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Identification of key insect pollinators and their active pollinating period of the day on selected vegetable plants in mixed cropping system

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Insects are important as main pollinators of many agricultural crops such as vegetables and fruits. More than 3000 species of insects are important as pollinators and among them insects belong to order Hymenoptera and Lepidoptera are well studied throughout the world. Pollinators belong to order Hymenoptera especially honeybees and butterflies were recorded as the main pollinators of crop plants. Present study investigates the pollinators of selected crop plants, Bitter gourd (*Mormodica charrantia*), Cucumber (*Cucumis satives*) and Snake gourd (*Tricosanthes cucumerina*) of family Cucurbitacea, Winged beans (*Psophocarpus tetragonolobus*) of family Fabaceae and *Solanum* sp. of Family Solanaceae grown in a dry zone mixed cropping system. Flowering time, flower visiting insects and their frequencies and durations on randomly selected study plants were recorded throughout the three months study period. Our study reveals that dwarf honeybee (*Apis florea*), Kanawe bee (*Trigona irridipennis*), *Trigona* morphospecies1 and Blue banded bee (*Amegilla* sp.) were the most frequent visitors of these vegetable plants, while butterfly species such as The Common Cerulean (*Jamides celeno*), The Lemmon Emigrant (*Catopsilia pomona*) and The Lesser Grass Blue (*Zizina otis*) regularly feed on above plants. Since pollination is a passive process, we speculate that these species might be the most important pollinators of above plants. Interestingly, although honey bees (*Apis cerana*) were available in the field during the study period we did not observe them visiting these vegetable flowers. Our study revealed that the above pollinators were active during the morning period. Therefore farmers can be advised to avoid this time period when they apply pesticides.