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Dina sketi n. sp., a new erpobdellid leech (Hirudinida: Erpobdellidae) from Bosnia and Herzegovina

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The concept of the genera within the family Erpobdellidae seems to be extremely artificial. Recent phylogenetic studies (Trontelj & Sket 2000, Siddall 2002) based on morphology and DNA sequence data showed that a revision of the family was necessary because the morphological characters used to distinguish known erpobdellid genera are not informative. The pattern of annulations, traditionally used for distinguishing *Dina* Blanchard, 1892 and *Trocheta* Dutrochet, 1817 has been proven to be inappropriate for identification of some species (e.g. *Dina krasensis* (Sket, 1968) and *D. pseudotrocheta* Grosser & Eiseler, 2008; see Trontelj & Sket (2000) and Grosser *et al*. (2011b), respectively). Siddall (2002) synonymized all the erpobdellid genera with *Erpobdella* de Blainville in Lamarck, 1818. However we decided to retain the traditional generic subdivisions of Erpobdellidae in accordance with the reasons listed by Trontelj & Sket (2000), which were also followed by the recent taxonomic studies (e.g. Ben Ahmed *et al*. (2011). Further systematic studies should be conducted for revising classification of the erpobdellid genera.

The hirudinean fauna, particularly the family Erpobdellidae of the Balkans still remains relatively unknown. According to the most comprehensive work on the Western Balkans leeches by Sket (1968) in the Dinaric karst areas of the western Balkan Peninsula as well as the south-eastern pre-Alpine region, four distinct leech taxa have been known from nearly identical geographic range. The north-western parts of this range are occupied by *Trocheta cylindrica* Örley, 1886 (formerly known as *Trocheta bykowskii* de Gedroyć, 1913; synonymizied by Košel (2004)). In the vast southern part of this range including Dalmacija (Croatia), Hercegovina and Montenegro, replaced by *Dina lineata dinarica* Sket, 1968. The most southern corner of this range, which includes the alpine region of Montenegro, is occupied by *Dina lineata montana* Sket, 1968. The fourth taxon *Dina krasensis* (Sket, 1968), occurs in a relatively small area in between first two taxa, which covers southern Slovenia and north-western Croatia. Additionally, *Dina minuoculata* Grosser, Moritz & Pešić, 2007, which was recently described from North Montenegro (Grosser *et al*. 2007), inhabits epirhithral sectors in mountain streams.

Field work recently done in a region of the 14.7 km long Cvrcka river in the NW part of Bosnia and Hercegovina (Republic of Srpska) resulted in the discovery of a species new to science which is presented in this paper.

Leeches examined in this study were collected by hand or with pincers from the underside of roots and stones in water, and on the banks as well. In total, six specimens were examined. The external morphology (i.e. the number and position of eyes, the annulation, colouration, papillation and the position of genital pores) was examined on all specimens. The characters of internal morphology (i.e. location, shape and extension of a genital atrium, shape of ovarian sacks and vasa deferentia), were observed on the holotype. This specimen collected in December was mature, with well developed sexual organs and oocytes visible inside the ovisacs. In addition, the paired parts of the reproductive system were symmetric in the shape and extension. Therefore, it could be most probably treated as the typical individual for the new species, and was designated as its holotype.

Measurements were taken with a ruler. Materials were examined using a stereomicroscope (Novex, 6,5 to 45x), photographs of the internal anatomy, mouth and annulation were taken with a microscope camera (Euromex, VC 3031C), and the photographs of the habitus and colour were taken with the camera Canon EOS 400 D. The holotype and three paratypes are deposited in the Senckenberg Museum Frankfurt (SMF); the rest of the material is kept in the collection of the senior author.

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