

**THE FIRST RECORD OF *PANORPA RUFOSTIGMA* WESTWOOD, 1846 FROM NORTH MACEDONIA (MECOPTERA: PANORPIDAE)**Libor DVOŘÁK¹, Ana NAHIRNÍČ² & Dušan DEVETAK³¹ Tři Sekery 21, 35301 Mariánské Lázně, Czech Republic,
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Abstract – The scorpionfly species *Panorpa rufostigma* Westwood, 1846 has been recorded for the first time in North Macedonia. This finding shifts the range border of the species by ca. 145 km northwards. A photograph detailing the male genitalia of *P. rufostigma* is presented for the first time.

KEY WORDS: faunistics, *Panorpa rufostigma*, scorpion fly, North Macedonia.

Izveček – PRVA NAJDBA ŠKORPIJONKE *PANORPA RUFOSTIGMA* WESTWOOD, 1846 V SEVERNI MAKEDONIJI (MECOPTERA: PANORPIDAE)

Prvič je za Severno Makedonijo zabeleženo pojavljanje vrste škorpionke *Panorpa rufostigma* Westwood, 1846. Z najdbo se je severna meja njenega poznanege areala premaknila za pribl. 145 km severneje. Na fotografiji so prvič predstavljene genitalije samččka vrste *P. rufostigma*.

KLJUČNE BESEDE: favna, *Panorpa rufostigma*, škorpionka, Severna Makedonija.

Panorpa rufostigma is a relatively rare scorpion fly species strictly restricted to the southernmost parts of the Balkan Peninsula. Published records with exact localities are known from southern Albania (Bartoš, 1965) and several records from southern Greece: Attiki, Pindos Mts, Kerkira (Korfu) island, Peloponnisos, and Evvia (Euboa) island (Lauterbach, 1972; Willmann, 1977; Pollmann et al., 2008; Dvořák, 2018).



Fig. 1. Right fore wing of *Panorpa rufostigma* with unmistakable red pterostigma. Photo: D. Devetak.

Panorpa rufostigma Westwood, 1846 (Figs 1–2)

North Macedonia: Vardar Region, Demir Kapija, east of Besvica village, gorge of Besvički dol river, 255 m a. s. l., 41°22'58"N, 22°11'45"E, 28. 10. 2018, light traps, 1♂, leg. A. Nahirnić & S. Beshkov, det. D. Devetak, revid. et coll. L. Dvořák.

Details of the habitat: pseudomaquis with *Fraxinus ornus* L., *Juniperus excelsa* M. Bieb., *Juniperus oxycedrus* L., *Paliuris spina-christi* Mill., *Pistacia terebinthus* L., *Phillyrea latifolia* L., *Quercus pubescens* Willd. (Fig. 3).

Details of the trap design: Collecting methodology involved 2-3 portable light traps with an 8 Watt actinic (368 nm) and 8 Watt "Blacklight" luminescent tubes, both powered by 12 Volt batteries, as well as a Finnish "tent trap" with a 160 Watt MV bulb at the top of the pole and a 20 Watt (368 nm) black light lamp over the catching pot below. An additional 20 Watt (368 nm) lamp was also positioned about 70 m from the tent trap. All traps ran throughout the night.

This record from North Macedonia represents the northernmost known locality of *P. rufostigma* (Fig. 4). This finding shifts the range border of the species by ca. 145 km northwards. As recently published data on *Panorpa* spp. records from the southern Balkans show (Dvořák, 2014, 2016a, 2016b; Dvořák & Georgiev, 2017), more interesting records should be expected.



Fig. 2. Male genitalia of *Panorpa rufostigma*. Photo: D. Devetak.

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Fig. 3. The locality of *Panorpa rufostigma* in North Macedonia. Photo: A. Nahirnić.



Fig. 4. The presently known distribution of *Panorpa rufostigma*. Orig. D. Devetak.

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