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A study of the Trichoptera of the Szalajka Valley near Szilvásvárad as indicated by light trap material

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ABSTRACT: (Untersuchung über die Trichoptera des Szalajka-Tales bei Szilvásvárad auf Grund des mit Hilfe einer Lichtfalle gesammelten Materials.) Der Verfasser untersuchte das Material der vom Mátra-Museum im Jahre 1980 im Szalajka-Tal bei Szilvásvárad betatigten lichtfalle und es wurden 46 Arten gefunden, darunter die *Allotrichia pallicornis* EATON, die in der Fauna Ungarns neu ist, sowie die Arten *Plectrocnemia brevis* Mac LACHLAN, *Neuronia ruficrus* SCOPOLI und *Limnephilus stigma* CURTIS, die früher im Bükk-Gebirge nach nicht gesammelt worden waren. Die Angaben bezeichnen die Flugperioden der einzelnen Arten, die Individuenzahl, die Dominanzperhaltnisse und die Verteilung der Arten je Familie. Auf Grund der Flugperioden werden 3 Aspekte abgesondert. Auf Grund der ökoligschen und tiergeographischen Eigenarten werden die Faunenkomponenten in die nachstehenden Verbreitungsgrundtypen eingereiht: boreale, mitteleuropaische, europaische, holarktische, palearktische und eurosibirische Arten.

Trichoptera in the Bükk Mountains were first collected by SÁTORI. It is the collecting work carried out from time to time by J. JABLONKAY and the National Light Trap Network that has been neteworthy since 1950 and the speies collected by them were indentified by S. ÚJHELYI. From time to time S. ÚJHELYI, K. PETRICH, M. RESKOVITS, S. TÓTH, A. VARGA, L. ZÖLD, J. OLÁH, mrs. OLÁH, Z. VARGA, H. STEINMANN, B. SZABÓ and the author also collected there. In the northern Szalajka Valley of cool microclimate the Mátra Museum continuosly had a light trap operated for capturing imagos of Trichoptera from March 15 — Nov. 15, 1980. The light trap was situated on the territory of the trout-farm, which is entirely shaded by *Alnus glutinosa* L. GART. and on the banks of the stream *Petasitetum hybridi* DOST. can be found. The height of the loca lity is 400 m above sea-level.

METHOD OF COLLECTING AND PRESERVING

The light trap used consists of a 125-watt mercury vapour lamp and a protecting corver of 1 m in diameter. Under the lamp there is a collecting funnel, it is 40 cm in diameter, and leads into a glass bin. The distance between the corver and the funnel is 40 cm. Pure chloroform was used as killing agent and it was kept in a glass vial placed in the glass bin. The gradually evaporating chloroform acted as leathal agent all night. The light trap was handled by the leader of the troutfarm, G. SÁFRÁNY. The material caught was transported in boxes almost full of cotton-wool and

its quality can be considered good – with the exception of those specimens trapped on rainy days. The imagos are stored in microvials filled with isopropil alcohol and can be found in the Mátra Museum.

CONCLUSIONS

During the one-year operation of the light trap 4315 specimens of 46 species were caught and values of dominance for species were calculated. Of the 46 species the larvae of 20 species had been collected in 1974/75.

FLIGHT PERIODS

RHYACOPHILIDAE

1. *Rhyacophila fasciata* HAGEN: May 10, 1♀; May 16—20, 1♂; May 18—28, 2♂, 1♀; Jun 7, 1♂; Jun 9, 3♂; Jun 10, 2♀; Jun 11, 1♂, 3♀; Jun 13, 2♂, 1♀; Jun 14, 2♂, 1♀; Jun 15, 1♀; Jun 16, 2♂, 2♀; Jun 18, 1♂; Jun 19, 1♂; Jun 20, 2♂, 1♀; Jun 21, 2♂, 1♀; Jun 22, 1♂; Jun 23, 1♂; Jun 24, 1♀; Jun 25, 2♂, 1♀; Jun 26, 1♂; Jul 5—6, 3♂; Jul 7, 1♂; Jul 8, 1♂; Jul 11, 1♂; Jul 17, 1♂; Aug 1, 1♂; Aug 2, 2♂; Aug 3, 1♀; Aug 7, 1♂; Aug 29, 1♂; Aug 30, 1♂; Aug 31, 5♂; Sept 2, 2♂; Sept 7, 1♂; Sept 10, 1♂; Sept 15, 1♂; Sept 22, 1♂, 4 ♀; Sept 23, 4♂, 1♀; Sept 25, 1♂; Sept 28, 1♂; Sept 29, 1♂; Oct 2, 1♂; Oct 3, 2♂, 1♀; Oct 9, 4♂; Oct 10, 2♂; Oct 12, 1♂; Oct 13, 6♂, 1♀; Oct 15, 2♂; Oct 17, 3♂; Oct 19, 3♂; Oct 20, 2♂; Oct 22, 3♂, 1♀; Oct 25, 5♂. The most widely distributed representative of its genus in the mountainous regions of Hungary.

