

**A NEW GENUS, *HECALOCORICA*, AND
A NEW SPECIES OF HECALINE LEAFHOPPER
FROM COSTA RICA (HOMOPTERA:
CICADELLIDAE)¹**

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ABSTRACT: A new genus and new species, (*Hecalocorica bidentata*), from Costa Rica is described and illustrated. Notes on related Neotropical genera are also given.

Linnavuori (1957) revised the subfamily Hecalinae for the Neotropical region, giving keys and redescriptions of five genera (*Cerillus* Oman, *Egenus* Oman, *Tenucephalus* Delong, *Spangbergiella* Signoret, *Bonamus* Oman), and their attendant species. In his revision of the Ethiopian Deltocephalinae, Linnavuori (1975a) reduced Hecalinae to a tribal level, citing several principal characters that allied the group within the Deltocephalinae. He also established a new genus, *Neohecalus*, for two Nearctic species that were previously assigned to *Hecalus*, a widespread group in the New and Old World. In a companion paper, Linnavuori (1975b) removed *Cerillus* from the tribe Hecalini and erected a new tribe, Cerillini, to accommodate the genus. Linnavuori and DeLong (1978) reviewed the tribe for Mexico and the United States including the genera *Hecalus* Stal, *Hecullus* Oman, *Memnonia* Ball, *Neohecalus*, *Dicyphonia* Ball, *Spangbergiella*, and described a new genus, *Jiutepeca*.

In this paper, a new genus, *Hecalocorica*, is described and illustrated from Costa Rica. Unlike other genera in the tribe, the ocelli are on the crown margin about 1/3 the distance from the eyes to the apex of the crown. The aedeagal processes are ventral whereas in other groups it is apical or subapical. The plate, venation in the forewing, body configuration and size are typical of *Spangbergiella*, to which it is likely most closely related.

***Hecalocorica*, NEW GENUS**

Type-species, *Hecalocorica bidentata*, n. sp.

Large, elongate species. Similar in general habitus to *Spangbergiella* but with ocelli removed about 1/3 distance from eyes to apex of crown; male genitalia distinctive. General color greenish to stramineous.

Head large, slightly wider than pronotum, anterior margin rounded; eyes small; crown produced, shorter than pronotum, shallowly depressed, anterior submargin with depressed line between ocelli, margin somewhat foliaceous in lateral view; ocelli visible from above, about 1/3 distance from eyes to apex of crown; pronotum large, broad, inflated, lateral margins parallel, surface with transverse striations; scutellum large (Figs 1, 2); face depressed along anterior submargin;

¹ Received January 3, 1996. Accepted January 23, 1996.

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clypeus broad anteriorly, lateral frontal sutures reaching ocelli; gena large, curved below eyes; clypellus long (Fig 3); forewing long, membranous, two claval veins, three apical cells, outer anteapical cell open distally, central anteapical cell closed, inner anteapical cell open basally (Fig. 4); hind femoral setal formula 2:2:1.

