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## WAYS AND ADVANTAGES OF USING THE HELPING MATERN BEES IN BREEDING FARMS

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**Abstract:** In the scientific article, those who quickly noticed such negative conditions of the changing climatic conditions in beekeeping in the conditions of our republic, searched for ways to rapidly develop the bee family. In beekeeping, it gives good results when the auxiliary queen bees are established only in early spring. After the bee family has grown stronger, it is not recommended to form colonies of them as auxiliary queen bees during the period when they are preparing to move, because during this period the main family may be weakened, and during the main honey collection season, they will produce less honey. collects, it is better to explain to the bee families prone to such swarming, about the need to apply other preventive measures to prevent swarming.

**Key words:** village, foraging, winds, weather, honey harvest, climate, auxiliary queen bees, migration, queen bees, hives, bee corridor, egg, village, plywood, cage.

**Introduction:** the long duration of the autumn season, which is a non-productive period for beekeeping in our republic, leads to many difficulties in raising a large number of young, active bees for the village of the bee family. Therefore, the bee colonies that go to the countryside become significantly weaker. Similarly, frequent winds and cool weather in early spring can also negatively affect the rapid growth of the bee colony. This situation greatly hinders the growth of the bee family until the main honey harvest period. Those who quickly noticed such adverse conditions of changing climatic conditions in beekeeping in the conditions of our republic, searched for ways to rapidly develop the bee family. In beekeeping, it gives good results when the auxiliary queen bees are established only in early spring. After the bee family has grown stronger, it is not recommended to form colonies of them as auxiliary queen bees during the period when they are preparing to move, because during this period the main family may be weakened, and during the main honey collection season, they will produce less honey. collects, it is better to apply other preventive measures to the families of bees that are prone to such separation. In order to establish tomorrow's colonies of bees, it is necessary to maintain a strong colony of bees in the apiary all year round, because colonies of bees from weak bees cannot form colonies. There are

two different ways to create colonies with auxiliary queen bees. The first way is individually, that is, from one family of bees, and the second way is to create many hives, that is, from several bee families.

Individual well-developed strong bee families are selected to create colonies with individually bred helper queen bees. It is possible to organize breeding work for such bee families. For the establishment of hives, on calm, sunny days, families with a family strength of 10-11 bees and 5-7 brood frames of different ages should be selected, because only a strong bee family collects a lot of honey and many farms. It is able to pollinate the flower of jalik crops. The main reason for the rapid growth of the bee family is that it depends on the quality and productivity of the mother bee in the family, such a mother bee should lay 1.5-2 thousand eggs per day. Even a strong colony of bees from spring does not have enough strength to develop the colony until the honey harvest season, which begins in early June with only one queen bee. Therefore, in order to sufficiently develop the strength of the main bee family, it is necessary to constantly strengthen it, and to strengthen it periodically by giving open offspring or egg-bearing frames from other families. For this purpose, it is appropriate to establish hives with auxiliary queen bees near each bee colony.

Collective auxiliary queen bee colonies are formed from bees and frames collected from several bee families, or in a small apiary, they are strengthened by introducing one or two additional young bees from the main family to strengthen bees from weak bee families in the village. This is done because there are not enough young nurse bees to warm and feed the brood of open bees in the hive, and young bees are given to them to fill this place. A. Kovalov (1954) was the first to describe in detail the technology of using auxiliary queen bees in beekeeping, and shows ways to strengthen the bee family during the period of collecting different types of honey. In our republic, many advanced beekeepers achieve many good results by using auxiliary queen bees throughout the year. For example, B. Rajabov, the advanced beekeeper of the Abu Ali ibn Sina beekeeping farm in Bukhara region, used auxiliary queen bees in dormant beehives in 1985-1990 for 5 years to produce a chronic high honey yield, i.e. 45-53 from each bee family. achieved gross honey yield from kg. In the long-term experiments of O. Toraev (1974) in the climatic conditions of Uzbekistan, the periods of establishing temporary hives with auxiliary queen bees in the conditions of the republic were developed in detail, and April was considered the most favorable period. 35-43% more honey was obtained with the help of hives with such auxiliary queen bees, and the bee family going to the village had a good quality and sufficient amount of food.

**Research methodology:** Preparation and equalization of temporary hives with breeding auxiliary queen bees in beekeeping in our country has many advantages to

establish hives with auxiliary queen bees only at the end of April. After that, the auxiliary queen bee hives created in the following months cannot gather enough strength, especially during the period of the flowering of the white-kuroy and yanto, and as a result, a good honey harvest is not collected.

In order to establish temporary hives with auxiliary queen bees, it is necessary to start from early spring in order to establish strong bee families in the apiary. In order to organize temporary beehives, the weather must be favorable and there must be enough open and closed brood and male bee brood in the family. After that, the temporary beehives are started to grow queen bees. In addition, it is possible to use fertilized mother bees from the reserve. The methods of raising queen bees are described in detail in the above chapters. Even so, raising queen bees for temporary hives is a must for every bee breed. For this purpose, starting from early spring, when fruit trees are blooming, good, high-quality, purebred and productive bee families are selected. After breeding mother bees from the larvae of such productive families, they begin to establish temporary hives. Temporary beehives are formed in multi-story and mature apiaries in various ways.

