

A New Species of the Ant Genus *Lasiomyrma* (Hymenoptera, Formicidae, Myrmicinae) from Thailand

by

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ABSTRACT

A new species of the genus *Lasiomyrma* is described from Thailand under the name, *L. wiwatwitayai* Jaitrong, sp. nov., based on the worker caste. This species probably constructs its nests in rotten wood on the forest floor.

Keywords: Ant, *Lasiomyrma wiwatwitayai*, new species, taxonomy, Thailand.

INTRODUCTION

The genus *Lasiomyrma* Terayama et Yamane is one of the rare ant genera, and belongs to the subfamily Myrmicinae. The members of the genus are mainly distributed in the tropical rain forest of Sundaland (Terayama and Yamane, 2000). Currently, only three species are known: *Lasiomyrma gedensis* Terayama et Yamane from Java, Indonesia; *Lasiomyrma gracilinoda* Terayama et Yamane and *Lasiomyrma maryatiae* Terayama et Yamane from Sabah (Borneo), Malaysia (Terayama and Yamane 2000; Bolton 2003; Bolton *et al.* 2006).

Recently I have examined a few specimens of this genus collected from Thailand and deposited in the collection of the Natural History Museum of the National Science Museum (Thailand) and the Ant Museum of Kasetsart University (Thailand). These specimens are of the same species that should be new to science. In the present paper I describe this as a new species based on the worker caste. This represents a first record of *Lasiomyrma* from the continental Asia.

The measurements, indices and morphological terms used in this paper follow those of Terayama and Yamane (2000).

DESCRIPTION

Lasiomyrma wiwatwitayai Jaitrong, sp. nov.

Figs. 1-3

Types. Holotype: worker from hill evergreen forest, Khao Yai, NE. Thailand, 30 V 2000, D. Wiwatwitaya leg. Paratypes: a worker from secondary forest, Khao Yai, Nakon Ratchasima Prov., NE. Thailand, 29 V 2000, W. Jaitrong leg.; a worker from Bueng Si To, 900-1,400 m asl., Khao Soi Dao, Chanthaburi Prov., Soi Dao Dist., 22 I 2008, W. Jaitrong leg.

Type depositary. The holotype is deposited in the Ant Museum of Kasetsart University (Thailand), and two paratypes are in Natural History Museum of the National Science Museum (Thailand).

Measurements. Worker ($n = 3$): TL (total length) 2.6-2.9 mm; HL (head length) 0.70-0.73 mm; HW (head width) 0.63-0.65 mm; SL (scape length) 0.43-0.45 mm; WL (Weber's length of alitrunk) 0.90-0.93 mm; PW (pronotal width) 0.50-0.53 mm; PL (petiole length) 0.33-0.35 mm; PH (petiole height) 0.28 mm; DPW (petiole width in dorsal view) 0.18-0.20 mm; PPL

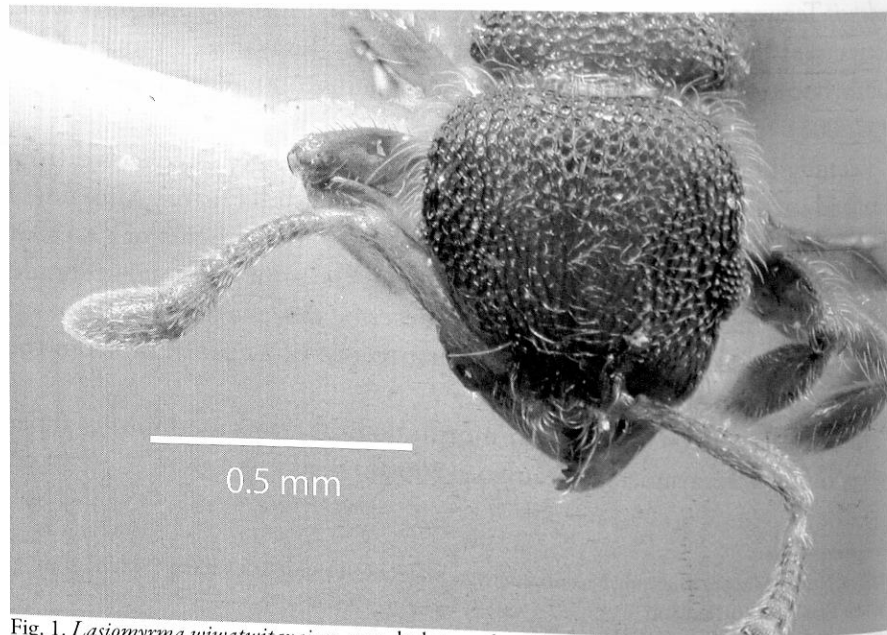


Fig. 1. *Lasiomyrma wiwatwitayai* sp. nov., holotype, head in full-face view.

