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## *Xynocoris*, new genus of Ochlerini from Central and South America (Hemiptera: Pentatomidae: Discocephalinae)

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### Abstract

*Xynocoris* Garbelotto & Campos **gen. nov.** is proposed for a monophyletic group recovered in the previous cladistic analysis of the *Herrichella* clade. The genus is proposed based in two synapomorphies: the presence of long, projected, and acute anteocular processes, and apices of posterolateral angles of pygophore tumid. Nine new species are described (*X. crinitus* Garbelotto & Campos **sp. nov.**, *X. recavus* Garbelotto & Campos **sp. nov.**, *X. tuberculatus* Garbelotto & Campos **sp. nov.**, *X. insularis* Garbelotto & Campos **sp. nov.**, *X. egeri* Garbelotto & Campos **sp. nov.**, *X. calosus* Garbelotto & Campos **sp. nov.**, *X. meridionalis* Garbelotto & Campos **sp. nov.**, *X. lucidus* Garbelotto & Campos **sp. nov.** and *X. cupreus* Garbelotto & Campos **sp. nov.**) and one new combination is proposed for *Alitocoris parvus* (Distant).

**Key words:** Heteroptera, *Alitocoris*, cladistic taxonomy, new combination

### Introduction

Ochlerini is endemic to the Neotropics and comprises 32 genera and 115 species of cryptic, dull-colored pentatomids found from Mexico to Argentina, though most genera and species are restricted to South America (Rolston, 1981, 1992, Campos & Grazia 2006, Garbelotto *et al.* 2013; Cervantes-Peredo & Ortega-León 2014; Simões & Campos 2014).

Ochlerini is recognized as a monophyletic group (Campos & Grazia 2006) and most genera are grouped in two major clades, namely *Ocellatocoris* Campos & Grazia and *Herrichella* Distant. The *Herrichella* clade (sensu Campos & Grazia 2006) comprises 18 genera, including *Alitocoris* Sailer, and was the subject of a cladistic analysis that recovered three monophyletic groups to be considered as new genera of Ochlerini (Garbelotto *et al.* 2013, clades H, I, K). Another consequence of the cladistics of the *Herrichella* clade was confirming the paraphyly of *Alitocoris* (sensu Sailer, 1950) as first proposed by Campos and Grazia (2006), with *Alitocoris parvus* (Distant) grouped with nine undescribed species in the clade ‘K’ (Garbelotto *et al.* 2013). *Xynocoris* **gen. nov.** is proposed here for the ‘clade K’ of Garbelotto *et al.* (2013), with the description of nine new species and a new combination for *A. parvus*.

### Material and methods

The specimens were observed, photographed, measured and drawn under light stereomicroscopy. The following morphometric parameters were taken: length and width of the head, pronotum and scutellum; length of the antennal and rostral segments; total length, from the apex of clypeus to the apex of segment VII of connexivum; and maximum abdominal width. Measurements (mean ± standard deviation, minimum, and maximum) are given in millimeters. Pygophores and female genital plates were illustrated using dry specimens; phallus and female ectodermal genital ducts were studied after boiling in 10% KOH aqueous solution and staining in Congo red. Pygophores and ectodermal genital ducts were also mounted on aluminum stubs and coated with gold for

yellowish carinae posterior to the eyes. Bucculae without anterior tooth. Rostrum yellowish, second segment reaching mesocoxae; apex on urosternite V; proportion of rostral segments: I<II>III>IV.

Pronotum with punctures forming wrinkles posterior to cicatrices; few yellowish spots, denser on anterior half of disc; cicatrices slightly tumid. Anterior angle of pronotum with projections parallel to posterior margins of eye, exceeding laterally the eye by half the eye diameter. Anterolateral and posterolateral margins subrectilinear. Scutellum with yellowish spots denser on post-frenal lobe; anterior margin with 1+1 yellowish spots near the fovea; punctures forming wrinkles denser on lateral margins. Corium reaching posterior margin of connexival segment VI; spot on apex of radial vein twice the ocellus diameter. Hemelytral membrane not surpassing the apex of abdomen, bearing six veins. Pleurae with light brown spots; sterna brown. Evaporatorium brown; peritreme reaching half the width of evaporatorium. Legs light brown, contrasting with body color; femora with few brown circular spots.

Segments of connexivum bearing middle yellowish spot. Abdomen uniformly coppery brown; punctures inconspicuous on lateral margins and absent on median disc. Yellowish maculae before spiracles present (fig. 8H).

Female. Measurements (n=1): head length, 1.09; width, 1.71; pronotum length, 1.64; width, 3.88; scutellum length, 3.04; width, 2.48; length of antennal segments: I, 0.48; II, 1.14; III, 1.16; IV, 1.48; length of rostrum segments: I, 0.85; II, 1.60; III, 1.15; IV, 1.00; total length, 8.06; abdominal width, 4.19.

Genitalia. Gonocoxites 8 longer than wide; posterior margins sinuous; middle projection over laterotergites 9 slightly longer than posterolateral projection over laterotergites 8; sutural margins with few short setae, densely on apical third; disc with low callus on middle, near posterior margin (fig. 8H). Laterotergites 8 wider than long, posterior half light brown (fig. 8H). Gonocoxites 9 triangular; longitudinal suture conspicuous (fig. 8H). Laterotergites 9 not reaching the band connecting laterotergites 8; sutural angles not touching each other; apex truncated (fig. 8H).

Male. Unknown.

**Comments.** *Xynocoris cupreus* sp. nov. (fig. 3B) is part of the apical polytomy within the 'clade Q' (fig. 1; Garbelotto *et al.* 2013, 'sp. 18'). Diagnostic characters are the elongated body, the legs with few circular brown spots, the abdomen without punctures on disc and the shape of the genital plates (fig. 8H).

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