



Redescription of the species *Procloeon (Pseudocentropilum) fascicaudale* (Sowa, 1985) (Ephemeroptera: Baetidae) with notes to its taxonomic position, biology and distribution

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Abstract

Based on the extensive material recently collected on the Island of Rhodos, Greece (terra typica) in May, 2005, a redescription of *Procloeon (Pseudocentropilum) fascicaudale* (Sowa, 1985) is presented. Larval characters are completed, female subimago described and the egg chorionic structures illustrated by means of scanning electron microscopy for the first time. Variability in color patterns and critical characters distinguishing eggs, larvae and male imagines from other Westpalaeartic species of the subgenus *Pseudocentropilum* Bogoescu, 1947 (the representatives of the *Procloeon (Pseudocentropilum) motasi* species-group in particular) are described and discussed. Distributional patterns of the species, its abundance, possible faunistic origin, some aspects of larval and imago's biology, and life cycle of the species are briefly stated. Delimitation and recent concepts of the taxa *Procloeon* Bengtsson, 1915 and *Pseudocentropilum* within the subfamily Cloeoninae Kazlauskas, 1972, taxonomic position and affinities of *P. fascicaudale* are discussed.

Key words: Ephemeroptera, Baetidae, Rhodos, *Procloeon (Pseudocentropilum) fascicaudale*, redescription, differential diagnosis, taxonomy, biology, distribution

Introduction

Procloeon (Pseudocentropilum) fascicaudale (Sowa, 1985) was described by Sowa (1985) on the basis of 9 males, 1 female, 1 male subimago and a single damaged female larva, collected in type locality (5 km N of Laerma, 1 km W of Kallithie, Island of Rhodos, Greece) by Dr. H. Malicky in May, 1975. The literature data on the species concern its generic and subgeneric placement (Jacob 1991), the description of other representatives of *Pseudocentropilum* Bogoescu, 1947 and delimitation or definition of certain species-groups within the genus (Belfiore & D'Antonio 1990).

Recently, T. Soldán has collected an extensive material on mayflies, which includes numerous specimens of *P. fascicaudale*. Although, the Sowa's (1985) description is precise enough (except for missing description of female subimagines), we decided to redescribe the species from the reasons, as follows: (i) to complete the description of missing larval characters, since a limited type series lacks some characters due to damage; (ii) to add a description of female subimago; (iii) to comment intraspecific variability; (iv) to present the egg chorionic structure by means of the scanning electron microscopy; (v) to define critical distinguishing characters allowing differential diagnosis; (vi) to discuss a generic/subgeneric placement of the species within the subfamily Cloeoninae Kazlauskas, 1972; (vii) to analyze distributional patterns and origin of the species and (viii) to summarize the data on biology of the species on the basis of field observations.