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WAYS OF TRANSFERRING THE MOTHER BEES TO THE FAMILY

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Abstract: In the article, the physiological condition of fertilized mother bees in the bee family includes all bees of different ages, open and closed generations, and only when they meet the requirements, this family forms a whole. The information about the successful transfer of the bee to the family is provided only if the physiological condition of the bee being transferred to the family is determined and it corresponds to the condition of the bee family.

Key words: bee family, fertilized mother, physiological, orphan bees, directly, young worker bees, fertilized queen bee, cage, mumparda, honey, perga, mesh cap.

Introduction: In the bee family, there are all bees of different ages, open and closed generations, and only when they meet the requirements, this family forms a whole. If the physiological condition of the mother bee being transferred to the family is determined and it matches the condition of the bee family, then the transfer to the family will be successful. When transferring unfertilized queen bees to a bee family, the bees should stay in an orphan state for several days, at least 3-4 days, and at this time, the family should not have orphan bee offspring. Therefore, the result of transferring unfertilized queen bees to the family depends on the period when the family was orphaned without a mother.

Research methodology: In beekeeping, there are many ways to transfer queen bees to a family. All available methods are divided into two groups, i.e. direct and protected transfer groups.

1. The method of transfer of queen bees from the hive to the host family.

In this method, the queen bee is transferred from family to family without any protection from the bees.

The efficiency of the transfer of queen bees to the family is best done in the following cases.

- when a good flower in nature has nectar and pollen.
- during the period of rapid growth and development of the bee family.
- when there are a large number of young worker bees in the family.
- when replacing old queen bees with young fertile queen bees, but there should not be a break in laying eggs during this period.







Perepelova L.I. (1948) conducted an experiment of mutual exchange of queen bees laying eggs in ten pairs of families. In all cases, they continued to lay eggs in the new family. From this, the researcher came to the conclusion that bees cannot distinguish "their" mother from "alien" mother. This is because in both conditions the queen bees were in the same physiological state. At the same time, R. In a series of experiments conducted by Reeb (1969), he observed the behavior of bees with queens of dramatically different physiological states and studied the effective ways of replacing queens in different physiological states and periods of orphanhood.

A). Replacement efficiency of queen bees in different physiological states.

The method of direct transfer of new queen bees to the colony instead of replacement queen bees can be successful only when both queens are of the same physiological state. So, in this case, it is necessary not to consider the temporary relationship between the existing bees in the family and the mother bees as a normal case, but perhaps because the physiological condition of the mother bees and bees is the same, in this case, their relationship will not be broken at all.

There are all bees of different ages, open and closed generations, and only when they meet the requirements, this family forms a whole. If the physiological condition of the mother bee being transferred to the family is determined and it matches the condition of the bee family, then the transfer to the family will be successful. When transferring unfertilized queen bees to a bee family, the bees should stay in an orphan state for several days, at least 3-4 days, and at this time, the family should not have orphan bee offspring. Therefore, the result of transferring unfertilized queen bees to the family depends on the period when the family was orphaned without a mother.

B). Transfer of unfertilized queen bees to bee families in different periods of orphanhood.

The longer a colony is without a queen bee, the better the bees will accept unfertilized queens. In this way, the beekeeper, who has done all the work, can match the physiological condition of the mother bees transferred to the family and the state of the family.

In order to know the state of the family, it is necessary to pay special attention to the strength of the family, the age of the growing bees, the presence and absence of the mother bees and their physiological state, the amount of open and closed offspring in the family, and the periods of orphanhood of the family. The more the conditions of the bee colony match the physiological state of the mother bees being transferred to the family, the more successful the transfer will be. One of the main rules of successful transfer of queen bees to the family is that every beekeeper should take into account objective reality in what he does.

