THE EFFECT OF FOOD ENRICHED WITH CELLULOSE SOLUTION ON THE PERFORMANCE INDICATORS OF BREEDING QUEEN BUTTERFLIES

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ВЛИЯНИЕ КОРМА, ОБОГАЩЕННОГО РАСТВОРОМ ЦЕЛЛЮЛОЗЫ, НА ПРОДУКТИВНОСТЬ МАТОК-БАБОЧЕК

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Abstract. The article is aimed at raising the productivity indicators of elite hybrids of mother butterflies, which are being prepared in seed breeding enterprises. Fertility indicators of female butterflies emerging from brood cocoons wrapped with silkworms fed with leaves soaked in cellulose solution when feeding elite hybrids, egg-laying weight up to 10.1, 14.8, 19.9 and 17.1%, number of eggs in clutch up to 6.4, 10.5, 15.3 and 13.1% compared to control female butterflies increase is given.

Абстрактный. Статья направлена на повышение показателей продуктивности элитных гибридов маточек-бабочек, которые готовятся в семеноводческих предприятиях. Показатели плодовитости самок бабочек,

выходящих из выводковых коконов, обернутых шелкопрядами, откормленными листьями, смоченными в растворе целлюлозы, при скармливании элитных гибридов, масса яйцекладки до 10,1, 14,8, 19,9 и 17,1%, число яиц в кладке до 6,4, 10,5, Приведена прибавка 15,3 и 13,1% по сравнению с контрольными самками бабочек.

Ключевые слова: Порода, гибрид, элита, яйцо, жизнеспособность, кокон, шелковистость, биологическая, продуктивность, клетчатка.

Key words: Breed, hybrid, elite, egg, viability, cocoon, silkiness, biological, productivity, cellulose.

INTRODUCTION. Cocooning is considered one of the main additional branches of the agricultural sector, which has been developing since ancient times. In order to satisfy the demand of our country's national economy for silk products and to strengthen mutual economic relations with foreign countries by increasing the industry's export potential, several decisions of the President of the Republic of Uzbekistan issued the development of the cocoon industry. Among them, decisions PQ-73 dated February 24, 2023 "On measures for the further development of the silk industry" and PF dated June 1, 2023 "On additional measures to support home farming in the field of cocoons and further expand the feed base for growing cocoons" - In Decree No. 85, extensive testing of silkworm breeding achievements, development of primary breeding of mulberry silkworm breeds and hybrids, taking into account the natural climatic conditions of the regions, creation of breeds and hybrids in accordance with international standards through the development of advanced scientific developments and intensive agrotechnologies, local silkworms and by increasing the production of cocoons and improving their quality, urgent tasks for expanding the export opportunities of the silk industry have been defined.

In order to positively solve these tasks, first of all, it is necessary to take measures to introduce high-yielding breeds and hybrids with high technological characteristics, as well as to improve the biological and productivity characteristics

of breeding and industrial eggs. Without improving the quality of silkworm eggs, cocoon quality cannot be improved.

A.N.Nartboev, G.U.Ayazov (1989), who conducted extremely interesting experiments from a theoretical point of view, noted that when the feeding of North Caucasian merino sheep was organized at a high level, their live weight and wool productivity increased significantly. Most importantly, the authors concluded that with improved nutrition and care, traits can be passed on genetically to the next generation.

J.Sh.Toychiev (2001) studies in the care of elite hybrid worms, using advanced methods of feeding, increase the number of cocoons suitable for breeding up to 16.6 percent compared to control worms.

For this purpose, breeding cocoons grown in each experimental variant were selected and placed in the population. Mother butterflies were cross-bred with the desired breed or hybrid and clutches were prepared. According to the experiment and comparative options, the following signs of dryness were identified:

number of eggs in a nest, weight of eggs in a nest, average weight of 1 egg.

The fertility indicators of the mother butterflies in the experimental and control options are presented in Table 1.

Table-1

Effects of Cellulose Solution Enrichment of Breeding Worm Food on Maternal Maternal Performance (Chinese x Japanese Elite Hybrids)

Options	Maternal fertility indicators		
	Egg laying weight, mg	In the standard in the warehousegi number of eggs, pcs	The average weight of 1 egg is mg.
1-Control	256	482	0,531
Experiment 2 0.025%.	282	513	0,549
Average vs. Comparator, %	110,1	106,4	103,4
Experiment 3 0.05%	294	533	0,551
Average vs. Comparator, %	114,8	110,5	103,7
4th Experiment 0.75%	307	556	0,552

Average vs. Comparator, %	119,9	115,3	103,9
Experiment 5 0.1%	300	544	0,551
Average compared to the comparator,%	117,1	112,89	103,7

As can be seen from the figures presented in Table 1, the average weight of one egg laid by a female butterfly from the breeding cocoons in the experimental variant was 282 mg in the variant fed with leaves enriched in 0.025% cellulose solution in experiment 2, and 282 mg in experiment 3 in 0.05% cellulose solution. 294 mg in the leaf-fed version enriched with 0.75% cellulose solution, 307 mg in experiment 4, 307 mg in the leaf-fed version enriched with 0.1% cellulose solution, experiment 5, 300 mg in the control version. this indicator was equal to 256 mg on average, or we witnessed an increase in the weight of the eggs laid by the queens of the experimental variants to 10.1, 14.8, 19.9 and 17.1% compared to the queens of the control version.

The average number of normal eggs in the clutch obtained from silkworm butterflies in the experimental variants was 513 eggs in the variant fed with leaves enriched in 0.025% cellulose solution in the 2nd experiment, 533 eggs in the variant fed with leaves enriched in 0.05% cellulose solution in the 3rd experiment, 533 eggs in the 4th experiment 0.75% It was found that 556 pieces in the variant fed with leaves enriched in cellulose solution with 4, 546 pieces in the variant fed with leaves enriched in 0.5% cellulose solution, while in the control version this indicator was equal to 482 pieces.

If this indicator is compared to the comparative variant, it is clearly seen that the number of eggs in the nest obtained from the mother butterflies of the experimental variants increased up to 6.4, 10.5, 15.3 and 13.1 percent compared to the mother butterflies of the control variant.

The following conclusions can be drawn from the results of these experiments.

The use of leaves enriched with cellulose solution in feeding the breeding worms, providing a normal feeding area and picking up the cocoons wrapped by the worms, not only increases the silkiness of the cocoons and the proportion of

fertile cocoons, but also leads to a positive change in the fertility indicators of the mother butterflies.

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