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Distribution of ants in different habitats of the Knuckles region and their interaction with plants

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Like most other tropical countries, Sri Lanka has a rich ant fauna that remains undiscovered due to the lack of research. Data is limited for floral relationships of ants in Sri Lanka. The present study on ants in the Knuckles region was carried out as an effort to fill the data gaps to some extent and to investigate interactions of these ants with plants. The study was carried out at three locations in the Northern flank of the Knuckles region namely Bellanella, Mahalakotuwa and Attanwala. Honey-baited plastic dishes were used as traps to capture ants in different micro habitats such as logs, mounds of soil, leaf litter and tree bark with 10 traps in each location. Ants were identified using keys. Two transects of 100 m x 5 m were used for each location to record interacting plant species, plant structures of interest and resource availability. The Shannon index (H') was used to compare the ant species diversity in the three different locations. The study recorded a total of 25 ant species of 15 genera in 4 families, namely, Formicinae, Myrmicinae, Dolichoderinae and Ponerinae. Fifteen species of ants from all three sites belong to the family Formicinae and ants in the genus *Paratrechina* were the most abundant. The highest diversity of ants were recorded from Bellanella (H' - 2.013) and included 22 species, and the lowest diversity was recorded from Attanwala (H' - 1.728) with 18 species, while 19 species were observed from Mahalakotuwa. Ant species recorded here interact with more than 39 plant species. Most of the interactions are opportunistic. Eighteen species of ants were seen to feed on honey dew secreted by aphids on plants such as *Zea mays*, *Austroeupatorium inulifolium* etc. One single *Paratrechina sp* use several plant species to build their nests and *Oceophylla smaragdiba* workers build nests in trees by attaching leaves together.