

Studies on the Trichoptera fauna of the Ciuc Basin and Harghita Mountains, Romania

LUIZA UJVÁROSI, SÁRA NÓGRÁDI & ÁKOS UHERKOVICH

UJVÁROSI, L., NÓGRÁDI, S. and UHERKOVICH, Á.: Studies on the Trichoptera fauna of the Ciuc Basin and Harghita Mountains, Romania.

Abstract. On the catchment area of the upper part of the River Olt 104 caddisfly species belonging to 15 families were collected by the authors in 30 sites during the years 1991-1994 and by other colleagues in the sixties and seventies. A survey of the materials is presented by an annotated list. Short faunistical and taxonomical comments are also given. *Anabolia concentrica* Zetterstedt proved to be new for the Romanian fauna.

Introduction

The first trichopterological data of Ciuc Basin and Harghita Mountains were published around the turn of the 20th century by KLAPÁLEK (1898, 1899). The paper of Fauna Regni Hungariae dealing with "Neuropteroidea" also gave a few informations on the caddisfly fauna of the Eastern Carpathians (MOCSÁRY 1900). PONGRÁCZ (1914) republished these data. No further results have been published for almost fifty years. The next step was taken in the sixties by BOTOȘĂNEANU (1961, 1971, 1975) as well as BOTOȘĂNEANU and SCHNEIDER (1978). The collection of the Hungarian Natural History Museum was also the depositor of some unpublished caddisfly faunistic record of this area (NÓGRÁDI 1989).

A check list of entire Romanian fauna was presented first time in the year 1993. Then Constantic Ciubuc compiled together the entire Romanian trichopterological literature and presented the list of the caddisflies occurring in Romania. The Ciubuc-list contains altogether 277 taxa mentioning 29 entities mentioned from the Eastern Carpathians (CIUBUC 1993). Additionally BOTOSĂNEANU (1995) presented important new informations on the Romanian fauna correcting some mistakes of CIUBUC's paper quoted above.

The Ciuc Basin is situated in the Eastern Carpathians, between the Harghita Mountains and the Ciuc Mountains. Its north-south longitudinal measure extends over 50 km, from the Sicaș Pass to the Olt Gorge nearby Băile Tușnad. The bottom of the basin lays on 650-700 m a. s. l., the total area spreads over 2063 km², representing one per cent of entire area of Romania.

The mountain chains surrounding the Ciuc Basin consist of three types of rocks: eruptive rocks from the Tercier and Quarter, mesozoic chrySTALLINE formations and flis rocks from the Lower Crete.

The continental climate is strengthened by the basin effect. The absolute fluctuation of temperature is 71 °C (absolute minimum -38, absolute maximum 33 °C). The mean annual temperature is only 5.9 °C. The annual precipitation is 560-580 mm in the middle of the basin (Miercurea-Ciuc), and 1000-1200 mm in the mountainous regions. The maximum precipitation is observed in June. The number of foggy days is 66 per year in average.

The Ciuc Basin belongs to the catchment area of the River Olt, situated in its northernmost part. The density of water courses is 0.94 km/km² (UJVÁRI 1972). The circumstances sketched in the previous paragraph cause development and survive of rich Trichoptera communities.



Fig. 1. Collecting sites in the Ciuc Basin and Harghita Mts. Key to signs: black dot: night capturing, empty circle: daytime sweeping, black triangle: light trap (numbering of localities: see the enumeration of collecting sites), thick line: catchment area boundary of Olt river-system, broken dotted line: boundary of county (judeţul) Covasna, shaded field: inhabited area (the name of settlements is written only in some cases).

1. ábra. Gyűjtőhelyek a Csíki-medencében és a Harghita-hegységben. Magyarázat: fekete kör: éjjeli gyűjtések lámpán, üres kör: nappali hálózások, háromszög: fénycsapda (a számok magyarázatát lásd a gyűjtőhelyek felsorolásánál), vastag vonal: az Olt vízgyűjtőterületének határa, szaggatott pontozott vonal: Kovászna megye (judeţul Covasna) határa, vonalkázott mező: lakott terület (a települések neve csak néhány esetben van kiírva).

Methods and collecting sites

The first author of this paper started to examine the caddisfly fauna of the region in the year 1991. Her very first results have already been published (UJVÁROSI 1994), which contains a few erroneous identifications, but the bulk of the results are correct. Two co-authors, S. Nógrádi and Á. Uherkovich joined her study in 1992 by field work, later by helping L. Ujvárosi to identify a part of her material. Thus the determination of the Trichoptera samples which were collected later, were also revised. In the year 1992 Ujvárosi erected a light trap which functioned throughout the year 1993.

Three customary collecting methods were applied in our field work. Daytime sweepings resulted insignificant material from several points, but a few species were collected only by this way. Night collecting ("lightning") were usually very fruitful. We always used mercury vapour bulbs (125 or 250 Watt). These lamps were powered by a portable generating set (Honda EM650 typ). The light trap, fitted by a 80 Watt mercury vapour bulb, were erected by the forester's house of Valea Mare, Sâncrăieni. It worked from June 21 till September 21, with some interruptions (the longest one was between August 12 and September 5.) The trap provided caddisfly material in 58 nights during this period. Altogether 4389 specimens of 64 species were collected and elaborated.

The collecting sites located mostly along the tributaries of the River Olt, but some of them are found in higher elevation of Harghita Mountains. On the map (Fig. 1) the collecting sites are marked according to the list presented below.

- | | | | |
|----|---|----|---|
| 1 | Băile Chirui, Chirui brook, 900 m | 16 | Harghita-Băi, forester's house („Piricske-p.”) |
| 2 | Băile Homorod | 17 | Izvoare, Ivo brook |
| 3 | Bălan, Fierarului, 950 m | 18 | Izvoru Mureşului |
| 4 | Bălan, Gal-Cut brook, 1000 m | 19 | Jigodin-Băi, outflow of gravel pits |
| 5 | Bălan, „Szép-patak”, 950 m | 20 | Jigodin-Băi, Olt river |
| 6 | Ciceu, „Oltfalu” | 21 | Miercurea-Ciuc, Olt river |
| 7 | Cârja, „Köves-patak” | 22 | Minele Bălan, Haghimaş Ciuc, Olt brook |
| 8 | Dăneşti, tributary of Groapa Apei brook, 1000 m | 23 | Potiond, Fenioved Vize |
| 9 | Dăneşti, Modicia brook, 900 m | 24 | Racu, Silaş brook |
| 10 | Fitod, Fitod brook, 700 m | 25 | Sâncrăieni, Valea Mare, 650 m |
| 11 | Harghita-Băi, 900 m, „Fűrész-patak” | 26 | Sâncrăieni. Valea Mare, forester's house (light trap) |
| 12 | Harghita-Băi, 900 m, „Tolvajos” pass, small tributary of Capolnaş brook | 27 | Sândominic, Baboş Loco |
| 13 | Harghita-Băi, toward Cabana Mădăraş | 28 | Sântimbru, „Bánya-patak”, 1000 m |
| 14 | Harghita-Băi, 900 m, Capolnaş brook | 29 | Sântimbru, Chendreş brook, 900 m |
| 15 | Harghita-Băi, Harghita Mts., 1500 m | 30 | Tuşnadu Nou, Mitaci brook |

List of material

The system and nomenclature is based on BOTOSANEANU's and MALICKY's (1978) paper. All data with collecting sites, date and number of specimens by sex are given. Collectors' name is abbreviated as follow:

- | | | | |
|----|--------------------|----|---|
| Á | Levente Ábrahám | N | Sára Nógrádi |
| B | Lazare Botoşăneanu | U | Ákos Uherkovich |
| IZ | Zoltán Izsák | UL | Lujza Ujvárosi (maiden name L. Keresztes) |
| K | Lujza Keresztes | UT | Tamás Ujvárosi |

The material is deposited in the collection of Zoological Museum of the University of Amsterdam, the Netherlands; in the Natural History Department of Janus Pannonius Museum, Pécs, Hungary; and in Lujza Ujvárosi's collection, Cluj-Napoca, Romania.

