



## REVISION OF THE GENUS *MEGACRASPEDUS* ZELLER, 1839, A CHALLENGING TAXONOMIC TIGHTROPE OF SPECIES DELIMITATION (LEPIDOPTERA, GELECHIIDAE)

BY

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*Megacraspedus faunierensis* Huemer & Karsholt, 2018

ZooKeys 800 ♦ 2018  
Special Issue

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Gelechiidae are among the megadiverse families of Lepidoptera with about 4700 species described worldwide, but their actual number is estimated to double. The revision of the Palearctic genus *Megacraspedus* Zeller, 1839 underlines this assumption. A total of 85 species are defined, including 44 new taxa. Twenty-two previously unnamed species originate from the seemingly well-studied Europe. The authors furthermore establish 4 new generic and 13 species synonyms, and 5 new combinations. Species delimitation is basically based on morphological characters and genetic data of the DNA barcode. However, only 35 species are known from both sexes, while females of 46 species are unknown. The partly inconspicuous morphology and an up to 14% intraspecific genetic divergence, so far unknown in Lepidoptera, occasionally make the identification difficult. The strong tendency to brachyptery or flightlessness in the female sex results in increased isolation of mountain populations and is reflected in a complex phylogeography with deep barcode splits.

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