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## Scientific note

# First record of the genus *Boreus* Latreille, 1816 from the Republic of Kosovo

(Mecoptera)

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Boreidae, commonly called snow scorpionflies or snow fleas, is a small family of Mecoptera notorious for their activity during the winter months and presence in high altitudes of the Northern Hemisphere. Their wings are reduced to bristles or absent. Species of this family feed on mosses during the larval and adult stages. It has been hypothesized that the main reason of their activity on snow is not copulation but egg dispersal, find of new feeding places and absorption of heat for ripening eggs during sunny days (Hågvar & Østbye 2011). Currently there are around 30 species in three genera belonging to this family: *Boreus* Latreille, 1816, *Caurinus* Russell, 1979 and *Hesperoboreus* Penny, 1977 (Penny & Byers 1979, Sikes & Stockbridge 2013). The highest number of species belongs to the genus *Boreus*, which is the only genus present in Europe (Fauna Europaea 2016).

Here we report the first record of *Boreus westwoodi* Hagen, 1866 from the Republic of Kosovo. This is also the first country record of the genus *Boreus* and even the Boreidae family. Two individuals (1 male and 1 female) of this species have been observed on 16.03.2016 walking on the snow inside the beech forest close to the ski resort in Brezovica which belongs to the Sharr Mountains (42.181543°N, 21.029119°E, 1613 m a.s.l.) (Fig. 1). We noted anvil-like tergal apophyses in the male, characteristic for the species. Specimens are preserved in 96 % alcohol and deposited in the collection of the Department of Biology, Faculty of Mathematics and Natural Sciences of the University of Prishtina "Hasan Prishtina". Beside Bosnia and Hercegovina and Croatia, currently this is the only record of this species in the Western Balkans (Kreithner 2001, Fauna Europaea

2016). We presume that sparse findings of Boreidae family in Southeastern Europe are a consequence of the lack of inventories of winter insect, rather than absence. *Boreus westwoodi* and *Boreus hyemalis* (Linnaeus, 1767) are two most widespread species of the genus *Boreus* in Europe, while the remaining three species have limited distribution according to the current knowledge. Until now the only records of the genus *Boreus* in the Balkan Peninsula are from Bosnia and Hercegovina, Croatia, Slovenia and now Kosovo.

Sharr Mountains, where *Boreus westwoodi* was found during this investigation are notorious in the Balkan Peninsula as a refugium for many rare, important, endemic and subendemic species of plants and animals. This contribution represents initial results of a wide-scale investigation of winter insect species of this area.

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Fig. 1. Male of *Boreus westwoodi* (left) and habitat in Sharr Mountains (right) where it was found.

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