

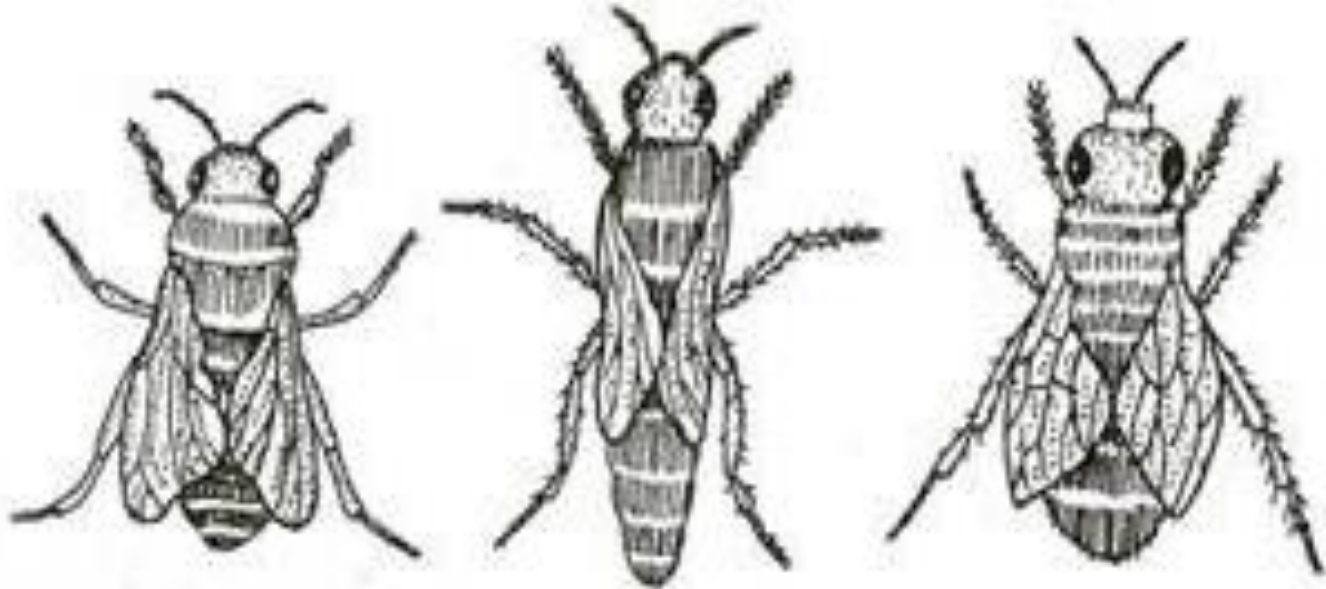
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Castes of honey bee



WORKER

QUEEN

DRONE

The worker bees are of three types:

- (a) Scavenger bees
- (b) Nurse bees and
- (c) Scout bees.
- Ernest Spytzner (1788) was the first to draw attention to the fact that bees communicate by means of definite movements now called “bee dances”.
- Prof Karl Von Frisch decoded the language of “bee dances” and got “Nobel Prize” in medicine or physiology for it in 1973.
- He discovered that scout bees perform two types of dances for communication,

- (i) Round dance is performed when a newly discovered food source is close (less than 75 metres) to the hive
- (ii) Tail wagging dance is performed for long distance sources.
- Eggs of queen hatch into white, legless larvae which spin delicate silken cocoons around themselves and turn into pupae.
- Each pupa develops into an adult.
- The adult comes out by cutting wall of cocoon first and secondly by breaking the wax cap of the cell.

- During first 2 to 3 days, all larvae of bee are fed on a special proteinaceous food, called “Royal jelly” or bee milk which is secreted by the hypopharyngeal glands of the young workers.
- After that coarser food, the “Bee Bread”, which is mixture of honey and pollen grain, is given.
- The queen forming larvae are fed on royal jelly for the full larval life and these larvae are also taken for further development into a special chamber called the queen’s chamber or cell.

- **Species of Honey bees:**
- There are four important species of honey-bees;
- (i) *Apis mellifera* (Italian Bee),
- (ii) *A. indica* (Indian Bee),
- (iii) *A. dorsata* (rock bee),
- (iv) *A. florea* (little bee).
- All of them occur in nature as wild insects.
- Their high economic importance, the honey-bees, especially, *A. mellifera* are domesticated and cul-tured, viz., reared and bred in artificial hives. Of these the most common species in wild state is *Apis indica* while in domestic state it is *Apis mellifera*.