

# CONTRIBUTION TO THE OPILIONES FAUNA OF SĂLAJ COUNTY, ROMANIA

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**ABSTRACT:** An annotated list of six Opiliones species from Sălaj county, Romania, collected during 2014, are presented together with a further species found during the same collecting tour in bordering Satu Mare county. Two species (*Opilio ruzickai* Silhavý, 1938 and *Leiobunum rupestre* (Herbst, 1799)) are worth to mention because of their rarity in Romania. The Sălaj population of *Gyas titanus* Simon, 1879, most probably belongs to the problematic Carpathian race of the taxon, needs further taxonomical investigation.

Keywords: Harvestmen, faunistic, new data, Gyas, Carpathian race

#### INTRODUCTION:

The Opiliones fauna of Romania is rather rich regarding both endemic taxa and rare montane elements (Martens 1978, Babalean 2005, Weiss 1996). The number of known species are around 60, however, occurrence of one fifth of these are in need of confirmation (Babalean 2005), and the taxonomic value of several endemics are questionable (Martens 1978).

Up to now, the Opiliones fauna of Sălaj practically remained unknown. With the research program "Invertebrate faunistical investigation of the Sălaj county" we had the opportunity to collect at various sites of the county during eleven tours between 2014 and 2015, however, special efforts were taken on harvestmen collecting only during a single autumnal tour. The Opiliones material of these collecting tours is worked up below.

## **MATERIAL AND METHODS:**

The specimens were collected with singling, beating sheet or with sweeping net. The material is stored in 70% ethanol and deposited in the Soil Zoological Collections, Department of Zoology, Hungarian Natural History Museum and the collection of the University Vasile Goldis.

For the identification I used the work of Martens (1978). Nomenclature, type of distribution and ecological demands mostly also refers to this work, or the source is marked in the text. Romanian distributions are discussed on the basis of Babalean (2005) and Weiss (1996).

# List of localities

The localities are given associated with mountain systems or basins. Their numbers refers to Gubányi (2015) where more detailed information can be found on each. For the comparison with old records, we also give the Hungarian names in parentheses after the Romanian names.

Collectors are: ZB – Zsolt Bálint; LD – László Dányi; AG – András Gubányi; GK – Gergely Katona; DM – Dávid Murányi; AO – András Orosz; GP – Gellért Puskás.

Culmea Codrului (Szilágysági-Bükk):

130: Hodod (jud. Satu Mare, Hadad), park of the lower castle, 03.10.2014, N47.4039° E23.02633°; leg. ZB-LD-GK-DM.

Culoarul Someşului (Szamos völgye):

92: Cliţ (Csűrfalva), 14.08.2014, N47.29° E23.422°; leg. AG-GK-AO-GP.

Dealurile Crasnei (Krasznamenti-dombság):

85: W of Aghireş (Egrespatak), 12-13.08.2014, N47.157° E22.992°; leg. AG-GK-AO-GP.

Munții Meseșului (Meszes-hegység):

- 86: 4.5 km W of Mesteacănu (Almásnyíres), 13.08.2014, N46.969° E22.959°; leg. AG-GK-AO-GP.
- 100: Treznea (Ördögkút), upper valley of the Treznea Stream, 29.09.2014, N47.11063° E23.04968°; leg. ZB-LD-GK-DM.
- 115: Huta (Csákyújfalu), 01.10.2014, N46.99416° E22.92813 leg. ZB-LD-GK-DM.

Munții Plopiș (Réz-hegység):

- 105: Iaz (Krasznajáz), valley of the Iaz Stream, 30.09.2014, N47.08698° E22.6511°; leg. ZB-LD-GK-DM.
- 122: Tusa (Tuszatelke), Ponor, 02.10.2014, N47.00953° E22.72308 leg. ZB-LD-GK-DM.
- 123: Tusa (Tuszatelke), Ponor, 02.10.2014, N47.01195° E22.7421°; leg. ZB-LD-GK-DM.
- 127B: Tusa (Tuszatelke), valley of the Boului Stream, 02.10.2014, N47.05576° E22.73013°; leg. ZB-LD-GK-DM.