Rhyacophilidae

- Rhyacophila aquitanica* McLachlan, 1879 – Sâncraieni, Valea Mare, June 24, 1993 2 ♂♂ (It).
Rhyacophila doehleri Botoșăncanu, 1967 – Harghita-Băi, towards Cabana Mădăraș, Aug. 10, 1970 1 ♂ (B).
Rhyacophila fasciata Hagen, 1859 – Balăn, Gal Cut, July 17, 1992 2 ♂♂ (N, K, U); Harghita-Băi, 900 m, Capolnaș brook, July 15, 1992 6 ♂♂ 1 ♀ (N, K, U); Harghita-Băi, 900 m, „Tolvajos” pass, small tributary of Capolnaș brook, July 15, 1992 2 ♂♂ (N, K, U); Sâncraieni, Valea Mare, July 20, 1992 3 ♂♂ (N, K, U), July 31, 1992 1 ♂ (K, IZ, UT), June 21, 1993 27 ♂♂ 3 ♀♀ (K, IZ), June 21 – Sept. 19, 1993 211 ♂♂ 19 ♀♀ (It).
Rhyacophila laevis Pictet, 1834 – Sâncraieni, Valea Mare, July 20, 1992 1 ♂ (N, K, U)
Rhyacophila mocsaryi Klapálek, 1898 – Bălan, „Szép-patak”, July 17, 1992 1 ♀ (N, K, U); Sâncraieni, Valea Mare, June 21, 1993 41 ♂♂ 2 ♀♀, July 5, 1993 6 ♂♂ 1 ♀ (K, IZ), June 22 – Aug. 9, 1993 99 ♂♂ 2 ♀♀ (It).
Rhyacophila nubila Zetterstedt, 1840 – Cârța, „Köves-patak”, Aug. 2, 1992 1 ♀ (K, UT); Ciceu, „Oltfalu”, Olt, Aug. 16, 1992 1 ♂ (K, UT); Racu, Silaș brook, Sept. 26, 1992 1 ♂ (K, UT); Sâncraieni, Valea Mare, July 18, 1992 4 ♂♂ 1 ♀ (N, K, U), July 31, 1992 2 ♂♂ 3 ♀♀ (K, IZ, UT), Aug. 5, 1992 2 ♀♀ (IZ); June 21, 1993 6 ♂♂ 3 ♀♀, July 5, 1993 8 ♂♂ 8 ♀♀, July 21, 1993 4 ♂♂ 2 ♀♀ (K, IZ), June 21 – Sept. 21, 1993 81 ♂♂ 42 ♀♀ (It); Sândominic, Baboș Loco, July 27, 1992 1 ♂ (K, UT); Tușnadu Nou, Mitaci brook, July 29, 1992 1 ♂ (K, UT)
Rhyacophila obliterata McLachlan, 1863 – Sept. 6-19, 1993 68 ♂♂, Sept. 20-21, 1993 17 ♂♂ (It).
Rhyacophila philopotamoides Schmid, 1970 – Bălan, Fierarului, July 17, 1992 1 ♂ (N, K, U); Bălan, „Szép-patak”, July 17, 1992 1 ♀ (N, K, U); Sâncraieni, Valea Mare, Aug. 6-7, 1993 1 ♂ (It).
Rhyacophila polonica McLachlan, 1879 – Cârța, „Köves-patak”, Aug. 2, 1992 5 ♂♂ 1 ♀ (K, UT); Dănești, Groapa Apei, July 19, 1992 2 ♂♂ (N, K, U); Sâncraieni, Valea Mare, July 18, 1992 2 ♂♂ 1 ♀, July 20, 1992 2 ♂♂ (N, K, U), July 31, 1992 3 ♂♂ (K, IZ, UT), July 21, 1993 2 ♂♂ 2 ♀♀ (K, IZ), July 9 – Aug. 11, 1993 73 ♂♂ 6 ♀♀ (It); Sândominic, Baboș Loco, July 27, 1992 2 ♂♂ (K, UT); Tușnadu Nou, Mitaci brook, July 29, 1992 5 ♂♂ (K, UT)
Rhyacophila torrentium Pictet, 1834 – Sâncraieni, Valea Mare, July 31, 1992 1 ♂ (K, IZ, UT)
Rhyacophila tristis Pictet, 1834 – Bălan, Fierarului, July 17, 1992 5 ♂♂ 1 ♀ (N, K, U); Balăn, Gal Cut, July 17, 1992 34 ♂♂ 10 ♀♀ (N, K, U); Bălan, „Szép-patak”, July 17, 1992 4 ♂♂ 2 ♀♀ (N, K, U); Harghita-Băi, 900 m, Capolnaș brook, July 15, 1992 2 ♀♀ (N, K, U); Miercurea-Ciuc, Băile Chirui, July 15, 1992 1 ♂ (N, K, U); Sâncraieni, Valea Mare, July 20, 1992 14 ♂♂ 4 ♀♀ (N, K, U), July 5, 1993 1 ♀ (K, IZ), June 21 – July 17, 1993 5 ♂♂ 3 ♀♀ (It); Sândominic, Baboș Loco, Aug. 15, 1992 1 ♀ (K, UT); Sântimbru, „Bánya-patak”, July 20, 1992 1 ♀ (U, N, K)

Glossomatidae

- Glossosoma boltoni* Curtis, 1834 – Jigodin-Băi, Olt river, July 21-23, 1977 1 ♀ (B); Miercurea-Ciuc, Olt river, July 15, 1992 1 ♂ 7 ♀♀ (N, K, U); Sâncraieni, Valea Mare, July 18, 1992 9 ♂♂ 14 ♀♀ (N, K, U), July 5, 1993 1 ♂ (K, IZ); June 21 – Aug. 11, 1993 9 ♂♂ 5 ♀♀ (It); Tușnadu Nou, Mitaci brook, July 29, 1992 1 ♀ (K, UT)
Glossosoma conformis Neboiss, 1963 – Harghita-Băi, forester's house („Piricske-p.”), July 17, 1992 1 ♀ (N, K, U, IZ); Sâncraieni, Valea Mare, July 31, 1992 1 ♂ 1 ♀ (K, IZ, UT), June 21, 1993 1 ♂ 2 ♀♀, July 5, 1993 18 ♂♂ 78 ♀♀, July 21, 1993 6 ♂♂ 17 ♀♀ (K, IZ); June 21 – Aug. 11, 1993 126 ♂♂ 173 ♀♀ (It).
Glossosoma discophorum Klapálek, 1902 – Sâncraieni, Valea Mare, July 31, 1992 3 ♀♀ (K, IZ, UT), July 5, 1993 1 ♂ (K, IZ), June 21 – Aug. 7, 1993 46 ♂♂ (It).
Glossosoma (Synafophora) intermedia Klapálek, 1892 – Sâncraieni, Valea Mare, June 24, 1993 1 ♂, July 4, 1993 1 ♂ (It); Sântimbru, Chendreș brook, July 20, 1992 1 ♂ (U, N, K)
Synagapetus armatus McLachlan, 1879 – Harghita-Băi, towards Cabana Mădăraș, Aug. 10, 1970 5 ♂♂ 1 ♀ (B)
Synagapetus moselyi Ulmer, 1938 – Harghita-Băi, „Fűrész-patak”, July 15, 1992 1 ♀ (N, K, U); Miercurea-Ciuc, Băile Chirui, July 15, 1992 1 ♀ (N, K, U); Sâncraieni, Valea Mare, July 23-24, 1993 1 ♀ (It).
Agapetus delicatulus McLachlan, 1884 – Dănești, Groapa Apei, July 19, 1992 1 ♂ (N, K, U); Dănești, Modicia brook, July 19, 1992 1 ♂ (N, K, U); Racu, Silaș brook, July 16, 1992 3 ♀♀ (N, K, U), Aug. 14, 1992 1 ♂ 2 ♀♀, Sept. 26, 1992 1 ♂ (K, UT); Sâncraieni, Valea Mare, July 18, 1992 75 ♂♂ 94 ♀♀ (N, K, U), July 31, 1992 1 ♀ (K, IZ, UT), July 5, 1993 16 ♂♂ 26 ♀♀, July 21, 1993 2 ♂♂ 3 ♀♀ (K, IZ), July 1 – Aug. 11, 1993 80 ♂♂ 96 ♀♀ (It).

Agapetus ochripes Curtis, 1834 – Miercurea-Ciuc, Olt river, July 15, 1992 2 ♂♂ 1 ♀ (N, K, U); Racu, Silaș brook, July 16, 1992 1 ♂ 7 ♀♀ (N, K, U); Sâncrăieni, Valea Mare, July 18, 1992 2 ♂♂ 1 ♀ (N, K, U), July 31, 1992 1 ♀ (K, IZ, UT), June 21, 1993 1 ♀, July 5, 1993 14 ♂♂ 6 ♀♀, July 21, 1993 1 ♀ (K, IZ); June 21 – Aug. 11, 1993 18 ♂♂ 25 ♀♀ (It).

