

## CONTRIBUTION TO THE KNOWLEDGE OF SPIDERS (ARANEAE) OF THE MURÁNSKA PLANINA MTS

VALERIÁN FRANC

V. Franc: Príspevok k poznaniu pavúkov (Araneae) Muránskej planiny

**Abstrakt:** Národný park Muránska planina patrí z hľadiska fauny pavúkov k menej preskúmaným regiónom Slovenska. V priebehu vegetačnej sezóny 2001 – 2003 som sa príležitostne venoval prieskumu pavúkov na vybraných lokalitách Muránskej planiny; išlo prevažne o biotopy xerotermného charakteru a lesné biotopy pôvodného charakteru. Boli použité iba šetrné individuálne metódy zberu s minimálnym rušivým vplyvom na faunu tohto chráneného územia. Výsledkom prieskumu je 161 druhov pavúkov, pričom toto číslo sa po podrobnom arachnologickom výskume Muránskej planiny ešte zrejme výrazne zvýší. Napriek značnej nadmorskej výške tohto horského regiónu je fauna charakteristická prenikaním veľkého množstva teplomilných druhov, ktoré sa vo veľmi členitom teréne stretávajú a prelínajú s horskou faunou. K významným druhom pavúkov patrí *Dipoena prona*, *Diplocephalus helleri*, *Erigonoplus globipes*, *Evansia merens*, *Alopecosa sulzeri*, *Pardosa sordidata*, *Phaeocedus braccatus*, *Myrmarachne formicaria*, *Philaeus chrysops* a *Sitticus saxicola*. Územná ochrana i ďalšia dokumentácia prírodných hodnôt tohto výnimočného územia je potrebná a plne opodstatnená.

**Kľúčové slová:** pavúky, Araneae, Muránska planina, ochrana fauny

### INTRODUCTION

The Muránska planina National park is one of the relatively well-known and popular national parks of Slovakia; it especially concerns tourism and botanical attractions. Fauna of this territory has not been studied properly, only vertebrates (birds, bats), snails and insects, especially beetles are better known. Spider fauna of this area is relatively lesser known. Spiders of the southern part of the Muránska planina National Park were studied by SVATOŇ (1985). PRÍDAVKA (1999) dealt with communities of epigeic spiders of this area. SVATOŇ and MIHÁL (2007) dealt with spiders of neighbouring Revúcka vrchovina Mts situated southerly, nevertheless it is out of the Muránska planina National park territory. During the years 2001 – 2003 I dealt with research of spiders on selected xerothermic and forest habitats of the Muránska planina National park; and the results are accessible in this paper.

### MATERIAL AND METHODS

In this paper I summarise the results of my arachnological research in the Muránska planina National park (the grid mapping code 021), that was carried out from 2001 to 2003. I applied current methods of collecting, especially sweeping the vegetation, sifting the leaf litter, knocking down the spiders from tree branches and individual collecting under the bark and under stones. The material was identified according the keys by MILLER (1971), HEIMER, NENTWIG (1991), ROBERTS (1995) and LOKSA (1969, 1972). The spiders were identified by the author (unless different note is not mentioned) and samples are deposited in his private collection.

The research was carried out in the following sites (DFS = the Databank of the Slovakian Fauna):

1. Nature Reserve (later only NR) Šiance ( $48^{\circ}46'18.49''$  N,  $20^{\circ}5'7.79''$  E, DFS 7286a)
2. NR Javorníková ( $48^{\circ}44'8.93''$  N,  $20^{\circ}0'21.82''$  E, DFS 7285d)
3. NR Šarkanica ( $48^{\circ}42'43.32''$  N,  $19^{\circ}58'15.29''$  E, DFS 7285d)
4. NR Hrdzavá ( $48^{\circ}45'2.93''$  N,  $20^{\circ}0'38.66''$  E, DFS 7285b)
5. NR Veľká Stožka ( $48^{\circ}46'42.11''$  N,  $19^{\circ}57'23.38''$  E, DFS 7285b)
6. NR Zlatnica ( $48^{\circ}49'13.54''$  N,  $20^{\circ}5'58.15''$  E, DFS 7186d)

Habitat types: open deciduous and fewer mixed forests on steep slopes, forest edges, cliffs, screes and rocky steppes (sites 1, 3, 4); shady and somewhere open (sub)mountain beech and mixed forests, cliffs and screes (sites 2, 5, 6).

