

## REPRODUCTION OF THE MOTHER BEE BY ARTIFICIAL METHODS

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Honey is important to beekeepers as a food source for bees. The off-season should be considered to determine where hives are located for maximum honey production and brooding. If the amount of honey decreases, it is necessary to feed the bees in special conditions. Bees used for commercial pollination are kept in backyards. Forage is also important to manage pollination by other bee species. Nectar contains sugar, which is the main source of energy for the muscles of the bees' wings, and also serves as a source of heat for the bee colonies for the winter. Pollen provides protein and trace minerals that are mainly fed to the offspring to replace lost bees in the normal life cycle and colony functioning.

The following three groups of bee families participate in the production of queen bees:

Group 1 - maternal family from which worms are taken to raise queen bees;

Group 2 - paternal family where male bees are bred;

Group 3 is a family that raises worms in a cup and a mushroom.

By artificially raising queen bees, the beekeeper achieves the following indicators: it is possible to take maggots from the eggs laid by the first high-yielding queen and breed a large number of queen maggots;

in early spring, small new families, which are planned to be organized, are bred as needed;

artificially bred queen bees are not only of high quality, but they are not inferior to migrant queen bees in terms of laying eggs, and in some cases even surpass them;

a specially specialized farm for breeding queen bees is established, and queen bees can be raised from the desired bee breed;

after establishing a good queen bee breeding farm, it is possible to organize breeding work to improve the breed of bees.

Before the mother bee begins to breed artificially, a frame is made for gluing the cup where the maggots are transferred. Such a frame is suitable if it is made of a wooden stick (slat) with a width of 15 mm. When such a frame is placed inside a bee family, the bees that are sitting in it are not scattered, and as a result, the bee family that nurtures the maggots in the cup accepts them well. The quality of the queen bee will be high. To stick 2-3 rows of wax cups inside the frame, stick one nail from both sides of a stick (slat) with a thickness of 10 mm and a width of 15 mm, and turn the stick slightly. A worm taken from the mother's family is transferred to it. If it is necessary to raise a large number of queen bees, then 20 frame bed hives with two

separate bee entrances of the queen family are tightly closed in the middle and divided equally. The maternal family is placed in one section of the nest. A healthy bee family with a young mother bee is transferred to the second part. In order for the mother bee in the mother family not to lay many eggs and to lay large eggs, this family is fed with a large amount of honey or sugar syrup. When the thick nests are filled with food, there are fewer empty nests for the queen bee to lay eggs, and as a result, the eggs laid by the queen bee become heavier and larger. will be moved. In order for the mother bee to be of good quality, the method of two-time migration of maggots is used. The rearing family is provided with a rum containing worms from the desired family, and the next day, the worms in the received wax cup are removed and replaced with 12-hour or one-day-old worms from the maternal family with productive indicators in the prepared milk cup. It is then given to the rearing family. When a queen bee is reared in this way, a high-quality queen bee grows out of the worm in exchange for milk that has the necessary nutritional units for one day.

In summary, the following results are achieved:

technological methods of raising queen bees will be created and tomorrow's quality queen bees will be cultivated, package beekeeping will be developed;

personal assistants, farmers and farms are supplied with queen bees, bee colonies are exported abroad;

The quality indicators of the population of Caucasian, Krama and local bee breeds being bred in Uzbekistan will improve;

production of bee products and the economic efficiency of bee families is increased by 15-20%;

a personal assistant for raising queen bees, offers and recommendations for farmers and farms.

#### **References:**

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