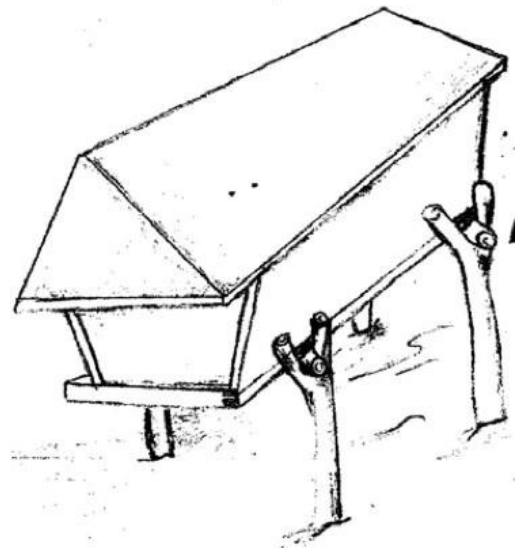
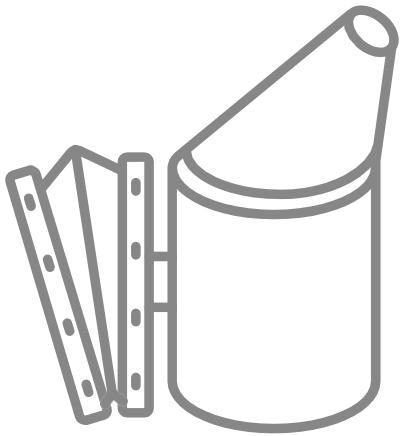




# Basic Beekeeping Guide



# Benefits of Bees

## Products:

Honey from bees doesn't go bad and is used in traditional and modern medicines. Honey is rich in antioxidants and can be used to treat inflammation, infections, and wounds. Honey is also rich in vitamins and minerals and is useful in skincare and cosmetic products. Beeswax, harvested from the comb that bees make, is used in polishes, cosmetics, toothpastes, candles, ointments, and creams. Bees also make propolis, or “bee glue”, which beekeepers use to seal holes in beehives and to bring in new swarms. Royal jelly is the protein rich substance given to larvae, especially the larva of the queen bee. Royal jelly contains proteins, vitamins, minerals,

sugars, fats, and amino acids. Bee pollen is also high in protein, with approximately 40% protein content, and is rich in B-complex and folic acid which makes it an incredibly nutritious food source..

## Pollination:

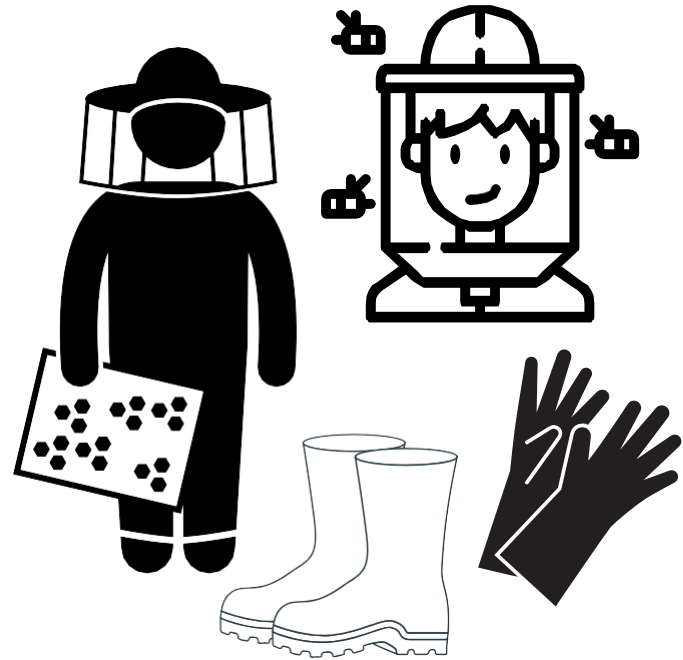
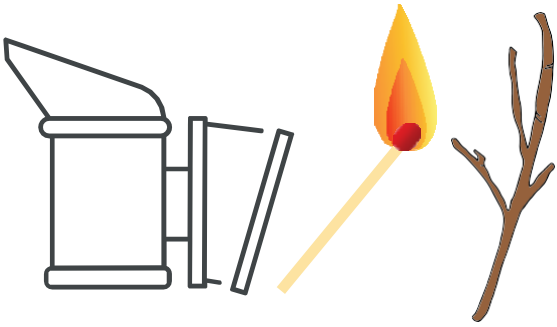
Bees also provide pollination services, which can help crops and plants to grow more successfully. Beekeeping pairs well with protecting forests because bees need the nectar and pollen of plants to create honey, wax, and other materials in the hive. Beekeeping does not compete for resources on a farm as bees provide pollination services but do not remove resources that may conflict with other farming practices. Beekeeping can increase crop yield of 30-40% from pollination

by bees, and managing bees in orchards can lead to higher quality fruit yields, because bees like to focus on one type of plant at a time, so planting fruit trees and keeping bees at the same time is a great practice.

