

## ***Albistyla*, a new genus of Neotropical Limosininae (Diptera: Sphaeroceridae)**

STEPHEN A. MARSHALL

*School of Environmental Sciences, University of Guelph, Guelph, Ontario, Canada N1G 2W1. E-mail: samarsha@uoguelph.ca*

### **Abstract**

The new genus *Albistyla* is described to include three new species associated with the decaying foliage of fallen trees in Costa Rica, Ecuador and Venezuela. The genus is defined on the basis of male terminalia and diagnosed by the combination of a single pair of strongly cruciate interfrontal bristles, two dorsocentral bristles, and the costa ending at the tip of  $R_{4+5}$ .

**Key words:** Acalyptratae, new species, tree falls, leaf litter

### **Introduction**

The genus *Albistyla* is described for a group of similar, highly distinctive Neotropical species that key out at couplet 55 of the key to Neotropical Sphaeroceridae in Marshall and Buck (2010). *Albistyla* is diagnosed by the combination of a single pair of strongly cruciate interfrontal bristles, two dorsocentral bristles, and the costa ending at the tip of  $R_{4+5}$ . It is defined as a monophyletic group primarily on the basis of the unusually modified male sternite 5 and the distinctive white surstyli with broad apical scales. The genus is infrequently collected and only the type species is known from good series. Many of the specimens examined were taken in association with tree falls or similar habitats rich in green leaf litter.

### **Material and methods**

Male and female terminalia were examined after clearing whole abdomens in hot 10% KOH solution and subsequent neutralization in glacial acetic acid. Cleared structures were preserved in glycerin and pinned below specimens in microvials.

**Terminology.** Morphological terminology follows Marshall and Buck (2010). Tergites and sternites are abbreviated in the descriptions as T and S.

**Acronyms of depositories:** DEBU (School of Environmental Sciences, University of Guelph, Guelph, Ontario, Canada); INBC (Instituto Nacional de Biodiversidad, Santo Domingo de Heredia, Costa Rica); MIZA (Museo del Instituto de Zoología Agrícola Francisco Fernández Yépez; Universidad Central de Venezuela, Maracay, Venezuela); ROME (Royal Ontario Museum, Toronto, Ontario, Canada); QCAZ (Departamento de Biología, Pontificia Universidad Católica del Ecuador, Quito, Ecuador).

### ***Albistyla* new genus**

Type species: *Albistyla spatulisterna* new species

**Generic diagnosis.** *Albistyla* is characterized by a suite of male abdominal synapomorphies including a white surstyli terminating in a broad, pale, scale-like bristle, an enlarged but simple fourth sternite, and a strongly



**FIGURE 15.** *Albistyla spatulisterna* female, photograph of mounted specimen.

#### Literature cited

- Marshall, S.A. (2013) *Bregmosina*, a new Neotropical genus of Limosininae (Diptera: Sphaeroceridae). *Zootaxa*, 3641 (3), 260–270.  
<http://dx.doi.org/10.11646/zootaxa.3641.3.5>
- Marshall, S.A. & Buck, M. (2010) Sphaeroceridae (Small Dung Flies). In: Brown, B.V., Borkent, A., Cumming, J.M. Wood, D.M., Woodley, N.E. & Zumbado, M.A. (Eds.), *Manual of Central American Diptera*. Vol. 2. National Research Council Press, Ottawa, pp. 1165–1187.