

DATA TO THE SPIDER (ARANEAE) FAUNA OF SĂLAJ, ROMANIA

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ABSTRACT: In 2014 and 2015 several zoological expeditions were carried out in Sălaj by the researchers of the Hungarian Natural History Museum. During their surveys 198 adult spider specimens were collected (823 specimens altogether with juvenile and subadult stages), representing 68 species, belonging to 20 families. The current investigations added 47 new species to the arachnofaunistic checklist of Sălaj, thus the detailed list now contains 132 spider species respectively.

Keywords: faunistics, Aranea, Salaj, Romania

INTRODUCTION:

The earliest arachnofaunistic data of Sălaj, Romania was reported by Chyzer & Kulczynski (1891; 1894; 1896; 1897). 85 spider species from 8 localities were mentioned in their work. Since that time no new data were added to this list. However, several authors investigated the Transylvanian spider fauna, and provided valuable results on the spider fauna of neighboring areas, e.g. Kolosváry (1937; 1940; 1942a; b; 1943), Balogh & Loksa (1947a; b), etc., unfortunately Sălaj was out of the scope of their expeditions.

In this paper we would like to contribute to the knowledges of the spider fauna of Sălaj, Romania, and provide a detailed checklist based on current collecting results and data of Chyzer & Kulczynski (1891; 1894; 1896; 1897).

MATERIAL AND METHODS:

The fauna and flora of Sălaj was investigated by the researchers of the Hungarian Natural History Museum in 2014 and 2015. The samples were collected using different methods: limb-beating, soil sampling, hand collecting, pitfall trapping, sweep netting, etc. The data of the 28 collecting places which provided spider specimens are listed below. Numbering is equivalent to those of Gubányi (in press). The list of collecting places was supplemented with those of Chyzer & Kulczynski (1891; 1894; 1896; 1897).

Adult spider specimens were identified to species level according to Nentwig *et al.* (2015) and Roberts (1993), taxonomy and nomenclature follows World Spider Catalog (2015).

List of collecting places:

Collecting places of Chyzer & Kulczynski

- CK1 – Moidad (Mojád)
- CK2 – Pir (Peér – current Hungarian name Szilágypér)
- CK3 – Becheni (Pele)
- CK4 – Uileacu Șimleului (Somlyó-Újlak)
- CK5 – Santău (Tasnád-Szántó)
- CK6 – Tășnad (Tasnád)
- CK7 – Zalău (Zilah)
- CK8 – Stana (Sztána)

Current surveys

99 – Munții Meseșului (Meszes-hegység), Treznea (Ördögkút), main valley of the Treznea Stream, 29.09.2014, N47.11005° E23.06443°; netting, hand

collecting, beating, soil sample, plankton sample. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

102 – Dealurile Crasnei (Krasznamenti-dombság), W of Aghireș (Egrespatak), 30.09.2014, N47.157° E22.992°; light trap. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

104 – Munții Plopiș (Réz-hegység), Iaz (Krasznajáz), peat bog and ruins of the bath, 30.09.2014, N47.111° E22.659°; hand collecting, soil sample. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

107 – Dealurile Crasnei (Krasznamenti-dombság), Crasna (Kraszna), Vârșoț (Varsolc) Reservoir, 30.09.2014, N47.177° E22.889°; pitfall trap, soil sample. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

108 – Dealurile Crasnei (Krasznamenti-dombság), W of Aghireș (Egrespatak), 30.09.2014, N47.157° E22.992°; soil sample, light trap. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

112 – Munții Meseșului (Meszes-hegység), Pria (Perje), SW slope of Vf. Măgura Priei (Perjei csúcs), 01.10.2014, N47.0056° E22.89196°; soil sample, netting. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

113 – Munții Meseșului (Meszes-hegység), Pria (Perje), SW slope of Vf. Măgura Priei (Perjei csúcs), 01.10.2014, N47.004° E22.8966°; netting, hand collecting, soil sample. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

114 – Munții Meseșului (Meszes-hegység), Huta (Csákyújfalu), 01.10.2014, N46.99456° E22.92488°; soil sample. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

116 – Munții Meseșului (Meszes-hegység), W of Mesteacănu (Almásnyires), 01.10.2014, N46.96701° E22.96668°; soil sample. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

117 – Depresiunea Almaș--Agrij (Almás--Egrefy-medence), between Băbiu (Bábony) and Almașu (Váralmás), shore of Băbiu Stream, 01.10.2014, N46.95291° E23.09595°; netting, hand collecting. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