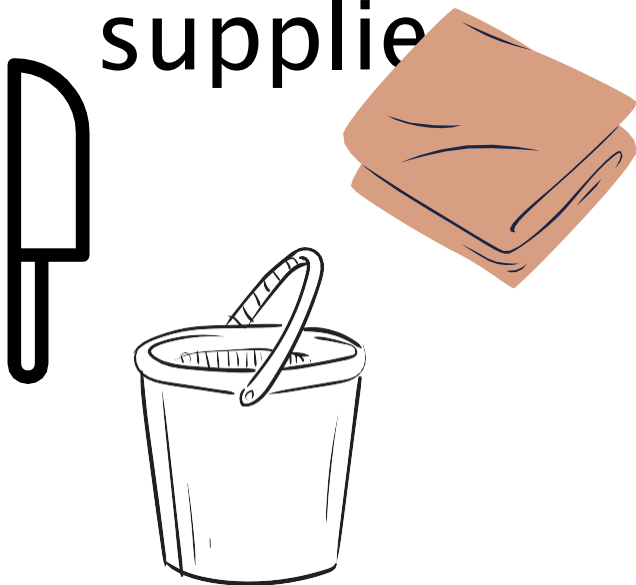
# Beekeeping Materials

Bee Suit

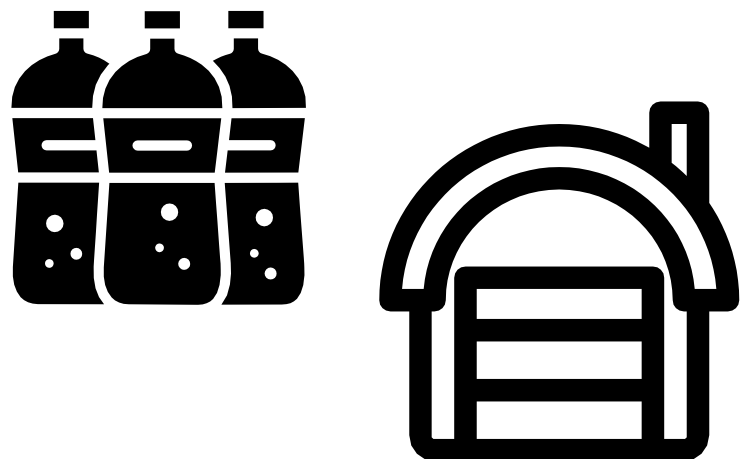
Smoker



Harvesting  
supplies



Storage  
supplies



# Keyan Top Bar Hive

Kenyan Top Bar Hive: Dimensions

97cm

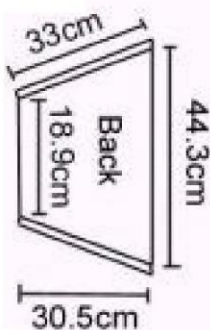
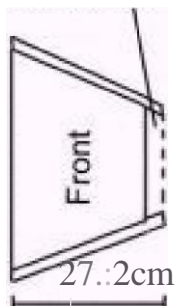
Lid  
58cm X 97cm

