

## First Records of the Genus *Paraleuctra* Hanson (Plecoptera: Leuctridae) and *Isoperla flavescens* Zhiltzova et Potikha (Plecoptera: Perlodidae) for the Stonefly Fauna of Mongolia

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### Abstract

Two species of stoneflies, *Paraleuctra zapekinae* Zhiltzova and *Isoperla flavescens* Zhiltzova et Potikha are recorded as new for the fauna of Mongolia as well as the genus *Paraleuctra* is firstly recorded in Mongolia. Redescriptions of the two species are given.

**Key words:** Plecoptera, *Paraleuctra*, *Isoperla flavescens*, first record, Mongolia

### Introduction

Forty-seven species of stoneflies were listed for Mongolia by Zhiltzova & Varykhanova (1988). Since 1998, the stonefly fauna of West Khentii (Northern Mongolia) is investigated in order to assess the effects of gold mining on the stream benthos in the region (Purevdorj *et al.*, in preparation). During this study, two species were discovered that are new to the fauna of Mongolia, namely *Paraleuctra zapekinae* Zhiltzova and *Isoperla flavescens* Potikha et Zhiltzova. Including these species, the stonefly fauna of Mongolia comprises now at least 50 species (including a rediscovery of *Diura nanseni* (Kempny)) of stoneflies, of which four species (but no genera) are endemics of Mongolia.

Identifications were carried out at the Department of Ecology, National University of Mongolia and Hydrobiological laboratory of Freshwater, Institute of Biology and Soil Sciences, Far Eastern Branch of the Russian Academy of Sciences. The redescriptions of the new recorded species are adapted from Zhiltzova and Zapekina-Dulkeit (1986) and Shimizu (2000).

### Redescriptions of Species

*Isoperla flavescens* Potikha et Zhiltzova, 1986  
(Figs. 1-7)

*Isoperla flavescens* Zhiltzova et Potikha, in  
Potikha & Zhiltzova, 1986: 50.

*Isoperla* is a wide-spread Holarctic genus comprising more than 130 species (Illies, 1966; Zwick, 1973). In the Palaearctic, 13 species are known from Japan (Kawai, 1976); and 19 species from Russian Far East (Zhiltzova & Zapekina-Dulkeit, 1986). Eight species are distributed in Mongolia, including *Isoperla flavescens* Potikha et Zhiltzova, which is new to the fauna of Mongolia.

**Material.** Two males: Northern Mongolia, West Khentii, Mandal-Khoning Nuga region, Eroo river, (N49°05'22", 107°17'44"), 14 June 2002, Leg. S., Purevdorj.

**Male.** Body 9.0-11.0 mm long, forewing 11.0-12.5 mm long, body color light yellowish and head with trapezoidal brown area between the three ocelli. The anterior margin of the brown area is well delimited, the arched rear margin is less pronounced, because there is a paler triangular central area (Fig. 1). Pronotum with weakly dark-coloured margins (Fig. 1), mesonotum and metanotum pale. Aedeagus absent or little developed with weak sclerotization. Rear margin of sternite VIII with projecting lobe on hind margin (Figs. 2), which varies in form and pigmentation (Figs. 2, 4, 5). Paraprocts dark, with upcurved posterior tips (Fig. 7). Posterior and central part of tergite IX with dark sclerotization and pigmentation (Fig. 3)

**Female.** Body 10.0-12.5 mm long, forewing 12.0-15.0 mm long, similar to male. Subgenital plate long, hind margin of sternite VIII extended (Fig. 6), medially notched with obtuse angles, sometimes hind margin rounded.