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DATA TO THE KNOWLEDGE OF THE MICROLEPIDOPTERA FAUNA OF THE SĂLAJ-REGION, TRANSYLVANIA, ROMANIA (ARTHROPODA: INSECTA)

Csaba SZABÓKY, Gergely KATONA, Zsolt BÁLINT*
Department of Zoology, Hungarian Natural History Museum

ABSTRACT. We provide geographical, spatial and temporal data to the faunistical knowledge of the 123 Microlepidoptera species recorded in the region Sălaj. This is the result of 201 data of 24 collecting events assembled in the period between 25. April, 2014 and 10. September, 2015. The species represent the following families (with species numbers): Alucitidae (2), Autostichidae (1), Coleophoridae (7), Cosmopterigidae (1), Cossidae (1), Depressariidae (2), Epermeniidae (1), Ethmiidae (2), Gelechiidae (5), Gracillariidae (1), Hepialidae (1), Limacodidae (1), Lypusidae (1), Oecophoridae (2), Plutellidae (1), Psychidae (2), Pterophoridae (4), Pyralidae (38), Sesiidae (1), Tineidae (5), Tortricidae (39), Yponomeutidae (1), Ypsolophidae (2), Zygaenidae (2), amongst them 33 species are recorded as new for the region Sălaj.

Keywords. Microlepidoptera, Romania, region Sălaj, new records, faunistics.

INTRODUCTION:

The Microlepidoptera fauna of Romania is moderately known. This is partly due to the fact that in Romania professional entomologists had to concentrate primarily on micromoths with agricultural or forestry importance, therefore they paid less attention to „neutral" species. On the other hand there were very few dedicated amateurs who could change their own interest from the „traditional" groups and deepen in the exploration of the more challenging micros.

As we will remark regarding Macrolepidoptera faunistics (see Bálint et al., 2015) the region Sălaj belongs to the less explored areas of western part of Romania. It is especially relevant in the case of Microlepidoptera. This contribution has the aim to publish the data collected by the expeditions of the Hungarian Natural History Museum during the years 2014-2015 for having the fauna better known (Gubányi, 2015).

There was no special effort to collect micromoths, consequently most of the species we recorded were wide-spread and faunistically less „interesting". However we have found that 27 % of the species we captured is new for the region Sălaj. This underlines that the region is indeed less explored and suggests that it is worth to study the Microlepidoptera fauna.

MATERIAL AND METHODS:

The list of collecting events is presented in temporal sequence. First the locality with its official Romanian name (in brackets with Hungarian equivalents) and then the geographical coordinates are given; after the semicolon the collecting methods are listed (in brackets with collector names). Day-active moths were collected by using butterfly net or were simply hand-collected. Night active moths were captured by semi-automatic light traps.

Families and species names are according to Szabóky et al. (2002). Nomenclature also reflects the mentioned checklist. Every species name is followed by a dash when the reference numbers of the collecting sites are given. Three species have been annotated, which are indicated by an asterisk (*) at the end of the species-entry.

We provide a list of species recorded as new for the region Sălaj. These are the species which were not indicated to occur in the region Maramureş-Satu-Mare of the checklist Rákosy et al. (2003). Although in this publication county Sălaj is regarded as belonging to the region Transylvania, in the figure provided it is obvious the county Sălaj was regarded as part of the region Maramureş-Satu-Mare. That makes more sense, consequently we followed the figure.

Voucher specimens are deposited in Lepidoptera collections of the Hungarian Natural History Museum. A representative collection of 250 Lepidoptera specimens (macros and micros) was assembled and provided to the University Vasile Goldiş, which will be deposited in the municipal museum of Zălau.

COLLECTING SITES AND EVENTS (Fig. 1.)

25 – Măgura Şimleului (Szilágysomlyói-Magura), Şimleu Silvaniei (Szilágysomlyó), 25.04.2014, N47.23878° E22.785203°; collecting, (leg. L. Forró, A. Gubányi, G. Katona & Cs. Kutasi).

