

Article



A new species of *Metreletus* Demoulin, 1951 from the far eastern region of Russia (Ephemeroptera: Ameletidae)

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Abstract

Metreletus omelkoi sp. nov. (male, female imagines and male, female subimagines, larvae and egg) is described from the far eastern region of Russia. The genus Metreletus Demoulin, 1951 has a trans-Palaearctic distribution and includes two species: the West-European mountain species, M. balcanicus Ulmer, 1920, and the Far-Eastern species, M. micus Bajkova, 1976. Metreletus omelkoi sp. nov. is the second species from Far-Eastern Russia and the third globally. The larvae of M. omelkoi sp. nov. differ from the other species in their genus by the size of gill I (M. micus) and the form of gills II–VII (M. balcanicus). The male imago of the new species can be distinguished from M. balcanicus by shape, the penis lobes.

Key words: Mayflies, *Metreletus*, taxonomy, morphology, egg, Asia

Introduction

The genus *Metreletus* Demoulin 1951 (Ephemeroptera: Ameletidae), until 2007, presented a single species, *Metreletus balcanicus* (Ulmer, 1920), described from the Balkans. Until then, descriptions included *Ameletus hessei* Fizaine, 1931 and *Metretopus goetghebuergi* Lestage, 1938, which Demoulin (1951) grouped into the new genus *Metreletus*. Several years later, S. Ujhelyi described *Metreletus hungaricus* Ujhelyi, 1960, which was later (Jacob, 1974) recognized as a junior synonym of *Ml. goetghebuergi*. While revising the European species of the genus *Metreletus*, Puthz (1977) came to the conclusion that all four taxa were conspecific, with the valid name being *Metreletus balcanicus* = *Ml. hessei* = *Ml. goetghebuergi* = *Ml. hungaricus*. In 2007, while reviewing mayflies of the Ameletidae family in Russia and adjacent lands, Kluge (2007) transferred the species originally described by Bajkova as *Ameletus micus* Bajkova, 1976 to the genus *Metreletus*. *Metreletus micus* is known as a single specimen from Far-Eastern Russia. Thus, the genus *Metreletus* has a trans-Palaearctic distribution and includes two species: The West-European mountain species, *M. balcanicus*, and the Far-Eastern species, *M. micus*.

A new species, *Metreletus omelkoi* **sp. nov.** is described based on the male and female imagines and larvae. Specimens were preserved in 75% ethanol. The holotype and paratypes are deposited in the collection of the Institute of Biology and Soil Sciences, Far-Eastern Branch, Russian Academy of Sciences, Vladivostok.

Metretopus omelkoi sp. nov.

(Figs 1–35)

Material examined. Holotype male imago, **RUSSIA**, Primorskiy Kray, Ussuriiskii region, Mountain-Taiga Station of Far-Eastern Branch of Russian Academy of Sciences, temporary stream along the road, 4.VI.2011, T. Tiunova. **Paratypes:** collected together with the holotype: 80 male and 50 female imagines, 15 male and 17 female subimagines, and 60 mature larvae.

Description. *Male imago* (in alcohol). Length (mm)—body 7.4–9.2; forewings 8.2–9.2; cerci 17.0–19.3. Total color of living imago brown with brightly yellow, blown-up membranous connection in the root of wings and between an episternum and the posterior arm of the prealar bridge (Fig. 32). After fixing in alcohol, yellow coloring