



FIRST RECORD OF MANTISPIDAE (NEUROPTERA) FROM ALBANIA

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Abstract – Three mantidfly species, *Mantispa styriaca* (Poda), *M. perla* Pallas and *M. aphavexelte* Aspöck & Aspöck (Neuroptera: Mantispidae) are recorded for the first time for Albania. The findings represent the first record of the family Mantispidae for the country.

KEY WORDS: Neuroptera, *Mantispa*, new record, Albania

Izvleček – PRVE NAJDBE DRUŽINE ZAPONČIC (NEUROPTERA: MANTISPIDAE) V ALBANIJI

Prvič so zabeležene najdbe treh vrst zapončic v Albaniji, *Mantispa styriaca* (Poda), *M. perla* Pallas in *M. aphavexelte* Aspöck & Aspöck (Neuroptera: Mantispidae). To je prva objava pojavljanja družine Mantispidae v državi.

KLJUČNE BESEDE: Neuroptera, *Mantispa*, nova najdba, Albania

Introduction

Mantidflies (Mantispidae) are lacewings resembling mantids in having a prolonged prothorax and front legs enlarged and adapted for grasping prey (Fig. 1). With approximately 400 described species it is a large neuropteran family (Ohl, 2004) with an unusual life cycle. The larvae of some species (such as *Climaciella* and *Mantispa*)



Fig. 1: *Mantispa aphavexelte* Aspöck & Aspöck. Photo Radomir Jaskuła.

feed on spider eggs, whereas those of other species (such as *Plega*) feed on the larvae of bees and wasps. Mantispidae undergo hypermetamorphosis: the first instar larvae are active and campodeiform, and the subsequent larval stages are scarabaeiform.

The lacewing fauna of Albania was insufficiently investigated up to now. Old records of lacewings occurring in the country are scattered (Pongrácz, 1923; Navás, 1932; Capra, 1945). In 1961 German Entomological Institute (Berlin-Friedrichshagen) organized entomological expedition to Albania and Zelený (1964) reported on Neuroptera collected on the trip. Later, Aspöck et al. (1977) and Jones & Devetak (2009) reported on the presence of Nevrorthidae in Albania. Finally, at the beginning of this century Popov (2004) reviewed the occurrence of owlflies of this country.

In July 2012 zoologists from the University of Maribor (Slovenia) collected lacewings in south Albania. Additionally, data on one species (*Mantispa aphavexelte*) come from the Balkan expedition organized in 2006 by the Department of Invertebrate Zoology and Hydrobiology, University of Lodz (Poland).

Material and methods

Mantidflies were collected using a sweep net, except a single individual of *Mantispa aphavexelte* collected using light trap. Specimens of *M. styriaca* and *M. perla* are preserved in alcohol and deposited in the first author's collection. A female of *M. aphavexelte* was photographed using Nikon Coolpix 5400 camera and is actually deposited in the entomological collection in the Upper Silesian Museum in Bytom (Poland).

Results

MANTISPIDAE Leach in Brewster, 1815

Mantispa styriaca (Poda, 1761)

Material examined: National park Parku Kombëtar Bredhi i Hotovës-Dangelli, 1270 m, peak, N 40° 21,81' E 20° 23,10', 21.VII.2012, in *Acer*; 1♂, Klokočovnik, Podlesnik, Janžekovič & Devetak leg.

***Mantispa perla* (Pallas, 1772)**

Material examined: National park Parku Kombëtar Bredhi i Hotovës-Dangelli, 1270 m, peak, N 40° 21,81' E 20° 23,10', 21.VII.2012, in *Acer*; 1 ♀, Klokočovnik, Podlesnik, Janžekovič & Devetak leg.;

Parku Kombëtar Bredhi i Hotovës-Dangelli, Frashëri, 1090m, N 40°22,03' E 20°25,20', 21.VII.2012, in *Pinus*, 1 ♀, V. Klokočovnik, J. Podlesnik, F. Janžekovič & D. Devetak leg.

***Mantispa aphavexelte* U. Aspöck & H. Aspöck, 1994**

Material examined: Butrint village, distr. Sarandë, olive grove, ad lucem, N 39°59.181' E 19°55.072', 07.IX.2006, 1 ♀, R. Jaskuła leg.

Discussion

The occurrence of the family Mantispidae in Albania is reported for the first time. All three species recorded from this country are common in some other Mediterranean countries bordering with Albania (Aspöck et al., 2001).

It is interesting to note that individuals of two species (a male of *Mantispa styriaca* and a female of *M. perla*), collected in the Bredhi i Hotovës National Park were captured in the same maple tree (Fig. 2).

The present study shows that the lacewing fauna of Albania is still poorly known and further faunistic investigations should be carried out to improve our understanding of the biodiversity and distribution of Neuroptera in this country.

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Fig. 2: Habitat of *M. styriaca* and *M. perla* in the National park Parku Bredhi i Hotovës, July 2012. Photo Dušan Devetak.



Fig. 3: Habitat of *M. aphavexelte* near Butrint village, September 2006. Photo Radomir Jaskuła.

company during the Balkan expedition. This research was partly supported to D.D. by the Slovenian Research Agency within the Biodiversity Research Programme (Grant No. P1-0078).

References

- Aspöck, H., Aspöck, U., Hözel, H.**, 1977: *Neurorthus apatelios* n. sp. – eine verkannte europäische Neurorthiden-Species (Neuroptera: Planipennia). *Entomol. Z.* 87: 53-57.
- Aspöck, H., Hözel, H., Aspöck, U.**, 2001: Kommentierter Katalog der Neuropterida (Insecta: Raphidioptera, Megaloptera, Neuroptera) der Westpaläarktis. *Denisia* 02, 1-606.
- Capra, F.**, 1945: Alcuni Odonati e Neuroteri dell’Albania settentrionale. *Ann. Mus. Civ. Stor. Nat. Giacomo Doria* 62: 292-300.
- Jones, J., Devetak, D.**, 2009: First record of Nevorthidae from Slovenia. *Acta Entomol. Slov.* 17: 99-106.
- Navás, L.**, 1932: Alcuni insetti del Museo di Zoologia della R. Università di Torino. *Boll. Mus. Zool. Anat. Comp. Univ. Torino* 42(26): 1-38.
- Ohl, M.**, 2004: Annotated catalog of the Mantispidae of the world (Neuroptera). *Contribut. Entomol. Int.* 5 (3): 129-264
- Pongrácz, S.**, 1923: Recésszárnyúak. Neuropteroiden. - In: Csiki Ernő Állattani Kutatásai Albániaban. Exploraciones zoologicae ab E. Csiki in Albania peractae. IX. A. Magyar Tudományos Akadémia Balkán-Kutatásainak Tudományos Eredményei. Budapest, 1(1): 143-166.
- Popov, A.**, 2004: The Ascalaphidae (Neuroptera) of the Balkan Peninsula. *Denisia* 13: 229-237.
- Zelený, J.**, 1964: Ergebnisse der Albanien-Expedition 1961 des Deutschen Entomologischen Institutes. 24. Beitrag. Neuroptera. *Beitr. Entomol.* 14: 323-336.

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