



BEE KEEPING



Introduction

Honey production is an alternative source of income for communities arid and semi-arid regions in Kenya.

The demand for improved quality and quantity of hive products requires use of modern methods of beekeeping and the following steps can be used to increase honey production.

i) Siting the apiary:

- Place hives under shade away from direct sunshine since excessive heat melts combs.
- Site apiary at least 100 metres from the nearest house.
- Grow a hedge around the apiary so that bees fly vertically as they enter and leave apiary.
- Provide water to minimize danger of bees in houses.

ii) Use the modern hives:

- Modern hives have moveable lids that allow opening to monitor bee activities without harming the bees.
- Place hard board under iron sheet lid to cushion excess heat for better bee occupation.
- Construct hives with timber that is termite proof, resistant to rotting due to effect of sun and rain, warp proof and non – bee repellent e.g. mvule.



Apiary

iii) Control of pests:

- Bee pests that affect hive occupation and development of bee colonies include: wax moth, beetles, ants, bee pirates, spiders and squirrels/rodents.
- Maintain a strong colony to fight invading enemies.
- Inspect the hives every month to remove cobwebs and rodents.
- Maintain cleanliness of apiary.
- Apply grease-insecticide mixture on hive hanging wires.

v) Handling bees:

a) Proper dressing:

A protective kit is required when bees are being handled. The kit comprises of;

- Complete bee suit with veil, leather gloves and gumboots or ankle boots.
- The other tools are the smoker, hive tool and bee brush. Check with your co-worker whether you are properly dressed before entering the apiary.



Protective Kit

b) Starting the Smoker:

To reduce aggressiveness of bees smoking is done with cool smoke from dry debris, wood shavings, saw dust.

- Start the fire from the bottom and then load smoking material (fuel) from the top and compress lightly until the cylinder is filled to capacity.
- Pump severally until there is smoke, indicating that fire is established before closing the lid. The smoker is now ready for use.



Smoker

c) Opening the hive:

- Avoid approaching the hive directly at the entrance because obstruction of bees' fly-path makes them aggressive.
- Apply smoke into the hive from the entrance and around the lid and wait for two minutes and repeat before opening.
- With the lid open, tap the top bars or frames from the entrance backwards to determine the extent of comb construction. The point of change in sound signifies the end of comb construction.

Move two bars ahead and open the top bars or frames leaving adequate working space while directing smoke gently at this point so that bees remain inside the hive as you work. Maintain gentle movements. Fast movements irritate bees. Avoid crushing bees.

vi) Harvesting honey:

Harvest combs that are fully capped or at least 2/3 capped to obtain honey of less than

20% moisture content. Do not harvest combs that contain brood or pollen as they will affect the quality of honey.

vii) Processing honey:

Small scale processing is done using home-made equipment. Crush selected honeycombs then pass mixture through a series of strainers (60, 90 and 120 holes per square inch) by gravity for about 12 hours. Do not squeeze.

viii) Packaging honey:

Pack honey in plastic or glass jars for the market. Honey can also be sold in the comb without processing (comb honey).

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