119 – Depresiunea Almaș--Agrij (Almás--Egrefy-medence), NE of Ciurmărna (Csömörlő), 01.10.2014, N47.12676° E23.15201°; soil sample. 29.09-

03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

123 – Munții Plopiș (Réz-hegység), Tusa (Tuszatelke), Ponor, 02.10.2014, N47.01195° E22.7421°; hand collecting, soil sample. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

124 – Munții Plopiș (Réz-hegység), Tusa (Tuszatelke), Ponor, 02.10.2014, N47.0148° E22.74496°; netting, hand collecting, soil sample. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

125 – Munții Plopiș (Réz-hegység), Tusa (Tuszatelke), Ponor, Barcău (Berettyó) springs, 02.10.2014, N47.02031° E22.74875°; netting, hand collecting, beating, soil sample. 29.09-03.10.2014 (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi)

163 – Dealurile Crasnei (Krasznamenti-dombság), Zalău (Zilah), churchyard, 11.05.2015, N47.18° E23.056°; from beneath stones. 10-13.05.2015 (leg. A. Grabant, O. Merkl, A. Podlussány, V. Szőke)

167 – Culoarul Someșului (Szamos völgye), Surduc (Szurduk), pasture, 11.05.2015, N47.291° E23.374°; hand collecting. 10-13.05.2015 (leg. A. Grabant, O. Merkl, A. Podlussány, V. Szőke)

170 – Culoarul Someșului (Szamos völgye), Cliș (Csúrfalva), hornbeam-oak forest, 11.05.2015, N47.284° E23.439°; hand collecting. 10-13.05.2015 (leg. A. Grabant, O. Merkl, A. Podlussány, V. Szőke)

176 – Depresiunea Almaș--Agrij (Almás--Egrefy-medence), Tihău (Tihó), Almaș valley, streamside, 11.05.2015, N47.232° E23.316°; hand collecting. 10-13.05.2015 (leg. A. Grabant, O. Merkl, A. Podlussány, V. Szőke)

180 – Munții Meseșului (Meszes-hegység), Poic, alder groove, 12.05.2015, N46.98° E22.925°; hand collecting. 10-13.05.2015 (leg. A. Grabant, O. Merkl, A. Podlussány, V. Szőke)

184 – Munții Meseșului (Meszes-hegység), Poic, wet meadow, 12.05.2015, N46.98° E22.925°; sweeping. 10-13.05.2015 (leg. A. Grabant, O. Merkl, A. Podlussány, V. Szőke)

185 – Munții Meseșului (Meszes-hegység), Poic, hornbeam-oak forest, 12.05.2015, N46.98° E22.925°; sifting. 10-13.05.2015 (leg. A. Grabant, O. Merkl, A. Podlussány, V. Szőke)

186 – Munții Meseșului (Meszes-hegység), Poic, spruce plantation, 12.05.2015, N46.971° E22.946°; hand collecting. 10-13.05.2015 (leg. A. Grabant, O. Merkl, A. Podlussány, V. Szőke)

190 – Munții Meseșului (Meszes-hegység), Poic, beech forest, 12.05.2015, N46.994° E22.93°; hand collecting. 10-13.05.2015 (leg. A. Grabant, O. Merkl, A. Podlussány, V. Szőke)

195 – Dealurile Crasnei (Krasznamenti-dombság), Aghireș (Egrespatak), dry sward, 13.05.2015, N47.157° E22.994°; sweeping and beating. 10-13.05.2015 (leg. A. Grabant, O. Merkl, A. Podlussány, V. Szőke)

201 – Munții Plopiș (Réz-hegység), Iaz (Krasznajáz), Mlaștina de la Iaz, pasture, 13.05.2015, N47.11° E22.659°; sweeping, hand collecting. 10-

13.05.2015 (leg. A. Grabant, O. Merkl, A. Podlussány, V. Szőke)

211 – Depresiunea Almaș--Agrij (Almás--Egrefy-medence), Ugruțiu (Ugróc), 27-28.05.2015, N47.025783° E23.350829°; light trap. 26-29.05.2015 (leg. Zs. Bálint, A. Gubányi & G. Katona)

224 – Munții Meseșului (Meszes-hegység), pass near Zalău (Zilah), at a spring and a car park on road 81E, 14.07.2015, N47.154° E23.0895°, 482m; hand collecting. 13-17.07.2015 (leg. Z. Erőss, A. Kenéz, P.G. Sulyán, Z. Vas)