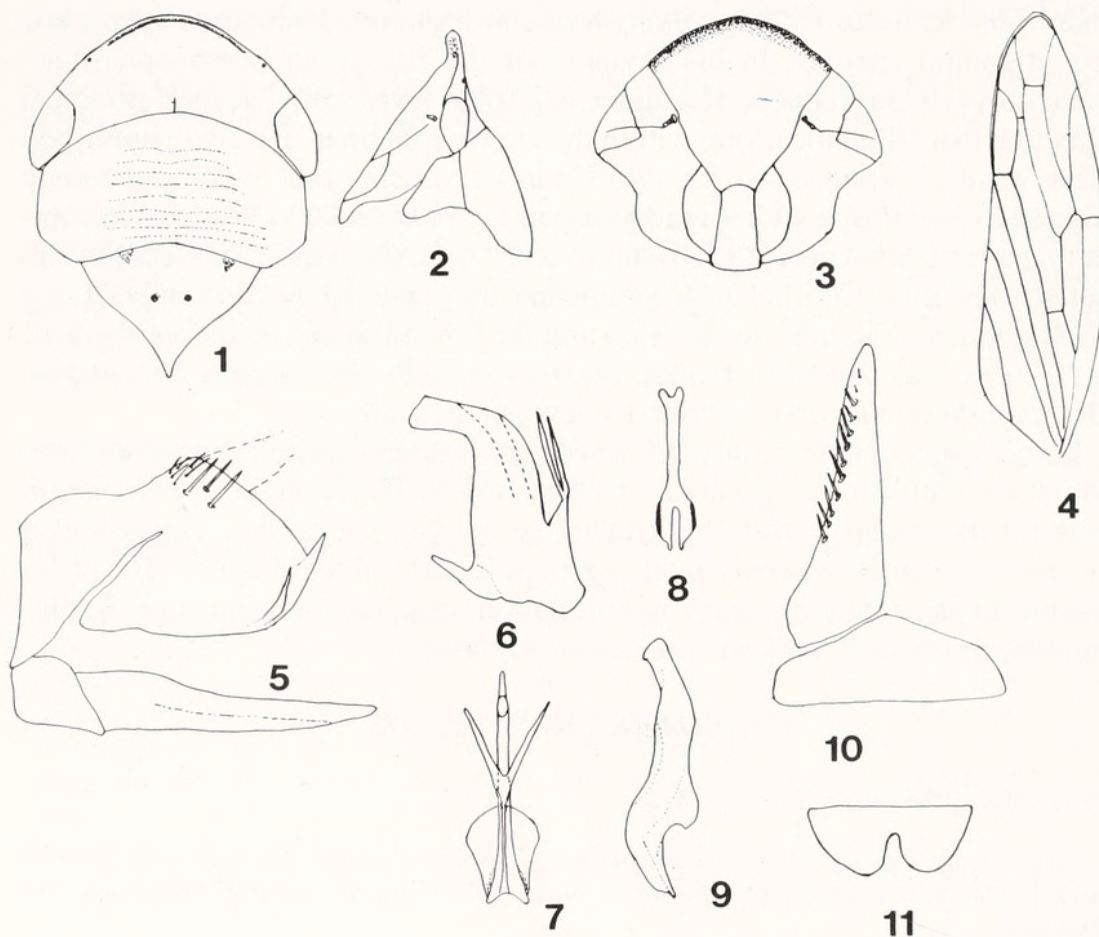
Male. Genitalia symmetrical; male pygofer elongate, armed on caudal margin; aedeagus flat, with ventral processes; connective long, narrowly Y-shaped; style with short apophysis; valve broadly triangulate; plate triangular elongate, macrosetae uniseriate.

Hecalorcorica bidentata, NEW SPECIES

Figs. 1-11

Length: male 9.50 mm., female 12.30 mm.

Male: Pygofer about twice as long as broad, with 2 stout caudal spines, macrosetae on middle of dorsal margin (Fig. 5); aedeagus in lateral view very broad, shaft compressed laterally, apex narrowed and curved dorsally, with pair of long spines ventrally, gonopore large, subapical (Fig. 6), ventral spines diverging in ventral view (Fig. 7); connective elongate, narrowly Y-shaped Fig. 8);



Figs. 1-11. *Hecalorcorica bidentata*, n. sp. 1. Head, pronotum & scutellum, dorsal view. 2. Head & pronotum, lateral view. 3. Face, ventral view. 4. Forewing, dorsal view. 5. Male pygofer, valve & plate, lateral view. 6. Aedeagus, lateral view. 7. Same, ventral view. 8. Connective, dorsal view. 9. Style, ventral view. 10. Valve & plate, ventral view. 11. Female seventh segment, ventral view.

plate, lateral view. 6. Aedeagus, lateral view. 7. Same, ventral view. 8. Connective, dorsal view. 9. Style, ventral view. 10. Valve & plate, ventral view. 11. Female seventh segment, ventral view. style long, apophysis short, rounded apically with small projection laterally (Fig. 9); valve broad, short, triangulate (Fig. 10); plate long, triangulate, macrosetae on lateral margin, uniseriate (Fig. 10).

Female. Seventh segment short, caudal margin bilobed (Fig. 11) .

Holotype male: COSTA RICA: San Jose, Cerro de la Muerte, pass on Highway #1, km. 88, 6.V.1995, Baumann & Houseman (UCR). Allotype female, same data as holotype (UCR).

Remarks: Two immature specimens (4 & 5 instar), same data as type specimens, were examined and are deposited in the UCR collection.

This species is rare and occurs in high elevations above 2800 m. It is the largest in size of the New World Hecalini.

ACKNOWLEDGMENTS

I thank Richard Baumann, Monte L. Bean Museum, Brigham Young University for loan of specimens, Paul Freytag, University of Kentucky, Lexington and Ray Gill, California Department of Food and Agriculture, Sacramento for reviewing the paper. Type specimens are deposited in the collection of the University of Costa Rica, San Jose (UCR).

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