Hydroptilidae

Hydroptila angustata Mosely, 1939 – Sâncraieni, Valea Mare, June 24, 1993 1 ♀ (It)
Hydroptila forcipata Eaton, 1873 – Sâncraieni, Valea Mare, June 22, 1993 1 ♂ 1 ♀, Aug. 6-7, 1993 1 ♀ (It).
Hydroptila lotensis Mosely, 1930 – Sâncraieni, Valea Mare, June 24, 1993 1 ♀ (It)
Hydroptila occulta Eaton, 1837 – Miercurea-Ciuc, Olt river, July 15, 1992 1 ♀ (N, K, U);
Agraylea sexmaculata Curtis, 1834 – Jigodin-Băi, Olt river, July 21-23, 1977 1 ♀ (B)

Philopotamidae

Philopotamus montanus Donovan, 1813 – Bălan, Fierarului, July 17, 1992 1 ♂ (N, K, U); Balăn, Gal Cut, July 17, 1992 23 ♂♂ 2 ♀♀ (N, K, U); Harghita-Băi, 900 m, Capolnaș brook, July 15, 1992 3 ♂♂ 1 ♀ (N, K, U); Harghita-Băi, forester's house („Piricske-p.”), July 17, 1992 2 ♂♂ (N, K, U, IZ); Harghita-Băi, „Fűrészpatak”, July 15, 1992 1 ♂ (N, K, U); Miercurea-Ciuc, Băile Chirui, July 15, 1992 18 ♂♂ 6 ♀♀ (N, K, U); Sâncrăieni, Valea Mare, July 18, 1992 1 ♀, July 20, 1992 23 ♂♂ 1 ♀ (N, K, U), July 31, 1992 4 ♂♂ 3 ♀♀ (K, IZ, UT), June 21, 1993 14 ♂♂ 11 ♀♀, July 5, 1993 4 ♂♂ 1 ♀, July 21, 1993 3 ♂♂ 4 ♀♀ (K, IZ), June 22 – Aug. 11, 1993 50 ♂♂ 129 ♀♀ (It); Sântimbru, „Bánya-patak”, July 20, 1992 1 ♂ (U, N, K)

Philopotamus variegatus Scopoli, 1763 – Miercurea-Ciuc, Băile Chirui, July 15, 1992 1 ♂ (N, K, U); Sâncrăieni, Valea Mare, July 20, 1992 1 ♂ 2 ♀♀ (N, K, U), June 21, 1993 105 ♂♂ 12 ♀♀, July 5, 1993 2 ♀♀, July 21, 1993 5 ♂♂ 3 ♀♀ (K, IZ), June 22 – Aug. 11, 1993 246 ♂♂ 67 ♀♀ (It); Tușnadu Nou, Mitaci brook, July 29, 1992 1 ♂ (K, UT)

Wormaldia occipitalis Pictet, 1834 – Harghita-Băi, brooks and springs, Aug. 9, 1970 64 ♂♂ 21 ♀♀, Oct. 13, 1970 1 ♂ (B); Jigodin-Băi, Olt river, July 21-23, 1977 2 ♀ (B); Sâncrăieni, Valea Mare, July 20, 1992 7 ♂♂ (N, K, U); July 5, 1993 4 ♂♂ (K, IZ)

Hydropsychidae

Hydropsyche angustipennis Curtis, 1834 – Dănești, Modicia brook, July 19, 1992 1 ♂ (N, K, U); Fitod, Fitod brook, Aug. 7, 1992 4 ♂♂, Aug. 12, 1992 5 ♂♂, Aug. 26, 1992 17 ♂♂ (K, UT)

Hydropsyche bulbifera McLachlan, 1878 – Ciceu, „Oltfalu”, Olt river, Aug. 16, 1992 23 ♂♂, Aug. 19, 1992 9 ♂♂ (K, UT); Sâncrăieni, Valea Mare, July 31, 1992 1 ♂ (K, IZ, UT), July 5, 1993 4 ♂♂ (K, IZ)

Hydropsyche contubernalis McLachlan, 1865 – Miercurea-Ciuc, Olt river, July 15, 1992 2 ♂♂ (N, K, U); Sâncrăieni, Valea Mare, July 18, 1992 1 ♂ (N, K, U)

Hydropsyche instabilis Curtis, 1834 – Cârța, „Köves-patak”, Aug. 2, 1992 1 ♂ (K, UT); Ciceu, „Oltfalu”, Olt Aug. 15, 1992 1 ♂, Aug. 16, 1992 2 ♂♂ (K, UT); Miercurea-Ciuc, Olt river, July 15, 1992 1 ♂ (N, K, U); Sâncrăieni, Valea Mare, July 18, 1992 68 ♂♂ (N, K, U), July 31, 1992 5 ♂♂ (K, IZ, UT), Aug. 5, 1992 2 ♂♂ (IZ); July 5, 1993 13 ♂♂, July 21, 1993 54 ♂♂ (K, IZ); June 21 – Aug. 11, 1993 314 ♂♂ (It); Tușnadu Nou, Mitaci brook, July 29, 1992 1 ♂ (K, UT)

Hydropsyche modesta Navás, 1925 – Sâncrăieni, Valea Mare, July 5, 1993 1 ♂ (K, IZ)

Hydropsyche pellucidula Curtis, 1824 – Ciceu, „Oltfalu”, Olt Aug. 15, 1992 1 ♂, Aug. 16, 1992 2 ♂♂ (K, UT); Miercurea-Ciuc, Olt river, July 15, 1992 6 ♂♂ (N, K, U); Racu, Silaș brook, July 16, 1992 1 ♂ (N, K, U); Sâncrăieni, Valea Mare, July 18, 1992 10 ♂♂ (N, K, U), Aug. 5, 1992 1 ♂ (IZ), July 5, 1993 2 ♂♂, July 21, 1993 2 ♂♂ (K, IZ), June 21, 1993 1 ♂, July 9, 1993 2 ♂♂ (It).

Hydropsyche saxonica McLachlan, 1884 – Cârța, „Köves-patak”, Aug. 2, 1992 1 ♂ (K, UT); Sâncrăieni, Valea Mare, July 18, 1992 1 ♂ (N, K, U), July 31, 1992 2 ♂♂ (K, IZ, UT), Aug. 5, 1992 9 ♂♂ (IZ), June 21, 1993 2 ♂♂, July 5, 1993 9 ♂♂, July 21, 1992 2 ♂♂ (K, IZ), July 1 – Aug. 11, 1993 19 ♂♂ (It); Sândominic, Baboș Loco, July 27, 1992 6 ♂♂ (K, UT)

Hydropsyche tabacarii Botoșăneagu, 1960 – Balăn, Gal Cut, July 17, 1992 11 ♂♂ (N, K, U); Sâncrăieni, Valea Mare, June 21, 1993 2 ♂♂ (K, IZ), June 24, 1993 6 ♂♂, July 22, 1993 1 ♂ (It).

Cheumatopsyche lepida Pictet, 1834 – Harghita-Băi, forester's house („Piricske-p.”), July 17, 1992 1 ♀ (N, K, U, IZ); Sâncrăieni, Valea Mare, July 5, 1993 2 ♂♂ 1 ♀, July 21, 1993 2 ♂♂ 1 ♀ (K, IZ); June 24, 1993 1 ♀, July 31 – Aug. 1, 1993 4 ♀♀, Aug. 6-7, 1993 2 ♀♀ (It).

Polycentropodidae

Plectrocnemia brevis McLachlan, 1871 – Băile Harghita, Harghita Mts., 1500 m, July 10-11, 1970 1 ♂ (B); Harghita-Băi, forester's house („Piricske-p.”), July 17, 1992 2 ♂♂ (N, K, U, IZ);

Plectrocnemia conpersa Curtis, 1834 – Dănești, Modicia brook, July 19, 1992 1 ♀ (N, K, U); Harghita-Băi, forester's house („Piricske-p.”), July 17, 1992 2 ♀♀ (N, K, U, IZ); Sâncrăieni, Valea Mare, July 18, 1992 2 ♂♂ 2 ♀♀ (N, K, U), Aug. 5, 1992 1 ♂ (IZ), June 21, 1993 2 ♂♂, July 5, 1993 1 ♂ (K, IZ), June 21 – Aug. 11, 1993 17 ♂♂ 2 ♀♀ (It).

