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A new species of *Agapophytus* Guérin named after the late Donald H. Colless (Diptera: Therevidae: Agapophytinae)

SHAUN L. WINTERTON

urn:lsid:zoobank.org:author:37F5AC48-EC3A-47ED-902B-2BD1467CCA72

California State Collection of Arthropods, California Department of Food & Agriculture, Sacramento, California, USA.

E-mail: wintertonshaun@gmail.com

Abstract

A distinctive new species of *Agapophytus* Guérin, 1831 (*Agapophytus collessi* **sp. nov.**) is described from Australia (Diptera: Therevidae: Agapophytinae) and honouring the Dipterist Dr Donald H. Colless.

Key words: Asiloidea, Therevidae, Donald Colless

Introduction

Agapophytinae are the dominant subfamily of stiletto flies (Diptera: Therevidae) in the Australasian region with 210 species in approximately 24 genera (Winterton 2009, 2011), including all genera previously comprising the enigmatic *Taenogera* genus group (Winterton *et al.* 1999b) as recently redefined by Winterton (2006). All genera of Agapophytinae are endemic to the region, except for three additional genera found in South America (i.e. *Melanothereva* Malloch, 1932, *Entesia* Oldroyd, 1968 and *Pachyrrhiza* Philippi, 1865). These Neotropical genera are apparently closely related to Australasian genera such as *Ectinorhynchus* Macquart, 1850 and *Taenogerella* Winterton & Irwin, 1999b and suggest a vicariant event in the subfamily during the early Tertiary (approximately 60–55 million years ago) when Australia and South America were still linked faunally and florally through Antarctica.

Agapophytus Guérin, 1831 is a diverse genus of stiletto flies found throughout Australia and Papua New Guinea. The genus is closely related to the sister genera *Acupalpa* Kröber, 1912 and *Pipinnipons* Winterton, 2001 in a relatively derived clade defined within Agapophytinae by the presence of elongate cylindrical antennae, gonocoxal and femora velutum patches, wing cell m3 closed and femora macrosetae absent (Winterton *et al.* 2001; Winterton 2011). *Agapophytus* is separated from *Acupalpa* and *Pipinnipons* by the elongate scape being equal to or longer than the flagellum (Winterton 2011). Forty previously described species are presently contained in the genus, the bulk of which (29) were described in a monograph of the genus by Winterton & Irwin (2001).

The late Donald Colless was an extraordinary entomologist throughout his career. An excellent field naturalist, he collected hundreds of specimens of Therevidae and Scenopinidae from remote regions of Australia and deposited them in the Australian National Insect Collection; many represent undescribed species. The distinctive new species described and figured herein (*Agapophytus collessi* **sp. nov.**) was collected by Don in northern Australia, near Cahill's Crossing of the East alligator River (Northern Territory).

Materials and methods

Adult morphological terminology follows McAlpine (1981) with genitalic morphology as modified by Winterton *et al.* (1999a,b) and Winterton (2006). Genitalia were macerated in 10% KOH to remove soft tissue, then rinsed in distilled water and dilute glacial acetic acid, and dissected in 80% ethanol. The genitalia preparation was placed in