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## A new species of *Tyrannomyrmex* (Hymenoptera: Formicidae) from Sri Lanka

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### Abstract

*Tyrannomyrmex legatus* sp. nov. is described based on a single worker collected from leaf litter in dipterocarp forest in southern Sri Lanka. A key is presented to separate the three known species of *Tyrannomyrmex*. A probable male specimen of the genus from the Philippines is noted. *Tyrannomyrmex* is placed within the tribe Solenopsidini and close to the genus *Monomorium*.

**Key words:** Ants, Sri Lanka, *Tyrannomyrmex*, new species, taxonomy

### Introduction

In 2003, Fernández described a new genus and species, *Tyrannomyrmex rex*, from peninsular Malaysia based on a single specimen collected from leaf litter at Negri Sembilan, Pasoh Forest Reserve in 1994 (Fernández 2003). Fernández was unable to place the new genus in any existing myrmicine tribe although several potential candidates were considered including the Adelomyrmecini and Solenopsidini. Without additional specimens or molecular data this genus was temporarily placed as *incertae sedis* within the subfamily Myrmicinae. Since then, a second species, *T. dux* Borowiec has been described based on a single specimen collected from leaf litter in southern India in 1999 (Borowiec 2007). In addition, Brian Heterick (pers. obs.) recognized a single male collected from a light trap in the Philippines in 1965 as possibly representing the male of an otherwise unknown species of *Tyrannomyrmex*.

A single worker of a third species of *Tyrannomyrmex*, described here, was collected by Nihara R. Gunawardene in 2006 from leaf litter in a lowland dipterocarp undisturbed forest in southern Sri Lanka. This species is generally similar to the two previously described species of *Tyrannomyrmex*; all species have small eyes reduced to a few ommatidia, an 11-segmented antenna with an ill-defined 3-segmented club (Fig. 3), palpal formula 2-2, and a masticatory border largely edentate with two apical teeth.

The discovery and description of this third species of *Tyrannomyrmex* expands the known range of this rare genus and clarifies its placement close to the genus *Monomorium*, an unexpected finding. The character states selected by Bolton in his *Synopsis and Classification of Formicidae* (2003) have become a valuable tool in the placement of ant genera. New generic descriptions should include these character states for future comparisons and an attempt should be made to expand the list of characters.

### Methods and terminology

This specimen was collected in a 1 m<sup>2</sup> quadrat of leaf litter which was sifted in the field. The litter was placed in a mini-winkler for 48 hours with a thorough shake at 24 hours. The specimen was killed and preserved in methylated spirits for up to five days and then removed and stored in 70% isopropyl alcohol. The specimen was pinned within a few days of storage in isopropyl alcohol.

Specimens were examined and all measurements were made using a Leica MZ16 stereomicroscope at 100 - 185X magnification. All measurements are in mm. Digital images were taken with a JVC digital camera and processed using Auto-Montage (Synchrosopy, Division of Synoptics, LTD) software. Images were cleaned and adjusted using Adobe Photoshop CS.