## RESULTS AND DISCUSSION

Systematic review of documented spiders is available in table 1. Table 1 also contains columns ‘Thermopreference’ and ‘Originality of Habitat’ based on the criteria and evaluation by BUCHAR and RŮŽIČKA (2002); both will be calculated generally later.

The scarcer spider species are often mentioned in the accessible Red Lists of several European countries; it concerns the Red List of Slovakia (GAJDOŠ, SVATOŇ, 2001), Czech Republic (RŮŽIČKA, 2005), Germany (PLATEN, BLICK, SACHER, MALTEN, 1998), Austria – Carinthia County (KOMPOSCH, STEINBERGER, 1999) and Poland (STARĘGA, BŁASZAK, RAFALSKI, 2004).

Several species (marked by ‘◀’ in table 1) deserve special note:

**1** *Nesticus cellulanus* – Šiance, in a little cave, June 22, 2001. A troglophilous species, living in cellars and mines as well. The male is conspicuous due to its large and complex palpal organs.

**2** *Dipoena prona* – Šarkanica, in the litter and low vegetation on a xerothermic slope, May 4, 2002. A rare species, considered to be very rare in the neighbouring Czech republic (BUCHAR, RŮŽIČKA, 2002). Known from several records in warmer habitats of Slovakia (GAJDOŠ, SVATOŇ, SLOBODA, 1999). The abundance of *Dipoena* spiders may be unclear and open problem; they are little ones of hidden way of life, being difficultly identifiable, especially females.

**3** *Centromerus albidus* – Šiance, in the leaf litter of a rock fissure, June 22, 2001; Šarkanica, the similar habitat, June 25, 2001. A scarce species, formerly had been considered to be utmost rare (MILLER, 1971). Its conspicuously pale colouration reflects that it tends to underground way of life; documented in the pseudokarst caves of the Cerová Mts as well (FRANC, HANZELOVÁ, 1995).

**4** *Diplocephalus helleri* – Zlatnica, in the wet moss of a forest march, August 6, 2003. A rare mountain species, known from several (prevailingly older) records from the higher altitudes of the Central Carpathians (GAJDOŠ, SVATOŇ, SLOBODA, 1999). Recently found in the Starohorské Mts (FRANC, KOPECKÝ, KORENKO, 2009).

**5** *Erigonoplus globipes* – Šarkanica, sieved from the leaf litter of a rocky slope, May 4, 2002. A rare little-known species of warmer habitats, reaching up higher altitudes in karst mountains as well (it also concerns several further spider species).

**6** *Evansia merens* – Veľká Stožka, under the stone in the colony of ants *Formica lemani*, August 4, 2003. A scarce species of higher altitudes, seems to be apparently myrmecophilous (HEIMER, NENTWIG, 1991; BUCHAR, RŮŽIČKA, 2002), preferring mentioned ant species. Known from several older records (GAJDOS, SVATOŇ, SLOBODA, 1999); recently found on the Panský diel Mt (FRANC, KOPECKÝ, KORENKO, 2009).

**7** *Acantholycosa lignaria* – Veľká Stožka, on the fallen stem of a spruce, August 4, 2003. A scarce species of well-preserved open forests, edges, etc.

**8** *Alopecosa sulzeri* – Šarkanica, running on the soil surface of a forest steppe, August 6, 2001. A scarce thermophilous species, living in hillock country especially; BUCHAR and RŮŽIČKA (2002) mention altitudes 300 – 500 m a. s. l. Its occurrence in the upland approximately 900 m is remarkable.

**9** *Pardosa sordidata* – Veľká Stožka, in the forest clearing on a rocky slope, August 4, 2003. A rare species occurring locally in the upland areas. It indicates well-preserved environments of higher altitudes.

**10** *Phaeocedus braccatus* – Šarkanica, swept from the xerothermic vegetation, June 25, 2001. A rare and conspicuous (fast and variegate) species occurring sporadically in warm habitats. Known also from core area of the Veľká Fatra Mts: the Kozia skala Mt (approx. 960 m a. s. l.), June 15, 1994 (FRANC, 2002). Its presence in the referred mountain areas is very remarkable.

**11** *Myrmarachne formicaria* – Šarkanica, running on the soil surface of a rocky slope, May 4, 2002. A rare and distinguished species of warm habitats – BUCHAR and RŮŽIČKA (2002) mention altitudes 200 – 300 m a. s. l. Its occurrence in this mountain area is highly remarkable.

