

**A NEW GENUS AND NEW SPECIES IN THE ROMANIAN SPIDER
FAUNA (ARACHNIDA: ARANEAE) FROM THE GURA ZLATA
(RETEZAT NATIONAL PARK, ROMANIA)**

KINGA FETYKÓ, ISTVÁN URÁK

Abstract. 77 species of 17 families were identified from Gura Zlata (Retezat National Park, Retezat Mountains). *Gongylidiellum vivum* (O. P.-Cambridge, 1885), *Helophora insignis* (Blackwall, 1841) and *Midia midas* Simon, 1884 are newly recorded for the Romanian fauna. The genus *Midia* Saaristo & Wunderlich, 1995 was indicated for the first time. Furthermore, three species were re-discovered: *Meioneta milleri* Thaler, 1997, *Clubiona reclusa* O. P.-Cambridge, 1863 and *Pardosa oreophila* Simon, 1937.

Résumé. De Gura Zlata (Parc national Retezat, Monts Retezat) ont été identifiées 77 espèces appartenant aux 17 familles. Les espèces *Gongylidiellum vivum* (O. P.-Cambridge, 1885), *Helophora insignis* (Blackwall, 1841) et *Midia midas* Simon, 1884 ainsi que le genre *Midia* Saaristo & Wunderlich, 1995 ont été mentionnées pour la première fois dans la faune de Roumanie. De plus, trois espèces ont été redécouvertes: *Meioneta milleri* Thaler, 1997, *Clubiona reclusa* O. P.-Cambridge, 1863 et *Pardosa oreophila* Simon, 1937.

Key words: Aranea, new records, Romania, faunistics.

The Retezat Mountain belongs to the Western group (Retezat-Godeanu) of the Southern Carpathians. It has an area of nearly 800 km², being located between the longitude of 22°43'0''-22°4'36'' and the latitude of 45°15'15''-45°28'52'' (Schreiber & Sorocovschi, 1992).

One of the very peculiar characteristics of the Retezat comparing to other Romanian mountains is that the number of peaks higher than 2,000 m is larger than in any other massifs in the Romanian Carpathian. In the park, the heights vary from 794 m at Gura Zlata to 2,509 m at the Peleaga peak.

Geologically, the mountain has mostly a crystalline structure, but on the southern part it is formed also of sedimentary deposits. The "Small Retezat" on the southern part of the mountain consists in limestone (Schreiber & Sorocovschi, 1992).

The water resource is plentiful, being represented by a net of streams and some 80 lakes, mostly of glacial origin, formed during the Riss and Wurm Glacial Age (Rakosy & Stan, 1997). The presence of water is a reason for the richness of the flora, a new study establishes 1,186 species, 104 subspecies and 312 varieties to be found here (Schreiber et al., 1992).

The Retezat National Park is considered to be a symbol for the Romanian natural heritage and the Romanian natural assets.

MATERIAL AND METHODS

The sampling was carried out between 6th and 12th of August 2002.

The studied area was the southwestern part of Retezat Mountain, along the routes: Gura Zlata – Zlata peak and Gura Zlata – Gura Apei Lake.

Spiders were sampled by hand (ground and plant search, turning rocks and sifting of leaf litter) or using a sweepnet or beating tray for grass and low shrubs. All materials were preserved in 70° ethylic alcohol and identified under the stereoscopic microscope.

The species were identified using various keys: Locket & Millidge (1951), Loksa (1969, 1972), Fuhn & Niculescu-Burlacu (1985), Sterghiu (1985), Roberts (1985, 1987), Heimer & Nentwig (1991), Fuhn & Gherasim (1995) and were ranged taxonomically according to Platnick's World Spider Catalog (2000).

RESULTS AND DISCUSSIONS

We collected 973 spider specimens, 271 adults (69 males and 202 females) and 702 juveniles, belonging to 77 species of 17 families.

