

TECHNOLOGY OF FEEDING FAMILIES OF BEES IN DIFFERENT TYPES OF HOUSEHOLDS IN UZBEKISTAN

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ANNOTATION

The article discusses the importance of feeding bee families in large-scale beehives. There is important information about the technology of feeding bee colonies in different types of beehives in Uzbekistan.

Keywords: beehives, bees, floors, beekeeping link, bed. cotton growing areas.

INTRODUCTION

The importance of feeding bee colonies in large-scale beehives: In Uzbekistan, beehives with 20 frames and 16 frames are very common for feeding bees. In addition, large-scale two-storey and multi-storey barns are widespread in the country. The productivity of beekeeping in our country depends not only on the advanced methods of feeding bee families, the structure of beehives, but also on the fact that the network of beehives used for beekeeping is flat or multi-storey.

Along with the transfer of beekeeping to industrial technology in the country, the task is to unite bees in large beekeeping farms and increase the number of bee colonies. This will require the relocation of all beehives or beekeeping facilities to the same type of beehives, as well as the provision of beekeeping equipment and transport facilities. Multi-storey beehives are very suitable both in the cotton-growing areas of the Republic and in mountainous areas, meet the requirements of the technology of development of industrial beekeeping, all the requirements of beekeeping in the beekeeping. For this purpose, the use of multi-storey beehives in beekeeping is more responsive to all technological processes, ie such beehives increase the productivity of beehives by 30-50%, the cost of manual labor for them is 40-45 times higher than other beehives. will be less than%.

Feeding bee families in multi-storey beehives Multi-storey beehives are widespread in many countries around the world, including the United States, Europe and other Eastern countries, where beekeeping is highly industrialized. Also, in Russia, Ukraine, Belarus, Transcaucasia, multi-storey beehives have been used for many years and produce a rich honey harvest. Multi-storey beehives offer great opportunities to increase productivity. The smaller the beehives, the smaller the volume and the frames, allowing the beekeeper to expand or shrink the entire floor and save time for the beekeeper to do other work. Multi-storey beehives have four

interchangeable floors. Each floor has 10 frames measuring 435 x 230 mm. The entire beehive consists of an removable equal part, an additional part with a hole for bees to enter and exit, a part under the lid and parts of the lid.

MAIN PART

On only one floor of a multi-storey beehive, if the bees have had a good winter and the young are open and dormant offspring in 6-7 frames, then the second floor of the beehive will be installed. In the spring, when the fields are in full bloom and pollen is coming, such beehives are given an additional second floor. On the second floor, there are frames suitable for laying queen eggs, frames with honey and less honey. If there is good sap coming from the field, between such layers are given frames with a canopy. When a little juice is sprayed on the frames where the wax curtains are drawn, bees quickly absorb such frames and begin to see the walls of the cells on the wax curtains.

Twelve to 15 days after laying the second layer, they fully absorb the second layer, and the queens begin to lay eggs. During this time, they are relocated, that is, the upper floor is moved down and the lower floor is moved up. Bee colonies that spend the winter on two floors need to be relocated in the spring. At this time, in the spring, the upper floor is always open and flat, and the lower floor is empty. These floors must be relocated after a spring inspection of the beehive.

On the second floor, families with beehives on 6-7 frames will have a third floor. On the third floor, along with the empty frame, wax-framed frames are poured one after another. On the third floor it is advisable to hive the bee family between the lower and upper floors.

During this period, there are many dormant offspring on the ground floor, so it is necessary to replace them with the upper floor, because on this floor, along with the open offspring, there are queens. In the bee family, queens always lay eggs instinct is developed. If the honey collection continues well, the fourth floor will be laid or a store-bought graft will be installed. It should be borne in mind that the fourth floor or storefront does not have holes for bees to enter, only frames collect honey in the frames, in mountainous conditions most beekeepers use storefront grafting instead of the fourth floor and get good results. .

