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Two new genera of oscinelline Chloropidae (Diptera) from Costa Rica

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Abstract

Medeventor gen. n. is described for the type species Medeventor nubosus sp. n. (type locality: Costa Rica: Monteverde). Medeventor is distinguished from other Oscinellinae on the basis of a large, extensively setulose body, reduced cephalic and thoracic setae, a broad but weak facial carina and broad rugose gena. It appears to be most closely related to the Old World genera Lipara Meigen and Pseudeurina de Meijere. Oscinicita gen. n. is described for the type species Oscinicita hansoni sp. n. (type locality: Costa Rica: San Pedro de la Tigra). Oscinicita is distinguished by its minute size, reduced wing venation and structure of the gena, face and frons. Its phylogenetic placement within the family is unknown.

Key words: Diptera, Chloropidae, Medeventor, Oscinicita, systematics, Neotropical

Introduction

With the increase in biodiversity research on Central American Diptera, it has become apparent that Chloropidae is among the most species rich and numerically dominant fly families in the region; it has also become apparent that most of these species are undescribed. The approximately 125 species recorded from the region (Sabrosky and Paganelli 1984) are only a fraction of the true species richness present. In many cases, these undescribed species possess the defining characters of established genera and can be assigned relatively easily (although generic limits in the family are sometimes tenuous). However, there are some undescribed species that possess distinctive apomorphies and lack the defining apomorphies of recognized genera, such that the limits of existing genera would have to be significantly redefined to accommodate the new species. Although it would be ideal to await a comprehensive phylogenetic analysis of the family prior to deciding on the status and placement of such taxa, preparation of a generic key to Central American Chloropidae for the upcoming Manual of Central American Diptera has necessitated the description of some new and unusual taxa from the region. In this paper, two genera are proposed for two aberrant species from Central America.

Material and methods

Type specimens are housed in the following collections: Canadian National Collection of Insects, Ottawa, ON (CNC); Instituto Nacional de Biodiversidad, Santo Domingo de Heredia, Costa Rica (INBio); Lyman Entomological Museum, McGill University, Ste-Anne-de-Bellevue, QC (LEM).

Most specimens examined were originally collected into ethanol and subsequently critical-point dried or chemically dried using hexamethyldisilazane. Genitalic preparations were made by removing the abdomen from the specimen and heating it in 85% lactic acid in a microwave oven for 2–3 intervals of 20–30 seconds each, separated by cooling periods. Cleared abdomens were transferred to glycerin for further dissection,