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**Preliminary Survey of Ants (Hymenoptera: Formicidae) in Dombagaskanda Forest Reserve,  
Sri Lanka**

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**Abstract**

Sri Lanka is renowned for its exceptional biodiversity, with a total of 341 documented valid species and subspecies of Formicidae, solidifying its status as an ant diversity hotspot. A preliminary survey to assess ant species diversity was conducted at Dombagaskanda Forest Reserve, Sri Lanka, on 24<sup>th</sup> of September and 20<sup>th</sup> of October 2023, from 9.00 a.m. to 3.00 p.m. Dombagaskanda is a tropical evergreen forest located in Kalutara District, Western Province, in the island's wet zone (rainfall > 2,500 mm/y). The study was conducted along a 150 m stretch of the access road to the Bodhinagala Temple. Survey techniques included rock flipping and visual observations aided by hand lenses, while detailed field notes were taken to record relevant data. However, our observations were somewhat constrained due to rain, which rendered the ground muddy and wet. The observed individuals were photographed using a camera equipped with a macro adapter and identified using standard guides. Identification was based solely on photographs. Ants belonging to five subfamilies were recorded, totalling 29 species. Notable species encountered during this survey included *Anochetus graeffei*, *Anoplolepis gracilipes*, *Brachyponera obscurans*, *Camponotus rufoglaucus*, *Carebara* sp. (1), *Cataulacus taprobanae*, *Cryptopone testacea*, *Diacamma indicum*, *Lophomyrmex* sp. (1), *Meranoplus bicolor*, *Myrmecaria brunnea*, *Nylanderia* sp. (1), *Odontomachus simillimus*, *Oecophylla smaragdina*, *Paratrechina longicornis*, *Pheidole parva*, *Pheidole rugosa*, *Pheidole spathifera*, *Pheidole* sp. (1), *Polyrhachis scissa*, *Prionopelta kraepelini*, *Pseudoneoponera rufipes*, *Tapinoma melanocephalum*, *Technomyrmex albipes*, *Tetramorium pacificum*, *Tetramorium insolens*, and *Trichomyrmex destructor*. Furthermore, we made a remarkable discovery by encountering a wood nesting ant species *Vollenhovia escherichi* and an endemical arboreal weaver ant *Polyrhachis curvispina* for the first time in the lowlands (previously known only from Peradeniya and Puwakpitiya respectively), thereby expanding our understanding of their geographical distribution. The former is Data Deficient while the latter is omitted from the 2012 National Red List. Despite human activity at the site (e.g., visiting the temple or collecting wood), the forest itself appears relatively undisturbed. The results suggest that the forest reserve is an important refuge of ant diversity. Our study underscores the importance of conducting surveys in various locations, such as the present study, to uncover the unseen diversity of ant fauna in Sri Lanka's lowland forests.

**Keywords:** Formicidae, Dombagaskanda, New localities, Ants of Sri Lanka, Diversity