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Bees of the Peradeniya University Park: diversity, floral and pollen hosts at a selected site

The bee fauna in the 11 ha Agriculture Farm at the University Park was studied to determine the diversity, floral hosts and pollen hosts of bees. The vegetation at this site comprises *Panicum* grass, other weeds, vegetables and a few tree species. The study was conducted over a period of 1 year and the collection of bees using hand nets was carried out intermittently.

A total of 52 bee species in 21 genera and 4 families (Anthophoridae, Apidae, Halictidae and Megachilidae) were collected and identified using keys, reference collections and by experts. Among the bees were 3 previously unrecorded species (*Heriades binghami, Ceratina (Ceratinula)* sp. 1 and *Lithurgus dentipes*). Four species of parasitic bees (*Nomada* sp.1, *Sphecodes* sp. 1, *Coelioxys capitata* and *Coelioxys* sp. 1) were also collected. The bees were collected on flowers of 30 plant species in 17 families and the majority of the hosts were weeds. The pollen carried by bees on microscopic examination was assigned to 8 pollen classes. Majority of the bees was generalists, visiting flowers of several plant species. Among them were *Ceratina hieroglyphica* (on 10 plant spp.), *Pithitis binghami* (on 7 plant spp.), *Nomia (Leuconomia)* sp. 4 (on 6 plant spp.) and *Halictus (Seladonia) lucidipennis* (on 6 plant spp). The 2 species of *Lithurgus* were specialists in that they visited and carried pollen only from *Ipomoea cairica* (Covolvulaceae) and *Hibiscus asculentus* (Malvaceae). Of the 9 bee species that visited brinjal flowers (Solanaceae) only *Pseudapis (Pseudapis) oxybeloides* was found to buzz pollinate in order to release the pollen. Flowers of *Sesamum rudiatum* (Pedaliaceae) attracted more than half the number of bees recorded for the site.

The rich bee fauna is attributed to the variety of flowering weeds present through out the year and the short- term cultivation vegetables, at this site.