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Four new species of the genus *Smaragdina* Chevrolat, 1836 from China (Coleoptera: Chrysomelidae: Cryptocephalinae: Clytrini)

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Abstract

Four new species are described for the genus *Smaragdina*, from Sichuan, Yunnan and Zhejiang provinces of China: *Smaragdina tianmuensis* sp. nov., *S. yajiangensis* sp. nov., *S. yangae* sp. nov., and *S. zhangii* sp. nov. The Chinese fauna of the genus is thus increased to 64 species. Color plates and line drawings of habitus, maxilla, labium, as well as those characters from the internal morphology like male genitalia, female spermatheca, and rectal sclerites are provided.

Key words: *Smaragdina*, Chrysomelidae, Cryptocephalinae, Clytrini, new species, China

Introduction

The genus *Smaragdina* Chevrolat, 1836 belongs to the tribe Clytrini (Coleoptera: Chrysomelidae: Cryptocephalinae). It occurs in the Palaearctic, Oriental and Afrotropical regions and is the most species-rich genus in this tribe (Seeno & Wilcox, 1982). According to our survey and the studies by previous authors (Clavareau, 1913; Regalin & Medvedev, 2010; Medvedev, 2010; Warchałowski, 2012), 340 species are recorded in the world and 60 of them in China before this study. Here we describe and illustrate four new species: *Smaragdina tianmuensis* sp. nov., *S. yajiangensis* sp. nov., *S. yangae* sp. nov. and *S. zhangii* sp. nov. The Chinese fauna of the genus is thus increased to 64 species.

Materials and methods

Dissections: Specimens were relaxed in distilled water. The abdomen was separated from the rest of the body, soaked in 10% KOH, often using a heat source to speed up the process, and then washed in water. This process was required for dissection of aedeagus and spermatheca. The dissected body parts were placed in vials with glycerin and pinned under each specimen for future studies. Observations, measurements and drawings were done under an apochromatic stereomicroscope Leica MZApo. Color photos were taken with a Nikon D300 digital camera.

Types of the new species are preserved at the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZ-CAS).

Taxonomy

Smaragdina Chevrolat, 1836

Diagnosis: The genus *Smaragdina* can be recognized by the following characters: body shape elongate and subcylindrical, size usually smaller than 6mm; head small, very short; mandibles short; eyes round or elongate; antennae slender, 2nd and 3rd antennomeres short and equal, following antennomeres serrate; pronotum transverse,

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