



Six new, unusually small ants of the genus *Leptomyrmex* (Hymenoptera: Formicidae)

DEREK J. SMITH¹ & STEVE SHATTUCK²

¹Australian Museum, Sydney, New South Wales, Australia

²CSIRO Entomology, P. O. Box 1700, Canberra, A.C.T., Australia

Abstract

The ant genus *Leptomyrmex* contains 41 named taxa which are limited to eastern Australia, New Guinea and New Caledonia. While most species are large and distinctive, a few species are much smaller and have only recently been recognised as belonging to this genus. These six species, informally called micro-*Leptomyrmex*, are restricted to rainforests and wet sclerophyll forests in two relatively small regions of eastern Australia. All are described here for the first time and include *L. aitchisoni* n. sp., *L. burwelli* n. sp., *L. dolichoscapus* n. sp., *L. garretti* n. sp., *L. pilosus* n. sp. and *L. ramorniensis* n. sp.

Key words: Hymenoptera, Formicidae, Dolichoderinae, *Leptomyrmex*, taxonomy, new species, Australia

Introduction

The dolichoderine ant genus *Leptomyrmex* Mayr, 1862 is a distinctive element of the ant fauna of eastern Australia, New Guinea and New Caledonia (Wheeler, 1934; Shattuck, 1992). The majority of species are highly distinctive, being moderately large, coloured orange or bicoloured orange and black or, less commonly, black, and with extremely long antennae and legs. They are restricted to the mountains and coastal areas of Eastern Australia, New Guinea (and surrounding islands) and New Caledonia (Shattuck, 1992). However, Shattuck (1992, 1999) mentioned the existence of several small species of *Leptomyrmex* which superficially resemble *Iridomyrmex*. These species differ significantly from “main-line” *Leptomyrmex* and were frequently identified as species of the related genus *Iridomyrmex*. They average much smaller than other species (head width less than 0.80mm versus greater than 0.80mm in the larger species) and are yellow-brown to brown, lacking the large size and bright orange colour common in other species. However, as defined by Shattuck (1992), these species belong to *Leptomyrmex* although their exact placement within the genus has yet to be examined in detail. In total six species are known which belong to this set, all of which are described below as new.

The high level of diversity among these ants has only recently become apparent. In most cases these species had previously been identified as belonging to *Iridomyrmex*. For example a biodiversity survey of the forests of northern NSW undertaken by the Australian Museum and the National Parks and Wildlife Service of NSW in 1993 (Grey & Cassis, 1994) revealed the presence of two micro-*Leptomyrmex* species originally identified as *Iridomyrmex* spp. Examination of material held in the Australian National Insect Collection, Canberra revealed another 3 species of micro-*Leptomyrmex* provisionally identified as *Iridomyrmex*. And finally material loaned from Queensland Museum provided further material for three of these species plus an additional 6th species. This misidentification of micro-*Leptomyrmex* as *Iridomyrmex* in collections implies that more material is awaiting correct identification. The presence of related species from New Guinea (and nearby islands) and New Caledonia, especially from rainforest areas, seems likely and material identified as