**12** *Philaeus chrysops* – Šarkanica, under stones and on the soil surface of a rocky slope, June 25, 2001. A scarce and conspicuous thermophilous species, especially males rank among one of the most beautiful spiders of Central Europe.

**13** *Sitticus saxicola* – Šiance, on the scree slope, June 22, 2001. A rare species of rocky habitats.

In this paper 161 spider species from the studied territory are mentioned. Despite this mountain area, prevailingly covered by forest, reaches over 1 200 m a. s. l., more-or-less clearly thermophilous species share more than 33%, while the share of oreophilous, montane species is merely 14% (see Fig. 1). Mesophilous species of temperate environments are slightly prevailing (52.31%).

The measure of habitat disturbance by anthropogenic activities is prevailingly low. The species of well-preserved or merely little-disturbed (semi-natural) habitats are highly prevailing in the studied area (see Fig. 2); together it is more than 92%. It indicates the relatively highly satisfactory state of the habitat conservancy in the Muránska planina National park generally. The list of spider species mentioned above is not definitive, of course. I would be glad to continue the spider research in this considerable area ranking among one of the richest «arthropod sites» in the whole Slovakia.

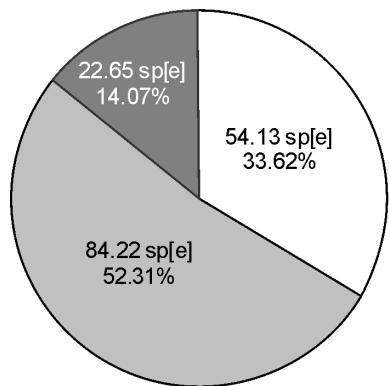


Fig. 1. Share of phytogeographic districts in the spider fauna in the whole: 1 thermophilous, 2 mesophilous, 3 oreophilous species

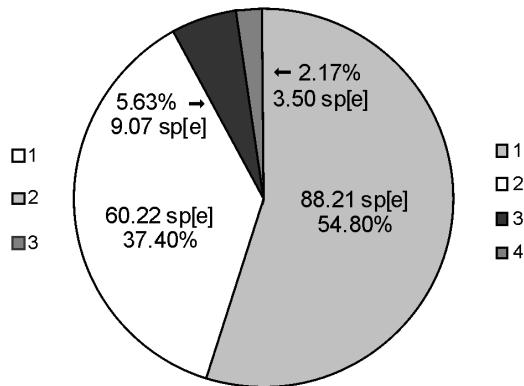


Fig. 2. Originality of habitat: 1 climax, 2 semi-natural, mesophilous, 3 disturbed, 4 artificial (sp[e] calculated species equivalent)

Table 1. Spiders (Araneae) documented in the Muránska planina Mts.

Family / Species	Codes of Records	Thermo-preference	Originality of Habitat	Ecosozological Status					
				Sk	Cz	AK	D	Pl	
<b>Pholcidae</b>									
1 <i>Pholcus opilionoides</i> (Schrank, 1781)	C1/- <sup>+</sup>	T M	C SN A						
<b>Segestriidae</b>									
3 <i>Segestria senoculata</i> (Linnaeus, 1758)	F1/- I-/ <sup>+</sup>	(T) M (O)	C SN						
<b>Dysderidae</b>									
3 <i>Dysdera erythrina</i> (Walckenaer, 1802)	I-/1	T M	C SN						
1 <i>Harpactea hombergi</i> (Scopoli, 1763)	C1/1 D1/1 I-/ <sup>+</sup>	T M	C SN						
2 <i>Harpactea rubicunda</i> (C. L. Koch, 1839)	A1/- <sup>+</sup>	T M	C SN A						
<b>Uloboridae</b>									
1 <i>Hyptiotes paradoxus</i> (C. L. Koch, 1834)	E/-1	M	SN						
<b>Nesticidae</b>									
1 <i>Nesticus cellulanus</i> (Clerck, 1757) <sup>¶1</sup>	A1/-	M	C SN A						
<b>Theridiidae</b>									
1 <i>Asagena phalerata</i> (Panzer, 1801)	A/1- <sup>+</sup>	T M (O)	C SN				NT		
<i>Crustulina guttata</i> (Wider, 1854)	C2/2 I2/2	T M	C SN						
1 <i>Dipoena melanogaster</i> (C. L. Koch, 1837)	A-/1	T	C SN				DD		
<i>Dipoena prona</i> (Menge, 1868) <sup>¶2</sup>	F2/1	T	C	VU	EN	EN	EN	VU	
1 <i>Enoplognatha ovata</i> (Clerck, 1757)	B1/- D1/-	T M	C SN D						
<i>Enoplognatha thoracica</i> (Hahn, 1833)	A-/3 C-/2 I-1	T M	C SN D						
1 <i>Episinus truncatus</i> Latreille, 1809	A1/2 C1/1	T	C SN						
1 <i>Euryopis flavomaculata</i> (C. L. Koch, 1836)	D-/1	T M	C SN				NT		
<i>Heterotheridion nigrovariegatum</i> (Simon, 1873)	C5/-	T	C SN				R!	VU	
1 <i>Neottiura bimaculata</i> (Linnaeus, 1767)	A2/- I-1	T M	C SN D						

