



The "false *Eucoila*" finally named; *Striatovertex* a new genus of *Eucoilinae* (Hymenoptera, Cynipoidea, Figitidae)

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Abstract

The new genus *Striatovertex* is described to accommodate a distinct group of eucoiline wasps (Hymenoptera: Cynipoidea: Figitidae) currently included in the nominate genus *Eucoila* Westwood, but known among specialists to not belong there for decades. They are characteristically large wasps with reduced wing pubescence, parasitizing dung-breeding Diptera, and are common in North and South America, but also present in Australia and Hawaii. Their diagnostic characters place them in what is currently *Ganaspini* rather than very close to *Eucoila* in *Eucoilini*, and this has been confirmed by earlier phylogenetic analyses. Diagnostic and other distinctive characters are reviewed, and thirteen new combinations are made for species belonging to this group.

Key words: *Striatovertex*, *Eucoila*, taxonomy, *Eucoilinae*, parasitoid wasp, biological control, dung fly, taxonomy

Introduction

Nordlander (1981) recognised that *Eucoila* Westwood, 1833 was a polyphyletic assemblage. As part of the first modern revision leading to the recognition of natural groups within *Eucoilinae*, he demonstrated that two distinct species groups, not closely related to each other, are readily recognisable. The provisionally named "*crassinerva* group" included the type species *Eucoila crassinerva* Westwood, thereby representing the true *Eucoila*. The other group was called the "*nudipennis* group", lacking an available generic name up to now, even though their status as a distinct group has been well-known to all workers in the field. This group has been thoroughly studied in a yet unpublished PhD thesis (Schick, unpublished). A generic name was proposed therein, but as the papers from the thesis are not yet published the name has remained unavailable. Moreover, this group has been included in phylogenetic analyses (Fontal-Cazalla *et al.* 2002, Buffington *et al.* 2007) under temporary names ("Eucoila" within quotation marks, and "Schick new genus" respectively), and demonstrated to be part of a wholly different lineage within the subfamily than the true *Eucoila*.

As it obviously creates difficulties to deal with this group without having an available name to utilise, we have deemed it necessary to publish the name in a separate publication. This is however a mere forerunner of the thorough revision by Schick, which is forthcoming. Therefore, new combinations are made of all currently valid species names belonging to this group simply to dissociate them from the genus *Eucoila*, and any closer study of their identities, including new synonymies, is postponed to the later publication.

The color image in this study was generated following methods summarized in Buffington and Gates (2009); the scanning electron micrographs were prepared with an uncoated specimen using a Hitachi TM3000 environmental SEM running in 'compo' mode and 'analysis' voltage.