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BENEFITS OF BEE CULTIVATION

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Abstract
In the conditions of Bukhara region, the increase in the weight of eggs laid by queens due to additional feeding of bee families for artificial breeding of queens from the bee family of the local population. The weight of a bee's egg is related to the quality of the queen's large number of eggs, the strength of the bee's family, the weight of the queen's bees, and the number of egg tubes in her ovary.

Keywords: Quality mother, pollen, egg tubes, wheat grass water, control group, experimental group, mother bees, mother bee breeding from bee eggs, breeding bee family, mother bee breeding from bee larvae, plastic cup, wing length, wing width, 3-tergit, 3-sternit.

Introduction

When raising a bee colony, the main focus is on making the colony strong. The strength of a bee colony depends on the quality of the only queen bee in the colony. The quality of a queen bee is characterized by the number of fertilized eggs she lays.

Only the queen bee laying a large number of eggs in the family ensures a strong bee family, because such a queen bee weighs much more and has a slightly larger number of egg tubes in her ovary.

Many factors affect the weight of queen bees. These include the weight of the bee eggs, the quality of the bee colony, the quality of the food provided to the queen bee, the arrival of natural nectar and pollen from the field, the surrounding environment, and the temperature of the weather.

Taking these into account, in accordance with the experiment conducted at the Saidov Samad Sanoevich Dehkan Farm in the Vobkent district of the Bukhara region, we studied the effect of the weight of bee eggs on the quality indicators of queen bees, namely the daily weight of the queen bee and the number of egg tubes in her ovaries, during artificial queen bee breeding.

We took the weight of the queen bees' eggs from the cells of the bee frames with a special scoop made of goose down, with a smooth tip, and measured them on an electronic scale that accurately measured them. We also measured the weight of the one-day-old queens on the same electronic scale. Before measuring, the unfertilized queens were anesthetized with ether.

To determine the number of oviducts in the anesthetized queens, they were placed in 70% ethyl alcohol and stored for later examination.

The experiments were conducted in two variants. In experimental group I, the queen bees were not fed any additional food, while in experimental group II, the nurse bee colonies were additionally fed 10 liters of 50% sugar syrup with one liter of wheatgrass juice [1;2;4.].

200-250 mg once every two days was fed through the upper mangers of the rearing bee family.

Information on the influence of bee egg size on queen bee quality indicators is presented in table 1 below.

Table-1 **The influence of bee egg size on the quality of queen bees**

Groups	n	Bees eggs weight	Weight of queen bee , мг	Egg tubes the number
Control is migrant queen bees	15	0,118±0,006	198,5±1,50	186,6±1,64
Experimental group 1 was not fed	105	0,109±0,005	196,4±1,66	170,8±1,59
Experiment 2 fed	98	0,149±0,004	217,6±1,71	191,2±2,21

As shown in Table 1, when 105 eggs of bees in the I-experiment group were measured, their average weight was 0.109 mg. The weight of one-day-old queens hatched from these eggs was 196.4 mg., and the number of oviducts in their ovaries was 170.8.

In the II-experimental group, when these colonies were fed with protein-rich wheatgrass juice, the picture was completely different, the average weight of 98 bees' eggs was 0.149 mg, which was 0.440 mg more or 136.6% more than in the I-experimental group. It was 31.0 mg more than in the control group.

Similarly, the weight of one-day unfertilized queen bees in the II-experimental group was 217.6 mg, or 21.2 mg more than in the I-experimental group. This is 110.8% more. It was 19.1 mg more than in the control group.

Also, the number of ovules in the ovaries of queen bees in experimental group II was 191.2, which was 19.4 more than in experimental group I, or 111.9% more. It was 4.6 more than in the control group.

It should be noted that the weight of the queen bee's egg also plays a major role in the formation of the queen bee. During the life cycle of queen bees, they only receive a large amount of milk from the nurse bees in the family, so even when the queen bees are mature, a large amount of milk remains unused in their hive (colony).

Therefore, the queen bees are provided with sufficient food during the formation period.

Therefore, additional protein-rich food has a significant impact on the formation and development of queen bees. Of course, they are fed additionally, and the temperature and humidity of the hive, as well as the food they receive from the field, are taken into account.

Conclusion:

Addition of grass wheat water (10×1 ratio) containing protein and vitamin nutrients to the formation and development of the queen bee, in addition to the content of her food [1;2;4.], ensured the rapid development of the queen bee larvae.

Also, heavy weight bee eggs produce mature and healthy heavy weight queen bees with increased viability and disease resistance, and are capable of laying large numbers of eggs.

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