## 1. continuance tab. 1

1 <i>Parasteatoda tepidariorum</i> (C. L. Koch, 1841)	B1/-	M	SN A				
<i>Pholcomma gibbum</i> (Westring, 1851)	B-/1	M	C SN		NT		
1 <i>Platnickina</i> [= <i>Theridion</i> , <i>Keijia</i> ] <i>tincta</i> (Walckenaer, 1802)	A1/-	T M	C SN				
1 <i>Robertus arundineti</i> (O. P.-Cambridge, 1871)	C-/1	(T) M	C SN D				
2 <i>Robertus lividus</i> (Blackwall, 1836)	A-/3 B-/1 C-/2	T M O	C SN				
2 <i>Robertus neglectus</i> (O. P.-Cambridge, 1871)	I-/1	(T) M	C SN	NT	NT		
<i>Robertus truncorum</i> (L. Koch, 1872)	G1/- II/-	(M) O	C			DD	
1 <i>Steatoda bipunctata</i> (Linnaeus, 1758)	A-/1	M	C SN A				
<b>Linyphiidae</b>							
1 <i>Abacoproeces saltuum</i> (L. Koch, 1872)	C-/1 I-/1	M	C SN		DD		
1 <i>Agynera</i> [= <i>Meioneta</i> ] <i>rurestris</i> (C. L. Koch, 1836)	A-/1 I2/1	T M O	C SN D				
3 <i>Bathyphantes nigrinus</i> (Westring, 1851)	E-/1	T M (O)	C SN				
<i>Centromerus albidus</i> Simon, 1929 <sup>43</sup>	A-/1 C-/1	T M	C	NT			
2 <i>Centromerus arcanus</i> (O. P.-Cambridge, 1873)	E-/1	M O	C SN			DD	
<i>Centromerus pabulator</i> (O. P.-Cambridge, 1875)	E-/1 <sup>G</sup>	O	C SN				
3 <i>Centromerus sylvaticus</i> (Blackwall, 1841)	G3/1 II/-	T M O	C SN D				
<i>Ceratinella brevis</i> (Wider, 1834)	G-/1	M O	C SN				
<i>Diplocephalus helleri</i> (L. Koch, 1869) <sup>44</sup>	I-/1	M O	C	EN	R!	DD	VU
3 <i>Diplocephalus latifrons</i> (O. P.-Cambridge, 1875)	G1/2 I-/1	M O	C SN				
<i>Diplocephalus picinus</i> (Blackwall, 1841)	E-/1 <sup>G</sup>	(T) M (O)	C SN				
2 <i>Diplostyla concolor</i> (Wider, 1834)	G-/1	T M O	C SN D				
<i>Dismodicus bifrons</i> (Blackwall, 1841)	C-/1	M (O)	C SN		NT		
1 <i>Entelecara acuminata</i> (Wider, 1834)	A1/- D1/-	M	C SN				
1 <i>Erigone atra</i> Blackwall, 1833	A-/1	T M O	C SN D				
3 <i>Erigone dentipalpis</i> (Wider, 1834)	B1/-	T M O	C SN D				
<i>Erigonoplus globipes</i> (L. Koch, 1872) <sup>45</sup>	F-/2	T M	C	NT	EN	VU	VU
<i>Evansia merens</i> O. P.-Cambridge, 1900 <sup>46</sup>	G-/1	M O	C SN	VU			EN
1 <i>Gonatum rubellum</i> (Blackwall, 1841)	G-/2	M O	C SN				
<i>Ipa</i> [= <i>Leptyphantes</i> ] <i>keyserlingi</i> (Ausserer, 1867)	C2/1 F-/2 I2/3	T (M)	C			VU	DD
1 <i>Leptyphantes leporosus</i> (Ohlert, 1865)	B-/1	M	C SN A				
<i>Leptyphantes nodifer</i> Simon, 1884	II/-	M O	C				
3 <i>Linyphia hortensis</i> Sundevall, 1829	A-/1	(T) M	C SN				
3 <i>Linyphia triangularis</i> (Clerck, 1757)	D3/- I2/1	T M	C SN D				
3 <i>Macrargus rufus</i> (Wider, 1834)	H-/1	M O	C SN				
2 <i>Mansuphantes mansuetus</i> (Thorell, 1875)	A-/2	M	C SN D				
3 <i>Maso sundevalli</i> (Wider, 1851)	A2/1 B3/3 D1/2	T M (O)	C SN				
<i>Micrargus georgescuae</i> Millidge, 1975	E2/-	M O	C SN	DD			
2 <i>Micrargus herbigradus</i> (Blackwall, 1854)	E1/-	(T) M O	C SN				
2 <i>Microneta viaria</i> Simon, 1897	A-/1 E-/1 I-/1 <sup>+</sup>	T M O	C SN				

