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Taxonomic notes on *Mahanarva (Ipiranga)* (Hemiptera, Cercopidae) with description of a new species

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Abstract

Mahanarva (*Ipiranga*) *takiyae* **sp. nov.** (Cercopidae) is described and illustrated from Brazil. This new species can be distinguished from other known species in the genus by the tegmen with three rounded yellow spots and the shape of the paramere. *Mahanarva* (*Mahanarva*) *rubripennis* is transferred to the subgenus *Mahanarva* (*Ipiranga*).

Key words: Auchenorrhyncha, taxonomy, Neotropical Region, Brazil

Introduction

The Cercopoidea encompasses about 3000 species included among the families Cercopidae, Aphrophoridae, Clastopteridae, Machaerotidae and Epypigidae. Cercopidae is the largest family, characterized by bright color pattern, reflexive bleeding, eyes in dorsal view circular, head narrow than pronotum and the amount of protective froth excreta produced by their nymphs (Fig. 25). Cercopids feed on a great variety of plants, but in the New World they commonly feed on pasture grass or sugar cane. They are known for the damage caused to these plants by the direct feeding: including lost production, quality and palatability of crops. *Mahanarva*, one of the most economically important genera, includes many pests of sugar cane and pastures, such as *M. liturata* (Le Peletier & Serville, 1825) (Fig. 24), *M. spectabilis* (Distant, 1909) and *M. fimbriolata* (Stål, 1854). An interesting adaptation in the feeding position occurs in some *Mahanarva* species, which hold their front legs raised away from the host plants (Carvalho & Webb, 2005). Nymphs of two species, *M. insigna* and *M. costaricensis*, live in water filled *Heliconia* spp. flowers (Thompson, 1997) and are considered semi-aquatic.

In Distant's (1909) original description the genus is characterized principally by: (1) head robust and subtriangular; (2) vertex wide; (3) postclypeus very prominent, slightly compressed, and convexly deflected downwards to an obtuse point in female; and (4) rostrum reaching mesocoxae. *Mahanarva* includes 46 species distributed in the Neotropical region.

Fennah (1968) redescribed the genus proposing two subgenera: *Mahanarva* (*s. str.*) and *Mahanarva* (*Ipiranga*) based mainly on the difference of tegmina proportion (length/width): wide in *Mahanarva*, narrow in *Ipiranga*. In the latter subgenus Fennah included three species: *M.* (*I.) rubicunda* (Walker, 1851) [type species], *M.* (*I.)aguirrei* (Berg, 1879), and *M.* (*I.)moreirae* (Lallemand, 1924). *Ipiranga* is characterized as follows: (1) postclypeus inflated, medially carinate, in profile shallowly convex and strongly receding caudad; (2) rostrum not quite attaining mesocoxae; (3) antennae with third segment subovoid, arista scarcely longer than segment; (4) pronotum convex with anterior margin straight, very little projecting laterally, posterior margin shallowly concave; and (5) tegmina longer than broad. Genitalic characters include: (1) pygofer with a pair of processes laterally; (2) subgenital plate totally fused to pygofer, relatively long, subacute distally; (3) paramere robust with one subapical spine with apex acute or obtuse; (4) aedeagus short, subcylindrical with one pair of long and slender processes, inserted dorsally at middle; and (5) ovipositor with first valvulae apposed almost to base, where each is shortly produced in a small convex ovate lobe.

