

## SOLENOPSIS PHORETICA, A NEW SPECIES OF APPARENTLY PARASITIC ANT FROM FLORIDA (HYMENOPTERA: FORMICIDAE)

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### ABSTRACT

A new species of ant, *Solenopsis phoretica*, is described from a dealate queen found clinging to the petiole of a nest queen of *Pheidole dentata* Mayr in Gilchrist County, Florida. The position of the *Solenopsis* queen, as well as details of its morphology, strongly suggest that it represents a parasitic species. It is distinguished from other *Solenopsis* by its concave clypeal area and slender, elongate mandibles with an enlarged basal tooth. A single specimen is known.

Key Words: parasitic ant, parasitic *Solenopsis*, parasitic fire ant

### RESUMEN

Se describe una nueva especie de hormiga, *Solenopsis phoretica* de una reina dealatada (que boto las alas) encontrada colgada al peciolo de la reina hormiga de *Pheidole dentata* Mayr en el condado de Gilchrist en la Florida. La posición de la reina de *Solenopsis* y los detalles de su morfología, sugiere fuertemente que esta representa una especie parasítica. Se distingue esta especie de otras *Solenopsis* por tener la área del clipeo concavo y la mandíbula elongada y delgada con un diente basal engrandecido. Un solo espécimen es conocido.

*Solenopsis* is a genus of over 180 described species (Bolton 1995). The genus shows variable habits. Many species are polyphagous, above-ground foragers, such as the notorious pest, *Solenopsis invicta* Buren. Other species, especially those species formerly placed in the subgenus *Diplorhoptrum*, are primarily subterranean foragers. Some of these subterranean species may issue from small galleries to carry off food and larvae from brood chambers of other ants (Hölldobler & Wilson 1990). A few species of *Solenopsis* are workerless parasites that were at one time placed in the genera *Labauchena* or *Paranamyrma* (Ettershank 1966). Here, we describe a new species of *Solenopsis* based on a single dealate queen. This species appears to be parasitic on other ants, but we do not know whether it is workerless, nor do we know whether it is closely related to any other parasitic species.

Character states defining *Solenopsis* are detailed by Ettershank (1966). In the North American fauna the genus can be recognized by the combination of a few character states: two-segmented petiole; two-segmented antennal club; propodeum lacking spines or angles; clypeus longitudinally bicarinate, with a median, apical marginal seta. The clypeal features are lacking on the species described below.

*Solenopsis phoretica*, Davis and Deyrup  
**new species**

Diagnosis of dealate female (Fig. 1): The dealate female is distinguished from other *Sole-*

*nopsis* by the following combination of character states: mandibles elongate, teeth lacking or vestigial, except for apical point and enlarged basal angle; clypeus concave, smooth.

Description of holotype dealate female: features visible in lateral view described from left side. Measurements in mm. Total length (length of head excluding mandibles + length of mesosoma + length of petiole + length of postpetiole + length of gaster): 3.03; head length: 0.55; head width at rear margins of eyes in frontal view: 0.55; length of mesosoma: 0.88; length of petiole: 0.30; length of postpetiole: 0.20; length of gaster 1.10. Color: yellowish brown, appendages yellow. Head: smooth, shining, sparsely covered with setigerous punctures separated by 2-8 times the width of a puncture, setae suberect, directed posteriorly in the frontal area, elsewhere directed anteriorly; ocelli not enlarged, each ocellus about the width of antennal scape at base; malar area long and narrow, slightly shorter than length of eye; mandibles elongate, over half the length of head at midline, apical tooth elongate, delimited proximally by a narrow notch apparently representing a vestigial tooth, inner profile of mandible strongly concave, concavity delimited proximally by strongly produced basal angle with a truncate apex; clypeus smooth, concave, without carinae, with four subapical elongate setae; antennae 10-segmented, scape reaching outer corners of head in frontal view, antennal club 2-segmented, club about as long as remainder of funiculus. Mesosoma: smooth and shining, with sparse setigerous