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PILIKULA



# PILIKULA BIOLOGICAL PARK



## WORLD BEE DAY

## 20<sup>TH</sup> MAY 2022

### INFORMATION CARD



**Anton Janša is known as a pioneer of modern apiculture techniques and a great expert in the field. World Bee Day is celebrated on his birthday to honour him for his contribution.**

### **Why are bees important for mankind?**

**The three types of honey bees in a hive are: queens (egg-producers), workers (non-reproducing females), and drones (males whose main duty is to find and mate with a queen). Unlike the worker bees the drones do not sting. Honey bee larvae hatch from eggs in three to four days. There are 20,000 types of bees across the globe. Bees pollinate as many as 170,000 species of plants. Bees and other pollinators are very important for human survival as they significantly contribute to the world's food security. Pollination-dependent crops are a major source of income for farmers in developing countries. They also provide jobs and income for millions of people. For the environment, Bees and other pollinators have positive effects on the entire ecosystem and help preserve biodiversity. Biodiversity is essential for preserving natural habitats and thus humanity itself. It provides food, fuel, oxygen, cleans water and air, stabilises weather and climate, increases the ability to adapt to changes, creates and renews soil fertility, detoxifies and breaks down waste products, and pollinates plants, including numerous crops; it suppresses pests and agricultural crop diseases, preserves genetic sources that are crucial for the development of new varieties, medicines and other products, and provides cultural and aesthetic benefits. Bees are also a good biological indicator of environmental conditions. Through observation of their development and health status, we can detect changes in the environment and take prompt action. Failure to respond to such warnings can make the consequences even worse.**

**3 important bee species of the western ghats are ;**

- **Apis florea – dwarf bee ( kolu jenu )**
- **Apis dorsata dorsata – giant honey bee ( kadu jenu )**
- **Apis cerana indica – the indian honey bee ( thuduve jenu )**

## **THINGS TO DO TO HELP SUPPORT BEES AND OTHER POLLINATORS**

**1. Plant or sow honey plants on balconies, terraces and gardens for decorative purposes.**

**2. Set up a nesting box for bees on your balcony, terrace or garden – you can do it yourself or buy it.**

**3. Maintain flowering meadows by using a greater variety of plants and by sowing honey plants in the meadows.**

**4. Avoid mowing grass during the peak flourishing of plants and mow grass in the evening hours.**

**5. Allow beekeepers to temporarily or permanently settle bees on agricultural surfaces. The bees will thus have proper plants to feed on, which will be properly pollinated and will bear more fruit.**

**6. As regards spraying, use pesticides that are harmless to bees and spray plants [www.worldbeeday.org](http://www.worldbeeday.org) in windless weather conditions early in the morning or late in the evening, when bees are back to their hives.**

**7. Mulch flowering plants in orchards and vineyards before spraying with pesticides, in order to prevent them from attracting bees.**

**8. Raise children's and teenagers' awareness about importance of the bees.**

**9. Buy honey and other bee products from a local beekeeper.**

**10. Support beekeepers and attend events in support of bees.**

# Life of a Honey Bee

Queen & Drone



## First 1 to 2 Weeks of a Queen's Life

The queen mates with 10 to 15 drones.

## Stage 1 - Egg (Days 0 - 3)

The queen lays up to 2,000 eggs per day.

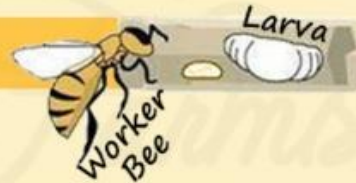


## Stage 2 - Larva (Days 3 - 6)

All larva eat royal jelly for 3 days. Queens will continue to eat royal jelly.

## Stage 2 - Larva (Days 6 - 9)

Worker & drone larva switch to a bee bread diet till capped.



## Stage 3 - Pupa (Days 9-Emerge)

Pupa don't need to eat. They are capped for protection while in their cocoon.

## Stage 4 - Adult (Days 24, 21, or 16)

Worker bees begin to clean, drones need fed, and queens start their hunt.



## Stage 5 - Death (Days 42 to 1,460)

Common causes of death are disease, plague, insecticide, and frost.

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