



Review of the Malagasy *Anthobosca*, the Bizarre and the Sublime (Hymenoptera: Tiphidae: Anthoboscinae)

LYNN S. KIMSEY

Bohart Museum of Entomology, Department of Entomology, One Shields Ave., University of California, Davis 95616, USA
E-mail: lskimsey@ucdavis.edu

Abstract

The Malagasy tiphids in the genus *Anthobosca* are revised, with description of eight new species, including *fisheri*, *harinhalai*, *mahajangaensis*, *castanea*, *namorokaensis*, *nigrimacula*, *toliaensis* and *hallucigenia* spp. nov. There are fourteen described species of *Anthobosca* recorded from Madagascar including the new ones below. A key to species, distribution maps and illustrations are given.

Key words: Tiphidae, *Anthobosca*, Madagascar, new species, key

Introduction

The island of Madagascar has a relatively diverse, though seemingly recently derived tiphid fauna. Unlike so many of the plants and animals found on the island, there are no endemic tiphid genera on the island. This pattern is seen also in the wasp family Chrysididae (Kimsey & Bohart 1991). The least derived tiphid subfamily (Kimsey 1996), Anthoboscinae, is particularly species-rich on Madagascar, with fourteen species. Anthoboscinae occur primarily in the Southern Hemisphere (Africa, Australia and South America), with the largest number of species in the south temperate regions. However, there are two notable exceptions to this distribution, *Anthobosca sauakinensis* Magretti from the Arabian Peninsula (Bartalucci 2005, Magretti 1884) and *Lalapa lusa* Pate from southwestern North America (Pate 1947).

The California Academy of Sciences' Arthropods of Madagascar Project revealed a much more diverse tiphid fauna than previously recorded, including one of the most bizarrely modified tiphid species yet seen, *Anthobosca hallucigenia* sp. nov., described below, which has unique spoon-like expansions of metasomal sterna II and III and a longitudinal, medial facial carina. Four previously published *Anthobosca* species are known from Madagascar (Bartalucci 2005). Unfortunately, the extreme sexual dimorphism in most *Anthobosca* species makes it difficult to associate the sexes. Of the previously described species, the unusually large size and distinctive coloration of male and female *A. insularis* F. Smith make the sex association straightforward. Sex associations among the remaining described species and the ones described below are less clear. As with other tiphid species body size in *Anthobosca* is fairly variable with the largest individuals in a species often twice the length of the smallest ones. Females have few useful characteristics, and three of the four previously described Malagasy species are based on females. The study below focuses on males. The two species previously described from females may turn out to be synonymous with two of the male species discussed below, but until a reliable way of associating the sexes can be found, it is not possible to sort this out.