

## **THE COEFFICIENT OF USE OF MULBERRY LEAVES IN THE FEEDING OF MULBERRY SILKWORMS BY AGE**

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### **ABSTRACT:**

**Definition and value of feeding factor of mulberry-trees leaves by caterpillars influencing the development and productivity of silk worms is lightened in the article. At present, new hybrids of silkworms are being raised on farms of the republic. For high-yielding breeds and hybrids, the amount of leaves consumed per box (19 g) of worms is set at 1000 kg according to the rules of agrotechnics. However, in production conditions, ie in the feeding of silkworms in rural households, this norm is ignored, and in many cases there is a shortage of leaves, which adversely affects the yield. Such a situation is scientifically and practically relevant to determine the growth, development of worms and how much of the leaves given to them, that is, what is the utilization factor.**

**Keywords: Mulberry silkworm, silkworm, breed, hybrid, worm feeding, mulberry leaf, coefficient, mulberry tree, seedling, seedling, fodder, agrotechnics, special feeding mulberry.**

### **INTRODUCTION:**

A number of scientists have conducted interesting research on how silkworms are fed, how many leaves they are given depending on their age, and how much a box of worms is spent. In particular, A.G.Kofian (1947), E.N.Mikhaylov (1953), P.A.Kovalev (1959), N.L.Bakhovutdinov (1961), U.Nasirillaev (1992), N.Akhmedov (1999) In their experiments, they studied in detail the age of silkworms, how much food they eat, the duration of feeding, the breakdown of food in the body and made appropriate recommendations. However, detailed data on the coefficient of use of the leaves given by the worms are not given.

Experiments show that from the beginning to the end of any age, worms do not eat an equal amount of leaves. The worm eats less of the leaf at the beginning and end of any age, and more in the days between the ages. As for the amount of leaves that a worm of any age eats relative to its live weight, a young worm eats more leaves than an adult worm.

In spring worm feeding, monovoltin worms ate 63-65% of the given leaf. It was found that the

current breed and hybrids eat 69-70% of the given leaf.

The fifth age of the worm will need several times more leaves than the previous four years. Three-quarters of this leaf is eaten. On average, the worm eats more than half of the total leaf given over the age of five. The difference between the total amount of leaves given to the worms and the amount of leaves eaten is called the utilization factor, and this ratio is measured as a percentage. Data on the leaf eating rate of worms are given in Table 1 below.

Table 1. The amount and coefficient of use of mulberry leaves in the feeding of silkworms by age.

Age of the worm	1 box The amount of leaves given to the worm, kg	Crushed leaf		Waste		Coefficient of use of the leaves given to the worms, %
		Amount, kg	%	Amount, kg	%	
1	6	0.78	13.0	5.22	87.0	15
2	17	4.16	24.5	12.84	75.5	25
3	57	18.80	33.0	38.20	67.0	35
4	170	83.30	49.0	86.70	51.0	50
5	750	525.00	70.0	225.00	30.0	70
Total:	1000	632.05	63.20	367.95	36.80	65

The data in the table show that as the worms get older, the amount of leaves given to them also increases (6 kg at the first age, 57 kg at the third age, 750 kg at the fifth age). At the same time, the amount of leaf erosion (utilization rate) of a given leaf also gradually increases (13-15 in the first year, 33-35 in the third year and 70% in the fifth year). Consequently, if worms excrete 85-87% of a given leaf in the first year, this figure is 67% in the 3rd year and 30% in the first days of the fifth year. However, on days 4-5-6 of the fifth year, the worms eat the entire part (almost 100%) except the band of the given leaf, and on days 7-8, this figure decreases slightly.

The coefficient of leaf use depends on the quality, variety, nutrient content of the leaf

and the amount of water in it, as well as the agro-techniques for feeding silkworms. The uneaten leaf (nutmeg) is low in nutrients and high in ash with klechatka. If worms are given fewer leaves, they will leave less food, but the worms will remain large and small without being able to feed evenly. Studies have shown that the nutrient level of a worm left by worms in the first and second years is twice as high as that of a worm in the fifth year.

Using the above data, it can be concluded that the higher the utilization rate of a given leaf of silkworms, the faster and better they develop and accumulate large amounts of silk fluid in the silk gland, resulting in the cocoons being alive and serpentine. When the utilization rate is low, a lot of feed is consumed, the amount of waste increases, and by the end of the fifth year there is a lack of leaves, resulting in worms wrapping cocoons that are small, poor quality and low in silk without saturating the feed.

In order to increase the leaf utilization rate, it is necessary to increase the number of mulberry seedlings, to organize special feeding mulberries, to feed the mulberries frequently, to feed them in accordance with agronomic rules. In addition, it is advisable to use innovative technologies of feeding worms, following the rules of preparation, storage, feeding of worms.

## REFERENCES:

- 1) Axmedov N. - Ecology of silkworms and agrotechnics of feeding. Teacher's Publishing House, 2004.
- 2) Bahovutdinov N.G. - Feeding silkworms. A reference book for cocoons. Uzbekistan Publishing House, Tashkent, 1961.
- 3) Kafian A.G. - Methodology of kormoispytatelnykh vykormok tutovgo shelkopryada.
- 4) Kovalyov P.A. Ecology and feeding of silkworms. Gosselkhoz izdat, Moscow, 1959.
- 5) Mixaylov E. Feeding silkworms. Tashkent, 1953.