



New species from the genera *Kansua* and *Anatlanticus* (Orhoptera: Tettigoniidae) in China

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Abstract

The genus *Kansua* Uvarov was only known in East Asian, and is considered to approach *Tettigonia* Linnaeus or *Glyphonotus* Redtenbacher. After comparing male and female specimens of *Kansua* with other genera of the subfamily Tettigoniinae, we find that *Kansua* is very similar to *Anatlanticus* Bei-Bienko and *Mongolodectes* Bei-Bienko in pronotum, legs, and tegmen rather than *Tettigonia* and *Glyphonotus*. Description of one new species *Kansua diebua* Liu sp. n., of two new species of one newly recorded genus *Anatlanticus* from China, and first description of male of *Mongolodectes alashanicus* are presented.

Key words: *Anatlanticus*, *Mongolodectes*, newly recorded genus in China, new species, systematic position

Introduction

Kansua was established by Uvarov (1933) based on a female type from northwestern China. The genus is characterized by short, weakly saddle-shaped pronotum, weakly rugose pronotal disc, abbreviated elytra, rudimentary wings, and long, decurved ovipositor. When established, Uvarov (1933) indicated that the genus approached *Glyphonotus* in the shape of pronotum while resembling *Tettigonia* in the structure of pronotum; nonetheless, the reduced and expanded elytra are unlike either of the two genera. Afterwards, inferring from the literature, Storozhenko (1994) put *Kansua* in the tribe Tettigoniini, and Heller & Korsunovskaya (2009) considered that *Kansua* is not a member of Drymadusini. In the latest list in the OSF (Eades *et al.*, 2014), the tribe that *Kansua* should belong to is not determined. Therefore, it is important to understand male characteristics of *Kansua* and further to attempt to clarify its systematic position.

Anatlanticus was established for the type species *Paradrymadusa uvarovi* Miram, 1940 (distributed in Ussuri) and another species *Anatlanticus koreanus* Bey-Bienko, 1951 (in Korea) by Bei-Bienko (1951). There are no other species recorded for *Anatlanticus* until now. *Mongolodectes* was also established by Bei-Bienko (1951) for *Paradrymadusa kiritshenkoi* Miram, 1929 (distributed in Mongolia) and *Mongolodectes alashanicus* Bey-Bienko, 1951 (in Inner Mongolia in China). Subsequently, another species of *Mongolodectes* was described from Mongolia by Bazyluk (1972), making the number of *Mongolodectes* species at three. The two genera *Anatlanticus* and *Mongolodectes* are distributed in the Asian part of Palearctic Realm, but no records of *Anatlanticus* or no male description of the only member *M. alashanicus* in China have been provided.

Concerning the systematic positions of the genera *Anatlanticus* and *Mongolodectes*, they initially were put into the tribe Tettigoniini by Rentz & Colless (1990), based on a numerical classification of the Tettigoniinae on a world-wide basis. Later they were transferred into the tribe Drymadusini by Sergeev (1993, 1995), which could be only defined by a list based on the general similarity of the species included (Heller & Korsunovskaya 2009).

Here we provide detailed description of one new species of *Kansua*, of two new species of *Anatlanticus*, and first description of male of *Mongolodectes alashanicus*. According to comparison between males and females of the three genera, they are closely related. Nonetheless, whether the three genera should be affiliated to Tettigoniini or Drymadusini needs further molecular phylogenetic analysis to help clarify. Key to *Kansua* and other relative genera in East Asia is also provided.

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