## TOOLS USED IN BEEKEEPING

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**Abstract:** This article provides information about the equipment, protective equipment, and the rules of their use used in beekeeping for feeding bees and extracting honey.

**Key words:** Bees, tools, mother bee, face mask, comb.

Beekeeping equipment - equipment used in beekeeping and extraction of beekeeping products. Asala-687 includes tools for bee control protection, beehive cleaning, honey combs, wooden frames, queen bee care, and honey extraction tools. It is used to create favorable conditions for bees, to improve the quality of honey, and to ensure that beekeeping products do not die. In addition, in beekeeping, beekeeping tools are used for attaching wax curtains to new frames for bees, separating honey from frames, processing wax raw materials, repairing, lifting apiaries, painting and other works. When working directly with bees, a special beekeeper's head mask.

The mask is made of black net. White and other colored nets are not suitable for this, because they tire the eyes and do not show clearly. So that the net of the mask does not touch the face, a circular wire is placed inside it and the net is tied around the neck with a string. The beekeeper's head is worn to protect the head from bee attacks. A ring made of wire is installed at the height of the forehead and chin of the human head. A small black mesh is sewn from the front of the eye to the shoulder (body outside the black mesh is better visible). A rubber band or thread is inserted into the bottom edge of the net. With this thread, the skirt of the net is tightly tied around the neck of the beekeeper, so that the bees do not enter the human neck.

A beekeeper's robe, all clothes, if possible, should be made of white cotton fabric.

A hive is one of the most necessary tools for working with bees. This tool is used to separate the magazine from the floors of the apiary, move the frames, clean the walls, floor and other areas of the apiary from wax and bee glue. Bees stick the shoulder of the frame to the inner side of the hive wall with propolis. For this reason, it is necessary to slowly dislodge the frame before pulling it out. Iskana makes this job easier. The bees glue the frame boards to the wall with wax. Therefore, before removing the frame, it is necessary to tear off the glued wax with a chisel, mass 0.15 kg.

Incense burner - this tool is used to flush bees with incense while inspecting the hive. The censer consists of a cylinder made of tin and a rest connected to it. An internal

cylinder with a latticed bottom is installed inside the burner. A space is left between the bases of this cylinder. In the part of the outer cylinder wall corresponding to this gap, there is a separate hole, air enters through this hole when the rest is pressed. The censer is closed with a return cap made in the shape of a circle, the smoke comes out of the hole at the end of this cap. Before removing the hatch cover (for example, before removing the upper magazine), smoke is injected into the flight holes 2-3 times. It is necessary to move gradually when dividing the hive into pieces. After removing the cover and the heating pads directly under it, the edge of the covering fabric on the frame is raised, and smoke is injected there 1-2 times. Then the covering cloth is taken aside. Opened frames are removed gradually. The exposed lower frame should be covered with a cloth. Non-flammable fuel (cattle dung, rotten tree bark, sawdust) is burned inside the smoker. Air from the outside is introduced into the smoker with the help of a baskan (made of leather, similar to a harpoon), and the amount of smoke is changed. Bees that fall into the smoke fill their hives with honey, reduce their anger, and become non-stinging. It should not be left in a damp place. Otherwise, the leather may become rough and crack, and the wood may rust. It is necessary to clean the net and the lid of the smoker. If it is necessary to extinguish unburnt fuel (chips), something is blocked in the place where the smoke comes out.

The movement of air through the hearth stops and the embers go out. If, on the contrary, it is necessary to intensify the burning, it is necessary to press the trigger several times by hand and introduce more air into the fire. ng, it will return to its original state. Special flaps provide suction and release of air under pressure. Old rags should not be used as fumigation fuel, as they produce acrid smoke that irritates the bees. The dimensions of the smoker are 220x118x250 mm, the diameter of the case is 100 mm.

Brush - for sweeping the bees from the frames into the apiary, it is made of soft and dense white horsehair.

