

**FIVE NEW SPECIES OF BOLIVIAN OSBORNELLUS  
(HOMOPTERA: CICADELLIDAE)**

DWIGHT M. DELONG AND CANDACE MARTINSON<sup>1</sup>

ABSTRACT

Five new species of *Osbornellus*, *O. antlerus* n. sp., *O. spinellus* n. sp., *O. asperus* n. sp., *O. circulus* n. sp. and *O. hamatus* n. sp. are described.

The genus *Osbornellus* was described by Ball (1932). Beamer (1937) reviewed and described the species occurring in the United States and Canada. DeLong (1941, 1942) described new species from Mexico, Guatemala and Panama. Linnavuori (1959) treated the Neotropical species, and Linnavuori and Heller (1961) described two more species. DeLong (1976) described four species from Bolivia and Brazil. Five new species are described at this time. All types are in the DeLong Collection.

*Osbornellus antlerus* n. sp.

(Figs. 1-2)

Length of male 5 mm, female unknown. Crown more than three-fourths as long at middle as basal width between eyes, apex blunt. Color, crown pale brown tinged with yellow; pronotum pale brown; scutellum yellow, basal angles dark brown; forewings brownish subhyaline, three small round spots each side at apex of claval veins.

Male genitalia with plates long and tapering to slender filamentous apices. Style broad at base then narrowed on basal half; apical half very narrow, slightly enlarged at apex. Aedeagus with anteriodorsal portion resembling a narrow thumb and long slender finger, both processes are narrow at apices. The ventrocaudal portion is composed of two slender processes, each indented on ventral margin at two-thirds its length and each bearing a sharp pointed spine on dorsal margin at point of ventral indentation. The processes are slender and sharply pointed at apex and greatly exceed in length the dorsal process.

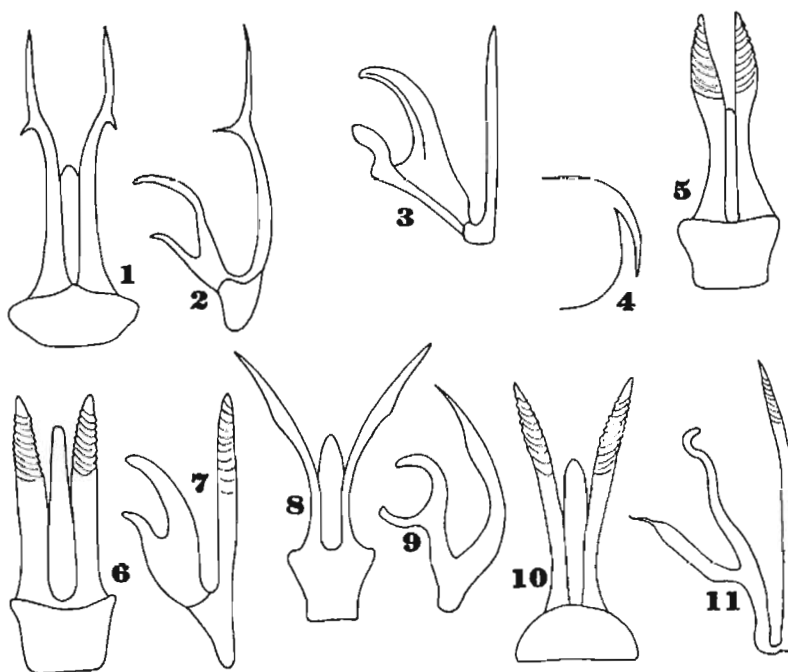
Holotype male San Esteban, Bolivia 49 km N. of Santa Cruz X-26-59 El. 1,120 ft (R. Cummings). Paratypes 1 ♂ same data as holotype.

*Osbornellus spinellus* n. sp.

(Figs. 3-5)

Length of male 4.5 mm, female unknown. Crown not quite as long at middle as basal width between eyes. Color, crown yellow, with a brown spot about middle, each side; pronotum pale brown; scutellum

<sup>1</sup>Department of Entomology, The Ohio State University.  
Received for publication November 3, 1975.



FIGS. 1-2. *Osbornellus antlerus* n. sp. 1. Aedeagus ventrally. 2. Aedeagus laterally. FIGS. 3-5. *O. spinellus* n. sp. 3. Aedeagus laterally. 4. Apex of pygofer (with spin). 5. Aedeagus ventrally. FIGS. 6-7. *O. asperus* n. sp. 6. Aedeagus ventrally. 7. Aedeagus laterally. FIGS. 8-9. *O. circulus* n. sp. 8. Aedeagus ventrally. 9. Aedeagus laterally. FIGS. 10-11. *O. hamatus* n. sp. 10. Aedeagus ventrally. 11. Aedeagus laterally.

yellow, basal angles dark brown; forewings pale brown subhyaline, with three faint brown spots each side, one at apex of each claval vein.