Results of the study: If everything in the main bee colony is left as usual without any changes, and if the old queen is immediately replaced with unfertilized queen bees

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or caged queen bees, then the percentage of queen acceptance of the colony will be much lower. But in such a case, if the family of bees is left motherless and orphaned for at least 3-4 days, and if the open-bred frames in the family are taken away, then unfertilized mother bees can be given to such families. Later, when the mother bee fertilizes and eggs appear in the family, the brood frames that were temporarily removed can be transferred back to their nest. If every beekeeper strictly adheres to these rules, he will definitely achieve high results and increase labor productivity.

G). A method of protecting the queen bee.

In the method of protection, it is accepted to use devices such as cages, caps, various insulators, bee hives, artificial queens to protect them from direct contact with bees until the mother bees smell the scent of the family.

A). Transferring queen bees using cages.

It is one of the most used methods in beekeeping. For this, the old replacement queen bees are removed from the family and replaced by newly fertilized queen bees placed in the cage. Queen bees in a cage burn against frames with open brood in the center of the hive. Here they start feeding the queen bees in the cage, and in this place a moderate temperature is created for the queen bees. Also, the young bees take care of the mother bees by beating them.

The cage should be placed in such a place that there should be honey feed on the frame on one side of it, and feed on the manger under the cage.

To increase the efficiency of the transfer of queen bees to the cage, it is very good to put 5-6 bees from her family in the cage together with the queen bees, because the "alien" bees in the cage quickly accept the smell of the main family within 24-48 hours, and the aggression of the bees towards them is much reduced.

Experienced beekeeper M. from Bukhara. After two days, Akhmedov opens the queen bees in the cage, glues a piece of wax to the hole where the queen bees come out, makes 4-5 holes in it with a simple ram nail, and rubs a little honey on these holes. does. It is better to do these things in the afternoon, when all family members are calmer.

Before the queen is released from the cage, the entire colony is inspected.

If the bees are gnawing on the wire type of the cage, getting excited and trying to kill the queen bees, it is necessary to look at the bee family and determine the reason. If during this period, Bordiyu sees and organizes peaceful queens in the family, these queens are removed and the queen bees in the cage are left for another day.

If the family members do any kind of aggression to the mother bee that has been taken out of the cage, she is immediately taken out and put back in the cage and kept in the cage for a couple of days. After two days, the queen bees in the cage are released back into the colony as above. If the queen accepts the bees well, the nest is carefully collected and after 2-3 days it is checked what kind of eggs the queen bees are laying.









There are also other ways to replace the queen bee. To do this, the queen bee of the main colony is kept in a cage for a day, and then it is removed and replaced with a newly fertilized queen bee in the cage. After that, a day later, the queen bee is released from the cage to the family.

Under all conditions of queen bee replacement, providing a family with a small amount of sugar syrup slightly increases queen acceptance. Placing in a queen bee cage and feeding it to nuclei and newly formed hives also works well.

B). Transfer of queen bees using mesh caps.

During the transfer of queen bees with the help of scaly cups, new queen bees are given 3-4 hours after the removal of the old queen bees, when the bee family notices the period of orphanhood. When it is given before, the bees in the family can gnaw on the frame, get under the cap and kill the queen bee.

When transferring the queen bees under the cap, a honey frame with closed brood is selected in the frame in the middle of the family, and the queen bees are transferred to this place under the cap. It is better to do these things especially at the end of the day. The queen bee is removed from under the cap and all previously seen queens in the family are lost. During this period, the actions of the queen bee are observed for 1-2 minutes, and if other bees attack the queen bee, then the queen bee is closed under the cap for another 2 days, and then it is released at the end of the day.

In unfavorable periods of transfer of queen bees, when the rapid development of a new strong family is completed, in the period when the flow of nectar from nature is reduced or completely stopped, it is necessary to take some measures. 2-3 days before the transfer of the queen bees, it is necessary to attract the family of bees to process 2-3 kg of sugar juice in a day, to install the queen bees in dark hard wax frames, that is, under the hood so that the bees cannot gnaw and kill the queen bees. The most effective way to transfer queen bees using a cap is to give new queen bees 3-4 days after removing the old queen bees from the colony, for this the colony must be checked and all the queens in it have been lost.

