



## Two new Nirvanini genera from China (Hemiptera: Cicadellidae)

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### Abstract

Two new Nirvanini genera, *Decursusnirvana* **gen. nov.** (type species: *Decursusnirvana fasciiformis* **sp. nov.**) and *Sino-nirvana* **gen. nov.** (type species: *Sino-nirvana hirsuta* **sp. nov.**), including two new species, *D. fasciiformis* **sp. nov.** and *S. hirsuta*, **sp. nov.** from China are described. One new combination, *Decursusnirvana excelsa* (Melichar) n. comb., is also proposed. *Decursusnirvana* most closely resembles *Oniella* Matsumura, but it may be distinguished from the latter by the aedeagus lacking an atrium and with the shaft with its basal half straight and apical half strongly curved ventrally, with a pair of processes. *Sino-nirvana* **gen. nov.** is similar to *Decursusnirvana* **gen. nov.**, differs from the latter as follows: head more elongate with anteclypeus much broader and not extended beyond margin of gena. Also, the pygofer lobe is solid (not divided in two places like the latter) and the subgenital plate has numerous long, fine setae. Detailed morphological descriptions and illustrations of all three species are given and a key to all male species in two genera is also provided.

**Key word:** Homoptera, Auchenorrhyncha, Nirvanini, taxonomy, morphology

### Introduction

Leafhoppers constitute one of the largest families of insects, with more than 22,000 described species (Oman *et al.*, 1990; Dietrich, 2005). Nirvanini is the largest and most widespread tribe of the subfamily Evacanthinae, which was treated as a senior synonym of Nirvaninae by Dietrich (2004). It can be distinguished from the other tribes of Evacanthinae by the following combination of features: head with face flattened but not concave ventrally, usually with partial longitudinal carina; front femur with basal seta of intercalary row distinctly enlarged, PV usually with a single distal macroseta, tibia cylindrical; hind femur with macrosetal formula 2+1+1 (Dietrich, 2004). Taxonomic reviews of the tribe have been published recently for the faunas of India (Viraktamath and Wesley 1988), China (Huang, 1989; Li and Chen, 1999), the Neotropical region (Dietrich, 2004), and for the tropical Asian species described by C. F. Baker (Viraktamath, 1992). The last comprehensive review of nirvanine classification (Li and Chen, 1999) and recent research (Dai and Zhang, 2005; Chen and Li, 2000) recorded 11 genera in the Nirvanini with 63 described species from China.

Many undescribed species of Nirvanini are known to occur in China. In the course of an ongoing study on the phylogeny and biogeography of Nirvanini, some specimens of the tribe were found in our institutional collection that could not be assigned to any known genera. Two new genera are erected for these specimens and two new species are described and illustrated. One new combination, *Decursusnirvana excelsa* (Melichar) **n. comb.**, is also proposed.

### Material and methods

All specimens examined are deposited in the Entomological Museum, Northwest A&F University, Yangling, Shaanxi, China (NWAFU). Morphological terminology follows Zhang (1990) and Li & Chen (1998). Habitus and



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**FIGURES 32–33.** Wings of *Decursus nirvana fasciiformis*. 32, forewing; 33, hindwing.

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