

On the leafhopper genus *Uzelina* (Hemiptera: Cicadellidae: Penthimiini), first record from China with description of a new species

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Abstract: The genus *Uzelina* Melichar, 1903 is recorded for the first time in China with a new species, *Uzelina (Uzelina) pterygoida* **sp. nov.**, described and illustrated. A key to species in the Oriental region and a checklist with distribution of members of the genus *Uzelina* are provided.

Key words: leafhoppers; taxonomy; morphology; checklist

宽颜叶蝉属——中国新记录并记一新种（半翅目：叶蝉科：乌叶蝉族）

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摘要：在中国首次报道宽颜叶蝉属 *Uzelina*，记述 1 新种：翼突宽颜叶蝉 *Uzelina (Uzelina) pterygoida* **sp. nov.**。提供了该属名录、分布及东洋区物种检索表。

关键词：叶蝉；分类；形态；名录

Introduction

The leafhopper genus *Uzelina* was established by Melichar (1903), with *Uzelina laticeps* Melichar, 1903 as its type species. Subsequently, Linnavuori (1977) added seven species to this genus from Africa and divided it into two subgenera (*Uzelina* and *Mulungaella*). The subgenus *Mulungaella* differs from *Uzelina* by the longer and spatulate head. Subsequently, Sharma (1986) added one more species from India. Recently, Dietrich *et al.* (2020) described one new species of this genus from Vietnam. Up to now, the genus *Uzelina* includes 10 described species.

In this paper, the genus *Uzelina* is reported for the first time from China and a new species, *Uzelina (Uzelina) pterygoida* **sp. nov.**, is described and illustrated.

Material and methods

Morphological terminology follows Zhang (1990) and Dietrich (2005). Specimens examined in this study are deposited in the Entomological Museum, Northwest A&F University (NWAFU). The abdomen was removed from the male specimens, treated with a 10% NaOH solution at 100°C for about 3 minutes, rinsed with water and immersed in a droplet of glycerol. Male genitalia were dissected following standard procedures. Photos were taken using an advanced Stereo Microscope System (Discovery V20, Zeiss; CCD, AxioCam ICc5, Zeiss and Leica 205C). A Nikon SMZ1500 microscope was used to examine the specimens and to draw figures. Both sketches and stacked images were used as templates to trace graphic vectors in Adobe Illustrato.

Taxonomy

Uzelina Melichar, new record to China

Uzelina Melichar, 1903: 181.

Type species: *Uzelina laticeps* Melichar, 1903.

Body yellowish, head in profile spatulate, marginally rimmed with transverse carinae. Vertex medially sulcate at base, broadly rounded, projecting slightly beyond outer line of eyes. Ocelli on crown. Clypeus flat, raised. Clypellus rectangular. Pronotum approximately 2× broader than median length, smooth; posterior margin straight or incurved medially; lateral margin long, carina present, nearly straight ventrally. Scutellum distinctly shorter than pronotum, basal width longer than medial length. Forewing elongate, subhyaline. Hind femoral spinulation 2+2+1.

Male pygophore with caudal margin rounded, with short spines subapically. Subgenital plate triangular with small hairlike setae on surface. Connective ‘Y’-shaped. Aedeagus dorsal apodeme plate-like, well-developed, preatrium reduced, gonopore at apex.

Distribution. Ethiopian and Oriental regions.

Checklist of the species in the genus *Uzelina*

1. *Uzelina (Mulungaella) bumbana* Linnavuori
Uzelina (Mulungaella) bumbana Linnavuori 1977: 47.
Distribution. DR Congo.
2. *Uzelina (Mulungaella) cinchonae* Linnavuori
Uzelina (Mulungaella) cinchonae Linnavuori 1977: 46.
Distribution. DR Congo.
3. *Uzelina (Uzelina) laticeps* Melichar
Uzelina (Uzelina) laticeps Melichar 1903:182.
Distribution. Sri Lanka.
4. *Uzelina (Uzelina) maculata* Linnavuori
Uzelina (Uzelina) maculata Linnavuori 1977: 42.
Distribution. Tanzania.
5. *Uzelina (Uzelina) medeia* Linnavuori

- Uzelina (Uzelina) medeia* Linnavuori 1977: 44.
Distribution. DR Congo.
6. *Uzelina (Uzelina) podocarpi* Linnavuori
Uzelina (Uzelina) podocarpi Linnavuori 1977: 44.
Distribution. Ethiopia.
7. *Uzelina (Uzelina) producta* Linnavuori
Uzelina (Uzelina) producta Linnavuori 1977: 42.
Distribution. South Africa.
8. *Uzelina (Uzelina) pterygoida* **sp. nov.**
Distribution. China (Yunnan).
9. *Uzelina (Mulungaella) tartaros* Linnavuori
Uzelina (Mulungaella) tartaros Linnavuori 1977: 46.
Distribution. DR Congo.
10. *Uzelina (Uzelina) vietnamensis* Dietrich
Uzelina (Uzelina) vietnamensis Dietrich 2020: 249.
Distribution. Vietnam.
11. *Uzelina (Uzelina) thaloriensis* Sharma
Uzelina (Uzelina) producta Sharma 1986: 39.
Distribution. India.

Key to species of the subgenus *Uzelina (Uzelina)* from the Oriental region (♂)

1. Aedeagal shaft with pair of preapical lateral spines *U. (U.) vientamensis*
- Aedeagal shaft without pair of preapical lateral spines 2
2. Aedeagus with lateral lamellate processes 3
- Aedeagus without lamellate processes *U. (U.) thaloriensis*
3. Aedeagal processes situated on the dorsal margin of shaft apex *U. (U.) pterygoida* **sp. nov.**
- Aedeagal processes situated on the ventral margin of shaft apex *U. (U.) laticeps*

Uzelina (Uzelina) pterygoida **sp. nov.** (Figs 1, 2)

Measurement. Length of male 3.9 mm.

