A CONTRIBUTION TO KNOWLEDGE OF BALKAN LEPIDOPTERA: SOME NEW AND RARE SPECIES FOR ALBANIA AND NORTH MACEDONIA (MACROLEPIDOPTERA)

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Abstract

Data for 45 nocturnal Lepidoptera species collected mainly in June-August 2018 by the authors are presented. The majority of reported species are from Albania, from where six genera and 19 species are reported for the first time. Seventeen other species are reported for the second time for Albania or are confirmed for the country. Three species are new for the North Macedonia (formerly known as the Yugoslav Republic of Macedonia). Two other species are reported for the second time for that country. Reported species and collecting localities are illustrated in colour, when necessary with genitalia, including everted vesicas.

Keywords: Albania, North Macedonia, faunistics, Lepidoptera, Macrolepidoptera

Introduction

Survey of Lepidoptera in the southern Balkans, and especially in Albania, is ongoing. Results of trips from September to November have been published (Beshkov & Nahirnić, 2019) and results of a trip in May-June, with C. W. Plant, P. Jakšić and A. King, will be published soon. A paper concerning the Pyraloidea is also in preparation (C. W. Plant et al., in prep.).

This present paper reports the results of five collecting trips to Albania in June, July and August 2018 by the authors, as well as some additional results from 2016 and 2017. Additional data from an expedition during August 2018 with C. W. Plant and his colleagues will also be published separately. In 2018 we extended research to new parts of the country, mostly high mountain areas.

The Albanian Lepidoptera fauna, particularly moths, still remains poorly explored, although in the last three years we have reported more than 120 new macrolepidoptera species for the country. After 2019, the number of the possible new species for the country is expected to decrease markedly, but there are large areas without any data or with old records only. Some species, recorded in only a few localities, may be widespread. The lack of native researchers in Albania is unfortunate as is the fact that recent research by foreign workers remains unpublished.

Collecting methods are described in details in Beshkov & Nahirnić (2018a, 2018b, 2019). Genitalia slides of Nola, Meganola and Eilema rungsi were photographed by Dr. B. Zlatkov using Carl Zeiss Jena Amplival Microscope. All material published here is deposited in the collection of Stoyan Beshkov in the National Museum of Natural History, Sofia (NMNHS).
Collecting localities

Many of the collecting localities have been mapped, described and illustrated already (Beshkov, 2018; Beshkov & Nahirnić, 2018a, 2018b, 2019). These are summarised in Table 1. Map 1 indicates the location of the 2018 localities.

1. Above Theth, Shkodra County, Boga district, Bjeshkët e Nemuna Mts (= Prokletije Mts), Radohima Mt., between Qafa e Thorës Pass and Theth Village, south-east of Shtegu Peak, 1657m, N42.3854°: E19.7502°, limestone rocky area above coniferous forest (Plate 1: 1).

2. Qafa e Selitës, Malësia e Tiranës, (Highlands of Tirana), below Maja e Fekenit (Feken peak), west from Qafa e Selitës Pass, 1133m, N41.3729°: E19.9992°, slopes with Quercus, Carpinus, Juniperus oxycedrus (Plate 2: 2).

3. Mali me Gropë, 1501m, Mali me Gropë Mts, Central part south of plateau, 1501m, N41.3617°: E20.0568°, Limestone area with dolines, mountain steppe-like grasslands with single Acer trees (Plate 1: 2).

4. Mali me Gropë, 1405m – Mali me Gropë Mt., above Shen Meri, 1405 m, N41.3524°: E20.0465°, stony slopes with Artemisia alba, Saturea, Juniperus, etc. (Plate 2: 1).

5. Tomori, 2379m, Mt. Tomor, Tomor peak (Abaz Aliu peak), 2379m, N40.6361°: E20.1615°, high mountain dry grassy slopes and rocky areas (Plate 3: 1).

6. Tomori, 1739m, Mt. Tomorr, Tomorr peak (Abaz Aliu peak, below to south, N40.6111°: E20.1885°, 1739m, mountain grassy slopes and rocky areas (Plate 3: 2).

