



**STUDY OF THE CHEMICAL COMPOSITION OF THE SPRING LEAF AND THE PRODUCTIVITY
OF MULBERRY VARIETIES IN THE CONDITIONS OF THE NAVAI REGION STEPPE**

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ABSTRACT: - Many researchers have found that, the amount of humidity in the leaves of mulberry not constant and it reduces white getting old of the leaf, in the not weather and salinity soil conditioner mulberry leaves roughens quirkily it can be seen from the table studding leaves of mulberry varieties amount of water is 71,11-76,82% and is tentatively Lite in spring indicators.

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KEYWORDS: Variety, leaf, rearing, ash, water, total nitrogen, moisture cocoon harvest.

INTRODUCTION

The silk industry is one of the oldest industries in the world and has served mankind since time immemorial. Historically, silkworm breeding was well developed in the Far East, but over the years, cocoon production has been declining worldwide. If in 1929 560 thousand tons of live cocoons were grown in the world, then in 1974 - 406 thousand tons, and in 2019 - 154 thousand tons. The main reason for this is that in the leading sericulture countries, the production of cocoons has sharply decreased or completely stopped. The main reason for this is the significant complexity of the process of growing cocoons, the rapid development of the production of chemical fibers. However, no chemical fiber can replace silk fiber. Therefore, many countries are conducting large-scale research on the production of silk and increasing its productivity and efficiency, caring for silkworms, storing raw silk, and improving primary processing processes. Increasing the production of raw silk around the world, increasing the level of production of silk from raw materials, developing inexpensive, inexpensive and fast methods of feeding silkworms and reducing the human factor, creating and implementing automated, self-managed "smart" technologies are urgent tasks of the industry. In this regard, the creation of a food base for the silkworm, the creation of new technologies to increase the yield of cocoons and thereby increase the quantity and quality of raw silk production in the silk industry, the study of the negative impact on the quality, yield and technological characteristics of cocoons. It should be noted that it has reached the level of important areas.

If in 1990 about 32.8 thousand tons of live cocoons were grown in our country, then in 2019 this figure was 19 thousand tons. The reason for this was the reduction or complete loss of mulberry, which in some places was a food base for breeding silkworms. However, in recent years, the state pays special attention to the development of the silk industry. These are the Decree of the President of the Republic of Uzbekistan dated July 31, 2019 No. PP-4411 "On additional measures for the development of deep processing in the silk industry" and dated January 17, 2020. industries. The solution of the issues raised in these documents, in fact, will serve to revive the silk industry of our country, increase the efficiency of the production of silk products. In this regard, the strengthening of the food base, which is an important factor in increasing the volume and quality of cocoon production in the country, the creation of new procedures (schemes) for planting mulberry seedlings in mulberry plantations, the study of their effect on the yield and nutrition of mulberry leaves, a comparative study of planting mulberry.

One of the urgent problems is the development of sericulture, to solve this problem, the first thing to do is to grow mulberries in order to create an adequate nutritional base for the silkworm.

Materials and methods

Some researchers recognize only the method of biological evaluation of feed, determined by the results of feeding the silkworm. Without denying the leading importance of assessing the nutritional value of leaves based on the results of silkworm

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rearing, it should be noted some limitations and a certain one-sidedness of this method. In order to get a more complete picture of the nutritional value of varietal mulberry leaves at different periods of operation, growing on saline soils, we studied the chemical composition of the leaves for 2 years in parallel with the feed by test feeding. In the middle of the 5th age of the experimental readings in spring and autumn, leaf samples were taken for chemical analysis in the form of an average sample from different parts of the crown. The main comparison criteria were water content, ash content and total nitrogen content. Under saline conditions, the water regime of plants changes greatly, which in turn can affect the content of moisture and other nutrients in mulberry leaves. Growth on saline soils did not cause noticeable discrepancies in the content of these main feed components.

Research results

The presented data confirm the position that there is a difference between the varieties in the total moisture content in a fresh leaf, and although in general it is at the optimal level, it still ranges from 75.92 to 78.11% by variety. The leaves of the “Katlama” variety are the richest in water; the intermediate position is occupied by the leaves of the control variety and the “Karshi-1” and “Winter-hardy” varieties, and the least amount of the “Oktyabrsky” variety. Numerous analytical data have established that the content of 7-9% sugar in a dry leaf fully satisfies the needs of the silkworm in carbohydrates. In this aspect, the results of our analyzes approach the established experience. Only in one variety “Winter-resistant” the sugar content was below 7.0% (6.44%), other varieties had sugars of 7.94-8.64. Determination in the leaves of the studied varieties of the main nutrient component - total nitrogen and crude protein is very necessary to reveal the effect of feed on silkworm productivity. (tab)

The content of nutrients and ash elements in the spring leaves of mulberry on saline soils (average for two years)

Mulberry varieties	Total moisture	In absolutely dry matter,%				
		Sugar	Total nitrogen	Crude protein	Raw ash	Hardness factor
Katlama	71,11	8,64	3,42	21,37	12,27	3,64
Zimastoykiy	76,82	6,44	3,47	21,71	12,59	3,84
Karshi-1	75,48	7,98	3,14	19,61	12,59	4,09

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October	74,93	7,94	2,56	16,03	11,67	3,91
Tajik seedless (the control)	76,28	8,34	2,04	12,73	11,79	3,67

CONCLUSION

For a silkworm, protein is necessary for metabolic processes in the body and for building silk. On average for 2 years, a noticeable variation in the content of total nitrogen was found for the studied varieties (from 2.04 to 3.47%). A high content of protein substances was found in the leaves of the "Katlama" and "Winter-resistant" varieties. Significantly less protein substances are contained in the leaves of the control variety and the Tajik seedless variety. However, in all cases, its presence in the spring leaf in excess covers the silkworm's need for nitrogen, since the yield of cocoons in no way shows the relationship between the nitrogen content in the leaves of the experimental varieties and the yield of cocoons, although, for example, in the leaves of the "Tajik seedless" variety, total nitrogen less than in the leaves of the "Winter-hardy" variety by more than 40 percent, and the yield of cocoons is almost the same. According to literature sources, the leaves of plants grown under saline conditions contain a large amount of ash elements. High salinity of the leaf is considered a negative point, since it reduces its nutritional value and increases the caterpillars' need for water. Thus, the results of the chemical analysis of spring leaves showed that the tested mulberry varieties differ in chemical composition. The highest content of nutrients

is observed in the leaves of the "Katlama" and "Winter-resistant" varieties, which are primarily characterized by a high content of total nitrogen.

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