27 – Munţii Plopiş (Réz-hegység), Iaz (Krasznajáz), Mlaştina de la Iaz 1, marsh, 19-21.05.2014, N47.11065° E22.66125°; collecting, (leg. Zs. Bálint, A. Gubányi, G. Katona & Cs. Kutasi).

28 – Munţii Plopiş (Réz-hegység), Iaz (Krasznajáz), Mlaştina de la Iaz 2, puddle, pastures, 19.05.2014, N47.11088° E22.6589°; collecting, (leg. Zs. Bálint

, A. Gubányi, G. Katona & Cs. Kutasi).

29 – Munţii Plopiş (Réz-hegység), Iaz (Krasznajáz), Mlaştina de la Iaz 2, streamside, 20-21.05.2014, N47.11019° E22.66388°, light trap, (leg. Zs. Bálint, A. Gubányi, G. Katona & Cs. Kutasi).

32 – Dealurile Crasnei (Krasznamenti-dombság), Aghireş (Egrespatak), dry swards, 20.05.2014, N47.15716° E22.99252°; collecting, light trap, (leg. Zs. Bálint, A. Gubányi, G. Katona & Cs. Kutasi).

42 – Dealurile Crasnei (Krasznamenti-dombság), Aghireş (Egrespatak), dry swards, 22-23.05.2014,

Correspondence*: *Bálint, Zs., Department of Zoology, Hungarian Natural History Museum, Baross u. 13., H – 1088, Budapest, Hungary; email: balint@nhmus.hu*

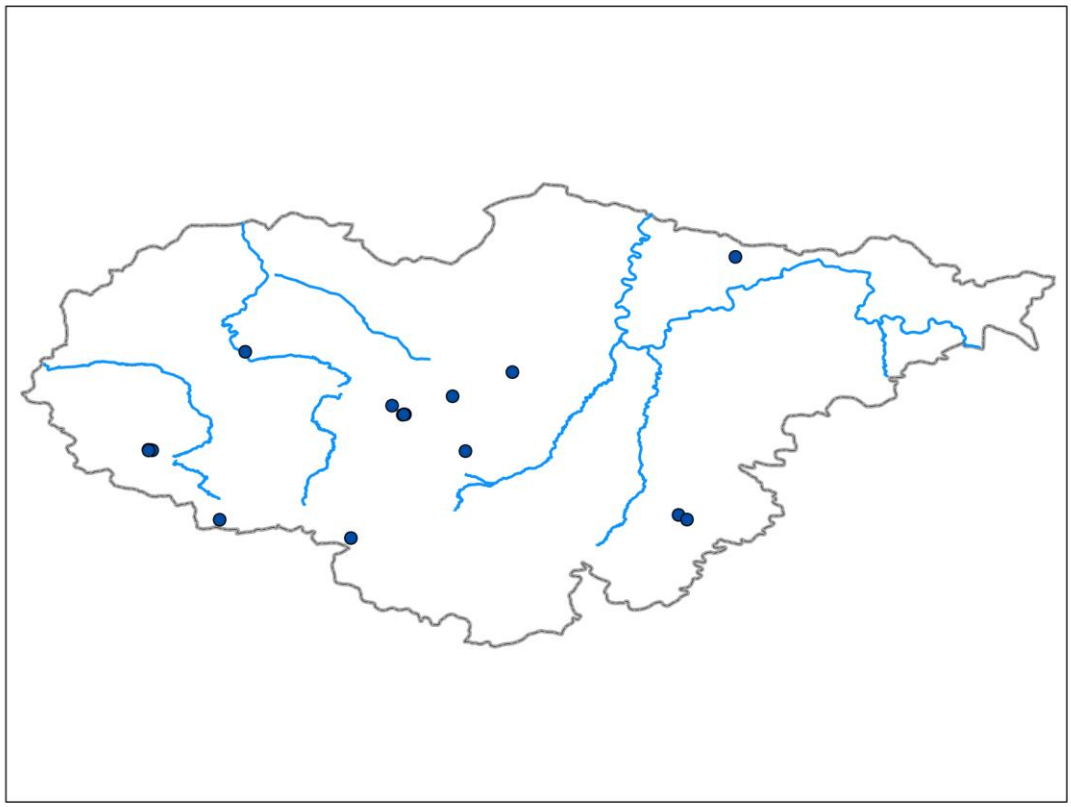

Fig. 1. The overview of Microlepidoptera collecting sites of the Hungarian Natural History Museum in 2014 and 2015 carried out in the County Salaj (by A. Gubányi).

