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Foraging and influence of season on *Apis dorsata* in an urban garden**Anitha A Abraham***Department of Life Science, Bangalore University, Bangalore -560004, India.****Corresponding author: abrahamanitha@yahoo.com***

The Asian honeybee *Apis dorsata* Fabricius (Apidae, Apinae) is known for its ecosystem service. Foraging is an important aspect of insect life. In the case of *A. dorsata*, searching for suitable floral resources is essential for the sustenance of the honeybee. This honeybee is an important crop pollinator known to visit several plants for its food source mainly nectar and pollen (Robinson, 2012). The honeybee is also found foraging on flowers in urban gardens.

An observational study was made in the year 2017-2018 at the nursery in Lalbagh Botanical garden (12.95°N 77.59°E) in Bangalore. The bee was observed from January to June in the garden. It visited many native and non-native plants in the garden. The foraging choices made by this bee are dependent on the seasonal availability of plant resources. It was observed that they visited a wide variety of plants from January to June. The flowers of the plants they foraged on were *Pentas lanceolate*, *Hibiscus rosa sinensis* (Anitha *et al.*, 2017). It was seen foraging on *Nymphae* sp. They were seen foraging in large numbers during February and March. The seasonal availability of nectar and pollen was important in their foraging choices. Its body size and large hives demand high energy.

Their foraging decisions are based on these factors. Many ornamental trees were foraged by *A. dorsata* during early summer like *Tabebuia argentea*, *Samanea saman*, and *Pongamia*. The abundance of floral resources seems to be a reason for higher foraging in summer and the seasonal availability of floral resources. Observations over a temporal scale showed floral fidelity in *A. dorsata*. This shows it can learn complex floral colors and odors of flowers of various plants ((Mogily *et al.*, 2020). This ability enables them to forage on the same floral patch seasonally over a temporal scale.

Reference

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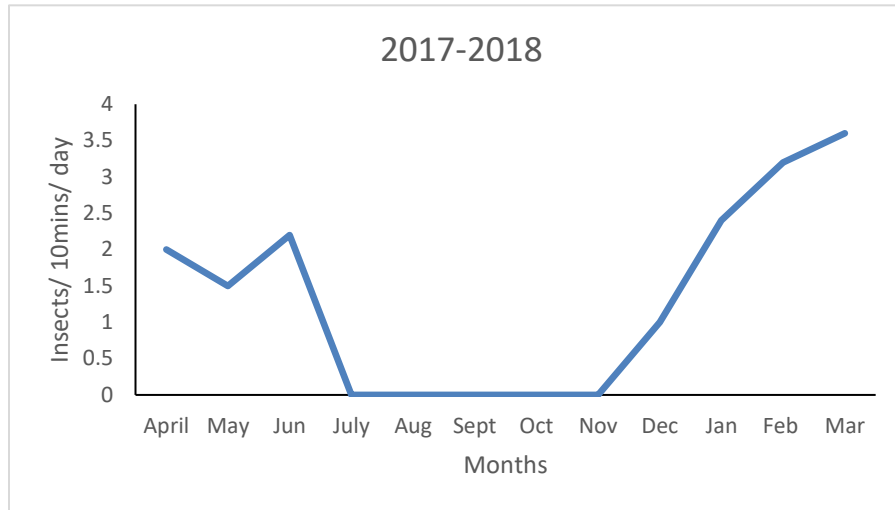


Fig 1: Population of *Apis dorsata* in the year 2017-2018



Fig 2: *Apis dorsata* on *Nymphaeae* sp, with hind leg showing pollen collected

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