Polycentropus flavomaculatus Pictet, 1834 – Cârța, „Köves-patak”, Aug. 2, 1992 2 ♂♂ (K, UT); Sâncrăieni, Valea Mare, July 18, 1992 3 ♂♂ 4 ♀♀ (N, K, U), July 31, 1992 1 ♂ 1 ♀ (K, IZ, UT), June 21, 1993 1 ♀, July 5, 1993 1 ♂, July 21, 1993 1 ♀ (K, IZ), July 25-26, 1993 1 ♂ (It).

Polycentropus irroratus Curtis, 1835 – Sâncrăieni, Valea Mare, July 18, 1992 1 ♂ (N, K, U)

Cyrnus crenaticornis Kolenati, 1858 – Sâncrăieni, Valea Mare, July 5, 1993 1 ♀ (K, IZ)

Cyrnus trimaculatus Curtis, 1834 – Sâncraieni, Valea Mare, June 24, 1993 1 ♀ (It)

Psychomyiidae

Psychomyia pusilla Fabricius, 1781 – Harghita-Băi, 900 m, Capolnaș brook, July 15, 1992 1 ♂ (N, K, U); Racu, Silaș brook, July 16, 1992 3 ♂♂ 4 ♀♀ (N, K, U); Sâncrăieni, Valea Mare, June 21, 1993 11 ♀♀, July 5, 1993 1 ♀ (K, IZ), June 21 – Aug. 7, 1993 3 ♂♂ 10 ♀♀ (It).

Lype phaeopa Stephens, 1836 – Racu, Silaș brook, July 16, 1992 1 ♂ (N, K, U)

Lype reducta Hagen, 1868 – Cârța, „Köves-patak”, Aug. 2, 1992 2 ♂♂ (K, UT); Miercurea-Ciuc, Olt river, July 15, 1992 1 ♂ (N, K, U); Racu, Silaș brook, July 16, 1992 1 ♂ (N, K, U); Sâncrăieni, Valea Mare, 1 ♂ (N, K, U), June 24, 1993 1 ♀, July 25-26, 1993 1 ♀ (It).

Tinodes rostocki McLachlan, 1878 – Harghita-Băi, „Fűrész-patak”, July 15, 1992 2 ♂♂ 1 ♀ (N, K, U); Miercurea-Ciuc, Băile Chirui, July 15, 1992 1 ♀ (N, K, U); Sâncraieni, Valea Mare, June 24, 1993 1 ♀ (It).

Phryganeidae

Agrypnia varia Fabricius, 1793 – Miercurea-Ciuc, Olt river, July 15, 1992 1 ♀ (N, K, U); Sâncrăieni, Valea Mare, July 18, 1992 3 ♀♀ (N, K, U), July 5, 1993 1 ♂, July 21, 1993 1 ♂ 2 ♀♀ (K, IZ); July 9 – Aug. 3, 1993 1 ♂ 6 ♀♀ (It).

Limnephilidae

Apatania carpathica Schmid, 1954 – Harghita-Băi, brooks and springs, Aug. 9, 1970 1 ♂ 9 ♀♀ (B); Harghita-Băi, towards Cabana Mădăraș, Aug. 10, 1970 9 ♂♂ 16 ♀♀ (B); Băile Harghita, Harghita Mts., 1500 m, July 10-11, 1970 3 ♀♀ (B); Sâncrăieni, Valea Mare, July 20, 1992 6 ♂♂ (N, K, U)

Drusus brunneus Klapálek, 1898 – Bălan, Fierarului, July 17, 1992 1 ♂ (N, K, U); Harghita-Băi, brooks and springs, Aug. 9, 1970 1 ♂ 2 ♀♀ (B); Harghita-Băi, 900 m, Capolnaș brook, July 15, 1992 1 ♂ (N, K, U); Harghita-Băi, towards Cabana Mădăraș, Aug. 10, 1970 7 ♂♂ 12 ♀♀ (B); Băile Harghita, Harghita Mts., 1500 m, July 10-11, 1970 22 ♂♂ 9 ♀♀ (B); Izvoare, Ivo brook, July 14, 1983 2 ♂♂ (Á); Sâncrăieni, Valea Mare, July 20, 1992 2 ♂♂ (N, K, U); June 21, 1993 1 ♂, June 22, 1993 1 ♀, June 26, 1993 1 ♂ (It).

Drusus discolor Rambur, 1842 – Sâncraieni, Valea Mare, July 12, 1993 1 ♂ (It).

Ecclisopteryx dalecarlica Kolenati, 1848 – Racu, Silaș brook, July 16, 1992 13 ♀♀ (N, K, U); Sâncraieni, Valea Mare, June 21, 1993 1 ♀ (It).

Ecclisopteryx madida McLachlan, 1867 – Cârța, „Köves-patak”, Aug. 2, 1992 1 ♂ (K, UT); Sâncrăieni, Valea Mare, July 31, 1992 3 ♂♂ 3 ♀♀ (K, IZ, UT), July 21, 1993 1 ♂ (K, IZ); July 23 – Sept. 21, 1993 77 ♂♂ 114 ♀♀ (It); Tușnadu Nou, Mîtaci brook, July 29, 1992 1 ♂ (K, UT)

Limnephilus affinis Curtis, 1834 – Sâncraieni, Valea Mare, June 24, 1993 1 ♂ (It).

Limnephilus auricula Curtis, 1834 – Băile Harghita, Harghita Mts., 1500 m, July 10-11, 1970 1 ♀ (B); Minele Bălan, Haghimaș Ciuc, Olt, Oct. 5, 1967 1 ♀ (B); Sândominic, Baboș Loco, July 27, 1992 1 ♀ (K, UT)

Limnephilus bipunctatus Curtis, 1834 – Sâncraieni, Valea Mare, Sept. 6-19, 1993 1 ♂ (It).

Limnephilus coenosus Curtis, 1834 – Sâncraieni, Valea Mare, Sept. 20-21, 1993 1 ♂ (It).

Limnephilus decipiens Kolenati, 1848 – Harghita-Băi, brooks and springs, Aug. 9, 1970 1 ♂ 1 ♀ (B); Harghita-Băi, towards Cabana Mădăraș, Aug. 10, 1970 6 ♂♂ 3 ♀♀ (B); Jigodin-Băi, Olt river, July 21-23, 1977 1 ♂ (B)

Limnephilus extricatus McLachlan, 1865 – Ciceu, „Oltfalu”, Olt river, Aug. 16, 1992 4 ♂♂ 1 ♀, Aug. 19, 1992 4 ♀♀ (K, UT); Miercurea-Ciuc, Olt river, July 15, 1992 2 ♂♂ 2 ♀♀ (N, K, U); Racu, Silaş brook, July 16, 1992 1 ♀ (N, K, U); Sâncrăieni, Valea Mare, July 18, 1992 1 ♀ (N, K, U), July 31, 1992 2 ♂♂ (K, IZ, UT), July 5, 1993 1 ♂, July 21, 1993 1 ♂ 3 ♀♀ (K, IZ), July 23-24, 1993 1 ♂, July 27-28, 1993 1 ♀ (It).

Limnephilus griseus Linnaeus, 1759 – Harghita-Băi, brooks and springs, Aug. 9, 1970 1 ♂ (B); Izvoru Mureşului, Oct. 6, 1967, 1 ♀ (B); Sâncrăieni, Valea Mare, Aug. 5, 1992 6 ♂♂ (IZ), July 5, 1993 3 ♂♂ (K, IZ), Sept. 6-19, 1993 2 ♂♂, Sept. 20-21, 1993 1 ♂ (It).

Limnephilus hirsutus Pictet, 1834 – Ciceu, „Oltfalu”, Olt, Aug. 16, 1992 1 ♂ (K, UT); Fitod, Fitod brook, July 19, 1992 2 ♂♂ (N, K, U)

Limnephilus ignavus McLachlan, 1865 – Sâncraieni, Valea Mare, July 25 – Sept. 21, 1993 3 ♂♂ 1 ♀ (It).