N47.15716° E22.99252°; light trap, (leg. Zs. Bálint, A. Gubányi, G. Katona & Cs. Kutasi).

60A – Dealurile Crasnei (Krasznamenti-dombság), W of Aghireş (Egrespatak), 02-03.06.2014, N47.157° E22.992°; collecting, light trap, (leg. A. Orosz, G. Puskás, Z. Soltész & M. Tóth).

61E – Munţii Plopiş (Réz-hegység), Iaz (Krasznajáz), 03.06.2014, N47.11° E22.659°; light trap, (leg. A. Orosz, G. Puskás, Z. Soltész & M. Tóth).

85 – Dealurile Crasnei (Krasznamenti-dombság), W of Aghireş (Egrespatak), 12-13.08.2014, N47.157° E22.992°; collecting, light trap, (leg. A. Gubányi, G. Katona, A. Orosz & G. Puskás).

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

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

120 – Dealurile Crasnei (Krasznamenti-dombság), W of Aghireş (Egrespatak), 01.10.2014, N47.16846° E22.97703°; light trap, sugar rope baiting, (leg. Zs. Bálint, L. Dányi, G. Katona & D. Murányi).

211 – Depresiunea Almaş-Agrij (Almás-Egregy-medence), Ugruţiu (Ugróc), 27-28.05.2015, N47.025783° E23.350829°; light trap, (leg. Zs. Bálint, A. Gubányi & G. Katona).

218 – Depresiunea Almaş-Agrij (Almás-Egregy-medence), Ugruţiu (Ugróc), 28.05.2015, N47.025783° E23.350829°; collecting, (leg. Zs. Bálint, A. Gubányi & G. Katona).

221 – Dealurile Crasnei (Krasznamenti-dombság), W of Aghireş (Egrespatak), xeromesophile grassland and forest edge, 28-29.05:2015, N47.156611° E22.990925°, 320m; light traps, collecting, (leg. Zs. Bálint, A. Gubányi & G. Katona).

228 – Munţii Meseşului (Meszes-hegység), Treznea (Ördögkút), alongside creek, wet meadow, 14.07.2015, N47.1091° E23.0728°, 366m; collecting, (leg. Z. Erőss, A. Kenéz, P.G. Sulyán, Z. Vas).

233 – Dealurile Crasnei (Krasznamenti-dombság), Zalău (Zilah), apartment balcony, 14.07.2015, N47.1807° E23.0559°, 274m; light trap, (leg. Z. Erőss, A. Kenéz, P.G. Sulyán, Z. Vas).

234 – Dealurile Crasnei (Krasznamenti-dombság), Aghireş (Egrespatak), dry sward with loess wall and abandoned orchard, 15.07.2015, N47.1571° E22.9937°, 330m; collecting, (leg. Z. Erőss, A. Kenéz, P.G. Sulyán, Z. Vas).

248 – Munţii Plopiş (Réz-hegység), Tusa (Tuszatelke), Barcău (Berettyó) springs, wet pasture, 16.07.2015, N47.0196° E22.7519°, 644m; collecting, (leg. Z. Erőss, A. Kenéz, P.G. Sulyán, Z. Vas).

252 – Dealurile Crasnei (Krasznamenti-dombság), Aghireş (Egrespatak), dry sward with loess wall and abandoned orchard, 16.07.2015, N47.1569° E22.9923°, 323m; light trap on hilltop (21.15-24.00), (leg. Z. Erőss, A. Kenéz, P.G. Sulyán, Z. Vas).

258 – Depresiunea Almaş-Agrij (Almás-Egregy-medence), Ugruţiu (Ugróc), closed steppe, edge of oak forest, pastures in valley floor, 07.09.2015,

N47.019723° E23.361953°; light trap, (leg. A. Gubányi, A. Orosz, L. Ronkay & M. Tóth).