2. *Rhyacophila obliterata* Mac LACHLAN: Aug 2, 1♂; Aug 15, 1♂; Aug 20—21, 1♂; Aug 31, 1♂, 1♀; Sept 1, 2♂; Sept 2, 2♂; Sept 5, 1♂; Sept 7, 2♂; Sept 8, 1♂; Sept 9, 3♂; Sept 10, 2♂, 2♀; Sept 11, 2♂; Sept 13, 2♂; Sept 14, 7♂; Sept 15, 4♂; Sept 16, 9♂; Sept 17, 3♂; Sept 18, 3 ♂; Sept 19, 6♂; Sept 26, 9♂; Sept 27, 6♂; Sept 28, 6♂; Sept 29, 3♂; Sept 30, 2♂; Oct 2, 8♂; Oct 3, 4♂; Oct 5, 4♂; Oct 7, 5 ♂, Oct 9, 8♂, 4♀; Oct 10, 2♂; Oct 12, 2♂; Oct 13, 44♂, 1♀; Oct 15, 4♂; Oct 16, 14♂; Oct 17, 3♂, 1♀; Oct 18, 1♀; Oct 19, 23♂; Oct 20, 5♂; Oct 22, 5♂; Oct 23, 5♂;Oct 24, 1♂, 2♀; Oct 25, 11♂; Oct 26, 1♂; Oct 29 1♂. Similarly to the above-mentioned one it is frequently found in the mountainous regions of Hungary.

3. *Rhyacophila tristis* PICTET: Jun 15, 2♂; Jun 19, 1♂; Jul 10, 1♂; Jul 17, 2♂; Jul 21, 1♂; Aug 1, 1♂; Aug 9, 1♀; Aug 10, 1♂; Aug 15, 1♂; Aug 17, 1♀; Aug 22, 1♂; Aug 30, 3♂. Its sites of occurence indicate a Central-European alpine distribution. FELBER mentioned it among the species of subalpine type. It is not present in boreal areas. The northern frontier of its distribution is the German Central Range of Mountains while its eastern frontier is constituted by the Charpathians.

4. *Rhyacophila pubescens* PICTET: Jul 29, 1♂; Aug 2, 1♀; Aug 5, 2♂; Aug 10, 1♂; Aug 31, 1♀; Oct 8, 1♂. A Central-European species, Hungary is the easternmost region of its distribution.

Synagapetus Mac LACHLAN genus has become known from the territory of Hungary in the past decade only, and several of its species have been collected by J. OLÁH and Z. VARGA. *Synagapetus mosely* ULMER is present in Rumania, Czechoslovakia and Austria and was collected in the Vörös-kő Valley and Szentléleki Valley as well as the Vadász Valley in Hungary by J. OLÁH and Z. VARGA.

5. *Synagapetus mosely* ULMER: Jun 15, 1♀; Jun 17, 1♀.

HYDROPTILIDAE

6. *Allotrichia pallicornis* EATON: Jun 16, 1♀; Jun 17, 1♀; Jun 19, 1♂. Distributed from Algeria to Poland, present in France, Germany, Yugoslavia and Rumania as well. *It is new to the fauna of Hungary.*

HYDROPSYCHIDAE

7. *Hydropsyche fulvipes* CURTIS: Jul 7, 1♂; Jul 9, 1♂.

8. *Hydropsyche angustipennis* CURTIS: Jun 28, 1♀; Jul 4, 1♂; Jul 8, 8♀; Jul 9, 1♂, 8♀.

9. *Hydropsyche guttata* PICTET: Jul 29, 1♀; Aug 6, 2♀.

10. *Hydropsyche instabilis* CURTIS: Jun 14, 3♂, 3♀; Jun 15, 6♀; Jun 16, 1♂, 11♀; Jun 18, 3♀; Jun 19, 1♀; Jun 20, 3♀; Jun 21, 9♀; Jun 22, 4♀; Jun 23, 6♀; Jun 26, 1♂; Jun 27, 2♀; Jun 30, 1♂; Jul 9, 2♂; Jul 10, 3♂, 5♀; Jul 11, 1♂, 2♀; Jul 12, 1♀; Jul 13, 1♀; Jul 15, 6♀; Jul 16, 9♀; Jul 17, 20♂, 20♀; Jul 19, 1♀; Jul 20, 7♂, 3♀; Jul 22, 2♀; Jul 23, 5♀; Jul 25, 16♀; Jul 26, 1♂, 16♀; Jul 27, 41♀; Jul 28, 9♀; Jul 29, 34♀; Jul 31, 77♀; Aug 1, 53♀; Aug 2, 60♀; Aug 3, 17♂, 75♀; Aug 5, 92♂, 125♀; Aug 6, 65♂, 59♀; Aug 7, 49♂, 49♀; Aug 8, 66♀; Aug 9, 2♂, 11♀; Aug 10, 1♂, 58♀; Aug 11, 4♀; Aug 12, 21♂, 20♀; Aug 13, 2♀; Aug 15, 10♂, 78♀; Aug 16, 4♂, 38♀; Aug 17, 28♂, 29♀; Aug 18, 18♂, 9♀; Aug 19, 10♂, 8♀; Aug 20, 8♂, 8♀; Aug 20—21, 3♂, 1♀; Aug 22, 1♂, 2♀; Aug 28, 1♂, 4♀; Aug 29, 6♂, 6♀; Aug 30, 4♂, 10; Aug 31, 300; Sept 2, 10, 50; Sept 6, 100, 100; Sept 8, 20, 10; Sept 10, 10; Sept 23, 10. A common species distributen in Europe and also found in Morocco.