Limnephilus (Colpotaulius) incisus Curtis, 1834 – Miercurea-Ciuc, Olt river, July 15, 1992 1 ♂ (N, K, U)

Limnephilus lunatus Curtis, 1834 – Ciceu, „Oltfalu”, Olt, Aug. 16, 1992 1 ♂ (K, UT); Fitod, Fitod brook, Sept. 17, 1991 2 ♀♀ (K); Racu, Silaş brook, Sept. 26, 1992 1 ♂ 6 ♀♀ (K, UT)

Limnephilus sparsus Curtis, 1834 – Sâncrăieni, Valea Mare, Aug. 5, 1992 2 ♂♂ 1 ♀ (IZ), July 5, 1993 1 ♂ 3 ♀♀ (K, IZ), Sept. 6-19, 1993 3 ♂♂, Sept. 20-21, 1993 2 ♀♀ (It).

Limnephilus stigma Curtis, 1834 – Harghita-Băi, towards Cabana Mădăraş, Aug. 10, 1970 1 ♂ (B); Sâncraieni, Valea Mare, July 27-28, 1993 1 ♂ (It).

Limnephilus vittatus Fabricius, 1798 – Băile Harghita, Harghita Mts., 1500 m, July 10-11, 1970 1 ♀ (B); Harghita-Băi, towards Cabana Mădăraş, Aug. 10, 1970 1 ♂ (B)

Grammotaulius nigropunctatus Retzius, 1783 – Harghita-Băi, brooks and springs, Aug. 9, 1970 1 ♂ (B)

Anabolia (Phacopteryx) brevipennis Curtis, 1834 – Jigodin-Băi, Olt river, July 21-23, 1977 1 ♂ (B); Miercurea-Ciuc, Olt river, July 15, 1992 3 ♂♂ 3 ♀♀ (N, K, U); Sâncrăieni, Valea Mare, July 18, 1992 1 ♀ (N, K, U), July 5, 1993 1 ♂ (K, IZ), July 13, 1993 1 ♂ (It).

Anabolia concentrica Zetterstedt, 1840 – Sept. 6-19, 1993 1 ♂, Sept. 20-21, 1993 1 ♂ (It).

Anabolia furcata Brauer, 1857 – Fitod, Fitod brook, Sept. 17, 1991 12 ♂♂ 1 ♀ (K); Racu, Silaş brook, Aug. 14, 1992 18 ♂♂ 2 ♀♀, Sept. 26, 1992 12 ♂♂ 3 ♀♀ (K, UT); Sândominic, Baboş Loko, Aug. 15, 1992 1 ♂ (K, UT)

Potamophylax cingulatus Stephens, 1837 – Sâncrăieni, Valea Mare, Aug. 5, 1992 1 ♂ (IZ), July 4 – Asept. 21, 1993 61 ♂♂ 7 ♀♀ (It).

Potamophylax latipennis Curtis, 1834 – Ciceu, „Oltfalu”, Olt river, Aug. 19, 1992 1 ♂ (K, UT); Harghita-Băi, forester's house („Piricske-p.”), July 17, 1992 2 ♂♂ (N, K, U, IZ); Sâncrăieni, Valea Mare, July 31, 1992 2 ♂♂ 3 ♀♀ (K, IZ, UT), Sept. 6-19, 1993 13 ♂♂, Sept. 20-21, 1993 17 ♂♂ (It).

Potamophylax luctuosus Piller & Mitterpacher, 1793 – Sâncrăieni, Valea Mare, June 21, 1993 14 ♂♂ 45 ♀♀, July 5, 1993 26 ♂♂ 15 ♀♀, July 21, 1993 3 ♂♂ 3 ♀♀ (K, IZ), June 21 – Aug. 9, 1993 94 ♂♂ 319 ♀♀ (It).

Potamophylax nigricornis Pictet, 1834 – Harghita-Băi, forester's house („Piricske-p.”), July 17, 1992 3 ♀♀ (N, K, U, IZ); Sâncraieni, Valea Mare, July 9, 1993 1 ♂, Aug. 10-11, 1993 1 ♂ (It).

Potamophylax rotundipennis Brauer, 1857 – Sândominic, Baboş Loco, July 27, 1992 1 ♂, Aug. 15, 1992 1 ♂ (K, UT)

Halesus digitatus Schrank, 1781 – Sept. 6-19, 1993 14 ♂♂ 14 ♀♀, Sept. 20-21, 1993 15 ♂♂ 38 ♀♀ (It).

Halesus tessellatus Rambur, 1842 – Sâncrăieni, Valea Mare, July 5, 1993 1 ♀ (K, IZ)

Melampophylax nepos triangulifera Botosaneanu, 1960 – Harghita-Băi, towards Cabana Mădăraş, Oct. 14, 1970 35 ♂♂ (B)

Stenophylax (Micropterna) lateralis Stephens, 1837 – Sâncraieni, Valea Mare, July 10, 1993 1 ♂ (It).

Stenophylax meridionalis Malicky, 1980 – Sâncraieni, Valea Mare, Sept. 6-19, 1993 1 ♂ (It).

Stenophylax permistus McLachlan, 1895 – Sâncraieni, Valea Mare, June 24, 1993 1 ♀ (It).

Allogamus dacicus Schmid, 1951 – Harghita-Băi, towards Cabana Mădăraş, Oct. 14, 1970 7 ♂♂ 1 ♀ (B)

Chaetopteryx biloba Botoşăneanu, 1960 – Harghita-Băi, brooks and springs, Oct. 13, 1970 3 ♂♂ (B)

Chaetopteryx bosniaca cissylvanica Botoşăneanu, 1960 – Dăneşti, Groapa Apei, [July 19, 1992] 1 ♀ (N, K, U); Harghita-Băi, brook towards Miercurea-Ciuc, Oct. 31 + Nov. 8, 1971, 3 ♂♂ 1 ♀ (B)

Chaetopteryx sahlbergi McLachlan, 1876 – Dăneşti, Groapa Apei, [July 19, 1992] 1 ♂ (N, K, U);

Annitella lateroproducta Botosaneanu, 1952 – Sâncraieni, Valea Mare, Sept. 6-19, 1993 67 ♂♂, Sept. 20-21, 1993 17 ♂♂ (It).

Annitella obscurata McLachlan, 1876 – Sâncraieni, Valea Mare, Sept. 6-19, 1993 201 ♂♂, Sept. 20-21, 1993 42 ♂♂ (It).

Goeridae

Goera pilosa Fabricius, 1775 – Racu, Silaş brook, July 16, 1992 1 ♂ (N, K, U);

Lithax obscurus Hagen, 1859 – Miercurea-Ciuc, Băile Chirui, July 15, 1992 3 ♂♂ 1 ♀ (N, K, U);
Silo graellsii E. Pictet, 1865 – Balăn, Gal Cut, July 17, 1992 1 ♂ (N, K, U); Bălan, „Szép-patak”, July 17, 1992 1 ♂ 1 ♀ (N, K, U); Cârța, „Köves-patak”, Aug. 2, 1992 2 ♀♀ (K, UT); Harghita-Băi, 900 m, Capolnaș brook, July 15, 1992 23 ♂♂ 6 ♀♀ (N, K, U); Harghita-Băi, forester's house („Piricske-p.”), July 17, 1992 1 ♂ (N, K, U, IZ); Harghita-Băi, „Fűrész-patak”, July 15, 1992 3 ♂♂ 1 ♀ (N, K, U); Jigodin-Băi, outflow of gravel pits, June 20, 1993 1 ♀ (UL); Sâncrăieni, Valea Mare, July 20, 1992 1 ♂ 3 ♀♀ (N, K, U), July 31, 1992 2 ♂♂ 1 ♀ (K, IZ, UT), Aug. 5, 1992 2 ♂♂ (IZ), June 21, 1993 8 ♂♂ 3 ♀♀, July 5, 1993 7 ♂♂, July 21, 1993 25 ♂♂ 26 ♀♀ (K, IZ), June 21 – Aug. 11, 1993 137 ♂♂ 103 ♀♀ (It); Sândominic, Baboș Loco, July 27, 1992 3 ♂♂ ♀ (K, UT); Tușnadu Nou, Mitaci brook, July 29, 1992 1 ♂ (K, UT)

Silo piceus Brauer, 1857 – Fitod, Fitod brook, Aug. 7, 1992 1 ♂ (K, UT); Izvoare, Ivo brook, July 14, 1983 ♀ (Á); Sâncrăieni, Valea Mare, July 5, 1993 1 ♂ (K, IZ), June 22, 1993 2 ♂♂, June 24, 1993 1 ♀, July 13, 1993 1 ♀ (It).