### **RESULTS AND DISCUSSION:**

Phalangiidae

Phalangium opilio Linnaeus, 1761

New data: Culoarul Someşului: 92:  $1 \, \circlearrowleft$ ,  $2 \, \circlearrowleft$ ; Dealurile Crasnei: 85:  $1 \, \circlearrowleft$ ; Munții Meseşului: 86:  $1 \, \circlearrowleft$ ,  $1 \, \circlearrowleft$ ;  $115: 2 \, \circlearrowleft$ .

Widely distributed Palaerctic species, introduced also in the Nearctic and New Seeland. It has a wide ecological spectrum, but usually found in open grasslands. The Sălaj specimens were found in

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different wet and dry grassland habitats. A common species in Romania.

Opilio saxatilis C.L. Koch, 1839

New data: Culmea Codrului: 130:  $3 \circlearrowleft$ , 2 juveniles; Munții Plopiș: 123:  $1 \circlearrowleft$ .

European and Mediterranean species but missing from the North and the West. It has a wide ecological spectrum, but usually found on stony substrate. We found it on limestone rocks and house walls. A common species in Romania.

Opilio ruzickai Silhavý, 1938

New data: Culmea Codrului: 130: 13.

Central European and Balkanian species. It lives on rocks, mostly in forested areas. Our specimen was found on house wall. A rare species in Romania, previously it was known only from seven localities (Dumitrescu 1972, Martens 1978, Oltean & Dumitrescu 1973, Weiss 1984).

Oligolophus tridens (C.L. Koch, 1836)

New data: Munții Plopiș: 105: 13.

Atlantic and continental European species. It inhabits forests, usually wet forest habitats. The single Sălaj specimen was found in a wet forest by a swamp. A common species in Romania.

Lacinius ephippiatus (C.L. Koch, 1835)

New data: Munții Meseșului: 100: 23, 59; 115: 29.

Widespread European species that is considered as hygrophylous. In Sălaj it was collected in wet beech forest close to forest brooks. A common species in Romania.

## Sclerosomatidae

Gyas titanus Simon, 1879

New data: Munții Plopiș: 127B: 1 juvenile.

A species with disjunct European montane distribution. It lives on rocks close to streams, mostly in forested areas. The single Sălaj juvenile was found at a streamshore in a wet beech forest. Differences of the North Carpathian population was already noted by Martens (1978). Recently investigated specimens from nearby areas of Maramureş and the Apuseni Mts proved to be the same morph like the North Carpathian ones (Lengyel & Páll-Gergely 2010, Murányi & Lengyel 2006). The present population most probably belong to that race, but the problem is in need of further studies and the capture of adults. A common species in montanous areas of Romania.

Leiobunum rupestre (Herbst, 1799)

New data: Munții Plopiș: 105: 13; 122: 13.

Alpine-Carpathian montane species. It occupies similar habitats like *G. titanus*. The Sălaj specimens were found in beech forests, one by a large forest stream while the another on a karst plateau. Its Romanian occurrence was just recently confirmed (Murányi & Lengyel 2006), since then this is the second report of the species from the country.

#### **CONCLUSIONS:**

The Opiliones fauna of Sălaj county still should be considered as poorly known. The six species enumerated above are all common species in Romania, with the exception of *Leiobunum rupestre*. The Romanian distribution of the latter is in need of further faunistical research. Given that the present contribution is based mostly on a single collecting tour taken during the autumnal season, further efforts would at least doubled the number of the species.

*Opilio ruzickai*, a further species of faunistical interest is reported herein from Satu Mare county. It was found while searching for the rare *Odiellus lendli* (Sörrensen, 1894 in: Lendl 1894) on its classical locality from where possibly the type specimen is originated (Kolossváry 1929).

To solve the identity of the juvenile *Gyas* speciemen found in Sălaj, further comparative taxonomical studies and the capture of adults are needed. Herein it reported as *G. titanus*, the only species of the genus reported from the Crapathian Basin, but most probably it belongs to the hitherto unnamed Carpathian race.

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