

Hunting Food of God and Aquitance with the Value Added Products

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Introduction:

Honey! How Sweet! Its name itself presenting the sweetness of it. Honey which is made by honey bees for nourishing their bee colonies as well as for human health. It acts as a super nutritious food having plenty amounts of proteins, vitamins, irons, minerals, and antioxidants.

Before going for harvesting the honey, first the bee keepers needs some precautions because the bees have alarming pheromones and they send it other honeybees that they have an intruder in our colony to steal the food so we have to attack, so if we did not take any precaution they will attack us because honey bees are very defensive of their honey and aggressive to intruders. Do not use any fragrance for sure.

When to harvest the honey?

It is a big question for some farmers still today's date. The bee keepers need to know when to harvest the honey or the correct time to harvest the honey. According to the great Roman writer Columella "the honey is ripe when the hives begins to expel the drone bees and the combs are sealed" this makes sense because no doubt we are practicing that method only.



Smoking and Brushing

Why smoking and brushing?

- Smoking the bees will subdue and drives the bees away from the frames or make them calm down for a while which will help the bee keepers to easily remove the frames.
- For smoking there is a smoker known as Bellow type smoker, who uses it around the hive entrance for 5-10 minutes by puffing a little smoke through the smoker which fuels coconut lint's, twigs- nothing toxic etc.
- A soft broom brush should be used to brushing them out from honey combs if there are any bees left before taken out for extraction.



Transferring the Frames From Hive

- Remove the honey frames from the bee hives and brush off the bees from the honey combs.
- It should be done in the evening hours so that there is no brood in it.
- Take it away from the bee hives to a safest place indoors and place it in an empty hive and cover it.
- It's important to keep the place clean and hygienic.

Uncapping Frames

Why uncapping?

- Honey bees preserve the honey by capping it in wax cells.
- It takes a long time to honey bees to build the wax comb and sealed the honey so the wax is most valuable product we need.
- To uncap the frames either steam heated uncapping knife or flame uncapping knife is used to cut the wax from the top of the cell on both sides of the frames.
- Used sawing motion will cut the capping off.



Honey Extracting

- Extracting the honey means removing it from the hive frames.
- Extractors vary according to the bee keepers.
- The smallest extractor a 2-frames manual types whereas some others are completely automated and hold 120 frames at a time.
- First place the uncapped frames into the honey extractor which works on the principle of centrifugal force generated manually the spin it in one direction.
- When the one side of the frame completely remove the honey then use the other side and place it in the extractor and follow the same procedure.
- Then strain the honey through filter then pour it in container.





Value Added Product from The Apiary

1. Bee Wax

- It synthesized by old worker bees.
- It contains 70-75% of esters of alcohol and fatty acids ,14-15% of free acids and 13-16% of saturated hydrocarbons.

Hot water Extraction method: -

- Bee wax is obtained from capping which is collected from honey extraction and old combs.
- Wash the crushed combs until they are free of impurities and honey.
- After removing the impurities then put it in a suitable clean cloth.
- Then push the cloth of honeycomb well down into the boiling water.
- Keep pressing until the wax has melted the wax will run through the mesh and rise to the surface of the water
- Leave the wax until it gets solidified on the surface of the water as it cools.



2. Royal Jelly

It is a viscous substance secreted by the hypopharyngeal gland and mandibular gland of nurse worker bees that constitute the essential food for the larvae of the queen bee.

It is creamy milky white strongly acidic highly nitrogenous with slightly pungent odor and bitter.



Extraction method of Royal Jelly: -

- Transfer two days-old larvae to queen cell cups attached to the bar of the queen cells frame.
- During spring it contains 120 queen-cell cups and in autumn it is 60 queen cell cups.
- As soon as possible insert the grafted frame so the bees can work on it.
- After 72 hrs. Remove the frames for harvesting.
- Safely remove the larvae don't harm them.
- Extract the Royal jelly with the Sharpe blade and then extract the jelly either with the help of aspirator or in a vacuum form.
- Don't contaminate the royal jelly.

3. Bee Venom

It is produced in the venom gland and stored in venom sac attached at the base of the sting of worker bees.

It is watery material with Sharpe and bitter taste consist a no. of proteins and aromatic smells.

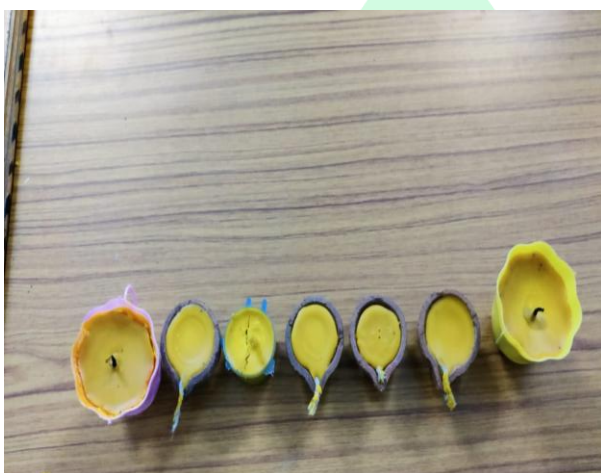
Extraction of Bee Venom: -

- It consists of a thin steel or copper wires approx. 6mm parts and suspended are charged to a current of 33 volts.
- It comprises a bee venom collection frame with wire electrodes installed parallel to each other.
- When the bee stings the surface beneath the body which is as white as the dimension of venom bottom is inserted in the hive body by removing the entrance board.
- When bee body touches the wire of venom extraction, they get the mild electric shock and stung onto the glass sheet, under the collecting plate.

- Collecting surfaces such as way that the bee doesn't lose its sting, venom dries up rapidly on the glass plate and can be scraped off with razor or knife.
- Then this productive store shift and processed.

4. Beeswax Scented Candles

- This product is prepared by using only beeswax and some essential oils and aroma oils.
- Which gives the pleasant fragrance of different flavours such as rose, jasmine, sandalwood, lavender, lemongrass.



5. Honey Lollypop

- This product is prepared by using sugar caramel and pure honey as it is very beneficial and contains many vitamins which helps in improving metabolism.
- This product also contains some amount of lemon juice which is rich in vitamin C.

6. Honey Sharbat

- This honey Sharbat contains chia seeds, pure honey, lemon juice, mint leaves.
- Chia seeds are known for improving heart health and intestinal health. This Sharbat contains many benefits for better health.

7. Propolis

- It is resinous substance of plants collected by bees for ceiling cracks and crevices; propolis is obtained by scrapping it from the frames.
- It contains 55% resins and balsams, 10% ethanol and scented oils, 5% pollen etc.
- It is a natural antibiotic with medicinal qualities.
- Used for preparing ointments and Vaseline.

8. New colony by colony division

- At the major breeding season just like summer we can go for colony division and there by not only it can multiply the unit but also can become a major bee colony seller.

Last but not the least some words for Honey BeesKeepers: -

- They are also living being don't harm them much for your benefits handle them softly and carefully.
- Leave some amount of honey for their purpose don't take all the honey.
- Sell the honey in a fair price don't over charge.

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