In multi-storey beehives, in the early spring, the bottom hole should be opened by 15-20 mm, and in April, when the weather is good, these holes should be opened to half and the top hole should be opened completely. Once the bees have fully absorbed the layer, the gap between the front frames of the beehive hole should not be wider than 8 mm in the spring. Multi-storey beehives produce the largest number of bees, especially on the fourth floor of temporary beehives with auxiliary queens. It is very easy to set up temporary beehives in multi-storey beehives. To do this, a plywood board is placed between the fourth floor and the third floor, which is tightly closed, and their flight holes are turned upside down. When the bees on the floor realize that the queen has no bees and is an orphan the next day, they are given from unfertilized queens or mature queens. After the mother bees receive them, they are controlled to beat them. Once the queen bees are fertilized, they are given simple care and at the beginning of the main honey collection season, such temporary beehives are merged with the main family.

Experiments conducted in 1987-1983 in the cotton-growing areas of Bukhara region (O. Turaev. 2002) examined the growth and development of bee colonies in multi-storey beehives. During the same period, winter mortality in bee colonies in two-story and dormant beehives was 11.4-10.3 kg or 16.3% and 05.1%, respectively. bee mortality was 0.62 and 0.75%, respectively. It was also observed that 7.4-7.9% more breeds were bred in multi-storey beehives.

When comparing the results of beekeeping in different types of beehives, the yield of honey, which is the main indicator in multi-storey beehives, is always higher. Every day 200-400 g of fodder comes from the field, and the bees dry one rum in 1.5 days. If 500 g or more of nectar comes in a day, the bees will see the seven beehives in the hive in 2 to 4 days.

In mountainous areas, queens lay very many eggs, which produce a lot of honey. Under such conditions, honey is extracted in July and August. In the cotton-growing areas, the family honey is cleaned before each transplant.

In all regions, bees also winter freely. It is advisable to leave at least 16-18 kg of feed honey for the main bee family in each winter multi-storey beehive. To prepare such families for the winter, empty, honey-free frames are taken from the hive, the hive is well heated, and the top is covered with a pillow.

Thus, the effectiveness of beekeeping technology in the mountainous areas of the country depends primarily on the use of the same system of beehives. It has been found that keeping bee colonies in multi-storey beehives is the most effective in terms of saving time and other biological and economic characteristics such as growth rate, productivity, winter hardiness and disease resistance.

Beekeeping in two-story beehives - Two-story beehives are mainly organized on the basis of 12-frame beehives. Initially, the 12-frame beehives had two additional floors of 12 similar frames to accommodate the bee family and expand the family as there was not enough space for them to grow. Even in such floors, the size of the frame is 435 x 300 mm. Two-story arihons are common in foreign countries, as well as in the Far East and the Urals of Russia. In the Republic of Uzbekistan, such beehives are rarely used.

In two-story beehives, beehives are usually shortened in the spring after the winter. During this period, the family should have 6-8 kg of feed honey and 2-3 frames of pollen. The beehive is heated by pads on the top and side. The expansion of the hive depends only on the sap and pollen coming from the field. During this period, when the air is warm and the nectar is coming in well, the mother bees are given light-colored quality bee frames to lay their eggs.

As the spring months come to an end and the flowers bloom, the family grows well and the strength of the family reaches 11-12 frames. During this time, bees will breed in 8 to 9 frames. Such developed bee families should be placed on the second floor, as the bees need to fully master the second floor before the main honey collection begins. On the second floor of a two-story beehive, queens are very effective if they lay eggs for 35-40 days. If this period is delayed, the main honey harvest will be negatively affected. In addition, bee colonies tend to be overpowered, which negatively affects family productivity.

For the second floor to be successfully occupied by bees, care must be taken to secure the beehive floor to the ground floor, leaving no gaps between the floors. Then the frames are sorted on the floor. There should be a small amount of honey in the rums, and waxed rums should be placed between these rums. Between the frames are given one open and 2 horizontal pedigree frames.

Such breeding frames are taken with the bees sitting on it. Next to the pedigree rums, light-brown rums are sprinkled with a little sugar juice. In this way, the bees quickly clean the frames and prepare the place for the queens to lay their eggs. The second floor is provided with a total of 7-8 frames, which are covered with planks and heated with pads.

