THE IMPORTANCE OF IMPROVING TECHNOLOGICAL PROCESSES FOR STORAGE AND PROCESSING OF DRY COCOONS GROWN IN DIFFERENT SEASONS

[1]Niyazaliyeva Mukhayyo Makhmudovna, [2]Mirzakhonov Mukhammadkarim
Fergana Polytechnic Institute, Fergana, Uzbekistan[1], Uzbekistan natural fibers ITI, laboratory manager Margilan, Uzbekistan[2]
muxayyo_makhmudovna@mail.ru[1], margilon_shoyi@yahoo.com[2]

ANNOTATION

This article examines the technological properties of silk obtained from re-feeding cocoons in the spring, summer and autumn seasons, and provides comparative results of the main indicators.

Keywords: Silkworm, cocoon, technology, process, silk, raw material, temperature, silkworm, continuous length, total length, linear density, silkworm.

Favorable metrological conditions in the country allow the development of the silk industry, a sharp increase in production of raw silk, silk fabrics and products.

In order to produce a quality product, it is necessary to ensure the compatibility of recyclable textile raw materials and the right technology. A number of measures taken in the Republic in recent years to increase the volume and quality of products and the uninterrupted production of valuable silk raw materials throughout the year are yielding good results. The integration of production and science is important as the main measure of the measures taken.

One of the most important problems of the silk industry is the production of raw silk and silk products that meet the requirements of world standards by improving the technological processes of high-quality, competitive cocoon production, cocoon pre-processing, storage and processing of dry cocoons. consists of

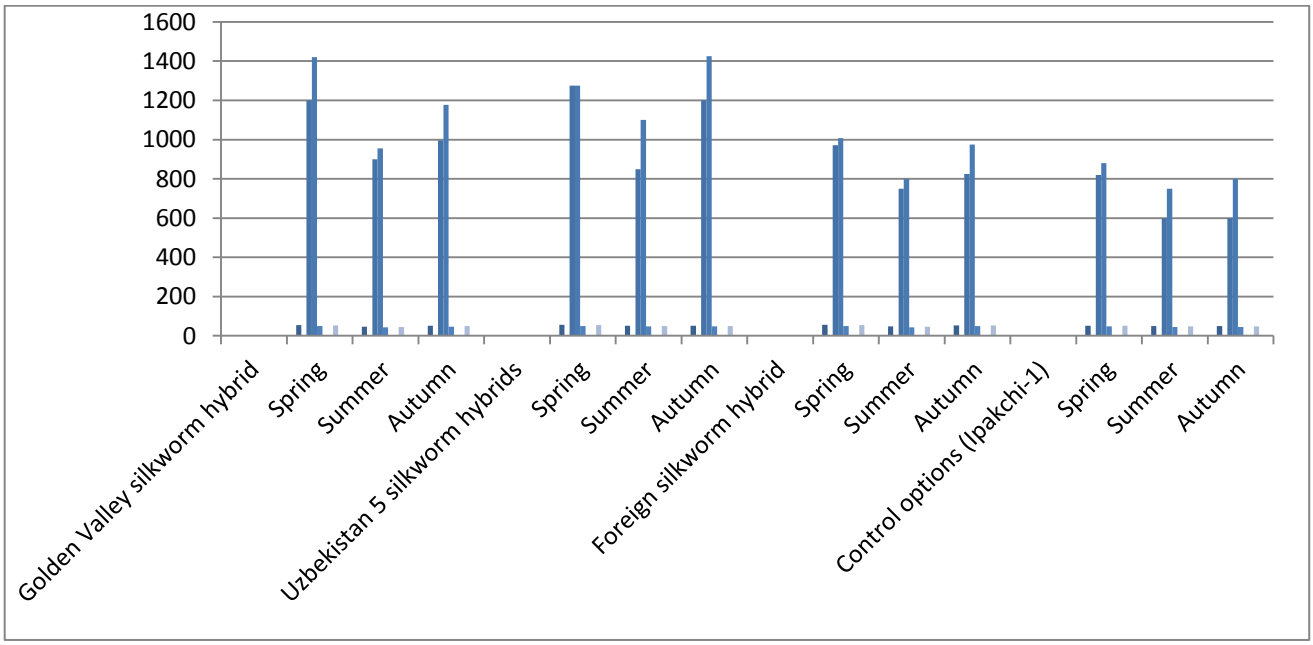
In the development of silkworm breeding, cocoons grown from silkworm seeds of different breeds and hybrids are made for the current silk industry due to the care of silkworms in different seasons and the creation of special climatic conditions for the production of cocoon raw materials. In the districts of Surkhandarya region from the southern regions of the country, the rearing of silkworms is carried out under normal conditions.