The richest families in species are Linyphiidae (40.26%, 31 species) followed by Lycosidae (12.96%, 10 species), Araneidae (9.09%, 7 species), Tetragnathidae (6.49%, 5 species), Clubionidae and Salticidae (5.19%, 4 species), Amaurobiidae (3.89%, 3 species), Agelenidae, Philodromidae and Thomisidae (2.59%, 2 species). The rest of seven families (Pholcidae, Segestriidae, Theridiidae, Pisauridae, Cybaeidae, Liocranidae and Gnaphosidae) are represented by a single species. The majority of specimens belong to the family Linyphiidae (41.93%, 408 specimens) followed by Thomisidae (16.03%, 156 specimens) and Lycosidae (14.69%, 143 specimens). The rest of families are represented by less specimens: Tetragnathidae 58 specimens (5.96%), Araneidae 47 specimens (4.83%), Agelenidae and Amaurobiidae 29 specimens (2.98%), Salticidae 25 specimens (2.56%), Pisauridae 20 specimens (2.05%), Clubionidae 17 specimens (1.74%), Philodromidae 14 specimens (1.43%), Cybaeidae 7 specimens (0.71%), Pholcidae 4 specimens (0.41%), Liocranidae and Gnaphosidae 2 specimens (0.2%) and Segestriidae 1 specimen (0.1%) (Fig. 1).

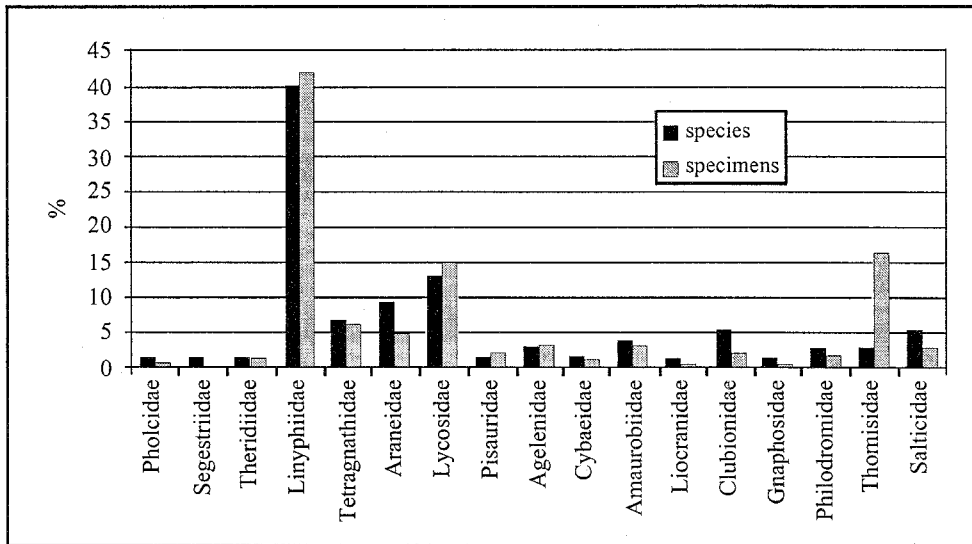


Fig. 1 – The percentage representation of the spider families

Linyphia triangularis (Clerck, 1757), from the family Linyphiidae was the most frequent species. 59 specimens (13 males, 17 females and 29 juveniles) were captured. Other common species: *Metellina segmentata* (Clerck, 1757) from the family Tetragnathidae (34 specimens), *Pardosa prativaga* (L. Koch, 1870) from the family Lycosidae (32 specimens), *Bolyphantes alticeps* (Sundevall, 1833) from the family Linyphiidae and *Pisaura mirabilis* (Clerck, 1757) from the family Pisauridae

