

THE SIGNIFICANCE OF POLLINATION WITH THE HELP OF BEE IN INCREASE THE PRODUCTIVITY OF AGRICULTURAL CROPS AND BERRIES

A.I. Amirov

Senior Teacher of the General Zootechnics and Veterinary Department of Tashkent State
Agrarian University,

M.I. Bosimova

Student of Beekeeping at the Faculty of Zoology.

Annotation

This article provides information on the importance of bees in the pollination of agricultural crops, berries, improvement of yield indicators and quality, productive and quality production for seed farms.

Keywords: bee, wax, pollen, nectar, juice, insect, climate, flower, smell, fruit, honeysuckle, solyanka, ivy, sorrel, syrup, clover, vineyard, orchard. Enter.

The beekeeping industry is one of the indispensable and important branches of agriculture, and it is important for breeding bee colonies, growing honey, wax, pollen and other bee products, pollinating agricultural plants, increasing productivity and improving the quality of berry crops, as well as for productive and high-quality production of seed farms.

Takes place. The pollination activity of insects is of great importance in increasing the productivity of plants. To imagine the role of insects in crop pollination, it is enough to say that 80% of these plants need external pollination. The method of pollination of plants with the help of bees is widely used in our country, which differs in the variety of climate and soil conditions, and the abundance of wild and cultivated plant species. Bees land on flowers and transfer plant pollen from one to another, ensuring their pollination. The smell of bees is very important when landing on certain types of flowers. Because the flowers of different types of plants emit different scents, bees find them quickly by taking them to a good target. Bees are well adapted to frequenting flowers, and each bee is able to find a flower that it receives nectar from among dozens of flowers. Pollination would not be good if the bees did not always land on the flowers of the same type of plant. Bees move from flowers of certain species to flowers of other species only when sap is depleted. Bees pollinate flowers in search of food, improve fruit varieties and increase productivity, while flowers provide bees with food such as pollen

and sap (protein, carbohydrate). The problem of increasing productivity with the help of bees and other complex methods is given great importance both in our country and in European countries. According to the information of many scientists, pollination of plants with the help of bees can increase the yield of alfalfa by 180-250%, sunflower by 40-50%, black wheat by 1.5 times, cabbage, turnip, onion by 30-40%, flax by 27%, rezovar fruit yield by 50- increases by 60%.

For large-scale use of bees for pollination: 12-14 days before moving a healthy, strong bee colony to the place where pollination is required, the family should have 5-6 brood rums and enough honey to feed the brood. One of the main conditions for achieving high pollination performance is to place the bee colony close to the pollination area and to have fewer obstacles in the way of the bees flying there. (Natural river, lake., hills, buildings, trees, toxic gases, industrial smoke, chemical waste), the faster the bees will go to pollinate, the less energy they need to fly over the obstacles, the safer their operation, and the fewer colonies of bees needed to pollinate an area.

In order to increase pollination efficiency in large areas of land, it is necessary to place bee colonies 200-300 m from the edge of the field, at a distance of 800-1200 m from each other. It should be taken into account that around the pollination area there should not be plants that attract the attention of bees, otherwise some of the bees will remain on them.

Taking into account that bees consume the same plant dust, reducing their vital activity, it is allowed to plant other crops next to the main plant.

Watermelons, melons, eggplants, cucumbers and wild plants, solyanka, ivy, sorrel and safflower crops increase the vital activity of bees, but their area should not exceed 2/3 of the pollinated crop area.

There are the following ways to pollinate crops with the help of bees and increase their productivity:

1. One of the methods used to ensure that bees go to the desired plant is to train them, that is, to develop in them a reflex to go to a certain plant;

For this, it is necessary to put the flower of the indicated plant in the prepared syrup (1 part of sugar, 2 parts of water) and leave it in this syrup for the whole night. In the morning, before the bees fly out, 200 g of this syrup is poured into containers for each family.

2. Teaching bees to collect honey from a certain place;

Prepared honey is poured into the container in the evening, and in the morning, the remaining honey is taken to the center of the designated area for pollination of the bees, covered with gauze, and the honey is poured again. When the bees return from the container to their hive, they "tell" the people there where the container is. If the bees are fed with this solution for several days in the hive, the bees will reach the place where they need it they will go.

3. One of the interesting methods is to remove the dust from the bees with a dust collector, at which time the bees go to collect dust again.

4. High density of bees per unit area of the pollinated crop;

5. Formation of steady reflex in bees to attend to plants;

6. Development of optimal periods of use of pollinating bees, taking into account the biological and physiological characteristics of plants, their cultivation techniques, growing season, temperature factor and conditions;

7. Changing the place of pollinating bee families every 5-7 days;

The main issue with bee pollination is the number of bee colonies needed to pollinate one hectare of plant. There are a total of 143 thousand bee families in our republic, which is not enough to pollinate 1.5 million hectares of cultivated cotton fields, 540 thousand hectares of alfalfa, 482 thousand hectares of gardens, poliza, vegetables, 387 thousand hectares of corn and other crops. In order to pollinate the crops in this area, additional 1.5-2 million bee colonies are required. Specialist scientists believe that 2-3 families of bees are enough to pollinate one hectare of clover flowers. 2-4 bee families are required for 1 hectare of cotton area, 2-4 bees for orchards, 0.5-1 bees for sugar crops, 1-2 bees for crops such as vegetables, vineyards, perco, rapeseed. Currently, it is possible to pollinate more than 200 thousand hectares of cotton fields with the bee family alone.

Bees help pollinate more than ten cotton flowers per minute, and about 72,000 per day. Good pollination at the right time is of great importance in increasing productivity. This is especially evident in the cultivation of alfalfa seed crops. Another way to develop beekeeping in our republic and provide it with food is that it is considered one of the nutritious crops that are repeatedly planted for livestock. Is to organize the planting of servitain crops such as winter rapeseed and perco along with rye on vacant land on farms. In addition to being a very nutritious succulent fodder for livestock in the spring, these nutritious crops are also excellent flower and pollen producing plants for the spring development of bees. Also, planting three-month-old varieties of sunflower in the fields freed from wheat also contributes significantly to the development of the bee colony by providing it with a lot of pollen and flower nectar at the end of summer.

Today, by applying innovative technologies in the beekeeping network in developed countries, creating famous breeds and types of bees belonging to the world gene pool, improving local breeds, it is possible to obtain at least 50-60 kg of honey from each bee family, bee products that cure thousands of different diseases, as well as another bee service. The fact is that by pollinating plant flowers, it is possible to increase the yield of various crops up to 60 percent.

List of used literature.

1. N.F. Krakhotin. "Beekeeping in Uzbekistan" T., Labor., 1985.
2. A.I. Isamuhamedov - "Beekeeping" T. Teacher. 1995.
3. N. F. Krakhotin "Calendar pchelovo". M. 1989.
4. A.G. Avestesyan "Pchelovodstva" M.
5. A.S. Nuzhdin "Osnovy pchelovodstva" M. 1988.
6. I. Kh. Irgashev., S. Starkov. "Basic beekeeping and bee diseases". T., Mekhnat, 1987.
7. T.Sh. Akmalkhanov "Beekeeping" (lecture texts) T. 2000.
8. T.Sh. Akmalkhanov, S.Sh. Isamuhamedov, B.A. Kahramonov. "Methodological manual for completing the tasks of practical training classes in beekeeping" T. ToshDAU 2000.