



***Arcuatitibia kerzhneri*, a new genus and species of Reduviinae (Hemiptera: Reduviinae) from China**

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Abstract

A new genus, *Arcuatitibia* Luo, Lu & Cai, and one new species, *A. kerzhneri* Luo, Lu & Cai, are described in the subfamily Reduviinae, based on the materials from Xinjiang, China. The dorsal habitus, male genitalia, and other diagnostic morphological features are illustrated.

Key words: Reduviidae, Reduviinae, taxonomy, China, Xinjiang, new genus, new species

Introduction

The Reduviinae represent the second largest subfamily in the assassin bug family Reduviidae, comprising more than 1000 valid species in approximately 140 genera from all zoogeographical regions (Putshkov & Putshkov 1985; Maldonado-Capriles 1990). Fifty-five species in 18 genera of the subfamily have been known in China prior to this study (China 1925, 1940; Wu 1935; Hoffmann 1944; Hsiao 1976; Hsiao & Ren 1981; Ren 1981; Lu & Cai 1994; Putshkov & Putshkov 1996; Cai & Shen 1997; Hua 2000; Cai *et al.* 2001; Cai & Yang 2002). In a study of Chinese reduviines, a new species was discovered. This undescribed species has some unique characters: large sized; body smooth and shiny; fore and mid tibiae bent, and with a small sponge furrow in each. We could not assign it to any known genus, so we here erect a new genus to receive this species.

Material and methods

This study is based on materials deposited in the China Agricultural University, Beijing (CAU) and the Xinjiang Institute of Ecology and Geography, Chinese Academy of Sciences, Urumqi (XIEG). All drawings were prepared with the aid of a camera lucida. Morphological terminology mainly follows that of Lent & Wygodzinsky (1979). Body length measurements represent the distance between the apex of head and hemelytron tip in resting condition. Maximum width of pronotum was measured across the humeral angles. Male genitalia were soaked in hot 10% potassium hydroxide solution for approximately 5 min to remove soft tissue, rinsed in distilled water, and dissected under a Motic binocular dissecting microscope. Dissected genitalia was placed in vial with glycerin and pinned under the body of corresponding specimen. Measurements were obtained using a calibrated micrometer. All the measurements are given in millimeters throughout the text.