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The Role Of Slaked Lime In The Care Of Adult Silkworms

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Annotation. In all silk-growing developed countries (China, India, Japan and Korea), it is widely used Lime, which is absorbed when feeding the silk worm. Until now, Lime has been treated only as a building material. The main component oflime, which does not absorb oxaccharides, is calcium oxide (CaO). Calcium oxide (Ca (OH)2), also known as insoluble lime, emits a certain amount ofheat during this process. Nidratated lime is a kind ofstrong hydrochloric substance that has a sterilization and disinfection effect, but at the same time it has a certain degree of corrosion meeting. Ifthe silk worm is used more wisely in feeding, where it is an untreated lime or a exaggerated lime, it will great help to prevent the disease ofthe silk worm, as a result of which the productivity of the cocoon can also increase significantly.

Keywords. Silk worm, lime, feed, film, seed, hybrid, temperature, humidity, vitality, formalin, chlorine, external environment, stove, paper.

Introduction.

A number of decrees and decisions have been adopted by the president of the Republic of Uzbekistan on measures to further develop the packed sector, strengthen its food base and increase the volume of cultivation of silk products. In order to implement these decisions, a number of positive works are being carried out to determine the prospects for further development of the Republic's ladder, and to the level that meets the world requests of the raw materials grown.

Under the leadership of the president, special attention is paid to further development of Agriculture in the process of reform. Advanced agrotechnical methods,

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modern innovative technologies are being introduced and technologies of foreign countries are widely used in increasing the productivity of the steps.

Purpose and function of the study. During the agrotechnics feeding of the silk worm, it is planned to increase the effectiveness of the silk worm by biological indicators, signs of productivity and survival, changes of the silk worm, as well as the impact of the silk worm on diseases and diseases, analysis of foreign technology on the basis of agrotechnics curiously used in the Republic.

On account of the use of lime is to maintain the prime number of silk worms, to develop teks and to prevent various diseases. Insufficient supply of nutrients in the process of feeding the silk worm does not cause the emergence of diseases.

The silk worm was picked up by Chinese-108, Japanese-66 and silkworms-1, silkworms-2 breeds. The mulberry tree is fed with leaves of Jarik 2, Jarik 4, and October Mulberry varieties.

Research conditions and method. The research was carried out in 2018-2020 at the joint Chinese enterprise "Samarkand TIAN ZHU SILKWORM" in Samarkand City, the following conditions were created and tasks were set for feeding the Bunda silk worm:

- disinfection of the incubator;
- preparation of special worms for feeding live worms;
- preparation of equipment used in worm feeding;
- when feeding the worm, the effect of disinfection can be enhanced on the basis of the addition of quenched lime to the means of disinfection of the worm. For sprinkling on a silk worm, 10 kg of unrefined lime is sprinkled with I liter of water and grind well;
- after disinfection, the premises are stored in an airtight condition at a temperature of 24 C^0 for one night;
- seeds of quenched lime silk worm should be prepared 7-10 days before arrival;
- do not use untreated lime directly on The silkworm;
- unused unbroken lime pieces and hydrated lime bag should be wrapped in plastic bags with a tightly tied mouth and stored in a sapol container;
- spraying lime silk worm is not recommended at the age of 1-2 years;
- lime powder sprinkled 2 times a day before giving leaves in the morning and in the evening;
- polyethylene was fed under the film.

The results of the study and its analysis. It is not recommended to use quenched lime for silk worms at the age of 1-2 years old, which is being fed. To disinfect the place of the silk worm, fresh lime powder is used at the age of 3-5 years. When feeding the silk worm, lime can prevent diseases, as well as protect the silk worm from drying out, and the appearance of weak silk worms was picked up;

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If the lime powder is exposed to the air and stored for a very long time, it reacts chemically with carbon dioxide in the air, forming a calcium carbonate that is insoluble in water and has no hydroxide ions, and it completely loses the effect of sterilization and disinfection;

In addition, unrefined lime is considered natural, and the lime powder formed as a result of the breakdown is also ineffective. Therefore, when lime is used as a disinfection agent, prepare it correctly for disinfection without proper storage and use it on the same day.

In fact, this operation is also not recommended for Mulberry silkworms at 1-2-year-old age. When a small age silk worm is completely covered with lime powder, it is difficult to breathe and does not correspond to the optimal condition.

If directly on the silk worm is sprinkled unsweetened lime, then its negative effects. As a rule, clusters engaged in silk production and specialists engaged in professional activities, farmers buy lime in scrap. If the exaggerated lime is crushed directly and sprinkled directly on the silk worm, the silk worm will burn. If the silk worm is sprinkled with lime, which is not absorbed more, some diseases of the silk worm appear. This is due mainly to the fact that mulberry leaves, silk worm feces, etc contain a certain amount of water, while the quenched lime emits a certain amount of heat under the influence of water, which burns the silk worm.

