



Allocapnia tsalagi, sp. n. and notes on A. recta (Claassen) from the Cumberland Plateau region of northeastern Alabama, U.S.A.

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Abstract

A new species of eastern Nearctic snowfly, *Allocapnia tsalagi*, is described from Jackson Co., Alabama, U.S.A. The new species is distinguished from closely-related *A. malverna* and *A. mohri* by details of the epiproct. Additionally, the dorsal process of the 8th abdominal tergite of morphologically-variable *A. recta* is illustrated from the Cumberland Plateau region of northeastern Alabama.

Key words: Plecoptera, Capniidae, Allocapnia tsalagi, Allocapnia recta, Alabama, Cumberland Plateau

Introduction

The snowfly genus *Allocapnia* (Plecoptera: Capniidae) is comprised presently by 44 species distributed mainly in eastern North America (Grubbs 2006; Kirchner 1980, 1982; Kondratieff & Kirchner 2000; Kondratieff & Voshell 1981; Poulton & Stewart 1987; Ross & Ricker 1971, Stark *et al.* 2008). While collecting in the Cumberland Plateau region of northeastern Alabama a distinctive form of *Allocapnia* was collected from two small springs. Specimens appeared most closely related to *A. malverna* Ross, a species known mainly from the Gulf Coastal Plain region. The type material is deposited at the Illinois Natural History Survey (INHS) and at Western Kentucky University (WKU).

Allocapnia tsalagi sp. nov.

(Figs. 1A–F)

Male. Body length 4.0–4.5 mm. Wings reaching 8th or 9th abdominal tergite. Dorsal process of 8th tergite situated on high plateau, forming a wide, broadly-arcuate transverse bar directed slightly anterad; tuberculate and noticeably arcuate when viewed dorsally, the concavity directed posteriorly (Figs. 1A–B). Apical segment of epiproct dorsal limb approximately 1.5X length of basal segment, expanded slightly in posterior half in lateral view, with a small subapical indentation (Fig. 1C–D); narrow profile in dorsal view, expanded slightly in posterior third (Fig. 1E).

Female. Body length 5.0–5.5 mm. Wings reaching 9th tergite to beyond tip of abdomen. Eighth abdominal sternite heavily sclerotized medially, gently concave posteriorly with a small medial subtriangular nipple (Fig. 1F); separated from 7th sternite by membrane.

Material examined. Holotype male, U.S.A., Alabama, Jackson Co., spring into unnamed tributary to Big Coon Creek, 4 km NE Hytop, 34° 56.48'N, 086° 03.84'W, 9 II 2008, S. A. Grubbs (SAG) (INHS); Paratypes,