UIC  
no 3

Entrance  
3.3cm X 19cm

Side  
33cm X 88.9cm

Bottom  
22.9cm X 96.5cm

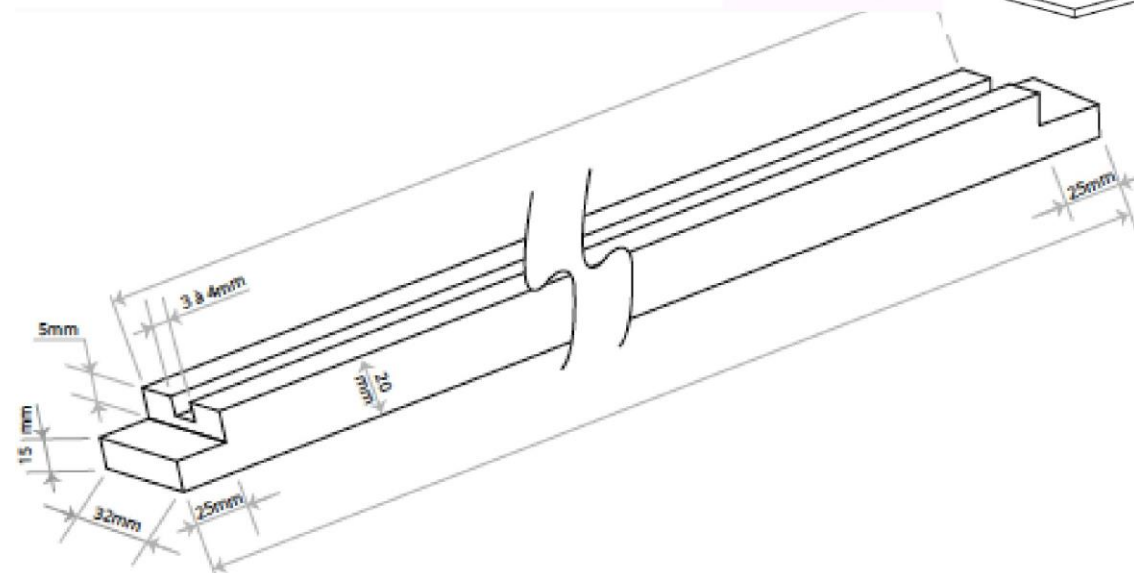


44.3cm

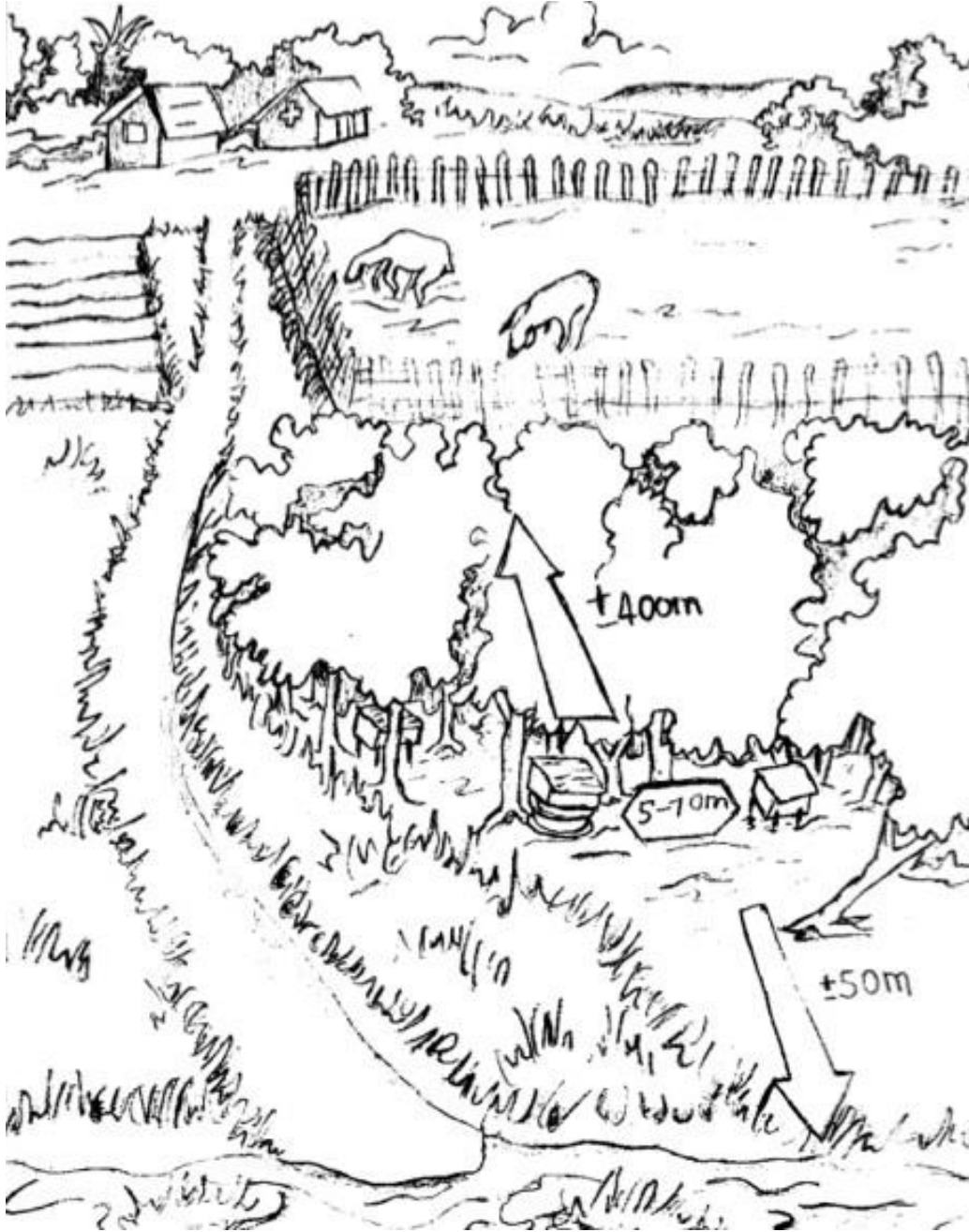
Side  
33cm X 88.9cm

Top Bar  
(upper  
surface)  
3.2cm X  
46cm

Top Bar  
Show the groove cut  
in lower surface

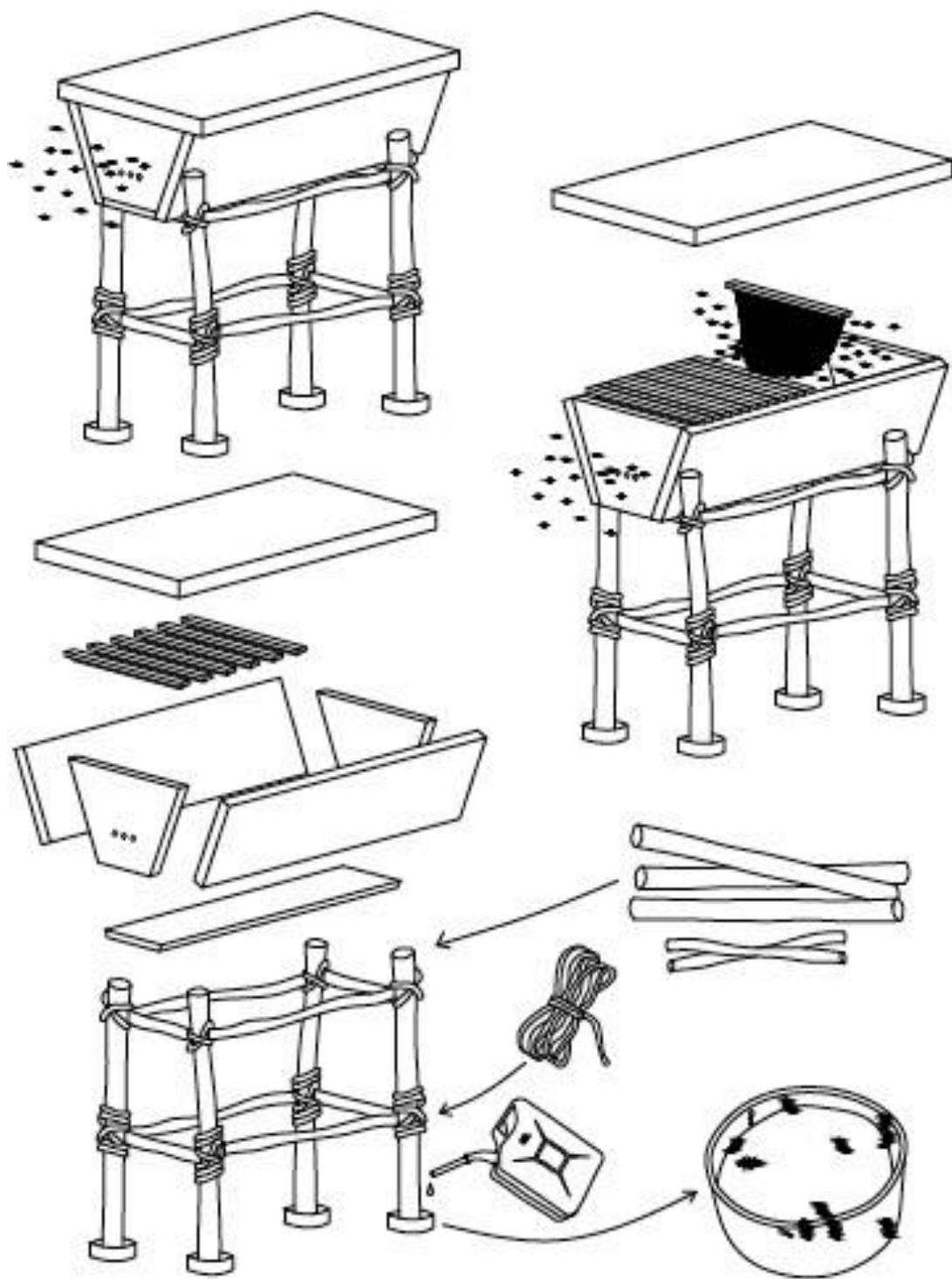


# Hive Location



- 5-10 meters apart
- 50 meters from water
- 400+ meters from livestock

# Installing Hives





# How to move a colony

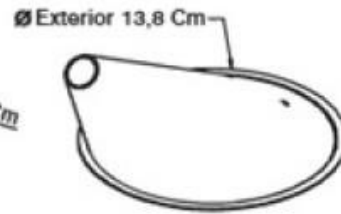
