Seasonal Management of Honeybee Colonies

Monsoon & Autumn Management

Monsoon management

- In the tropical and sub-tropical regions of the country, June to September represents the monsoon or wet season
- Bees face several problems of pests, predators, excessive humidity and starvation
- Sometimes due to continuous rains, bees are confined to their hives for a long period
- Honey bees become lethargic and may develop dysentery

- **The colonies need following management to keep them strong:**

1. Weak colonies which have become queenless, should be united with queen right colonies, since during this period due to absence of drones new virgin queen can not mate

2. Avoid broodlessness in colonies; if pollen stores and fresh pollen is not available, feed the colonies either pollen substitute or pollen supplement

3. If colonies have poor food stores (below 5kg) provide sugar in the form of candy or dry sugar instead of sugar syrup

4. Keep in check the attack of enemies like wax moth, ants, mites and wasps

5. The hives are kept on stands sloping towards entrance in order to drain out water and prevent its accumulation inside the hive

Autumn/fall management

- Management practices during this period depend on the climatic and floral conditions where bees are kept
- In some parts of Hilly areas, there is a second honey flow season in autumn
- The colonies in such places are managed as described earlier for availing honey flow
- Near the end of honey flow, reduce the hive space to the needs of colony for winter
- Restrict the food storage space to the lower hive body so that bees are forced to store their winter stores there instead of super

Autumn/fall management

- During this period many colonies make preparation for superseding old queens and raise few queen cells
- And this is natural replacement of failing queen in a colony
- The new queen on emergence kills the old queen

Management practices for successful overwintering

- Overwintering is the non-productive season

Following management should be done:

1. Ensure that the colony has vigorous and productive queen.
   - An ideal queen is one whose egg laying rate is high and continues to lay well till late fall and thus provides population of predominantly young bees in sufficient number for wintering
2. Colonies below average population or having scattered or less brood than the average colonies indicate failure of queens.
   - Replace queens of such colonies by early fall so that these colonies produce desirable number of young bees
3. Colonies for wintering should be free from disease

Management practices for successful overwintering

4. Reduce the comb space by removing extra frames to such a level which can be covered by the bees well
5. Under moderate climatic conditions, colonies of bees on 3-5 frames can winter successfully, if the colonies have proper food stores.
   - ➢ Unite the weak colonies with colonies of average bee strength
6. If colonies have less honey stores, feed them with heavy sugar which is prepared by:
   - ➢ Dissolving 2 parts of sugar in one part of boiling water (2:1)
   - ➢ To avoid crystallization, add 1 table spoon full of tartaric acid to each of 50kg of sugar
   - ➢ Fill this syrup in combs and exchange for empty combs in the hive

Precautions

- Sugar should be fed while:
  - ➢Outside temperature is sufficient for bees to take syrup and store in combs after reducing its moisture
- To avoid robbing, feeding should be done only in the evening