FOLIA HISTORICO-NATURALIA MUSEI MATRAENSIS
2014 38: 87–90

Data to the Raphidioptera fauna of the Balkan Peninsula and Crete

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Abstract: About 60 snakefly specimens belonging to 14 species were determined from the given territory. *Phaeostigma galloitalica*, *Phaeostigma klimenschi* and *Puncha ratzeburgi* are new to the fauna of Albania, while *Dichrostigma flavipes* is new to Serbia. Albanian findings of *P. klimenschi* are the first ones outside Greece. In the case of *P. galloitalica* and *P. klimenschi* some taxonomic remarks are also given.

Introduction

Between the years 1983 and 2014 a number of collecting trips were carried out by entomologists, botanists and other specialists of the Hungarian Natural History Museum, Budapest (HNHM), and other institutions to different Balkan countries. Raphidioptera specimens collected by them are deposited in the HNHM. All of the identified exemplars are belonging to the family Raphidiidae Latreille, 1810.

In the present paper the Balkan Peninsula is regarded in the sense of physical geography, therefore material from the territories south of the rivers Sava and Danube is treated only. When making zoogeographical remarks, data of Aspöck et al. (1980), Aspöck et al. (1991), Devetak (1992) and Aspöck et al. (2001) were considered.

The names of collectors are given in the following abbreviations: AH = András Hunyadi, AP = Attila Podlussány, AK = Attila Kovács, BN = Barnabás Nagy, BS = Barnabás Sárospataki, DM = Dávid Murányi, DP = Dániel Pifkó, GM = Gábor Magos, GP = Gellért Puskás, JK = Jenő Kontschán, LD = László Dányi, LS = Lajos Somlyai, PJ = Péter Juhász, TH = Tamás Huszár, TISZ = Tímea Szederjesi, TK = Tibor Kovács, ZB = Zoltán Barina, ZE = Zoltán Erőss, ZF = Zoltán Fehér, ZSU = Zsolt Ujvári.

Annotated list of the determined species

Phaeostigma (Phaeostigma) galloitalica (H. Aspöck & U. Aspöck, 1976) – **Albania**, Has District, Pashtrik Mts., Salghinë, 22.05.2010, 1 ♀, ZF, DM & ZSU; Mirditë District, Ndërshenë, 21.05.2010, 1 ♂, 1 ♀, ZF, DM & ZSU.

The species was hitherto reported from south-eastern part of France, from Italy, Bosnia–Herzegovina, and Montenegro. It is new to the fauna of Albania.

Taxonomic remarks: Though the number of poststigmatic cells is 4 (which number usually characteristic for *P. notata*), the shape of the parameres and hypovalva of the male specimen is typical of *P. galloitalica*. The shape of the caudal edge of the subgenital plate of females are agree also with figures about this organ of *P. galloitalica* (Aspöck et al. 1991: Figs 1961, 1962).

As regards the poststigmatic cells of females, in case of Salaghinë specimen 3 are on the right, and 4 on the left fore wing (but the apical one is very small), while in Ndërshenë specimen 4 are on both fore wings, but on the right fore wing the apical poststigmatic cell is very small.

Phaeostigma (Phaeostigma) pilicollis (Stein, 1863) – **Greece**, Makedonia Region, Grevena County, Polyneri, 14.05.2006, 1 ♀, LD, JK & DM; Makedonia Region, Kozani County, Neapoli, 08.05.2014, 1 ♀, TK & DM; **Macedonia**, South-Eastern Region, Volandovsko Polje, Dedeli, 06.05.2014, 1 ♀, TK & DM.

Known only from the southern part of the Balkan Peninsula.

Phaeostigma (Magnoraphidia) major (Burmeister, 1839) – **Greece**, Ipeiros Region, Ioannia County, Kalpaki, Vallas Monasteri, 12.05.2006, 1 ♂, 1 ♀, LD, JK & DM.

Distributed on the Balkan Peninsula and in Central Europe.

