

Revision of the genus *Culoptila* (Trichoptera: Glossosomatidae)

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ABSTRACT

The caddisfly genus *Culoptila* is revised to include 17 previously described species and 9 new species. Illustrations of the male genitalia and a key are provided for all species. In addition, illustrations of male head and thoracic features, larval characters and cases, and female genitalia are included. New species described here include: *Culoptila bidentata* (Costa Rica), *C. buenoi* (Mexico), *C. cascada* (Costa Rica), *C. hamata* (Costa Rica), *C. pararusia* (Mexico), *C. plummerensis* (eastern United States), *C. tapanti* (Costa Rica), *C. unispina* (Costa Rica, Panama), and *C. vexillifera* (Guatemala).

Key words: Trichoptera, Glossosomatidae, Protoptilinae, *Culoptila*, caddisfly, revision, new species, Neotropics, Nearctic

INTRODUCTION

The subfamily Protoptilinae of the family Glossosomatidae is species rich and known to contain a number of additional, undescribed species (Flint et al. 1999). There has never been a comprehensive treatment of the subfamily. This paper represents one of a planned series of papers intended to review the genera of this subfamily and to describe the many new species. Although most *Culoptila* species have been reasonably well described, they are difficult to compare due to differences in terminology and different styles of illustration used by various authors. This paper reviews the described species, provides new illustrations, and increases the known diversity of the genus by about a third.

To date, 18 genera and 205 species (including 3 fossil species) are recognized for Protoptilinae. Protoptilinae is most abundantly represented in the Neotropics, both by species and genera. In fact, it is the only subfamily of Glossosomatidae found in the region. Diversification of protoptilines outside the Neotropics is comparatively limited. One genus, *Matrioptila* Ross 1956, with a sole species, is endemic to eastern North America. Seventeen species in 4 genera, *Nepaloptila* Kimmins 1964, *Padunia* Martynov 1910, *Poeciloptila* Schmid 1991 (1990), and *Temburongpsyche* Malicky 1995, are known from Asia.

Within the Neotropics, generic diversification shows an interesting pattern. Three genera, *Campsiophora* Flint 1964, *Cariboptila* Flint 1964, and *Cubanoptila* Sykora 1973