7. Ossumi, Osumi river canyon, Çorovodë, opposite Çerenisht village, 419m, N40.4846°: E20.2362°, Maquis: Phyllirea, Arbutus unedo, Pistacia terebinthus, Quercus ilex, Quercus sp., Palliurus, Cotinus coggyria, Juniperus oxycedrus, Carpinus orientalis, etc. (Plate 4: 1).

8. Mal Çajup, Gjirokaster County, Mt. Lunxhërisë, between Mal Çajup and Erind Village, 1015m, N40.1825°: E20.1661°, limestone mountain steppe-like grasslands with Quercus, Carpinus, Acer trees around (Plate 4: 2).

Map 1. New in 2018 collecting localities in Albania.
Table 1. Key to localities mapped in earlier works.

<table>
<thead>
<tr>
<th>Locality</th>
<th>Number in map</th>
<th>Source of map</th>
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<td>Ardenica</td>
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<td>Bistrice</td>
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<td>Beshkov (2018)</td>
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<td>Bistrice - Syri i Kaltër</td>
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<td>Dishniçë</td>
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<td>Prespa Lake</td>
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<td>Beshkov &amp; Nahirnić (2018a)</td>
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<td>Pustec, 862m</td>
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<td>Stan Karbunarë</td>
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<td>Vukopoles</td>
<td>4</td>
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<td>Zvezdë</td>
<td>2</td>
<td>Beshkov (2018)</td>
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**Inventory of species**

All entries relate to Albania, unless otherwise stated to the contrary. Data are presented chronologically.

**Drepanidae Boisduval, 1828**


**Geometridae Stephens, 1829**

*Proteuchloris neriaria* (Herrich-Schäffer, 1852) Syri i Kaltër, 6.viii.2018, 1 ♂ (Plate 5: 1). Reported for Albania from Tirana, Marikaj near Tirana, Fush-Kuqe and Kavajë (Misja, 1977). We suppose possible misidentification because in the work by Misja *Comibaena bajularia* ([Denis & Schiffermüller], 1775) is not included.


Plate 1. Survey areas. 1. Above Theth, 1657m; 2. Mali me Gropë, 1501m.
Plate 2. Survey areas. 1. Above Shen Meri, Mali me Gropë, 1405m; 2. Qafa e Selitës, 1133m.
Plate 3. Survey Areas. 1. Tomori summit, 2379m; 2. Tomori, below summit to the south, 1739m.

Protorhoe unicata is reported as a new for Albania by Urbahn (1966), although it is presented as a synonym of P. corollaria in Rebel & Zerny (1931). After examination of genitalia here we confirm correct identification and the presence of this species in Albania after the recent taxonomic revision of the genus Protorhoe Herbulot, 1951 by Rajaei, Stadie & Hausmann (2017).
Protorhoe corollaria (Herrich-Schäffer, 1848) Strelcë, 5.vi.2016, 1♀ (Plate 5: 5), Gen. prep. 2/09.III.2018, S. Beshkov, ♀ genitalia (Plate 10: 6). Genitalia length: 3.65mm, cornutus length: 0.55mm, wingspan 23mm. Protorrhoe corollaria is reported for Albania from Rebel & Zerny (1931). After examination of genitalia here we confirm correct identification and the presence of this species as well in Albania after the recent taxonomic revision of the genus Protorhoe Herbulot, 1951 by Rajaei, Stadie & Hausmann (2017).


Sphingidae Latreille, 1802


Erebidae Leach, [1815]


Noctuidae Latreille, 1809


Helivictoria victorina (Sodoffsky, 1849) Kolonjë, 27.VI.2017, 1♀/H20040 (Plate 7: 2). New genus and a new species for Albania.

Condica viscosa (Freyer, [1831]) Stan Karbunarë, 11.viii.2016, 11♂♂ and 6♀♀, Gen prep 1./19.IV.2019 S. Beshkov (Plate 11: 4: ); Ardenica, 4♂♂ and 1♀. In Beshkov & Nahirnić (2019), the specimens mentioned and illustrated as Phyllophila obliterata are Condica viscosa. New genus and a new species for Albania.

