

HONEY BEE  
DISEASES AND  
PESTS

Tools and  
Equipment used in  
Beekeeping

# Honey Bee Hives

- In wildlife, honey bees choose places such as tree and rock cavities as their home.
- In 3000 B.C. years, the honey bees were placed into hives made from mud in ancient Egypt.
- Over time, the baskets (ruskie) and trunks were also used as hives.
- These primitive hives are still being used in Turkey, though rarely.

- The ruskie are long cylindrical.
- The ruskie knitted from willow branches is prepared by plastering with a mixture made by soil, turf and wood ash.
- There is a flight hole in front of it and a cover behind it.
- It is difficult to intervene in this type of hives.

◦ There are mainly two type of modern hives.

1. Langstroth type hive

2. Dadant type hive

- The Langstroth hive is used mostly in areas where flowers are present at a certain level for a long time, the honey season is long, the climate is mild, and very dense flowers exist.
- It is more useful than Dadant type hive and it is more common.
- Dadant type hives are used in cold areas.

- There is a cover on the top.
- There is a honey chamber on the top and a brood chamber on the bottom.
- There are approximately 10 frames in each chamber.
- The honey chamber can be two.
- Inner cover
- Division board
- Entrance
- Flight board
- Hive stand (should be 30 cm above from the ground)
- Queen excluder

Outer cover (roof)

Honey chamber

Brood chamber

- For hive construction, 2.5 cm thick board is used in Langstroth type hive, while 3-3.5 cm in Dadant type hive.
- These boards are roasted and do not get too much moisture.
- In Langstroth type hives, the heights of honey and brood chambers are equal and are 26 cm.
- In Dadant type hives, the height of honey chamber is 17 cm., while the brood chamber is 31 cm.
- In both of them, the wide of the front side is 38,5 cm., while the lateral side is 45,5 cm.
- Hives made from styrofoam are also produced in recent years.

# Comb Foundation

- The honey bees consume 20 gr. honey in order to produce 1 gr. honeycomb under natural conditions.
- Pre-obtained waxes are melted at  $75^{\circ}\text{C}$  to avoid this consumption.
- It is sterilized at  $110^{\circ}\text{C}$ , then melted wax is pressed into special molds.
- Thus, time and work are saved.
- Sterilization is important (in terms of diseases).

# Plastic containers for syrups

- The honey bees should be supported in terms of food, vitamin and mineral especially at the beginning of spring and last autumn.
- Syrups are prepared for this purpose.
- The sugar syrups can also be prepared to give medications.

# Other materials

- Smoker
- Mask
- Frame bar
- Honey knife
- Pollen trap
- Skep for taking swarms
- Brush
- Honey centrifuge