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IMPROVE THE BEE FOOD BASE BY PLANTING SAP AND POLLINATING TREES AND SHRUBS

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A B S T R A C T

This article provides information on increasing the yield of fruits and obtaining high-quality honey by planting trees and shrubs that provide nectar and pollen, improving the food base of bees.

K E Y W O R D S

Bees, bee feeding, bee milk, bee wax, bee venom, pollen, flower.

Introduction

Beekeeping is one of the branches of agriculture, based on raising bees for the purpose of obtaining honey, wax and other products (bee milk, bee glue, bee venom, etc.), as well as for pollination of agricultural crops. The science of organization and management of beekeeping farms covers the legal and organizational aspects of farms that are developing rapidly in agriculture, the ways of using advanced technologies in raising bee families and increasing productivity and high-quality products. It is necessary to pay attention to the quality of food while using innovative technologies in beekeeping and to use modern methods. It is important to feed the bees with healthy food so that they do not get sick. Such food is given before the bees get sick. If the bees were infected with rot or nozematosis in the previous season, methods of adding protein food to the bee colonies in the next season will be necessary.

If bees are given 1-2.5 million units of biomycin, tetracycline, and streptocide drugs per kilogram of pasty food, they will not be infected with rotting disease. It is necessary to consult a veterinarian about which of the mentioned drugs and how much to add. If the bees in the apiaries are heavily infected with nozematous disease, then 4-8 g of fumagillin per kilogram of food is added (the amount to be added depends on how dangerous the bees are infected). Strong bee colonies consume one kilogram of the doughy food made from a mixture of honey and sugar syrup and added medicine for 7-10 days.

The bee family can be seen in 3 distinct periods in their spring development:
1 The period of replacement of overwintering bees
2 The period of rapid development of the Ari family
3 A period in which a large number of unemployed young bees accumulate
First period. After 1 month from the time when the mother bee begins to lay eggs, there is a period of exchange of places of bees that have come out of winter, this period extends to the period of intensive work of bees. During this period, the old bees that overwintered die, and their place is taken by the bees that were raised in the spring. The mother bee starts laying eggs in the southern regions at the beginning of spring, that is, in the first 10 days of February. In the first days, the mother bee begins to lay 40-80 eggs per day, and then 100-120. After passing the first spring flight and emptying the garbage accumulated during wintering in the hindguts, the egg-laying of the queen bee increases several times.
Second period. This period is characterized by rapid development of the bee family. There is a reciprocal relationship between the developing forager bees and the maturing larvae, and the oa bee lays eggs depending on the number of bees feeding the larvae. As the number of young bees in the colony increases, so does the mother bee's egg-laying rate. In the second period, the death of old bees in the family is not so much, on average, it is equal to the number of eggs laid by the mother bee 56-66 days ago (21 days - the day of raising worker bees; the day of bees' summer residence - 35 45 days; total 21 + 35 = 56 days; 21 + 45 = 66 days).
The development and growth rate of the bee family in the second period also depends on the quality of the bees that make up the family, the development of a bee family that has failed to hibernate in winter does not exceed 3-5% per day, and that of a strong bee family that has wintered well is 10-14% per day. How many days the second period lasts depends on the growth and development of the bee family, the weaker the family, the longer it develops, and vice versa.
Third period. The third period begins only after 2-2.5 kg of bees are grown in the bee family. This period is called the gathering period of unemployed young bees. This period lasts until the bees of the bee family reach 2.5-4 kg. In the third instar, the queen lays more eggs, but this increase still results in fewer larvae than the number of young bees produced, meaning that there is a significant disconnect between the number of nurse bees and the number of eggs laid by the queen. The stronger the colony, the fewer larvae the mother bee produces relative to her weight. The mother bee lays up to 2,000 eggs per day, and it takes an average of 43 seconds to lay one egg. He spends most of his time looking for empty, cleaned inchas. There are slightly more young growing bees than dying old ones, and the family develops slowly. The stronger the family, the slower it develops. When strong bee families are long developed, the number of young bees produced in 1 day is equal to the number of old bees dying per day, and the development and growth of the family stops. During this period, the decline of old bees depends on the amount of sap coming from nature. residence time is slightly longer. Thus, there is a difference between the number of eggs laid by the mother bee and the number of worker bees, and the surplus of young worker bees in the family remains unemployed. In the third period, bees are not provided with work because there is no sap from nature.
The following changes occur in the family:
1) the average life time of worker bees in the family increases, a large number of young bees accumulate, and the strength of the family increases slightly;

2) as a result of the reduction of the physiological aging of the bees' body in the family, the bees of the family become younger, and the bees of the family accumulate energy and useful food units for living and working in their bodies.

