



***Leuctra usdi*, a new stonefly (Plecoptera: Leuctridae) of the *L. tenuis* (Pictet) species group from the southeastern U.S.A. plus three new Alabama state records**

SCOTT A. GRUBBS

Department of Biology and Center for Biodiversity Studies, Western Kentucky University, Bowling Green, KY 42101 USA

E-mail: scott.grubbs@wku.edu

Abstract

Leuctra usdi sp. n. is described from Tennessee and Alabama, U.S.A. *Leuctra usdi* sp. n. is differentiated from other members of the *L. tenuis* (Pictet) species group mainly by unique characteristics of the dorsal process on the male 7th abdominal tergum. New Alabama state records of *Leuctra carolinensis* Claassen, *L. grandis* Banks and *Perlesta teaysia* Kirchner & Kondratieff are reported.

Key words: Plecoptera, Leuctridae, *Leuctra*, Tennessee, Alabama, new species

Introduction

The Holarctic stonefly genus *Leuctra* Stephens (Plecoptera: Leuctridae) is currently represented within the Nearctic region by 29 species (DeWalt et al. 2010), of which most are distributed in the Cumberland Plateau and Appalachian Mountain regions. As part of sampling efforts for stoneflies from springs across the southeastern U.S.A., an undescribed species belonging to the *L. tenuis* (Pictet, 1841) species group was discovered in Tennessee and Alabama. Specimens are deposited at the Illinois Natural History Survey (INHS) and Western Kentucky University (WKU). Terminology follows Harper & Harper (1997, 2003).

***Leuctra usdi* sp. n.**

(Figs. 1A–F, 2A)

Male. Forewing length 5.5 – 6.5 mm. General body color and wings brown. Cerci tubular and unmodified. Abdominal terga 1 – 6 unmodified. Lateral portion of abdominal segment 7 darkly sclerotized, conjoining medially into a near-parallel sided dorsal process that is ca. ½ segment width and truncate distally except for a pair of small lateral notches that give the process a slightly trilobed appearance, ends of the medial and lateral lobes terminate along the same distal plane (Figs. 1A, 3A); lateral margins of abdominal segment 8 darkly sclerotized and conjoin medially only into a thin band anteriorly (Figs. 1A–1B). Epiproct sclerite narrow throughout length, expanded slightly and rounded distally. In lateral view the inner paraproct lobes are broad basally, simple, and rounded; with low tubercles present on both inner and outer margins distally (Fig. 2A–2B); both the anterolateral and posteromedial portions are slightly concave. Outer paraproct lobes are broadest basally, simple and narrow, tapered distally and recurved slightly (Fig. 2A). Vesicle small and subtriangular (Fig. 1C).

Female. Forewing length 7.0 – 7.5 mm. Body color and cerci similar to male. Lobes of subgenital plate distally subtruncate, posterolateral corners rounded marginally and mediolateral corners slightly angular; lobes separated by a V-shaped notch (Fig. 1D).

Nymph. Unknown.