During the research work on silkworm re-feeding, Golden Valley 2, Uzbekistan 5 and Foreign Silkworm hybrids were fed in spring, summer and autumn, and live and dried cocoons were stored in the laboratory of the Uzbek Natural Fiber Research Institute at 3 different temperatures. samples were taken by keeping them alive and by drying the cocoons on a single cocoon washing machine.

Cocoon breeding season	Live cocoon weight, mg	Silk, %	Linear density, tex	Continuous washing length, m	Total length, m	Raw silk,%	Cocoon los, %	Sanax, %	Total raw silk, %	Solvents, %	Comparative spending
Golden Valley silkworm hybrid											
Spring	0,966	54,22	0,330	1200	1420	49,80	0,98	1,80	52,58	1,64	,01
Summer	0,630	46,60	0,286	900	955	43,40	0,80	1,30	45,5	1,10	2,30
Autumn	0,802	51,20	0,306	996	1178	46,50	1,02	1,98	49,50	1,70	2,15

Uzbekistan 5 silkworm hybrids											
Spring	0,758	55,67	0,346	1275	1275	49,99	1,22	2,64	53,85	1,82	2,00
Summer	0,700	51,20	0,300	850	1100	47,65	1,05	1,25	49,9	1,30	2,10
Autumn	0,750	51,65	0,330	1200	1425	47,90	1,05	1,20	50,15	1,50	2,09
Foreign silkworm hybrid											
Spring	0,476	56,72	0,279	971	1008	50,14	2,62	2,15	54,91	1,81	1,99
Summer	0,400	47,78	0,260	750	800	43,29	1,90	1,24	46,43	1,35	2,31
Autumn	0,426	53,72	0,270	825	975	50,47	1,05	1,10	52,62	1,10	1,98
Control options (Ipakchi-1)											
Spring	0,40	52,2	0,269	820	880	47,87	1,70	1,46	51,03	1,17	2,09
Summer	0,320	49,10	0,272	600	750	45,55	1,20	1,00	47,75	1,35	2,19
Autumn	0,332	49,20	0,266	600	800	45,60	1,40	1,10	48,1	1,10	2,19

According to the research on the processing of dry cocoon raw materials obtained from the results of feeding silkworms in 2020 and the indicators of silk raw materials obtained, the technological parameters and washing characteristics of cocoons grown in



spring, summer and autumn are given in the table above.

The table and histogram show that the weight of dry cocoons grown in the spring, high silkiness, the length of the continuous weave and the total length, and the amount of dry cocoons used to weave raw silk yarn from these cocoons are lower than in the summer and autumn cocoons. rsatdi. It was found that the length of the continuous washing of dry cocoons and the total length is two or more. Research has also shown that live cocoons grown in summer and autumn can be stored in special refrigerators to produce high quality raw silk.Oltin vodiy duragayi hamda tadqiqot variantida yetishtirilgan Ipakchi-1 duragayidan olingan tirik va quruq pillalarning xossalari va ipak tolasi xususiyati o`rganildi. Natijalar ko`rsatishicha bahorgi, yozgi va kuzgi mavsumda yetishtirilgan pillalardan xom ipak olish uchun sarflanadigan pilla miqdori tadqiqot variantida kam ekanligi aniqlandi.

In conclusion, due to the fact that silkworms are fed for three seasons, it is possible to fully meet the nutritional needs of silkworms.

In connection with the feeding of silkworms in the spring, summer and autumn seasons, the establishment of new mulberry groves, the care of mulberry seedlings and the feeding of silkworms will create silkworm farms and create opportunities for silkworms to work full year round.

The uniform development of silkworms was achieved by ensuring that the air temperature was 25–260C and the relative humidity was 66– 68% when feeding silkworms on young and old.

Due to the improvement of metrological conditions, each box of laboratory-fed silkworms increased by 4 5 kg and the amount of quality cocoons increased by 2 3% compared to live cocoons in the control variant fed at home.

By feeding the silkworms in accordance with the agro-technical requirements for each age and providing them with cocoon wrapping space, the number of varietal cocoons has increased by 10-15% and the number of non-standard, non-standard cocoons has decreased accordingly.

REFERENCES

1. Resolution of the President of the Republic of Uzbekistan dated December 4, 2018 No PQ4047 "On additional measures to support the accelerated development of the silk industry in the Republic."
2. A. Yu. Rakhimov, U. O. Akhunbabayev, M. M. Mirzakhanov and others, Development of technology for the production of raw silk from live silk and hybrid cocoons // 2020, Margilan.
3. M. Sh. Jumaniyozov, Sh. R. Umarov Influence of amino acids on cocoon productivity in repeated feeding of mulberry silkworm // Republican scientific-technical conference "Actual problems of growing high-quality and competitive cocoon raw materials", October 24, 2017, Tashkent.
4. KR Avazov Study of the characteristics of cocoons grown in the second season // International scientific-analytical online conference "Traditional development of the light industry of the Republic of Uzbekistan: problems, analysis and solutions", July 7, 2020, Tashkent.