Phaeostigma (Magnoraphidia) klimenschi (H. Aspöck & U. Aspöck, 1964) – **Albania**, Dibär District, Korab Mts., Radomirë, 26.06.2007, 1 ♀, LD, ZE, ZF, AH & DM; Skrapar District, Tomor Mts., 7km NW of Terovë, 25.08.2006, 2 ♀, ZF, AH, TH & DM.

The species was hitherto reported only from the Olymp Mt., at 2100-2200 m a. s. l., from *Pinus heldreichii* forest, near to timber line (Aspöck et al. 1991). Later (21 and 22 June 1993) it was collected by Hubert Rausch at the Katara Pass (Greece), at elevation 1700 m, from small *Pinus* and *Juniperus* trees (personal communication by H. Aspöck). The examined specimens are the first ones found outside the territory of Greece. Those were collected at the edge of a *Pinus heldreichii* forest, with beech bushes (Tomor, elevation 1950 m), and from a habitat with willow, hornbeam and alder bushes and small trees along a small creek in an otherwise rather bare mountain landscape (Korab, elevation 1440 m).

Taxonomic remark: On the basis of eidonomic characters and the structure of atrium bursae the examined specimes proved to be *P. klimenschi* with the largest probability, but the (oderwise distinct) subgenital plate was smaller than it was figured by Aspöck et al. (1980: Fig. 32). However, Horst and Ulrike Aspöck were so kind to compare one of the three Albanian exemplars to a *P. klimenschi* specimen from the type locality of the species. They found that the slight differences may be interpreted as being within the normal variability. Thus, confirming my tentative determination, they identified it as *Phaeostigma (Magnoraphidia) klimenschi*, with a comment that „a closely related species can never be excluded, of course (although very unlikely) – a male would therefore be welcome" (personal communication by H. Aspöck).

Phaeostigma (Aegeoraphidia) biroi (Navas, 1915) – **Greece**, Crete, Irakleia County, Gazi, Keris Hill, 05-09.05.1993, 1 ♂, AP.

The species is endemic to Crete.

Dichrostigma flavipes (Stein, 1863) – **Albania**, Has District, Pashtrik Mts., Salghinë, 22.05.2010, 6 ♂, 4 ♀, ZF, DM & ZSU; Mirditë District, Ndërshenë, 21.05.2010, 1 ♀, ZF, DM & ZSU; **Greece**, Thessalia Region, Karditsa County, Sarantoporo, 08.05.2011, 1 ♂, JK, DM, TISZ & ZSU; **Montenegro**, Bar Municipality, Rumija Mts., Stari Bar, 26.05.2013, 1 ♀, PJ, TK, GM & GP; Bar Municipality, Rumija Mts., Sutorman, 26.05.2013, 1 ♂, 1 ♀, PJ, TK, GM & GP; **Serbia**, Zlatibor District, Jadovnik Mts., Brodarevo, 24.05.2010, 4 ♂, 1♀, ZF, DM & ZSU.

Distributed mostly in the the Balkan Peninsula (with exception of the southern territories of Greece) and in Central Europe, but it present also in southern part of East Europe. However, up to now there was no exact record about its finding in Serbia, and the occurrence of the species at Sarantoporo (nearly at the latitude 39°N) in Greece is also worth to mention.

Turcoraphidia amara (H. Aspöck & U. Aspöck, 1964) – **Albania**, Has District, Pashtrik Mts., Salghinë, 22.05.2010, 1 ♀, ZF, DM & ZSU; Mirditë District, Nanshenë, 21.05.2010, 1 ♂, DM; Tropojë District, Prokletje Mts., Sylbice, 08.07.2011, 1 ♂, ZB, AK, GP & BS; **Macedonia**, Pelagonia Region, Pelister Mts., Nižepole, 25.06.2014, 1 ♀, PJ, TK & DM; Vardar Region, Kožuf Mts., near to the Ski Center Kožuf, 25.06.2014, 1 ♀, PJ, TK & DM.

It is known from several territories of the Balkan Peninsula, from the Crimea, and from NW Anatolia.

