Zootaxa 4048 (1): 001–036
www.mapress.com/zootaxa/

Article

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

http://dx.doi.org/10.11646/zootaxa.4048.1.1
http://zoobank.org/urn:lsid:zoobank.org:pub:635F2D91-E791-4918-9D77-763F39EF217C

The trap-jaw ant genus *Odontomachus* Latreille (Hymenoptera: Formicidae) from Sumatra, with a new species description

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Abstract

The ant genus *Odontomachus* Latreille is reviewed for Sumatra, the sixth largest island in the world and located in western Indonesia. Previously three species were recorded from the island: *O. simillimus* F. Smith, *O. rixosus* F. Smith, and *O. latidens* Mayr. We add two species to the fauna, *O. procerus* Emery **stat. nov** and *Odontomachus minangkabau* **sp. nov.** The new species belongs to *O. rixosus* species group, and it is morphologically most similar to *O. rixosus* and *O. para-rixosus* Terayama & Ito. However, it can be separated from the latter two by its large body (HL 3.13–3.55 mm, WL 4.15–4.65 mm), the masticatory margin with 11–14 denticles, and dark-colored body. *Odontomachus latidens* subsp. *sumatranus* Emery is newly synonymized with *O. procerus*. The castes and sexes of the known species are also described, including the first descriptions of the male for *O. latidens*, *O. procerus*, and *O. rixosus*. A key to the Sumatran species based on the worker caste is provided, and the bionomics of each species is summarized.

Key words: *Odontomachus,* Indonesia, Sumatra, taxonomy, male genitalia, DNA barcoding

Introduction

The ponerine ant genus *Odontomachus* Latreille, 1804, is assigned to the *Odontomachus* genus group of the tribe Ponerini (Schmidt & Shattuck, 2014). This genus has so far been known from pantropical, pansubtropical and temperate zones, and contains 67 valid extant and three valid fossil species (Schmidt & Shattuck, 2014; MacGown *et al.* 2014; Bolton, 2015).

The world revision of the genus by Brown (1976) has been widely used as a basis for the taxonomy of the genus. Brown (1976) recognized 51 valid species and classified them into 12 well-defined species groups. Recently, Sorger & Zettel (2011) established two more species groups in their revision of the Philippine *Odontomachus*: the *O. malignus* and *O. silvestrii* species groups, although the latter was only discussed in a note because it is only known from Vietnam and China.

Regional faunas of the genus *Odontomachus* include the Nearctic region (MacGown *et al.* 2014), Malagasy region (Fisher & Smith, 2008), China (Wang, 1993), southern Japan (Yoshimura *et al.* 2007), and various countries of South and Southeast Asia (Emery, 1887, 1901; Forel, 1913; Crawley, 1924; Chapman & Capco, 1951; Wilson, 1959; Ito *et al.* 1996; Yamane, 2008, 2013; Sorger & Zettel, 2011; Terayama & Ito, 2014). The classification of Southeast Asian *Odontomachus* is, however, still far from completion. The present paper is the first outcome of our long-term project for revising Southeast Asian *Odontomachus* and *Anochetus*, and aims to provide new taxonomic and bionomic knowledge of the species known from Sumatra. The island is one of the main components of the Malay Archipelago and the sixth largest island in the world.

Three species of *Odontomachus* had been reported from Sumatra by previous authors: *O. simillimus* F. Smith, 1858; *O. latidens* Mayr, 1867; and *O. rixosus* F. Smith, 1857 (Emery, 1887; Forel, 1913; Crawley, 1924; Karavaiev, 1925; Chapman & Capco, 1951; Brown, 1976). However, our recent intensive study revealed two additional species: *O. minangkabau* **sp. nov.** and *O. procerus* Emery, 1901 **stat. nov.** Thus, the present study contains (1) a

Accepted by J. Longino: 28 Oct. 2015; published: 24 Nov. 2015