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Two new species of *Platypona* DeLong (Hemiptera: Cicadellidae: Iassinae: Gyponini) from Peru and key to the species of the genus

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Abstract

Two new species of the previously monotypic genus *Platypona* DeLong, 1982 from Peru are described and illustrated: *P. furcata* **sp. nov.** (Cusco Department) and *P. inca* **sp. nov.** (Pasco Department). These two species can be distinguished from each other, as well as from the type-species, *P. sinverda* DeLong, 1982, mainly by features of the style and aedeagus. A key to the three known species of *Platypona* is provided.

Key words: leafhoppers, Neotropical region, *Platypona furcata* **sp. nov.**, *Platypona inca* **sp. nov.**

Introduction

Gyponini is the largest tribe of the leafhopper subfamily Iassinae, comprising more than 1,300 species in 60 genera (Gonçalves *et al.* 2013, Freytag 2013 a, b, c). *Platypona* DeLong, 1982 is a Neotropical genus, previously known from a single species from Peru, *P. sinverda* DeLong, 1982 (= *P. sindveda* [sic!] in the original description), described based on a single male specimen from Fundo Sinchono, Ucayali Department. In this paper, *P. furcata* **sp. nov.** and *P. inca* **sp. nov.** are described from Southern (Cuzco Department) and Central (Pasco Department) Peru, respectively. Holotypes (males) are deposited in the Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Lima (MUSM), and the male paratype of *P. inca* is deposited in the Coleção Entomológica Professor José Alfredo Pinheiro Dutra, Universidade Federal do Rio de Janeiro, Rio de Janeiro (DZRJ). A key to the now three known species of *Platypona* is provided.

Material and methods

For the analysis of the genital structures, the abdomen was removed and placed in hot 10% KOH, following Oman (1949). Terminalia were washed for 5–10 minutes in hot water, placed on a concave slide with glycerin for examination and preparation of photographs, and stored in a small vial with glycerin pinned below the specimen. The right hind wing was mounted between two microslides and also pinned below the specimen. Photographs were taken with a camera attached to a Leica stereomicroscope, using the image stacking software CombineZP. Morphological terminology follows mainly Dietrich (2005), except for the head sclerites (Hamilton 1981, Mejdalani 1998) and leg chaetotaxy (Rakitov 1997).

All characteristics known to vary among gyponine genera were given in the revised diagnosis for *Platypona*, including those that are not known in the type-species (marked with an asterisk [*]). Characters of the external morphology considered taxonomically important were maintained in the species descriptions.

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Measurements (mm). Male holotype: total length 10.4; crown median length 1.2; transocular width 2.8; interocular width 1.9; pronotum median length 1.6; width between humeri 3.4; mesonotum median length 1.7; mesonotum maximum width 2.4; forewing length 7.7; forewing maximum width 1.8.

Color. Body (Figs 26, 27) with ground color brownish-yellow. Color pattern similar to *P. furcata* **sp. nov.**, except dorsal portion of frons orange and central and ventral portions of frons and clypeus yellow (Fig. 14).

External morphology. Characters as in *P. furcata* **sp. nov.**

Male terminalia. Sternite VIII (Fig. 17) slightly longer than wide; anterior margin concave; lateral margins converging apically; posterior margin acute. Pygofer (Fig. 18) lobe with ventrocaudal margin bilobed; inner surface with hook-shaped process arising dorsally, near base of anal tube, extending ventrocaudally but with apex directed caudally; disk with long robust setae on dorsoapical half and minute microsetae distributed along ventrocaudal margin; apex rounded. Valve (Fig. 18) laterally fused to pygofer. Subgenital plates (Figs 18, 19) elongate, 3.2 times longer than maximum width, not extending posteriorly as far as pygofer apex; outer margin with minute microsetae distributed at apical half; ventral surface with few long setae on basal half close to outer margin; apex acute. Connective (Fig. 21) Y-shaped; arms broad and directed dorsally. Style (Figs 20, 21) elongate; in lateral view, slightly tapering towards apex; apex bifurcate. Aedeagus (Figs 22, 23) with shaft tubular, elongate, laterally expanded preapically, with two pairs of processes, apical pair short, approximately straight and slightly convergent apically, and pair of long lateral processes at apical third, approximately $^{1}/_{3}$ the length of shaft; dorsal apodemes with pair of slender elongate processes extending adjacent to ventral margin of shaft to its apex, where each is strongly bent basolaterally, forming falciform crossed apices of $^{1}/_{6}$ length of shaft, basal third of apodemes with short dorsal truncate projection with dorsal margin slightly serrated (Fig. 22, arrowed); preatrium absent; gonopore located at apex. Anal tube (segment X) without processes.

Female unknown.

Etymology. The new species epithet alludes to the Inca civilization, one of the most important empires in pre-Columbian America.

Material examined. Male holotype: "PERU Pasco [Department] 6-9.x.2002 \ Yanachaga-Chemillén N.P. \ Huampal Station, Malaise trap \ across R. Huancabamba, 1050 \ m. S10°11'08" W75°34'27" D. \ Takiya; C. Peña & R. Rakitov" (MUSM). Male paratype: same data as holotype (DZRJ).

Notes. *Platypona inca* **sp. nov.** is most similar to the type-species, *P. sinverda*, but can be easily distinguished from the latter by characters of the male genitalia, such as: (1) styles (Figs 20, 21) with apex bifurcate and with rami subequal in length, while in *P. sinverda* the ventral ramus is much longer and very slender (DeLong [1982] referred to the dorsal ramus as a short thorn-like spine); (2) aedeagal shaft (Fig. 23) with apical processes straight, while in *P. sinverda* they are hook-shaped, and long lateral processes arising from apical third, which are absent in *P. sinverda*; and (3) processes of aedeagal apodemes (Fig. 22) with basodorsal projections that are broad and truncate, while in *P. sinverda* they are spiniform.

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