236 – Dealurile Crasnei (Krasznamenti-dombság), Crasna (Kraszna), near Vârșolt (Varsolc) reservoir, willows and wet meadow, 15.07.2015, N47.1776° E22.8891°, 238m; hand collecting, sweeping, flight intercept trap, leaf samples. 13-17.07.2015 (leg. Z. Erőss, A. Kenéz, P.G. Sulyán, Z. Vas)

RESULTS AND DISCUSSION:

During the two years survey 198 adult spider specimens were collected out of 823 specimens altogether with juvenile and subadult stages. Adult specimens represented 68 species, belonging to 20 families. The most species-rich families were Linyphiidae (26 species, 38.4 %), Lycosidae (6 species, 8.8 %), Araneidae (5 species, 7.4 %) and Thomisidae (5 species, 7.4 %). Most of the species found, can be considered as common ones, and no new species was added to the Romanian spider fauna list, which consists ca. 1050 species (Nentwig et al. 2015; Weiss and Urák 2000).

Chyzer and Kulczynski (1891; 1894; 1896; 1897) reported 85 species from Sălaj (* and ** in the list). 21 species represent the overlapping between current and their lists (** in the list), thus the combined checklist of Sălaj contains 132 species.

Despite current survey contributed 47 new species to the arachnofauna list of Sălaj, our knowledge of spider fauna of this area is still far from complete, further investigations are needed in the future to improve our knowledge.

Checklist of the spider species of Sălaj

Agelenidae

Allagelena gracilens (C. L. Koch, 1841): 107 – 1♀.

Coelotes terrestris (Wider, 1834): 125 – 1♀.

Inermocoelotes falciger (Kulczyński, 1897)*: CK7.

Inermocoelotes inermis (L. Koch, 1855): 180 – 1♀.

Amaurobiidae

Callobius claustrarius (Hahn, 1833): 117 – 1♀; 186 – 1♀.

Anyphaenidae

Anyphaena accentuata (Walckenaer, 1802): 195 – 1♀.

Araneidae

Agalenatea redii (Scopoli, 1763)**: CK2; CK3; CK6; CK7; 201 – 1♀.

Araneus diadematus Clerck, 1757: 125 – 1♀.

Araneus sturmi (Hahn, 1831)*: CK6.

Araneus triguttatus (Fabricius, 1793)*: CK3.

Araniella cucurbitina (Clerck, 1757)*: CK3; CK6.

Araniella opisthographa (Kulczynski, 1905): 195 – 1♀.

Argiope bruennichi (Scopoli, 1772)*: CK2; CK6.
Cercidia prominens (Westring, 1851)**: CK6; 107 – 1♀; 108 – 1♂.
Cyclosa conica (Pallas, 1772)*: CK2; CK6; CK7.
Cyclosa oculata (Walckenaer, 1802)*: CK6.
Gibbaranea bituberculata (Walckenaer, 1802)*: CK2; CK6.
Hypsosinga sanguinea (C. L. Koch, 1844)*: CK3; CK6.
Larinioides cornutus (Clerck, 1757)*: CK2.
Mangora acalypha (Walckenaer, 1802)*: CK6; CK7.
Neoscona adianta (Walckenaer, 1802)*: CK3.
Nuctenea umbratica (Clerck, 1757)*: CK3.
Singa hamata (Clerck, 1757)**: CK2; CK5; 236 – 1♀.
Singa nitidula C. L. Koch, 1844*: CK2.

Clubionidae

Clubiona juvenis Simon, 1878: 108 – 1♀.
Clubiona lutescens Westring, 1851: 180 – 1♂.
Clubiona phragmitis C. L. Koch, 1843*: CK1.
Clubiona stagnatilis Kulczynski, 1897: 107 – 1♀.

Dictynidae

Argenna subnigra (O. P.-Cambridge, 1861): 116 – 1♀.
Dictyna arundinacea (Linnaeus, 1758)*: CK2; CK3; CK6.
Dictyna pusilla Thorell, 1856*: CK6.
Nigma flavescens (Walckenaer, 1830)*: CK2; CK6.

Dysderidae

Dysdera hungarica Kulczynski, 1897**: CK7; 163 – 1♀; 170 – 1♀.
Dysdera ninnii Canestrini, 1868*: CK7.
Harpactea hombergi (Scopoli, 1763)*: CK8.
Harpactea rubicunda (C. L. Koch, 1838)*: CK6.