During the feeding of the silk worm, we sometimes encounter continuous rain or high temperature and humidity. In this case, the relative humility of the silk worm is high, while the silk worm's beak is prone to moisture, in some there may also be droplets of water. More lime can reduce moisture. It is carbon dioxide in the air (CO2) added with, it is formed. Calcium carbonate (CaCO3, and water at the same time (H2O) will form.

Table 1

The procedure for using lime and the amount of spraying when feeding silkworms

Age of the silk worm	Feeding area m^2	Sprayed lime powder kg	Spraying periods in the morning kg	Spraying periods in the evening kg
1-day	**25-30**	0,500	0,200	0,300
2-day		0,750	0,300	0,450
3-day		1,250	0,500	0,750
4-day		1,5	0,700	0,800
4-age total		**4**	**1,700**	**2,300**
1- day	**55-60**	1,5	0,700	0,800
2- day		1,700	0,700	1
3- day		2	1	1

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4- day		2,300	1	1,300
5- day		2,600	1,200	1,400
6- day		2,900	1,300	1,600
7- day		3	1,400	1,600
5-age total		**16**	**7,300**	**8,700**
Total		**20,5**	**20,5**	**20,5**

When fed on the basis of agrotechnics feeding mulberry silk worm on the basis of foreign technology sprayed lime amount for a box worm and acceptable deadlines.

At the Fourth Age for a box of Worms, 4 kg of quenched lime is sprinkled. Then in the morning 1.7 kg, in the evening 2.3 kg of quenched lime is sprinkled.

At the fifth age for a box of worms, 16 kg of quenched lime is sprinkled. Then in the morning, 7.3 kg, in the evening, 8.7 kg of quenched lime is sprinkled.

1-picture. The process of sprinkling quenched lime

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Table 2

Prevention of adult mulberry silkworm diseases by applying slaked lime

Sequel to Silkworm Youth		During the silkworm's youth																			
		Silkmaker 1					Silkmaker 2					Chinese -108					Japanese-66				
		the rest	%	died	%	relative to the comparator %	the rest	%	died	%	relative to the comparator %	the rest	%	died	%	relative to the comparator %	the rest	%	died	%	relative to the comparator %
October																					
4-age	expe-l	295	98,3	5	1,7	98,6	293	97,7	7	2,4	98,6	292	97,3	8	2,7	98,6	291	97	9	3,1	97,9
	com-e	291	98,6	9	3,1		289	96,3	11	3,8		288	96	12	4,2		285	95	15	5,3	
5-age	expe-l	293	97,7	7	2,4	98,3	291	97	9	3,1	98,6	287	95,7	13	4,5	96,5	287	95,7	13	4,5	95,8
	com-e	288	98,3	12	4,2		287	95,7	13	4,5		277	92,3	23	7,7		275	91,7	25	8,3	
Jararik 2																					
4-age	expe-l	294	98	6	2,0	98,3	291	97	9	3,1	98,9	291	97	9	3,1	98,6	290	96,67	10	3,4	97,2
	com-e	289	96,3	11	3,8		288	96	12	4,2		287	95,7	13	4,5		282	94	18	6,4	
5-age	expe-l	292	97,3	8	2,7	97,9	289	96,3	11	3,8	98,3	285	95	15	5,3	95,4	285	95	15	5,3	94,7
	com-e	286	95,3	14	4,9		284	94,7	16	5,6		272	90,7	28	9,3		270	90	30	11,1	
Jararik 4																					
4-age	expe-l	291	97	9	3,1	97,9	290	96,7	10	3,45	97,9	287	95,7	13	4,5	99,3	287	95,7	13	4,5	97,9
	com-e	285	95	15	5,3		284	94,7	16	5,63		285	95	15	5,3		281	93,7	19	6,8	
5-age	expe-l	283	94,3	17	6,0	99,3	287	95,7	13	4,53	97,6	283	94,3	17	6,0	94,7	282	94	18	6,4	94,3
	com-e	281	93,7	26	9,2		280	93,3	20	7,1		268	89,3	32	11,9		266	88,7	34	12,8	

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As can be seen from the information in this table, we can see the positive results of the degree of morbidity in the control of qiyosin when fed mulberry silkworm breeds on the basis of sprinkling of quenched lime.

A positive result in relation to the control of comparative analysis was found that each breed was higher in youth.

In the control option, lime was springled with Table 1 and positive results were obtainable. In the comparative variant, the quenched mortar was not applied.

Conclusion. The use of lime extended on the basis of foreign technology has a positive effect on the use of lime extended during young people in the care of mulberry silkworm, this indicators that bacterial, virus, fungal and pebrina diseases have been picked up, the number of healthy worm heads has been brought and the
productivity and quality of the industrial plants grown.

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