

## A New Taxonomic Status in the Ant Genus *Aenictus* from India (Hymenoptera: Formicidae)

Weeyawat Jaitrong

*Natural History Museum, National Science Museum, Thailand,  
Technopolis, Khlong 5, Khlong Luang, Pathum Thani 12120 Thailand*

**ABSTRACT:** Four syntype workers of *Aenictus laeviceps* var. *smythiesii* Forel were examined. Two syntypes from Malaya belong to *Aenictus laeviceps* (Fr. Smith), while the other two from Assam, India belong to a distinct species, *Aenictus smythiesii* Forel, stat. nov. The lectotype and a paralectotype are designated for the species.

**KEY WORDS:** Formicidae, army ant, *Aenictus smythiesii*, Taxonomy, India.

### INTRODUCTION

'*Aenictus laeviceps* var. *smythiesii* Forel, 1901' was described using material from two localities (Assam, India and Mount Tapah, Malaya) and synonymized with *Aenictus laeviceps* (Fr. Smith) by Wilson (1964). Dr. Bernhard Merz of the Museum d' Histoire Naturelle Geneva, Switzerland (MHNG) kindly sent four syntype workers of *A. laeviceps* var. *smythiesii* to me. I studied the specimens carefully and found that the two syntypes from Mount Tapah, Malaya [Peninsular Malaysia] agree well with *Aenictus laeviceps* syntypes (Figures 1C, 1D), but that the other two from Assam, India are completely different from *A. laeviceps* in terms of pilosity and sculpturing. After a careful comparison of these two syntypes with the type materials of the related species (*Aenictus laeviceps* group

sensu Wilson, 1964), from the Oriental and Indo-Australian regions, I have reached the conclusion that the two syntypes from Malaya belong to *A. laeviceps* but the two from India to a distinct species.

### SYSTEMATICS

***Aenictus smythiesii* Forel, stat. nov.**  
(Figs. 1A, 1B).

*Aenictus laeviceps* var. *smythiesii*  
Forel, 1901: 465 (diagnosis in  
key).

*Aenictus laeviceps*: Wilson, 1964:  
467 (part); Bolton, 1995: 60  
(part).

**Types.** *Aenictus laeviceps* var. *smythiesii*: Four syntype workers on two pins (two on each pin) from Assam, India; Mount Tapah, Perak, Malaya (MHNG, examined). One

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\*Corresponding author.

E-mail: polyrhachis@yahoo.com

worker from Assam (top of the pin) is designated here as the lectotype, and the others as paralectotypes.

**Measurements.** Worker lectotype and paralectotype (n = 2 from Assam): TL 3.8 mm; HL 0.83 mm; HW 0.70 mm; SL 0.70 mm; ML 1.20-1.22 mm; PL 0.25-0.28 mm CI 85; SI 100.

**Redescription of worker.** (lectotype and paralectotype). Head in full-face view slightly longer than broad, with sides convex and posterior margin almost straight; occipital margin bearing a carina. Antennal scape relatively long, reaching the posterolateral corner of head; antennal segments II-X each longer than broad; II almost as long as each of III-IV. Frontal carina short, not extending beyond the level of the posterior margin of the torulus. Parafrontal ridge absent. Clypeus short, with its anterior margin convex, bearing 6-7 denticles. Mandible subtriangular, its masticatory margin with a large apical tooth followed by a medium-sized subapical tooth, 5-6 denticles, and a medium-sized basal tooth; basal margin sinuate with a series of 2-3 ill-defined denticles. Promesonotum in profile convex dorsally and sloping gradually to metanotal groove; propodeum in profile lower than promesonotum, and in profile its dorsal outline almost straight or feebly convex; mesopleuron clearly demarcated from metapleuron by a deep groove; propodeal junction acutely angulated; declivity of propodeum shallowly

concave, encircled with a ridge. Petiole almost as long as high; subpetiolar process low, with a downward directed acute spine; postpetiole almost as long as petiole, with its node rounded dorsally.

The head entirely smooth and shiny. Antennal scape smooth and shiny. Pronotum entirely smooth and shiny, except for anteriormost portion which is punctate; mesothorax, metapleuron and propodeum densely punctate, without distinct rugulae. Petiole weakly reticulate with smooth and shiny bottoms, Postpetiole entirely smooth and shiny. Legs entirely smooth and shiny.

