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BEES AND WASPS ATTRACTED TO TRAP NESTS IN RICE FIELDS

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Bees and Wasps (Hymenoptera : Apocrita) are an economically important group of insects as pollinators and predators. Certain solitary bees and wasps make their nests in the hollows of stems. Provision of artificial / natural trap - nests is one of the methods of encouraging these beneficial insects. The stem nesting bees and wasps associated with rice field ecosystems were studied by hanging artificial and natural trap - nests of different diameters and colours at seven sites in two rice fields located at Udaperadeniya - Kandy and Siyambalapitiya - Kegalle, during a single cultivation cycle. Traps were examined and renewed every two weeks. In addition, sweep net collections off the vegetation were made to collect the same. The flowering weeds which provide pollen and nectar for the bees were collected and the pollen examined and identified. Only the traps at the rice fields in Siyambalapitiya were nested and that too by three families of wasps (Eumenidae, Pompilidae, Sphecidae) and not by solitary bees. The traps were occupied only during the vegetative and reproductive phases of the paddy cycle. Sweep netting caught three families (14 spp.) of solitary bees and five families (15 spp.) of wasps. Of the twenty seven common flowering weeds associated with the rice field ecosystem pollen from six plant species were present in the scopa (pollen carrying hairs) of bees. Although none of the bees nested in the trap nests, *Ceratina sp.* was observed to be nesting in rose stems around the field. Of the wasps that nested in the trap nests one species was observed to be predatory on a leaf rolling caterpillar of *Hibiscus esculenta*. Species diversity of the two fields in relation to bees and wasps gave a high index (Margalef's Diversity Index : $D_{mg} = 3.5789$) for Siyambalapitiya where there is continuous bund cultivation of vegetables and a high weed cover. (This study was carried out for the B.Sc Special Degree)