Male genitalia with plates elongated, tapering to slender, filamentous apices. Style broad at base, apical half slender, straight, apex slightly enlarged, blunt. Aedeagal shaft with anteriodorsal portion stout at base with a short anterior process bending cephalad and a much longer, stouter portion which curves cephalad and is blunt at apex. The ventrocaudal portion is composed of two straight, rather slender processes in lateral view, which are longer than the dorsal portion. In ventral view these processes appear concavely curved and narrowed at about one-third their length; apices pointed. The pygofer bears a spine each side on dorsocaudal margin.

Holotype male San Esteban, Bolivia, 49 km N. Santa Cruz X-26-59 El. 1,120 ft (R. Cummings). Paratypes 1 ♂ same as holotype; 2 ♂ same except XII-7-59.

*Osbornellus asperus* n. sp.

(Figs. 6-7)

Length of male 6 mm, female unknown. Crown as wide between eyes at base as median length. Color, crown yellowish-brown, pronotum pale brown; scutellum with basal angles dark brown; apex yellow; forewings pale brown, subhyaline, dark brown spots at apex of clavus and at apices of claval veins.

Male genitalia with plates long and tapering to slender filamentous apices. Style broad at base, blade elongate, narrow, apex blunt. Aedeagal shaft with anteriodorsal portion resembling a thumb and first finger separated by a notch, curved at base. The ventrocaudal portion is composed of two stout separated straight processes longer than finger of anteriodorsal process, bluntly pointed at apex. These processes are not contiguous at base with the anteriodorsal portion.

Holotype male San Esteban, Bolivia 49 km N. Santa Cruz XII-7-59 El. 1,150 ft. 2 ♂ paratypes same data as holotype; 6 ♂ paratypes same except X-26-59 (R. Cummings).

*Osbornellus circulus* n. sp.

(Figs. 8-9)

Length of male 5 mm, female unknown. Crown about three-fourths as long as basal width between eyes. Color, crown yellow with transverse brownish markings, each side on posterior portion; pronotum pale brown; scutellum yellow, basal angles dark brown; forewings brownish subhyaline with three conspicuous brown spots each side at apices of claval veins.

Male genitalia with plates long, tapering to filamentous tips. Style with basal portion broad and rather transverse, apical third narrow, shaft-like apex blunt. Aedeagal shaft with anteriodorsal portion forming two rather short curved processes which are semi-circular in arrangement. The ventrocaudal portion is composed of two processes extending beyond the dorsal portion. Each process is thickened near middle then tapers to a thin sharp pointed apex.

Holotype male San Esteban, Bolivia, 49 km N. Santa Cruz X-26-59 El. 1,160 ft (R. Cummings); 1 ♂ paratype same data as holotype.

*Osbornellus hamatus* n. sp.

(Figs. 10-11)

Length of male 4.5 mm, female unknown. Crown as long at middle as basal width between eyes. Color, crown pale brown, with a dark brown spot each side on posterior portion; pronotum dark brown; scutellum yellow, basal angles dark brown; forewings brownish, subhyaline, three dark brown spots at apices of claval veins.

Male genitalia with plates long, tapering to filamentous tips. Style broad at base, abruptly narrowing at about half its length, apical half

slender, elongate, apices blunt. Aedeagal shaft with anteriodorsal portion long and narrow; branching at one-third its length into two processes. The anterior portion one half length of posterior process extends dorsocephalad. The posterior process is long, narrow undulating and terminates with a curved hook-like tip, apex blunt. The ventrocaudal portion is composed of a pair of slightly curving processes, pointed at apices and extending beyond apex of anteriodorsal portion.

Holotype male San Esteban, Bolivia, 49 km N. Santa Cruz. X-26-59, El. 1,120 ft (R. Cummings); paratypes: 1 ♂ same data as holotype.

## LITERATURE CITED

- Baker, C. F. 1923. Comparison of Neotropical and Paletropical insect faunae. *Philippine Jour. Sci.* 23:531-532.
- Ball, E. D. 1932. New genera and species of leafhoppers related to *Scaphoideus*. *Jour. Wash. Acad. Sci.* 22:9-19.
- Beamer, R. H. 1937. A review of the genus *Osbornellus* in the United States and Canada (Homoptera: Cicadellidae). *Jour. Kans. Ent. Soc.* 10:89-112.
- DeLong, Dwight M. 1941. Some new species of Mexican *Osbornellus* (Homoptera: Cicadellidae). *Anales de la Escuela Nacional de Ciencias Biologicas* 2: 263-270.
- . 1942. Twelve new species of *Osbornellus* (Homoptera: Cicadellidae) from Mexico, Guatemala and Panama. *Bull. Brook. Ent. Soc.* 37:92-101.
- . 1976. New Species of *Osbornellus* from Bolivia and Brazil (Homoptera: Cicadellidae) *Jour. Kans. Entomol. Soc.* 49:262-265.
- Linnavuori, Rauno. 1959. Revision of the Neotropical Deltocephalinae and some related subfamilies. *Ann. Zool. Soc. Vanamo Tom. 20 No. 1*, 370 pp.
- , and Friedrich Heller. 1961. Beitrag zur Cicadelliden-Fauna von Peru. *Stuttgarter Beitrage zur Naturkunde aus dem Staatlichen Museum fur Naturkunde in Stuttgart Nr. 67 pp.* 1-14.