- Traditional beehive
- Move the traditional hive, put the top bar hive in place
- Open the traditional hive, remove the combs
- Put the honeycombs in a covered bowl
- Place the worker brood comb in the top bar hive
- Pour the remaining bees into the top bar hive, close the hive, reduce the entrance
- Make sure the traditional hive is discarded far



away to prevent the bees from returning

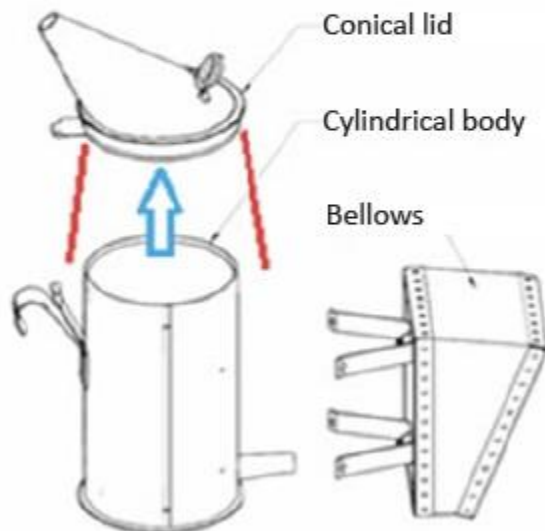
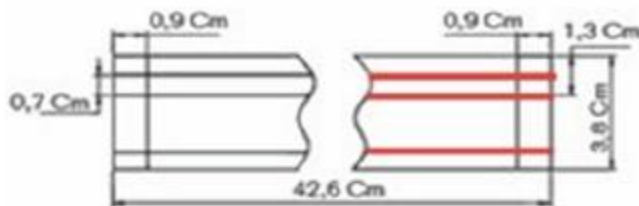
# Smoker