Table 1

The list of the species

Nr. crt.	Taxon	♂	♀	J	Σ
I.	Pholcidae	3	1	-	4
1.	<i>Pholcus opilionoides</i> (Schrank, 1781)	3	1	-	4
II.	Segestriidae	-	-	1	1
2.	<i>Segestria senoculata</i> (Linnaeus, 1758)	-	-	1	1
III.	Theridiidae	-	7	4	11
3.	<i>Achaearanea lunata</i> (Clerck, 1757)	-	7	2	9
IV.	Linyphiidae	46	68	294	408
4.	<i>Agyneta subtilis</i> (O. P.-Cambridge, 1863)	1	1	-	2
5.	<i>Bolyphantes alticeps</i> (Sundevall, 1833)	5	15	-	20
6.	<i>Diplocephalus latifrons</i> (O. P.-Camb., 1863)	2	-	-	2
7.	<i>Diplostyla concolor</i> (Wider, 1834)	1	1	-	2
8.	<i>Erigone dentipalpis</i> (Wider, 1834)	2	-	-	2
9.	<i>Gonatium rubellum</i> (Blackwall, 1841)	2	1	-	3
10.	<i>Gongylidiellum vivum</i> (O. P.-Camb., 1885)	-	1	-	1
11.	<i>Helophora insignis</i> (Blackwall, 1841)	-	6	2	8
12.	<i>Lepthyphantes leprosus</i> (Ohlert, 1865)	-	1	-	1
13.	<i>Lepthyphantes midas</i> Simon, 1884	-	1	-	1
14.	<i>Linyphia triangularis</i> (Clerck, 1757)	13	17	29	59
15.	<i>Macrargus rufus</i> (Wider, 1834)	-	1	-	1
16.	<i>Maso sundevalli</i> (Westring, 1851)	1	-	-	1
17.	<i>Meioneta milleri</i> Thaler, 1997	2	2	-	4
18.	<i>Meioneta rurestris</i> (C. L. Koch, 1836)	3	1	-	4
19.	<i>Micrargus herbigradus</i> (Blackwall, 1854)	-	1	-	1
20.	<i>Microlinyphia pusilla</i> (Sundevall, 1830)	1	-	-	1
21.	<i>Mughiphantes mughi</i> (Fickert, 1875)	1	3	-	4
22.	<i>Neriere clathrata</i> (Sundevall, 1830)	1	-	-	1
23.	<i>Neriere emphana</i> (Walckenaer, 1842)	-	2	-	2
24.	<i>Neriere peltata</i> (Wider, 1834)	-	4	-	4
25.	<i>Oedothorax agrestis</i> (Blackwall, 1853)	1	-	-	1
26.	<i>Oedothorax apicatus</i> (Blackwall, 1850)	1	-	-	1
27.	<i>Oedothorax gibbifer</i> (Kulczynski, 1882)	1	-	-	1
28.	<i>Porrhomma convexum</i> (Westring, 1851)	-	1	-	1
29.	<i>Porrhomma errans</i> (Blackwall, 1841)	1	-	-	1
30.	<i>Stemonyphantes lineatus</i> (Linnaeus, 1758)	-	4	2	6
31.	<i>Tenuiphantes tenebricola</i> (Wider, 1834)	1	3	-	4
32.	<i>Tenuiphantes mengei</i> (Kulczynski, 1887)	1	1	-	2
33.	<i>Tenuiphantes tenuis</i> (Blackwall, 1852)	1	1	-	2
34.	<i>Tiso vegans</i> (Blackwall, 1834)	3	1	-	4
V.	Tetragnathidae	3	11	44	58
35.	<i>Metellina segmentata</i> (Clerck, 1757)	1	1	32	34
36.	<i>Pachygnatha degeeri</i> Sundevall, 1830	1	-	1	2
37.	<i>Tetragnatha extensa</i> (Linnaeus, 1758)	1	8	5	14
38.	<i>Tetragnatha nigrita</i> Lendl, 1886	-	1	-	1
39.	<i>Zygiella montana</i> (C. L. Koch, 1834)	-	1	-	1

