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INFLUENCE OF TEMPERATURE AND MOISTURE CONTENT OF WOMES HELD FROM IMPORTED SEEDS ON VIABILITY OF THE LARVES

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ABSTRACT:

The article examines the effect of live worms from imported seeds on the viability of larvae by feeding them at different temperatures and humidity in order to adapt them to the conditions of Uzbekistan, and also provides information on determining the normal temperature and humidity.

World experience in economic development shows that the growth of the agricultural sector is one of the key factors in the development of agriculture. Therefore, special attention is paid to agriculture in the balance of macroeconomic indicators for the sustainable and continuous development of the country's economy in the near future.

KEYWORDS: seeds, agriculture, macroeconomic indicators, silkworm seeds.

INTRODUCTION:

Measures are being taken in our country to develop the silk industry. In particular, the Decrees of the President of the Republic of Uzbekistan "On measures for further reforming the silk industry of the Republic" of November 15, 2006 No. PP-512, "On the construction of special worms" in November 2012 were adopted. They call for the creation of new mulberry groves in designated areas, the fulfillment of silkworm seed production tasks, and timely and final settlement for live cocoons obtained from farms, and serious attention to the quality of cocoons.

In recent years, it is customary in our country to import the seeds of silkworm hybrids. The origin of these hybrids, feeding methods, cocoon yield, quality and technological features are not fully understood. As a result, the quantity and quality of cocoons grown in the country are not at the required level. The analysis shows that imported breeds and hybrids of the silkworm are not able to clearly show their internal potential in the climatic conditions of our country. In addition, since these seeds are mainly hybrid, they must be brought in every year.

In addition, the import of hybrid silkworm seeds from abroad makes the silkworm country dependent on the outside world. To date, very little research has been done on purebred silkworm species from abroad. To solve this problem, it is necessary to increase the yield, quality and technological characteristics of the cocoon by adapting

imported breeds and silkworm hybrids to the conditions of Uzbekistan. The relevance of this topic indicates that the preparation of promising hybrid seeds, their recommendations for production, has a positive effect on the reproduction of the silkworm and on the economy of the republic.

The authors of interesting studies in the field of silkworm and temperature in recent years are A.B. Yakubov (1997), S.S. Lezhenko (1998), E.Kh. Tajiev (1999), N.A. Akhmedov (1999, 2001), U. N. Nasirillayev (2008, 2009), Sh.R. Umarov (2008, 2010), who believe that cooking eggs, their incubation, feeding worms at different temperatures and wrapping cocoons, primary processing of cocoons are processes associated with energy consumption, the temperature of the silkworm. An in-depth study of the interaction with the factor suggests that it can control the development of silkworms.

According to the rules of agricultural technology, according to the variants of worms, in the experiment, food was served with a sufficient area and amount of food (in the order that is considered normal for a box with worms), in the order of light and air exchange. But at what temperature and humidity the worms were fed in the following mode.

Option 1: from the silkworm breeds imported from Japan, the seed worms of the "Japan" breed fed at a temperature of 20-21 ° C and a humidity of 60-65%.

Option 2: from the silkworm breeds imported from China, the seed worms of the "China" breed fed at a temperature of 20-21 ° C and a humidity of 60-65%.

Option 3: Worms of Jingsong x Haoyue hybrid seeds imported from China were fed at 20-21 ° C and 60-65% humidity.

Option 4. Haoyue x Jingsong hybrid seed worms imported from China fed at 20-21 ° C and 60-65% humidity.

Option 5: (comparative). The larvae of hybrid seeds Ipakchi-1 x Ipakchi-2 were fed at a temperature of 20-21 ° C and a humidity of 60-65%.

Option 6: from the silkworm breeds imported from Japan, the seed worms of the "Japanese" breed fed at a temperature of 26-27 ° C and a humidity of 75-80%.

Option 7: from a silkworm breed imported from China, the China breed worms fed at a temperature of 26-27 ° C and a humidity of 75-80%.

Option 8: Worms of Jingsong x Haoyue hybrid seeds imported from China fed at 26-27 ° C and 75-80% humidity.

Option 9. Haoyue x Jingsong hybrid seed worms imported from China fed at 26-27 ° C and 75-80% humidity.

Option 10: (comparative). The larvae of hybrid seeds "Ipakchi - 1 x Ipakchi - 2" were fed at a temperature of 26-27 ° C and a humidity of 75-80%.

