

Article



Aradacanthia, a first record of a Calisiinae genus (Hemiptera: Aradidae) from China, India and Thailand with description of a new species

XIAOSHUAN BAI1, WENJIE ZHANG2 & WANZHI CAI2,3

Abstract

A new aradid, *Aradacanthia heissi* Bai, Zhang & Cai, sp. nov., from China, Thailand, and northern India is described. A key to related species is given and the diagnostic morphological features of new species are illustrated. This new species represents the first record of a Calisiinae in China.

Key words: Hemiptera, Aradidae, Calisiinae, *Aradacanthia*, China, Thailand, northern India, new record subfamily, new record genus, new species

Introduction

The subfamily Calisiinae is a small subfamily of the flat bug family Aradidae. The members of this subfamily can be distinguished by the following characters: body small, with coarse granules or blunt spines; genae well developed, contiguous in front of clypeus; rostrum arising behind apex of clypeus with bucculae well developed; scutellum large, covering most of abdominal disc (except *Breviscutheissia ernsti* Jacobs, 2006); metapleura without a visible scent-gland opening; abdominal terga I and II distinct. Eight genera and 111 species are recognized to date: *Allocalisius* Heiss, 2002 (fossil, Baltic amber); *Aradacanthia* A.Costa, 1864 (Oriental and New Guinea); *Breviscutheissia* Jacobs, 2006 (Africa); *Calisiopsis* Champion, 1898 (Neotropical); *Calisius* Stål, 1869 (the world), *Heissia* Kormilev, 1986 (Africa); *Paracalisiopsis* Kormilev, 1963 (Africa); and *Paracalisius* Kormilev, 1974 (Africa) (Kormilev & Froeschner 1987, Heiss 2002, Jacobs 2006).

The genus *Aradacanthia* is a small genus. Only three species, *A. multicalcarata* A.Costa, *A. singhalica* Heiss, and *A. kormilevi* Heiss, have been known prior to this study (Heiss 1984). In a study of the Chinese aradids, we found a remarkable new species of the genus described here. Additional materials were available from Thailand and northern India.

Material and methods

This study is based on materials preserved in the Entomological Museum of the China Agricultural University, Beijing (CAU), and in the collection of Ernst Heiss, Innsbruck, Austria (CEHI). All drawings were traced with the aid of a camera lucida. Measurements were obtained using a calibrated micrometer. All measurements are in millimeters. Morphological terminology mainly follows that of Kormilev (1986). The abbreviation *deltg* means dorsal external laterotergites (connexiva).

¹ Institute of Life Science and Technology, Inner Mongolia Normal University, Zhaowuda Road 81, Huhhot 010022, Inner Mongolia, China

² Department of Entomology, China Agricultural University, Yuanmingyuan West Road, Beijing 100094, China

³Corresponding author. E-mail: caiwz@cau.edu.cn.