2. continuance tab. 1

1 <i>Minicia marginella</i> (Wider, 1834)	A-/1	T M	C SN		NT	VU
2 <i>Neriene emphana</i> (Walckenaer 1841)	I1/-	M	C SN			
1 <i>Oedothorax apicatus</i> (Blackwall, 1850)	C1/-	T M (O)	C SN D			
2 <i>Palliduphantes pallidus</i> (O. P.- Cambridge, 1871)	E-/3 <sup>G</sup>	T M	C SN			
3 <i>Panamomops fagei</i> Miller & Kratochvíl, 1939	C1/5	T M	C SN		R	
<i>Porrhomma microphthalmum</i> (O. P.- Cambridge, 1871)	A1/- <sup>G</sup>	T M (O)	C SN D			VU
1 <i>Tapinocyba insecta</i> (L. Koch, 1869)	B-/2	T M	C SN			
3 <i>Tenuiphantes alacris</i> (Blackwall, 1853)	E-/1 <sup>G</sup>	M O	C SN			
3 <i>Tenuiphantes cristatus</i> (Menge, 1866)	E-/1	M (O)	C SN			
<i>Thyreosthenius parasiticus</i> (Westring, 1851)	F1/1	M O	C SN D			
<i>Tiso vagans</i> (Blackwall, 1834)	A-/3 C-/2	M (O)	C SN (D)			
1 <i>Trematocephalus cristatus</i> (Wider, 1834)	A1/- C1/-	(T) M	C SN			
3 <i>Walckenaeria antica</i> (Wider, 1834)	B-/1	(T) M (O)	C SN			
2 <i>Walckenaeria cucullata</i> (C. L. Koch, 1836)	E-/1 <sup>G</sup>	M (O)	C SN			
<b>Tetragnathidae</b>						
<i>Meta menardi</i> (Latreille, 1804)	B-/2 <sup>+</sup>	(T) M (O)	C SN A			
1 <i>Metellina mengei</i> (Blackwall, 1869)	B2/-	T M O	C SN			
1 <i>Metellina merianae</i> (Scopoli, 1763)	B-/1 F-/1	T M O	C SN (A)			
3 <i>Pachygnatha listeri</i> Sundevall, 1830	A-/1	(T) M	C SN			
<i>Tatragnatha pinicola</i> L. Koch, 1870	A2/- <sup>+</sup>	T M	C SN			
<b>Araneidae</b>						
1 <i>Araneus diadematus</i> Clerck, 1757	D2/1 <sup>+</sup>	T M O	C SN A			
1 <i>Araneus sturmii</i> (Hahn, 1831)	C2/ <sup>+</sup>	T M	C SN			
<i>Araniella albica</i> (L. Koch, 1869)	G-/1	M O	C SN			
1 <i>Araniella cucurbitina</i> (Clerck, 1757)	A2/- <sup>+</sup>	T M	C SN D			
<i>Cercidia prominens</i> (Westring, 1851)	C1/1 I-/1	T M	C SN			
1 <i>Gibbaranea bituberculata</i> (Walckenaer, 1802)	C-/1	T (M)	C (SN)			
<i>Hypsosinga sanguinea</i> (C. L. Koch, 1845)	A1/-	T M	C SN		NT	VU
1 <i>Mangora acalypha</i> (Walckenaer, 1802)	A1/- C1/- <sup>+</sup>	T M	C SN D			
<i>Nuctenea umbratica</i> (Clerck, 1757)	A-/1 <sup>+</sup>	(T) M	C SN A			
<i>Zygilla montana</i> (C. L. Koch, 1839)	I-/2	O	C SN		DD	
<b>Lycosidae</b>						
<i>Acantholycosa lignaria</i> (Clerck, 1757) <sup>¶7</sup>	G-/1 <sup>+</sup>	M O	C SN	EN	DD	EN
<i>Alopecosa accentuata</i> (Latreille, 1817)	C-/3 F2/-	T M	C SN		NT	
2 <i>Alopecosa inquilina</i> (Clerck, 1757)	A-/1	M	C SN		NT	VU
1 <i>Alopecosa sulzeri</i> (Pavesi, 1873) <sup>¶8</sup>	I-/1	T	C	EN	EN	
1 <i>Aulonia albimana</i> (Walckenaer, 1805)	A-/1 C-/1 D-/1 <sup>+</sup>	T M	C SN			
3 <i>Pardosa amentata</i> (Clerck, 1757)	F1/- I1/-	T M O	C SN D			
3 <i>Pardosa lugubris</i> (Walckenaer, 1802)	F1/-	T M O	C SN D			
1 <i>Pardosa pullata</i> (Clerck, 1757)	C1/-	T M O	C SN D			
2 <i>Pardosa sordidata</i> (Thorell, 1875) <sup>¶9</sup>	G-/2	O	C	NT	R!	EN EN
1 <i>Xerolycosa nemoralis</i> (Westring, 1861)	C2/-	T M O	C SN			
<b>Pisauridae</b>						
1 <i>Pisaura mirabilis</i> (Clerck, 1757)	C1/1 <sup>+</sup>	T M	C SN D			
<b>Agelenidae</b>						
3 <i>Coelotes atropos</i> (Walckenaer, 1802)	A-/1 B-/1 <sup>+</sup>	M O	C SN		EN	