(postpetiole length) 0.18-0.20 mm; PPH (postpetiole height) 0.23 mm; PPW (postpetiole width) 0.25 mm; CI (cephalic index = $HW/HL \times 100$) 86-90; SI (scape index = $SL/HW \times 100$) 65-68.

Worker Description (holotype and paratypes). Head in full-face view slightly longer than broad (1.11-1.12 times as long as broad), with slightly convex sides and very weakly concave posterior margin. Eye 0.18 mm in maximum diameter, with 9 omatidia along the longest axis. Antenna 11-segmented; scape extending beyond half of head length, but not reaching the posterolateral corner of head in full-face view; antennal segment II longer and broader than each of III-VIII; III-VIII each broader than long; the terminal segment (XI) large, almost 1.7 times as long as IX and X combined; antennal club indistinct with 2 or 3 segments. Clypeus convex anteriorly and lacking teeth. Mandible elongate-triangular with apical tooth large, followed by 7 denticles; basal margin of mandible lacking denticles.

Alitrunk rather robust; pronotum and mesonotum fused to form a dome, with a very shallow suture between them in at least two specimens, seen from above much broader anteriorly than posteriorly, laterally slightly convex; anterior margin of pronotum produced medially; mesonotum with a steep and short posterior slope. Mesopleuron rather short; anepisternum

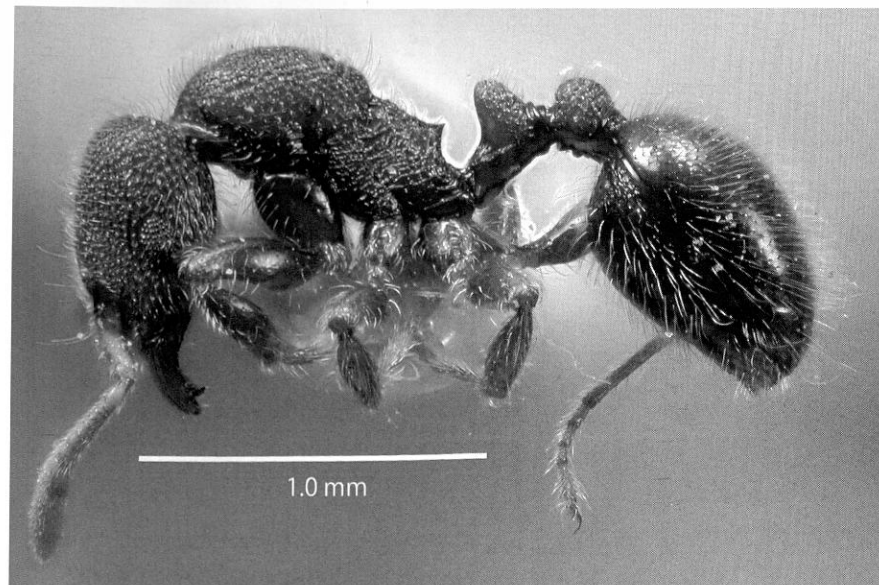


Fig. 2. *Lasiomyrma wiwatwitayai* sp. nov., holotype, habitus in profile.

clearly demarcated from katepisternum by a deep groove. Metanotal groove relatively shallow and indistinct. Propodeum in profile extremely lower than promesonotum, with its dorsal outline slightly straight and distinctly sloping to the base of propodeal spine, seen from above dorsum and declivity of propodeum concave; propodeal spine obtusely angulated, shorter than broad at base. Propodeal lobe produced posteriorly.

Petiole pedunculate, slightly longer than high, with a thin node; the node reversed U-shaped in profile; subpetiolar process weakly developed, with its ventral outline almost straight. Postpetiole short, slightly shorter than high and broad, with convex dorsal margin in profile.

Gaster large and oval, in dorsal view 0.70-0.73 mm in maximum width, slightly broader than head.

