



The Afrotropical ponerine ant genus *Asphinctopone* Santschi (Hymenoptera: Formicidae)

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Abstract

The Afrotropical ponerine ant genus *Asphinctopone* is revised. Two species are recognised, of which one (*differens*) is described as new, and two names are established as new junior synonyms of the type-species *silvestrii* (*lucidus* and *lamottei*). A new diagnosis of the genus is presented, based on the female castes (male remains unknown) and critical morphological characters are discussed.

Key words: Asphinctopone, taxonomy

Introduction

Asphinctopone is one of the most rarely collected and least known small ponerine genera of the Afrotropical region. Specimens are seldom found and most samples recovered consist of only one or two workers. As a measure of its rarity, a survey of leaf litter in Ghana (Belshaw & Bolton, 1994) recorded 43,824 individual ants, of which only 5 (about 0.01%) were Asphinctopone. Despite this rarity, the genus is widespread in wet forest zones in leaf litter, topsoil, pieces of rotten wood and rotting vegetation on the forest floor. One worker has been found foraging in a fallen, abandoned termitary (Dejean *et al.*, 1996). Beyond this nothing is known of its biology. Its specialised morphology implies that it may be prey-specific, but in reality its victims remain unknown.

The genus is a member of subfamily Ponerinae, tribe Ponerini, as diagnosed by Bolton (2003). Within the tribe the morphology of *Asphinctopone* appears to imply that it belongs in the currently confused mass of genus-group names that surrounds *Pachycondyla* and its synonyms, but a recent molecular study (Ouellette, Fisher & Girman, 2006) relates it to *Odontomachus* (for morphology see Brown, 1976). Whichever turns out to be correct, the present analysis makes it clear that *Asphinctopone* is a valid genus, isolated from either possibility by several important characters.

Measurements and indices

All measurements are in millimetres.

Total Length (TL) The total outstretched length of the ant from the mandibular apex to the gastral apex.

Head Length (HL) The length of the head capsule excluding the mandibles, measured in full-face view in a straight line from the midpoint of the anterior clypeal margin to the midpoint of the

posterior margin.