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Tropidomyrmex elianae, a new myrmicine ant genus and species from Brazil, tentatively assigned to Solenopsidini (Hymenoptera, Formicidae)

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Abstract

A new myrmicine ant, *Tropidomyrmex elianae* **gen. n.** & **sp. n.**, is described from southeastern and central Brazil, based on workers, ergatoid gynes, males and larvae. *Tropidomyrmex* workers are relatively small, monomorphic, characterized mainly by the feebly pigmented and extremely thin integument; subfalcate mandibles bearing a single apical tooth; palpal formula 1,2; clypeus relatively broad and convex; reduced compound eyes; propodeum unarmed and with a strongly medially depressed declivous face; double and bilobed well developed subpostpetiolar processes; and peculiarities in the sting apparatus. A colony fragment of *T. elianae* containing workers, ergatoid gynes, males, and brood was found inside a ground termite nest (*Anoplotermes pacificus* Apicotermitinae) in a montane rocky scrubland in the state of Minas Gerais, southeastern Brazil. *Tropidomyrmex elianae* is known also from two workers collected in leaf litter samples processed with a Winkler extractor, from the state of Tocantins, central-north Brazil. Despite the differences from the accepted solenopsidine genera, *Tropidomyrmex* is tentatively assigned to this tribe. Within the solenopsidine ants, the genus is apparently related to *Tranopelta*. *Tropidomyrmex* is marked by extreme reductions, perhaps reflecting adaptations to particular habits and habitats.

Key words: taxonomy, *Tropidomyrmex*, *Tranopelta*, termites, Brazilian biomes

Introduction

Although the Neotropical Region continues to contribute numerous new ant species, only a few genera have been recently described. Since 2000, only the myrmicine *Cryptomyrmex* Fernández (2004) and the dolichoderine *Gracilidris* Wild & Cuezzo (2006) were described.

Tropical wet forests have received the bulk of the recent sampling effort, but arid and semi-arid areas of South America remain relatively under-sampled for ants (Wild & Cuezzo, 2006). The ecologically heterogeneous "Cerrado" biome is a savanna-like ecosystem, originally covering *c.* 2.5 million square kilometers, with its core area in the center of Brazil. It is possible to recognize Cerrado areas in distinct successional stages, ecotones with other ecosystems, and Cerrado islands surrounded by different formations; within the Cerrado, a net of streams and rivers support gallery forests that act as important corridors for the dispersal of organisms inhabiting other neighboring ecosystems. The Cerrado supports a rich and generally unappreciated biodiversity; it is one of the world's biodiversity hotspots (Klink & Machado, 2005; Lewinsohn *et al.*, 2005). It is under severe anthropocentric pressure, as it is presently being replaced by soybean monoculture. The Brazilian montane rocky scrublands in general occupy areas with altitudes over 900 m above sea level (Giulietti & Pirani, 1988), and have been considered as a particular type of Cerrado; they have also been overlooked in recent surveys.

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