THE RAFFLES BULLETIN OF ZOOLOGY 2013 **61**(1): 97–102
Date of Publication: 28 Feb.2013

TWO NEW SPECIES OF THE *AENICTUS PACHYCERUS* SPECIES GROUP (HYMENOPTERA: FORMICIDAE: AENICTINAE) FROM SOUTHEAST ASIA

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ABSTRACT. — The *Aenictus pachycerus* species group is widespread in the eastern Oriental, Indo-Australian, and Australasian regions. The members of the group are characterised by the well-developed frontal carina and parafrontal ridge, a weakly developed subpetiolar process and a smooth and shiny first gastral tergite (rarely superficially shagreened). Eleven worker-based species of the *A. pachycerus* group are recorded from Southeast Asia. Among them, two new species are here described: *Aenictus kutai* from Borneo (E. Kalimantan) and *Aenictus sulawesiensis* from Sulawesi. A key to Southeast Asian species of the species group is presented. The distribution and type locality for each species in Southeast Asia are given.

KEY WORDS. — *Aenictus pachycerus* species group, army ants, taxonomy, Southeast Asia

INTRODUCTION

The *Aenictus pachycerus* species group was established by Wilson (1964) based on external morphology of the worker caste. Later Jaitrong & Yamane (2011) redescribed the species group and listed 14 worker-based species from the Oriental, Indo-Australian and Australasian regions. Recently Jaitrong & Yamane in Jaitrong et al. (2012) described a sibling species of *Aenictus dentatus* Forel, 1911 of the *A. pachycerus* group from continental Southeast Asia. In Southeast Asia, eight species of the group have been recorded.

During our survey on the Asian *Aenictus* we found two new species from Borneo (E. Kalimantan) and Sulawesi, and an unidentified species from Java (Table 1). In this paper we describe the two new species. 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 temporarily use morphospecies codes to refer to the workers.

MATERIAL AND METHODS

The holotype and paratypes for each new species are pin-mounted. Syntypes or paratypes were examined for the six named species (*Aenictus carolianus* Zettel & Sorger, 2010; *A. dentatus* Forel, 1911; *A. nesiotis* Wheeler & Chapman, 1930; *A. paradentatus* Jaitrong & Yamane, 2012; *A. powersi* Wheeler & Chapman, 1930; *A. reyesi* Chapman, 1963) of the *Aenictus pachycerus* species group. The holotype of *A. paradentatus* was also examined. Most morphological observations were made with a Nikon SMZ1000 stereoscope. Multi-focused montage images were produced using Helicon Focus 4.75 Pro from a series of source images taken by a Canon EOS Kiss×4 digital camera attached to a Nikon ECLIPSE E600 microscope. Type material of each species were measured for the following parts using a micrometer (accurate to 0.01 mm).

The abbreviations used for the measurements and indices are as follows:

TL Total length in profile, roughly measured from the anterior margin of head to the tip of gaster in stretched specimens