

# **NUTRITION SPECIES OF MULBERRY TREE** Abduraxmonov Kamoliddin Gapparovich TDAU is a Master's Student in the Department of Silk Production

## Annotation

The first type of mulberry is mainly planted in one or two or three rows on the banks of roads, ditches (canals), ditches, as well as around cotton fields or other cultivated areas. Of course, if it is planted in two or three rows, it will make the body small while giving shape to the mulberries. Currently, 75-80 % of mulberries are planted in rows in the Republic. For the second type, separate large areas are allocated and tall and bushy bushes are formed. The size of such areas can be from one hectare to 10 hectares. In our republic, this type of tussors is only 20-25 %. If we take as an example the countries of China, India, and Japan, where cocooning is developed, 100 % of these mulberries, and 100 % of high-quality mulberries, are in them. In our country, this indicator is only 5-6 %.

Key words: Mulberry tree, mulberry branch, fertilizers for mulberry seedlings.

### Annotatsiya

Birinchi turdagi tut asosan yoʻllar, ariqlar (kanallar), ariqlar qirgʻoqlariga, shuningdek, paxta maydonlari yoki boshqa ekin maydonlari atrofiga bir yoki ikki yoki uch qator qilib ekiladi. Albatta, ikki-uch qator qilib ekilsa, tutga shakl berish bilan birga gavdani kichkina qiladi. Hozirgi kunda Respublikamizda tutzorlarning 75-80 foizi qatorlab ekilgan. Ikkinchi tur uchun alohida katta maydonlar ajratilib, baland va buta butalar hosil bo'ladi. Bunday maydonlarning hajmi bir gektardan 10 gektargacha bo'lishi mumkin. Respublikamizda bu turdagi tumorlar atigi 20-25 % ni tashkil qiladi. Misol tariqasida pillachilik rivojlangan Xitoy, Hindiston, Yaponiya mamlakatlarini oladigan boʻlsak, ana shu tutlarning 100 foizi, sifatli tutlarining 100 foizi ularda. Mamlakatimizda bu ko'rsatkich atigi 5-6 % ni tashkil qiladi.

#### Аннотация

Шелковицу первого вида в основном высаживают в один, два или три ряда по берегам дорог, арыков (каналов), канав, а также вокруг хлопковых полей или других обрабатываемых площадей. Конечно, если посадить в два-три ряда, это придает шелковице форму и делает тело меньше. В настоящее время 75-80 % виноградных лоз в нашей республике высажены рядами. Для второго типа выделяют отдельные большие участки и формируют высокие и кустистые





кусты. Размер таких участков может быть от одного гектара до 10 га. В нашей республике таких амулетов всего 20-25 %. Если взять в качестве примера страны Китая, Индии и Японии, где развито коконирование, то у них 100 % настоящей шелковицы и 100 % качественной шелковицы. В нашей стране этот показатель составляет всего 5-6 %.

# Introduction

The demand for cocoons grown in our republic is very high, so it is necessary to enrich the food base of the silkworm with promising, that is, high-quality and productive varieties of mulberry. Many feeders should be planted. In mulberry farming, mulberries are divided into three types depending on the method of planting: mulberries planted in rows, mulberries planted in special separate plots, and third, mulberries planted mixed with other types of trees or planted for scenery. The first type of mulberry is mainly planted in one or two or three rows on the banks of roads, ditches (canals), ditches, as well as around cotton fields or other cultivated areas. Of course, if it is planted in two or three rows, it will make the body small while giving shape to the mulberries. Currently, 75-80 % of mulberries are planted in rows in the Republic. For the second type, separate large areas are allocated and tall and bushy bushes are formed. The size of such areas can be from one hectare to 10 hectares. In our republic, this type of tussors is only 20-25 %. If we take as an example the countries of China, India, and Japan, where cocooning is developed, 100 % of these mulberries, and 100 % of high-quality mulberries, are in them. In our country, this indicator is only 5-6 %.

