



Two new species of *Macrolea* Samouelle (Coleoptera: Chrysomelidae: Donaciinae) from China, with a key to all known species

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Abstract

Two new species of the aquatic leaf beetle genus *Macrolea* Samouelle namely *M. ranina* Lou & Yu, **sp. nov.** and *M. huaxiensis* Lou & Liang, **sp. nov.** are described from China. *Macrolea appendiculata* (Panzer, 1794) is recorded for the first time from China and a key to all known species of *Macrolea* is provided.

Key words: Donaciinae, *Macrolea*, new species, new record, key, Palaearctic Region, China.

Introduction

Macrolea Samouelle, 1819, a Palaearctic leaf beetle genus of the aquatic subfamily Donaciinae, is represented by five species, namely *M. mutica* (Fabricius, 1792), *M. appendiculata* (Panzer, 1794), *M. pubipennis* (Reuter, 1875), *M. japana* (Jacoby, 1885), and *M. skomorokhovi* Medvedev, 2006. This genus is known to occur in Europe, Algeria, Middle Asia, Siberia, Far East, China and Japan (Monrós, 1959; Gressitt & Kimotto, 1961; Jolivet, 1970; Borowiec, 1984; Lopatin, 1984; Kimoto & Takizawa, 1994; Hayashi & Shiyake, 2001; Kölsch *et al.*, 2006; Mende *et al.*, 2010; Silfverberg, 2010).

A pair of donaciine specimens received from Jindong Zhang encountered in frog stomach during a food composition study in Zoigê county of Sichuan Province in 2005, has turned out to be that of a new species. In 2007, nine more specimens of this species were collected at the same locality.

In 2008 and 2009, Ye Liu found a number of donaciine specimens in Huaxi river of Guizhou Province. These specimens were initially determined as *M. japana* (Jacoby) by Zhang *et al.* (2010). However, subsequent careful study revealed that they represent yet another new species.

During a field expedition in 2009, Zhiliang Wang collected adults of *M. appendiculata* in a slow-flowing river in Altay, Xinjiang for the first time in China.

The new species of *Macrolea* from Guizhou and Sichuan are described here in with a key to all known species of the genus.

Material and methods

This study is based on 190 specimens of *Macrolea* and 17 specimens of *Neohaemonia* Székessy. All specimens examined are deposited in the National Zoological Museum of China, Institute of Zoology (Beijing), except as otherwise specified.

All measurements were made using a Nikon SMZ1500 stereoscopic dissecting microscope with ocular micrometer. Body length (BL) = the linear distance along the midline from the apex of the labrum to the inner apical angle of the elytra; and body width (BW) = elytra width (EW) = the linear distance at the widest point across elytra measured at 90° to the longitudinal axis. Pronotum length (PL) = the linear distance along the midline from