

Supplement 2 List of oribatid species recorded along the microclimatic gradient in Silická ľadnica Ice Cave from the vegetation zone on the cave entrance slope towards adjacent deciduous forest with mean species abundances at study sites S1 - S7. Species potentially new for Slovak region are written in bold.

Species	Author of description	S1	S2	S3	S4	S5	S6	S7
<i>Adoristes ovatus</i>	(C.L.Koch, 1839)	0	4	0	0	0	0	0
<i>Achipteria coleoptrata</i>	(Linnaeus, 1758)	0	4	8	0	127	1070	1231
<i>Achipteria nitens</i>	(Nicolet, 1855)	17	0	0	13	34	755	1800
<i>Amerus polonicus</i>	Kulczynski, 1902	0	0	0	0	17	17	38
<i>Berniniella bicarinata</i>	(Paoli, 1908)	4	0	0	4	68	115	110
<i>Berniniella hauseri</i>	(Mahunka, 1974)	0	0	0	0	0	191	51
<i>Camisia spinifer</i>	(C.L.Koch, 1835)	0	4	0	0	0	0	0
<i>Carabodes areolatus</i>	Berlese, 1906	0	0	0	0	0	4	0
<i>Carabodes coriaceus</i>	C.L.Koch, 1835	4	0	0	0	4	8	17
<i>Carabodes femoralis</i>	(Nicolet, 1855)	0	0	0	0	0	4	8
<i>Carabodes labyrinthicus</i>	(Michael, 1879)	0	0	0	13	4	0	0
<i>Carabodes ornatus</i>	Štorkán, 1925	13	0	0	0	0	8	4
<i>Carabodes reticulatus</i>	Berlese, 1916	0	0	0	0	8	0	0
<i>Carabodes rugosior</i>	Berlese, 1916	0	0	0	4	0	0	0
<i>Carabodes subarcticus</i>	Trägårdh, 1902	0	0	0	0	0	4	8
<i>Cepheus cepheiformis</i>	(Nicolet, 1855)	0	0	0	0	4	0	0
<i>Cepheus dentatus</i>	(Michael, 1888)	8	0	0	0	0	0	0
<i>Cepheus grandis</i>	Sitnikova, 1975	0	0	0	0	0	0	4
<i>Ceratoppia bipilis</i>	(Hermann, 1804)	72	0	115	437	161	55	34
<i>Ceratozetes gracilis</i>	(Michael, 1884)	4	0	0	4	0	0	0
<i>Ceratozetes peritus</i>	Grandjean, 1951	0	0	0	0	0	0	30
<i>Conchogneta dalecarlica</i>	(Forsslund, 1947)	4	0	0	297	1396	921	1570
<i>Ctenobelba pilosella</i>	Jeleva, 1962	0	0	0	0	0	21	123

