

***Mycterodus arpadi* Dlabola, 1977 (Hemiptera Issidae): a new record from Europe**

Ilia Gjonov

Sofia University “St. Kliment Ohridski”, Faculty of Biology, Department of Zoology and Anthropology National Museum of Natural History, Sofia, Bulgaria; e-mail: gjonov@cicadina.com

ABSTRACT

Mycterodus arpadi Dlabola, 1977 (Hemiptera Issidae) is reported only from Asia Minor (Beikoz, Istanbul Province). In 2012, in the Bulgarian part of the Strandzha Mountain a few specimens of the species were collected and photographed. This is the first record of *M. arpadi* in Europe.

KEY WORDS

Bulgaria; fauna; Issidae; *Mycterodus arpadi*; new record.

Received 21.03.2016; accepted 08.05.2016; printed 30.03.2017

Proceedings of the 3rd International Congress “Biodiversity, Mediterranean, Society”, September 4th-6th 2015, Noto-Vendicari (Italy)

INTRODUCTION

The Issidae family described by Spinola in 1839, belongs to the order Hemiptera and includes numerous species. In the Western Palaearctic there is only one tribe, Issini Spinola, 1839 comprising 51 genera and more than 455 species (Gnezdilov, 2013).

The genus *Mycterodus* Spinola, 1839 is one of the richest within the family. It is present in the Western Palaearctic with 40 species distributed in Central and Southeastern Europe, Eastern Mediterranean Basin, Anatolia, Caucasus, Middle Asia, and Iran (Gnezdilov et al., 2014).

Mycterodus arpadi Dlabola, 1977 was described on the base of only one male specimen from Beikoz (the Anatolian part of Turkey). The specimen is deposited in the Hungarian Natural History Museum (Budapest) (Dlabola, 1977). There are no other published records except the holotype. Nevertheless, four specimens are included in the collection of the National Museum of Natural History in Paris (Mike Wilson, pers. comm.). In the Turkish literature the

species is treated as endemic (Lodos & Kalkan-delen, 1981; Önder et al., 2011). The species is assigned to the subgenus *Mycterodus* s. str. (Dlabola, 1995; Gnezdilov et al., 2014).

Two other species of *Mycterodus* are reported from Bulgaria - *M. cuniceps* Melichar, 1906 and *M. immaculatus* Fabricius, 1794. According to Gnezdilov et al. (2014) the records concerning *M. immaculatus* need a revision. Gruev (1970) described another species - *M. longivertex* - but 3 years later the author referred to the species as a junior synonym of *M. cuniceps* (Gruev, 1973).

Mycterodus usually live on bushes and small trees. *M. cuniceps* is frequently collected on oaks.

This is the first record of *M. arpadi* for Europe.

MATERIAL AND METHODS

EXAMINED MATERIAL. Bulgaria, Strandzha Mt., Popovi skali, N 42.1630 E 27.7373, 52 m a.s.l., 1 male 2 females, 10.V.2012, m = 20/12, leg. I. Gjonov (Figs. 1, 2).



Figure 1. *Mycterodus arpadi* lateral view.



Figure 2. *Mycterodus arpadi* dorsal view.

The material was collected by entomological sweeping net in May 2012 in the Bulgarian part of the Strandzha Mountain. The location is not far from the Black sea coast in a limestone area with bushy slopes, close to a small river. The specimens were collected on oaks. Photographs of the living specimens were taken by Olympus E-500 DSLR camera with Sigma 150mm F2.8 EX DG OS HSM APO Macro lens with Raynox DCR-250 macro lens and ring flash. After photographing the samples were stored. The specimens were preserved dry; they were identified by examining external morphology and by carrying out a detailed examination of genitalia following the original description (Dlabola, 1977).

RESULTS

Photos of the genital structures made under microscope were sent to András Orosz in HNHM, Budapest, and he compared them with the genital of the holotype and confirmed the species identification.

DISCUSSION AND CONCLUSIONS

Till now *M. arpadi* was known as an Anatolian endemic species. Considering the lack of previous data, *M. arpadi* could be regarded as a rare species. With this record the knowledge on the distribution

of *M. arpadi* is expanded and new data about the composition of the family Issidae in Bulgaria are added.

ACKNOWLEDGMENTS

I am grateful to András Orosz, HNHM, Budapest, for confirming species identification and to Mike Wilson, National Museum Cardiff who kindly provided essential information.

REFERENCES

- Dlabola J., 1977. Neue Zikaden-Taxone von *Mycterodus*, *Erythria*, *Selenocephalus* und *Goldeus* (Homoptera: Auchenorrhyncha). Acta Zoologica Academiae Scientiarum Hungaricae, 23: 279–292.
- Dlabola J., 1995. *Mycterodus* verwandte Taxone und sieben neue Zikadenarten (Homoptera, Auchenorrhyncha). Acta Entomologica Musei Nationalis Pragae, 44: 301–319.
- Gnezdilov V.M., 2013. [Modern Classification and the Distribution of the Family Issidae Spinola (Homoptera, Auchenorrhyncha: Fulgoroidea)]. Entomologicheskoe Obozrenie, 92: 2013. (in Russian with English summary)
- Gnezdilov V.M., Holzinger W.E. & Wilson M.R., 2014. The Western Palaearctic Issidae (Hemiptera, Fulgoroidea). An illustrated checklist with keys to genera and subgenera. Proceedings of the Zoological Institute of the Russian Academy of Sciences, 318 (Supplement 1): 121.

- Gruev B., 1970. *Mycterodus longivertex* sp. n. aus Bulgarien (Homoptera, Auchenorrhyncha, Issidae). Reichenbachia, 13: 1–3.
- Gruev B., 1973. Über zwei Arten der Familie Issidae in Bulgarien (Homoptera, Auchenorrhyncha). Folia Entomologica Hungarica, 26: 71–74.
- Lodos N. & Kalkandelen A., 1981. Preliminary list of Auchenorrhyncha with notes on distribution and importance of species in Turkey IV. Family Issidae Spinola. Türkiye Bitki Koruma Dergisi, 5: 5–21.
- Önder F., Tezcan S., Karsavuran Y. & Zeybekoğlu Ü., 2011. Türkiye Cicadomorpha, Fulgoromorpha ve Sternorrhyncha (Insecta: Hemiptera) Kataloğu, Meta Basım, Bornova, Izmir, 168 pp.