The third type of mulberry tree is planted to surround it with other trees. It is also planted for landscape in cities. Mulberry is divided into three groups depending on the height of the body. The first group includes mulberry trees with a height of 1.0-1.2 m from the trunk to the branches. The second group is bushy mulberry trees with a height of 0.5-0.7 m from the root neck to the branches. The third group is mulberry bushes, the height of which is less than 0.3 m from the trunk to the branch.

When mulberry trees are planted in a row along roads, canals, and streams, it is necessary to plant seedlings with a height of not less than 120 cm from the root neck to the branches of the strong biennial trunk. If it is lower than stated, domestic animals will eat and dry the trees that have not yet grown up. There are many such incidents in the regions of our Republic. If the trunk of the seedling is 120 cm, its three branches are 40-50 cm, as a result, the leaf part of the tree is located 160-170 cm, such mulberry trees cannot be destroyed by cattle.



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The distance between the mulberries planted in a row should not be less than 2.5-3 meters, the depth of the planting place should be 50 cm, and the width should be 70 cm. At the time of planting, the third part of the root of the seedling is cut with a sharp knife or garden shears. The seedling is transferred to the center of the pit and first the surface part of the soil is buried, then the part taken from the bottom. It is good when the soil is 4-5 cm above the seedling root neck in autumn and 2-3 cm in spring. If the seedlings are planted in the spring, water should be given immediately. The seedlings are often watered until they turn green. In the first year, it is watered 7-9 times, softened 3 times, and fed with mineral fertilizers 2 times.

To plant mulberry trees in rows, roadsides, permanent ditches and ditches, and the sides of alternating planting areas are plowed with the help of a bulldozer or scraper when the planting layer is leveled to a width of 1.2-1.5 m and a depth of 28-30 cm. At the same time, 50 % of the total amount of organic fertilizers and phosphorus are applied before plowing. Before planting seedlings, the strip is harrowed and leveled. For row planting, it is necessary to use hybrid seedlings that meet the requirements of the standard or seedlings grafted with regionalized high-yielding varieties and grown from their cuttings. Tall mulberry saplings planted in rows are planted in one row along the permanent stream at a distance of 1-2 m from each other, and in two rows along the borders of crop cards and roadsides.

According to the recommendation of the Central Asia Scientific Research Institute of Sericulture (Yu. Miralimov, 1980), it is planted in one row on the upper and lower border of cotton fields, and in 2-3 rows on the left and right sides. In this case, the distance between the seedlings should be 1 m. The row spacing is 4 or 9 m wide, and 4-8 or 12 rows of cotton are planted between them. Such bushy mulberries have a sixheaded shape and are 70-75 cm tall. If bushy mulberries planted in rows are arranged around a 20-ha cotton field, 2740-3700 seedlings are planted on it, and they occupy 1.5% of the area or 0.3 ha. If 80 % of the planted seedlings in this area turn green, it is possible to grow 10-12 tons of leaves at a low price (16 soums per ton) without additional costs. Currently, based on this recommendation, row planting of mulberries is being introduced in Kashkadarya, Bukhara, Samarkand, Tashkent, Andijan, Fergana and Namangan regions of Uzbekistan. The establishment of such orchards in farms, the complete implementation of crop rotation in cotton production, and the further increase of the food base of cocoon production will provide an opportunity.

In the districts of the central and southern regions, seedlings are planted in autumn, when the weather is warm, in winter and early spring, in the northern regions, mainly in spring. Seedlings are planted after preparing them before planting. Before planting



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the seedlings, stakes are driven lengthwise into the prepared strip, a plan thread is pulled, and stakes are driven in the direction of this thread, at an interval of 1-2 m from each other. The place of the pits for planting seedlings is marked and the pits are dug in the KPYa-100 brand digger mounted on the T-154V or "Belorus" tractor. Their depth and width should be 60 cm. If seedlings are planted in 2-3 rows, their place is determined and dug in the same way as the first row. Before planting the seedling, the cut roots and branches are left at a height of 40-50 cm from the base of the head and are cut with a sharp garden knife or knife. When planting seedlings, the bottom of the pit is softened by 10-15 cm. First, top fertile soil is placed in half of the pit, the roots of the seedling are placed in it without turning, then it is well buried with the soil remaining from the surface layer and the soil from the lower layer and compacted with feet. When planting a seedling, its root neck should be 4-6 cm deep from the ground. Otherwise, after the soil settles, the root canal of the seedling opens, and the seedling often dries up.

