



JUST LIKE BIRDWATCHING: THE FIRST RECORD OF *MEGAPERLODES TIUNOVI* TESLENKO 2015 (PLECOPTERA: PERLODIDAE) FROM KOREA

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ABSTRACT

The genus *Megaperlodes* Yokoyama, Isobe & Yamamoto, 1990 is reported for the first time from the Korean Peninsula based on a color photograph of a *M. tiunovi* Teslenko 2015 specimen in Gangwon Province of South Korea. With this record, sixty-two species are now known from the country. A distribution map of the genus is also presented.

Keywords: *Megaperlodes* Yokoyama, Isobe & Yamamoto, 1990, distribution, South Korea, Russian Far East, Japan

INTRODUCTION

Megaperlodes Yokoyama, Isobe & Yamamoto 1990 is a small genus of the stonefly family Perlodidae, which consists of two striking, large sized species restricted to the Pacific temperate ranges of the East Palaearctic (Teslenko 2015). The type species, *M. niger* Yokoyama, Isobe & Yamamoto 1990 was described from Honshu of Japan, and is known only from Yamagata, Okayama and Ibaraki Prefectures (Yokoyama et al. 1990, Inada et al. 1998, Yoshinari 2001, Shimizu et

al. 2005). The original description was rather incomplete, and the genus remained unknown for most non-Japanese Plecoptera students, despite its detailed complementary description (Inada et al. 1998). It was even missing from Plecoptera Species File (DeWalt et al. 2014) before the second species was recently described from the South of the Russian Far East, and the genus received a widely available revision (Teslenko 2015, DeWalt et al. 2015).

Herein we report the Korean occurrence of the mainland species, *M. tiunovi* Teslenko 2015 from

Gangwon Province of South Korea, and present a map on the distribution of the genus.



Fig. 1. Habitus of *Megaperlodes tiunovi* Teslenko 2015 from South Korea (photograph by T.W. Kim).

RESULTS AND DISCUSSION

Megaperlodes tiunovi Teslenko 2015

(Fig. 1)

Megaperlodes tiunovi Teslenko 2015:554. (original description of male, female and larva).

Type locality: Russia, Primorye, Brus'ya River at Bamburovo

New record (photograph): SOUTH KOREA: Gangwon Province, Inje-gun, Girin-myeon, Bangdong-ri, (Mt.) Bangtaesan, N37°56'33.73" E128°22'55.76", 06.v.2010, T.W. Kim.

On the very same day when the description of *M. tiunovi* was published, the first author encountered a color photograph of a similar stonefly in the recent monograph of Korean Orthoptera (Kim 2013). The image is included in a table to present orders related to Orthoptera, but even though it is small, the characteristic wing and

head pattern of the species are obvious. Dr. Tae Woo Kim kindly provided us an original, larger image and informed us about the habitat and other circumstances where the photo was taken. Unfortunately, the specimen was not captured, but it was clearly identical with the type series. Dr Valentina A. Teslenko also confirmed its conspecificity.

Although it is not the usual practice to publish stonefly records without voucher specimens, vertebrate biologists occasionally do, [e.g. birds, where even a new species was described without fixing type specimens Robb et al. (2013); however, disputed and put in synonymy by Kirwan et al. (2015)]. We take this exception because of the distinctive habitus of *M. tiunovi*, and the detailed agreement based on high quality photographs of the Korean specimen (Fig. 1) with that of the type specimens (Figs. 1–2, 4 in Teslenko 2015). We also note that color photography has increasing importance in the study of stoneflies, and photographic guides are already available (Stark et

al. 1998, Szczytko & Kondratieff 2015).

The Korean specimen of *M. tiunovi* was found near a narrow stream resting on stones during daytime and showed weak flight ability. According to the latest stonefly reports from South Korea

(Murányi & Park 2011, Zwick & Baumann 2011), this is the 62th species reported from the country. To explain this range extension we provide a map on the known distribution of the two *Megaperlodes* species (Fig. 2).

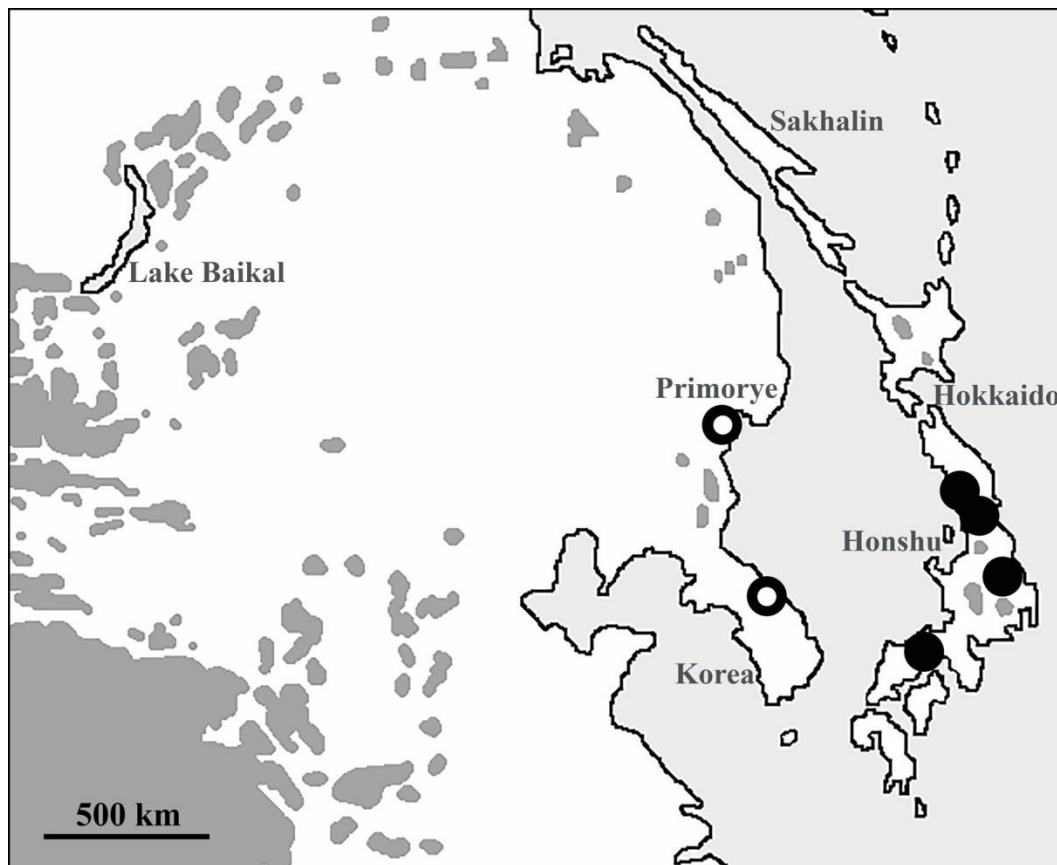


Fig. 2. Distribution of the genus *Megaperlodes* Yokoyama, Isobe & Yamamoto 1990; gray areas are above 2000 meters; open circles = *M. tiunovi*; closed circles = *M. niger*.

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