



INFLUENCE OF OPERATING CONDITIONS ON THE WINTER RESISTANCE AND YIELD OF THE MULBERRY LEAF

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Annotation:

The article studies the issues of high shoot formation of a variety, one of the important structural elements that determine its yield. In summer, the regeneration process is faster, but the growth of shoots is insignificant. In varieties Uzbeksky and Pionersky, when pruning all shoots on August 5 and 15, growth was restored on days 6-8, and on August 30, only on days 10-13. This indicates that by the end of August, the period of the end of growth begins.

Key words: exploitation, mulberry, leaf, worm feeding, fertilizer, nitrogen, phosphorus.

Eight varieties of mulberry are zoned in Uzbekistan: Pioneer, Tajik seedless, Mankent, Oktyabrsky, Uzbek, Surkh-tut, Bedana Vuadilskaya, Winter-hardy.

Some biological and morphological features of the listed varieties, in particular, the features of spring shoot formation and the rate of growth recovery after pruning, are still insufficiently covered in the literature, in connection with which we began to study these issues. The zoned varieties Tajik seedless, Pionersky, Mankentsky, Uzbeksky, Winter-hardy and local mulberry Khasak grew in bush molding, the placement scheme on the plantation was 4.0x0.5, 5 thousand plants per 1 ha.

The care of experimental plants consisted of 7 irrigations, 3 soil cultivations and the introduction of 120 kg of nitrogen, 90 kg of phosphorus and 30 kg of potassium per 1 ha.





Table 1.

Sort	branch length, m	Number of buds on the second branch, pcs	Implementation of buds into shoots, %	The number of growth shoots. PC	Harvest a leaf from a bush. kg
Tajik seedless	2,1	43	54,0	12,0	2,5
Pioneer	2,4	57	58,0	14,0	3,0
Mankentsky	1,9	60	67,0	17,0	2,7
Uzbek	2,5	55	64	23,0	3,6
Winter-hardy	2,6	62	70,0	20,0	4,0
Hasak	2,0	49	45,0	8,0	1,5

Table 2.

Sort	Trimming date	The appearance of new shoots for the day	Leaf size in August (length x width) mm	Length of shoots after pruning, m	Number of shoots
Tajik seedless	25/IV	12 th	15,0 x 13,5	2,13	10
	5/V	13 th	15,8 x 12,9	1,95	14
	17/V	11 th	14,9 x 13,0	1,80	12
Pioneer	25/IV	11 th	13,9 x 11,0	2,4	14
	5/V	13 th	14,0 x 11,6	2,2	11
	17/V	10 th	13,8 x 11,7	2,0	13
Uzbek	25/IV	8 th	19,0 x 17,5	2,6	15
	5/V	10 th	21,0 x 18,0	2,3	17
	17/V	10 th	20,6 x 19,1	2,1	14
Winter-hardy	25/IV	14 th	18,5 x 16,0	2,19	15
	5/V	15 th	17,0 x 15,3	2,0	13
	17/V	15 th	16,2 x 13,1	1,8	16

Note. For each variety and pruning period, five accounting bushes were taken. The results of observations indicate the different ability of varieties to implement buds into shoots (Table 1). The more buds are sold into growth shoots, the higher the yield of leaves. This is especially true for the winter-hardy variety.

Mulberry varieties differ from each other in the rate of growth recovery after spring pruning (Table 2).

Growth processes are restored most quickly on the Uzbek variety, the slowest on the Winter-resistant variety.

The length of the growth of shoots and their number per bush depend on the pruning period. The most significant increase in the Uzbek variety, in the Zimatoykiy and Pionersky varieties, the average increase. According to the data of the Yangiyul variety-testing plot, the varieties Zimatoisky and Uzbeksky significantly outperform the previously zoned standard Tajik seedless in terms of leaf yield (Table 3).



Table 3. Leaf yield of standard plantation of 10-year-old zoned mulberry varieties, c/ha.

Sort	First year	Second year	Average over two years	
	c/ha		c/ha	% to control
Uzbek	110,6	69,4	90,0	125,9
Winter-hardy	128,0	90,0	109,0	152,0
Tajik seedless (control)	85,0	58,1	71,5	100,0

Thus, the high shoot formation of a variety is one of the important structural elements that determine its yield. In summer, the regeneration process is faster, but the growth of shoots is insignificant. In varieties Uzbeksky and Pionersky, when pruning all shoots on August 5 and 15, growth was restored on days 6-8, and on August 30, only on days 10-13. This indicates that by the end of August, the period of the end of growth begins. The length of the shoots during pruning on August 5 in the Uzbek and Pionersky varieties reaches 22 and 31 cm, on August 15 - 15 and 12 cm, and on August 30 - 7 and 5.

High-yielding varieties Tajik seedless Uzbek, Pioneer and Winter-hardy have a high ability to regenerate.

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