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Article



A new species of *Asphinctopone* (Hymenoptera: Formicidae: Ponerinae) from Tanzania

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Abstract

Asphinctopone is a rarely encountered genus of ponerine ants, previously known only from the wet forest zones of West and central Africa. In the most recent revision of the genus Bolton & Fisher synonymised the three previously described species under A. sylvestrii Santschi and described one new but very closely related species, A. differens Bolton & Fisher. A very distinctive new species, Asphinctopone pilosa **sp. n.**, is described from Tanzania and represents the first record of this genus from East Africa. Modifications to the diagnosis of the genus and an updated key to the species of Asphinctopone are presented. An analysis of the distribution records of Asphinctopone, using BIOCLIM and DOMAIN as implemented in DIVA-GIS 7.1 to provide preliminary predictions of the potential range of the genus, is also provided.

Key words: Africa, Asphinctopone, new species, taxonomy, distribution, Bioclim, Domain

Introduction

Asphinctopone is a very small genus of rarely encountered Afrotropical ants in the subfamily Ponerinae, tribe Ponerini. The genus was first described by Santschi (1914) with a single species, *A. silvestrii*. Two more species were subsequently described: *A. lucidus* (Weber 1949) and *A. lamottei* (Bernard 1953), the latter originally ascribed by Bernard to a new genus, *Lepidopone*, but subsequently placed in *Asphinctopone* by Brown (1953). In a recent revision of the genus, Bolton & Fisher (2008) synonymised all three previously described species and described one additional species, bringing the total number of described species to two. Of these *A. differens* (Bolton & Fisher 2008) is known only from the holotype (collected in the Central African Republic), while *A. silvestrii* (now including *A. lucidus* and *A. lamottei*) has been recorded at least 22 times in West and Central Africa (Bolton & Fisher 2008, Fisher 2010).

A single *Asphinctopone* specimen was collected by hand at night during a survey of the Kilindi Forest Reserve (Nguu Mountains, Kilindi District, Tanzania); this was one of 15 sites in Tanzania surveyed during a project investigating ground-dwelling ant and beetle diversity in the Eastern Arc Mountains and Coastal Forests Hotspot of Tanzania and Kenya.

Methods

Sample collection was carried out under COSTECH permit No. 2005-269-NA-2005-57 and the samples exported under the Tanzanian Ministry of Wildlife trophy export certificate No. 48157.

Measurements were taken using a Leica MZ16 stereomicroscope equipped with an ocular micrometer calibrated with a graticule; each measurement was repeated three times and the average is reported. Specimens were photographed using a Leica DFC 420 digital camera connected to the same microscope; montage images were produced using Leica Application Systems (LAS) montage V3.4 and edited with Adobe Photoshop.