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Larval description of *Drusus bosnicus* Klapálek 1899 (Trichoptera: Limnephilidae), with distributional, molecular and ecological features

MLADEN KUČINIĆ^{1,7}, ANA PREVIŠIĆ¹, WOLFRAM GRAF², IVA MIHOČI³, MARIN ŠOUFEK³, SVJETLANA STANIĆ-KOŠTROMAN⁴, SUVAD LELO⁵, SIMON VITECEK⁶ & JOHANN WARINGER⁶

¹Department of Biology, Zoology, Faculty of Science, University of Zagreb, Rooseveltov trg 6, 10000 Zagreb, Croatia.

E-mail: mladen.kucinic@biol.pmf.hr; ana.previsic@biol.pmf.hr

²Institute of Hydrobiology and Aquatic Ecology Management, University of Natural Resources and Applied Life Science, Max Emanu-
elstraße 17, 1180 Vienna, Austria. E-mail: wolfram.graf@boku.ac.at

³Croatian Natural History Museum, Demetrova 1, 10000 Zagreb, Croatia. E-mail: iva.mihoci@hpm.hr; marin.soufek@hpm.hr

⁴Faculty of Science and Education, University of Mostar, Matice hrvatska bb, 88000 Mostar, Bosnia and Herzegovina.

E-mail: sstanic@sve-mo.ba

⁵Department of Biology, Faculty of Science, University of Sarajevo, Zmaja od Bosne 35, Sarajevo, Bosnia and Herzegovina.

E-mail: suvad_lemo@hotmail.com

⁶Department of Limnology and Bio-Oceanography, University of Vienna, Althanstraße 14, 1090, Vienna, Austria.

E-mail: johann.waringer@univie.ac.at; simon.vitecek@univie.ac.at

⁷Corresponding author

Abstract

In this study we present morphological, molecular and ecological features of the last instar larvae of *Drusus bosnicus* with data about distribution of this species in Bosnia and Herzegovina. We also included the most important diagnostic features enabling separation of larvae of *D. bosnicus* from larvae of the other European Drusinae and Trichoptera species.

Key words: Drusinae, 5th instar larva, identification, morphology, Bosnia and Herzegovina

Introduction

The Balkan Peninsula is one of the most interesting centres of diversity for different animal groups in Europe (e.g., Gottstein-Matočec *et al.* 2002; Džukić & Kalezić 2004; Kryštufek 2004; Bedek *et al.* 2006; Bilandžija *et al.* 2013) including Trichoptera (e.g., Kumanski & Malicky 1999; Malicky 2005; Oláh 2010, 2011). In this region (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Kosovo, Macedonia, Montenegro, Serbia, Greece) 40 species from the Eurasian genus *Drusus* (family Limnephilidae) have been recorded (Schmid 1956; Radovanović 1942; Krušnik 1987; Kumanski 1988; Malicky 2004, 2005; Oláh 2010, 2011; Oláh & Kovács 2013). Except *Drusus botosaneanui* Kumanski 1968, *Drusus discolor* (Rambur 1842), *Drusus biguttatus* (Pictet 1834) and *Drusus tenellus* (Klapálek 1898), all other *Drusus* species are endemic to this region. *Drusus tenellus* and *D. botosaneanui* also occur in Romania, *D. biguttatus* and especially *D. discolor* are widespread throughout Europe. *Drusus* larvae usually inhabit springs and the crenal section of mountain streams and rivers with low water temperature.

Within the family Limnephilidae, one of the most interesting groups is the *Drusus bosnicus* Group (Schmid 1956) with numerous endemic species described from the Balkan Peninsula (e.g., Radovanović 1942; Marinković-Gospodnetić 1976). All species of the *Drusus bosnicus* Group share some morphological and behavioural features like the shape of male genitalia, the dark coloration of adults and diurnal activity. The first species described from this group at the end of the 19th century was *Drusus bosnicus* Klapálek 1899 (Fig. 1), from the type locality at the spring of the River Bosna situated in Sarajevo, central Bosnia and Herzegovina (Fig. 2). Recently, seven newly described species from Albania (Oláh 2010, 2011) mostly belonging to the *Drusus bosnicus* Group. The main