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# INFLUENCE OF THE PREPARATION UGLIN ON THE GROWTH AND DEVELOPMENT OF MULBERRY CUTTINGS

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Article history:		Abstract:				
<b>Received:</b>	8 <sup>th</sup> September 2023	To create a food base for silkworms in a short time, treating to cut				
Accepted:	8 <sup>th</sup> October 2023	with the preparation uglin has a great impact on their rooting, growth and				
<b>Published:</b>	16 <sup>th</sup> November 2023	development and the formation of disease-resistant mulberry seedlings.				
Keywords: Variety, cuttings, root, a leaf, a branch, a seedling, stability, growth, development						

In recent years, important strategic programs have been developed and are being implemented aimed at ensuring the stability of the country's economy. Against the backdrop of these achievements, it is important that large-scale reforms in agriculture and modernization of the industry are consistently carried out under the leadership of the President of our republic.

Under the personal leadership and raising to a higher level of the cocoon industry in our republic, increasing the material interest of the population employed in the industry, the production of national silk products of competitive export quality in the world market, the initiatives of the head of our state.

On February 7, 2022, cuttings of 50 pieces of mulberry varieties Zhararik-12, Katlama, Uzbek, Zhararik-4, Tajik seedless were taken and planted in open ground for cultivation as a comparison from the mulberry collection of the Sericulture Research Institute. For 3-4 weeks, cuttings are buried in moist soil at 60-C to a depth of 70 cm. In February, cuttings were cut from annual branches of the mother tree of varieties selected for the experiment, 40 cm long, 50 pieces each.

The cuttings of each variety are wrapped in separate sheets of paper, the name of the mulberry variety, time, date and number of cuttings (250 pieces) are written. These cuttings were planted for the first time on the land plot of the Muzaffar Entrepreneur farm in the Middle Chirchik district of the Tashkent region. After 3-4 weeks, the buried cuttings were removed and soaked in a 3% aqueous extract of the charcoal preparation for 10 minutes.

After this, the cuttings were planted horizontally in the ground. Cuttings soaked in uglin preparation quickly take root, are resistant to diseases, and the growing season is accelerated. During our experiments, data on the rooting of cuttings is presented in (Table 1), the formation of the root system (histogram-1) and the growing season (histogram-2).

The rooting	of	cuttings	was	treated	with	the	preparation	uglin
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Names of mulberry varieties	Planted cuttings, pcs.	Rooted cuttings and, pcs.	Rooting rate, %						
Zhararik 12	50	42	84						
Katlama	50	36	72						
Uzbek	50	34	68						
Zhararik 4	50	32	64						
Tajikistan seedless (comparative)	50	28	56						

In our experiment, 50 cuttings of each mulberry variety and a comparison variety were planted, their rooting rates in the Jararik-12 variety were 42 pieces, the percentage of rooted cuttings was 84%, in the Katlama variety - 36 pieces, the percentage of rooted cuttings was 72%, and in Uzbek variety - 36 cuttings was 68%, Zhararik-4 variety - 32 cuttings and 64%, and Tajik seedless mulberry was taken as a comparison and this is 28 cuttings 56%. In our scientific studies, high rates were noted in the mulberry variety Zhararik-12.



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**1-histogram.** Formation of the root system during the growth period in annual mulberry seedlings using their own roots.

In our experience, during the formation of the root system, the thickness of the base of the body was 15.0 mm, the depth of root penetration was 70 cm, the span of roots was 60.0 cm. Comparative version, the thickness of the base of the body was 10.0 mm, the root depth was 50 cm, the span of roots was 44.5 cm wide. The indicators of other varieties are given in Gist-1.



**2-histogram.** The influence of coal solution on the growth and development of mulberry cuttings (vegetation period).

During our experiment, the rooting, growth, and development process of mulberries grown from cuttings were studied. Rooting of cuttings under the influence of the preparation uglin, the first roots appeared after 35-40 days and the appearance of leaves on the surface of the ground was observed. In order to improve the growth and development of seedlings, a number of agrotechnical measures were carried out, such as watering seedlings, softening the soil, weeding, applying organic and mineral fertilizers (nitrogen 120 kg, phosphorus 60 kg, potassium 30 kg per 1 ha). During the season they watered 18-20 times, fertilizers were applied twice during the growing season. 50% of mineral fertilizers were applied twice during the growing season. 50% of mineral fertilizers were applied when leaves appeared, and the remaining 50% when branches reached a length of 30-40 cm. Between plants in a row and between rows, they were treated 4-5 times. Seedlings grown from mulberry cuttings under the influence of this drug do not require much labor in the first year of the growing season, and the leaves of mulberry seedlings grown from cuttings can be used in the second year. Rapid development of plants was observed during the growing season, i.e. in the first ten days of July. At the same time, the number of leaves on a branch of seedlings of the Jararik-12 variety is 25-30, the distance between leaf joints is 2-3 cm, it has been established that the number of leaves on seedlings is 12-15, and the distance between leaf joints is 4-5 cm.

In conclusion, we can say that in order to create a food supply for the silkworm in a short time, the use of the preparation uglin to the cuttings will significantly improve their root formation, growth and development, as well as

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create disease-resistant mulberry plantations. When using the method of propagating mulberry seedlings by cuttings, cuttings should be made from high-yielding mulberry varieties, since mulberry cuttings obtained from annual shoots of varietal mulberry cuttings retain all their genetic characteristics.

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