

<http://dx.doi.org/10.11646/zootaxa.3796.2.8>
<http://zoobank.org/urn:lsid:zoobank.org:pub:9F9DA323-128B-44A7-9414-798B50DAAC44>

Myrmecophilous rove beetles (Coleoptera: Staphylinidae) associated with *Aenictus hodgsoni* (Hymenoptera: Formicidae) from Thailand, with description of two new genera and three new species

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Abstract

Three species of rove beetles (subfamily Aleocharinae) were collected from colonies of *Aenictus hodgsoni* Forel, 1901 in Khao Yai National Park, Thailand. They are classified into three genera, including two new genera, and described herein as: *Aenictobia siamensis* Maruyama, sp. n. (tribe Aenictoteratini), *Aenictosymbia cornuta* Maruyama, gen. & sp. n. (tribe Lomechusini) and *Aenictoxenides mirabilis* Maruyama, gen. & sp. n. (tribe Pygostenini). The systematic positions of the new genera are discussed.

Key words: Aleocharinae, Aenictoteratini, Lomechusini, Pygostenini, *Aenictoxenus*, *Aenictophila*, systematic position, Khao Yai National Park

Introduction

Various myrmecophilous insects are associated with army ants of the genus *Aenictus* (e.g., Seevers, 1965). In Peninsular Malaysia and Borneo, several researchers have conducted field surveys for myrmecophiles and found many genera and species of rove beetles associated with *Aenictus* (Kistner & Jacobson 1975; Kistner et al, 1997, 2009; Maruyama *et al.*, 2011). However, these insects have largely been uninvestigated in the other areas of Southeast Asia, and only a few species of rove beetles have been recorded (Seevers, 1965; Maruyama, 2008; Wheeler, 1932). In 2007, MM, TK and YK investigated the myrmecophilous guests of *Aenictus* ants in Khao Yai National Park, Thailand. Then they found many unknown species and genera of rove beetles. Among them were three species recovered from colonies of *Aenictus hodgsoni* Forel, 1901. These species belong to three genera, including two new genera. This paper describes these species.

Materials and method

Our investigation was conducted in the Khao Yai National Park, which is located about 40 km northeast of Bangkok, and is basically monsoon primary forest (dry evergreen forest), partly with grassland forming an elephant sanctuary.

Aenictus ants were generally rare and only occasionally found in the park. We walked forest trails to find

sparingly covered with setae, with 7 macrosetae. Metasternum (Fig. 44) with 2 macrosetae antero-medially. Elytra (Figs. 33–35, 45) glabrous; disc with 6 macrosetae around mesal area and 4 short macrosetae along lateral margin; hypomera sparsely covered with setae, with 5 macrosetae along lateral margin.

Abdomen (Figs. 33–35, 49, 50): tergites II–VIII with following numbers of macrosetae: 0–3–3–3–2–2; sternites III–VIII with those: 10–10–10–8–3–3 (III–VI with variation, ± 1).

Male: Median lobe of aedeagus (Figs. 52) with crista apicalis truncate at apex in lateral view; sclerites of internal sac small; apical lobe of paramere (Fig. 53) covered with pores, with 4 setae.

Female: Spermatheca (Fig. 54) with basal part coiled at middle.

Measurements. BL, ca. 1.8–2.0; FBL, ca. 0.9–1.1; HW, 0.64–0.70; AL, 0.25–0.27; PL, 0.33–0.36; PW, 0.80–0.88 (N=3).

Differential diagnosis. This species is similar to *Aenictoxenus* species but easily distinguished from them by the more elongate body, and the temples of head which strongly extend laterally. See also Diagnosis of the genus.

Etymology. The Latin adjective *mirabilis* meaning "amazing", "strange", for the amazingly beautiful and strange habitus of this species.

Symbiotic host. *Aenictus hodgsoni*.

Distribution. Central Thailand.

Acknowledgments

We thank Mr. Narong Mahannop, the superintendent of Khao Yai National Park, for his support and provision of our fieldwork, and an anonymous reviewer and Dr. Jan Klimaszewski for comments on the manuscript. M. M., T. K. and Y. K. thank Mr. Yasuhiko Hayashi and Mr. Noboru Ito for their financial support in their collecting trip. Permission for sampling in this project was granted by the Department of National Parks, Wildlife and Plant Conservation, Thailand (DNP No. 0907/14255). This paper is supported by Grants-in-Aid for Scientific Research of JSPS. This paper is supported by a Grant-in-Aid for Scientific Research from JSPS (Young Scientists B, 22770085) funded to M. M.

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