



## Tribe Teruliini: new genera and new species of Neotropical leafhoppers with a revised key to genera and species, new records and notes on distribution and taxonomy (Hemiptera: Cicadellidae: Coelidiinae)

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## Abstract

Two new genera, *Freytagolidia*, type-species *Freytagolidia ligula* **sp. nov.** and *Neodocalidia*, type-species *Neodocalidia connectiva* **sp. nov.**, from Colombia are described and illustrated. Nineteen additional new species are described and illustrated in the following genera: *Baluba sharkeyi* **sp. nov.** (Colombia), *Bolidiana robusta* **sp. nov.** (Colombia), *B. trisetacea* **sp. nov.** (French Guiana), *B. elongata* **sp. nov.** (Colombia), *Harasupia lyrata* **sp. nov.** (Mexico), *Hastalidia acinaca* **sp. nov.** (Peru), *Jalorpa constricta* **sp. nov.** (Colombia), *Licontinia minutasetacea* **sp. nov.** (Colombia), *L. recurvata* **sp. nov.** (Panama), *Panolidia torquersi* **sp. nov.** (Colombia), *P. minuta* **sp. nov.** (Colombia), *Sapingia calcaris* **sp. nov.** (Colombia), *Stalolidia flangella* **sp. nov.** (Colombia), *S. semiovata* **sp. nov.** (Colombia), *S. setacea* **sp. nov.** (Colombia), *S. ecuadorensis* **sp. nov.** (Ecuador), *S. lyrica* **sp. nov.** (Bolivia), *S. clava* **sp. nov.** (Brazil) and *S. bulbata* **sp. nov.** (Peru). Taxonomy and distribution of genera, revised key to species and details on new records are provided. A revised key to all known genera is also included. Colombia is a new record for *Baluba*, *Jalorpa*, *Panolidia*, *Sapingia* and *Stalolidia*; Panama for *Licontinia*; Peru for *Hastalidia* and Ecuador for *Stalolidia*. The type-species name, *Coelidia marginata* Stål, for *Harasupia* Nielson, 1979 was incorrectly cited as *Harasupia marginata* (Stål) and is corrected herein.

**Key words:** *Freytagolidia*, *Neodocalidia*, key, new species, new records, distribution, Neotropical, leafhoppers

## Introduction

This paper is the first in a series of studies of Neotropical leafhoppers that focus primarily on the fauna of Colombia. Two new genera, *Freytagolidia*, type-species *Freytagolidia ligula* **sp. nov.** and *Neodocalidia*, type-species *Neodocalidia connectiva* **sp. nov.**, and 19 additional new species among nine genera are described. The number of species and their assigned genera follow: one each in *Baluba* Nielson, 1979, *Harasupia* Nielson, 1979, *Hastalidia* Nielson, 1996, *Jalorpa* Nielson, 1979 and *Sapingia* Nielson, 1979; two each in *Licontinia* Nielson, 1979 and *Panolidia* Nielson, 1979, three in *Bolidiana* Nielson, 1979 and seven in *Stalolidia* Nielson, 1979. Among 21 new taxa treated, 15 are from Colombia. A concise taxonomic review of the genera, revised keys (based on males) to species, distribution and new records also are given. A revised key to all known genera is also provided. The type-species name, *Harasupia marginata* (Stål), cited for *Harasupia* Nielson, 1979 is corrected herein as *Coelidia marginata* Stål.

The majority of the leafhoppers described herein were collected by flight traps in Colombia by Michael Sharkey, University of Kentucky, Lexington and his colleagues; others by conventional means (sweeping, pan trapping) in several South and Central American countries. Flight traps and fogging forest canopy have proved far more efficacious than sweeping for specimens of the subfamily Coelidiinae. Males predominate over females by a ratio about 100:1 by all collecting methods. The reason for this disparity is unknown. Flight trap data suggest that members of the subfamily Coelidiinae may be more active (and available) during certain periods, perhaps crepuscular and/or nocturnal, than during daylight time when sweeping is normally employed. This hypothesis has not yet been tested.

Holotype specimens, where appropriate, are deposited in the following institutions: Colección de Artrópodos, Instituto Alexander von Humboldt, Villa de Leyva, Colombia (IAHC) and the National Museum of Natural History, Washington, D.C (NMNH). Paratype specimens and other identified material are shared among the following institutions: (IAHC), (NMNH), Department of Entomology collections, University of Kentucky, Lexington (UK); Monte L. Bean Life Science Museum, Brigham Young University, Provo, UT (MLBM), Department of Biology collections, Utah State University, Logan (USU) and Department of Entomology collections, Florida State University, Tallahassee, FL (FSU). All descriptions, illustrations and photos were done from holotype specimens. All illustrations were drawn at 40X magnification to show comparative size of structures among species.

## Taxonomy

Teruliini was first established as a new tribe in a revision of the subfamily Coelidiinae (Nielson, 1979). This study covered the type-genus, *Terulia* Stål, 1862, 38 new genera and 191 valid species of which 131 were new to science and 60 were new combinations. The tribe Teruliini differs from its nearest relative, Coelidiini, by the presence of a complete, longitudinal clypeal carina. Among the nine genera treated herein, eight were originally described in that