



# Article

## Revision of the *Aenictus minutulus* species group (Hymenoptera: Formicidae: Aenictinae) from Southeast Asia

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### Abstract

The genus *Aenictus* is a diverse group of army ants in the Old World tropics and subtropics. The worker-based *Aenictus piercei* species group of Jaitrong and Yamane (2011) is redefined and renamed here as the *Aenictus minutulus* group. *Aenictus piercei* Wheeler et Chapman, 1930 and *A. lifuiaae* Terayama, 1984 are removed from this group; the former is moved to the *A. javanus* group and the latter to the *A. ceylonicus* group. The Southeast Asian species of the group are revised to include six species: *Aenictus changmaianus* Terayama et Kubota, 1993, *Aenictus* sp.56 of WJT, *A. minimus* **sp. nov.**, *A. minutulus* Terayama et Yamane, 1989, *A. peguensis* Emery, 1895 and *A. subterraneus* **sp. nov.** *Aenictus changmaianus*, *A. minimus* and *A. peguensis* are probably restricted to the seasonal forest located northward from the Isthmus of Kra, while *A. minutulus*, *A. subterraneus* and *Aenictus* sp.56 of WJT are obviously Sundaland species inhabiting the perhumid evergreen rainforest.

**Key words:** *Aenictus minutulus* species group, army ants, taxonomy, distribution, Southeast Asia

### Introduction

The genus *Aenictus* Shuckard, 1840 (subfamily Aenictinae) is one of the larger ant genera of the world with 182 valid species and subspecies, and is distributed in the Old World tropics and subtropics (Wilson 1964; Bolton 1994; Gotwald 1995; Shattuck 2008; Jaitrong & Yamane 2011; Jaitrong *et al.* 2012). Jaitrong and Yamane (2011) established 12 species groups in the genus from the eastern part of the Oriental region, and the Indo-Australian and Australasian regions, with these groups being well defined on the basis of worker morphology.

In this report we redefine and rename the *A. piercei* group as the *A. minutulus* group, and we provide a revision of the Southeast Asia members of the group. Morphological and bionomic information is presented for each species. We omit the male-based names from the species treatment in this paper, following Wilson (1964). We anticipate that male-based names will eventually be matched with worker-based names using DNA information, but until then it is important to develop a sound worker-based taxonomy. Where our new worker-based species co-occur with potentially matching named males, we use temporary morphospecies codes to refer to the workers.

### Materials and methods

This study is mainly based on the materials deposited in the SKY Collection at Kagoshima University (Japan) and The Natural History Museum of the National Science Museum (Thailand). Syntypes or paratypes were examined for the three named species of the *Aenictus minutulus* group. The holotype and eight paratypes of *A. lifuiaae* and syntypes of *A. piercei* were also examined.

Most morphological observations were made with a Nikon SMZ1000 stereoscope. Multi-focused montage