Lepidostomatidae

Lepidostoma hirtum Fabricius, 1781 – Racu, Silaș brook, July 16, 1992 3 ♂♂ 2 ♀♀ (N, K, U); Sâncrăieni, Valea Mare, July 18, 1992 4 ♂♂ (N, K, U), July 5, 1993 1 ♂, July 21, 1993 1 ♀ (K, IZ), July 17 – Aug. 7, 1993 4 ♂♂ 5 ♀♀ (It).

Leptoceridae

Athripsodes bilineatus Linnaeus, 1758 – Sândominic, Baboș Loco, July 27, 1992 7 ♂♂ 2 ♀♀ (K, UT)
Ceraclea dissimilis Stephens, 1836 – Miercurea-Ciuc, Olt river, July 15, 1992 1 ♂ (N, K, U); Sâncrăieni, Valea Mare, July 5, 1993 3 ♂♂ (K, IZ)
Mystacides nigra Linnaeus, 1758 – Dănești, Modicia brook, July 19, 1992 3 ♂♂ 2 ♀♀ (N, K, U), Aug. 2, 1992 1 ♂ (K, UT); Racu, Silaș brook, July 16, 1992 12 ♂♂ 1 ♀ (N, K, U); Aug. 14, 1992 22 ♂♂ 10 ♀♀ (K, UT)
Ylodes (Triaenodes) simulans Tjeder, 1929 – Sândominic, Baboș Loco, July 27, 1992 1 ♀ (K, UT)
Leptocerus tineiformis Curtis, 1834 – Miercurea-Ciuc, Olt river, July 15, 1992 1 ♀ (N, K, U);
Adicella filicornis Pictet, 1834 – Sâncrăieni, Valea Mare, June 21, 1993 1 ♀, July 5, 1993 1 ♀ (K, IZ)

Sericostomatidae

Oecismus monedula Hagen, 1859 – Balăn, Gal Cut, July 17, 1992 1 ♂ (N, K, U); Cârța, „Köves-patak”, Aug. 2, 1992 2 ♂♂ 1 ♀ (K, UT); Harghita-Băi, „Fűrész-patak”, July 15, 1992 1 ♂ (N, K, U); Miercurea-Ciuc, Băile Chirui, July 15, 1992 1 ♂ (N, K, U); Sâncrăieni, Valea Mare, July 31, 1992 2 ♂♂ 2 ♀♀ (K, IZ, UT), July 21, 1993 3 ♂♂ 2 ♀♀ (K, IZ), July 12 – Aug. 7, 1993 12 ♂♂ 10 ♀♀ (It); Sântimbru, Chendreș brook, July 20, 1992 2 ♀♀ (U, N, K).

Sericostoma flavicorne Schneider, 1845 – Sâncrăieni, Valea Mare, July 18, 1992 32 ♂♂ 133 ♀♀, July 20, 1992 1 ♀ (N, K, U), July 31, 1992 43 ♂♂ 2 ♀♀ (K, IZ, UT), July 5, 1993 187 ♂♂ 140 ♀♀, July 21, 1993 139 ♂♂ 61 ♀♀ (K, IZ), June 21 – Aug. 11, 1993 114 ♂♂ 142 ♀♀ (It); Sântimbru, „Bánya-patak”, July 20, 1992 1 ♀ (U, N, K); Tușnadu Nou, Mitaci brook, July 29, 1992 2 ♂♂ (K, UT)

Sericostoma personatum Kirby & Spence, 1848 – Harghita-Băi, forester's house („Piricske-p.”), July 17, 1992 1 ♀ (N, K, U, IZ); Miercurea-Ciuc, Olt river, July 15, 1992 6 ♂♂ (N, K, U); Sâncrăieni, Valea Mare, July 18, 1992 1 ♀ (N, K, U), June 21, 1993 6 ♀♀ (K, IZ), June 21 - July 24, 1993 7 ♂♂ 4 ♀♀ (It).

Beraeidae

Beraea pullata Curtis, 1834 – Balăn, Gal Cut, July 17, 1992 4 ♂♂ 1 ♀ (N, K, U); Băile Harghita, Harghita Mts., 1500 m, July 10-11, 1970 7 ♂♂ 1 ♀ (B); Harghita-Băi, 900 m, Capolnaș brook, July 15, 1992 1 ♂ (N, K, U); Jigodin-Băi, outflow of gravel pits, June 20, 1993 1 ♂ (UL)

Odontoceridae

Odontocerum albicorne Scopoli, 1763 – Potiond, Fenioved Vize, July 31, 1992 3 ♂ (K, UT); Sâncrăieni, Valea Mare, July 18, 1992 1 ♂ (N, K, U), July 31, 1992 5 ♂♂ (K, IZ, UT), July 5, 1993 1 ♂ 2 ♀♀, July 21, 1993 2 ♂♂ 2 ♀♀ (K, IZ), July 1 – Aug. 7, 1993 3 ♂♂ 3 ♀♀ (It); Tușnadu Nou, Mitaci brook, July 29, 1992 1 ♂ (K, UT)

Odontocerum hellenicum Malicky, 1972 – Harghita-Băi, 900 m, Capolnaș brook, July 15, 1992 1 ♂ (N, K, U)

Some faunistical comments

Anabolia concentrica Zett. Northern species with Euro-siberian distribution. It was recorded from Fennoscandinavia, in the Baltic States and in NW Russland in Europe (BOTOSANEANU, MALICKY 1978, ANDERSEN, WIBERG-LARSEN 1987). Although BOTOSANEANU and MALICKY (1978) mentioned its occurrence from the Carpathians, neither NOVÁK and OBR (1977), nor RIEDEL (1962) recorded it from this region. Two specimens were captured by the light trap at Sâncrăieni. It is a new species for the Romanian fauna.

Rhyacophila doehleri Bots. This species occurs only in the Northern and Eastern Carpathians. We identified a male specimen collected by L. Botosaneanu in the Harghita Mountains. This adult is deposited in the Zoological Museum, University of Amsterdam.

Rhyacophila torrentium Pict. CIUBUC's (1993) list does not contain this species, but he mentioned *Rh. valkanovi* Bots. from few sites. According to BOTOSANEANU's (1995) recent investigations, *Rhyacophila armeniaca* and *Rh. valkanovi* are identical with *Rh. torrentium*. Thus they are synonyms of *Rh. torrentium*. The former literature (BOTOSANEANU, MALICKY 1978) mentioned *Rh. armeniaca* as bona species living in the Balkans and Caucasus. Based on morphologic character we also determined the *torrentium*-specimens as *armeniaca* originated from the Ciuc Basin as well as from the region of Caucasus (NÓGRÁDI, UHERKOVICH 1992, 1994).

Glossosoma discophorum Klap. According to BOTOSANEANU (1995) it is a very rare member of the Roumanian fauna. Along a tributary of river Olt (Valea Mare = "Nagyos-patak") it proved to be frequent. The distinguishing of four *Glossosoma*-species occurring in the area examined sometimes is not easy, mostly the characteristic features of females are examinable with difficulty. On the Figs. 2 and 3 the most important difference and characteristics of four species can be study.

Hydroptila angustata Mos. CIUBUC (1993) did not list the species, it was mentioned by BOTOSANEANU (1995) from Dobrogea as new for the Romanian fauna.

Apatania carpathica Schmid. The taxon *A. motasi* Bots. turned to be an older available name, so *A. carpathica* is a synonym (BOTOSANEANU 1995).

Anabolia (Phacopteryx) brevipennis Curt. According BOTOSANEANU (1995) is a very rare species. It was generally found a single specimen in each sample. Along the River Olt we captured three males and three females during a night collection and we suppose that the species is not rare in the marshy lands of the Upper and the Central Olt Basin. In Hungary this species is expanding during the last decade.

Chaetopteryx bosniaca cyssilvanica Bots. The taxon was described as *Chaetopteryx cyssilvanica*, very recently it was synonymized with *Ch. bosniaca* by MALICKY (1994). On the other hand BOTOSANEANU (1993, 1995) regards as a geographical race, the subspecies of *Ch. bosniaca* Marinković, 1955.

Odontocerum hellenicum Mal. Its occurrence was questioned, but CIUBUC (1995) confirmed listing some Romanian localities of the species. We also caught an adult in the Harghita Mts.