Whole head covered with dense punctures (almost reticulate); area between frontal carinae with several longitudinal rugulae. Mandible almost smooth and shiny except at the base where short longitudinal rugulae are present. Antennal scape punctate but spaces between punctures smooth and shiny.

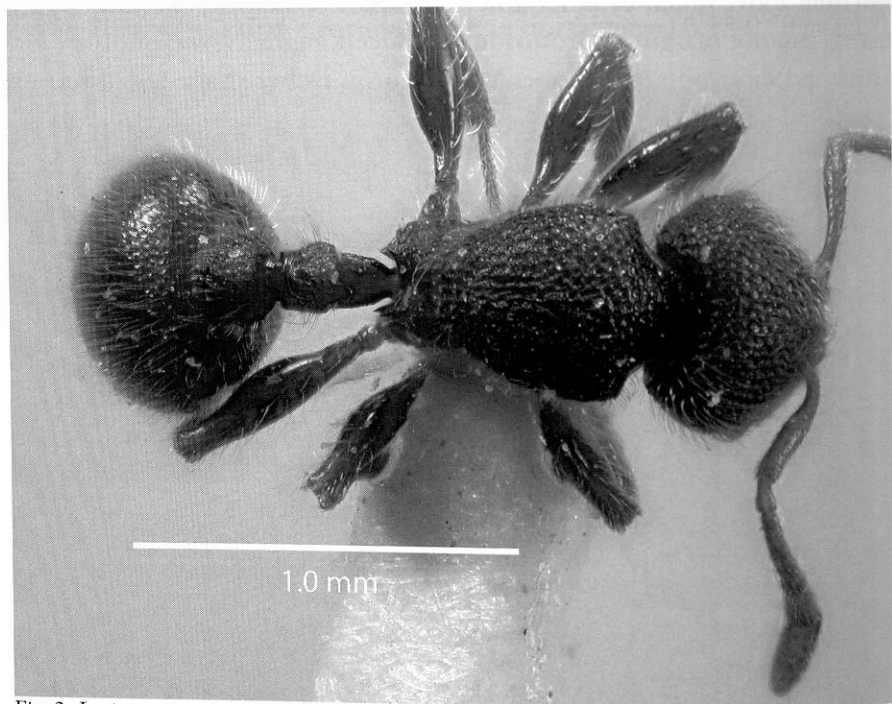


Fig. 3. *Lasio-myrra wiatwitayai* sp. nov., holotype, body in dorsal view.

Promesonotum with dense punctures (a condition similar to the head); mesopleuron with dense punctures; metapleuron and sides of propodeum with dense rugulae, but sparsely punctate; dorsum and declivity of propodeum with more than 10 transverse rugulae. Anterior face of petiolar node smooth and shiny, but posterior face with dense punctures; whole postpetiole with smaller and dense punctures. First gastral segment (tergite and sternite) punctate, others smooth and shiny.

Body reddish brown to dark brown; antenna and mandible yellowish brown to dark brown; legs reddish brown to dark brown.

Etymology. The species epithet is dedicated to Dr. Decha Wiwatwitaya of the Ant Museum, Kasetsart University, who loaned me the holotype.

Distribution. Thailand.

Remarks. This is a first record of this genus from the continental Asia. The holotype and a paratype were taken from rotten wood on the forest floor in a highland (800-1,400 m alt.) hill evergreen forest, but the other paratype was collected in a lowland secondary forest. Thus *L. wiatwitayai* inhabits forests located from lowland to highland, probably nesting in rotten wood. This species is distinguished from the other congeners by the promesonotum that is broader and dorsally more strongly convex than in the latter, the propodeal dorsum that is straight in profile and distinctly slopes to the base of the propodeal spines, and by the propodeal spine that is obtusely angulated and shorter than broad at base (in the latter it is longer than or as long as broad at base).

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REFERENCES

- Bolton, B. 2003. Synopsis and classification of Formicidae. *Memoirs of the American Entomological Institute* 71: 370 pp.
- Bolton, B., G. Alpert, P.S. Ward & P. Naskrecki 2006. *Bolton's Catalogue of Ants of the World, 1758-2005* [CD-ROM]. Harvard University, Cambridge.
- Terayama, M. & Sk. Yamane 2000. *Lasio-myrra*, a new Stenammine ant genus from Southeast Asia (Hymenoptera: Formicidae). *Entomological Science* 3 (3): 523-527.