Species	Author of description	S1	S2	S3	S4	S5	S6	S7
<i>Cymbaeremaeus cymba</i>	(Nicolet, 1855)	0	0	0	0	4	8	0
<i>Damaeolus asperatus</i>	(Berlese, 1904)	0	0	0	0	0	64	64
<i>Damaeus (Adamaeus) onustus</i>	(C.L. Koch, 1841)	0	0	0	0	98	8	0
<i>Damaeus (Damaeus) auritus</i>	C.L. Koch, 1835	0	0	0	0	0	0	17
<i>Damaeus (Damaeus) crispatus</i>	(Kulczynski, 1902)	4	0	0	0	0	0	8
<i>Damaeus (Damaeus) gracilipes</i>	(Kulczynski, 1902)	0	0	0	0	4	0	4
<i>Damaeus (Damaeus) riparius</i>	Nicolet, 1855	4	0	0	55	272	340	42
<i>Damaeus (Paradamaeus) clavipes</i>	(Hermann 1804)	13	4	0	64	13	4	0
<i>Damaeus aff. gracilipes</i>		4	0	0	0	0	0	0
<i>Dissorhina ornata</i>	(Oudemans, 1900)	8	8	4	4	0	0	0
<i>Dorycranosus acutus</i>	(Pschorn-Walcher 1951)	0	0	0	0	0	4	0
<i>Eremaeus hepaticus</i>	C.L. Koch, 1835	0	0	0	0	13	233	352
<i>Eueremaeus valkanovi</i>	(Kunst, 1957)	17	0	0	0	0	0	0
<i>Eulohmannia ribagai</i>	(Berlese, 1910)	0	0	0	0	13	0	0
<i>Eupelops hirtus</i>	(Berlese, 1916)	8	0	0	0	13	21	4
<i>Eupelops plicatus</i>	(C.L. Koch, 1835)	0	4	0	0	110	0	0
<i>Euzetes globulus</i>	(Nicolet, 1855)	0	0	0	0	182	30	0
<i>Fuscozetes fuscipes</i>	(C.L. Koch, 1844)	4	0	0	0	0	0	0
<i>Galumna lanceata</i>	(Oudemans, 1900)	0	0	0	0	0	0	4
<i>Globozetes longipilus</i>	Sellnick, 1928	0	4	0	0	0	0	0
<i>Gustavia microcephala</i>	(Nicolet 1855)	0	4	0	0	4	34	0
<i>Gymnodamaeus bicostatus</i>	(Koch, 1835)	0	0	0	0	0	0	25
<i>Hafenrefferia gilvipes</i>	(C.L.Koch, 1839)	0	4	0	0	0	0	0

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<i>Haplozetes elegans</i>	Kunst, 1977	0	0	0	0	0	0	38
<i>Heminothrus targionii</i>	(Berlese, 1885)	0	0	0	0	42	0	0
<i>Hermannia cf. convexa</i>	(C. L. Koch, 1839)	0	0	0	0	0	0	72
<i>Hermannia gibba</i>	(C. L. Koch, 1839)	0	4	4	4	76	255	132
<i>Hermanniella dolosa</i>	Grandjean, 1931	0	0	0	0	17	289	85
<i>Hypothonius luteus</i>	Oudemans, 1917	0	0	0	0	0	0	8
<i>Chamobates birulai</i>	(Kulczynski, 1902)	4	0	4	0	0	0	0
<i>Chamobates borealis</i>	(Trägårdh, 1902)	55	8	0	47	98	403	912
<i>Chamobates cuspidatus</i>	(Michael, 1884)	0	0	0	0	0	4	4
<i>Chamobates pusillus</i>	(Berlese, 1895)	0	0	0	0	0	8	0
<i>Chamobates spinosus</i>	Sellnick, 1928	42	4	0	0	4	0	0
<i>Chamobates subglobulus</i>	(Oudemans, 1900)	4	8	0	0	0	4	0
<i>Chamobates voigtsi</i>	(Oudemans, 1902)	89	0	0	4	38	781	1171
<i>Kunstidamaeus nidicola</i>	(Willmann, 1936)	13	0	0	0	0	0	0
<i>Liacarus coracinus</i>	(C. L. Koch, 1841)	0	0	0	0	0	13	13
<i>Liacarus subterraneus</i>	(C. L. Koch, 1841)	0	0	0	4	25	59	89
<i>Liacarus xylariae</i>	(Schränk, 1803)	0	0	0	0	8	72	246
<i>Licneremaeus licnophorus</i>	(Michael, 1882)	0	0	0	0	0	4	0
<i>Liochthonius sellnicki</i>	(Thor, 1930)	0	4	0	0	0	0	0
<i>Liochthonius strenzkei</i>	Forsslund, 1963	0	0	4	0	0	0	0
<i>Lucoppia burrowsi</i>	(Michael, 1890)	0	0	0	0	0	0	4
<i>Metabelba papillipes</i>	(Nicolet, 1855)	8	0	0	4	0	0	0
<i>Metabelba propexa</i>	(Kulczynski, 1902)	0	0	0	4	0	47	946

