

Description of a new species in the *Sphaerophthalma pensylvanica* species-group (Hymenoptera: Mutillidae)

JAMES P. PITTS

Department of Biology, Utah State University, Logan, UT 84322, USA; jpitts@biology.usu.edu

Abstract

A new species, *Sphaerophthalma nocticarum*, is described from Oaxaca, Mexico and Petén, Guatemala. This species is placed into the *S. pensylvanica* species-group, with which it shares many morphological characters. This species-group is found predominately in the Southeastern USA ranging into eastern Texas, and addition of this new species greatly extends the geographic range of this group.

Key words. Sphaerophthaminae, solitary wasp, velvet ant

Introduction

The *Sphaerophthalma pensylvanica* species-group is a small group of diurnal sphaerophthalmine mutillid wasps, formerly placed in the subgenus *Sphaerophthalma* (Pitts *et al.* 2004). This species-group currently contains three species and five subspecies (Schuster 1958): *auripilis auripilis* (Blake), *auripilis fasciventris* Schuster, *boweri* Schuster, *pensylvanica floridensis* Schuster, *pensylvanica pensylvanica* (Lepeletier), *pensylvanica scaeva* (Blake). This species-group is found predominately in the Eastern United States. *Sphaerophthalma pensylvanica* is the most widespread of the species and is found throughout the Southeastern United States, west to Texas and north to Missouri, and is the only species of this genus found in the Eastern U.S. (Krombein 1979). The remaining species are known from Kansas, Oklahoma, and Texas (Krombein 1979).

The males of this species-group are unusual when compared to the other species-groups in *Sphaerophthalma*. Although they are easily diagnosed by external morphology, the morphology of the genitalia is very similar for all of the currently described species. This is contrary to many of the other species-rich groups of *Sphaerophthalma*, which have very similar facies, but drastically different genitalic morphology, and makes the species designations within the *Sphaerophthalma pensylvanica* species-group seem questionable.