



<http://dx.doi.org/10.11646/zootaxa.3784.1.6>

<http://zoobank.org/urn:lsid:zoobank.org:pub:DF571BDA-ED8B-45BD-ADC5-AEF1B4875BA8>

***Lauriana* Ren & Qin, a new genus of the tribe Tropidocephalini (Hemiptera: Fulgoromorpha: Delphacidae) from China**

FENG-JUAN REN, LI-FANG ZHENG, YI-XIN HUANG & DAO-ZHENG QIN¹

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

¹Corresponding author. E-mail: qindaozh@nwsuaf.edu.cn

Abstract

A new delphacid genus and species, *Lauriana senticosa* Ren & Qin, **gen. et sp. nov.** (Hemiptera: Delphacidae: Tropidocephalini) is described from Sichuan, China. Habitus photos and illustrations of male genitalia of the new species are given, and the differences between the new genus and its closely related genera are discussed.

Key words: Auchenorrhyncha, Fulgoroidea, planthoppers, taxonomy

Introduction

Tropidocephalini is the second largest tribe of the delphacid subfamily Delphacinae (Hemiptera: Fulgoroidea: Delphacidae), currently containing more than 180 species in 36 genera (Chen & Tsai 2009; Bartlett 2009; Qin & Zhang 2010; Hu & Ding 2013). Species of the tribe are widely distributed throughout the Palaearctic, Afrotropical, Oriental, Australian and Pacific Regions, but most species, feeding on bamboos, are recorded from the Oriental Region (Chen & Tsai 2009).

The Chinese fauna of Tropidocephalini, comprising about 90 described species in 22 genera, represents the richest species diversity of this tribe worldwide, with most taxa restricted to south China (Chen 2003, Ding 2006, Qin & Zhang 2010). However, many species remain unknown and await descriptions. In the present paper, one new genus based on a new species from Sichuan, China is described below.

Material and methods

All specimens examined in this study are macropterous and are deposited in the Entomological Museum, Northwest A & F University, Yangling, Shaanxi, China (NWAUFU). The genital segments of the examined specimens were macerated in 10% KOH and drawn from preparations in glycerin jelly with the aid of a light microscope. Illustrations of the specimens were made using a Leica MZ 12.5 stereomicroscope. Habitus photos were taken using a Scientific Digital micrography system equipped with an Auto-montage imaging system and a highly sensitive QIMAGING Retiga 4000Rdigital camera (CCD), multiple photographs were compressed into final images. The terminology in this paper follows that of Ding (2006). Measurements of the body length were from the apex of the vertex to the posterior tip of the abdomen. All measurements are in millimeters (mm).

Taxonomy

***Lauriana* Ren & Qin gen. nov.**

(Figs 1–18)

Type species. *Lauriana senticosa* Ren & Qin **sp. nov.**, here designated.

posterolaterally, not reaching posterior margin, median carina distinct but obscure apically (Figs 1, 3). Forewing surpassing tip of abdomen approximately 2/3 of its total length (Figs 1, 2), about 3.30 times longer than wide at maximum, widest at apical 1/4, covering black granules on longitudinal veins (Figs 1, 2, 18). Legs with hind tibiae 1.44–1.49 mm long, distinctly longer than post tarsi together, bearing 2 lateral teeth, post-tibial spur (0.28–0.31 mm) about half length of metabasitarsus, without teeth along lateral margin but with a rigid apical tooth (Fig. 5).

Male genitalia. Pygofer narrow in profile, posterior margin sinuate, much longer than anterior margin, ventral margin apparently wider than dorsal margin; in caudal view pygofer widest in dorsal fourth, opening much longer than wide, ventrocaudal margin with single long, spine-like process on midventral margin inclined to the left (Figs 6, 7, 9, 11). Diaphragm widely open centrally for connecting with opening for parameres, lateral margins membranous and irregular, subbasally produced subtriangularly with numerous tiny strumae on surface, basal transverse sclerotized (Fig. 11). Parameres fairly long, in caudal view contiguous and broad at base, then curving and narrowing apically, apices convergent and slightly expanded, dorsally emarginated with inner apical angles finger-like produced, in lateral view parameres with a subtriangular lobe-like process subbasally (Figs 6–8, 9, 12, 16). Aedeagus with phallobase developed, asymmetrical, bearing a short slender process arising near base on dorsal side, phallus strongly curved twice, n-shaped, ventrobasally has a thick process which is bifurcated at apex, distal limb of phallus membranous, bearing a series of teeth and strumae and three spines, one long spine on left side and adorned with numerous jagged teeth, other two spines located at apex on ventral side, on dorsal side of phallus tectiform apically, and from there gonopore opens (Figs 6–9, 12–15). Male anal segment without processes but with a small tooth in middle (Figs 6–9, 12, 17).

Host plants. Unknown.

Etymology. The specific epithet is an adjective derived from the Latin word “*senticosus*”, referring to the prickly apex of the aedeagus.

Distribution. Known currently from the type locality in southwest China (Sichuan Province).

Acknowledgments

We are grateful to Prof. John Richard Schrock (Emporia State University, Emporia, KS, USA) for suggestions and improvement of the manuscript. We wish to thank Prof. Ai-Ping Liang (Institute of Zoology, Chinese Academy of Sciences, Beijing, China) for his editorial help with the manuscript. This study was supported by the grants from the National Science Foundation of China (Nos. 30970387 and 31172126).

References

- Bartlett, C.R. (2009) A new genus of new world Tropidocephalini (Hemiptera: Delphacidae: Delphacinae), with the description of two new species. *Entomological News*, 120 (4), 387–396.
<http://dx.doi.org/10.3157/021.120.0407>
- Chen, X.S. (2003) Key to genera of the tribe Tropidocephalini from the People’s Republic of China with description of a new genus. *The Canadian Entomologist*, 135, 811–821.
<http://dx.doi.org/10.4039/n02-097>
- Chen, X.S. & Tsai, J.H. (2009) Two new genera of Tropidocephalini (Hemiptera; Fulgoroidea: Delphacidae). *Florida Entomologist*, 92 (2), 261–268.
<http://dx.doi.org/10.1653/024.092.0210>
- Ding, J.H. (2006) *Fauna Sinica. Insecta Vol. 45. Homoptera Delphacidae*. Editorial Committee of Fauna Sinica, Chinese Academy of Science. Science Press, Beijing, China, 776 pp.
- Hu, C.L. & Ding, J.H. (2013) One new genus and species of Tropidocephalini (Hemiptera, Delphacidae, Delphacinae) from Tibet, China. *Acta Zootaxonomica Sinica*, 38 (3), 552–555.
- Qin, D.Z. & Zhang, Y.L. (2010) A key to the genera of Tropidocephalini (Hemiptera: Fulgoromorpha: Delphacidae) of China with description of *Mucillnata rava*, new genus and species. *Zootaxa*, 2448, 61–68.