## Top

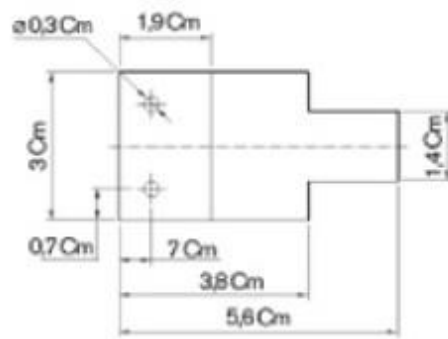


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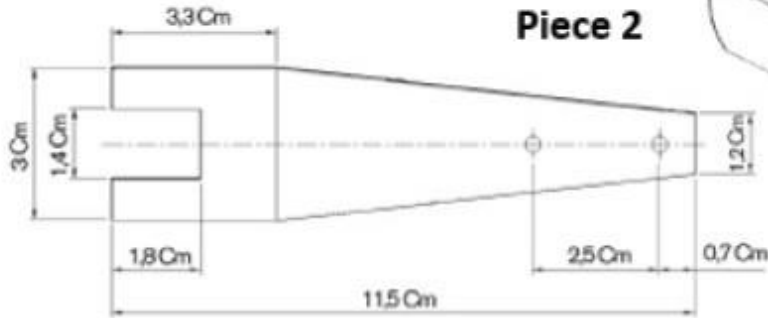
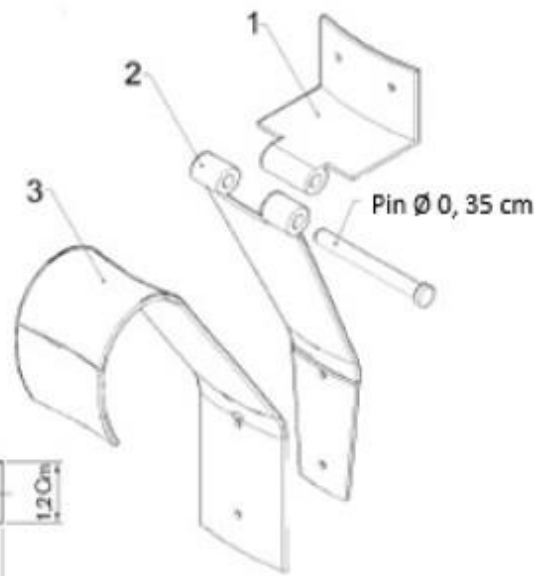
## Ring



