

Copyright © 2005 Magnolia Press





A new species of *Chudania* Distant (Hemiptera: Cicadellidae: Nirvaninae) from China

WU DAI & YALIN ZHANG¹

Key Laboratory of Plant Protection Resources and Pest Management, Ministry of Education, Entomological Museum, Northwest Sci-Tech University of Agriculture and Forestry, Yangling, Shaanxi 712100, China E-mails: daiwu@nwsuaf.edu.cn, yalinzh@nwsuaf.edu.cn

Abstract

In the present paper, a new species, *Chudania guangxiana* sp. nov., is described from China. A detailed morphological description and illustrations of the new species are provided. The type specimen is deposited in the Institute of Zoology, Chinese Academy of Sciences.

Key word: Hemiptera, Cicadellidae, Nirvaninae, Chudania, new species, China

Introduction

The genus *Chudania* was established by Distant (1908), with the type species *C. delecta* Distant, based only on external morphology. Later, Jacobi (1944) described a second species, *C. exposita*. Subsequently, Heller (1972) described *C. africana* and gave male genital characters of all three species (Heller, 1988). In a more detailed review of the genus, Zhang and Yang (1990) removed *C. exposita* from the genus, described eight new species, and gave a key to all 10 species based on male sexual characters. Further new Chinese species were added by Li and Wang (1991), Cai and Kuoh (1992), Zhang (1992), and Li & Chen (1998, 2001). Up to now, there are 15 known species included in this genus. In the present study, a new species of this genus, *C. guangxiana* sp. nov., is described from Guangxi, China. The type specimen is deposited in the Institute of Zoology, Chinese Academy of Sciences.

Accepted by C. Schaefer: 10 Sept. 2005; published: 4 Oct. 2005

^{1.} corresponding author, E-mail: yalinzh@nwsuaf.edu.cn

zootaxaChudania guangxiana sp. nov.(1057)Figs. 1–9.

Head slightly produced angularly. Crown nearly flat, entire anterior and lateral margins separated from face by a distinct carina; medium length of crown slightly shorter than width between eyes; coronal suture obscure; eyes fairly large; ocelli near lateral margins of crown, some distance in front of inner margin of eyes. Face slightly convex and centrally carinate in basal area. Pronotum slightly wider than head, anterior margin roundly produced, posterior margin slightly concave, sides carinate. Scutellum almost as long as head, transverse depression distinct, nearly reaching lateral margin. Elytra with venation obscure.

Head and thorax black; ocelli, face below eyes and antennae, bright yellow. Fore wing brown except bright yellow at basal 1/4 of corium adjacent clavus and two triangular hyaline patches near costal margin subapically.

Male genitalila: Pygophore lobe square, with several macrosetae at posterior margin, caudoventral margin with a dorsally curved appendage. Subgenital plate (apex missing) with a spinelike appendage at inner margin; ventral side with an oblique row of large setae. Style apical process elongate, curved laterally; lateral lobe well-developed with a group of small setae. Connective Y-shaped. Aedeagus curved ventrally with basal half well sclerotized; apical half membranous, wide, narrowed gradually at apex, with a pair of well developed appendages curved ventrally; basal 1/3 of lateral dorsum with a pair of appendages which are slightly curved and extended caudad; at lateral ventrum just before basal atrium a pair of long appendages curved dorsocaudad and with a short branch near base extending dorsad; with a pair of short appendages sub-basally extending ventrad.

Measurement: Male 3.9mm long (including tegmen).

Material examined: Holotype of China: Guangxi Prov., Napo, Defu, 1440m, 4 April 1998, coll. Huang Fusheng.

Remarks: This species resembles *Chudania kunmingana* Zhang et Yang externally, but can be distinguished by the shape of its aedeagus from the latter: 1) apical half not gradually expanded apically; 2) a pair of appendages extended caudally at basal 1/3 laterodorsally; 3) a pair long appendages at basal half with a short branch near base extending dorsally. The new species is also very similar to *C. fujianana* Cai et Kuoh, but differs from the latter by: 1) fore wing brown except bright yellow at basal 1/4 of corium; 2) aedeagus with developed appendages at apical half arising from membranous part; 3) aedeagal appendages situated at basal 1/3 laterodorsally; 4) long aedeagal appendages present with a short branch just before basal atrium.

Etymology. The specific name is derived from the type locality.



FIGURES 1–9. *Chudania guangxiana* sp. nov. 1. Head, pronotum, and scutellum, dorsal view; 2.head, ventroanterior view; 3. left forewing; 4. male pygophore, lateral view; 5. aedeagus, dorsal view; 6. aedeagus, lateral view; 7. right style, dorsal view; 8.connective, dorsal view; 9. left subgenital plate, ventral view.

zootaxa 1057

Acknowledgements

ZOOTAXA

(1057)

We acknowledge Professor Xing-ke Yang (the Institute of Zoology, Chinese Academy of Sciences, Beijing) for lending us the specimen. Sincere thanks also go to Mick Webb, The Natural History Museum, London, for his comments in reviewing the manuscript. The project was supported by Northwest A&F University grant for outstanding faculty members and partly also by the Northwest A&F University Youth Foundation.

References

- Cai, P. & Kuoh, C.L. (1992) A new species of the genus *Chudania* from China (Homoptera: Cicadellidae: Nirvaninae). *Journal of Anhui Agricultural College*, 19, 130–132.
- Distant, W. L (1908) Rhynchota: Homoptera and Appendix. *In* Bingham, C.T. (Ed.), *The Fauna of British India, including Ceylon and Burma*. Volume 4. Taylor and Francis, London, xv+501pp.
- Heller, F.R. (1988) Die Typen von *Chudania exposita* Jacobi und Genitalarmaturen von anderen Nirvaniden (Homoptera, Cicadellidae, Nirvanidae). *Entomotaxonomia*, 10, 55–64.
- Heller, F.R. (1972) Zwei neue Nirvaniden aus Kamerun (Homoptera, Cicadellidae). Stuttgarter Beiträge zur Naturkunde aus dem Stattlichen Museum für Naturkunde in Stuttgart, Series A, 246, 1–7.
- Li, Z.Z. & Chen, X.X. (1998) *Chudania* Distant. *In* Li, Z.Z. & Chen, X.X. (Eds.), *Nirvaninae from China (Homoptera: Cicadellidae)*. Guizhou Science and Technology publishing house, pp. 92–101.
- Li, Z.Z. & Chen, X.X. (2001) A new species of the genus *Chudania* Distant (Homoptera: Cicadellidae: Nirvaninae) from Yunnan Province, China. *Entomotaxonomia*, 23, 90–92.
- Li, Z.Z. & Wang, L.M. (1991) Nirvaninae: Chudania Distant. In: Li, Z.Z. & Wang, L.M. (Eds.), Agriculture and Forestry Insect Fauna of Guizhou, 4: (Homoptera: Cicadellidae). Guizhou Science and Technology Publishing House, pp. 129–133.
- Zhang, Y.L. & Yang, C.K. (1990) Revision of the genus *Chudania* Distant. *In*: Zhang, Y.L. (Ed.), A *Taxonomic Study of Chinese Cicadellidae (Homoptera)*. Tianze Eldonejo, Shaanxi, Yangling, pp. 55–69.
- Zhang, Y.L. (1992) One new species of the genus *Chudania* Distant (Homoptera: Cicadellidae: Nirvaninae). *Entomotaxonomia*, 14, 263–265