268 – Dealurile Sălajului (Szilágymenti-dombság), Zalău-Ortelec (Zilah-Vártelek), oak forest on the top of the hill, semi-natural steppe, 09.09.2015, N47.212209° E23.134001°; collecting, light trap, (leg. A. Gubányi, A. Orosz, L. Ronkay & M. Tóth).

272 – Dealurile Boiului (Szamoszug), Vălișoara (Diószpatak), limestone hill, 10.09.2015, N47.362717° E23.425185°; light trap, (leg. A. Gubányi, A. Orosz, L. Ronkay & M. Tóth).

LIST OF MICROLEPIDOPTERA SPECIES RECORDED

Hepialidae

Triodia sylvina (Linnaeus, 1761) – 85, 258, 268, 272.

Tineidae

Nemapogon cloacella (Haworth, 1828) – 37.

Nemapogon variatella (Clemens, 1859) – 268.

Tinea semifulvella Haworth, 1828 – 258.

Monopis monachella (Hübner, 1796) – 32.

Euplocamus anthracinalis (Scopoli, 1763) – 25.

Lypusidae

Lypusa maurella ([Denis et Schiffermüller], 1775) – 42.(*)

Psychidae

Bijugis bombycella ([Denis et Schiffermüller], 1775) – 61E.

Megalophanes viciella ([Denis et Schiffermüller], 1775) – 32, 42.

Gracillariidae

Aspilapterix limosella (Duponchel, 1843) – 221.

Yponomeutidae

Argyresthia spinosella Stainton, 1849 – 42.

Ypsolophidae

Ypsolopha scabrella (Linnaeus, 1767) – 258.

Ypsolopha persicella (Fabricius, 1787) – 85, 102, 108.

Plutellidae

Plutella xylostella (Linnaeus, 1758) – 211, 221, 258.

Ethmiidae

Ethmia dodecea (Haworth, 1828) – 32, 42, 85.

Ethmia bipunctella (Fabricius, 1775) – 42, 85.

Depressariidae

Luquetia lobellum ([Denis et Schiffermüller], 1775) – 32, 221.

Depressaria pimpinellae Zeller, 1839 – 272.

Oecophoridae

Batia lambdella (Donovan, 1793) – 258.

Pleurota pyropella ([Denis et Schiffermüller], 1775) – 32.

Coleophoridae

Coleophora alcyonipennella (species-group) – 221, 233. (*)

Coleophora serpylletorum Hering, 1889 – 221.

Coleophora auricella (Fabricius, 1794) – 211.

Coleophora dignella Toll, 1961 – 32.

Coleophora lixella Zeller, 1849 – 221.

Coleophora ornatipennella (Hübner, 1796) – 32, 42, 221.

Coleophora sp. – 233.

Autostichidae

Oegoconia caradjai Popescu-Gorj et Capuse, 1965 – 258.

Cosmopterigidae

Eteobalea tririvella (Staudinger, 1871) – 60A.

Gelechiidae

Aproaerema anthyllidella (Hübner, 1813) – 252.

Anarsia spartiella (Schrank, 1802) – 221, 252.

Nothris verbascella ([Denis et Schiffermüller], 1775) – 85.

Acompsia cinerella (Clerck, 1759) – 42, 221, 272.

Gelechiidae sp. – 42.

Limacodidae

Apoda limacodes (Hufnagel, 1766) – 252.

Zygaenidae

Jordanita globulariae (Hübner, 1793) – 61E, 221.

Zygaena filipendulae (Linnaeus, 1758) – 228.

Sesiidae

Synanthedon spheciformis ([Denis et Schiffermüller, 1775) – 27.

Cossidae

Dyspessa ululа – 32, 42.

Tortricidae

Cochylimorpha straminea (Haworth, 1811) – 221.

Agapeta hamana (Linnaeus, 1767) – 85.

Agapeta zoegana (Linnaeus, 1758) – 32, 60A.

Fulvoclysia nerminae Kocak, 1982 – 32, 37, 42, 221.

Aethes hartmanniana (Clerck, 1759) – 32, 42.