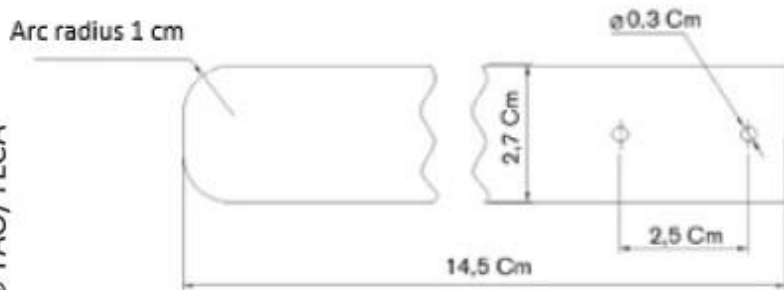
© FAO/TECA



**Piece 1**

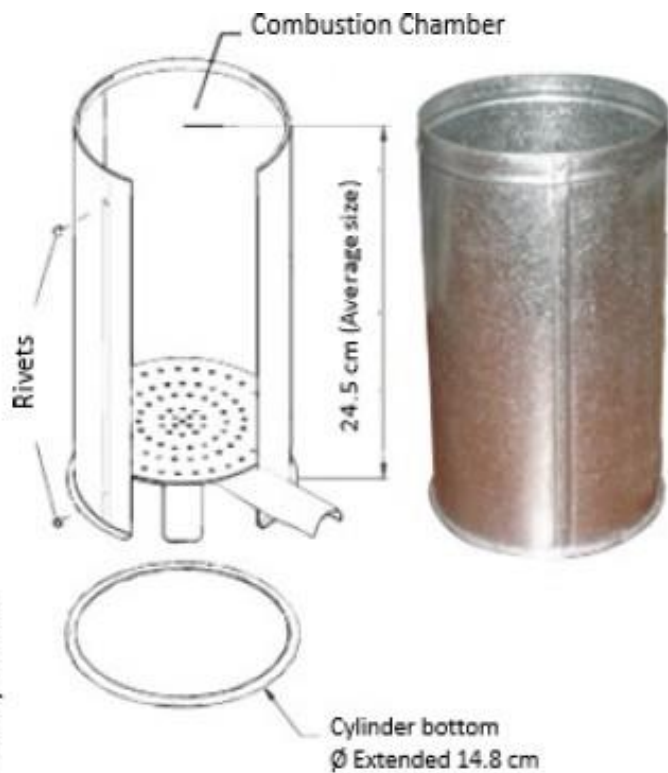


**Piece 2**

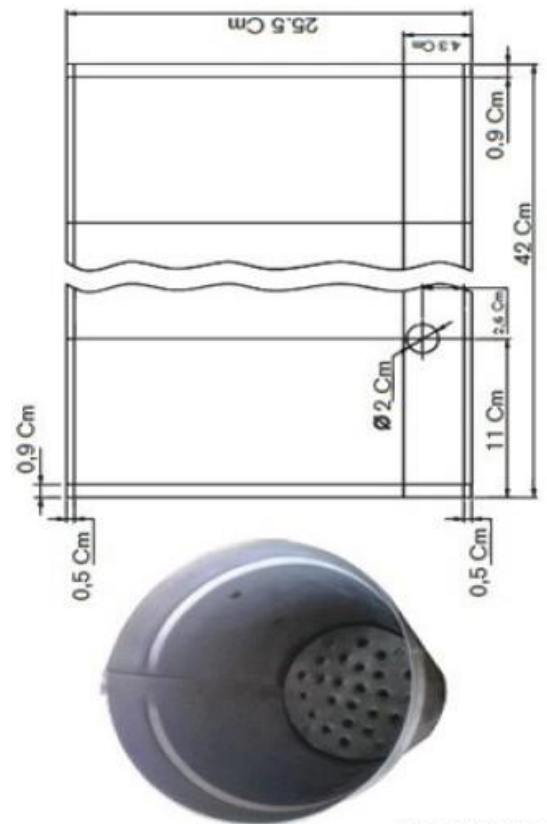


**Piece 3**

© FAO/TECA

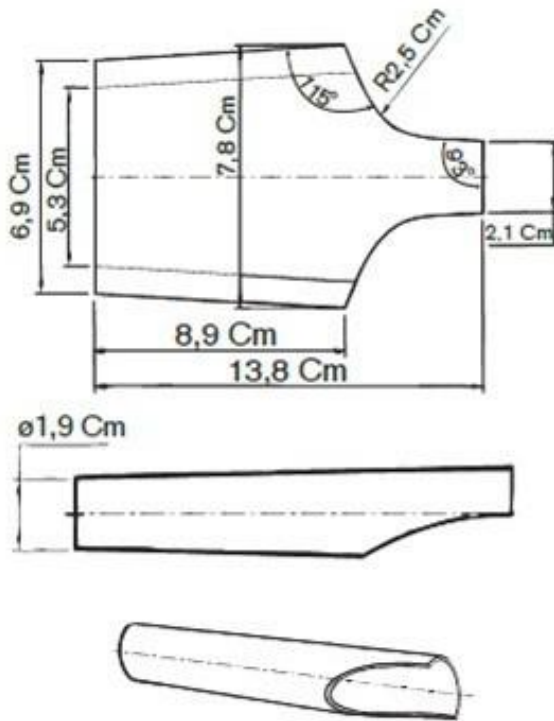


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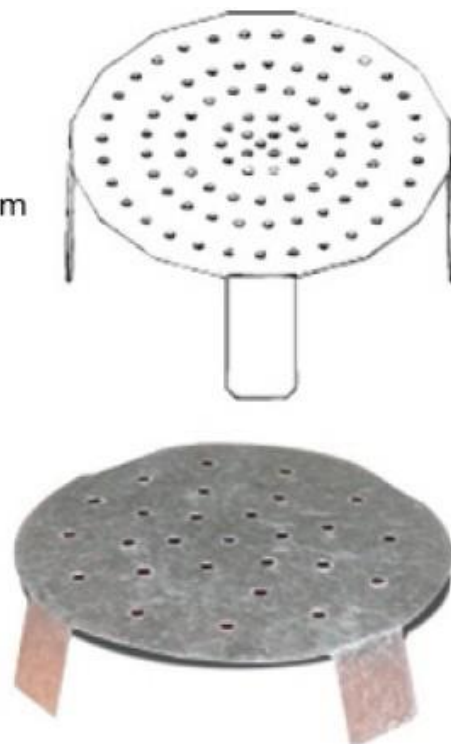
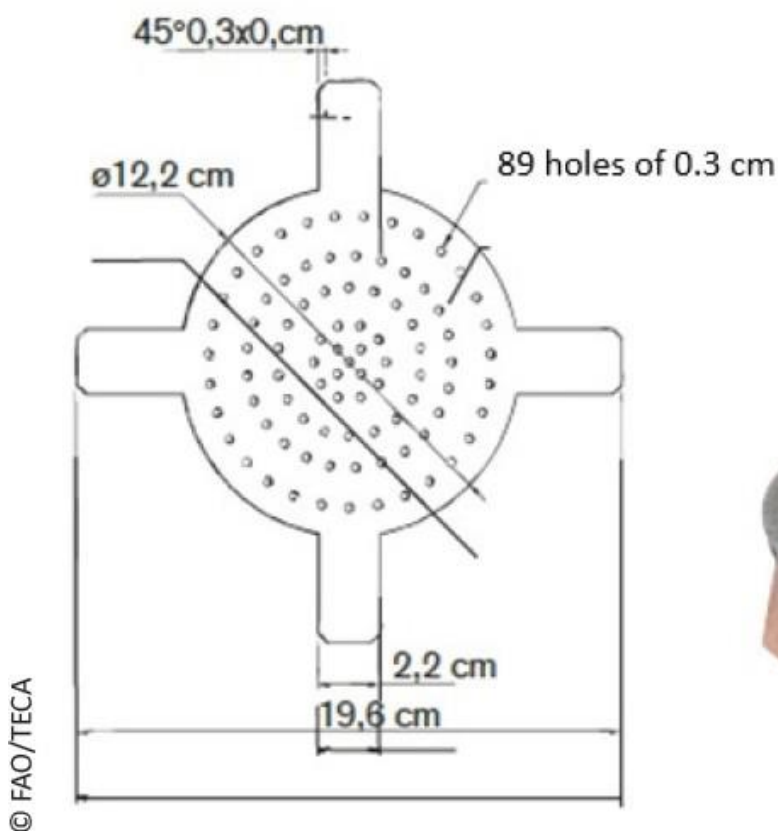