Coloration. Vertex pale yellowish, marked with four orange spots between eyes. Ocelli dark brown. Eyes grey (Figs 1A, 1C). Face black (Fig. 1D). Pronotum orange basally, pale yellow with obscure brownish black dots on posterior half. Scutellum pale yellowish. Forewing subhyaline, vein brown (Figs 1A–C).

Morphology. Head including eyes nearly as broad as pronotum. Clypeus flat. Clypellus rectangular, ridged medially. Lorum flat. Ocelli on crown, placed approximately at a distance equal to adjacent eye (Figs 1A, C).

Male genitalia. Pygophore with caudal margin rounded with a few short spines subapically (Fig. 2A). Valve with caudal margin rounded. Subgenital plate longer than length of pygofer, nearly triangular, with several short setae near the lateral margin and near apex (Fig. 2B). Style broad at anterior half, apophysis pointed finger-like, curved laterally, curvature of apophysis in line with curvature of preapical lobe (Fig. 2C). Connective Y-shaped, arms shorter than stem (Fig. 2D). Aedeagal shaft slender, with a pair of

wing-shaped lateral processes apically, processes with finely serrated margins; gonopore apical (Figs 2E, 2F).

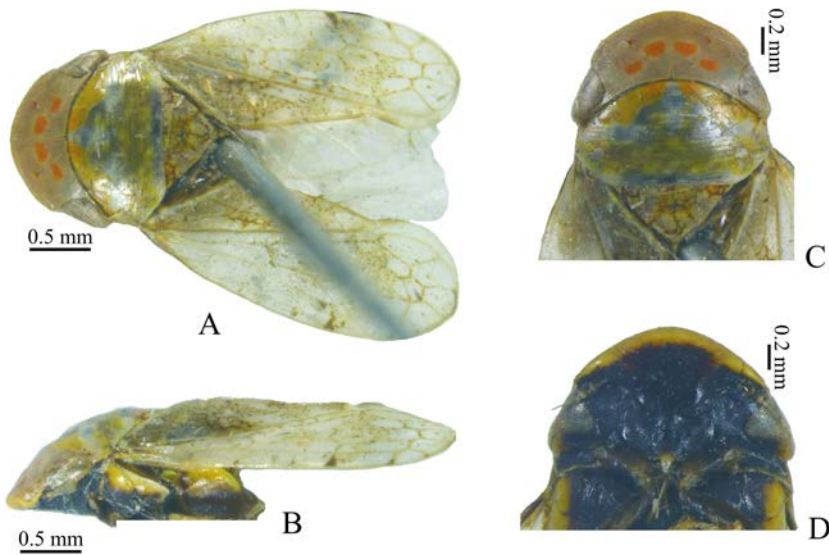


Figure 1. *Uzelina (Uzelina) pterygoida* sp. nov. A, B. Habitus, dorsal and lateral views; C. Head and pronotum, dorsal view; D. Face.

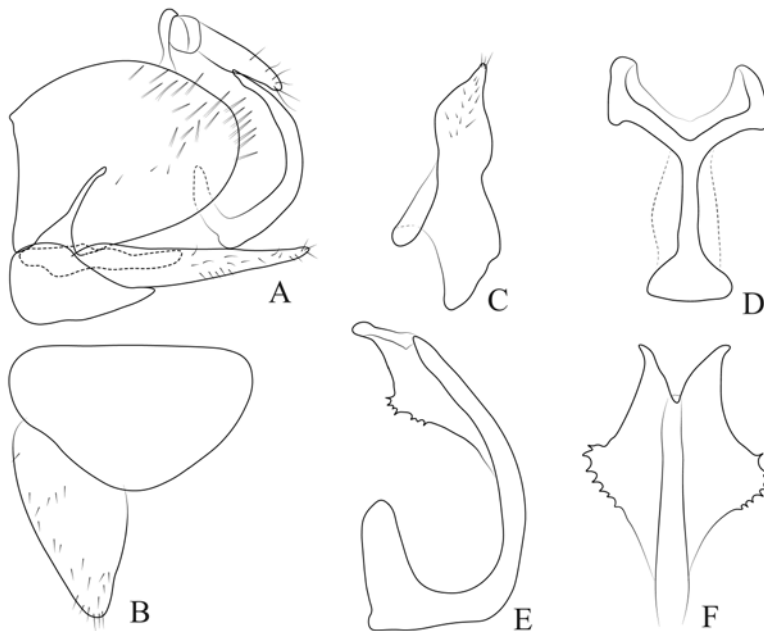


Figure 2. *Uzelina (Uzelina) pterygoida* sp. nov. A. Pygofer, lateral view; B. Genital valve and subgenital plate, ventral view; C. Style, ventral view; D. Connective, ventral view; E. Aedeagus, lateral view; F. Apical part of aedeagus, dorsal view.

Holotype. ♂ (NWAUFU), **China**, Yunnan, Menglun County, 21-IV-1982, coll. Jingruo ZHOU & Sumei WANG. **Paratypes.** 2♂ (NWAUFU), same data as holotype.

Etymology. This specific epithet is from the Greek word “pterygoida-” referring to the slender aedeagal shaft having a pair of wing-shaped lateral processes apically.

Diagnosis. This species can be distinguished from other species in this genus by the aedeagal shaft with a pair of wing-shaped lateral processes and the processes with finely serrated margins.

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