

Bee Diversity and Floral Hosts in the Home Gardens of Jaffna District

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A study of the diversity of bees and floral hosts in the home gardens of Jaffna District documented fourteen species of bees in four families, Apidae, Halictidae, Anthophoridae and Megachilidae involved in pollination process of flowering plants. Majority of bees belong to the family Apidae (57.14%). Four species of social bees, *Apis dorsata*, *A. cerana*, *A. florea* and *Trigona iridipennis* were present in the home gardens of study site. Ten species of the solitary bees were foraging on pollen and collecting nectar of a variety of flowers on home gardens. *Amegilla sp*, *A. cingulata*, *Braunsapis cupulifera*, *Ceratina binghami*, *Lasioglossum vagans*, *Xylocopa fenestrata*, *Thyreus ramosellus*, *Nomia iridescens*, *Megachile mystacea* and *Lipotriches pulchriventris* were categorized under solitary bees. The floral hosts of bees included 66 species of flowering plants in thirty four families. A total number of 1448 individual plants, Majority of the floral host plants of bees belonged to the family Fabaceae. Highest numbers of bee species were visited to the vegetable crops in home gardens. Highest bee diversity was recorded on Cucubitaceae family crops. Cucubitaceae flower of *Luffa cylindrica* was attracted the highest number (9) of bee species. Fruit crops also were received high number of bee species next to vegetable crops. *Trigona iridipennis* bee species were identified in twenty six plant species. *Thyreus ramosellus* and *Megachile mystacea* bee species were found only in certain flowering plants. The diversity of bees appears to be determined by the availability and diversity of suitable floral hosts in the home garden.

Keywords: Bees diversity, Flowering plants, Home garden, Pollinators.