The head and mesosoma with relatively sparse standing hairs mixed with sparse short hairs over the surface; longest pronotal hair 0.20-0.23 mm long. Entire body dark reddish brown. Typhlatta spot present located anterior to occipital corner.

**Distribution.** India (Assam).

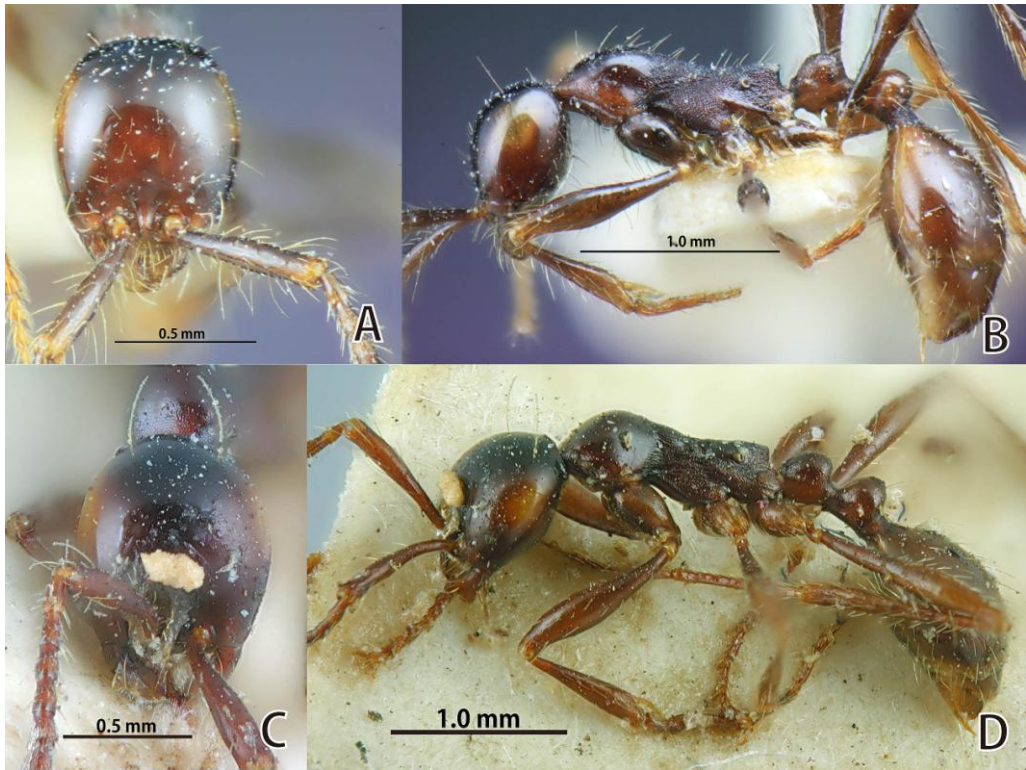
**Bionomics.** Nothing is known about the bionomics of *A. smythiesii*.

**Remarks.** This species (according to the lectotype and a paralectotype from Assam, India) has been confused and synonymized with *A. laeviceps*, but can be easily distinguished from the latter as follows: vertex with some shorter standing hairs in addition to two long hairs (with only two long hairs in *A. laeviceps*); promesonotum with relatively sparse standing hairs mixed

with sparse short hairs over the surface (without hairs in *A. laeviceps*, except for specimens from two Sumatran colonies with 1-2 hairs); legs entirely smooth and shiny (femora extensively superficially reticulate and shiny; tibiae very finely reticulate in *A. laeviceps*).

The description of *A. laeviceps* by Bingham (1903) might have been based on the material from Assam and Myanmar (Burma), and is actually a closer fit to *A. smythiesii* in the present sense.

Two paralectotypes mounted on one pin from Perak, Malaysia belong to the true *A. laeviceps*.



**Figure 1.** Workers of *Aenictus*. A, B *A. smythiesii* stat. nov., lectotype; C, D *A. laeviceps*, syntype. A, C Head in full-face view; B, D habitus in profile.

#### ACKNOWLEDGEMENTS

I would like to express my deep gratitude to Dr. Bernhard Merz

of the Museum d' Histoire Naturelle Geneva, Switzerland for kindly sending type materials.

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