Experiments conducted at the Tutchik Department of the Tashkent Agricultural Institute showed that if 8-10 kg of manure is mixed with 70-80 g of pure phosphorus in the pit before planting seedlings, the seedlings will grow well and compared to unfertilized 1 -2 years ago it showed that it will enter the harvest. Regardless of whether the mulberry seedling is planted in autumn or spring, after this work is completed, a ditch is opened 60-70 cm away from the mulberry row and watered immediately. When this is done, the soil is well compacted around the roots, it does not get cold and does not dry out.

The roots of a newly planted seedling are slow to regenerate and grow during the growing season, and cannot spread more widely to the lower layer or sides of the soil. Taking this into account, despite the fact that the seedlings are planted around a stream, canal slope or cultivated fields, they should be watered separately 6-7 times in the first year. Later, it is watered 4-5 times for 2-3 years. The mulberries in the first row, planted on the side of the ditch, may not be watered separately from the third year of growth. In order for planted seedlings to grow well and get a quick harvest, their base should always be soft, cleaned of weeds, and fertilized. For this purpose, in autumn or early spring, mulberry is plowed 50-60 cm apart, 1.3-1.5 m wide and 20-25 cm deep with PRVN-2.5A, KSL-5 and PRVM-3 machines. For this purpose, it is possible to use the PNP-0.6 device for working between trees, the FSN-0.9 hanging milling cutter. If the distance between mulberry planted in rows or between mulberry and cotton and other crops is narrower, the MPT-1.2 milling machine mounted on a narrow gauge T-54 tractor is used. If it is not possible to use these machines, then during the season the surrounding trees are softened by hand 3-4 times and weeds





are removed. In order to get an abundant harvest of leaves from trees planted in rows, it is necessary to regularly feed them with fertilizers. In accordance with the recommendations of the Central Asian Research Institute of Sericulture, organic and mineral fertilizers are applied to mulberry trees planted in rows in the following amounts.

	Organic fertilizers, kg		Mineral fertilizers, in g (net weight)		
The age of the tree	Manure or compost	Juice	Nitrogen	Phosphorus	Potassium
10 under the age of 10	10-25	5	125	60	30
from the age 20 under the age of 20 from the age	25-50	12	250	125	60
40 under the age of		20	500	250	125
40 from the age big	50-100				
	100-200	30	1000	500	250

### The amount of fertilizers applied to trees planted in rows

Growing the branches of young mulberry trees in the appropriate form is of great importance in producing abundant and high-quality leaves. Previously, due to the lack of special agrotechnical measures in the field of mulberry farming, mulberry trees, which were grown for feeding silkworms with their leaves, were not given shape. For this reason, the mulberries that were planted until now had mostly single-headed branches. As a result of cutting the branches of such trees every year, new branches grew close to each other, that is, densely. In addition, in single-headed mulberry, nutrients rising from the soil stay near the head for a certain time, so the lower part of the head swells and expands like a stork's nest. After a few years, in such mulberries, first the core part of the wood, then the wood around the core begins to rot. Before they reach 40-50 years of age, the yield of leaves is drastically reduced, as a result, the tree completely dries up. In order to prevent this from happening, three-headed branches are given to seedlings grown in state mulberry nurseries.

We have seen above that it takes 3 or 4 years for trees planted from seed to become six-headed, and its leaves can be used in the 5 th year. Trees grown from grafts or cuttings are given a six-headed shape in the 2nd year of growth, and in the 3rd year, leafy branches in six "hands" are cut to feed worms. Consequently, mulberries grown from grafts or cuttings produce leaves 2-3 years earlier than trees grown from seedlings. In addition, since in fertile mulberry trees, small branches almost do not come out from the side of the body and under the "hands", the nutrients absorbed by the root are directly used for the growth of the main branches in the head.





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