



A review of the leafhopper genus *Subulatus* Yang & Zhang (Hemiptera: Cicadellidae: Evacanthinae), with description of a new species from China

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Abstract

The species of the Oriental leafhopper genus *Subulatus* Yang & Zhang are reviewed. A new species, *Subulatus flavidus* sp. nov., from Yunnan Province, China is described and a key to all known species of *Subulatus* is provided.

Key words: Homoptera, Auchenorrhyncha, morphology, taxonomy, Oriental

Introduction

Evacanthinae is a relatively small subfamily of Cicadellidae distributed worldwide. Dietrich (2004) reinstated this group to subfamily status and included four tribes: Evacanthini, Nirvanini, Balbillini and Pagaroniini. The tribe Evacanthini is distributed both in the Holarctic and the Oriental regions, but the diversity of genera is greatest in the Oriental region (Oman *et al.*, 1990). Research about this group in recent years has mainly focused on the Oriental fauna, including papers by Li & Li (2011a, 2011b, 2011c, 2012a, 2012b, 2014a, 2014b), Zhang, Zhang & Wei (2009, 2010), Zhang, Zhang & Wei (2010a, 2010b), Zhang, Wei & Zhang (2011), Wei, Webb & Zhang (2014), Wang, Wei, & Zhang (2013), Xing & Li (2013), Wang & Zhang (2014), and others. The Oriental evacanthine genus *Subulatus* was established by Yang & Zhang in 2001, with *Subulatus bipunctatus* Yang & Zhang as the type species, and another species, *S. trimaculatus*, was described. Zhang, Wei & Zhang (2011) described a third species, *S. sangzhiensis*.

A new species from Yunnan Province, China is here described and illustrated. A key to all known species of *Subulatus* Yang & Zhang is given. Currently four species are included in the genus. The specimens used in this study are deposited in the Institute of Entomology, Guizhou University, Guiyang, China (GUGC).

Subulatus Yang & Zhang

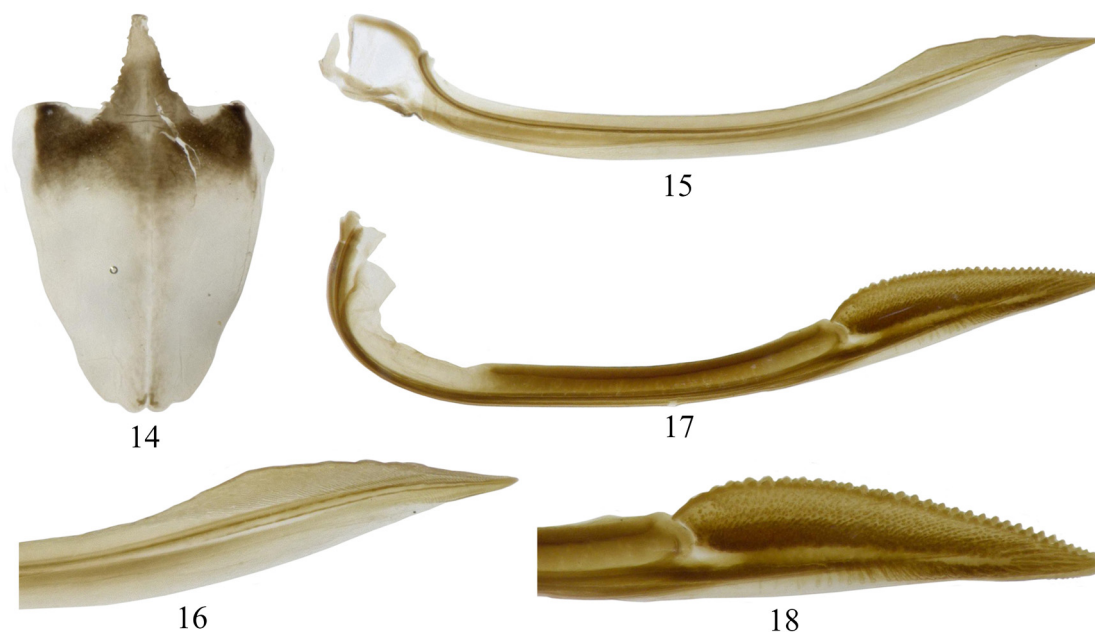
Subulatus Yang & Zhang, 2001: 177

Type species: *Subulatus bipunctatus* Yang & Zhang

Distribution. China (Sichuan, Hunan, Yunnan).

Description. Body medium-sized, 6.0–7.5 mm in length (including tegmen). Front of head slightly conically produced; vertex slightly shorter than wide, about as long as pronotum, with paired preapical spots and median apical spot black; lateral margin carinate; median longitudinal carina lamellate, median carina and submarginal carina concentrated on head; area between median carina and submarginal carina slightly concave. Frontoclypeus broad, with median longitudinal carina strongly elevated, laterally obliquely striate; lora nearly reaching apex of clypellus. Pronotum broad, wider than head. Scutellum triangular, about as long as pronotum, with transverse depression distinct. Forewing with veins prominent, with R_{1a} present; five apical cells; appendix very narrow.

Remarks. This species resembles *Subulatus bipunctatus* Yang & Zhang, but it can be distinguished by the shape of its aedeagus and little scaly bumps only on dorsal side.



FIGURES 14–18. *Subulatus flavidus* sp. nov., female genitalia: 14. sternite VII, ventral view; 15. valvula I, lateral view; 16. apex of valvula I, lateral view; 17. valvula II, lateral view; 18. apex of valvula II, lateral view.

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