

FEED BIOTECHNOLOGY IN THE CULTIVATION OF BEES QUEENS ARTIFICIALLY

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ABSTRACT

In the Bukhara region, it is important to feed the bee colony with natural, vitamin-rich feed that accelerates the development of the colony, in addition to accelerating the development of the colony, for the artificial breeding of queen bees in early spring if there is no pollen. Natural nutrients have a positive effect on the development of the bee family and create a solid basis for the artificial breeding of queen bees.

KEYWORDS: *Natural Nutrients, Sugar Juice, Sweet Corn Juice, Wheatgrass Juice, Breeding Of Bees, Control Group, Experimental Group, Queen Bees, Artificial Breeding Of Bees, Larvae, Zootechnical Indicators.*

INTRODUCTION

The fact that the warm climatic conditions of the Bukhara region are sharply very hot and the variability is much slower than that of the flying activity of bees and the accumulation of honey, the sharp warming of the air and the abundance of unexpected precipitation in the furnace completely inhibit the frost separation of plants. During this period, the process of the development of the bee family ceases, the Mother Bee shortens the laying of eggs. As a result, the amount of offspring of young bees in the family decreases.

It is of great importance to feed the bee family with natural vitamin nutrients rich in proteins, which accelerate the growth and development of the family of bees, in addition, accelerate the development of the family, with the aim of growing mother bees in an artificial way, in the period when the bees do not have pollen in the early spring. It is known that this natural nutrient positively affects the development of the bee family, which in an artificial way becomes a solid ground for the cultivation of native bees. [2]

To this end, in order to develop the bee family in early spring in the conditions of Bukhara region in 2019 and to grow mother bees in an artificial way, in addition to bees from natural substances, water from the Willow was used for feeding.

During the experiment, on the basis of zootechnical indicators, Bee families were selected and, on the basis of similarity, experimental groups consisting of three different, 8 Bee families were formed. The first group was in control, and the remaining two were experimental groups. The

first experimental group of both groups included 50 liters of sugar corn water per 10 liters of sugar juice with 1%, and in the second experimental group, in addition to 10 liters of maize water per 1 liter of sugar juice with 1%, from 28 March 2019 to 10 May, kunora 300 mg. Dan went to a giving.

And in the control group, no additional feeding work was carried out. Bees in all groups were controlled on the basis of pre-established general methods.

Data on the effect of natural nutrients on the development of the bee family are presented in Table 1 below.

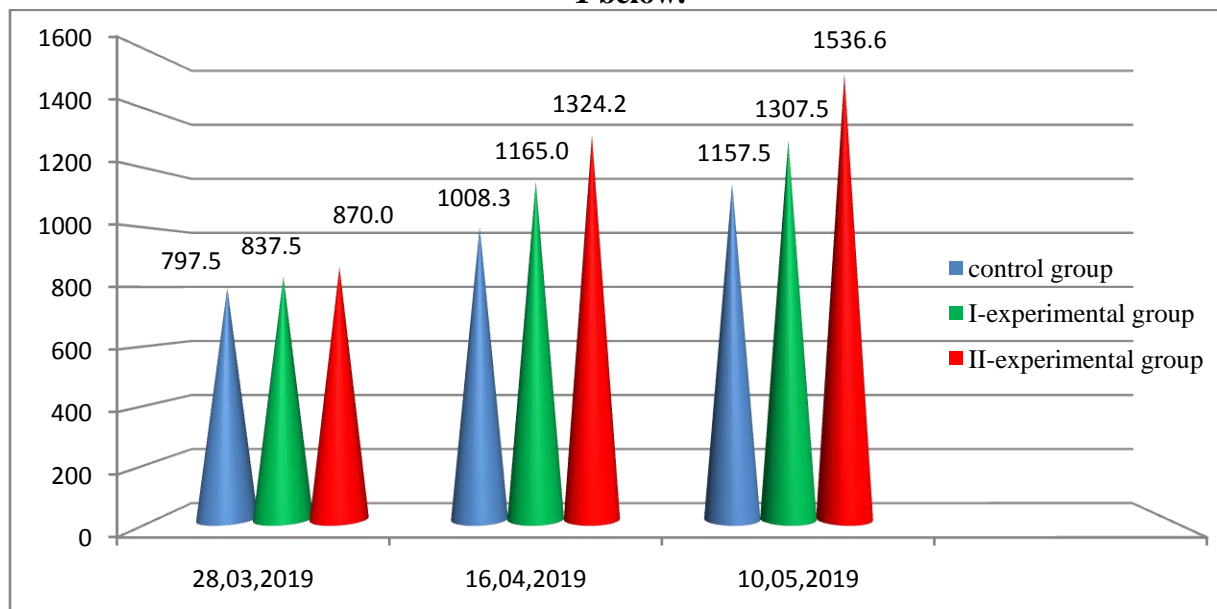
TABLE 1 THE EFFECT OF NATURAL NUTRIENTS ON THE DEVELOPMENT OF THE BEE FAMILY

Indicators	n	28.03.2019		16.04.2019		10.05.2019	
		Quantity Square	Mother Bee egg transfusion, pieces	Quantity of offspring, square	Mother Bee egg transfusion, pieces	Quantity of offspring, square	Mother Bee eggs, transfusion pieces
Control group (sugar juice)	8	95,7±5,1	797,5±9,4	121,0±4,1	1008,3±9.3	138,9±8.7	1157,5±11,5
I-experimental group, sugar juice +1 liter of sugar corn juice	8	100,5±2,6	837,5±22,1	139,8±8,9	1165,0±11,4	156,9±18,4	1307,5±20,5
II-experimental group, sugar juice + Sumal water	8	104,4±3,4	870,0±42,5	158,9±10,1	1324,2±15,4	184,4±22,5	1536,6±25,6