Aethes tesserana ([Denis et Schiffermüller], 1775) – 42.

Cochylis hybridella (Hübner, 1813) – 42.

Falseuncaria ruficiliana (Haworth, 1811) – 252.

Acleris forsskaleana (Linnaeus, 1758) – 252.

Acleris rhombana ([Denis et Schiffermüller], 1775) – 102, 120.

Neosphaleroptera nubilana (Hübner, 1799) – 252.

Cnephasia incertana (Treitschke, 1835) – 32, 42, 221.

Cnephasia communana (Herrich-Schäffer, 1851) – 221.

Choristoneura hebenstreitella (Müller, 1764) – 42.

Pandemis cerasana (Hübner, 1796) – 32, 85.

Pandemis heparana ([Denis et Schiffermüller], 1775) – 252.

Pandemis dumetana (Treitschke, 1835) – 85.

Syndemis musculana (Hübner, 1799) – 29.

Aphelia viburnana ([Denis et Schiffermüller], 1775) – 85.

Clepsis rurinana (Linnaeus, 1758) – 85, 252.

Clepsis pallidana (Fabricius, 1776) – 32, 42, 85, 221.

Adoxophyes orana (Fischer von Rőslerstamm, 1834) – 85.

Isotrias hybridana (Hübner, 1817) – 221.

Endothenia oblongana (Haworth, 1811) – 32, 85, 252.

Hedya nubiferana Haworth, 1811 – 32, 42.

Celypha flavipalpana (Herrich-Schäffer, 1851) – 32, 42.

Celypha cespitana (Hübner, 1817) – 28, 32, 252.
Loxoterma lacunana ([Denis et Schiffermüller], 1775) – 37, 42, 120.
Loxoterma rivulana (Scopoli, 1763) – 32, 85, 211.
Epinotia nisella (Clerck, 1759) – 252.
Epiblema graphana (Treitschke, 1835) – 42.
Epiblema similana ([Denis et Schiffermüller], 1775) – 218.
Notocelia cynosbatella (Linnaeus, 1758) – 37.
Notocelia incarnatana (Hübner, 1800) – 272.
Cydia succedana ([Denis et Schiffermüller], 1775) – 252. (*)
Cydia pomonella (Linnaeus, 1758) – 85, 252.
Cydia fagiglandana (Zeller, 1841) – 252.
Lathronympha strigana (Fabricius, 1775) – 221.
Grapholita caecana (Schläger, 1847) – 42.

Epermeniidae

Epermenia pontificella (Hübner, 1796) – 211.

Alucitidae

Alucita huebneri Wallemgren, 1859 – 108.
Orneodes grammodactyla Zeller, 1841 – 32, 258, 272.

Pterophoridae

Stenoptilia sp. – 221, 252.
Crombrughia distans (Zeller, 1847) – 258.
Cnaemidophorus rhododactyla ([Denis et Schiffermüller], 1775) – 258.
Pterophorus pentadactyla (Linnaeus, 1758) – 32.