## 3. continuance tab. 1

2 <i>Histopona torpida</i> (C. L. Koch, 1834)	A-/1 <sup>+</sup>	<b>M</b> (O)	C SN				
3 <i>Inermocoelotes inermis</i> (L. Koch, 1855)	B-/1 G-/1 <sup>+</sup>	M O	C SN				
1 <i>Tegenaria agrestis</i> (Walckenaer, 1802)	F1/-	T M	C S N D				
3 <i>Tegenaria silvestris</i> (L. Koch, 1872)	B1/- D1/- <sup>+</sup>	<b>M</b> (O)	C SN				
1 <i>Textrix denticulata</i> (Olivier, 1789)	A1/- C-/1 I-/1 <sup>+</sup>	T	C				
<b>Cybaeidae</b>							
3 <i>Cybaeus angustiarum</i> L. Koch 1868	H-/1	M O	<b>C</b> SN				
<b>Hahniiidae</b>							
1 <i>Cryphoeca silvicola</i> (C. L. Koch, 1834)	G1/-	M O	C SN				
<i>Hahnia helveola</i> Simon, 1875	I-/1	M	C SN				
<b>Amaurobiidae</b>							
3 <i>Amaurobius fenestralis</i> (Ström, 1768)	B1/- I-/1 <sup>+</sup>	<b>M</b> O	C SN				
3 <i>Callobius claustrarius</i> (Hahn, 1833)	D-/1	M O	C SN				
<b>Titanocidae</b>							
1 <i>Titanoeca quadriguttata</i> (Hahn, 1833)	A1/- C1/- <sup>+</sup>	T M	<b>C</b> SN		NT	VU	
<b>Liocranidae</b>							
1 <i>Agroeca cuprea</i> Menge, 1873	F2/-	T M	C		NT	VU	
2 <i>Apostenus fuscus</i> Westring, 1851	A-/3	T M	C SN				
<i>Liocranum rupicola</i> (Walckenaer, 1830)	A-/1 <sup>+</sup>	M	C S N A				
<b>Clubionidae</b>							
1 <i>Clubiona comta</i> C. L. Koch, 1839	D-/1	T <b>M</b>	C SN				
<i>Clubiona diversa</i> O. P.-Cambridge, 1862	C1/-	T M O	C		R!	VU	
1 <i>Clubiona pallidula</i> (Clerck, 1757)	A2/-	(T) <b>M</b>	C SN				
1 <i>Clubiona saxatilis</i> L. Koch, 1867 [= <i>dvoraki</i> Miller, 1947]	C-/1	(T) <b>M</b>	C	LC	EN		
<i>Clubiona terrestris</i> Westring, 1851	C1/-	M	C SN				
<b>Corinnidae</b>							
1 <i>Phrurolithus festivus</i> (C. L. Koch, 1835)	C4/- I-/2	<b>T</b> M	C SN				
<i>Phrurolithus minimus</i> C. L. Koch, 1839	A-/1 C-/1 D-/1 F1/1	T M	<b>C</b> SN				
<b>Zodariidae</b>							
3 <i>Zodarion germanicum</i> (C. L. Koch, 1837)	D-/1 F1/1 I-/1 <sup>+</sup>	T M	<b>C</b> SN		VU	VU	VU
<b>Gnaphosidae</b>							
<i>Callilepis nocturna</i> (Linnaeus, 1758)	C-/2	T <b>M</b>	C SN			VU	
<i>Callilepis schuszteri</i> (Herman, 1879)	C1/-	T	C		NT	EN	
1 <i>Drassodes lapidosus</i> (Walckenaer, 1802)	A-/1 C1/1 I-/2	T M	C SN				
1 <i>Drassyllus praeficus</i> (L. Koch, 1866)	A-/1 B1/- C-/3 I-/1	T M	<b>C</b> SN			VU	
3 <i>Gnaphosa bicolor</i> (Hahn, 1833)	D-/1	T M	C		NT	VU	
1 <i>Gnaphosa lucifuga</i> (Walckenaer, 1802)	C-/2 F-/1	T	C		VU	VU	
3 <i>Haplodrassus signifer</i> (C. L. Koch, 1839)	A1/-	<b>T</b> M O	C S N D				
2 <i>Haplodrassus silvestris</i> (Blackwall, 1833)	C-/1	(T) <b>M</b>	C SN				
<i>Haplodrassus umbratilis</i> (L. Koch, 1866)	F-/2	M	C SN				
<i>Phaeocedus braccatus</i> (L. Koch, 1866) <sup>¶10</sup>	C1/-	T	C	LC	EN	EN	
1 <i>Zelotes erebeus</i> (Thorell, 1871)	D-/1	<b>T</b> M	C			VU	
1 <i>Zelotes petrensis</i> (C. L. Koch, 1839)	F-/2 I-/1	T M	C SN				

