



Revision of the Australian endemic ant genera *Pseudonotoncus* and *Teratomyrmex* (Hymenoptera: Formicidae: Formicinae)

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Abstract

The Australian endemic formicine ant genera *Pseudonotoncus* and *Teratomyrmex* are revised and their distributions and biologies reviewed. Both genera are limited to forested areas along the east coast of Australia. *Pseudonotoncus* is known from two species, *P. eurydikos* (new species) and *P. hirsutus* (= *P. turneri*, new synonym), while *Teratomyrmex* is known from three species, *T. greavesi*, *T. substrictus* (new species) and *T. tinae* (new species). Distribution modelling was used to examine habitat preferences within the *Pseudonotoncus* species.

Key words: Formicidae, *Pseudonotoncus*, *Teratomyrmex*, Australia, new species, key, MaxEnt

Introduction

Australia has a rich and diverse ant fauna, with over 1400 native species assigned to 100 genera. Of these 100 genera, 18 are endemic to Australia. These include *Adlerzia*, *Anisopheidole*, *Austromorium*, *Doleromyrma*, *Epopostruma*, *Froggattella*, *Machomyrma*, *Mesostruma*, *Myrmecorhynchus*, *Nebothriomyrmex*, *Nothomyrmecia*, *Notostigma*, *Melophorus*, *Onychomyrma*, *Peronomyrmex*, *Pseudonotoncus*, *Stigmacros* and *Teratomyrmex*. In the present study we revise two of these endemic genera, *Pseudonotoncus* and *Teratomyrmex*.

Pseudonotoncus is found along the Australian east coast from the wet tropics in North Queensland to southern Victoria in rainforest and wet and dry sclerophyll forests. Specimens of this genus are uncommon and forage primarily on vegetation and tree trunks, both during the day and at night. The only known nest was found in soil. Nothing more is known of their biology.

Pseudonotoncus was originally established by Clarke (1934) for the single species *Pseudonotoncus hirsutus*. This species was known from only a single nest found in the Gellibrand Forest on the Otway Peninsula in Victoria. Donisthorpe (1937) described a second species, *Pseudonotoncus turneri*, from the Tambourine Mountains in Queensland, some 1,500km to the north-east of the type locality of Clark's *P. hirsutus*. Donisthorpe's description of *P. turneri* mirrors that of *P. hirsutus* in all aspects except colour. Brown (1955) noted that *P. hirsutus* had considerable variation in colour and, particularly on the propodeum and petiole, in sculpturation. He also speculated that, while *P. hirsutus* and *P. turneri* were likely the same species, additional species may emerge with more thorough collecting. Taylor (1992) also recognised that there was no convincing evidence to support *P. hirsutus* and *P. turneri* as separate species but mentioned that Clark had labelled one specimen from Woori Yallock, Victoria, with an unpublished species name ("breviceps"). This specimen is currently held in ANIC (Acc. No. 32-010753) and the name was never published.

Most records of *Pseudonotoncus* come from the area just north of the New South Wales/Queensland border south to southern Victoria with the most westerly from the Otway Peninsula. There have been occasional collections further north in Queensland, most notably specimens from the Tambourine Mountains (the type of *P. turneri* was collected here) and a single specimen from Mount Elliot, south-west of Townsville. Many specimens come from forests in and around Melbourne, Victoria, with samples from Gellibrand, the Dandenong Ranges, Kew,