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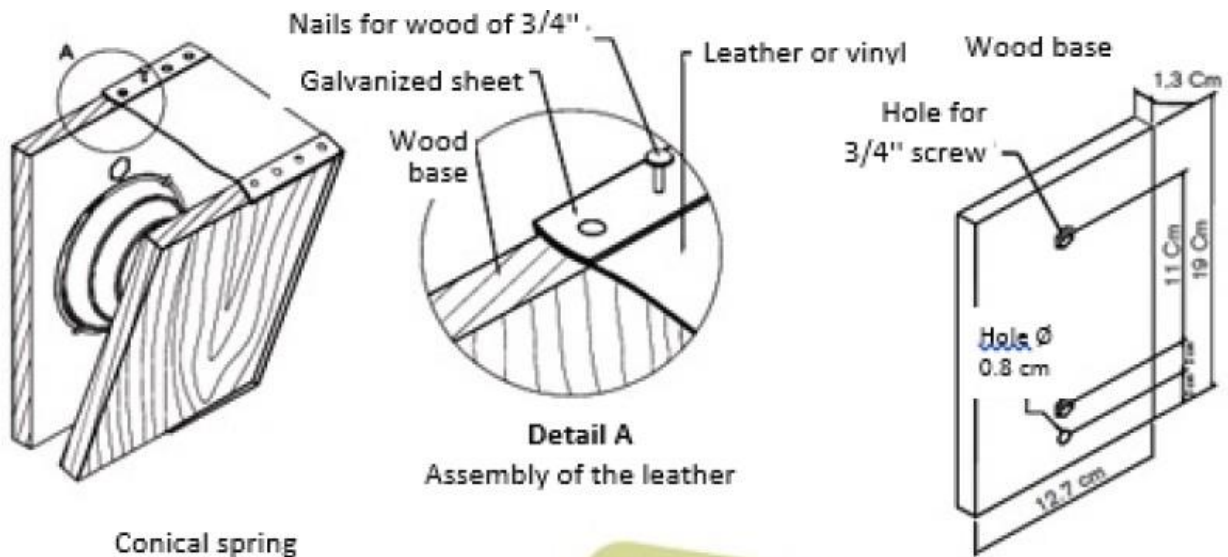
# Air injection pipe to the combustion chamber



