A NEW SPECIES OF THE GENUS MIMOTETTIX MATSUMURA, 1914 (HEMIPTERA: CICADELLIDAE: DELTOCEPHALINAE) FROM CHINA

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ABSTRACT: In this paper, a new species Mimotettix articularis Xing and Li sp. n. is described and illustrated. A check-list and a key to species of the genus from China is provided.

KEY WORDS: Homoptera, morphology, taxonomy, Mimotettix, China.

The leafhopper genus Mimotettix, belonging to tribe Athysanini of subfamily Deltocephalinae (Hemiptera: Cicadellidae), was established by Matsumura (1914) for a single species, M. kawamurae Matsumura, from Taiwan. Later, Kwon & Lee (1979) described another species, M. curticeps from South Korea. Webb & Heller (1990) transferred five species to Mimotettix from other genera from India. Recently, Li & Xing (2010) described another new species, M. spinosus, and made two new combinations: M. slenderus (Li & Wang, 2005) and M. fanjingensis (Li & Wang, 2005) from China. Dai, Zhang & Webb (2010) reviewed this genus based on examining the types of most species, and described seven new species, proposed five new synonyms and one new combination made one new combination. Up to the present, 15 species have been reported, and of these, 9 species occur in China.

Here, we described and illustrated a new species Mimotettix articularis Xing & Li sp. n. from Guizhou Province, China. The type specimens of the new species are deposited in the Institute of Entomology, Guizhou University, Guiyang, China (GUGC). This genus now contains 16 species, 10 species were known in China. A key to species from China is given. The morphological terminology used in the descriptions mainly follows Dai, Zhang & Webb (2011).

Mimotettix Matsumura, 1914
Mimotettix Matsumura, 1914: 197; Dai, Zhang & Webb, 2010: 2
Type species: Mimotettix kawamurae Matsumura 1914: 198, by original designation.
Remarks. The genus is similar to Scaphomonos Viraktamath (Dai et al., 2009) in having the forewings with scattered unpigmented areas, and the anterior margin of vertex with one or two cream transverse bands, but differs in having the aedeagus with a process arising apically on shaft.
Distribution. China, Japan and throughout the Old World tropics.

Check-list of the genus Mimotettix from China
M. alboguttulatus (Melichar, 1903)
M. articularis Xing & Li sp. n.
Distribution. China.
M. curticeps Kwon & Lee, 1979
Distribution. China, Japan, Korea, Russia.
M. distiflangentus Dai, Zhang & Webb, 2010
  Distribution. China.
M. dorsocavatus Dai, Zhang & Webb, 2010
  Distribution. China.
M. fanjingensis (Li & Wang, 2005)
  Distribution. China.
M. robustistylus Dai, Zhang & Webb, 2010
  Distribution. China.
M. spinosus Li & Xing, 2010
  Distribution. China, Malaysia.
M. slenderus (Li & Wang, 2005)
M. tibetensis Dai, Zhang & Webb, 2010
  Distribution. China.

Key to Chinese species (male) of Mimotettix

1. Pygofer side without process..........................2
   - Pygofer side with process or articulated with process..........................6

2. Aedeagal shaft with a pair of distal triangular-shape flanges on dorsal surface........
   - Aedeagal shaft with or without a pair of narrow flanges on dorsal surface......3

3. Aedeagal shaft deeply concave ventrally or dorsally........................................4
   - Aedeagal shaft not deeply concave ventrally or dorsally..........................5

4. Aedeagal shaft deeply concave ventrally..............................M. slenderus (Li & Wang)
   - Aedeagal shaft deeply concave dorsally.....................M. dorsocavatus Dai, Zhang & Webb

5. Aedeagal shaft broadest at mid-length in lateral view, process with length about 2/3
   length of shaft.........................................................M. alboguttulatus (Melichar)
   - Aedeagal shaft evenly tapered from base to apex in lateral view, process similar in length to
   that of shaft..............................................................M. curticeps Kwon & Lee

6. Pygofer side articulated with process.............................M. articularis Xing & Li sp. n.
   - Pygofer side with process................................................7

7. Pygofer side with process at dorsal margin...........................M. fanjingensis (Li & Wang)
   - Pygofer side with process at ventral margin.........................................8

8. Aedeagal shaft without flanges on dorsal surface, pygofer side slightly protruding at
   ventroposterior angle......................................................M. robustistylus Dai, Zhang & Webb
   - Aedeagal shaft with narrow flanges on dorsal surface, pygofer side acutely rounded
   posteriorly..............................................................9

   - Pygofer side with ventral process near caudal margin....................M. spinosus Li & Xing

Mimotettix articularis Xing & Li sp. n.
  Figs. 1-11

Description. Length of male 5.6mm. Body reddish brown, vertex with two
cream transverse bands anteriorly bordered with dark brown. Eyes black, ocelli
pale yellow. Forewings brownish hyaline, with scattered unpigmented areas, veins
dark brown. Legs dark brown.
Vertex roundly produced. Head including eyes slightly wider than pronotum, vertex slightly longer medially than next eyes. Ocelli located on lateral margin of vertex, separated from eyes by own diameter. Face slightly flattened, similar in length to width. Frontoclypeus narrow, longer than width between eyes. Anteclupeus slightly expanded apically. Antennae arising near lower corner of eye. Pronotum slightly longer than vertex, anterior margin roundly produced and posterior margin slightly concave. Scutellum triangular, equal in length to vertex, with transverse suture curved and depressed. Forewings with four apical cells and two subapical cells, outer subapical cell acute apically, inner subapical cell open basally.

Male genitalia. Pygofer side elongate, slightly narrowed caudally in lateral aspect, dorsoposterior area with many macrosetae, articulated with a long process on inner surface arising near ventral margin and directed caudally and dorsally (Fig. 9). Valve triangulate (Fig. 10). Subgenital plate elongate and triangulate, narrowly rounded apically, with uniseriate submarginal row of stout setae ventrolaterally and numerous hair-like setae laterally and apically (Fig. 11). Aedeagal shaft robust in lateral view, tapered to apex and curved dorsally, with a process arising apically, directed ventrally, gradually attenuate, apical process with length slightly more than 1/2 length of shaft; aedeagal shaft with a pair of triangular-shape dentate subapical flanges on each side, gonopore apical (Figs. 12, 13). Connective Y-shaped, articulating with aedeagus, its stem slightly longer than arms (Fig. 14). Style elongate, apophysis long, tapered to acute apex, turned laterally (Figs. 15, 16).

Type Material. Holotype ♂, China: Guizhou Province, Libo County, Maolan, 20 July 2011, coll. Qiongzhang Song (GUGC).

Remarks. This new species is similar to *Mimotettix tibetensis* Dai, Zhang & Webb, 2010 but can be distinguished by the pygofer side elongate, tapered posteriorly to rounded apical margin, and articulated with a long process on inner surface arising near ventral margin, connective stem less than twice length of arms, and the structure of the aedeagal shaft and location of gonopore are also different.

Etymology. The species name is derived from the Latin words *articulāris*, indicating that the pygofer side articulated with a long process on inner surface arising near ventral margin.

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LITERATURE CITED


Figures 1-3. *Mimotettix articulatus* sp. n. 1. ♂, dorsal view; 2. ♂, face; 3. ♂, lateral view;