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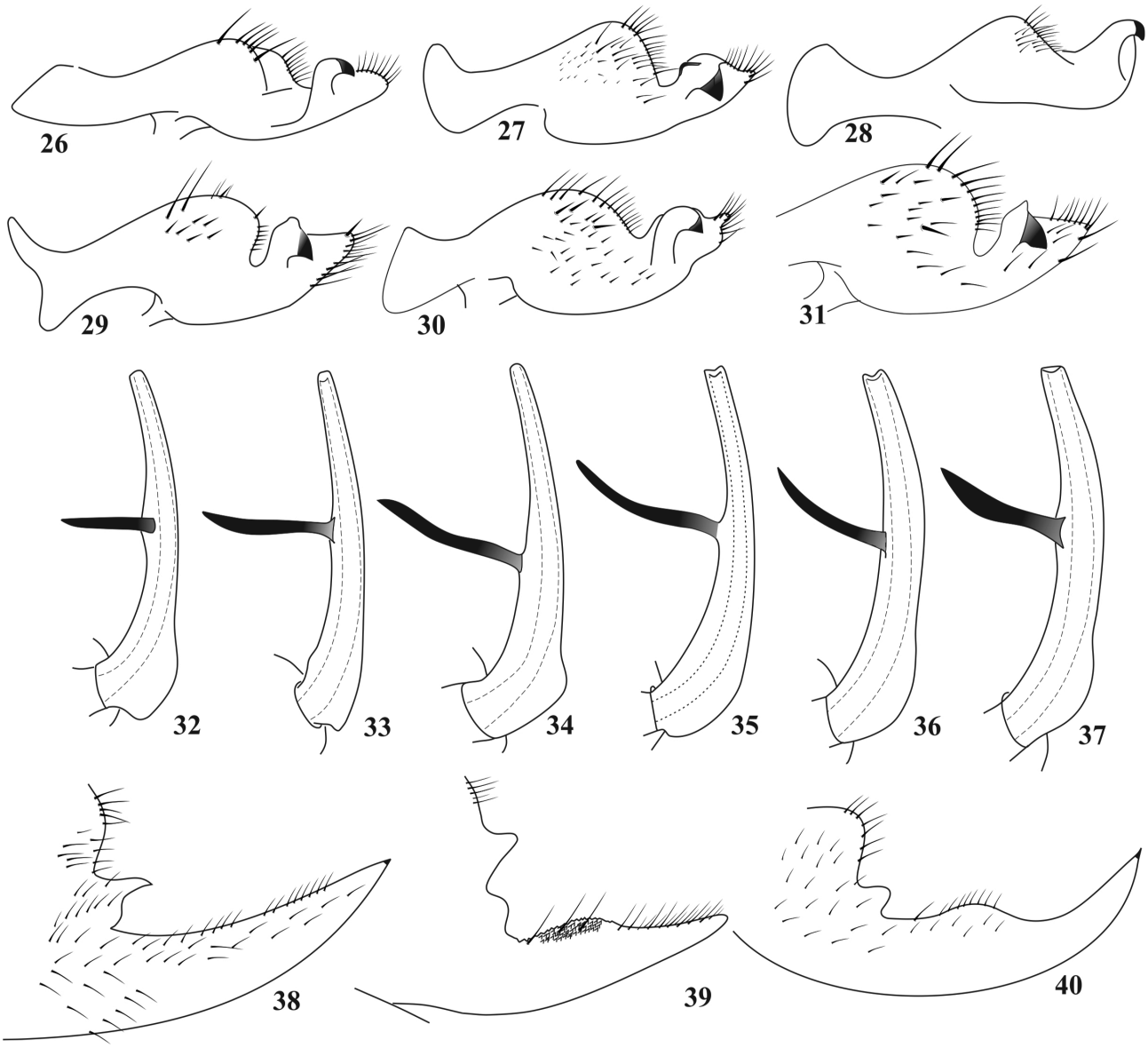

FIGURES 26–40. Male terminalia of *Mahanarva* (*Ipiranga*) species. Parameres: 26. *M.* (*I.*) *aguirrei*; 27. *M.* (*I.*) *bahiaensis*; 28. *M.* (*I.*) *fortunata*; 29. *M.* (*I.*) integra; 30. *M.* (*I.*) *rubicunda*; 31. *M.* (*I.*) *rubripennis*. Aedeagus: 32. *M.* (*I.*) *aguirrei*; 33. *M.* (*I.*) *bahiaensis*; 34. *M.* (*I.*) *fortunata*; 35. *Mahanarva* (*Ipiranga*) *integra*; 36. *M.* (*I.*) *rubicunda*; 37. *M.* (*I.*) *rubripennis*. Subgenital plates: 38. *M.* (*I.*) *vitatta*; 39. *M.* (*I.*) *integra*; 40. *M.* (*I.*) *fortunata*.

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