

First record of the species *Bithynia zeta* Glöer & Pešić, 2007 (Gastropoda: Hydrobiidae) in Bosnia and Herzegovina

Prvi podatek o vrsti *Bithynia zeta* Glöer & Pešić, 2007 (Gastropoda: Hydrobiidae) v Bosni in Hercegovini

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The genus *Bithynia* Leach, 1818 is widespread in the Western Palearctic, with its species particularly rich in the regions of the Balkans and Asia Minor (Glöer 2019). The species occurring in the southwestern Balkans exhibit very small distribution ranges (Glöer et al. 2007). In Bosnia and Herzegovina, three species have been known so far according to Karaman (2006): *Bithynia tentaculata* (Linnaeus, 1758), endemic species *Bithynia mostarensis* Möllendorff, 1873, and *Bithynia leachii* (Sheppard, 1823). Only the first two are listed for the country also by Bank & Neubert (2017) and Glöer (2019). Here we report on discovery of a new species for the country, *Bithynia zeta* Glöer & Pešić, 2007.

The species *B. zeta* was first described from Lake Skadar in southern Montenegro and has eventually been found also at many sites along the lake: Tanki Rt, Malo Blato, Vranjina, Karuč spring and Gornje Vrelo spring in Bar (Glöer & Pešić 2007). It has a distinctive anatomy of the penis and shape of the shell, and it also shows a clear DNA distinction from the species *B. cetinensis* and *B. tentaculata* (Pešić et al. 2019).

B. zeta has recently also been found in Bosnia and Herzegovina, about 70 km away from the north westernmost locality in Montenegro (Glöer & Pešić 2007). Samples of spring snails were taken from three springs along the Trebišnjica River (springs Vruljak 1, »Gorički Studenac« and Vruljak 2, near the Gorica settlement near Trebinje) on

18 July 2020. Vruljak 2 spring (coordinates N 42°42'38.00" E 18°22'33.60"), which represents one of the entrances to the cave bearing the same name, is inhabited by the species *Emmericia ventricosa* Brusina, 1870, and *B. zeta* specimens were collected from the stones there. Species determination was performed based on shell morphology. Vruljak 2 spring is in direct connection with the cave Vruljak 1, forming a cave system known for its large population of the olms (*Proteus anguinus*) (Lewarne et al. 2010, Lewarne 2018).

These samples were collected during a field trip within the framework of the student workshop »Strengthening research capacity«, which was part of the project »Distribution, population and threat status for biodiversity of freshwater snails of the family Hydrobiidae«, a project led by the Center for Karst and Speleology from Sarajevo and financed by the Critical Ecosystem Partnership Fund. The discovery of *B. zeta* in Bosnia and Herzegovina contributes to a better knowledge of the biogeography of this species, formerly known only from a small region in Montenegro. But, the discovery also shows the potential for new discoveries of aquatic, especially spring snails in Bosnia and Herzegovina.

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