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Two new species of *Tetralidia* Marques-Costa & Cavichioli (Hemiptera: Cicadellidae: Neocoelidiinae) from Peru with a key to species of the genus

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Abstract

Two new species of *Tetralidia* Marques-Costa & Cavichioli, 2008: *Tetralidia pachamama* **sp. nov.** and *Tetralidia viracocha* **sp. nov.** are described and illustrated. *T. pachamama* **sp. nov.** can be distinguished from the other species of the genus by the simple aedeagus, without processes, spines or lamellae, while *T. viracocha* **sp. nov.** can be distinguished by the aedeagus with two pairs of lamellae at shaft and anal tube with basiventral processes strongly curved posteriorly. An identification key to males of the species is provided.

Key words: leafhoppers, Neotropical region, morphology, *Tetralidia pachamama* **sp. nov.**, *Tetralidia viracocha* **sp. nov.**

Introduction

Neocoelidiinae includes leafhoppers restricted to the New World, and most of its species are endemic to the Neotropical Region (Nielson & Knight 2000). The subfamily has 175 valid species in 33 genera (Gonçalves, Marques-Costa & Ale-Rocha 2012, 2013).

Tetralidia was described by Marques-Costa & Cavichioli (2008) based on the morphology-based phylogenetic analysis of Neocoelidiinae (Marques-Costa 2008). In this analysis, the genus was supported only by one homoplastic character: (1) connective with forked stem at articulation point with aedeagus. It also seems to be sister group of (*Tozzita* Kramer, 1964 + *Coelindroma* Kramer 1967) based on the following homoplastic characters: (1) lateral margins of clypeus slightly convergent apically and (2) pygofer without external process at ventral margin. Although, it is not well supported in the phylogenetic analysis, it seems to constitute a natural group. It can also be easily distinguished from other genera of Neocoelidiinae by (1) crown with four orange maculae; (2) aedeagus long and slender, generally with pair(s) of apical or preapical processes or lamellae (except in *Tetralidia pachamama* **sp. nov.**); (3) and anal tube with pair of basal processes.

The genus initially included two species: *Tetralidia prolata* (Chiamolera & Cavichioli 2004), type-species of *Tetralidia*, originally described in *Cocoelidia*, type-locality Ariquemes, Rondônia, Brazil; and *Tetralidia admirabilis* Marques-Costa & Cavichioli 2008, described from Puerto Maldonado, Madre de Dios, Peru. Three years later, one new species of the genus, *Tetralidia curvipennis* Gonçalves, Marques-Costa & Ale-Rocha 2011, was described from Manaus, Amazonas, Brazil. This species is known from the male holotype and one male paratype, contrary to the other *Tetralidia* species, which were described based only on the holotypes. In this same paper the authors provided a redescription of the genus and a key to species.

Here, two new species, *Tetralidia pachamama* **sp. nov.** and *Tetralidia viracocha* **sp. nov.**, are described from Peru, and a complete identification key to males, including all five known species of the genus is provided.

Holotypes (males) are deposited in the Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima (MUSM), and the male paratype of *T. pachamama* **sp. nov.** is deposited in the Coleção

Material examined. Male holotype: “PERU: Cusco 3rd km E\ Quincemil 13°13’03”S\ 70°43’40”W, 633m\ 20.viii-01.ix.2012, Malaise\ R.R. Cavichioli; J.A. Rafael; A.P.M. Santos & D.M. Takiya” (MUSM).

Notes. *Tetralidia viracocha* sp. nov. is similar to *T. admirabilis* Marques-Costa & Cavichioli 2008, in having the subgenital plates enlarged at the base and strongly tapering towards the apex and the styles with truncated apices. However, it can be easily distinguished from this and other species of the genus by the aedeagus with two pairs of lamellae on the shaft and the anal tube with basiventral processes strongly curved posteriorly.

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