VI.	Araneidae	2	9	36	47
40.	<i>Aculepeira ceropegia</i> (Walckenaer, 1802)	1	-	-	1
41.	<i>Araniella cucurbitina</i> (Clerck, 1757)	-	2	7	9
42.	<i>Araneus diadematus</i> Clerck, 1757	-	1	2	3
43.	<i>Araneus triguttatus</i> (Fabricius, 1775)	-	1	-	1
44.	<i>Cyclosa conica</i> (Pallas, 1772)	-	1	-	1
45.	<i>Mangora acalypha</i> (Walckenaer, 1802)	-	1	-	1
46.	<i>Nuctenea umbratica</i> (Clerck, 1757)	1	3	-	4
VII.	Lycosidae	4	66	73	143
47.	<i>Aulonia albimana</i> (Walckenaer, 1805)	-	1	-	1
48.	<i>Pardosa agrestis</i> (Westring, 1861)	1	-	-	1
49.	<i>Pardosa albatula</i> (Roewer, 1951)	-	1	-	1
50.	<i>Pardosa amenata</i> (Clerck, 1757)	-	5	-	5
51.	<i>Pardosa ferruginea</i> (L. Koch, 1870)	-	1	-	1
52.	<i>Pardosa monticola</i> (Clerck, 1757)	1	1	-	2
53.	<i>Pardosa prativaga</i> (L. Koch, 1870)	1	31	-	32
54.	<i>Pardosa riparia</i> (C. L. Koch, 1833)	-	14	-	14
55.	<i>Pardosa oreophila</i> Simon, 1937	1	11	-	12
56.	<i>Trochosa terricola</i> Thorell, 1856	-	1	-	1
VIII.	Pisauridae	-	3	17	20
57.	<i>Pisaura mirabilis</i> (Clerck, 1757)	-	3	17	20
IX.	Agelenidae	2	2	25	29
58.	<i>Tegenaria ferruginea</i> (Panzer, 1804)	1	2	1	4
59.	<i>Tegenaria silvestris</i> L. Koch, 1872	1	-	2	3
X.	Cybaeidae	2	5	-	7
60.	<i>Cybaeus angustiarum</i> L. Koch, 1868	2	5	-	7
XI.	Amaurobiidae	1	16	12	29
61.	<i>Amaurobius fenestralis</i> (Stroem, 1768)	-	1	7	8
62.	<i>Callobius claustrarius</i> (Hahn, 1833)	-	2	-	2
63.	<i>Coelotes terrestris</i> (Wider, 1834)	1	13	5	19
XII.	Liocranidae	-	2	-	2
64.	<i>Phrurolithus festivus</i> (C. L. Koch, 1835)	-	2	-	2
XIII.	Clubionidae	1	4	12	17
65.	<i>Clubiona alpicola</i> Kulczyński, 1881	-	1	-	1
66.	<i>Clubiona lutescens</i> Westring, 1851	-	2	-	2
67.	<i>Clubiona reclusa</i> O. P.-Cambridge, 1863	-	1	-	1
68.	<i>Clubiona trivialis</i> C. L. Koch, 1841	1	-	-	1
XIV.	Gnaphosidae	-	1	1	2
69.	<i>Micaria pulicaria</i> (Sundevall, 1832)	-	1	-	1
XV.	Philodromidae	-	1	13	14
70.	<i>Philodromus cespitum</i> (Walckenaer, 1802)	-	1	-	-
71.	<i>Thanatus</i> juv.	-	-	1	-
XVI.	Thomisidae	1	4	151	156
72.	<i>Misumena vatia</i> (Clerck, 1757)	1	2	2	5
73.	<i>Xysticus cristatus</i> (Clerck, 1757)	-	2	27	29
XVII.	Salticidae	3	3	19	25
74.	<i>Evarcha arcuata</i> (Clerck, 1757)	-	1	-	1
75.	<i>Evarcha falcata</i> (Clerck, 1757)	2	2	-	4
76.	<i>Heliophanus cupreus</i> (Walckenaer, 1802)	1	-	-	1
77.	<i>Sitticus</i> sp.	-	-	1	-
TOTAL		69	202	702	973

Abbreviations: ? = number of male specimens, ♀ = number of female specimens, J = number of juvenile specimens, Σ = total number of specimens.

(20-20 specimens), *Coelotes terrestris* (Wider, 1834) from the family Amaurobiidae (19 specimens), whereas 21 species were represented by a single specimen (Tab. 1). The great number of specimens collected from these species can be explained by the fact that they are very common species and are also easy to capture.

Out of these species, three are newly recorded for the Romanian fauna: *Gongylidiellum vivum* (O. P.-Cambridge, 1885), *Helophora insignis* (Blackwall, 1841) and *Midia midas* Simon, 1884.

Gongylidiellum vivum (O. P.-Cambridge, 1885) is widespread and common throughout the British Isles, usually recorded from moss, grass and leaf-litter in wet habitats. This species has a strong preference for undisturbed, well vegetated sites, (McFerran, 1997).

Helophora insignis (Blackwall, 1841) is also a widespread and typically northern species in Britain, usually recorded from woodlands, sometimes on Dog's Mercury (*Mercurialis perennis*), in moss, grass and other low vegetation. In Ireland it has a local distribution, where has also been recorded from an unimproved grassland and woodland habitat (McFerran, 1997).

