

WASPS OF THE PERADENIYA UNIVERSITY PARK: DIVERSITY IN DIFFERENT HABITATS

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Wasps of the world comprise about 20, 000 species belonging to 19 families. They are important as pollinators, predators of insect and due to their contribution to biodiversity. Wasps are among the best published groups of insects in Sri Lanka. Due to the efforts of the Sri Lanka – Smithsonian Survey, the Smithsonian collection of Sri Lankan wasps comprises 469 species in 153 genera and 16 families. The present investigation was carried out to study the wasps of the University Park that comprises 10 habitats within an area of 700 ha. Wasps from the selected, accessible areas in the 10 different habitats were collected using sweep nets, trap nests (artificial wooden traps and bamboo stems) and from their ground, mud or paper nests.

A total of 41 species of wasps belonging to 32 genera and 11 families were collected. Families Eumenidae and Scoliidae each was represented by 7 species of wasps while family Pompilidae included only 2 species. Of the wasp genera, *Ceceris* (Philanthidae) and *Scolia* (Scoliidae) each included 4 species. Of the different collecting methods, sweep netting caught all the recorded wasps species except two; *Delta flavopictum* and *Ropalidia cyathiformes*. They were collected from mud nests and paper nests respectively. Nests of 9 species of wasps were recorded; mud nests (3 spp.), trap nests (2 spp.) and ground nests (1 sp.). *Pison rugosum* constructs characteristic mud nests that are commonly seen on carved walls of buildings.

The highest diversity of wasps numbering 20 species was recorded from the cultivated areas of the University Park followed by grassland (9 spp.), *Alstonia* habitat, Kandyan forest garden and scrubland (each 8 spp.) and paddy fields (6 spp.). The type of vegetation or trees mostly associated with wasps were flowering weeds, grasses like *Panicum maximum*, herbs such as *Lantana camara* and *Tithonia diversifolia* and trees such as *Persea americana* and *Muntingia calabura*. The most common wasp species occurring in almost all the habitats was *Chalybion bengalensis* (Sphecidae) and *Ropalidia stigma* was confined to a single habitat (mixed species habitat). The pompilid wasps were confined to the paddy fields and cultivated areas.

Use of sweep net appears to be an effective method of collecting wasps from vegetation over large areas. Flowering weeds appear to attract more wasps than most other vegetation types.