



First record of the genus *Leptanilloides* (Hymenoptera: Formicidae: Dorylinae) from the United States

JOE A. MACGOWN^{1,3}, TERENCE L. SCHIEFER¹ & MICHAEL G. BRANSTETTER²

¹Mississippi Entomological Museum, Mississippi State, MS

²Department of Biology, University of Utah, Salt Lake City, UT

³Corresponding author. E-mail: jmacgown@entomology.msstate.edu

Abstract

We describe a new species of the Neotropical genus *Leptanilloides*, *L. chihuahuaensis* sp. n., based on male specimens from the Davis Mountains in western Texas. Known males of species of *Leptanilloides* are compared with *L. chihuahuaensis*. This is the first report of the genus from the United States and the Nearctic region. Previously, the *Leptanilloides* genus-group was only known to occur from southern Mexico to southeastern Brazil; and thus, this record from Texas represents a remarkable extension of the known range of the genus.

Key words: dorylomorph, army ants, taxonomy, Davis Mountains State Park, Texas, ants, Chihuahuan Desert, COI

Introduction

Leptanilloides Mann, 1923 is a genus of minute, rarely collected Neotropical ants related to army ants. Workers lack eyes and ocelli, although males have extraordinarily large eyes and obvious ocelli (for a full diagnosis of the genus see Borowiec & Longino 2011). Little is known about their biology, although most collections have been from cloud forests (Borowiec & Longino 2011).

Currently, twelve species of *Leptanilloides* are recognized. Mann (1923) originally placed *Leptanilloides* in the subfamily Dorylinae, but subsequent authors placed it in Cerapachyinae (Bolton 1990a, 1990b; Brown 1975). Later, it was placed in its own monotypic subfamily, Leptanilloidinae (Baroni Urbani *et al.* 1992; Bolton 1994). Two related genera, *Asphinctanilloides* Brandão *et al.*, 1999, with three species, and *Amyrmex* Kusnezov, 1953, with one species, (Bolton 2014) were subsequently included in the Leptanilloidinae (Brandão *et al.* 1999; Ward & Brady 2009). Recently, Brady *et al.* (2014) transferred *Amyrmex*, *Asphinctanilloides*, *Leptanilloides*, and other dorylomorphs to the Dorylinae, which currently is not subdivided into tribes. However, the three genera that constituted the former Leptanilloidinae are clearly closely related (Ward & Brady 2009), and in this paper we refer to them as the *Leptanilloides* genus-group. The generic boundaries of these three genera are not well understood, and names in this genus-group will likely change in the future (Borowiec & Longino 2011).

Here, we describe the first *Leptanilloides* species from the United States and Nearctic region, which extends the known range of the genus approximately 2500 km north of previously reported collections.

Methods

Morphological observation. Measurements were made using an eyepiece micrometer placed in a 10× eyepiece of a Leica MZ16 stereomicroscope at a magnification of 100×. Photomicrographs were captured using a Leica DFC 495 digital camera mounted on a Leica Z16 macroscope with a motorized focus column, and image stacks were merged using Leica Application Suite V 4.1.0 with Montage Module. For describing wing venation we use the terminology of Brown & Nutting (1949), for genitalia we follow Boudinot (2013) and Yoshimura & Fisher (2012), and for mesosomal structure we use Yoshimura and Fisher (2012).