



A review of the genus *Ruidocollaris* Liu (Orthoptera: Tettigoniidae), with description of six new species from China

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Abstract

The validity of *Ruidocollaris* Liu is re-confirmed based on abundant material from China. A review on *Ruidocollaris* in the world is given, with a list of nine species. Characters of the stridulatory file on the underside of the male left tegmen, and male stridulatory area on left and right tegmen are provided for each species. Six new species are described, including *R. rubescens* **sp. nov.**, *R. longicaudalis* **sp. nov.**, *R. apennis* **sp. nov.**, *R. latilobalis* **sp. nov.**, *R. ferruginescens* **sp. nov.**, and *R. parapennis* **sp. nov.**. A key to nine species of the genus *Ruidocollaris* is provided accompanied by illustrations. Distribution maps of *Ruidocollaris* species, mainly from China, are provided.

Key words: new species, *Sympaestria*, *Liotrachela*, katydid, China

Introduction

The genus *Ruidocollaris* Liu, 1993 belongs to the subfamily Phaneropterinae (Orthoptera: Tettigoniidae) and presently includes three species *R. truncatolobata* (Brunner von Wattenwyl, 1878) (originally in genus *Sympaestria*), *R. convexipennis* (originally in genus *Liotrachela*) and *Ruidocollaris obscura* (Liu, 1999) (misspelled as *Rudicollaris obscura*).

Liu (1993) proposed to establish the new genus *Ruidocollaris* including the two known species, but he didn't give the specific reasons for the transferal and combination. Here we try to provide brief history of the related genus and an argument for the establishment of *Ruidocollaris*.

On one hand, Brunner von Wattenwyl (1878) proposed the genus *Sympaestria* based on two species *Sympaestria acutelobata* and *Sympaestria truncatolobata*, and Caudell (1927) designated the former as the generic type. In addition, Hebard (1922) described one new species *S. lampra*, and Karny (1923) described three additional new species *S. brevicauda*, *S. genualis*, and *S. triramosa*. After carefully examining materials of three species *S. acutelobata*, *S. truncatolobata* and *S. genualis* from China, and description and illustration of other three species, we found that other five species of the genus *Sympaestria* except *Sympaestria truncatolobata* possess feebly convex pronotal disk, stiff, shell-like tegmen, proximal fork of tegminal Radial section vein (Rs) running directly into the Medial (M) vein, and a sharp middle spine on genicular lobe of the posterior femur. As a consequence, we consider that the differences between *Sympaestria truncatolobata* and its congeners are enough to exclude the species *Sympaestria truncatolobata* from *Sympaestria*. With regard to *Liotrachela convexipennis*, its generic association has been questionable since the species was published (Caudell 1935, Bei-Bienko 1954). The species differs from the typical representatives of the genus *Liotrachela* Brunner von Wattenwyl by tegmina which are convex posteriorly, and unarmed genicular lobes of each femur. *Liotrachela* now includes seventeen species and subspecies mainly from southeastern Asia. There are no additional species to record from China except *Liotrachela convexipennis*. On the other hand, *Sympaestria truncatolobata* and *Liotrachela convexipennis* are distinctly distinguished from their congeners by