



Solar wax melter (Source: Jonah Kinyanjui)

d) Steam Wax Melter Requirements

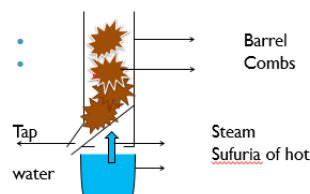
- Clean combs
- Wax extractor
- Water
- Source of heat
- Moulds
- Soap (detergent)

Procedure

- Fill the extractor with the clean empty combs.
- Smear soap on the inside of the moulds for ease of wax removal.
- Boil the water to produce steam so as to melt the combs, letting the melted wax into the moulds.
- Allow the molten wax to cool for 6-12 hours.
- Remove the wax from the moulds.

NB: New combs yield more beeswax than old combs.

This method may however demand more energy for heating.



Steam wax melter, illustrations (Source: Jonah Kinyanjui)

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EXTRACTION OF BEESWAX FROM HONEYCOMBS



Introduction

Beeswax is extracted from empty honeycombs by boiling the combs in water, sieving and cooling. The extracted beeswax has many uses, including baiting of hives, making of candles and creams as well as wood and leather shine waxes.

Methods of beeswax extraction

1. Squeezing method
2. Immersion method
3. Solar wax melter method
4. Steam wax extraction method.

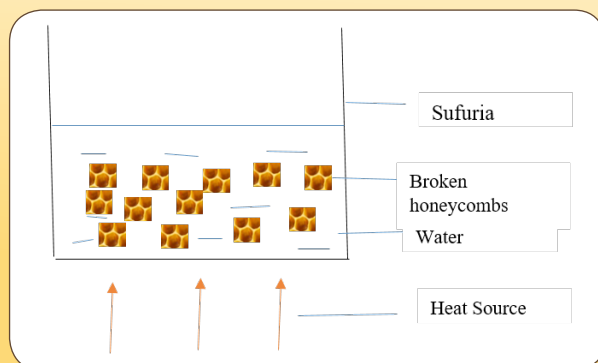
a) Squeezing method

Requirements

- Empty honeycombs
- Cotton straining bag
- 2 wooden rods or wax press
- Water
- Source of heat
- Soap
- Mould (any heat resistant containers to hold and shape wax as one desires)
- Wooden stirrer

Method

- Remove impurities e.g sticks, dead bees etc.
- Rinse the combs in cold water
- Immerse the combs in clean water and put to boil until they break apart.



- Pass molten wax through a cotton bag and squeeze into a holding container as shown in the picture below.



Squeezing wax out of a wax cotton bag. care should be taken to avoid burns (Source: Jonah Kinyanjui)

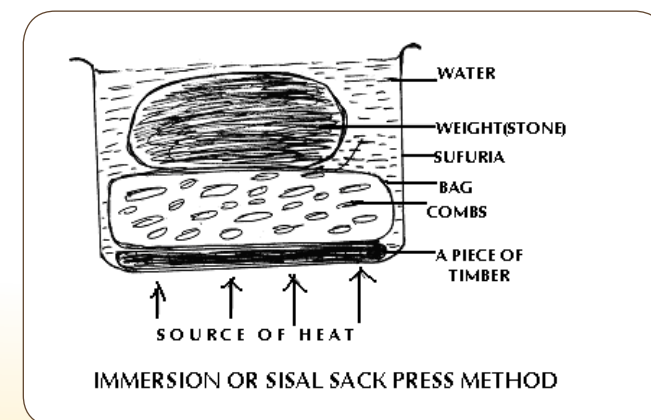
- Allow to cool overnight. Upon cooling, a layer of wax will float on water as a cake. This can easily be collected.
- Select suitable moulds with desired shapes and lubricate them by rubbing with unscented bar soap.
- Melt the wax collected. You can pass it again through a wax cloth and into the moulds. Allow enough time to harden before removing the beeswax cakes from the moulds.
- Wrap the beeswax in print paper for safe

keeping in a clean, dry place.

b) Immersion method

When large amounts of honeycombs are available, the immersion method is convenient. The combs are placed in a sisal sack after cleaning in cold water to remove any traces of honey. The sack is placed in a water drum and heated. A weight is placed over the bag to ensure it doesn't float.

As the combs get heated above 65°C, dissolved beeswax escapes out of the bag. The set-up is then allowed to cool, allowing the wax to harden above the water in the drum.



c) Solar wax melter method

This method uses sun's rays as a source of heat.

Requirements

- New combs
- Solar wax melter

Solar Wax Melter

Procedure

- Clean and dry the combs in the sun.
- Place the clean dry combs in the wax melter and place it in an open space, well exposed to the sun's rays.
- The wax collects in moulds