Species	Author of description	S1	S2	S3	S4	S5	S6	S7
<i>Metabelba pulverosa</i>	Strenzke, 1953	0	0	0	221	76	361	547
<i>Microppia minus</i>	(Paoli, 1908)	0	0	0	0	0	8	4
<i>Minunthozetes pseudofuriger</i>	(Schweizer, 1922)	0	4	0	0	0	0	0
<i>Multioppia glabra</i>	(Mihelcic, 1955)	0	0	0	0	0	21	1002
<i>Mycobates bicornis</i>	(Strenzke, 1954)	0	13	0	0	0	0	0
<i>Neoribates aurantiacus</i>	(Oudemans, 1914)	0	0	0	115	221	132	0
<i>Neotrichoppia confinis</i>	(Paoli, 1908)	0	0	0	0	0	13	21
<i>Nothrus anauniensis</i>	Canestrini & Fanzago, 1876	0	0	0	0	17	144	0
<i>Nothrus palustris</i>	C. L. Koch, 1839	0	0	0	0	4	72	0
<i>Ophidiotrichus tectus</i>	(Michael, 1884)	0	0	0	0	0	4	0
<i>Oppia denticulata</i>	(R. & G. Canestrini, 1882)	0	0	0	0	0	4	0
<i>Oppiella (Moritzoppia) cf. unicarinata</i>	(Paoli, 1908)	4	0	0	4	4	0	0
<i>Oppiella (Oppiella) marginedentata</i>	(Strenzke, 1951)	0	0	0	0	4	0	0
<i>Oppiella (Oppiella) nova</i>	(Oudemans, 1902)	4	0	0	0	0	55	811
<i>Oppiella (Rhinoppia) epilata</i>	Miko, 2006	0	0	0	17	0	21	857
<i>Oppiella (Rhinoppia) hauseri</i>	(Mahunka & Mahunka-Papp, 2000)	0	0	0	0	4	0	0
<i>Oppiella (Rhinoppia) obsoleta</i>	(Paoli, 1908)	4	0	0	0	8	47	480
<i>Oppiella (Rhinoppia) subpectinata</i>	(Oudemans, 1900)	4	0	0	8	106	149	297
<i>Oribatella calcarata</i>	(C. L. Koch, 1835)	8	0	0	110	144	157	13
<i>Oribatella dudichi</i>	Willmann, 1938	4	0	38	1787	110	0	4
<i>Oribatula amblyptera</i>	Berlese, 1916	0	0	0	0	0	4	59
<i>Oribatula pannonica</i>	Willmann, 1949	0	0	0	0	0	8	0
<i>Oribatula tibialis</i>	(Nicolet, 1855)	0	0	0	0	0	0	13

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<i>Oxyoppia europaea</i>	Mahunka, 1982	0	0	0	0	0	25	0
<i>Pantelozetes cavatica</i>	(Kunst, 1962)	0	4	0	0	0	8	0
<i>Pergalumna nervosa</i>	(Berlese, 1914)	0	0	0	0	0	0	8
<i>Perlohmannia dissimilis</i>	(Hewitt, 1908)	0	0	0	0	13	0	0
<i>Phthiracarus</i> cf. <i>boresetosus</i>	Jacot, 1930	0	0	0	0	0	0	4
<i>Phthiracarus</i> cf. <i>clavatus</i>	Parry, 1979	0	0	0	34	13	0	4
<i>Phthiracarus</i> cf. <i>compressus</i>	Jacot, 1930	0	0	0	0	21	8	4
<i>Phthiracarus</i> cf. <i>globosus</i>	(C.L. Koch, 1841)	0	0	0	0	4	30	13
<i>Phthiracarus</i> cf. <i>incertus</i>	Niedbala, 1983	4	4	0	93	191	144	8
<i>Phthiracarus</i> cf. <i>laevigatus</i>	(C.L. Koch, 1844)	0	0	0	0	4	4	0
<i>Phthiracarus</i> cf. <i>nitens</i>	(Nicolet, 1855)	0	0	0	0	8	25	0
<i>Pilogalumna tenuiclava</i>	(Berlese, 1908)	4	0	8	2614	1867	76	17
<i>Platynothrus peltifer</i>	(C. L. Koch, 1839)	0	0	34	1282	768	760	34
<i>Poroliodes farinosus</i>	(C.L. Koch, 1840)	4	0	0	0	0	0	0
<i>Punctoribates punctum</i>	(C.L. Koch, 1839)	4	0	0	0	0	0	0
<i>Quadroppia galaica</i>	Minguez et al., 1985	0	0	0	0	0	0	8
<i>Quadroppia michaeli</i>	Mahunka, 1977	0	0	0	0	0	0	38
<i>Quadroppia pseudocircumita</i>	Minguez et al., 1985	0	0	0	8	0	59	323
<i>Quadroppia quadricarinata</i>	(Michael, 1885)	4	4	0	0	0	0	0
<i>Scheloribates (Hemileius) initialis</i>	(Berlese, 1908)	4	0	0	4	0	8	700
<i>Scheloribates</i> aff. <i>laevigatus</i>		0	0	0	0	0	0	13
<i>Scheloribates laevigatus</i>	(C. L. Koch, 1836)	4	4	4	0	4	132	255
<i>Scheloribates latipes</i>	(C.L. Koch, 1844)	0	0	0	0	8	4	0

