



Description of *Ecdyonurus solus* sp. nov., a new species of the *Ecdyonurus venosus* species-group (Ephemeroptera: Heptageniidae) from the Crimean Peninsula, Ukraine

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Abstract

The larvae and adults of *Ecdyonurus solus* sp. nov., are described and illustrated. This species is found in the mountainous region of the Crimean Peninsula, and belongs to the *Ecdyonurus venosus* species-group. SEM photographs of the eggs of new species are presented. The distinguishing characteristics separating this *E. solus* sp. nov. from closely related species of the *E. venosus* species-group are discussed. Detailed data on the biology and distribution of the new species are presented.

Key words: *Ecdyonurus venosus* species-group, Ephemeroptera, Heptageniidae, new species, description, taxonomy, Crimean Peninsula, Ukraine

Introduction

So far little is known about the genus *Ecdyonurus* Eaton, 1868 from the Crimean Peninsula. It was first identified in the 1980's by R. Sowa who described the species *Electrogena braaschi* (Sowa, 1984) (originally *Ecdyonurus braaschi* from the *Ecdyonurus lateralis* species-group) from the Bel'bek Stream on the northern slopes of Aipetryns'ka Yaila (Sowa 1984). This region is in the height climatic subalpine belt, and is typical of the Crimean Mountains (Godunko *et al.* 2002). *Ecdyonurus venosus* (Fabricius, 1775) and *E. fluminum* (Pictet, 1843) were reported in the rivers on northern slopes of the Crimean Mountains and their foothills such as the Angara River, the Kirliuk-Su River, the Eni-Sala River, the Kyzyl-Koba River, the Aian River, the Tavel' River, the Dzhalman River and the Salgir River (Kiseleva & Ezernitskii 1985; Kiseleva 1992, 1993). Verification of the material collected by G. A. Kiseleva in 1984, 1985 and 1989 from the Eastern Ulu-Uzen' River and the Skel'skii Stream showed that the species that had been named "*Ecdyonurus fluminum*" and "*Heptagenia sulphurea*" are in fact *E. braaschi*. In our taxonomic studies, carried out in Crimea from 1999 through 2003, we identified the previously undescribed *Ecdyonurus* species, *E. solus* sp. nov. Also, there are three larvae of this species found in G. A. Kiseleva's material from Stilia river in 1989. It is highly conceivable that Kiseleva and Ezernitskii (1985) identified it as "*E. venosus*".