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A New Latitudinal Record for the Ant Genus *Leptogenys* (Hymenoptera: Formicidae) in North America

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Abstract. We report the first record of the ant genus *Leptogenys* in Oklahoma. Two species have been recorded from the United States, but northern range boundaries for both have been primarily limited to Gulf Coast states. This collection increases the known distribution northward into the central United States for one of those species, *Leptogenys elongata* (Buckley 1866).

Ants in the genus *Leptogenys* (Hymenoptera: Formicidae) are elongate members of the subfamily Ponerinae with powerful stings (Fisher and Cover 2007). Many species nest under rocks or decaying wood and are specialist predators on ant queens (Wheeler 1933), earwigs (Steghaus-Kovac and Maschwitz 1993), isopods (Wheeler 1904), or termites (Wroughton 1892). Other species of *Leptogenys* ants are group foragers and prey upon a large taxonomic range of arthropods (Maschwitz et al. 1989). Ergatoid, or wingless, queens are common with winged reproductives or gamergates rarely occurring (Lattke 2011). In addition to displaying diverse life history traits, the genus *Leptogenys* is the most speciose clade within the Ponerine ants (Bolton 1995).

Of the approximately 200 described species from this pantropical genus, 81 occur in the New World, with only two species, *Leptogenys elongata* (Buckley 1866) and *Leptogenys manni* (Wheeler 1923), residing in the United States (Lattke 2011). The known northern edge of distributions of these species is limited to the southeastern coastal United States, with the exception of Mississippi and Alabama. Suspect records from higher latitudes have been mentioned but were subsequently dismissed by Creighton (1950) or Lattke (2011).

Here we report the first record of *Leptogenys elongata* in Oklahoma. *L. elongata* is a moderately large, slender ant with sickle-shaped toothless mandibles (Fig. 1, Fisher and Cover 2007). Coloration varies from yellow-red to dark-brown to black with variable punctate sculpturing depending on the latitude where collected (Lattke 2011). *L. elongata* belongs to the *elongata* species group and is the northernmost New World *Leptogenys* with records from northern Mexico, Louisiana, and Texas. The closest published record of *L. elongata* to Oklahoma is approximately 300 km to the southwest in Abilene, TX, but specimens can be readily found across Central Texas (Creighton 1950).

We collected eight workers by hand on 14 and 21 September 2014 at the University of Oklahoma Biological Station on the northern border of Lake Texoma (33°53.67'N, 096°48.24'W, 219 m elevation). On both occasions, the ants were

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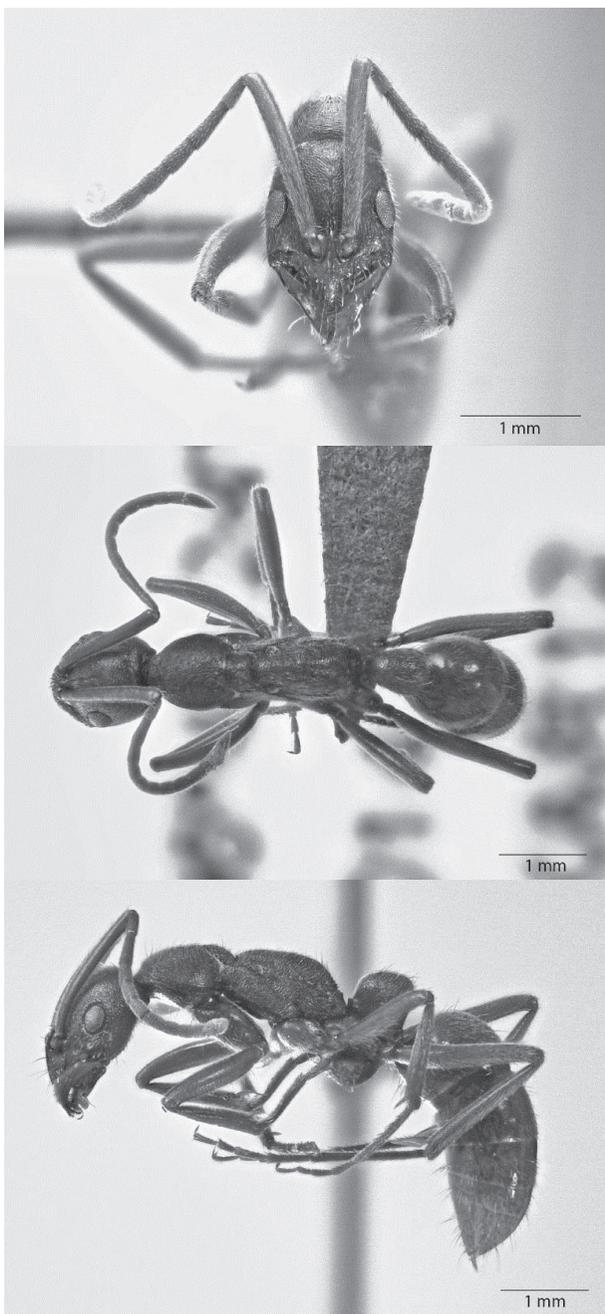


Fig. 1. Face, dorsal, and lateral views of *Leptogenys elongata* collected at Lake Texoma, Oklahoma (Specimen #KAR13).

found under decaying logs in a deciduous forest that contained American elm (*Ulmus americana* Linnaeus), hackberry (*Celtis occidentalis* Linnaeus), and pecan (*Carya illinoensis* (Wangenh.) K. Koch). This new locality from Oklahoma represents a North American latitudinal record for the *Leptogenys* genus and expands the known distribution northward into the central United States.

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