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<i>Scheloribates pallidulus</i>	(C. L. Koch, 1840)	0	0	0	0	4	17	4
<i>Scheloribates quintus</i>	Wunderle, Beck & Woas, 1990	0	0	0	0	0	182	93
<i>Spatiodamaeus fageti</i>	(Bulanova-Zachvatkina, 1957)	4	0	0	0	0	0	8
<i>Sphaerozetes piriiformis</i>	(Nicolet, 1855)	0	0	0	0	4	0	0
<i>Steganacarus (Atropacarus) striculus</i>	(C.L. Koch, 1835)	0	0	0	0	4	21	0
<i>Steganacarus (Tropacarus) carinatus</i>	(C. L. Koch, 1841)	0	0	0	0	38	280	293
<i>Steganacarus spinosus</i>	(Sellnick, 1920)	0	0	0	0	4	0	0
<i>Suctobelba discrepans</i>	Moritz, 1970	0	0	0	0	0	4	51
<i>Suctobelba lapidaria</i>	Moritz, 1970	0	0	0	0	0	0	4
<i>Suctobelba reticulata</i>	Moritz, 1970	0	0	0	0	0	4	0
<i>Suctobelbella alloenasuta</i>	Moritz, 1970	0	0	0	0	0	4	4
<i>Suctobelbella cf. sarekensis</i>	(Forsslund, 1941)	0	0	0	0	0	0	13
<i>Suctobelbella duplex</i>	(Strenzke, 1950)	0	0	0	4	0	0	0
<i>Suctobelbella forsslundi</i>	(Strenzke, 1950)	0	0	0	85	4	0	21
<i>Suctobelbella sarekensis</i>	Forsslund, 1941	0	0	42	47	0	8	68
<i>Suctobelbella similis</i>	(Forsslund, 1941)	0	0	0	4	0	0	0
<i>Suctobelbella sp.1</i>		0	0	0	0	4	4	81
<i>Suctobelbella sp.2</i>		0	0	0	0	0	0	13
<i>Suctobelbella sp.3</i>		0	0	0	0	0	0	13
<i>Suctobelbella subcornigera</i>	(Forsslund, 1941)	0	0	0	4	4	34	110
<i>Suctobelbella subtrigona</i>	(Oudemans, 1916)	0	0	0	0	0	0	42
<i>Tectocepheus minor</i>	Berlese, 1903	0	0	0	0	25	25	666
<i>Tectocepheus velatus sarekensis</i>	Trägårdh, 1910	0	0	0	0	21	25	13

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<i>Tectocephus velatus velatus</i>	(Michael, 1880)	0	0	0	0	81	13	81
<i>Xenillus tegeocranus</i>	(Hermann, 1804)	8	0	0	4	38	204	64
<i>Zetorchestes falzonii</i>	Coggi, 1898	0	0	0	4	17	25	144
<i>Zygoribatula exilis</i>	(Nicolet, 1855)	0	0	0	0	0	4	0