

Diversity of Ant Fauna in Selected Crops and Ornamental Plants in Mathavuvaitha Kulam, Vavuniya District, Sri Lanka

S. Ravichandran¹ and W. S. Udayakantha^{1*}

¹*Department of Biological Sciences, Faculty of Applied Sciences, South Eastern University of Sri Lanka, Oluvil, 32360, Sri Lanka*

*sudesh@seu.ac.lk

Exploration of ants in Vavuniya District in Northern Province of Sri Lanka is very important, due to the lack of previous records of ants in this region. The objectives of the study were investigation of the diversity of ants associated with selected plant species in selected home gardens of Mathavuvaitha Kulam in Vavuniya District and to present a list of the ant fauna from the region for the first time. Mathavuvaitha Kulam is located approximately 15 km Southwest of Vavuniya town, between 8°43'41.6" N, 80°29'06.7" E and 8°43'48" N, 80°29'07.4" E. The survey was conducted between July and September, 2022. Ants crawling on each of the 10 plants of papaya, guava, banana, brinjal, tomato, chilli, cayenne pepper plant, cassava, okra and "rose of Sharon" plants in ten home gardens were observed and two individuals in each species were collected using a wet paint-brush and preserved in 80 % ethanol. Collected ants were identified to the possible taxonomic levels using a low-power-stereo microscope and appropriate taxonomic keys. 90 % frequency of occurrence out of ten home gardens was observed for *Technomyrmex albipes* (Smith, 1861) and *Tapinoma melanocephalum* (Fabricius, 1793), which is significantly higher than that of other species, and the lowest occurrence, 10%, was observed for *Camponotus oblongus* (Smith, 1858). Only *T. albipes* was common to all plant species and *T. melanocephalum* was observed in all species except banana and rose of Sharon. Fourteen species belonging to twelve genera in three subfamilies, Dolichoderinae, Formicinae and Myrmicinae are presented in this first list of ants but further surveys on the ant diversity are recommended in the various habitats in Vavuniya District.

Keywords: Ant Diversity, Diversity in Vavuniya, Crop Plants, Ant Inventory