



Redescription of *Filchneria mongolica* (Klapálek, 1901) (Plecoptera, Perlodidae) based on type eggs and fresh material from the Selenga and Amur River Basins of Russia and Mongolia

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Abstract

Filchneria mongolica (Klapálek, 1901) is redescribed and reillustrated from the female holotype and fresh material collected in the Selenga and Amur River Basins of Russia and Mongolia. Its relationship with close relatives is discussed.

Key words: Plecoptera, Perlodidae, *Filchneria mongolica*, eggs, eversible paraproct lobes, Selenga River, Amur River, Russia, Mongolia

Introduction

The genus *Filchneria* Klapálek (1908) belongs to the *Perlodes* group which is characterized by the combination of secondary loss of the epiproct, an entire tergum 10 and triangular eggs (Zwick 1997). Abdominal segments 1–3 are divided into terga and sterna by hairless pleural membranes in adults as well as in larvae. Larvae have a small protrusion with a group of short setae arising basally from the apical lacinial tooth (Zwick 2004). Presently, twelve species of *Filchneria* are recognized: the type species *F. mongolica* (Klapálek, 1901), *F. amabilis* (Jewett, 1958), *F. balcarica* Balinsky, 1950, *F. furcifera* Navás, 1936 [species inquirenda], *F. heteroptera* (Wu, 1938), *F. irani* (Aubert, 1964), *F. kuenluensis* (Šamal, 1935), *F. mesasiatica* Zhiltzova, 1971, *F. nuristica* (Brinck, 1954), *F. olgae* (McLachlan, 1875), *F. shobhaae* (Singh & Ghosh, 1969), *F. tau* (Klapálek, 1908). The above species inhabit the Palearctic from Afghanistan to India and China to Mongolia, including boundary areas of the Oriental Region (Zwick 1973).

As currently understood, *Filchneria* seems to be paraphyletic, and may include members of other genera because most descriptions in the group do not consider all of the relevant characters, for example, egg morphology, the eversible male paraproct lobes, and details of chaetotaxy. Conversely, some species presently assigned to other genera may in fact belong to *Filchneria*.

Filchneria mongolica was described after a female from northern Mongolia. The description of the male (Klapálek 1908) was based subsequently on material collected in China (Tsinling), and was inaccurate in some details (Zhiltzova 1971). Better figures of both sexes from the Chinese material were provided by Klapálek (1912), but unfortunately these do not include some needed specific characters. Raušer (1968) and Zhiltzova (1971) attempted to redescribe adults of *F. mongolica*, but both used misidentified specimens.

The female holotype of *F. mongolica*, a recently collected female and a presumably conspecific male from Mongolia were studied by Zwick (1997). He illustrated the female subgenital plate, the characteristic egg, and the everted male paraproct lobe. However, a complete redescription was not provided. Zwick (1997)