## Grate



# Bellows

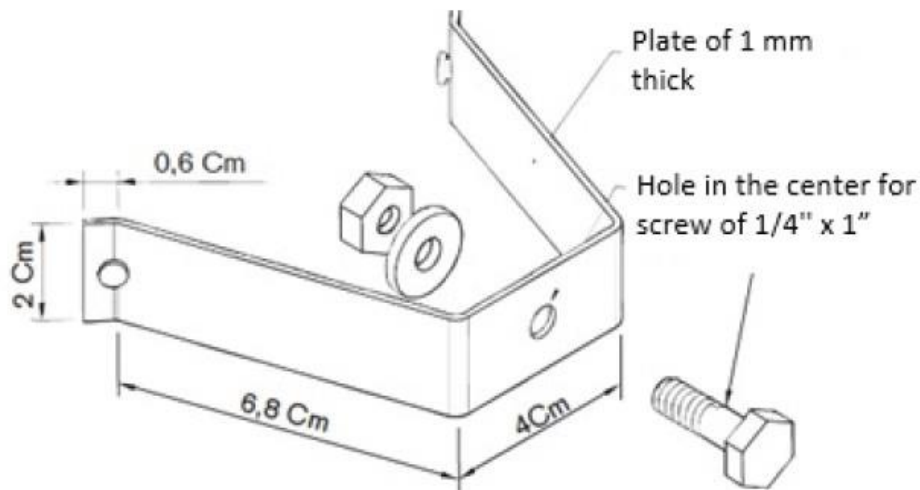


Two equal pieces  
Only one contains holes

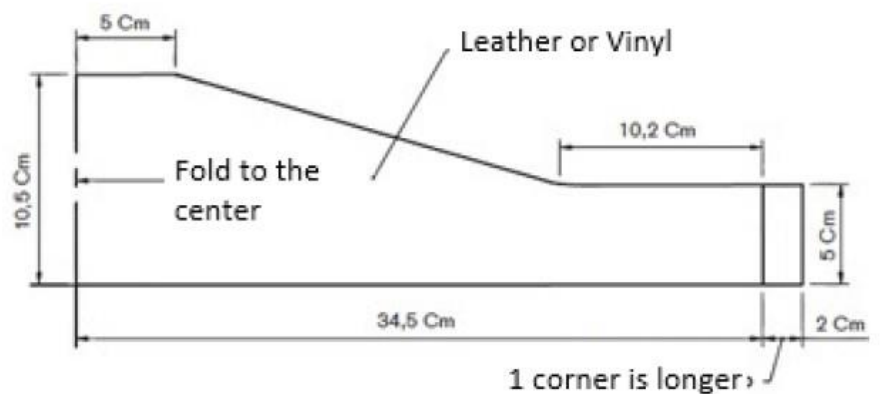
Conical spring  
Base Ø9x13 cm



© FAO/TECA

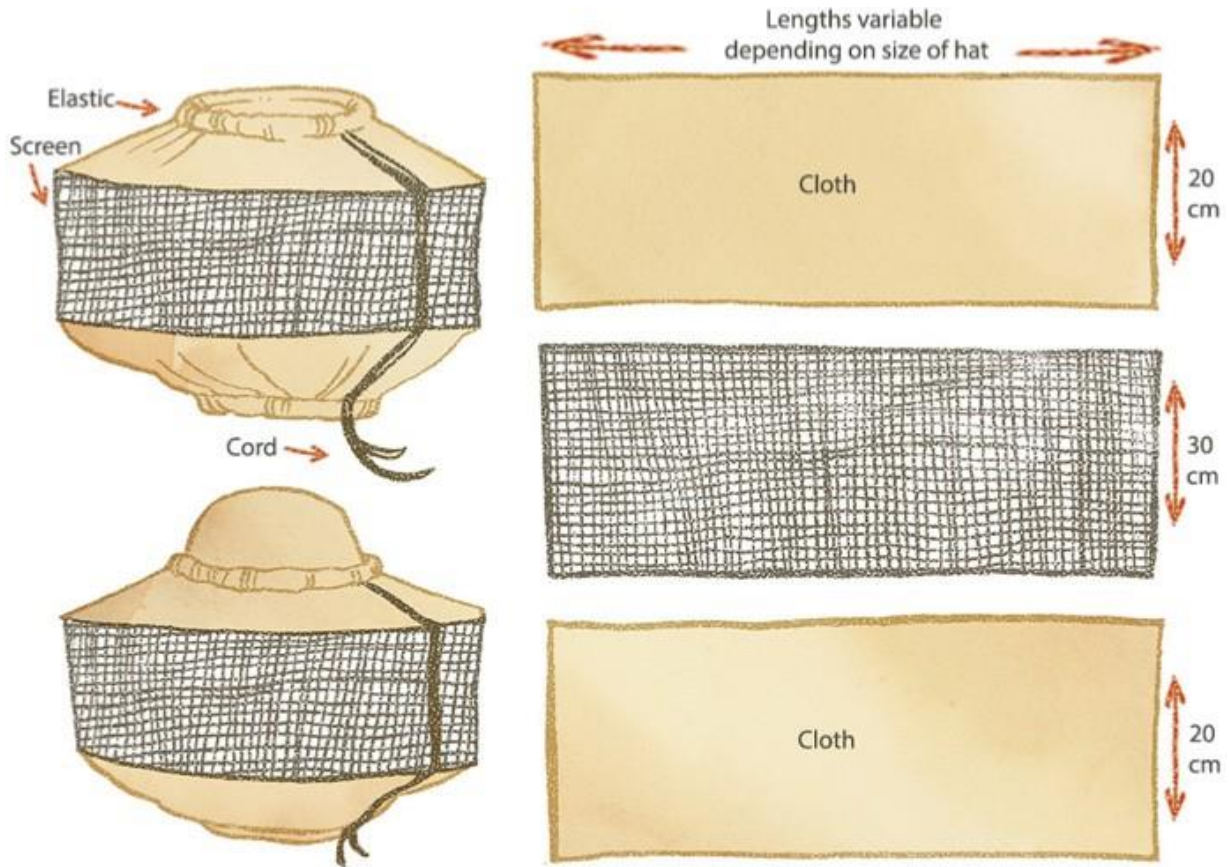


Leather (or vinyl)





# Bee Suit

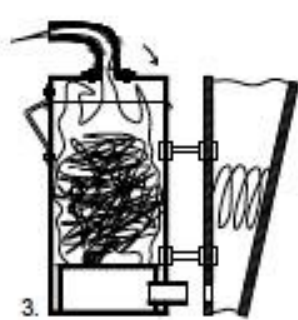
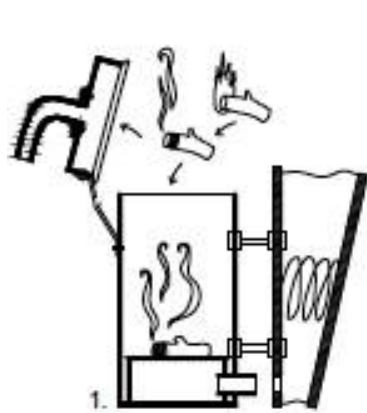
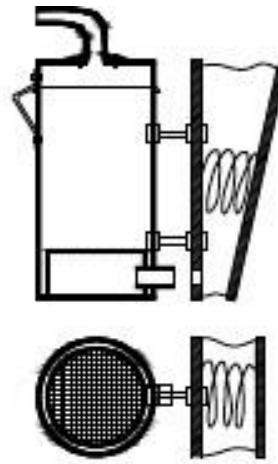
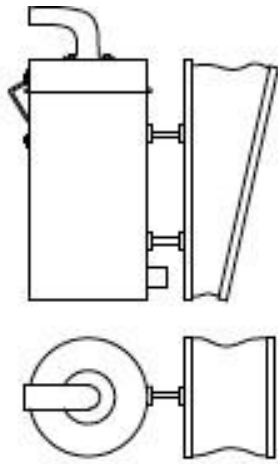


## Other Materials:

- Gloves
- Socks
- Boots
- Brimmed Hat
- Pants/Long sleeve shirt with elastic openings

\*Bee suits should be light fabric and fit loosely except at elastic openings

# Lighting the Smoker





# Harvesting



# Storing Honey

- Harvest comb with just honey
- Cut the comb
- Strain through wire or cloth
- Store in clean jars or bottles.



- Store honey in a cool, dry, dark place