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## Revision of *Taiwanaenidea* Kimoto, 1984 (Coleoptera: Chrysomelidae: Galerucinae)

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### Abstract

The genus *Taiwanaenidea* Kimoto, 1984 is a little-known galerucine genus known only with original description, which lacks illustrations. A number of specimens belonging to this genus are now available for study with effective collection made by Taiwan Chrysomelid Research Team. Two new species, *T. cheni* Lee and Beenen sp. nov. and *T. jungchangi* Lee and Beenen sp. nov. are here described. The other two known species, *T. collaris* Kimoto, 1984 and *T. strigosa* Kimoto, 1984 are reviewed and illustrations of diagnostic characters are presented. A key to all species of this genus is provided.

**Keywords:** Endophallus, Taiwan, taxonomic revision, *Alnus formosana*, *Fagus hayatae*

### Introduction

The genus *Taiwanaenidea* is endemic to Taiwan. It was described by Kimoto (1984) for two species, *T. collaris* Kimoto and *T. strigosa* Kimoto. No additional records or notes have been published since. Researchers of the Taiwan Agricultural Research Institute (TARI) had been collecting insects with sweeping and Malaise traps from 1979–1988. Approximately 60000 leaf beetles were preserved at the historic collection of TARI. However, only ten specimens of *Taiwanaenidea collaris* Kimoto, 1984 were found among them. This result may indicate that members of this genus are not common.

The Taiwan Chrysomelid Research Team (TCRT) was formed in 2005 and is composed of 10 members. Most are amateurs aiming to make an inventory of all species of Chrysomelidae in Taiwan. Based on material collected by this team, we found that adults of this genus appear during spring and feed on tender leaves of host plants, including *Alnus formosana* for most *Taiwanaenidea* species (Figs 2–5). Because their host plants always are large trees, effective collection is possible by sweeping leaves of host plants during spring season with extendable insect nets (Fig. 1). Approximately 300 specimens had been collected and made available for study.

### Materials and Methods

To prepare drawings of the adult reproductive systems, the abdomens of adults were separated and boiled in a 10% KOH solution, cleared in distilled water, and then mounted on microscope slides in glycerin for observation. Specimens were examined and drawings were made using a Leica M165 stereomicroscope. Microscope slides were examined and illustrated using a Nikon ECLIPSE 50i microscope. Body parts were then stored in glycerin tubes with the dry mounted specimens.

Host plants are recorded by observing adult feeding behavior in the field. Plants were identified by Chih-Kai Yang.

Specimens examined are deposited at the following institutes and museums, KMNH: Kitakyushu Museum of Natural History and Human History, Kitakyushu, Japan; OMNH: Osaka Museum of Natural History, Osaka, Japan; RBCN: Ron Beenen collection, Nieuwegein, The Netherlands; TARI: Taiwan Agricultural Research Institute, Taichung, Taiwan.

Exact label data are cited for all type specimens of the described species; a double slash (//) divides the data on