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Emeia gen. nov., a new genus of Luciolinae fireflies from China (Coleoptera: Lampyridae) with an unusual trilobite-like larva, and a redescription of the genus *Curtos* Motschulsky

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Abstract

Emeia, a new genus of Luciolinae fireflies, is described from males, flightless females and unusual trilobite-like larvae for a single species *pseudosauteri* (Geisthardt) transferred from *Curtos* Motschulsky. Flashing patterns and ecological data are presented. A phylogenetic analysis covering 143 Luciolinae species uses 436 morphological characters of males, females and larvae to support the erection of the new genus. A generic redescription of *Curtos* Motschulsky from a restricted number of species is given. A key to genera and certain species groups using males is provided.

Key words: Luciolinae, *Emeia* **gen. nov.,** flightless females, trilobite-like larva, *Curtos* Motschulsky

Introduction

Geisthardt (2004) described *Curtos pseudosauteri* from Mt E Mei in China, listing it as the fourth species of *Curtos* Motschulsky to have been recorded from China. Phylogenetic analyses including two *Curtos* species (Ballantyne & Lambkin 2009 and herein) do not support the assignment of *pseudosauteri* to *Curtos*.

This analysis establishes the distinctiveness of *Curtos*, as defined by the two species we included, as well as indicating that *C. pseudosauteri* Geisthardt does not belong in *Curtos*. Here we describe *Emeia* **gen. nov.** for a single species *pseudosauteri* transferred from *Curtos*, from males, flightless females and unusual "trilobite"-like larvae (Figs 1–6), as well as including behavioural and ecological information. The genus *Curtos* is redescribed from the two species scored in this analysis. A key to genera and certain species groups uses males.

Material and methods

Ballantyne and Lambkin (2009) is followed.

Abbreviations, taxonomic characters

A, B, C	pronotal dimensions; A=width across anterior 1/3; B=width across middle; C=width across posterior 1/3
ASD	smallest distance between inner margins of antennal sockets
ASW	antennal socket width measured along the same horizontal line as for ASD
BP	basal piece aedeagus
FS	antennal flagellar segments

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