



Two new species of *Xenysmoderodes* from China (Coleoptera: Curculionidae: Ceutorhynchinae)

NI YANG^{1,2}, RUNZHI ZHANG¹ & LI REN^{1,3}

¹CAS Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, No. 1 Beichen West Road, Chaoyang District, Beijing 100101, China

²University of Chinese Academy of Sciences, 19A Yuquan Road, Shijingshan District, Beijing 100049, China

³Corresponding author. E-mail: renl@ioz.ac.cn

Abstract

Xenysmoderodes Yoshitake, 2007, belonging to the tribe Mecysmoderini, was described as a monotypic genus from Japan, including the species *X. sasajii* Yoshitake. Two new species, *X. concavus* **sp. nov.** and *X. flos* **sp. nov.**, are described here from China, providing a new country record for this genus. We revise the description of the genus based on three species and present an updated key to the species.

Key words: biodiversity, weevils, systematics

Introduction

The tribe Mecysmoderini Wagner, 1938, at present includes 8 genera and 107 species, mainly distributed in the Oriental region (Colonnelli, 2004; Korotyaev, 2004; Yoshitake, 2007). It differs from other tribes by the basal margin of the pronotum projecting backwards at the middle, the hidden scutellum, and the antennal funicle with 6 articles. At present, there are 6 genera and 16 species of this tribe recorded from China (Pascoe, 1870; Hustache, 1920; Voss, 1958; Korotyaev, 1989; Korotyaev, 1992; Yoshitake, 2005; Huang, Zhang & Pelsue, 2006).

Xenysmoderodes was established by Yoshitake (Yoshitake, 2007) based on *X. sasajii* Yoshitake from Honshu and the Izu Islands, Japan. It differs clearly from other genera of Mecysmoderini by the following characters: rostrum in dorsal view parallel-sided in basal 2/3, then curved and moderately broad towards the apex; pronotal carina complete, pronotal spine acutely projected to the basal 1/3 of elytral intervals; sternal canal evident only before procoxae; elytral intervals convex, the basal 1/3 of interval 1 possessing a distinct, dense patch of oval scales, the middle of interval 8 with a small spot of white, oval scales; elytral striae linear, punctures in striae deep and separated by a distance more than their diameter. A study of the unsorted specimens of Mecysmoderini in the Institute of Zoology's collection has brought to light two new species of *Xenysmoderodes* in China. These species are described and illustrated, and a generic redefinition and key to the species are also provided.

Materials and methods

Specimens examined for this study are deposited in the insect collection of the Institute of Zoology, Chinese Academy of Sciences, Beijing, China (IZCAS). Photographs were taken with a CCD Qimage MircoPublisher 5.0 RTV mounted on a Zeiss SteREO Discovery V.12. Extended focus images were generated with Auto-Montage Pro 5.03.0061 and edited with Adobe Photoshop CS 5.0 when required. External structures were studied under a binocular Zeiss SteREO Discovery V.12 microscope. Internal characters were studied as follows: the abdomen was first removed from the body and then digested in 10% NaOH solution for 1–2 hours. Genitalia and terminalia extracted from the abdomen were temporarily mounted on a slide in pure water, and examined under a Leica