A revision of the hover fly genera Chrysogaster and Orthonevra (Diptera: Syrphidae: Eristalinae) from the Afrotropical Region

Terence Bellingan*1,2, John Midgley^{3,4}, Kurt Jordaens⁵, and Georg Goergen⁶

Department of Entomology Arachnology, Albany Museum, Makhanda, 6139 – South Africa
Department of Zoology Entomology, Rhodes University, Makhanda, 6139 – South Africa
KwaZulu-Natal Museum, Pietermaritzburg, KwaZulu-Natal, 3021 – South Africa
Department of Zoology Entomology, Rhodes University, Makhanda, 6139 – South Africa
Royal Museum for Central Africa, 4Joint Experimental Molecular Unit, Leuvensesteenweg 13,
Tervuren – Belgium

⁶International Institute of Tropical Agriculture (IITA), Biodiversity Centre, 08 BP 0932 Tri Postal, Cotonou – Benin

Abstract

Hover flies (Diptera: Syrphidae) deliver important ecosystem services such as pollination, pest control and nutrient cycling. Currently, 62 genera of Syrphidae are known to the Afrotropical Region (i.e., Africa, south of the Sahara). Despite the growing number of taxonomic studies, the taxonomic status of many hover fly genera within the Afrotropical Region are not well known. The genera Chrysogaster Meigen, 1803 and Orthonevra Macquart, 1829 are good examples of this. In contrast to the better studied Palaearctic and Nearctic relatives, specimens of both genera are rare among museum collections and most species are only known from the type material. Our recent collecting efforts, however, have substantially increased the number of specimens, and the availability of fresh material allows the inclusion of molecular analysis in the study of the taxonomy of both genera. Here, we present the preliminary results of a taxonomic revision underway of both genera within the Afrotropical Region.

Keywords: Taxonomy, Africa, flower fly, pollinators

^{*}Speaker