## 4. continuance tab. 1

3 <i>Zelotes subterraneus</i> (C. L. Koch, 1833)	A1/-	(T) <b>M</b> (O)	C SN D				
<b>Zoridae</b>							
2 <i>Zora nemoralis</i> (Blackwall, 1861)	A-/1 C-/1	(T) <b>M</b>	C SN		NT		
<b>Sparassidae</b>							
1 <i>Micrommata virescens</i> (Clerck, 1757)	A1/- <sup>+</sup>	M	C SN				
<b>Philodromidae</b>							
1 <i>Philodromus aureolus</i> (Clerck, 1757)	C-/1	T <b>M</b>	C SN D				
<i>Philodromus caespitum</i> (Walckenaer, 1802)	C-/1	T <b>M</b>	C SN D				
1 <i>Philodromus dispar</i> Walckenaer, 1826	A1/-	T <b>M</b>	C SN				
1 <i>Thanatus formicinus</i> (Clerck, 1757)	I-/1	T M	C SN		NT		
<b>Thomisidae</b>							
3 <i>Diae dorsata</i> (Fabricius, 1777)	D1/-	T M	C SN				
1 <i>Misumena vatia</i> (Clerck, 1757)	D1/- <sup>+</sup>	T M	C SN D				
3 <i>Ozyptila atomaria</i> (Panzer, 1801)	C-/1	T M	C SN				
1 <i>Ozyptila claveata</i> Walckenaer, 1837 [= <i>nigrita</i> Thorell, 1875]	C1/-	T M	C		NT	VU	
<i>Ozyptila simplex</i> (O. P.-Cambridge, 1862)	I1/-	T M	C SN	VU	DD		
<i>Synema globosum</i> (Fabricius, 1775)	A-/1 C-/1 <sup>+</sup>	T M	C SN (D)		NT	VU	VU
1 <i>Xysticus audax</i> (Schrank, 1803)	A2/-	(T) <b>M</b> (O)	C SN				
1 <i>Xysticus lanio</i> C. L. Koch, 1835	A1/-	T <b>M</b>	C SN				
<b>Salticidae</b>							
1 <i>Asianellus festivus</i> (C. L. Koch, 1834) [= <i>Phlegra festiva</i> ]	C1/-	T M	C (SN)		R!	VU	VU
1 <i>Ballus chalybeius</i> (Walckenaer, 1802)	A-/1 <sup>+</sup>	T M	C SN				
1 <i>Euophrys frontalis</i> (Walckenaer, 1802)	C1/- D-/1 F1/- I1/1	T M	C SN				
1 <i>Evarcha arcuata</i> (Clerck, 1757)	A1/-	T <b>M</b>	C SN				
3 <i>Evarcha falcata</i> (Clerck, 1757)	A2/1	(T) <b>M</b>	C SN				
1 <i>Heliophanus cupreus</i> (Walckenaer, 1802)	A4/1 D1/- F1/-	T M	C SN				
<i>Myrmarachneformicaria</i> (DeGeer, 1778) <sup>¶11</sup>	F-/1	T	C	VU			VU
3 <i>Neon reticulatus</i> (Blackwall, 1853)	B-/1	T <b>M</b>	C SN				
1 <i>Pellenes tripunctatus</i> (Walckenaer, 1802)	I-/1	T (M)	C		DD	VU	VU
<i>Philaeus chrysops</i> (Poda, 1761) <sup>¶12</sup>	C-/2 I-/1 <sup>+</sup>	T	C		R!	CR	EN