POLYCENTROPODIDAE

11. *Plectrocnemia conspersa* CURTIS: Jun 17, 1♂; Jun 18—24, 1♂; Jul 31, 1♂; Aug 16 1♂. Widely distributed in Europe, more frequently occurring in the North.

12. *Plectrocnemia brevis* Mac LACHLAN: Aug 5, 1♂. Occurred sporadically in Europe (England, the Pyrenees the Alps, Rumania, the Balcans) and was found in the Mátra Mountains by S. ÚJHELYI. *It is new to the Bükk Mountains.*

13. *Polycentropus flavomaculatus* PICTET: May 18—24, 1♂. Distributed in Europe, but also found in Siberia, Japan and North—Africa.

14. *Neureclipsis* sp. (?): Jul 21, 1♂; Aug 31, 1♂. It is characteristic of the northern areas of Europe, the southern frontier of its distribution is Hungary.

PSYCHOMYIDAE

15. *Lype reducta* HAGEN: Jun 16, 2♂; Jul 16, 2♂; Jul 17, 3♂; Aug 5, 5♂; Aug 8, 1♂; Aug 10, 2♂. It is distributed from Portugal and Scandinavia on the coast of the Atlantic Ocean through Central Europe (between Poland and Austria) to the Caucasus. It is freqently occurring in Hungary.

16. *Tinodes* sp. (?): Aug 3, 1♀; Aug 5, 1♀; Aug 6, 1♀; Aug 17, 2♀; Aug 18, 4♀; Aug 20, 1♀; Aug 30, 7♀; Aug 31, 3♀; Sept 1, 3♀.

PHRYGANEIDAE

17. *Oligotricha striata* L. (syn. *Neuronia ruficrus* SCOP.): Jun 10, 2♂; Jun 15, 1♂; Jun 16, 1♂; Jun 24, 1♂. It is a Central-European species, rare in Hungary, found in the Zemplén Mountains, Keszthely and Tihany, *new to the Bükk Mountains.*

LIMNEPHILIDAE

18. *Ecclisopteryx madida* Mac LACHLAN: Sept 14, 1♂; Sept 16, 1♂; Sept 26, 1♂, 1♀; Sept 30, 2♂; Oct 6, 1♂; Oct 7, 1♂; Oct 9, 1♂; Oct 12, 2♀; Oct 13, 1♂, 1♀; Oct 15, 1♂; Oct 16, 7♂; Oct 17, 5♂, 4♀; Oct 19, 1♀; Oct 24, 2♂; Nov 7, 1♀. It is mentioned as occurring in the Mátra Mountains by. S. ÜJHELYI and in the Bükk Mountains by SÁTORI, widely distributed in Europe.

19. *Limnephilus affinis* CURTIS: Oct 15, 1♀; Oct 19, 1♂. It is distributed in the area of the Palearctic, and is *new to the Szalajka Valley.*

20. *Limnephilus auricula* CURTIS: Jun 9, 1♀; Aug 5, 3♂; Aug 6, 1♂; Aug 8, 1♂, 1♀; Aug 9, 1♂, 1♀; Aug 10, 2♂; Aug 15, 1♂; Aug 17, 1♂; Aug 18, 1♂; Aug 20, 1♂; Aug 22, 1♂; Aug 29, 1♂; Aug 31, 3♂, 1♀; Sept 2, 2♂; Sept 7, 1♂; Sept 8, 1♂; Sept 9, 1♂; Sept 11, 1♂; Oct 8, 1♂; Oct 9, 1♂; Oct 10, 1♂; Oct 12, 8♂, 2♀; Oct 13, 3♂; Oct 16, 3♂.

21. *Limnephilus decipiens* KOLENATI: Mar 19, 1♂, 1♀; Oct 12, 1♂. It is a Eurosiberian species.

22. *Limnephilus extricatus* Mac LACHLAN: Aug 14, 1♂; Aug 17, 1♂; Aug 30, 1♂. It is distributed in Northern and Central Europe.

