

# Sociobiology An international journal on social insects

# **RESEARCH ARTICLE - ANTS**

# New Records of Ants (Hymenoptera: Formicidae) from Sri Lanka, Including Four Tramp Species

RKS DIAS<sup>1</sup>, WS UDAYAKANTHA<sup>1</sup>, AA WACHKOO<sup>2</sup>, SA AKBAR<sup>3</sup>

- 1 Department of Zoology and Environmental Management, University of Kelaniya, Sri Lanka
- 2 Department of Zoology, Government Degree College, Shopian, Jammu and Kashmir, India
- 3 Division of Entomology, Central Institute of Temperate Horticulture, Rangreth, Srinagar, Jammu and Kashmir, India

#### **Article History**

#### Edited by

Evandro N Silva, UEFS, Brazil

Received 18 March 2018
Initial acceptance 30 April 2018
Final acceptance 07 June 2018
Publication date 02 October 2018

### Keywords

Ants, Sri Lanka, taxonomy, distribution, new records, tramp species.

# **Corresponding author**

Shahid Ali Akbar 117 Pomposh Colony Natipora Srinagar - 190015 Jammu and Kashmir, India. E-Mail: kingakbarali@gmail.com

# **Abstract**

Five ant species are reported for the first time from Sri Lanka: *Ooceraea alii* (Bharti & Akbar, 2013); *O. biroi* (Forel, 1907); *Prionopelta kraepelini* Forel, 1905; *Strumigenys emmae* (Emery, 1890) and *S. membranifera* Emery, 1869. Among the newly reported species, four species (*O. biroi, S. membranifera, S. emmae* and *P. kraepelini*) are known for their invasive and tramping nature, spreading via human commerce and have attained broad cosmopolitan distribution. Impact of these ants on regional fauna is not known and needs immediate attention. A brief diagnosis, distribution, and illustrations are provided for each species.

## Introduction

Sri Lanka is one of the 25 biodiversity hotspots in the world (Myers, 2000). It is relatively a large island (66,000 km²); a shallow continental shelf as India; been able to maintain a largely distinct fauna from that of the Indian mainland (Bossuyt, 2004). The country has the highest biodiversity density in Asia with 27% of the 3,210 flowering plants and 22% of the mammals being endemic to Sri Lanka (Mittermeier et al., 2000; Gunawardene et al., 2007). These distinct elements are established not only because of regional isolation as an Island but also because of the establishment of finest local endemic niches. Patterns of such local endemism at the finest scale, at which they may occur, should form basis for all future conservation programs.

Ant diversity and distribution greatly influence faunal community dynamics; understanding such patterns is prerequisite for all conservational programs (Lach et al., 2010). Ant fauna of Sri Lanka is highly diverse with high Indo-Malayan affinity and a high degree of endemism. The Sri Lankan ants include 11 of the 17 known extant subfamilies

with 355 valid ant species in 78 genera (AntWeb, 2018a; Dias et al., in press). The region is home to many endemic ant species; more than 30 % of the regional ants are endemic including relict Sri Lankan ant *Aneuretus simoni* Emery, sole extant representative of the subfamily Aneuretinae and several genera and species, which are only reported from Sri Lanka.

In Sri Lanka, the documentation and cataloguing of ants has been fragmentary, with few earlier studies being largely focused on systematic accounts and mere species enumeration. However, recognizing the importance of ants as major ecosystem players, several significant initiatives for cataloguing this important group of insects have been taken in the recent past (Dias, 2006, 2014; Dias & Chaminda, 2000; Gunawardene et al., 2008). The regional centre for ant research attached to the Department of Zoology and Environmental Management, University of Kelaniya, Sri Lanka is pioneering these efforts. The centre intends to establish and maintain an ant repository for the ants of Sri Lanka and is currently encouraging young ant researchers with practical experience to explore many unknown ant species in the region. These findings of the present paper form part of the surveys conducted by the centre in recent years.



Open access journal: http://periodicos.uefs.br/ojs/index.php/sociobiology ISSN: 0361-6525