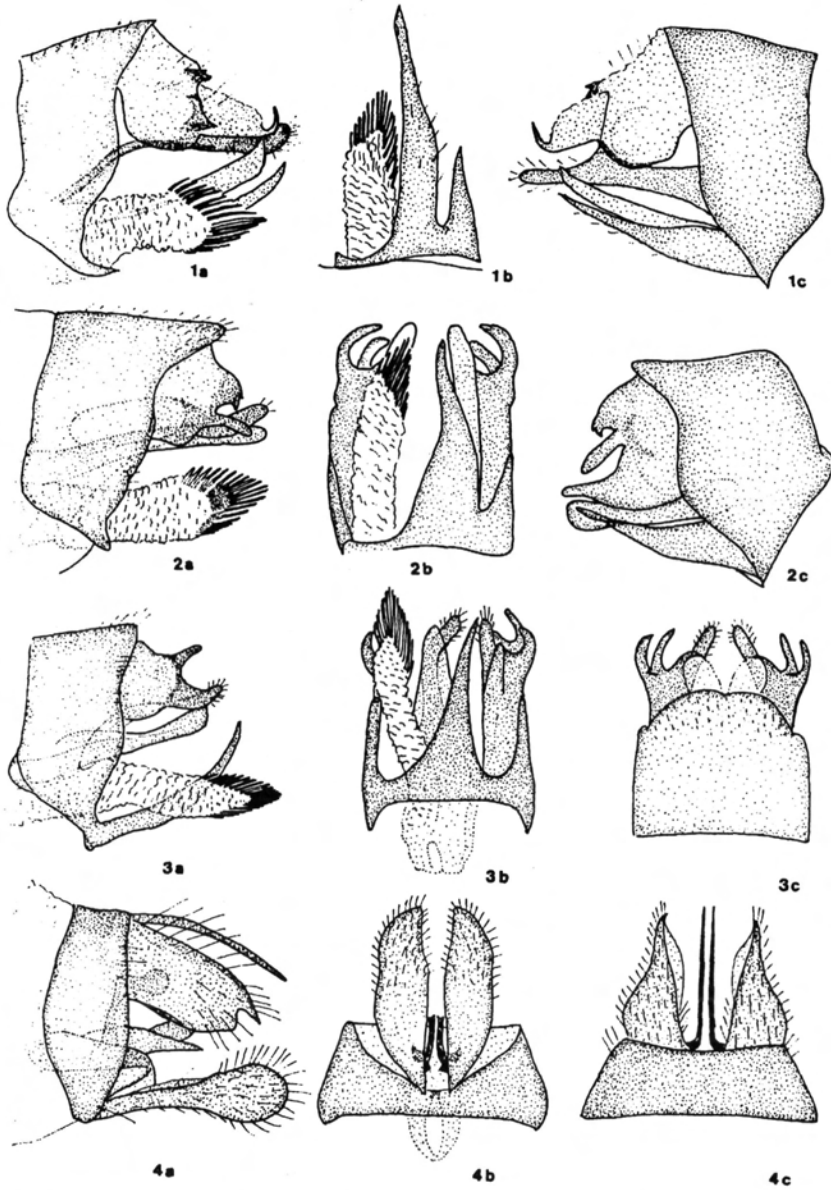


Fig. 2. Abdomen of the male of four *Glossosoma* species occurring in the Ciuc Basin. 1: *Glossosoma boltoni* Curt. lateral, left side (a), ventral (b), lateral, right side (c); 2: *Glossosoma conformis* Neboiss lateral, left side (a), ventral (b), lateral, right side (c); 3: *Glossosoma discophorum* Klap. lateral, left side (a), ventral (b), dorsal (c); 4: *Glossosoma intermedia* Klap. lateral, left side (a), ventral (b), dorsal (c).

2. ábra. A Csíki-medencében előforduló négy *Glossosoma* faj hímjének potrohvége. 1: *Glossosoma boltoni* Curt. bal oldalról (a), alulról (b), jobb oldalról (c); 2: *Glossosoma conformis* Neboiss bal oldalról (a), alulról (b), jobb oldalról (c); 3: *Glossosoma discophorum* Klap. bal oldalról (a), alulról (b), felülről (c); 4: *Glossosoma intermedia* Klap. bal oldalról (a), alulról (b), felülről (c).

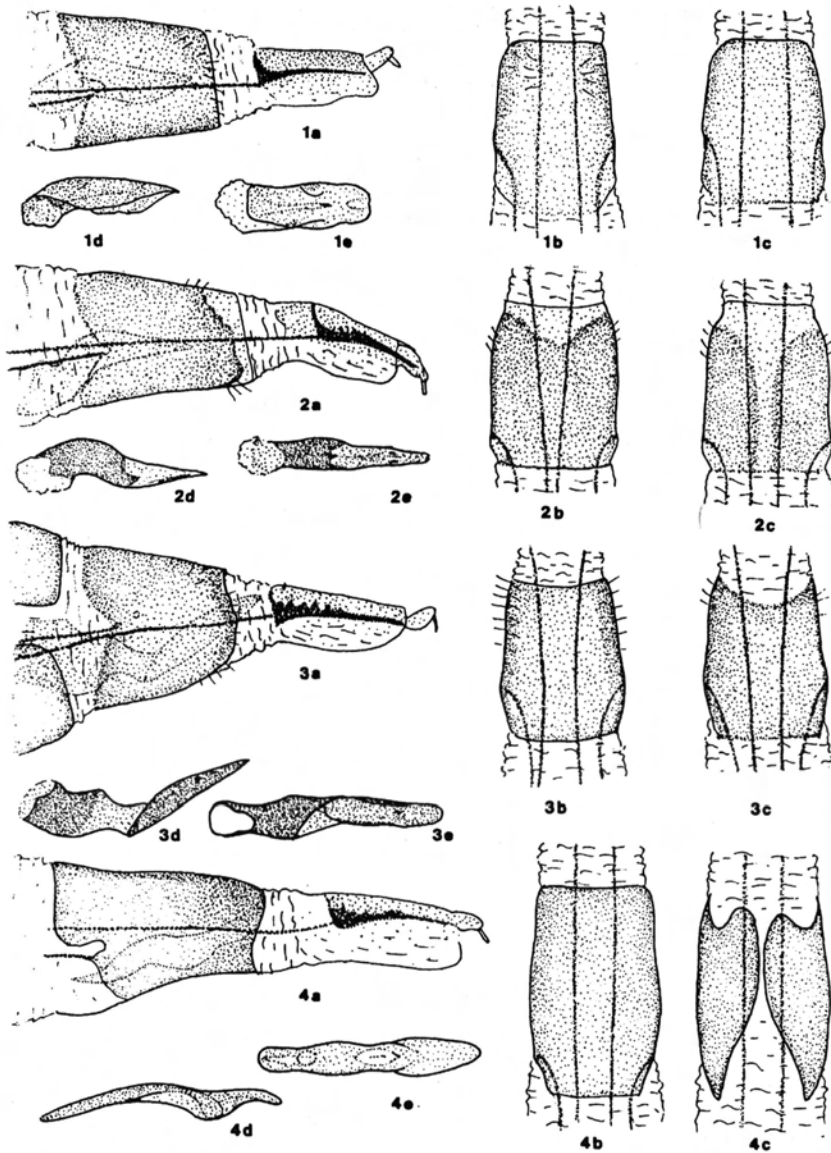


Fig. 2. Abdomen of the female of four *Glossosoma* species occurring in the Ciuc Basin. 1: *Glossosoma boltoni* Curt., 2: *Glossosoma conformis* Neboiss, 3: *Glossosoma discophorum* Klap., 4: *Glossosoma intermedia* Klap.; a: lateral, b: ventral, c: dorsal, bursa copulatrix lateral (d) and dorsal (e).

2. ábra. A Csíki-medencében előforduló négy *Glossosoma* faj nőstényének potrohvége. 1: *Glossosoma boltoni* Curt., 2: *Glossosoma conformis* Neboiss, 3: *Glossosoma discophorum* Klap., 4: *Glossosoma intermedia* Klap.; a: oldalról, b: alulról, c: felülől, a bursa copulatrix oldalról (d) és felülől (e).

