



The genus *Phygasia* Chevrolat (Coleoptera: Chrysomelidae: Galerucinae: Alticini) in Taiwan

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Abstract

The Taiwanese species of *Phygasia* are reviewed. *Phygasia diluta* Chûjô, 1963 is recognized as a valid species and is removed from synonymy with *P. ornata* Baly, 1876. It is a senior subjective synonym of *P. taiwanensis* Ge *et al.*, 2010. The widely distributed *P. ornata* Baly, 1876 is not found on the island of Taiwan but occurs on the Kinmen Island. A new species, *P. chengi*, parapatric with *P. diluta*, is described. A key to the Taiwanese species of *Phygasia* is provided.

Key words: *Phygasia*, new species, new synonym, new species group, Taiwan

Introduction

The genus *Phygasia* Chevrolat, 1836, widespread in Africa and Asia, comprises of about 60 species (Ge *et al.* 2008). This genus can be distinguished from other related genera in Taiwan by a combination of the following characters: length 6.0–8.0 mm; frontal tubercles triangular, entering into interantennal space; pronotum with ante-basal transverse impression limited laterally by short longitudinal impressions; elytra with punctures confused, not arranged in regular rows; pronotum and elytron without pubescence; and procoxal cavities open. *Phygasia ornata* Baly was first recorded from Taiwan by Maulik (1926). A new subspecies, *P. ornata diluta* described by Chûjô (1963), is characterized by its transverse, extremely wide white band on the elytra. Kimoto (1971), who elevated this subspecies to species rank, misidentified some individuals of *P. diluta* as *P. ornata* (Kimoto 1991) possibly because of the extremely variable white band on elytra in both the species. Kimoto and Takizawa (1997) regarded *P. diluta* as a junior subjective synonym of *P. ornata*. Although a new species of *Phygasia* was described recently (Ge *et al.* 2010), taxonomic confusion still prevails.

The Taiwan Chrysomelid Research Team (TCRT) has been initiated to inventory the Chrysomelidae of Taiwan. Extensive collecting revealed that the so-called “*Phygasia ornata*” is a species group characterized by a yellowish-brown head, pronotum, and venter; and the black elytron with a white spot at middle and the orange elytral apex.

Material and Methods

The recent and historical collections at the Taiwan Agricultural Research Institute and the material collected by the TCRT were studied. As most of the old specimens were labeled with the name of collecting sites translated from Japanese, they were again translated into modern names based on Chu and Yamanaka (1973). Two males of *Phygasia ornata* from China, with the following data, were studied for comparison: Fujian, Chunganhing village, Tungmukuan, 800–900 m, 30.VII.1960, leg. Sheng-Qiao Jiang.

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. At least three dissections were made for each sex of all the three species to detect inter- and intraspecific variation of male and female genitalia.