

## Article



## Review of the grass feeding leafhopper genus *Paramesodes* Ishihara (Hemiptera: Cicadellidae: Deltocephalinae: Deltocephalini) from China

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## **Abstract**

The Chinese leafhopper species of the genus *Paramesodes* Ishihara are revised, one new species *P. cangshanae* **sp. n.** is described and a key is provided for the five Chinese species in this genus.

Key words: Taxonomy, Auchenorrhyncha, new species, China

## Introduction

The genus *Paramesodes* was established by Ishihara (1953) for *Athysanus albinervosus* from Japan. Wilson (1983) revised the genus and included one species from Europe and the Middle East, one species from Africa and nine species from Asia. Four other species, *P. montanus* Rao (1989) from India, *P. wilsoni* Rao & Ramakrishnan (1990) from India, *P. iraniensis* Webb & Viraktamath (2009) from Iran and *P. menghaiensis* Xing & Li (2011) from China were subsequently included.

Although *Paramesodes* is relatively distinctive externally (see Plate I), Wilson (1983) drew attention to its similarity to *Paramesus* Fieber, *Exitianus* Ball and *Ctenurella* Vilbaste. From these genera *Paramesodes* was distinguished by the following combination of characters: forewing with inner anteapical cell open basally (closed in *Paramesus* and *Ctenurella*) and the veins always pale or white (usually brown in *Exitianus*). In the male genitalia the connective and aedeagus are fused (free in *Paramesus*) and the pygofer side has a dense covering of long stout pale macrosetae (2–6 dark or black macrosetae along apical margin in *Exitianus*) and the pygofer side has a large process (lower edge of pygofer pectinate in *Ctenurella*).

With respect to the last mentioned character, in *Paramesodes* the form of the pygofer process is the most important character for species identification, rather than the aedeagus as in most other Cicadellidae. This fact has made species separation in the genus difficult in the present study as we have found further, presumably intraspecific, variation than was documented by Wilson (1983). Although we have been able to identify our material using Wilson's key, if further studies show more variation, reassessment of the species may be necessary.

In this paper we review the species of *Paramesodes* Ishihara from China and include a world checklist. Two species, *P. albinervosus* (Matsumura) and *P. mokanshanae* Wilson were included from China in Wilson's (1983) study, and two species, *P. menghaiensis* and *P. annamae* were included from China in Li, Dai & Xing's (2011) study. All Chinese species are redescribed and figured and a key for their separation is provided. Morphological terminology follows Zhang (1990). The material examined during the course of this work is deposited in the Entomological Museum of Northwest A & F University (NWAFU).

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