23. *Limnephilus flavicornis* FABR: Jun 15, 1♂; Jun 16, 1♀; Jun 22, 1♂; Jul 3, 1♂; Jul 7, 1♂; Jul 8, 1♂, 1♀; Jul 10, 1♂, 1♀; Jul 16, 1♂; Aug 6, 1♀; Aug 7, 2♀; Aug 9, 1♂; Aug 31, 7♂, 10♀; Sept 1, 1♂; Sept 2, 5♂, 5♀; Sept 7, 2♂; Sept 8, 5♂, 4♀; Sept 9, 2♂, 2♀; Sept 10, 1♂, 3♀; Sept 11, 8♂; Sept 12, 2♂; Sept 13, 2♀; Sept 15, 1♂; Sept 16, 2♀; Sept 19, 1♀; Sept 22, 1♂, 2♀; Sept 23, 2♀; Sept 24, 1♂, 1♀; Sept 25, 1♂; Sept 26, 1♀; Sept 27, 1♀; Oct 8, 2♀; Oct 9, 1♂; Oct 12, 2♂; Oct 13, 2♂, 2♀; Oct 17, 2♂, 1♀.

24. *Limnephilus griseus* LINNÉ: Aug 5, 1♀; Oct 18, 1♂. It occurs in Europe, Greenland and Asia Minor, and is frequent in the mountainous regions of Hungary.

25. *Limnephilus ignavus* Mac LACHLAN: Aug 31, 1♂; Sept 2, 1♂; Sept 8, 1♂, 1♀; Sept 10, 1♂; Sept 16, 1♂; Sept 19, 1♂; Sept 20, 2♂; Sept 22, 1♂; Sept 25, 1♂; Sept 26, 1♂; Oct 8, 5♂; Oct 9, 9♂; Oct 10, 1♂; Oct 12, 3♂; Oct 13, 3♂; Oct 15, 2♂; Oct 16, 1♂; Oct 17, 1♂; Oct 18, 2♀; Oct 22, 1♂; Oct 23, 1♂; Oct 24, 1♂. It is a Western and Central European species and rare in Hungary.

26. *Limnephilus lunatus* CURTIS: Jul 24, 1♀; Jul 25, 1♀; Aug 2, 1♂; Aug 7, 2♂, 1♀; Aug 10, 1♂; Aug 12, 1♂, 3♀; Aug 13, 3♀; Aug 14, 2♂; Aug 15, 5♂, 5♀; Aug 16, 4♂, 3♀; Aug 20, 3♂, 1♀; Aug 30, 1♂, 1♀; Aug 31, 5♂, 3♀; Sept 1, 5♀; Sept 2, 1♂, 2♀; Sept 10, 1♀; Sept 11, 2♂; Sept 13, 1♀; Sept 21, 1♂; Sept 22, 1♂; Sept 23, 1♂, 1♀; Sept 26, 2♂, 1♀; Sept 27, 1♀; Oct 2, 1♂, 1♀; Oct 3, 4♂, 1♀; Oct 8, 7♂; Oct 9, 13♂, 3♀; Oct 12, 20♂, 5♀; Oct 13, 16♂, 16♀; Oct 15, 6♂; Oct 16, 32♂, 2♀; Oct 17, 16♂, 7♀; Oct 18, 1♂, 3♀; Oct 19, 2♂, 5♀; Oct 20 1♂; Oct 21, 8♂, 1♀; Oct 22, 80♂, 9♀; Oct 24, 1♂, 2♀; Oct 25, 9♂, 3♀; Oct 29, 3♂; Nov 5—15, 1♂. It is a European species, comman in Hungary, but also occurs in Algeria and Iran.

27. *Limnephilus rhombicus* LINNÉ: Jun 15, 1♂; Jun 20, 1♂; Jun 23, 1♀; Jun 24, 1♂; Jun 25, 1♂; Jul 4, 1♂; Jul 7, 4♂, 1♀; Jul 8, 2♂, 1♀; Jul 13, 1♂; Jul 16, 3♂; Jul 17, 1♂, 1♀; Jul 20, 1♂; Jul 22, 1♂, 1♀; Jul 24, 1♀; Jul 25, 1♂, 1♀; Jul 26, 1♂; Aug 2 ,1♀; Aug 3, 1♂, 1♀; Aug 5, 2♂; Aug 6, 1♂, 1♀; Aug 7, 1♂, 1♀; Aug 8, 2♂, 1♀; Aug 9, 3♂, 9♀; Aug 10, 3♂, 5♀; Aug 11, 1♂; Aug 12, 2♀; Aug 13, 9♂, 2♀; Aug 14, 1♂, 4♀; Aug 15, 8♂, 15♀; Aug 16, 1♂, 6♀; Aug 17, 4♀; Aug 20, 10♀;

