



A review of the genus *Agetocera* (Coleoptera: Chrysomelidae: Galerucinae) in Taiwan—are there only two species?

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Abstract

The Taiwanese species of *Agetocera* (Coleoptera: Chrysomelidae) are reviewed. Three new species, *A. yuae*, *A. choui*, and *A. huatungensis* are described and *A. discedens* Weise and *A. taiwana* Chûjô are redescribed. *Agetocera taiwana* together with the new species form a group of four sibling species. The *Agetocera taiwana* species group is defined and a key to Taiwanese *Agetocera* species is provided.

Key words: Coleoptera, Chrysomelidae, Galerucinae, *Agetocera*, new species, speciation, Taiwan, Palaearctic Region

Introduction

The Oriental and Eastern Palaearctic genus *Agetocera* Hope, 1840, is relatively well studied. It was recently revised by Yang *et al.* (2001) and two more species were subsequently described by Zhang & Yang (2005) and Bezděk (2009). Now the genus *Agetocera* comprises 25 species.

Two species of *Agetocera* were recognized from Taiwan: *A. discedens* Weise, 1922, and *A. taiwana* Chûjô, 1962. The Taiwan Chrysomelid Research Team (TCRT) has been initiated to conduct a survey of the Chrysomelidae of Taiwan. Extensive investigation on *Agetocera* in Taiwan revealed that the southern Taiwanese population of *A. taiwana* differs from that of the north by the shape and color of the antennomere IX, which necessitated further taxonomic review. In the present study, more than 300 specimens were examined and the results are presented.

Materials and methods

The recent and historical collections at the Taiwan Agricultural Research Institute and material collected by the TCRT were studied. As most old specimens were labelled with the name of collecting sites translated from Japanese, they were again translated into modern names based on Chu & Yamanaka (1973).

For the preparation of genitalia drawings, the abdomen was separated and boiled in 10% KOH solution, followed by washing in distilled water. Genitalia was then mounted on slides in glycerin and studied and drawn using a Leica M165 stereomicroscope. For detailed examination a Nikon ECLIPSE 50i microscope was used. As females of the new species are not distinguishable, they are not designated as types.

Specimens, including types, are deposited in the following collections: JBCB: Jan Bezděk collection, Brno, Czech Republic; NMNS: National Museum of Natural Science, Taichung, Taiwan; TARI: Taiwan Agricultural Research Institute, Wufeng, Taiwan.