

## New records of scorpion-flies (Mecoptera: Panorpidae) from Bulgaria

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**Abstract.** The distributional data for three *Panorpa* species from Bulgaria are presented here. The species *Panorpa rufostigma* Westwood, 1846 is published the first time from Bulgaria.

**Key-words:** Mecoptera, Bulgaria, new records.

### Introduction

The research of Mecoptera of Bulgaria led to publishing of several papers with the first records of three species for the country (Dvořák 2014, 2016, Dvořák & Georgiev 2017). Here are presented records of three species including one new for Bulgaria.

### Material and Methods

The material was collected by beating sheet by Hungarian colleagues and donated to the author who identified it. Material is deposited at private collection of L. Dvořák, Czech Republic.

### Results

#### ***Panorpa germanica rumelica* Lauterbach, 1972**

Blagoevgrad province, Belasitsa Mts, Petrich, spring of Leshnishka stream SW of the city, 1025 m, N 41°21.021', E 23°10.767', 5.5.2014, 1 ♂, T. Kovács & D. Murányi leg.

Kyustendil province, Upper Struma Valley, Dobrovo, Struma River N of village, 400 m, N 42°10.698', E 22°58.687', 5.5.2014, 1 ♀, T. Kovács & D. Murányi leg.

Smolyan province, Perelik Mts, Progled, Chepelarska River and its forest sidebrook NW of the village, 1260 m, N 41°41.207', E 24°41.961', 31.5.2012, 1 ♂, J. Kotschán, D. Murányi & T. Szederjesi leg.

Smolyan province, Radyuva Planina, Pavelsko, beech forest and spring SE of the village, 1245 m, N 41°51.023', E 24°43.885', 31.5.2012, 1 ♀, J. Kotschán, D. Murányi & T. Szederjesi leg.

Dvořák & Georgiev (2017) published the second to seventh known locality of *P. germanica rumelica* from Bulgaria. All the published and unpublished data indicate that this subspecies could be common in southern half of Bulgaria.

#### ***Panorpa hybrida* McLachlan, 1882**

Smolyan province, Perelik Mts, Pamporovo, open brooks and alpine grassland at the settlement (Fig. 1), 1560 m, N 41°37.450', E 24°42.411', 31.5.2012, 6 ♂♂, 1 ♀, J. Kotschán, D. Murányi & T. Szederjesi leg.

This species was published only two times from Bulgaria by Zelený (1971) and Dvořák & Georgiev (2017). Here presented record is the third known locality in Bulgaria and the southernmost located occurrence in Europe.



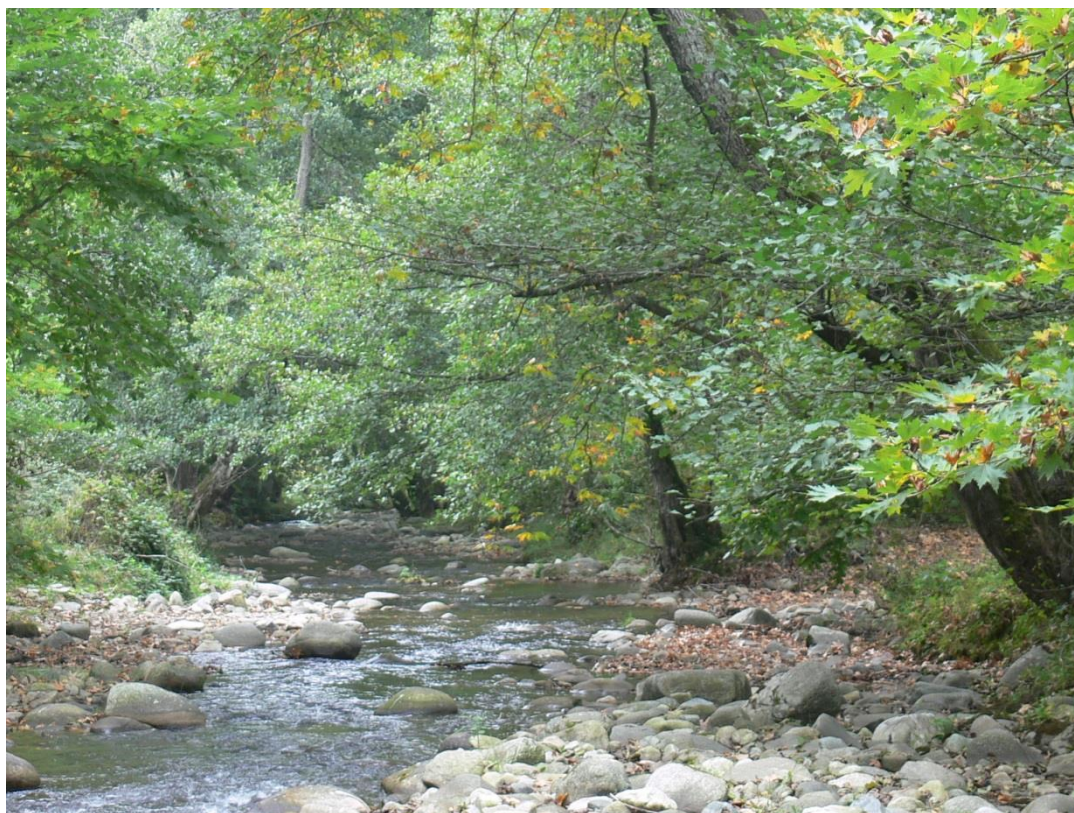
**Fig. 1.** Open brooks and alpine grassland by Pamporovo, locality of *Panorpa hybrida*.  
Photo: Dávid Murányi.

***Panorpa rufostigma* Westwood, 1846**

Smolyan province, Pirin Mts, degraded grassland and *Rubus* shrubland at Pirinska Bistritsa (Fig. 2), 1 km S of Kovachevo, 250 m, N 41°29.319', E 23°28.923', 8.10.2011, 1 ♂ (Fig. 3), Á. Ecsedi, T. Kovács & G. Puskás leg.

Rarely collected and rarely published species. Recently, it was published from several new records in Greece (Dvořák 2018) and firstly from North Macedonia (northernmost record of the species; Dvořák et al. 2020). **Here presented record is the first from Bulgaria** and it is situated a little more to the north than that from North Macedonia.





**Fig. 2.** *Rubus* shrubland at Pirinska Bistritsa by Kovachevo, locality of *Panorpa rufostigma*. Photo: Tibor Kovács.



**Fig. 3.** *Panorpa rufostigma* from a locality by Kovachevo. Photo: Libor Dvořák.

### Conclusions

Dvořák & Georgiev (2017) summarized the *Panorpa* fauna of Bulgaria and listed eight taxa (seven species and one additional subspecies). The data presented in this short contribution yielded in increase the number of Bulgarian *Panorpa* taxa to nine and widening the knowledge about distribution of two taxa having their distributional limits on the territory of Bulgaria.

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