Aug 28, 2♂; Aug 29, 1♀; Aug 30, 6♀; Aug 31, 8♂, 18♀; Sept 1, 1♂, 4♀; Sept 2, 3♂, 10♀; Sept 3, 3♀; Sept 5, 1♀; Sept 6, 3♀; Sept 7, 1♂, 9♀; Sept 8, 2♂, 6♀; Sept 9, 9♀; Sept 10, 1♂, 11♀; Sept 11, 2♂; Sept 12, 4♀; Sept 13, 1♂; Sept 14, 1♀; Sept 16, 1♂, 1♀; Sept 18, 4♀; Sept 19, 3♀; Sept 21, 1♀; Sept 22, 1♂, 3♀; Sept 23, 1♀; Oct 2, 1♂, 2♀; Oct 3, 1♀; Oct 8, 1♀; Oct 9, 1♂, 3♀; Oct 12, 1♂; Oct 13, 1♂; Oct 16, 1♂; Oct 18, 1♀. It is a Palaearctic species, common in Hungary.

28. *Limnephilus stigma* CURTIS: Aug 10, 1♀. It occurs in the northern and central parts of the Palaearctic, *is new to the Bükk Mountains.*

29. *Limnephilus vittatus* FABR.: Aug 9, 1♂; Aug 11, 1♀; Oct 13, 1♂; Oct 22, 1♂, 1♀. It is a common species, a native of Europe and Asia Minor.

30. *Glyphotaulius pellucidus* RETZ.: Jun 17, 1♂; Jul 31, 1♂; Aug 1, 1♂; Aug 31, 1♀; Sept 4, 1♂; Sept 25, 1♂. It is a European species, it was collected in the Bükk Mountains of Hungary by J. SÁTORI.

31. *Anabolia laevis* ZETT.: Sept 22, 1♂; Sept 23, 4♂, 1♀; Sept 26, 2♂; Sept 27, 1♀; Oct 2, 1♂; Oct 3, 4♂; Oct 6, 1♂; Oct 8, 1♂, 2♀; Oct 9, 8♂; Oct 12, 1♂; Oct 13, 2♂; Oct 17, 6♂; Oct 18, 1♂; Oct 19, 1♂.

32. *Potamophylax nigricornis* PICTET: Jun 7, 1♂; Jun 9, 1♂; Jun 14, 1♂; Jun 19, 1♂; Jun 25, 1♂; Jul 5—6, 1♂; Jul 13, 1♂; Aug 5, 1♂; Sept 5, 1♂.

33. *Halesus digitatus* SCHRANK: Aug 2, 2♂; Aug 3, 2♂; Aug 5, 5♂, 1♀; Aug 6, 2♂, 2♀; Aug 8, 2♂; Aug 9, 2♂, 1♀; Aug 11, 2♂; Aug 12, 3♂; Aug 13, 2♀; Aug 14, 1♂; Aug 15, 1♂; Aug 16, 1♂; Aug 29, 2♂; Aug 30, 1♂; Aug 31, 2♂; Sept 2, 2♀; Sept 4, 1♂; Sept 5, 1♂, 1♀; Sept 7, 1♀; Sept 8, 5♂, 1♀; Sept 9, 5♂, 6♀; Sept 10, 6♂; Sept 11, 2♂, 3♀; Sept 12, 2♂; Sept 13, 10♂, 10♀; Sept 15, 2♂, 2♀; Sept 16, 4♂, 3♀; Sept 17, 3♂; Sept 18, 2♂; Sept 19, 1♂; Sept 20, 4♂, 2♀; Sept 21, 6♂; Sept 22, 2♂; Sept 23, 1♂, 2♀; Sept 24, 1♀; Sept 25, 5♂, 9♀; Sept 26, 2♂, 7♀; Sept 27, 2♀; Sept 28, 1♂, 4♀; Sept 29, 2♀; Sept 30, 2♂, 9♀; Oct 2, 3♂, 9♀; Oct 3, 2♂, 4♀; Oct 4, 6♂; Oct 5, 7♂; Oct 6, 12♂, 7♀; Oct 7, 2♂, 1♀; Oct 8, 4♂; Oct 9, 27♂, 21♀; Oct 10, 13♂, 3♀; Oct 12, 72♂, 50♀; Oct 13, 65♂, 30♀; Oct 15, 41♂, 15♀; Oct 16, 39♂, 32♀; Oct 17, 41♂, 26♀; Oct 18, 1♂, 5♀; Oct 19, 8♂, 2♀; Oct 20, 1♂; Oct 21, 10♂, 1♀; Oct 22, 40♂, 11♀; Oct 23, 22♂, 2♀; Oct 24, 8♂, 6♀; Oct 25, 7♂, 4♀; Oct 29, 7♂, 2♀; Nov 5—15, 6♂. It is distributed in Europe and Morocco.

34. *Stenophylax permistus* Mac LACHLAN: May 10, 1♂; Jun 7, 1♂. It is distributed in Western and Central Europe.