Another advantage of transferring the queen bees with the help of a cap is that in such conditions, the queen bees get under the cap in the most favorable biological conditions, and there are conditions for laying eggs. The queen will be surrounded by young bees and enough food. Such an environment improves all the harmonious relations between the queen and the bees, and it is quickly adopted by the family. One downside to this method is that worker bees sometimes gnaw the wax under the cap and kill the queen.

V). Transfer of queen bees with hives.

Transferring queen bees with hives is the best method in beekeeping, where 100% of the queen bees are accepted into the new family. For this, beehives are created in a simple way, modeled after young bees. During the formation of beehives, it is







necessary to pay special attention to the fact that there should be less open brood, especially 1-4-day-old larvae, and more bees with closed brood, after 3-4 hours the hives are given the same mother bees as before. After the queen bees start to lay eggs in the hives, in order to strengthen the hives, closed-bred frames are taken from the main family. After the broods are on the main strength, the old queen bees from the main colony are removed and the broods are reunited with the main colony.

To replace the queen bees with the help of hives, if they are organized on the upper floor of multi-story apiaries, it is much easier to transfer them to each other. And in the empty part - pockets located on the side of the sleeping apiaries, such shacks were organized. In 16-frame apiaries, temporary bee colonies are created in separate empty apiaries, and they are sent together with the main family to replace the mother bees. Replacing queen bees with the most valuable breed with this method gives good results. It is also possible to use queen bees and unfertilized queen bees during the replacement of queen bees with the help of bee hives.

G). Transfer of queen bees using mesh insulator frames.

For transfer of queen bees using mesh insulator frames, after the replacement queen is removed from the main colony, a closed brood and honey frame is selected from the same colony. All the bees in the obtained frame are shaken and placed in the isolator, new queen bees are burned into it, and it is well closed so that foreign bees do not enter from the upper part of the type isolator. Inside the isolator, good conditions are created for the queen bee, the young bees from the closed brood become a butterfly for the queen bee and become her mother. Under these conditions, the queen bees begin to lay eggs, and after 4-5 days, the queen bees are taken out of the isolator with the rum and transferred to the family. During this period, the family is checked and if there are mothers, everything is removed. The most reliable method is to replace the queen bees using mesh insulator frames, which guarantees up to 95% transfer of the queen bees to the family.

D). Unprotected transfer of queen bees.

During unprotected transfer of queen bees, the physiological state of both queens that are exchanged should not differ from each other. Some beekeepers use ancient methods to replace queen bees. The replacement fertilized queen bees are cut into honey and released from the beehive's flight vents. At this time, the queen bee moves slowly to the hive and does not disturb the bees in the hive, and while licking the honey from the body of the queen bee, she makes direct contact with it and quickly receives the queen bee. But due to the high mobility and agility of Carpathian queen bees, it is much more difficult to transfer them to the family in this way. Ammonium nitrate can be used to transfer queen bees to the family. The author of this manual is N. Krakhotin (1985) used this salt for several years during the transfer of queen bees at any time of the year. For this purpose, 0.2 g of ammonium nitrate

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salt is burned in a burner device, and its smoke is introduced into the hive for 2-3 seconds through the opening of the beehive. The gas immobilizes the bees in the hive and puts them to sleep in 10-30 minutes. As soon as fresh air enters the hive, they gradually start to move, clean themselves and begin to fly. During this period, the queen bee is well received.

Conclusion: Most beekeepers put queen bees, especially unfertilized queens, in honeydew water, and after its movement slows down, the queen bees are poured out of the apiary's flight hole and the apiary is smoked once or twice.

Some beekeepers remove all the bees from the colony and dump all the bees in the colony near the apiary during the queen bee changeover. It is during this period that the new queen bee is released into the family. During this period, the family is also given a couple of smokes before the bees are stung.

Most beekeepers use the simplest method. To do this, the queen bee colonies are given the same scent, the old queen is first found, the space between the frames in the hive is slightly widened, and they are sprayed with peppermint sugar juice. Bees are also well received in this way.

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