New records of *Hierodula transcaucasica* Brunner von Wattenwyl, 1878 (Mantodea) from Bulgaria

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Abstract: New localities of *Hierodula transcaucasica* Brunner von Wattenwyl, 1878 from Bulgaria and illustrations of the species are provided.

Keywords: distribution, invasive insect, Mantodea

Introduction

The mantis *Hierodula transcaucasica* Brunner von Wattenwyl, 1878 was firstly reported for Bulgaria in 2019 from the southern part of the country, near Pazardzhik Town (Romanowski et al., 2019). Since then, many new observations from the country have been published in the social media (from Shumen, Stara Zagora, Tsarevo, Plovdiv, Kresna and probably more locations), but none of them in a scientific journal. Here we provide two new localities from northern and another two from southern Bulgaria.

Methods

The insects were observed in the field and some collected by hand. The three female specimens from

Oryahovo were killed using chloroform, eviscerated and filled with cotton wool, pinned and dried. They were preserved in the collection of the National Museum of Natural History at the Bulgarian Academy of Sciences, Sofia, Bulgaria. Further, one female was dried and preserved in the personal collection of V. Gashtarov. The figures in the paper were edited with Illustrator and Photoshop (Adobe Inc.). For representation of distribution, a template map from Abadjiev (2001) was used.

Results and discussion

The species was recorded from the following localities (Fig. 1):

1 ♀, Bulgaria, Oryahovo, N 43.7366°, E 23.9755°, 24.ix.2020; 2 ♀♀, ibid., 28.ix.2020, leg. S. Stefanov

Fig. 1. Distribution of *Hierodula transcaucasica* Brunner von Wattenwyl, 1878 in Bulgaria. New localities are presented with black circles, previously published record – with empty circle. Map courtesy by S. Abadjiev.

(Fig. 2); 1 nymph, Bulgaria, Varna, N 43.2137°, E 27.9431°, 21.viii.2020 (observation B. Zlatkov); 1 ♀, Bulgaria, Rupite area near Petrich, N 41.4587, E 23.2616, 12.x.2020 (observation V. Gashtarov); 1 ♀, Bulgaria, Novo Konopladi, N 41.4588° E 23.3342°, 8.ix.2020, leg. V. Gashtarov.

Apart from Bulgaria, *H. transcaucasica* is known from Iran, Afghanistan, Caucasus, Crimea, Ukraine, Central Asia, Turkey, Greece, and Albania (Battiston et al., 2018; van der Heyden, 2018). Over the past few years, an ongoing debate suggests that *H. transcaucasica* and *H. tenuidentata* Saussure, 1869 maybe are synonyms (Battiston et al., 2018). If this assumption is correct, the valid name of the taxon should be *H. tenuidentata* and its range would cover a very large area from India and Central Asia to Western Europe (Battiston et al., 2018; Moulin, 2020). The new findings from our country suggest that *H. transcaucasica* is going to be a common and widely distributed spe-

cies throughout Bulgaria. The impact of this new and apparently invasive species on the local fauna is yet unknown and its eventual assessment would be highly desirable.

References

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Fig. 2. *Hierodula transcaucasica* Brunner von Wattenwyl, 1878. Females from Bulgaria, Oryahovo. Scale line = 2 cm.

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