The bee colony settles in the fall flat and around areas with early spring blooming, pollinating and nectar-producing plants, as the bees replenish the nutrients lost in their bodies during the long winter with pollen from early spring flowering plants. Beehives are placed with the entrance of bees facing the sun. The beehives should be placed one meter apart, and the rows should be 3-4 meters apart. They are installed on piles at a height of 40-45 cm from the ground. When the bees fly after the weather warms up, if after flying out of the hive their abdomens are swollen, they crawl and empty their hindguts inside the hive, then the bee family has been fed with poor quality food during the winter, that is, the food contains nozematous bacilli. lib, this indicates that he has an intestinal disease. If the bees leave the hive and fly slowly, then this means that the bee family is small or lacks food. will be

In order to know when to feed or feed the colony, the beekeeper should watch for flowering nectar plants in early spring. For this, one medium strong bee family is placed on the scales and it is necessary to check whether the bees are producing juice or consuming the accumulated nectar in the house. If the weight of the bee colony has not changed, the bees will produce some juice and feed themselves. If the weight has changed, the bees accumulate a small amount of juice. Beekeepers do not give honey, sugar, juice to the bee family in both of the above cases.

The following plants can be planted to improve the bee food base.

Apricots bloom in March-April and provide bees with pollen and nectar in early summer. The color of the pollen is red. One apricot bush gives 7-8 kg of flowers. The color of honey is white yellow.

Apple - blooms from April to June. One bush gives 5-7 kg of flowers and pollen. The color of the pollen is yellow. Honey crystallizes very quickly, its color is pale yellow.

Quince is a smaller tree that blooms in May and gives 4-5 kg of flowers per bush. The color of the pollen is white and that of honey is light yellow.

Almond - blooms in March and April, one bush gives 5-7 kg of flowers. The color of the honey is light yellow, the color of the pollen is red.

Persimmon is a tall tree that blooms in May and June. One bush gives up to 10 kg of flowers and pollen. The honey of all date varieties is yellow in color, slightly bitter, but sweet and dark, and quickly crystallizes.

Pear - blooms in April. Each bush gives 5-6 kg of flowers. Bees also collect pollen from pears. The color of honey is light yellow.

Yantok - blooms in July-September. Each hectare yields up to 150 kg of honey. The color of the pollen is light yellow. The color of honey is light gray, it crystallizes quickly, and the crystals are small.

Oak acacia tree height 10-12 m. It blooms in May-June. The color of the flowers is white. Each hectare gives 300 to 500 kg of flowers. White acacia honey is one of the best honeys. The color of honey is white and it is finely crystallized.

Cherry blossoms in April and May. The flowering period is 10 days. The color of honey is light yellow. Gives flowers and pollen. Each bush gives 5-7 kg of flowers.

Mynchak is a perennial plant that blooms in June and July. Even during warm rains, bees visit the monkey flower. The flowering period is 40 days. Gives honey and pollen.

The color of the pollen is light gray. Each hectare yields up to 100 kg of honey. The color of the honey is light yellow.

Peach is a 6-7 m tree that blooms in March and April. The color of the pollen is red. One bush of peach gives 6-7 kg of flowers.
The color of honey is light yellow.
The color of honey is orange. It crystallizes quickly.
Lion's tail (pustirnik) - blooms in June and August. It also gives pollen. One hectare yields up to 300 kilograins of honey. The honey is pale straw in color and does not have a sharp taste.
Botakoz (vasilyok) is found among barley crops. St. John's wort - blooms in summer and autumn until frost. Gives nectar and pollen. Bees work hard. The color of honey is green-yellow. The honey is thick and smells of almonds. At the beginning, the taste is slightly bitter.
Old lady (lopukh) - blooms in June and July. One hectare yields up to 100 kg of honey. The color of the honey is dark-olive, the honey is fragrant and elastic.
Plum is a 10 m tall tree, it blooms 1-2 days before cherry in May and lasts for 10 days. It also gives pollen. Strong families can collect up to 1.8 kg of flowers per day. One bush gives 4-5 kg of flowers. The color of honey is light yellow.
Japanese safflower blooms in June and July. During the flowering period, bees work hard. The color of honey is cream color.
Coriander - blooms from June to July, gives pollen. One hectare yields up to 500 kg of honey. Honey has a sharp taste and a light yellow color.
Willow blooms in March and April, each bush gives 20-25 kg of flowers and pollen. The color of honey is golden yellow.
Tograyhan (dushisa) is a herb that blooms in June. The flowering period is one month. One hectare yields up to 100 kg of honey and pollen. Honey is fragrant and has a yellow-blue color. When it crystallizes, it turns into white small grains.
Krushina - blooms in May and June. One hectare yields up to 40 kg of honey. The color of honey is light yellow.
Kamchigul (gechikha) - blooms in July and August. The flowering period is 40-45 days. One hectare yields up to 150 kg of honey and pollen. The color of honey is dark reddish.
Emari - blooms in March and April. It gives a lot of pollen and honey. Bees collect dew from the leaves. It is not recommended to leave the honey in the village.

Conclusion:

In short, it is possible to get a high yield by planting nectar-rich plants on large areas, and by improving the food base for bees, high-quality honey can be obtained.

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