Pyralidae

Pyralis regalis ([Denis et Schiffermüller], 1775) – 85, 258, 268.
Hypsopygia costalis (Fabricius, 1775) – 85, 102, 252.
Endotricha flammealis ([Denis et Schiffermüller], 1775) – 85.
Pempeliella dilutella ([Denis et Schiffermüller], 1775) – 42.
Etiella zinckenella (Treitschke, 1832) – 252.
Oncocera semirubella (Scopoli, 1763) – 32, 42, 85, 258, 272.
Dioryctria abietella ([Denis et Schiffermüller], 1775) – 85.
Phycita roborella ([Denis et Schiffermüller], 1775) – 85.
Hypochalcia ahenella ([Denis et Schiffermüller], 1775) – 32, 221.
Epischnia prodromella Hübner, 1796 – 42.
Conobathra tumidana ([Denis et Schiffermüller], 1775) – 85.
Eurhodope rosella (Scopoli, 1763) – 85.
Euzophera cinerosella (Zeller, 1839) – 32, 37.
Homoeosoma sinuellum (Fabricius, 1794) – 32.
Hypsotropa unipunctella (Ragonot, 1827) – 42, 233.
Scoparia subfusca Haworth, 1811 – 32.
Scoparia basistrigalis Knaggs, 1866 – 42.
Scoparia ambigualis (Treitschke, 1829) – 42.
Scoparia pyralella ([Denis et Schiffermüller], 1775) – 32, 42, 221.
Eudonia mercurella (Linnaeus, 1758) – 252.
Calamatropha paludella (Hübner, 1824) – 85.
Chrysoteuchia culmella (Linnaeus, 1758) – 85.
Crambus pratella (Linnaeus, 1758) – 32.
Agriphila tristella ([Denis et Schiffermüller], 1775) – 258, 272.
Agriphila tolli (Bleszinsky, 1952) – 272.
Chrysocrambus craterella (Scopoli, 1763) – 32.
Thisanotia chrysonuchella (Scopoléi, 1763) – 221.
Pediasia luteella ([Denis et Schiffermüller], 1775) – 85, 248.
Platytes cerussella ([Denis et Schiffermüller], 1775) – 85.
Pyrausta despicata (Scopoli, 1763) – 221, 258, 268.
Pyrausta aurata (Scopoli, 1763) – 42, 85, 234, 252, 268.
Pyrausta purpuralis (Linnaeus, 1758) – 85, 233, 258.
Sitochroa verticalis (Linnaeus, 1758) – 32.
Ostrinia nubilalis (Hübner, 1796) – 61E, 85, 234, 252.
Anania verbascalis ([Denis et Schiffermüller], 1775) – 32, 42, 211, 252.
Pleuroptya ruralis (Scopoli, 1763) – 108, 233, 252.
Dolicharthria punctalis ([Denis et Schiffermüller], 1775) – 85.
Nomophila noctuella ([Denis et Schiffermüller], 1775) – 85.

ANNOTATIONS

Coleophora alcyonipennella (species-group) – There are several *C. alcyonipennella* look-alike species. The identification of these species on the basis of external characters is difficult. For having a well established identification the examination of genitalia structures is obligatory. This was not undertaken in the case of the specimens.

Cydia succedana – There are several look-alike species in Europe, many of them have been also recorded in the fauna of the Carpathian Basin. Therefore the examination of the specimens needs special care avoiding misidentifications.

Lypusa maurella – Recently the species *Lypusa tokari* Elsner, 2009 has been described. Some *Lypusa* specimens collected in Hungary proved to be this species. However the sample examined was limited and there was no effort for conducting more extensive research and revise all the specimens available. Hence until the taxonomic identity of the *Lypusa* species recorded in the Carpathian Basin is not clarified satisfactorily, we retain to use the name *maurella*.

MICROLEPIDOPETRA SPECIES RECORDED AS NEW FOR THE REGION SĂLAJ (in alphabetic order)

1. *Acleris forsskaleana;*
2. *Acleris rhombana;*
3. *Agriphila tolli;*
4. *Alucita huebneri;*
5. *Aspilapterix limosella;*
6. *Batia lambdella;*
7. *Celypha flavipalpana;*

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8. *Chrysocrambus craterella;*
9. *Coleophora alcyonipennella;*
10. *Coleophora auricella;*
11. *Coleophora dignella;*
12. *Coleophora serpylletorum;*
13. *Cydia succedana;*
14. *Endothenia oblongana;*
15. *Epermenia pontificella;*
16. *Epiblema similana;*
17. *Epischnia prodromella;*
18. *Eteobalea tririvella;*
19. *Ethmia dodecea;*
20. *Eurhodope rosella;*
21. *Euzophera cinerosella;*
22. *Falseuncaria ruficiliana;*
23. *Grapholita caecana;*
24. *Hypsotropa unipunctella;*
25. *Isotrias hybridana;*
26. *Nemapogon cloacella;*
27. *Nemapogon variatella;*
28. *Notocelia incarnatana;*
29. *Oegoconia caradjai;*
30. *Orneodes grammodactyla;*
31. *Pyralis regalis;*
32. *Ypsolopha persicella;*
33. *Ypsolopha scabrella*

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