It is much easier to create temporary hives with auxiliary queen bees in multi-story beehives, because the upper floor of multi-story beehives is blocked from the middle with the main family using plywood. The growth of the upper layer is directed to the back or side of the hives, so that the bees in the temporary hive can be mistaken for the main colony. To form temporary hives, 2-3 closed brood frames with bees from the main colony and 2-3 feeder frames after 5-6 hours, when the family notices the orphans, the queen bees are fed with the help of a cage and the hive is thoroughly warmed. Temporary beehives organized in multi-story apiaries are much warmer than the main family on the lower floor, and less effort is spent on feeding. However, in multi-story apiaries, temporary hives often have to be disturbed in order to take care of the main family, because a lot of work is spent on each care, and the floor where the hive is located is taken away from the main family. , after a certain period of time, after all the work is done, the floor on which the branch is located will be moved to its new place. In addition, it is known that bees tend to migrate due to the narrowness of space in such families. In dormitories, auxiliary queen bees organize temporary hives on the side of the apiary, separated from the main colony by a solid barrier board, in a pocket. For this, 2 closed breeding frames are taken from the main family, 2 feeder frames with bees sitting on it, and young bees in 1-2 frames are tapped to strengthen the hives a little, because the main family and the hive are in one box and they fly. Such processes are carried out because the holes are directed in one direction. In this case, a certain proportion of adult bees can return to their old nest.

After a certain period of time, after realizing that the hive is orphaned, the queen bees are given to them with the help of a cage and the hive is well warmed. When the

queen bees return from spawning, care for them is carried out as usual, if necessary, the hive is expanded and waxed frames are given. Before the main honey collection begins, 2-3 closed-breed rums can be taken from the hives of such auxiliary queen bees and given to the main family, and quality empty rums are given to the hives instead.

At the beginning of the main honey collection, the hives with such auxiliary queen bees, established in dormant apiaries in the Republic of Belarus, were combined with the main family and up to 510 kg of honey was obtained from them (Shemetkov, Savenko. 1960). The work of uniting the temporary hives with the auxiliary queen bees with the main family is carried out before the start of the main honey collection. For this, they remove the barrier board placed between the floors of the hives in multi-story beehives, and turn the floor where the hive is located, and turn their flight holes to one side. After the bees have joined, one queen chooses the bees in the family, and the poor quality and weak ones die.

In order to unite temporary hives with auxiliary queen bees established in sleeping beehives into the main family, the barrier board inside the box is removed and the families are sent together. A little smoke is better during this period. If there are temporary hives with auxiliary queen bees established in twelve-room beehives, they are brought to a place closer to the main family. After that, the rums in the branches are transferred to the main family together with the bees. Even in this case, the bees themselves kill the poor ones, leaving the best quality queen bees. In order to equalize the aggressiveness of the united families, giving them smoke or spraying them with honey juice gives good results and the families are quickly reunited.

In addition, in order to gradually strengthen the colonies of auxiliary queen bees, they can be given 1-2 frames of closed breeding from the main family. During this period, 1-2 open-bred rams from such branches are taken to the main family. This type of interdependence and the rotation of closed brood frames to the main family and branches is of great importance, because the main family is strong and has many bees, and with the help of bees from closed brood frames placed in open brood hives, the hives will quickly become stronger. . Also, bees of all ages in the family are provided with work, as a result of which migration situations are prevented. In this way, the hives with auxiliary queen bees quickly become stronger, and even before the main honey harvest begins, their strength does not lag behind that of the main family. It is not necessary to send auxiliary temporary branches with such families to the main family. In the experiments carried out by O. Toraev (1973, 2006) in the cotton-growing zones of Tashkent region, in order to strengthen the main family before the main honey collection from cotton begins, when temporary hives with auxiliary queen bees are used separately without adding them to the main family, compared to the main family, 10 -15% more honey yield was obtained and it was shown to be the most effective method in beekeeping. In order to provide queen bees in early spring in the northern

states in March-April in the southern states, specially specialized nucleus apiaries have been established to store queen bees in the winter. In Romania, a different method is used to keep queen bees in winter. For this, one queen bee and 100-150 g of queen bee food are kept in special boxes, separately from the family, and tomorrow's bee hives are formed from them in the spring. Similar experiences in the conditions of Russia prof. Avetisyan G.A. (1983) and good results were obtained in long-term rural conditions. After leaving such villages, queen bees are formed in early spring with auxiliary queen bees and the strength of the main family is strengthened until the main honey collection begins.

**Research results:** By raising brood queens for temporary hives in the fall and forming nuclei for their colony, beekeepers usually produce queens in early spring, forming many hives from them and filling the place of dead queens in the main families. Although there is little production of queen bees in autumn, it is important to keep queen bees in reserve in winter, because such queen bees can be used in order to strengthen the main family by forming colonies with auxiliary queen bees in early spring. Ways of raising queen bees are carried out in the order indicated in the previous chapters. Cultivated queen bees are kept in nuclei, which are kept separately after fertilization. In general, 10-15% of such bees should be kept in stock in each apiary.

**Conclusion:** Nuclei from 12-frame apiaries in reserve were used for winter storage of queen bees. For this, the nuclei are given 3-4 frames densely packed with bees. All holes behind the beehive are covered with foil, and the inside of the box is divided into 3 parts with a barrier board so that the bees cannot pass through. From the front of the apiary, separate flight holes are made for each family, and they are painted in three different colors and marked with separable boards. These signs help bees in each family to quickly find their hive without getting lost, and 2-2.5 kg of honey food is given to each family. It is even better if such nuclei are formed at the beginning of autumn, because they can provide enough for themselves even up to 8-10 kg of honey food. When storing 3-4 nuclei of queen bees in a box, they keep each other warm, during this period they consume less honey in the village. It is even better to keep queen bees in reserve in dormant apiaries, because the nuclei placed in the pocket on the side of the dormant apiary will come out of the colony well during the winter, using the heat of the main colony. The more bees from the colony to the nuclei, the less feed they consume, and on the contrary, in small nuclei, a lot of feed is consumed, as a result, the hind intestines of bees in such nuclei quickly collect feces, and they can get nazematosis.

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