностикованих врста) су нове за фауну Србије (Табела 1). То су: *Bolyphantes alticeps* (Sundevall), *Bolyphantes kolosvaryi* (Caporiacco), *Formiphantes leptyphantiformis* (Kolosváry), *Saaristoa firma* (O. P. – Cambridge), *Tenuiphantes florianae* (van Helsdingen), *Trichoncus hackmani* Millidge, *Walckenaeria cucullata* (C. L. Koch), *Walckenaeria furcillata* (Menge), *Coelotes titanicus*

Brignoli и *Clubiona saxatilis* L. Koch. Поред наведеног, још три рода: *Bolyphantes*, *Formiphantes* и *Saaristoa* су нови за фауну паукова Србије.

Фаунистичка разноврсност паукова Србије указује да је Балканско полуострво подручје нарочито богато врстама свих арахнида. Зоогеографски, широко распрострањене врсте су доминантне, што указује на константност процеса колонизације различитих таксона. Ендемичне врсте одсликавају локални или регионални карактер ове фауне и упућују на значај генезе Балканског полуострва у њиховом пореклу и даљој еволуцији. Овај феномен се, дакле, може тумачити као последица многоbroјних промена у животној средини, још од мезозоика па до данашњих дана.