When the frames are removed downstairs, there will be 8-9 frames left. These rums are given to replace them with new waxed rum. Once all the floors are fully equipped with frames, they are relocated, i.e. the upper floor is moved down and the lower floor is moved up, and the beehive is well heated. When all the work is done, the queen goes up to the second floor to lay eggs. As a result, the number of open beehives and the number of young bees is increasing day by day, and the construction of waxed frames on the second floor begins quickly. the bees begin to lay eggs, during which time the bees have to expand the hive. If good syrup comes from the field, it is given from mummified rums, and if no syrup comes from the field, it is given from honey rums. After that, the hive is expanded every 6-7 days. A month later, the 24 frames on both floors will be fully occupied by bees.

It is advisable to provide additional store-bought grains on the second floor before the start of the honey harvest. These store-bought welds contain 9 to 10 small frames, which are mainly used for honey collection. Temporary beehives can also be set up on the second floor. To do this, the middle floor of the basement and the lower floor are tightly closed with plywood boards. In order to establish beehives, 2-3 closed frames are taken along with the bees and they are given mature mothers. When the queen bees return to their hives, they are assisted by 2 to 3 closed rhizomes. Once the hives have been strengthened, they will be reunited with the main family for the honeymoon season.

At the beginning of the main honey harvest, all the honey frames are collected, and from time to time honey is extracted from them and preparations for the winter begin. Such families are left with about 16-18 kg of fodder honey for the winter. The hive is shortened and the hive is well heated.

Beekeeping in beehives-Beekeeping in beehives is widespread in many European and South American countries. In particular, it is widespread in Russia, Ukraine, Belarus and the Transcaucasian Republics. In the Central Asian Republics, especially in the Republic of Uzbekistan, bee colonies are mainly kept and cared for in beehives.

Closed beehives differ from other types of beehives in that they are more suitable for feeding bee families, expanding hives and establishing new hives, and transplanting honey plants. After a series of spring inspections of bee colonies that have survived the winter in dormant hives, the hive is shortened, the feed is inspected, and the top and sides are heated with pads. In weak bee colonies, the upper flight holes are closed and the lower ones are narrowed and opened by 8 - 10 mm. In the event of a new generation in the hive, such an event retains some of the heat in the hive, otherwise the heat in the hive escapes through the upper flight holes in the hive and the bees have to spend a lot of food to maintain the temperature in the hive. When the temperature is good, the bottom runways should be half open and the top open completely in April.

In dormant hives, the hive must be heated during the spring months, as it requires the necessary temperature for the new generation to emerge. A family of healthy bees always has 2 to 2.5 kg of bees. The temperature needed for such families should always be available.

During this time, the bees have to actively control the microclimate in the hive. Thus, the bee family has the ability to control heat, which is characteristic of animals with a constant temperature. The dormant offspring of the bee family produce a lot of heat. For example, according to G. Taranov (1961), in 24 hours at a temperature of 34 0, 100 g of bees produce 15.1 g, and in the same time at 32.9 0, 1000 bee larvae produce 3.49 g of carbon dioxide. . Note that given the fact that carbon dioxide in beehives combines with the carbon released by bees to breathe oxygen with beeswax, it is clear to us how important the upper and lower flight holes in beehives are for bee life. that is, air enters the beehive from the lower hole of the apiary, and moisture and various dusts enter from the upper hole, which means that both the gas and the temperature of the hive are controlled at the same time.

It is also very convenient to clean the underside of the frames in the bedrooms, and in multi-storey buildings it is more labor-intensive, because the floor is removed. It is also possible to expand the frames of the hive as much as you want in the spring during the dormancy. Its large size allows you to heat it in cool weather.

It is possible to keep a family of two bees in the hive. According to O. Turaev (2006), as a result of such families keeping each other warm during the winter, food reserves are used less, and the offspring of bees appear much earlier, and all the conditions are created for the mother bees to lay eggs.

Such beehives should be expanded once or twice when the bees in the hive are coming from the field to support the beehives. When the strength of the bees in the family reaches 6-7 frames, all the frames in the hive are moved to the opposite side of the apiary. The open-breeding frames in the hive are left in front of the flight hole along with the mother bees. In the space vacated in front of the flywheel, mummified frames are placed between the open-frame frames. Bees quickly see such mummified frames and assimilate other empty frames.

