S. S. L. Andrade, E. A. Souza, L. C. L. Santos, C. Moraes, A. K. C. L. Lobato

Authors: Fazal Said, Mian Inayatullah

Abstract : Various insect visitors in common and honeybees in particular are considered to be accountable for 80-85% of pollination services for numerous crops worldwide. Pollinators not only increase crop yield but also improve quality of produce as well. The present investigation is therefore, an endeavor to assess the visitation pattern of honeybees, Apis florea (Hymenopterae: Apidae) in sunflower (Helianthus annuus L.). The current research trial was carried out at New Developmental Farm (NDF), The University of Agriculture Peshawar, (34.01° N, 71.53° E) Khyber Pakhtunkhwa-Pakistan during 2012 and 2013. Different observations on the foraging behavior of A. florea's individuals were made from 0800 hr in the morning and continued until 1800 hr in the evening. Hence, total duration of foraging activity of A. florea individuals was comprised of 10 hours. It was found that two peaks of visitation/foraging occurred between 1400 to 1600 hr of the day. First peak of foraging was recorded at 1600hr, where 15 individuals of honeybees/3 m2 were counted to be engaged in foraging sunflower blooms. Second peak visitation was recorded with a total of 12 bees/3 m2 at 1400 hrs of the day. Visitations of A. florea were observed to its minimum intensity of only 07 individuals during late hours of the day as evening approached after 1800 hrs. Similarly, due to more number of pollens and nectars on flowers, high frequency of A. florea were found engaged in foraging during 20th and 25th day after initiation of blooms on sunflower. Minimum numbers of honeybees were recorded during initial and very last days of flowering due to less number of plants with blooms and less availability of pollen and nectar on flowers.

Keywords: apis florea, days after flowering, daily hours, sunflower, visitation pattern

Conference Title: ICE 2015: International Conference on Entomology

Conference Location: Penang, Malaysia Conference Dates: December 03-04, 2015