As can be seen from Table 1 data, when sugar corn water was used in the I-experiment group, the number of offspring in the family was 15,5% compared to the control group on 16 April and 31,3% in the II-experiment group. Similarly, 10 May it was found that these indicators grew by 12,9% and by 32,7%.

Information on the use of natural food for the purpose of the development of the bee family for the cultivation of native bees in an artificial way can also be seen in the picture

1 below.



1-picture. Dynamics of daily laying of eggs of native bees in control and experimental groups fed with natural nutrients.

As can be seen from Figure 1 data, it is shown that the daily egg laying of Mother bees increases with the number of months in the control and I and II experimental groups. It was found that the daily egg laying rate of the Mother Bee increased by 16 April, in the II-experimental group by 15,5% compared to the control, and in the II-experimental group by 31.3%. Similarly, 10 May, these proportions increased by 12,9% and 32,3%. ($R > 0,999$). Various natural nutrients were used in the cultivation of native bees. For this, two different groups of options were used in the cultivation of native bees in an artificial way. When the breeding bees were given to their families to grow larvae, they were given two different types of nutrients. And in the control group, only honey, which was in the frames, and 50% of sugar juice was used. In the I-experiment Group, one litre of sugar corn juice was added to 50% L of 10 litres of sugar juice, and in the II-experiment Group, water was added from the 10/1 ratio with the addition of soybeans. Data on the effect of natural nutrients on the reception of larvae from bees are presented in Table 2 below.

2 below.

The effect of additional nutrients on the reception of larvae

Groups	Larva was given, pieces	Larva accepted, numeral word	Received, %	Mother Bee has grown, pieces	%
Control	48	36,0±0,01	75,0	30,0±0,5	62,5
I-experience	48	39,0±0,8	81,2	33,0±0,15	68,7
II- experience	48	41,0±0,10	85,4	36,0±0,15	75,0

Table 2 data showed that in the cultivation of native bees, when breeding families were fed natural food, they differed sharply from each other in the reception of larvae. In particular, this indicator received 39,0 percent from 48 given larvae in the I-experimental group, which was 81,2%, in the II-experimental group this indicator received 41,0 percent from 48 given larvae,

which was 85,4%, or this indicator was 130,5% more than in the I-experimental group. This figure was 75.0 % in the control group. ($R > 0,999$). At the end of the experiment, a control group of larvae received 30,0 units (62,5 %), 33.0 (68.7 %) and 36.0 (75.0 %) quality native bees were grown in the I-experimental group.

We have also studied the effects of immature, unfertilized Mother Bee on weight, when feeding families who are bred in the cultivation of Mother bees, with natural nutrients of different composition.[1],[5]. Data on the effect on the weight of native bees, grown from larvae fed with various nutrients, are presented in Table 2 below.

3 below.

The effect of various compounds of nitrogen on the growth of native bees, its weight, mg

Groups	N	Lim	M±m	Cv, %
Control	5	171-198	184,5±0,54	1,31
I-experience	5	180-206	193,0±1,66	3,57
II- experience	5	185-210	197,5±1,63	3,75

From Table 3 data it can be seen that when using sugar corn water, which is a natural nutrient, the weight of the Mother Bee is 193 when fed in the I-experiment group mg.ni in the II-experimental group, the weight of the Mother Bee was 197,5 mg compared to the control group, which is 8,5 mg or more, which is 104,6%, and in the II-experimental group mg.ni it was determined that it was organized. These indicators are compared to the control group at 13,0 mg or this is 107,1% more. In the control group, this figure is 184,5 mg.ni it was observed that the organization. When using different types of nutrients in the cultivation of native bees, there is no significant difference in the weight of native bees in the I and II-experimental groups, their variability coefficient varies by 0,5% in the sign.

[3]. Since early spring, in the cultivation of native bees in an artificial way, in order to ensure the growth and development of the bee family, the composition of sugar juice containing the Bee's food has been added from the nutrients in natural addition. As a result, the adoption of larvae during the period of artificial breeding of Mother bees increased by 18-22 %, the weight of Mother bees increased by 8-12 mg.ga it is noted that the Daily laying of eggs by increased and native bees reaches 2000 PCs.

In bee farms, the use of sugar corn water and lawn water in addition to sugar juice of mineral and natural nutrients, stimulating the families of growing bees, with the aim of growing mother bees in an artificial way, is of great importance.

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