



## Synopsis of the genus *Paraleuctra* (Plecoptera: Leuctridae) from China

WEIHAI LI<sup>1,4</sup>, YUNBING WANG<sup>2</sup> & DING YANG<sup>3</sup>

<sup>1</sup>Department of Plant Protection, Henan Institute of Science and Technology, Xinxiang, Henan 453003, China.

E-mail: lwh7969@163.com

<sup>2</sup>Entomological Museum of Henan Institute of Science and Technology, Xinxiang, Henan 453003, China.

E-mail: wybing228@163.com

<sup>3</sup>Department of Entomology, China Agricultural University, 2 Yuanmingyuan West Road, Beijing 100193, China.

E-mail: dyangcau@yahoo.com.cn

<sup>4</sup>Corresponding author

### Abstract

A species of the family Leuctridae, *Paraleuctra tianmushana* **sp. nov.**, is described from Zhejiang and Henan, China. Its relationship with closely related species is discussed and a key to Chinese species of *Paraleuctra* is presented.

**Key words:** Plecoptera, Leuctridae, *Paraleuctra*, *Paraleuctra tianmushana*, new species, China

### Introduction

*Paraleuctra* was erected by Hanson (1941) as a genus in the family Leuctridae. Recent studies of Stark & Kyzar (2001) on the Nearctic *Paraleuctra* and Shimizu (2001) and Zhiltzova (2003) on the Asian species have greatly contributed to knowledge of this genus. Presently there have been a total of 21 valid *Paraleuctra* species reported (Baumann & Stark 2009; DeWalt *et al.* 2009; Harper 1977; Shimizu 2000; Stark & Kyzar 2001; Zhiltzova 1974, 2003). However, the species of *Paraleuctra* from China still remain poorly known long after the descriptions of *P. orientalis* (Chu, 1928) which was redescribed by Wu (1938, 1940, 1949) and *P. sinica* Yang & Yang, 1995. In the present paper, a distinct new species is described from Zhejiang and Henan provinces and a key to the species of *Paraleuctra* known from China is provided. The studied material is deposited in the Entomological Museum of the Henan Institute of Science and Technology (HIST) and the Entomological Museum of China Agricultural University (CAU), Beijing, respectively, and all of the specimens are preserved in 75% ethanol. The morphological terminology follows that of Stark & Kyzar (2001).

### Taxonomy

#### A key to species of *Paraleuctra* from China

1. Body evenly brown in both sexes; male tergum 10 with posterior notch..... 2
- Body with areas of dark pigmentation on head, pronotum, or abdominal terga in background of yellowish brown (Figs. 1, 3–5, 9); male tergum 10 entire..... *Paraleuctra tianmushana* **sp. nov.**
2. Male cerci with a small bulge on dorsal arm (Fig. 14), tergum 9 normal; female subgenital plate heavily sclerotized with posterior margin slightly roundly or somewhat angulately expanded posteriorly (Fig. 6)..... *P. orientalis*
- Male cerci without a small bulge on dorsal arm, tergum 9 with sclerotized median strips (Fig. 13); female subgenital plate lobes slightly sclerotized, with posterior margin more roundly expanded (Fig. 7) ..... *P. sinica*