

DISTRIBUTIONAL RECORDS TO KNOWLEDGE OF MANTIS RELIGIOSA IN THE SĂLAJ-REGION, ROMANIA (MANTODEA)

Gergely KATONA, Gellért PUSKÁS*

Hungarian Natural History Museum, Department of Zoology

ABSTRACT. We provide 17 data of *Mantis religiosa* (Linnaeus, 1758) originating from the Sălaj-region of western Transylvania, Romania between 11. August, 2014 and 9. September, 2015. Geographical, spatial and temporal records are documented for the better knowledge of the species.

Keywords: Mantidae, *Mantis religiosa*, European praying mantis, Romania, Sălaj, faunistics

INTRODUCTION:

The order Mantodea includes over 2460 described species (Otte *et al.*, 2015), out of which 127 species live in the Euro-Mediterranean area. In Europe, 36 mantis species has been cited (Heller *et al.*, 2015). The Balkan Peninsula has 9 species (Battiston *et al.*, 2010, Romanowski *et al.*, 2014). In Romania only three species are known (Kis, 1977): *Mantis religiosa*, *Empusa fasciata*, *Ameles heldreichi*. Among them the most widespread is the praying mantis or European mantis: *Mantis religiosa* (Linnaeus, 1758). The distribution of the remaining further species is poorly known or the occurrence is doubtful: With this publication we present reliable data to the Romanian distribution of the most enigmatic European species of the order.

MATERIAL AND METHODS:

All the records are field observations, documented by digital photographs or notebook entries. Two voucher specimens are preserved in the Collection of Smaller Insect Orders of the Hungarian Natural History Museum, one specimen is sent to the Vasile Goldiș Western University of Arad. The specimens were identified by the authors, except one case when our colleague, M. Tóth provided the data.

We list all the localities where *Mantis religiosa* has been recorded. The numbers refer to Gubányi (2015) where more detailed information can be found on the sites and collecting methods. For the comparison with old records, we also give the Hungarian equivalents in parentheses after the Romanian names.

List of localities

78 – Dealurile Crasnei (Krasznamenti-dombság), 1.5km NNW of Cehei (Somlyócsehi), Balta Cehei, 11–14.08.2014, N47.266° E22.755°; (leg. A. Gubányi, G. Katona, A. Orosz, G. Puskás).

79 – Munții Meseșului (Meszes-hegység), Cizer (Csíszér), 12.08.2014, N47.021° E22.864°; (leg. A. Gubányi, G. Katona, A. Orosz, G. Puskás).

80 – Munții Meseșului (Meszes-hegység), Pria (Perje), SW slope of Vf. Măgura Priei (Perjei csúcs), 12.08.2014, N47.008° E22.906°; (leg. A. Gubányi, G. Katona, A. Orosz, G. Puskás).

81 – Munții Meseșului (Meszes-hegység), Pria (Perje), W of Vf. Măgura Priei (Perjei csúcs),

12.08.2014, N47.004° E22.882°; (leg. A. Gubányi, G. Katona, A. Orosz, G. Puskás).

82 – Munții Meseșului (Meszes-hegység), 2.5 km SW of Huta (Csákyújfalu), at Poicu Stream, 12.08.2014, N46.986° E22.917°; (leg. A. Gubányi, G. Katona, A. Orosz, G. Puskás).

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

86 – Munții Meseșului (Meszes-hegység), 4.5 km W of Mestecănu (Almásnyíres), 13.08.2014, N46.969° E22.959°; (leg. A. Gubányi, G. Katona, A. Orosz, G. Puskás).

87 – Depresiunea Almaș-Agruj (Almás-Egregy-medence), between Băbiu (Bábony) and Almașu (Váralmás), shore of Băbiu Stream, 13.08.2014, N46.954° E23.099°; (leg. A. Gubányi, G. Katona, A. Orosz, G. Puskás).

88 – Depresiunea Almaș-Agruj (Almás-Egregy-medence), Sfâraș (Farnas), 13.08.2014, N46.897° E23.101°; (leg. A. Gubányi, G. Katona, A. Orosz, G. Puskás).

90 – Dealurile Sălajului (Szilágyménti-dombság), Popeni (Szilágypaptelek), 14.08.2014, N47.25° E23.189°; (leg. A. Gubányi, G. Katona, A. Orosz, G. Puskás).

91 – Culoarul Someșului (Szamos völgye), between Surduc (Szurduk) and Cliț (Csűrfalva), Someș (Szamos) River, 14.08.2014, N47.29° E23.367°; (leg. A. Gubányi, G. Katona, A. Orosz, G. Puskás).

92 – Culoarul Someșului (Szamos völgye), Cliț (Csűrfalva), 14.08.2014, N47.29° E23.422°; (leg. A. Gubányi, G. Katona, A. Orosz, G. Puskás).

93 – Culoarul Someșului (Szamos völgye), Cliț (Csűrfalva), 14.08.2014, N47.284° E23.447°; (leg. A. Gubányi, G. Katona, A. Orosz, G. Puskás).

104 – Munții Plopis (Rész-hegység), Iaz (Krasznajáz), peat bog and ruins of the bath, 30.09.2014, N47.111° E22.659°; (leg. Zs. Bálint, L. Dányi, G. Katona, D. Murányi).

112 – Munții Meseșului (Meszes-hegység), Pria (Perje), SW slope of Vf. Măgura Priei (Perjei csúcs), 01.10.2014, N47.0056° E22.89196°; (leg. Zs. Bálint, L. Dányi, G. Katona, D. Murányi).