35. *Micropterna nycterobia* Mac LACHLAN: Oct 3, 1♀; Oct 9, 2♂; Oct 10, 2♀; Oct 12, 2♂; Oct 13, 6♂; Oct 16, 1♂; Oct 17, 1♂; Oct 19, 2♂; Oct 21, 1♂; Oct 22, 1♂; Oct 23, 1♂; Oct 24, 1♂; Oct 25, 1♂; Nov 7, 1♂. It is a Central European species.

36. *Micropterna lateralis* STEPHENS: Sept 11, 1♂. It is a Northern European species, rare in Hungary.

37. *Chaetopteryx fusca* BRAU: Sept 29, 1♀; Oct 9, 3♂; Oct 13, 3♂; Oct 16, 1♂; Oct 17, 4♀; Oct 22, 1♂, 1♀; Oct 23, 1♂, 1♀; Oct 24, 1♀; Oct 25, 3♂; Oct 29, 1♂; Nov 9, 1♂, 1♀; Nov 16, 2♀; Nov 18, 1♀. It is a Eeuropean species.

GOERIDAE

38. *Silo pallipes* FABR.: Jun 6, 1♂; Jun 7, 5♂; Jun 9, 1♂; Jun 10, 10♀; Jun 11, 4♂, 1♀; Jun 13, 5♂; Jun 14, 19♂, 2♀; Jun 15, 12♂, 3♀; Jun 16, 16♂, 4♀; Jun 17, 1♀; jun 18, 1♂; Jun 19, 5♂; Jun 21, 8♂; Jun 22, 1♂; Jun 23, 1♂; Jun 24, 3♂; Jun 26, 3♂; Jun 27, 4♂; Jul 2, 2♂, 1♀; Jul 7, 1♂; Jul 8, 3♂; Jul 9, 8♂, 5♀; Jul 10, 3♂, 1♀; Jul 11, 2♂; Jul 15, 3♂; Jul 16, 3♂; Jul 17, 5♂, 1♀; Jul 20, 1♂; Jul 21, 7♂, 3♀; Jul 27, 1♂; Jul 29, 2♀; Jul 31, 1♂; Aug 2, 2♂; Aug 5, 2♂; Aug 6, 1♂, 1♀; Aug 7, 1♂; Aug 9, 1♂; Aug 15, 1♂; Aug 16, 1♂; Aug 18, 1♀; Aug 29, 1♂; Aug 31, 1♀; Sept 23, 1♂. It is a Eeuropean species, frequent in the mountains of Hungary.

LEPIDOSTOMATIDAE

39. *Crunoecia irrorata* CURTIS: Jul 15, 1♂. It is a European species.

LEPTOCERIDAE

40. *Mystacides nigra* LINNÉ: Jul 7, 1♂. It can be found in Europe and North America.

41. *Oecetis notata* RAMBUR: Jul 16, 1♀. It is a European species.

LEPTOCERIDAE

42. *Athripsodes alboguttatus* HAGEN: Jul 20, 1♀. It is a European species, can be found in France, and is *new to the fauna of the Bükk Mountains in Hungary.*

43. *Leptocerus tineiformis* CURTIS: Jul 26, 1♂. It is a European species, characteristic of the lowlands in Hungary.

SERICOSTOMATIDAE

44. *Sericostoma personatum* SPENCE: Jun 15, 1♂; Jun 19, 2♂; Jul 9, 1♂; Jul 10, 1♂; Jul 16, 1♀; Jul 17, 1♂; Jul 24, 1♂; Aug 1, 1♂; Aug 2, 4♂; Aug 5, 3♂, 1♀; Aug 6, 2♂, 1♀; Aug 9, 3♂, 2♀; Aug 16, 1♂; Aug 17, 1♂; Aug 18, 1♂; Aug 22, 1♂; Aug 30, 1♂; Sept 10, 1♂; Oct 9, 1♂. It is a European species, and is frequent in the mountains of Hungary.

BERAEIDAE

45. *Beraea maurus* CURTIS: Jul 7, 1♂. It is a European species, already collected by J. SATORI.

