

Revision of the ant genus *Anillomyrma* EMERY, 1913 (Hymenoptera: Formicidae: Myrmicinae: Solenopsidini)

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Abstract

The ant genus *Anillomyrma* EMERY, 1913 is revised based on the type and new materials from Vietnam and the Philippines. *Anillomyrma decamera* ssp. *continentis* WHEELER, 1927 described from Vietnam is a junior synonym of *A. decamera* (EMERY, 1901) described from Sri Lanka. *Anillomyrma decamera* is newly recorded from the Philippines. *Anillomyrma tridens* BOLTON, 1987 has so far been known only from the type series, and it is morphologically very similar to *A. decamera*. The conspicuous morphological characters separating the two species are as follows: masticatory margin of mandible 3-toothed in *A. tridens* but 4-toothed in *A. decamera*; 3rd tooth much larger than the 2nd in *A. tridens* but almost as large as the 2nd in *A. decamera*; posterior slope of propodeum in lateral view expanded posterodorsad more strongly in *A. tridens* than in *A. decamera*; petiolar peduncle in lateral view more slender in *A. tridens* than in *A. decamera*. The genus is relatively well diagnosed from the other genera of the *Solenopsis* WESTWOOD, 1840 genus group by the shape of clypeus, condition of eye, antennal and palpal segmentations, shape of promesonotum, forecoxa and petiole, segmentation between postpetiole and 1st gastral segment, and condition of sting.

Key words: *Solenopsis* genus group, *Anillomyrma decamera*, *A. decamera* ssp. *continentis*, *A. tridens*, synonymy, Vietnam, Philippines.

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Introduction

The genus *Anillomyrma* EMERY, 1913 is one of the rare and mysterious taxa, containing two described species and one subspecies all of which are known from South, Southeast and East Asia: *A. decamera* ssp. *decamera* (EMERY, 1901) from Sri Lanka (the type locality) and India (BOLTON 1987); *A. decamera* ssp. *continentis* WHEELER, 1927 from Vietnam (the type locality) and China (WHEELER 1928); *A. tridens* BOLTON, 1987 from East Malaysia (the type locality). In a recent taxonomic treatment of the family Formicidae by BOLTON (2003), two units previously treated as separate entities, i.e., the *Solenopsis* WESTWOOD, 1840 genus group and the *Carebara* WESTWOOD, 1840 genus group, were combined in the tribe Solenopsidini, and the genus *Anillomyrma* was placed in the *Solenopsis* genus group together with *Allomerus* MAYR, 1878, *Bondroitia* FOREL, 1911, *Carebarella* EMERY, 1906, *Diplomorium* MAYR, 1901, *Epelysidris* BOLTON, 1987, *Megalomyrmex* FOREL, 1885, *Monomorium* MAYR, 1855, *Nothidris* ETTERSHPANK, 1966, *Oxyepoecus* SANTSCHI, 1926, *Phacota* ROGER, 1862 and *Solenopsis*. EGUCHI & BUI (2007) added *Parvimyrma* EGUCHI & BUI, 2007 as a member of the *Solenopsis* genus group.

In Vietnam, this genus has not been seen since WHEELER (1927) described *A. decamera continentis* based on workers collected by F. Silvestri from Van Phu. Its morphological features (i.e., its depigmented, tiny, slender body and eyeless condition), and its behavior (i.e., the discovery that it creates a runway covered by a canopy of small soil particles, BOLTON 1987), suggest that the genus is subterranean. As a part of our inventory work on Vietnamese ants (see YAMANE & al. 2003, EGUCHI & al. 2005), we conducted a survey of subterranean ants, using the underground bait-trapping method, in Binh Chau - Phuoc Buu Nature Reserve of Ba Ria - Vung Tau Province, Vietnam (EGUCHI & BUI in press), and collected several hundred workers of a single colony which are referable to *A. decamera continentis*. Based on the examination of new material and the type material we here redefine the genus, and revise the status of *A. decamera continentis*.

Methods

In the present study, we examined two syntypes of *A. decamera*, three syntypes of *A. decamera* ssp. *continentis*, 48