Eutichuridae

Cheiracanthium erraticum (Walckenaer, 1802): 211 – 1♂.

Gnaphosidae

Gnaphosa bicolor (Hahn, 1833): 185 – 1♂; 190 – 1♀.
Micaria nivosa L. Koch, 1866*: CK7.
Micaria pulicaria (Sundevall, 1832): 112 – 3♂; 117 – 1♂.
Zelotes latreillei (Simon, 1878): 123 – 1♀.

Hahniidae

Hahnina nava (Blackwall, 1841): 108 – 1♀; 116 – 1♀.

Linyphiidae

Araeoncus humilis (Blackwall, 1841): 116 – 1♀.
Agyneta affinis (Kulczynski, 1898): 108 – 1♂; 112 – 1♀, 1♂; 119 – 1♀, 1♂.
Agyneta rurestris (C. L. Koch, 1836)**: CK6; 102 – 8♀, 12♂; 107 – 1♂; 108 – 2♀, 2♂; 113 – 9♀, 1♂; 114 – 1♀; 116 – 1♀, 1♂; 119 – 2♂; 123 – 1♂.
Agyneta simplicatarsis (Simon, 1884): 112 – 1♂; 113 – 1♀, 3♂.
Bathyphantes gracilis (Blackwall, 1841): 112 – 1♀, 2♂.
Ceratinella brevis (Wider, 1834)**: CK3; 113 – 1♂.
Cnephalocotes obscurus (Blackwall, 1834): 107 – 2♂.
Cresmatoneta mutinensis (Canestrini, 1868): 108 – 5♀.
Dicymbium nigrum (Blackwall, 1834): 112 – 1♀.
Diplostyla concolor (Wider, 1834): 112 – 1♀.
Entelecara erythropus (Westring, 1851)*: CK6.
Erigone dentipalpis (Wider, 1834)**: CK6; 119 – 2♀.
Frontinellina frutetorum (C. L. Koch, 1834): 201 – 1♂.
Gnathonarium dentatum (Wider, 1834): 104 – 1♀.

Gonatium rubellum (Blackwall, 1841)*: CK7.
Gonatium rubens (Blackwall, 1833): 113 – 1♂.
Hypomma bituberculatum (Wider, 1834)*: CK1.
Linyphia hortensis Sundevall, 1830*: CK7.
Linyphia triangularis (Clerck, 1757): 114 – 1♀.
Micrargus herbigradus (Blackwall, 1854): 125 – 1♂.
Microlinyphia pusilla (Sundevall, 1830)*: CK2; CK3; CK6.
Nematogmus sanguinolentus (Walckenaer, 1841)*: CK6.
Neriere clathrata (Sundevall, 1830)**: CK2; CK3; 104 -1♀, 1♂; 112 – 2♀.
Neriere radiata (Walckenaer, 1841)*: CK6; CK7.
Oedothorax apicatus (Blackwall, 1850): 116 – 2♀; 125 – 1♀.
Oedothorax fuscus (Blackwall, 1834): 112 – 1♀, 1♂.
Stemonyphantes lineatus (Linnaeus, 1758)**: 108 – 1♀, 1♂.
Styloctetor romanus (O. P.-Cambridge, 1872): 123 – 1♂.
Tallusia experta (O. P.-Cambridge, 1871): 104 – 2♀.
Tapinocyba insecta (L. Koch, 1869): 116 – 1♂.
Tenuiphantes cristatus (Menge, 1866)*: CK7.
Tenuiphantes flavipes (Blackwall, 1854): 114 – 2♀.
Tenuiphantes mengei (Kulczynski, 1887)**: CK7; 112 – 4♀; 116 – 1♀; 123 – 1♂.
Trichopterna cito (O. P.-Cambridge, 1872): 102 – 1♂; 119 – 1♀; 123 – 1♂; 124 – 2♀.
Troxochrota scabra Kulczyński, 1894*: CK6.
Walckenaeria antica (Wider, 1834)*: CK7.

Liocranidae

Apostenus fuscus Westring, 1851*: CK7.
Liocranum rupicola (Walckenaer, 1830)*: CK7; CK6.