ODONTOCERIDAE

46. *Odontocerus albicorne* SCOP.: Jun 11, 1♂;Jun 13, 1♂; Jun 14, 3♂; Jun 15, 1♂; Jun 16, 3♂; Jun 17, 1♂; Jun 19, 4♂; Jun 20, 1♂; Jun 21, 5♂; Jun 24, 1♂; Jun 25, 1♂; Jun 26, 1♂, 1♀; Jun 27, 2♂; Jun 28, 2♂; Jul 4, 2♂; Jul 5—6 1♂; Jul 7, 4♂, 1♀; Jul 9, 1♂; Jul 10, 1♂; Jul 12, 1♂; Jul 13, 2♂, 1♀; Jul 15, 6♂, 1♀; Jul 17, 10♂, 2♀; Jul 19, 1♂; Jul 20, 1♂; Jul 21, 2♂, 2♀; Jul 22, 6♂; Jul 23, 3♂, 2♀; Jul 25, 1♂; Jul 27, 7♂; Jul 28, 2♂; Jul 29, 5♂; Jul 31, 5♂; Aug 1, 4♂; Aug 2, 12♂, 1♀; Aug 3, 12♂, 1♀; Aug 5, 13♂; Aug 6, 16♂; Aug 7, 7♂; Aug 8, 9♂, 1♀; Aug 9, 2♂; Aug 10, 3♂, 1♀; Aug 11, 5♂; Aug 12, 7♂; Aug 15, 7♂; Aug 16, 3♂; Aug 17, 1♂, 1♀; Aug 18, 1♂; Aug 20, 4♂; Aug 21, 2♂; Aug 22, 1♂, 1♀; Aug 29, 2♂, 1♀; Aug 30, 2♂; Aug 31, 7♂, 1♀; Sept 1, 1♂; Sept 2, 9♂, 1♀; Sept 3, 1♂; Sept 6, 9♂; Sept 7, 6♂, 2♀; Sept 8, 5♂; Sept 9, 7♂, 2♀; Sept 10, 18♂, 2♀, Sept 12, 2♂; Sept 13, 4♂, 1♀; Sept 14, 4♂; Sept 15, 3♂, 2♀; Sept 16, 1♀; Sept 17, 1♂; Sept 19, 1♀; Sept 21, 1♂, 1♀; Sept 22 1♂, 1♀; Sept 23, 1♂, 1♀; Sept 26, 2♂; Sept 27, 1♂; Oct 2, 1♂; Oct 9, 2♂, 1♀. It occurs in Europe and is frequent in he mountains of Hungary.

Table 1. The family distribution of the species caught in the light trap

Family	Number of species	D %	Number of ind.	D %
1. Limnephilidae	20	43,47	1785	43,36
2. Rhyacophilidae	5	10,86	408	9,45
3. Hydropsychidae	4	8,69	1533	35,52
4. Polycentropodidae	4	8,69	8	0,18
5. Lepidostomatidae	3	6,52	3	0,06
6. Leptoceridae	2	4,34	2	0,04
7. Psychomydae	2	4,34	38	0,88
8. Hydroptilidae	1	2,17	3	0,06
9. Phryganeidae	1	2,17	5	0,11
10. Goeridae	1	2,17	177	4,10
11. Sericostomatidae	1	2,17	32	0,32
12. Beraeidae	1	2,17	1	0,02
13. Odontoceridae	1	2,17	320	7,41

Table 1 shows that *Limnephilidae* and *Rhyacophilidae* have the largest number of species (20 and 4 respectively) while *Hydropsychidae, Polycentropodidae* and *Lepidostomatidae* have a smaller number of species (4, 4 and 3 resp.)

From the point of view of the number of individuals *Limnephilidae* precede *Hydropsychidae* (1785 and 1533, resp.) and both are followed by *Rhyacophilidae* (408.)

Table 2. The number of individuals and the values of dominance expressed in percentage.

Species	Numer of individuals	D %
1. Hydropsyche instabilis	1509	34,97
2. Halesus digitatus	843	19,53
3. Limnephilus lunatus	346	8,01
4. Odontocerum albicornis	320	7,41
5. Rhyacophila obliterata	268	6,21
6. Limnephilus rhombicus	256	5,93
7. Silo pallipes	177	4,10
8. Rhyacophila fasciata	116	2,68
9. Limnephilus flavicornis	98	2,27
10. Limnephilus auricula	46	1,06
11. Limnephilus ignavus	42	0,97
12. Anabolia laevis	37	0,85
13. Ecclycopteryx madida	34	0,78
14. Sericostoma personatum	32	0,74
15. Chaetopteryx fusca	26	0,60
16. Micropterna nycterobia	23	0,53
17. Tinodes sp. (?)	23	0,53
18. Hydropsyche angustipennis	19	0,44
19. Rhyacophila tristis	15	0,34
20. Lype reducta	15	0,34
21. Potamophylax nigricornis	9	0,20
22. Rhyacophila pubescens	7	0,16
23. Glyphotaulius pellucidus	6	0,13
24. Neuronia ruficrus	5	0,11

Species	Numer of individuals	D %
25. Limnephilus vittatus	5	0,11
26. Plectrocnemia conspersa	4	0,09
27. Allotrichia pallicornis	3	0,06
28. Hydropsyche guttata	3	0,06
29. Limnephilus decipiens	3	0,06
30. Limnephilus extricatus	3	0,06
31. Synagapetus mosely	2	0,04
32. Hydropsyche fulvipes	2	0,04
33. Neureclipsis bimaculata	2	0,04
34. Limnephilus affinis	2	0,04
35. Limnephilus griseus	2	0,04
36. Stenophylax permistus	2	0,04
37. Plectrosnemia brevis	1	0,02
38. Polycentropus flavomaculatus	1	0,02
39. Limnephilus stigma	1	0,02
40. Micropterna lateralis	1	0,02
41. Crunoecia irrorata	1	0,02
42. Mystacides nigra	1	0,02
43. Oecetis notata	1	0,02
44. Athripsodes alboguttatus	1	0,02
45. Leptocerus tineiformis	1	0,02
46. Beraea maura	1	0,02