The walls of the cage are made of wire mesh with a mesh size of 3 mm. In the upper part of the cage there is a hole for placing the queen bee, and this hole is closed with a tin sliding cover. The bottom of the cage is closed with a wooden cover. In this cap, there is a cavity where food is provided for the queen bee. This cage is used to separate the queen bee or queens, as well as to place the queen bees in a new family. The length of the queen bee cage is 36 mm, the width is 28 mm and the height is 58 mm, the mass is 15 grams. Its height is 25 mm, the height of its legs is 9 mm, and its mass is 35 grams. The top of the queen bee's cap is grid-shaped, and it is used to cover the queen bee. It is used to transfer the mother bee to a new family.

A honey extractor is a special tool for extracting honey from the honey. This tool is based on centrifugal force. It is known that if you spin a stone tied to one end of a string around you, this stone pulls the string to the edge with a great force. When you

let go of the end of the string, the stone will fly to the side due to the centrifugal force. The honey in the comb is also separated from the cells due to the frequent rotation of the frames.

The honey extractor consists of a cylindrical tank with a hole and a tap at the bottom for draining the honey. A vertical shaft is placed in the center of the tank, and a box is attached to this shaft. The walls of the box are made slightly larger than the frames, and mesh is drawn on them. The apiary consists of 2-3-4 boxes. Separation fence - the worker bees can easily pass through this fence, the queen bee and male bees cannot pass through it. The separation fence is used in cases where it is necessary to block the passage of the queen bee to one part of the apiary.

Honey bee hives must meet the following requirements:

It should be installed in the warmest place of the beehive.

To feed as much as possible, to be large.

It should be easy to use, it should not disturb the bees, not crush them and not cool the beehive when the additional food is added. When the bees are fed, they should not fall into it and die. must be inserted.

Bee cart - the advantages of bee cart in beekeeping are as follows: less labor is required to move the hive from place to place, reptiles, spiders and rodents do not harm the bee cart. The service life of the hives will increase by 55% compared to the usual relocation. The size of the stroller should meet the traffic rules in the state of transport, that is, its width should not exceed two and a half meters.

A spatula is a tool used to move a day-old larva of a queen bee.

Frame grabber - used to get a frame from a bee family.

The barrier board (diaphragm) is made of boards with a thickness of 12-15 mm. The boards are inserted into each other and connected with glue. In order for the fence board not to bend, 1-2 mm space is left on the edges of the boards, and two boards with a width of 25 and a thickness of 8 mm are knocked together. In order to fit the fence board to the ark, its upper ends are stuck to a plank that slightly protrudes from the edges of the board. To facilitate the work, it is possible to mix the ends of the upper board without laying the plank on the board. In this case, so that the upper board does not crack, leave a space of 10-15 mm on the edges of the board and drive one nail. It is used to catch standing bees and put them in an empty apiary. The catch is made of plywood or plastic in an oval or round shape.

In order for air to enter, a non-detachable wire mesh is pulled on one side of it. A removable cloth is drawn on the other side. The grid-like barrier is made of plastic. This fence is used to block the queen bees from entering any part of the apiary. The mesh will be 4.4 mm. Then, worker bees can easily pass through the grid, and the queen bees and male bees cannot pass without fitting.

## **Conclusion:**

Beekeeping is also practiced by private beekeepers with 20-50 (90%) or 50-150 (10%) hives. Honey is harvested twice a season - May-June (spring) and August-September (summer). In 1996, 17,100 tasals, 187 tons of wax were produced. The Republic has the potential to produce more than 20,000 tons of honey per year. Bees are kept mainly in a portable way. Bees are used to pollinate agricultural crops (cotton, sorghum, hemp, seed alfalfa, etc.). Pollination with bees has been found to increase the yield of cotton by 5.1 - 5.9 s/h on average.

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- 15.Azizov Rahmatillo Olimjon ugliFOR PUBLICATION OF THE PAPER ENTITLED IMPROVE THE BEE FOOD BASE BY PLANTING SAP AND POLLINATING TREES AND SHRUBS[2]