

## A revision of the *Aphaenogaster phalangium* complex (Hymenoptera: Formicidae: Myrmicinae)

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### Abstract

The *Aphaenogaster phalangium* complex is a lineage of rainforest ants endemic to Central America. The complex is revised and interpreted as two parapatric species, *A. phalangium* and *A. araneoides*, with extensive geographic variation. Character variation is discordant within species, but in some cases appears to vary in parallel between the two species, such that both species vary the same way in montane versus lowland sites. *Aphaenogaster inermis* Forel 1899, *A. nitidiventris* Forel 1912, and *A. canalis* Enzmann 1947 are synonymized under *A. phalangium* Emery 1890; and *A. brevicollis* Forel 1899 is synonymized under *A. araneoides* Emery 1890. The complex lacks winged queens and instead has ergatoid queens with enlarged postpetiole and gaster.

**Key words:** *Aphaenogaster phalangium*, *Aphaenogaster araneoides*, Formicidae, geographic variation

### Introduction

Forested habitats of Central America are home to ants of the *Aphaenogaster phalangium* complex. Within the context of the New World *Aphaenogaster* fauna, the workers of the *phalangium* complex are uniquely identified by a combination of head and propodeum characters. The portion of the head posterior to the eyes is drawn out and tapers to a strongly constricted neck, beyond which the head flares out into a pronounced collar. The propodeum lacks spines, although it may be weakly tuberculate. The workers are large, with long spindly legs. They are a common element of many lowland rainforest sites, where solitary foragers are common on the forest floor. They are timid ants that run from any threat, and they are decidedly comical with their large heads on implausibly narrow necks. The nests are in small chambers in the ground, and colonies maintain multiple empty nests, moving among them (McGlynn et al. 2002, 2003).