Table 1. Summarized list of the Trichoptera material captured by the light trap at Sâncrăieni, Valea Mare, 1993

1. Táblázat. Sâncrăieni, Valea Mare lelőhelyen álló fénycsapda (1993) által fogott Trichopterák összesített listája.

Species	number of occurrences	number of			p. c.
		♂♂	♀♀	Σ	
<i>Agapetus delicatulus</i> McL.	15	80	96	176	4.01
<i>Agapetus ochripes</i> Curt.	11	18	25	43	0.98
<i>Agrypnia varia</i> F.	5	1	6	7	0.16
<i>Anabolia (Phacopteryx) brevipennis</i> Curt.	1	1	0	1	0.02
<i>Anabolia concentrica</i> Zett.	2	2	0	2	0.05
<i>Annitella lateroproducra</i> Bots.	2	84	0	84	1.91
<i>Annitella obscurata</i> McL.	2	243	0	243	5.54
<i>Cheumatopsyche lepida</i> Pict.	3	0	7	7	0.16
<i>Cyrnus trimaculatus</i> Curt.	1	0	1	1	0.02
<i>Drusus brunneus</i> Klap.	3	2	1	3	0.07
<i>Drusus discolor</i> Ramb.	1	1	0	1	0.02
<i>Ecclisopteryx dalecarlica</i> Kol.	1	0	1	1	0.02
<i>Ecclisopteryx madida</i> McL.	11	77	114	191	4.35
<i>Glossosoma boltoni</i> Curt.	9	9	5	14	0.32
<i>Glossosoma conformis</i> Neboiss	28	126	127	253	5.76
<i>Glossosoma discophorum</i> Klap.	18	46	48	94	2.14
<i>Glossosoma intermedia</i> Klap.	2	2	0	2	0.05
<i>Halesus digitatus</i> Schrank.	2	29	52	81	1.85
<i>Hydropsyche instabilis</i> Curt.	23	314	0	314	7.15
<i>Hydropsyche pellucidula</i> Curt.	2	3	0	3	0.07
<i>Hydropsyche saxonica</i> McL.	10	19	1	20	0.46
<i>Hydropsyche</i> sp. indet.	22	0	596	596	13.58
<i>Hydropsyche tabacarii</i> Bots.	2	7	0	7	0.16
<i>Hydroptila angustata</i> Mosely	1	0	1	1	0.02
<i>Hydroptila forcipata</i> Eaton	2	1	2	3	0.07
<i>Hydroptila lotensis</i> Mosely	1	0	1	1	0.02
<i>Lepidostoma hirtum</i> F.	6	4	5	9	0.21
<i>Limnephilus affinis</i> Curt.	1	1	0	1	0.02
<i>Limnephilus bipunctatus</i> Curt.	1	1	0	1	0.02
<i>Limnephilus coenosus</i> Curt.	1	1	0	1	0.02
<i>Limnephilus extricatus</i> McL.	2	1	1	2	0.05
<i>Limnephilus griseus</i> L.	2	3	0	3	0.07
<i>Limnephilus ignavus</i> McL.	4	3	1	4	0.09
<i>Limnephilus sparsus</i> Curt.	2	3	2	5	0.11
<i>Limnephilus stigma</i> Curt.	1	1	0	1	0.02
<i>Lype reducta</i> Hag.	2	0	2	2	0.05
<i>Odontocerum albicorne</i> Scop.	5	3	3	6	0.14
<i>Oecismus monedula</i> Hag.	10	12	10	22	0.50
<i>Philopotamus montanus</i> Don.	20	50	129	179	4.08
<i>Philopotamus variegatus</i> Scop.	20	246	67	313	7.13
<i>Plectrocnemia conspersa</i> Curt.	13	17	2	19	0.43
<i>Polycentropus flavomaculatus</i> Pict.	1	1	0	1	0.02
<i>Potamophylax cingulatus</i> Steph.	6	61	7	68	1.55
<i>Potamophylax latipennis</i> Curt.	2	30	0	30	0.68
<i>Potamophylax luctuosus</i> Piller & Mitt.	24	94	319	413	9.41
<i>Potamophylax nigricornis</i> Pict.	2	2	0	2	0.05
<i>Psychomyia pusilla</i> F.	4	3	10	13	0.30

Species	number of occurrences	number of			p. c.
		♂♂	♀♀	Σ	
<i>Rhyacophila aquitana</i> McL.	1	2	0	2	0.05
<i>Rhyacophila fasciata</i> Hag.	28	211	19	230	5.24
<i>Rhyacophila mocsaryi</i> Klap.	20	99	2	101	2.30
<i>Rhyacophila nubila</i> Zett.	22	81	42	123	2.80
<i>Rhyacophila obliterata</i> Zett.	2	85	0	85	1.94
<i>Rhyacophila philopotamoides</i> McL.	1	1	0	1	0.02
<i>Rhyacophila polonica</i> McL.	11	73	6	79	1.80
<i>Rhyacophila tristis</i> Pict.	5	5	3	8	0.18
<i>Sericostoma flavicorne</i> Schneider	17	114	142	256	5.83
<i>Sericostoma personatum</i> Kirby & Spence	8	7	4	11	0.25
<i>Silo graellsii</i> E. Pictet	23	137	103	240	5.47
<i>Silo pallipes</i> F.	1	0	1	1	0.02
<i>Silo piceus</i> Brau.	2	0	3	3	0.07
<i>Stenophylax (Micropterna) lateralis</i> Steph.	1	1	0	1	0.02
<i>Stenophylax meridionalis</i> Mal.	1	1	0	1	0.02
<i>Stenophylax permistus</i> McL.	1	0	1	1	0.02
<i>Synagapetus mosely</i> Ulm.	1	0	1	1	0.02
<i>Tinodes rostocki</i> McL.	1	0	1	1	0.02
altogether 64 species	450	2419	1970	4389	100.00

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Vizsgálatok a Csíki-medence és a Hargita (Románia) tegzés (Trichoptera) faunáján

UJVÁROSI LUJZA, NÓGRÁDI SÁRA és UHERKOVICH ÁKOS

A Csíki-medence és a Hargita-hegység területéről először a századforduló táján közöltek tegzes adatokat (KLAPÁLEK 1898, 1899, MOCSÁRY 1900, PONGRÁCZ 1914). Ezután hosszú ideig nem folytak ott kutatások, csak a hatvanas évektől gyűjtött ott és közölt adatokat BOTOSANEANU (1961, 1971, 1975), valamint BOTOSANEANU és SCHNEIDER (1978). CIUBUC (1993) romániai faunalistájában 277 faj előfordulásáról számolt be – ezekből szerinte 29 előfordul a vizsgálati területünkön is –, azonban munkája számos fogyatékossgot tartalmazott, mint ahogy arra BOTOSANEANU (1995) közelmúltban megjelent munkája is rámutatott.

Jelen cikk szerzői 1991-ben kezdték gyűjtő- és feldolgozó munkájukat a Csíki-medencében és a Hargita-hegységben, részben közös terepmunkával és az adatok, határozások ellenőrzésével. Emellett feldolgozták az amszterdami egyetemi zoológiai múzeum Lazare Botosaneanu által elküldött néhány mintáját is, valamint Izsák Zoltán Miercurea-Ciuc (Csíkszereda) környéki gyűjtéseinek tegzéseit is. Az anyag tekintélyes részét – összesen 4389 példányt – a Sâncraieni (Csíkszentkirály) mellett felállított fénycsapda fogta, e csapda anyagában 64 fajt találtak.

A jelenben is folyó vizsgálatok során – amelyek a Csíki-medence és a Hargita-hegység Trichoptera faunáját hivatottak megalapozni – eddig összesen 104 faj jelenléte bizonyosodott be.

A romániai faunára újnak bizonyult az *Anabolia concentrica* Zetterstedt. Emellett számos, országszerte ritka vagy taxonómiailag újabban tisztázott faj került elő, például *Rhyacophila doehleri* Bots., *Rhyacophila torrentium* Pict. (amely faj a *Rh. armeniaca* szinonimájának bizonyult), *Glossosoma discophorum* Klap., *Hydroptila angustata* Mos., *Apatania carpathica* Schmid., *Anabolia (Phacopteryx) brevipennis* Curt., *Chaetopteryx bosniaca cyssilvanica* Bots. (amely taxont eredetileg önálló fajként írtak le s csak újabban bizonyosodott be, hogy egy korábban leírt faj egyik alfaja) és *Odontocerum hellenicum* Mal.

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Authors' address:

Mrs. Lujza Ujvárosi
Department of Zoology
Babeș-Bolyai University
5-7 Clinicilor
RO-3400 Cluj
ROMANIA

Dr. Sára Nógrádi & Dr. Ákos Uherkovich
Natural History Department
Janus Pannonius Museum
H-7601 Pécs
P. O. Box 347
HUNGARY