

On the ants (Hymenoptera: Formicidae) of the Philippine Islands: V. The genus *Odontomachus* LATREILLE, 1804

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Abstract

A review of the Philippine species of *Odontomachus* treats eleven species including two unnamed species. They belong to four species groups, *Odontomachus simillimus* SMITH, 1858 to the *O. haematodus* group, *O. rixosus* SMITH, 1857 to the newly delimited *O. rixosus* group, and *O. malignus* to the newly established *O. malignus* group (excluded from the *O. infandus* group). None of these three species are endemic. The majority of species belongs to the *O. infandus* group, and all known species are endemic to the Philippines. These include *O. infandus* SMITH, 1858 (= *O. infandus* r. *striaticeps* STITZ, 1925) from Luzon and Mindoro, *O. philippinus* EMERY, 1893 sp.rev. from Panay, Negros and Siquijor, *O. banksi* FOREL, 1910 from Luzon, and three species new to science: *Odontomachus schoedli* sp.n. from northern Luzon, *O. alius* sp.n., wide-spread in the central and eastern Philippines, and *O. scifictus* sp.n. from Camiguin. In addition, we treat two species (sp. 1 and sp. 2) of uncertain status from southern Luzon and Mindanao which remain unnamed. For stability of nomenclature, lectotypes are designated for *O. infandus* SMITH, 1858, *O. infandus* r. *striaticeps* STITZ, 1925, *O. papuanus* st. *philippinus* EMERY, 1893, and *O. banksi* FOREL, 1910.

Key words: Formicidae, *Odontomachus*, *Odontomachus infandus* species group, *Odontomachus malignus* species group, *Odontomachus rixosus* species group, *Odontomachus haematodus* species group, new species, Philippines, key, island endemism, lectotype designation.

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Introduction

Seen up close, a large *Odontomachus* worker moving slowly across the leaf litter in a dipterocarp forest in the Philippines (or elsewhere) is spectacular. The bizarre head of species of this genus bears strong jaw-muscles, and large, elongate trap-jaws which are carried sideways when foraging, ready to snap shut as potential prey comes in touch with the long frontal trigger hairs. A powerful stinger at the apex of the abdomen completes the image. These ants resemble nothing so much as small alligators lost among the dimensions of the litter.

Odontomachus LATREILLE, 1804 is a genus of the Ponerinae (sensu stricto) (BOLTON 2003) and contains 64 species (BOLTON 2010) plus three newly described species in this study. It is widely distributed in tropical regions, with highest species numbers in the Neotropics and Malesia (BROWN 1976).

Despite their peculiar appearance, the taxonomy of Philippine *Odontomachus* LATREILLE, 1804 was treated only superficially prior to this study – and not without reason: The sorting of slightly different morphological forms on the Philippine Islands still remains a great challenge. Two important studies on Pacific *Odontomachus* have been carried

out to date: WILSON's (1959) treatment of Melanesian species and BROWN's (1976, 1978) classification of the "subtribe Odontomachiti" (comprising ponerine ants with trap-jaws). We used BROWN's (1976) publication as a base for this study since it includes an interesting treatment of the Philippine *Odontomachus infandus* group species, which represented the core difficulty of our revision. However, we chiefly used WILSON's (1959) publication for understanding the taxonomy and variations of the widely distributed species.

The Philippine *Odontomachus* fauna can be broadly divided into two sets of species. One set contains three unrelated species (in three species groups) with wide distributions: *Odontomachus simillimus* is an open-land species, which can also be found in villages and plantations and was probably continuously and accidentally introduced by man into some parts of its large range (BROWN 1976: 87), *Odontomachus malignus* is a coastal species with unique habitat requirements in intertidal zones (e.g., OLSEN 2009; and observations by the second author) which probably favours colonization of new land, and *Odontomachus rixosus* is a widely distributed forest-species, present in the