



Systematics of *Agrophaspidium*, a new genus of Neotropical Chloropidae (Diptera)

TERRY A. WHEELER¹ & JULIA J. MLYNAREK²

Department of Natural Resource Sciences, McGill University, Macdonald Campus, Ste-Anne-de-Bellevue, QC, H9X 3V9, Canada.

E-mail: ¹terry.wheeler@mcgill.ca, ²julia.mlynarek@mail.mcgill.ca

Abstract

Agrophaspidium **gen. n.** is described for six species: *Agrophaspidium flavimana* **sp. n.** (type locality: La Selva, Costa Rica); *Agrophaspidium hastatum* Duda, 1930, comb. n. (type locality: Suiza de Turrialba, Costa Rica); *Agrophaspidium minutum* **sp. n.** (type locality: Gatun Lake, near Colón, Panama); *Agrophaspidium monticola* **sp. n.** (type species of genus; type locality: Monteverde, Costa Rica); *Agrophaspidium pollinosum* **sp. n.** (type locality: Portachuelo Pass, Venezuela); and *Agrophaspidium psilotum* **sp. n.** (type locality: Guanacaste National Park, Costa Rica). *Agrophaspidium* is distinguished from other Oscinellinae by the combination of an anteromedial-posterolateral arrangement of the vertical bristles, a dorsally flattened scutellum with four elongate marginal projections bearing stout bristles, and characters of the male genitalia (enlarged epandrium, branched surstylus, enlarged and modified cercus). Although the phylogenetic relationships of species within *Agrophaspidium* are resolved by morphological characters, the generic relationships to other Oscinellinae are unresolved.

Key words: Diptera, Chloropidae, *Agrophaspidium*, systematics, Neotropical, Central America

Introduction

Because there is no comprehensive phylogenetic hypothesis of relationships within the Chloropidae, the generic classification of the family is in a state of flux that will probably continue for some time. This is especially true of the poorly documented tropical fauna. In ongoing study of the northern Neotropical chloropid fauna, the rate of discovery of new species in established genera is high (e.g., Mlynarek and Wheeler 2008), and some of these species call into question the limits and validity of those genera (Wheeler and Forrest 2002). In addition, taxonomic study has revealed several species that cannot be assigned to existing genera as they are currently defined (e.g., Wheeler 2007). In this paper, a new genus is proposed for six species from Central America that cannot be accommodated in any currently recognized genus.

Material and methods

Specimens are housed in the following collections: Canadian National Collection of Insects, Ottawa, ON, Canada (CNC); University of Guelph Insect Collection, Guelph, ON, Canada (DEBU); Hungarian Natural History Museum, Budapest, Hungary (HNHM); Instituto Nacional de Biodiversidad, Santo Domingo de Heredia, Costa Rica (INBio); Lyman Entomological Museum, McGill University, Ste-Anne-de-Bellevue, QC, Canada (LEM); United States National Museum of Natural History, Washington, DC, USA (USNM).

Genitalic preparations were made by removing the abdomen from the specimen and heating it in 85% lac-