Ornatoraphidia flavilabris (Costa, 1855) – **Bulgaria**, Blagoevgrad Province, Belazica Mts., Petrič, 09.05.2014, 4 ♂, 1 ♀, TK & DM; **Greece**, Makedonia Region, Grevena County, Aetia, 14.05.2006, 1 ♂, LD, JK & DM; Makedonia Region, Florina County, Verno Mts., Pisoderi, 15.05.2006, 2 ♀, LD, JK & DM; Sterea Ellas & Euvoia or Roundi Region, Evritania County, Tirufristas Mts., Ano Kalesmeno, 07.05.2011, 1 ♀, JK, DM, TISZ & ZSU; Thessalia Region, Trikala County, 09.05.2011, 1 ♀, JK, DM, TISZ, & ZSU; **Macedonia**, Pelagonia Region, Pelister Mts., Nižepole, 25.06.2014, 1 ♀, PJ, TK & DM; Polog Region, Bistra Mts., Galičnik, 01.07.2010, 1 ♂, DP & ZB.

Distributed in eastern half of South Europe and of the southen part of Central Europe.

Ornatoraphidia christianodagmara (H. Aspöck & U. Aspöck, 1970) – **Greece**, Thessalia Region, Trikala County, W of Katafito, 09.05.2011, 1 ♀, JK, DM, TISZ & ZSU.

The species was hitherto only known from the south-eastern part of Greece (Euboia Island and Attka Peninsula), while the locality of the new finding is situated in the Athmanon Mts., in the western part of Thessalia Region.

Xanthostigma xanthostigma (Schummel, 1832) – **Bulgaria**, Kyustendil Province, Upper Struma Valley, N of Dobrove, 05.05.2014, 1 ♂, TK & DM.

It is a videly distributed Euro-Siberian snakefly species.

Parvoraphidia microstigma (Stein, 1863) – **Albania**, Tepelenë District, Lunehëri Mt., Hornovë, 11.05.2014, 1 ♀, ZB, DP & GP; **Greece**, Makedonia Region, Grevena County, Eleftherohori, 13.05.2006, 1 ♀, LD, JK & DM; Thessalia Region, Trikala County, Neraida Mts., Desi, 09.05.2011, 1 ♂, JK, DM, TISZ & ZSU.

Known only from the southern part of the Balkan Peninsula.

Raphidia (Raphidia) mediterranea H. Aspöck, U. Aspöck & Rausch, 1977 – **Bulgaria**, Blagoevgrad Province, Kresna, 11.05.1983, 1 ♀, BN.

The species is known from the Balkan Peninsula, from the Carpathian Basin, and from Anatolia.

Remarks: The taxon was for a long time regarded as a subspecies of *Raphidia ophiopsis* Linnaeus, 1758 (see: Aspöck et al. 1980, 2001). However, in the latter monography it was

already mentioned that *R. mediterranea* may be, nothwithstanding, a separate species, as it was also the opinion of Kis (1984) and Sziráki (1993). Therefore, in the recent works by Aspöck & Aspöck (2013, 2014), the earlier subspecies of *R. ophiopsis* are treated at the species rank.

Raphidia (Raphidia) ariadne H. Aspöck & U. Aspöck, 1964 – **Greece**, Crete, Irakleia County, Gazi, Keris Hill, 05-09.05.1993, 1 ♂, 3 ♀, AP.
It is an endemic species to Crete.

Puncha ratzeburgi (Brauer, 1876) – **Albania**, Tropojë District, Prokletije Mts., Ourraj i Eperm, 22.07.2012, 1 ♂, ZB, GP, BS & LS.

Distributed in Central Europe and in the northern part of the Balkan and the Appenin Peninsulas. New to the fauna of Albania.

Acknowledgements: I am indebted to the collectors of the examined material, especially to Dr. Dávid Murányi (HNHM), who took care most intensively the collection of these rather rare insects. I am greatful also to Professor Horst Aspöck (Medical University of Vienna) and to Professor Ulrike Aspöck (Natural History Museum of Vienna) for examination of one of the interesting Albanian specimens of *Phaeostigma klimenschi*.

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