Table 2 shows that only 10 species have values of dominance of more than 1 per cent, all the others have less, i. e. for 10 species the number of individuals ranges between 46—1509, for 26 species between 2—42 and for 10 species it is only 1 each. Advancing in time the following important aspect can be noticed:

1. Sprong species: *Limnephilus decipiens* K., *Synagapetus mosely* U., *Silo pallipes* F., *Lype reducta* H., *Polycentropus flavomaculatus* P., *Plectrocnemia conspersa* S., *Plectrocnemia brevis* M., *Hydropsyche instabilis* C.

2. Summer species: *Odontocerum albicornis* S., *Limnephilus flavicornis* F., *Limnephilus rhombicus* L., *Limnephilus extricatus* M., *Potamophylax nigricornis* P., *Rhyacophila tristis* P., *Rhyacophila pubescens* P., *Sericostoma personatum* S., *Rhyacophila fasciata* H., *Rhyacophila obliterata* M.

3. Autumn species: *Halesus digitatus* S., *Micropterna nycterobia* M., *Micropterna lateralis* S., *Limnephilus lunatus* C., *Anabolia laevis* Z., *Chaetopteryx fusca* B., *Limnephilus ignavus* M., *Ecclisopteryx madida* M.

THE ECOLOGICAL AND ZOOGEOGRAPHICAL CHARACTERISTICS OF THE TRICHOPTERAN FAUNA

From a zoogeographical point of view Hungary is part of the Pannonicum and the Bükk Mountains belong to the Matricum. The components of the fauna of the area under investigation can be included in the following basic types of distribution:

1. Boreal species The larvea are expressly eurytherm ones, extreme eurytopes. They live in the streams of mountains, and often in springs too. They are members of the stony fauna (steinfauna) and are of rheophile type. *Rhyacophila fasciata H., Rhyacophila obliterata* Mac L. and *Micropterna lateralis* can be mentoined here.

2. Central-European species: Some of them are the inhabitants of the stones and moss of the streams of subalpine type, and are not present in the boreal areas. The eastern, frontier of their distribution is the Carpathians. *Rhyacophila tristis* P., *Tinodes* sp. (?) belong to them. Some of them are species of rheophile type living in streams of mountains. *Neuronia ruficrus* S. inhabiting the moors of Central Europe and Northern Europe occupies an intermediate position between the two types mentioned above.

3. European species: The rheophile species of the streams of the mountains are: *Synagapetus mosely* U., *Stenophylax permistus* Mac L., *Chaetopteryx fusca* B., *Silo pallipes* F., *Sericostoma personatum* S., *Crunoecia irrorata* Mac L., *and Odontocerus albicornea* S., *Halesus digitatus* S., *Limnephilus flavicornis* F., *Limnephilus rhombicus* L., *Leptocerus tineiformis* C., *Limnephilus affinis* C. and *Anabolia laevis* Z. are species of the mountainous limnadophile fauna (oreolimnopes, MARTINOV, 1928). In the biotopes with fauna hygropetrica THIENEMANN *Beraea maurus* C. can be found.

4. Holarctic species: *Neureclipsis bimaculata* C. is one of them. It is widely distributed also in North America and is found en masse in the northern European rivers of the Soviet Union.

5. Palearctic species: They are included in the limnadophile fauna of the mountains: *Limnephilus rhombicus* L., *Limnephilus stigma* C. can be listed here.

6. Eurosiberian species: *Limnephilus decipinens* K., *Limnephilus griseus L.* are members of the limnadophile fauna.

KISS O.: A Szilvásvárad melletti Szalajka-völgy Trichopteráinak tanulmányozása fénycsapda anyag alapján.
A szerző a Mátra Múzeum által 1980-ban a szilvásváradi Szalajka-völgyben üzemeltetett fénycsapda anyagát tanulmányozta és 46 fajt talált, közöttük az *Allotrichia pallicornis* EATON -t, amely új hazánk faunájára, valamint a *Plectrocnemia brevis* Mac LACHLAN, a *Neuronia ruficrus* SCOPOLI és *Limnephilus stigma* CURTIS fajokat, amelyeket előzőleg még nem gyüjtötték a Bükk hegységben. Az adatok jelzik az egyes fajok repülési periódusait, az egyedszámot, a dominantiaviszonyokat és a fajok családonkénti megoszlását. A repülési periódusok alapján 3 aszpektust különit el. Az ökológiai és állatföldrajzi sajátosságok alapján a faunakomponenseket az alábbi elterjedési típusokba sorolja: borealis, közép-európai, európai, holarktikus, palearktikus és euroszibériai fajok.

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