Lycosidae

Alopecosa inquilina (Clerck, 1757): 176 – 1♀.
Arctosa maculata (Hahn, 1822)*: CK7.
Hogna radiata (Latreille, 1819): 117 – 1♂.
Hygrolycosa rubrofasciata (Ohlert, 1865): 104 – 3♀.
Pardosa amentata (Clerck, 1757): 163 – 2♀.
Pardosa lugubris (Walckenaer, 1802)*: CK7.
Pardosa prativaga (L. Koch, 1870)*: CK6.
Pardosa riparia (C. L. Koch, 1833): 184 – 1
Trochosa ruricola (De Geer, 1778)*: CK2.
Trochosa terricola Thorell, 1856: 99 – 1♀, 1♂; 117 – 1♀.

Mysmenidae

Microdipoena jobi (Kraus, 1967): 104 – 1♀, 2♂; 114 – 1♀, 1♂.

Oxyopidae

Oxyopes ramosus (Martini & Goeze, 1778)*: CK2; CK3; CK6.

Philodromidae

Philodromus aureolus (Clerck, 1757)*: CK6.
Philodromus dispar Walckenaer, 1826*: CK7.
Philodromus emarginatus (Schrank, 1803): 195 – 2♀.

Pholcidae

Pholcus opilionoides (Schrank, 1781)*: CK7.

Pisauridae

Pisaura mirabilis (Clerck, 1757)**: CK7; 163 – 1♀; 170 – 1♂; 184 – 2♀, 2♂; 201 – 1♀; 224 – 1♀.

Salticidae

Ballus chalybeius (Walckenaer, 1802)*: CK6.

Evarcha arcuata (Clerck, 1757)**: CK2; CK3; CK6; 184 – 2♀, 2♂.

Evarcha falcata (Clerck, 1757)*: CK4; CK6.

Heliophanus auratus C. L. Koch, 1835*: CK3.

Heliophanus cupreus (Walckenaer, 1802)**: CK3; 195 – 1♀.

Macarokeris nidicolens (Walckenaer, 1802)*: CK3; CK6.

Marpissa muscosa (Clerck, 1757)*: CK2; CK3.

Marpissa pomatia (Walckenaer, 1802)*: CK2.

Philaeus chrysops (Poda, 1761)*: CK3.

Pseudeuophrys erratica (Walckenaer, 1826)*: CK7.

Salticus zebraneus (C. L. Koch, 1837): 201 – 1♂.

Sparassidae

Micrommata virescens (Clerck, 1757)**: CK6; 184 – 1♀.

Tetragnathidae

Metellina segmentata (Clerck, 1757)**: CK7; 112 – 3♂.

Pachygnatha clercki Sundevall, 1823**: CK1; 107 – 1♂; 112 – 1♀.

Pachygnatha degeeri Sundevall, 1830*: CK6.

Tetragnatha montana Simon, 1874: 201 – 3♀.

Theridiidae

Enoplognatha ovata (Clerck, 1757)*: CK6.

Lasaeola coracina (C. L. Koch, 1837)*: CK6.

Neottiura bimaculata (Linnaeus, 1767)*: CK3, CK6.

Phylloneta impressa (L. Koch, 1881)*: CK5.

Platnickina tincta (Walckenaer, 1802)*: CK6.

Theridion varians Hahn, 1833*: CK6.

Thomisidae

Ebrechtella tricuspidata (Fabricius, 1775)*: CK3.

Misumena vatia (Clerck, 1757)*: CK3; CK6; CK7.

Ozyptila claveata (Walckenaer, 1837)*: CK3.

Ozyptila praticola (C. L. Koch, 1837)*: CK4.

Pistius truncatus (Pallas, 1772)**: CK3; CK7; 195 – 1♀.

Tmarus piger (Walckenaer, 1802)*: CK3; CK6.

Xysticus acerbus Thorell, 1872*: CK2.

Xysticus audax (Schrank, 1803)*: CK6.

Xysticus bifasciatus C. L. Koch, 1837**: CK3; CK6; 108 – 2♀.

Xysticus cristatus (Clerck, 1757)**: CK2; CK3; CK4; CK6; 184 – 3♀, 2♂; 201 – 1♀.

Xysticus luctator L. Koch, 1870*: CK3.

Xysticus kochi Thorell, 1872**: CK4; 201 – 1♀.

Xysticus ulmi (Hahn, 1832)**: CK2; CK6; 184 – 4♀, 2♂.

Zoridae

Zora spinimana (Sundevall, 1833): 104 – 1♂; 107 – 1♀; 114 – 1♀.

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