Option 11: from the silkworm breeds imported from Japan, the seed worms of the "Japan" breed fed at a temperature of 29-30 ° C and a humidity of 65-75%.

Option 12: from a silkworm breed imported from China, the China breed worms fed at a temperature of 29-30 ° C and a humidity of 65-75%.

Option 13: Worms of Jingsong x Haoyue hybrid seeds imported from China were fed at a temperature of 29-30 ° C and a humidity of 65-75%.

Option 14. Haoyue x Jingsong hybrid seed worms imported from China fed at a temperature of 29-30 ° C and a humidity of 65-75%.

Option 15: (comparative). The larvae of hybrid seeds Ipakchi-1 x Ipakchi-2 were fed at a temperature of 29-30 ° C and a humidity of 65-75%.

Although there have been a number of studies on the effects of temperature on

silkworms, no data has been collected on the extent to which this affects the viability of live worms from imported seeds by linking them to air humidity. However, this issue plays an extremely important role in the breeding practice of the silkworm.

Because today, due to the inexperience of wormholes on farms, sudden changes in temperature and humidity in a wormhole are tolerated. Therefore, in our study, special attention was paid to the study of the influence of high and low temperatures and relative humidity on the viability of the silkworm. Data on this are given in Table 1.

Table 1. The survival rate of worms developed at different temperatures and humidity

Variants	Number of worms by age, pcs.							Duration of the worm cycle, days
	At the age of 1	At the age of 2	At the age of 3	At the age of 4	At the age of 5	Before packing the cocoon		
						pieces	%	
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
temperature 20 – 21⁰C humidity 60–65%								
B– 1	200	187	182	178	176	175	87,5	31
B– 2	200	187	182	178	176	176	88,0	31
B– 3	200	186	181	179	178	177	88,5	30
B– 4	200	186	180	178	177	177	88,5	30
B–5 п	200	189	185	183	181	180	90,0	29
temperature 26 - 27 ⁰C humidity 75–80 %								
B–6	200	196	193	188	184	184	92,0	26
B–7	200	197	193	190	187	186	93,0	25,5
B–8	200	195	192	190	188	188	94,0	23
B–9	200	198	194	190	187	187	93,5	23,5
B-10п	200	198	196	194	191	190	95,0	24
temperature 29 - 30 ⁰C humidity 65–75 %								
B–11	200	197	195	189	179	177	88,5	24
B–12	200	198	196	191	185	183	91,5	23,5
B–13	200	199	198	193	186	184	92,0	22
B–14	200	199	198	194	191	186	93,0	22,5
B-15п	200	197	194	188	181	179	89,5	22,5

The numbers in Table 1 show that dramatically different temperatures and humidity affect not only the development of the silkworm during the incubation period, but also its survival during the worm period. For example, by the end of the fifth year, when the worms were fed at a temperature of 20-21 ° C and a humidity of 60-65%, survival to cocoon was 88.5% in hybrids imported from Japan and China, and 90% in local hybrids. This means that the survival rate of worms that feed at low temperatures and humidity is almost the same. The continuation of their worm cycle also lasted from 29 to 31 days, and it was found that the worm of local worms was reduced to 1-2 days.

When the temperature and humidity of the larvae are normal (temperature 26-27 ° C, humidity 75-80%), the survival rate of worms averages 92-94% for live worms from imported seeds, which is 1-3% lower than that of local hybrids (95.0%). It was observed that

the length of the worm cycle was equal to the control variant.

When silkworms were fed at high temperatures (29 - 30 ° C), their survival averaged 89 - 93% in all variants, and the average larval period was 23 - 24 days.

The growth, development and disease of the worms were also observed during the experiment. The worms developed well and were healthy for up to 3 years in all variants. From the age of 4, it is known that they are mainly susceptible to bacterial and fungal diseases.

Thus, when larvae from imported seeds fed at low (20-21 ° C) and above normal (29-30 ° C) temperatures, the survival rate of the larvae was reduced by 5-6%, and the larval period was increased to 7-9 days. ... This situation leads to the fact that the feeding of the worms is delayed on hot summer days, and as a result of improper nutrition of the worms due to rough processing and hardening of the leaves, small and poor-quality cocoons are wrapped. With this in mind, it is advisable to reanimate imported seeds at 24-25 ° C, feed the worms at a temperature of 26-27 ° C and a humidity of 75-80% at a young age, as well as at a temperature of 25-26 ° C and a humidity of 65-70% in adulthood.

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