



A Field survey on ant species in four selected locations in Wellamadama premises of the University of Ruhuna.

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Ants are very common group of insects and constitute up to 20% of the animal biomass in tropical region. About 65 genera, 12 subfamilies and 210 species were recorded from Sri Lanka. Majority of ants belongs to the subfamily Myrmicinae and Formicinae. Ants play essential roles in ecosystem functioning by inhabiting in divers microhabitats. The objective of the present study is to identify the species of ants and their preferable habitats in four selected locations in Wellamadama premises of University of Ruhuna and the study was conducted from April to September year 2009.

Four major locations (forest habitat, grassy habitat, indoor habitat and outdoor habitat) were selected in the study sites. Four sub sampling units in each location were used to collect data. Recorded each ant species was collected manually by a fine pointed (No.1) paint brush. Shape of the head, thorax and abdomen, structure of the antenna and arrangement of hairs in the abdominal tip and number of nodes of ants were used for identification. Identified species were confirmed using taxonomic keys. The habitats of each ant species were recorded based on occurrence of their nests.

Twelve species of ants were recorded belonging to five sub families. The highest number of ant species represented in subfamily: Formicinae and Myrmicinae belonging to four species in each family (66.67%). Only *Pseudomyrmex sp* belonging (Subfamily, Pseudomyrmecinae) and *Diacamma rugosum* belonging to Subfamily, Ponerinae were recorded. Both of *Tapinoma*

melanocephalum and *Forelius pruinosus* (Subfamily: Dolichoderinae) were only found from indoor habitats, like inside the walls of buildings. Although both of arboreal and soil nesters were some members of subfamily: Formicinae and Myrmicinae, *Crematogaster sp* and *Pheidole sp* of subfamily: Myrmicinae were preferred to the additional nesting sites, beneath the rocks, logs, fire woods and hollow cavities in plant of *plumaria obtusa* in the grassy habitat. Nests of *Diacamma rugosum* were located under the debris of plant materials in the forest, *Oecophylla smaragdina* was occasionally nested in outdoor areas of the buildings in the Wellamadama premises.

The availability of beneficial microhabitats for Formicinae and Myrmicinae ants may have to increase their species abundance in the Wellamadama premises. There was no significant different among selected locations of recorded ant species in the study area ($P>0.05$). The highest number of ant species were recorded in the forest habitat (35.7%), moderate number in the grassy cover (28.57%), outdoor habitats (21.43%) and the lowest number in indoor habitat (14.3%).

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