Midia midas Simon, 1884 is a newly recorded species and the *Midia* Saaristo & Wunderlich, 1995 is a new genus for the Romanian spider fauna. From this extremely rare species we sampled only one female specimen from the ranger's lodge. In Great Britain it has been recorded from ancient woodland sites in Sherwood, Charnwood, Windsor and Epping Forests (Roberts, 1987).

Other three recently identified species were sampled as: *Meioneta milleri* Thaler, 1997, from the family Linyphiidae, *Clubiona reclusa* O. P.-Cambridge, 1863 from the family Clubionidae, and *Pardosa oreophila* Simon, 1937 from the family Lycosidae.

Meioneta milleri Thaler, 1997 was described recently from the Sudeto-Carpathian range (Czech Republic and Slovakia) by Thaler et. al. (1997), but this species was identified in Romanian Carpathian mountains, too (Urák, 2001). The female of this species was not described so far.

The presence of *Clubiona reclusa* O. P.-Cambridge, 1863 in Romanian spider fauna was proved recently (Gallé & Urák, 2001). The former data (Fuhn & Oltean, 1970), could not be confirmed, because of the absence of specimens in collections in Romania. In the "Fauna R.S.R." (Sterghiu, 1985), the figures of the males pedipalps of *Clubiona reclusa* and *Clubiona stagnatilis* (Kulczynski, 1897) are mixed.

Pardosa oreophila Simon, 1937 was recently identified in Romania, in Retezat Mountains (Urák, 2001) and now it was sampled again around the Gura Zlata.

Conclusions

The spider fauna of the Retezat Mountains is rich: out of the 77 identified species, three are new to Romania and the presence of other three species in Romanian spider fauna was indicated recently. The bad weather prevented us to collect in a more regular manner the samples. Due to this, our sampling was made rather at random; this gives us only a few hints about the rich spider fauna in the area.

The landscape beauties, the botanical and ornithological values of this habitat complex are well known. All these natural values confirm the necessity of more severe protection of this area not only in the scientific reserve Gemenele (1,630 ha) but in the core and the buffer area too. The most intense pasturage in core area has an undesirable effect: destruction of original natural flora and fauna.

ACKNOWLEDGEMENTS

We thank to Éva Szita and Erika Botos, from the Plant Protection Institute, Budapest, for the review of problematical species. Thanks are due to anonymous reviewers.

The fieldwork made is part of a research program of the Retezat National Park Administration (Deva, Romania). During the preparation of the article, my colleague Urák István, was supported by a research grant from the Hungarian Ministry of Education – Domus Hungarica Scientiarum and Artium.

GEN NOU ȘI SPECII NOI DE PĂIANJENI PENTRU FAUNA ROMÂNIEI
(ARACHNIDA: ARANEAE), COLECTATE LA GURA ZLATA
(PARCUL NAȚIONAL RETEZAT, ROMÂNIA)

REZUMAT

Lucrarea de față prezintă materialul arahnologic colectat la Gura Zlata și împrejurimi (Parcul Național Retezat, Munții Retezat). Au fost colectate un număr de 973 aranee, 271 adulți (69 masculi și 202 femele) și 702 juvenili, reprezentând 77 specii din 17 familii.

Gongylidiellum vivum (O. P.-Cambridge, 1885), *Helophora insignis* (Blackwall, 1841) și *Midia midas* Simon, 1884 sunt semnalate pentru prima dată în arachnofauna României. Genul *Midia* Saaristo & Wunderlich, 1995 este nouă pentru fauna țării. Au fost regăsite alte trei specii semnalate curent: *Meioneta milleri* Thaler, 1997, *Clubiona reclusa* O. P.-Cambridge, 1863 și *Pardosa oreophila* Simon, 1937.

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Received: December 16, 2003

Accepted: February 5, 2004

Kinga Fetykó
Unirii Str. 1A/28,
Sighetu-Marmației, Romania
e-mail: kinga78@freemail.hu

István Urák
Kinizsi Str. 235,
525103 – Căpeni, Covasna, Romania
e-mail: kui@email.ro