When a good apricot is coming from the field, after the beehives are filled with bees in the range of 16-18 frames, the frame spacing should be increased to 12 mm. bees put only honey, which plays an important role in increasing family productivity. A method of expanding the hive once in the bedrooms was developed (G. Bukharev, 1964). The essence of this method is not to disturb the bee family many times, but to expand it only once, that is, to move the existing breeding frames in the hive to one side and free the front of the flight hole. This empty space is lined with frames and wax frames suitable for laying queen eggs. As a result, such frames are located in a convenient location for fresh air exchange and basic nutrients, so bees are quickly assimilated by bees and the queen encourages them to lay eggs.

The queen bees get used to the place quickly. Beekeepers, on the other hand, do not often disturb the family.

In beehives, beehives can be easily set up to prevent migration from the family and to strengthen the family's strength to the main honey collection. To do this, the part of the pocket on the side of the bedrooms is blocked by a wooden board from the main family. Such beehives can be made up of mature queens or unfertilized queens. It is very convenient to organize such stations in the Republic, from the cotton plant, where the evening honey harvest begins, to the collection of honey, because during this period the queen bees are fertilized and gain the main strength. Such outlets can also be reinforced with bed rims grown at the expense of the main family. Combining such strong beehives with the main family before the start of the honeymoon

gives good results. To do this, the good mother bees are kept and the bad ones are removed, or when the barrier in the middle is removed, the bees themselves retain what the mother bees are of good quality. It is better to reunite the families, mainly in the evening, because during this time all the bees will return to the hive. Even if such powerful bee colonies are placed on the box with additional store-bought bees, they can be quickly assimilated. Such bees can also be used by families to make bee packages to replace bees that have died during the winter, as well as for sale in early spring. Breeding frames should be placed in front of the flight holes of the hive in order to limit the laying of eggs by the queen during the main honey collection period in the hive, while the queens begin to look for a place to lay eggs and lay fewer eggs. power is not spent on feeding the larvae, it is focused on collecting honey. With the end of the main honey season, the queen bees return to their position and start laying eggs, allowing the young bees to gather before the onset of winter.

Feeding bee colonies in 16-room beehives - 16-bee beehives are common in beekeeping farms in Uzbekistan, as these types of beehives are very convenient for relocating bee families. Due to their large size, such beehives are very suitable for expanding beehives in early spring and for breeding and feeding. In the early days of spring, such beehives contain 8-10 rum bees. In order to expand the hive and provide a place for the queen to lay eggs, they are given 1-2 light-colored frames. When the sap from the field is good and the rums begin to show signs of "whitening", they are given 2 to 3 new rums with mumps. Such waxed frames are usually placed in the middle of the open-faced frames in front of the flight holes. When the beehives are fully built, the queens begin to lay eggs on them. In 16-year-old beehives, due to their small size in some years, the number of bees in the hive tends to increase and they tend to expend a lot of energy, and 50-60% of families tend to separate new families. At this time, new beehives will be established in such beehives. One of the disadvantages of the 16-room beehives is that it is not possible to set up beehives in the beehive itself, as the size of such beehives is much smaller than other types of beehives. That is why new beehives are organized in separate beehives. Methods of organizing beehives are described in previous chapters. A comparison of the methods of feeding bee colonies in 16-room beehives with other beehives showed that in such beehives the bee family develops freely and is the most productive.

CONCLUSION

This means that the 16-room beehives are very suitable for cotton growing and mountainous areas of the Republic, and are very suitable for the requirements of beekeeping on an industrial scale, for beekeeping. It was found that the productivity of bee colonies in 16-room beehives increased by 30-41% compared to other beehives, and the labor required for them decreased by 45.4%. To this end, such beehives are more responsive to the requirements of new technologies for beekeeping.

The 16-room arias are also the most lucrative, with a lot of flowers, and they can also be used as store-bought grafts. These welds have 16 small 435 x 145 mm frames. Store welds must be prepared in advance.

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