2 <i>Phlegra fasciata</i> (Hahn, 1826)	F-/1	T M	C SN				
2 <i>Pseudeuophrys erratica</i> (Walckenaer, 1825)	A1/- F2/-	T M	C SN	LC			
1 <i>Salticus zebraneus</i> (C. L. Koch, 1837)	C1/- I1/- <sup>+</sup>	T <b>M</b>	C SN				
2 <i>Sibianor</i> [= <i>Bianor</i> ] <i>aurocinctus</i> (Ohlert, 1865)	C1/-	T M	C SN				
<i>Sitticus saxicola</i> (C. L. Koch, 1846) <sup>¶13</sup>	A1/1	M O	C (SN)	NT		R	VU
1 <i>Synageles venator</i> (Lucas, 1836)	A-/1	T M	C SN				

**1, 2, 3** (numbers in front of the species name): 1 cited in the paper by SVATOŇ (1985), 2 cited in the paper by PRÍDAVKA (1999), 3 cited in both papers. **Codes of records:** A – Nature Reserve (later only NR) Šiance, June 22, 2001. B – NR Javorníková, June 24, 2001. C – NR Šarkanica, June 25, 2001. D – NR Šiance, August 7, 2001. E – NR Hrdzavá, August 8, 2001. F – NR Šarkanica, May 4, 2002. G – NR Velká Stožka, August 4, 2003. H – NR Javorníková, August 5, 2003. I – NR Zlatnica, August 6, 2003. **1/2** one male and two females, **-/1** one female, <sup>+</sup> more individuals were registered and left, <sup>g</sup> P. Gajdoš det.

**THP** Thermopreference: **T** thermophilous, **M** mesophilous, **O** oreophilous species. **OOH** Originality of habitat: **Cl** climax, **SN** semi-natural, **D** disturbed, **A** artificial. **ESS** Ecosozological Status: **SK** Slovakia, **CZ** Czech Republic, **AK** Austria – the Carinthia County, **G** Germany, **P** Poland; **Categories:** **CR** critically endangered, **EN** endangered, **VU** vulnerable, **NT** near threatened, **LC** least concern, **DD** data deficiency, **R!** extremely rare, **R** (extremely) rare or having restricted range.

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Address of the author:

Doc. PaedDr. Valerián Franc, CSc. Department of Biology and Ecology, Faculty of Natural Sciences, Matthias Belius University, Tajovského 40, 97401 Banská Bystrica, Slovakia,  
e-mail: valerian.franc@umb.sk

Oponent: RNDr. P. Gajdoš, CSc.