Zootaxa 414: 1–15 (2004)
www.mapress.com/zootaxa/

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

414

Acraspisoides gen. nov. (Diptera: Therevidae: Agapophytinae): a new genus of stiletto-flies from Australia

HILARY N. HILL & SHAUN L. WINTERTON
Department of Entomology, North Carolina State University, Raleigh, N.C. 27695, U.S.A.
wintertonshaun@netscape.net

Abstract

A new Australian genus of Therevidae, *Acraspisoides* **gen. nov.**, comprising a single species (*A. helviarta* **sp. nov.**) is described and illustrated. This new genus is placed within the subfamily Agapophytinae based on the presence of velutum patches on the fore and hind femora. *Acraspisoides* is easily separated from other agapophytine genera by the combination of characters: large ventral lobe on aedeagus, multiple rows of postocular setae in both sexes, antennae positioned low on frons, and wing cell m_3 closed. Cladistic analyses using all genera of Agapophytinae (including *Acraspisoides***)** based on adult morphological characters and sequence data of the protein-encoding gene, elongation factor-1α (EF-1α), were performed to determine the phylogenetic placement of *Acraspisoides* **gen. nov.** in the subfamily. Analysis of the combined morphological and molecular matrices produced two most parsimonious trees, placing *Acraspisoides* **gen. nov.** as the most basal genus of Agapophytinae.

Key words: Diptera, Asiloidea, Therevidae, Agapophytinae, *Acraspisoides*, taxonomy, phylogenetic, EF-1α, Australia

Introduction

Stiletto-flies (Diptera: Therevidae) are of virtually worldwide distribution, occurring in all geographical regions with the exception of Antarctica (Irwin & Lyneborg 1989). Therevids occur in a multitude of habitats including rainforests, coastal dunes, and deserts, with greatest diversity apparent in arid environments where the sandy, friable soils provide a suitable habitat for the soil-dwelling larvae (Irwin 1976; Winterton *et al.* 2001).

Adult stiletto-flies are similar in appearance to robber flies (Diptera: Asilidae) but the mouthparts and fore legs are rather weak and without the predatory characteristics of robber flies. Also, most therevids lack a mystax and a vertex that is indented or depressed

Accepted by N.L. Evenhuis: 20 Jan. 2004; published: 28 Jan. 2004