Cryphia algae (Fabricius, 1775) Known in Albania at a single locality only: Tirana (Rebel & Zerny, 1931, Heinicke, 1965). The locality Galičica reported by Rebel & Zerny (1931), following the report of Drenowsky (1930) is in North Macedonia, not


Caradrina wullschlegeli wullschlegeli Püngeler, 1903 (= wullschlegeli schwingenschussi Boursin, 1936) Previously in Albania known only from Mali me Gropë, Bizë near


*Apterogenum ypsillon* ([Denis & Schiffermüller], 1775) Shkallë, 08.vi.2018, 1♀ (Plate 8: 3). New genus and a new species for Albania.

Hadena drenowskii drenowskii (Rebel, 1930) Tomori, 1739m, 13.vii.2018, 1♀ and 1♂; Mali me Gropë, 1501m, 16.vii.2018, 3♂♂ and 9♀♀; Mali me Gropë, 1405m, 17.vii.2018, 2♂♂. In some internet sources for the range of H. drenowskii drenowskii Albania is mentioned but without any further data and proofs. New species for Albania.


Mythimna alopecuri (Boisduval, 1840) North Macedonia, Galičica Mts, between Dvata Javora and Bulgarska Čuka Top, 1587m, N40.9908°; E20.8578°, 17.viii.2013, 4♂♂ and 1♀; Pelister Mt.-Prespa lake, between Slivnica Village and Sveta Bogorodica Monastery, 1135m, N40.9684°; E21.0917°, 1.viii.2016, 2♂♂; Prilep Region, near Pletvar Pass, 963m, N41.3702°, E21.6704°, 5.viii.2018, 2♂♂ (Plate 9: 3); Albania, Pustec, 862m, 19.viii.2017, 2♂♂. In Albania known only from Klocë (Beshkov & Nahirić, 2018a). New species for North Macedonia and second report for Albania. Although Mythimna alopecuri can be split by appearance from Mythimna sicula (Treitschke, 1835) (= scirpi Duponchel, 1836), the easier way for correct identification is examination of ♂ clasper mechanism. Differences are shown on Plate 12: 3, 4.

Albocosta musiva (Hübner, [1803]) North Macedonia, Bitola Region, Pelister Mt., “Široka”, 1955m, N41.0047°; E21.1686°, 06.viii.2016, 1♀. Second locality for North Macedonia, recently reported as a new for the country from Galičica Mts (Beshkov, 2014).


Nolidae Bruand, 1847

*Meganola kolbi* Daniel, 1935 Ilias, 140m, 15.v.2017, 1 ♀ (Plate 10: 1), Gen. prep. 4./18.IV.2018, S. Beshkov, ♀ genitalia (Plate 12: 6); Strelčë, 5.vi.2016, 1 ♀, genitalia checked. New species for Albania. Female genitalia are distinctive and easily separate this species from *M. strigula*.

*Meganola strigula* ([Denis & Schiffermüller], 1775) In Albania known from Kula e Lumës (Rebel & Zerny, 1931), Levan near Fieri [Koshovica Gorge] (Beshkov, 1995). This reports may concern both *M. strigula* and *M. kolbi*. New data: Pustec, 862m, 19.viii.2017, 1 ♂, Gen. prep. 5./18.IV.2018, S. Beshkov, ♀ genitalia (Plate 13: 1).


**Corrections to earlier published list**

*Phyllophila obliterata* (Rambur, 1833) is reported in error from Ardenica (Beshkov & Nahirnić, 2019). The specimens (Plate 11: 3, 4) are *Condica viscosa* (Freyer, [1831]). The specimen illustrated in the same article (Plate 13: 6) as *Lithophane socia* (Hufnagel, 1766) from Starë is *Lithophane semibrunnea* (Haworth, 1809) which is also new for Albania (genitalia checked).

**Acknowledgements**

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**References**


