**Lecture-7-**

**Type of foods:-**

**1-Honey:** Honey is the best food for the bees and a beekeeper should always leave enough honey stores for them at all times.

**2-Sugar syrup:** If there is no honey, we shelter to feeding bees on sugar syrup which is the best substitute.

**Preparation of sugar syrup**:

A- By dissolving sugar in hot water with continuous stirring till full dissolving.

B-Different syrups of sugar were prepared according to the season.

C-Leave syrup for awhile to cool then fills the feeders and submitted to bees.

**The required caution which taking at feeding on sugar syrup**:-

1-Use pure sugar devoid of impurity, not burning, reverses that cause bees dysentery.

2-After placed feeder required narrowing the hive entrance fear from Robbing.

3-Feeding all colonies at the same time if there is enough feeders, else the strong colony will feeding at first, the weak later fear from robbing.

4-Don’t let sugar syrup at long time so that not fermentation.

5-Itis necessary to clean the feeders continuously by hot water after every feeding avoid happen fermenting.

**3- Candy:** There are two types of candy:-

A-Queen candy: It used for feeding queen or her attendants during queen transporting in cage.

B-Workers candy: It used for feeding bees during winter and placed on the top of the frames or in the Rim feeder or inner cover.

**4- Dry sugar:** It used directly for bees feeding during spring or summer season by dispersal it on the frames or on the inner cover.

**5- Pollen and pollen substitutes and supplements:-**

Pollen is a protein food. Brood rearing is impossible without it .And it is necessary for stimulate queen to lay eggs.

**Feeding in different year season:-**

**1-Winter feeding:** Honey or candy.

**2-Spring feeding:** Diluted sugar (1sugar:1water) in early spring to activation the queen to laying eggs, by slow feeder.

**3-Summer feeding generally not shelter to it.** But when catching swarm or buy a new nucleus we feed them by sugar syrup (1sugar: 1or 2 or 3 water) or by dry sugar.

**4-Autumn feeding:** By concentrated sugar syrup (2,3parts of sugar +1 part water).

**Inspection of honey bee colony:**

**When the colonies are inspecting:** Generally not inspect when the weather is cold- and- rainy, stormy and hot**.**

**But inspect in these cases:-**

1**-**During spring season when the buildup or honey flow period, the bee colonies need to be examined every week to addition frames or combs and to remove queen cells to prevent swarming and in late season to lift frames with sealed honey.

2-In summer only once or twice a month the colony may be examined in early morning or evening but not during day time.

3-In autumn season colony may be examined to lift extra frames for readiness wintering.

4-During winter, they should be examined in the middle of worm day, once or twice during the season and quickly**.**

**The goals of the inspection colonies:-**

1-To looking for queen and its activity.

2-To looking for brood and look for if there is any disease or pests which attack bees and broods.

3-Determine (show) if there are enough empty comb are available for queen to lay eggs or for workers to store pollen and honey for brood rearing. If not more frames or combs should be provided. And brood or honey chamber are provided too as they need.

4-Examine if bees have sufficient stores of nectar (honey) and pollen or require artificial feeding.

5-Examine if there is sealed honey for extracting.

6-Cleaning inside hives from any residual.

7-Examine for the presence of queen cells and destroy if any and crush the larvae inside it to prevent swarming.