113 – Munții Meseșului (Meszes-hegység), Pria (Perje), SW slope of Vf. Măgura Priei (Perjei csúcs),

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

01.10.2014, N47.004° E22.8966°; (leg. Zs. Bálint, L. Dányi, G. Katona, D. Murányi

267 – Dealurile Sălajului (Szilágyménti-dombság), Zalău-Ortelec (Zilah-Vártelek), oak forest on the top of the hill, semi-natural steppe, 09.09.2015, N47.211599°

E23.133539°; (leg. A. Gubányi, A. Orosz, L. Ronkay, M. Tóth) det. M. Tóth. (Fig. 2.)

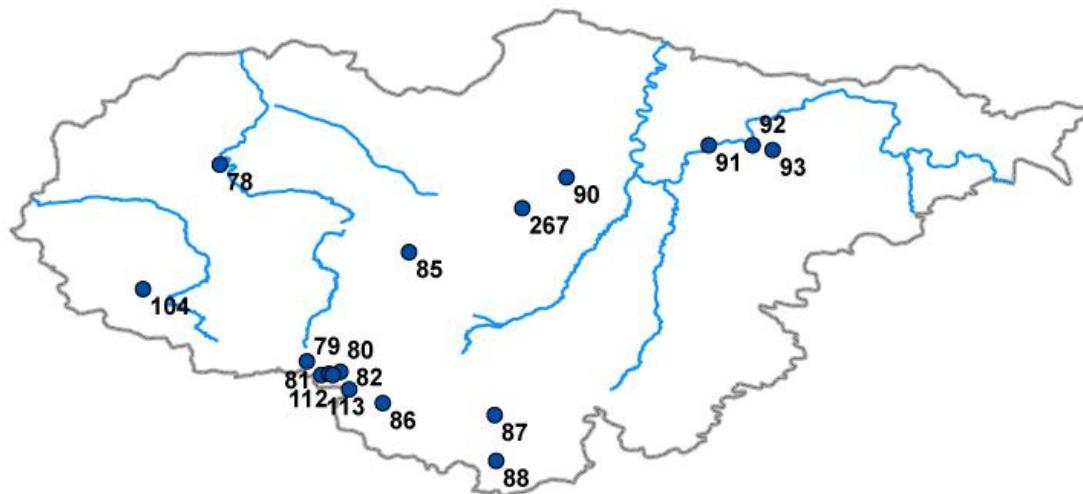


Fig. 1. The overview of *Mantis religiosa* collecting sites of the Hungarian Natural History Museum in 2014 and 2015 carried out in the County Sălaj (by A. Gubányi).

RESULTS:

The first and only published records of *Mantis religiosa* in the Sălaj region is from Pungur (1891): "Somlyó, Zilah, Görcsön, Szilágfő-Keresztúr". Today, the names of these settlements are as follows: Șimleu Silvaniei (Szilágysomlyó), Zalău (Zilah), Gârceiu (Szilággyörcsön), Cristur-Crișeni

(Szilágfőkeresztúr). Since then, no more Mantodea record has been published.

Our praying mantis records are from Munții Plopș (1 data), Culoarul Someșului (3), Dealurile Crasnei (2), Munții Meseșului (7), Depresiunea Almaș-Agrij (2) and Dealurile Sălajului (2). These suggest that the species is widely distributed in the region. (Fig. 1.)



Fig. 2. Praying mantis or European mantis (*Mantis religiosa*) adult female in Zalău-Ortelec, loc. 267. (photo: M. Tóth).

CONCLUSIONS:

We provided 17 data of *Mantis religiosa* (Linnaeus, 1758) originating from the Sălaj-region of western Transylvania, Romania between 11. August, 2014 and 9. September, 2015. Although the *Mantis religiosa* seems to be common and widespread, from faunistical

and zoogeographical point of view, it deserves our attention.

ACKNOWLEDGEMENTS:

We are very grateful to our colleagues who took part in the field work, especially M. Tóth who provided her photo and data. Our collectings in 2014 and 2015 were done as part of research project "Invertebrate

faunistical investigation of the Sălaj county” established between the University Vasile Goldiș and the Hungarian Natural History Museum.

REFERENCES:

- Battiston R, Picciau L, Fontana P, Marshall J, Mantids of the Euro-Mediterranean Area. Vol. 2. WBA Handbooks; Verona, Italy, 1-240, 2010.
- Gubányi A, Collecting sites of the Hungarian Natural History Museum in Sălaj, Romania, in 2014 and 2015. *Studia Universitatis „Vasile Goldiș”*, Seria Științele Vietii, 25(3), 157-167, 2015.
- Heller K-G, Bohn H, Mantodea. Fauna Europaea version 2.6.2, <<http://www.faunaeur.org>> [retrieval date: 28.10.2015]
- Kis B, Familia Amelidae (Ord. Mantodea) in R. S. Romania. Peuce (Zoologie) 5, 65–68, 1977.
- Otte D, Spearman L, Stiewe MBD, Mantodea Species File Online. Version 5.0/5.0, <<http://Mantodea.SpeciesFile.org>> [retrieval date: 28.10.2015]
- Pungur Gy, Adatok Szilágymegye Orthoptera-faunájához (Beiträge zur Orthopterenfauna des Szilágyer Comitatus). Értesítő az Erdélyi Múzeum-Egylet Orvos-Természettudományi Szakosztállyából II. Természettudományi Szak 13, 3, 255–266 + 351–352, 1891.
- Romanowski J, Romanowski M, Mantids (Mantodea) from Pelješac Peninsula. Southern Croatia Entomol. Croat. 18(1–2) 7–11, 2014.