

## Article



# A new species of the genus *Indolipa* Emeljanov, 2001 from China (Hemiptera: Fulgoromorpha: Cixiidae: Pentastirini), with a checklist of world species

### HONG-WEI GUO & JI-NIAN FENG<sup>1</sup>

Key Laboratory of Plant Protection Resources and Pest Management of Ministry of Education; Entomological Museum, Northwest A&F University, Yangling, Shaanxi province, 712100, China

<sup>1</sup>Corresponding author. E-mail: jinianf@nwsuaf.edu.cn

#### **Abstract**

The cixiid planthopper genus *Indolipa* Emeljanov, 2001 is revised taxonomically. Seventeen species are recognized of which one, *Indolipa gansuensis* sp. nov., is new to science. *Indolipa kureongensis* (Distant, 1911) and *I. gansuensis* represent the first record of the genus for the Palaearctic Region. A list of all known species of the genus *Indolipa* is given as well as new descriptions, illustrations and an identification key to Chinese species.

Key words: planthopper, Homoptera, Auchenorrhyncha, Fulgoroidea, morphology, distribution

#### Introduction

The cixiid planthopper genus *Indolipa* was erected by Emeljanov (2001) to accommodate 16 species from the Oriental Region formerly assigned to the genus *Oliarus*. Emeljanov (2001) characterised the genus as follows: "Basal laterodorsal angle of apical dilation of stylus usually with tooth. Lobes of pygofer symmetrical or nearly so, without marked projection or processes." These features separate the genus *Indolipa* from the other *Oliarus*-like genera.

The current paper provides additional characters at the generic level, supplementing the original description given in Emeljanov's (2001) key and expanding the generic concept.

Generally, the most important diagnostic features distinguishing *Indolipa* from other Pentastirini are those of the male genitalia, especially the characteristic genital styles and uniform shape of the anal segment.

In addition, a new species is described from China, *I. gansuensis* Feng, **sp. nov.**, bringing the number of recognized species in this genus to 17 (list provided below).

#### Material and methods

Specimens were dissected by removing the abdomen with a pin. The abdomen was then macerated in a 1.5ml PVC centrifuge tube, containing 10% NaOH, for about 12 hours or put in a centrifuge tube in a hot water bath for 10 to 20 minutes. Prior to examination of the aedeagus, the abdomen is washed in distilled water 3 to 5 times and a drawing is made of the anal segment and pygofer (this is necessary as the pygofer might be damaged upon removal of the aedeagus). The aedeagus is carefully removed by using pins and forceps. Observations and drawings are done in glycerine under a LEICA MZ12.5 anatomy stereoscopic microscope fitted with a drawing tube and mirror, often a small amount of cotton fiber is added to keep the parts still from moving during the course of drawing. After examination the abdomen is stored in a PVC microvial containing a small amount of glycerine and reassociated with the mounted specimens.