

## VINE GROWING TECHNOLOGY IN FERGANA VALLEY REGIONS

*Yuldashev Rahimjon Tajidinovich*

*Andijan Institute of Agriculture and Agrotechnologies*

**Annotation:** The article provides information on the issues related to the large-scale cultivation of vines in the Fergana Valley of the Republic of Uzbekistan and the regular supply of this vitamin-rich plant product to the population.

**Key words:** grapes, planting of a grape plantation, vitamins, grape berries, grape bush care, seedlings, agricultural technology, fertilizers, harvest, yield.

On July 7, 2021, a video selector meeting of the Pre-resident of the Republic of Uzbekistan was held on measures to grow grapes, develop their industrial processing and establish ecotourism in the regions. At the meeting, special attention was paid to the rapid development of viticulture in our republic, to increase the yield of grapes, to improve the quality of the product, and to increase the number of products made from them in the processing industry, to fully satisfy the demand for grapes of our people, and to widely introduce science and innovations in the field.

Supplying the population of our republic with high-quality industrial grapes and processed wine products is one of the urgent tasks facing the winegrowers. The soil and climatic conditions of Uzbekistan make it possible to provide our people with inexpensive, vitamin-rich, tasty grape products and wines all year round. In our republic, great attention is paid to the rapid development of viticulture, increasing the yield of grapes, improving the quality of the product, and increasing the number of products made from them in the processing industry to fully satisfy the demand for grapes of our people.

Agrotechnics of planting and maintenance of vineyards. Our republic is famous for its sweet and sugar healing grapes along with all the agricultural fields. In the region, early, medium and late ripening varieties of grapes are grown on

mountain slopes at an altitude of 350 to 600-1000 meters above sea level, and abundant quality crops are grown. The sugar content of grape varieties grown in Fergana region is on average 16-18% in early ripening varieties, 18-21% in mid-ripening varieties and 22-27% in late-ripening varieties.

Land preparation and planting for vine planting. Before creating a vineyard, i.e. a vineyard, a site is selected and a plan is drawn up depending on the climatic conditions, wind paths, waterways and soil conditions of the site. Before planting, the land is plowed and leveled. Mineral and organic fertilizers are added to the soil before plowing. 25-30 tons of manure, 120-140 kg of phosphorus, 60 kg of potassium (pure) mineral fertilizers are applied to 1.0 ha. ROU-6, ROU-5, NRU-05 aggregates can be used for mixing mineral and organic fertilizers. For plowing, it is plowed to a depth of 30-35 cm using a PYa-3-35 plow, then it is leveled. During leveling, hollows and deep places of the earth are filled. For leveling, it is done on the P-4, PA-3 unit.

Before planting seedlings, the area is planned. During the planning period, attention is paid to irrigation ditches, main roads (10-12 m) and intermediate roads (7-8 m) after every 100 meters.

Sizot waters are deep in typical gray soils, for vertical sybtagaz - in 3x3, 3x2.5 scheme, for curved sybtagaz - in 3.5x2.5, 3.5x2, schemes.

In irrigated vineyards on gravelly soils, upright sybtagaz-3x1.5, 3x2, 3x2.5 schemes. On the land where the water is located on the surface, for vineyards with steep sybtagaz - 3x3, 3x2.5, in the scheme. It is recommended to plant cypresses in 3.5x3.5, 4x3.5, 3.5x2.5 schemes.

In order to ensure the good growth and early harvest of young vines planted in early spring, it is advisable to plant vegetable crops between the rows of young vines for 2 years, because this requirement is due to the additional fertilization of crops during the vegetation period, and between the rows. additional processing is carried out, most importantly, weeding is done to create normal conditions for vineyards.

Young vineyards are irrigated up to 16-20 times during the vegetation period, depending on the soil conditions. The current's affinity for water is not the same in different phases of its development. Therefore, in the first period of vegetation, soil moisture should be maintained at the level of 70-80% of the field moisture capacity, and in the second period at 60-65%.

A single irrigation during the growing season on heavy loamy soils is 700-800 cubic meters per hectare, and on light loamy and stony soils it is 400-500 cubic meters per hectare.

In the autumn-winter period, 1200-1500 cubic meters of reserve water is supplied per hectare.

Shaping, cutting and trimming the vine bush. Pruning is an important agrotechnical method that regulates vine growth and fruiting. In order to obtain abundant and high-quality harvest from the vine every year, the number of shoots on the bushes is classified according to varieties, taking into account the growth strength and fruiting characteristics of the vine.

Pusthi type, Nimrang, Husayni, Surhak Kitabskiy, as well as Kara kishmish and Aq kishmish, which are strong growing varieties with low fruiting, have more buds left. Reinforced fertile joints are left in the sleeves, fertile branches are cut leaving 10-15 cells, 200-300 cells are left in one bush. 160-200 eyes left on a bush with a feeding area of 3x2.5 m for Bayan Shirey variety.

The number of buds is up to 150-180 in medium-growing Rikatsiteli, Muscat Rozovi varieties.

In the conditions of Fergana region, depending on the growth strength of the variety and specific branch (stronger branches are cut long), branches are cut to different lengths, leaving 6-8, 9-12, 12-15 buds.

Make a ham. As soon as the salt appears on the vine, khometok is made. With the formation of inflorescences on the branches, it is possible to distinguish the fruitful branches from the unfruitful ones and remove the excess. When the length of the branches reaches 40-50 cm, they are tied to the sybagan. If instead of a flower, curls appear, this branch will be barren. Early pruning of non-

productive branches will encourage the development of additional branches, including those that do. Therefore, it is necessary to finish the khumtok as soon as possible. If two or three green branches have grown from the same place of fruitful and substitute branches, then the fruitful branch is left and the unfruitful ones are removed. The first khumtok is carried out after the clear formation of the khumtok, and the khumtok, which is done after the khumtok vine has fully flowered, is called ghora khumtok. During this period, the size of the caves is approximately the size of a mash, and in some varieties of vines, the size of a pea. 3-4 of the strong branches that have grown from the sun are left during the period of the shora khometok, and the rest are cut without leaving a stump. 3-4 remaining branches will be used in the future to rejuvenate old rusts. In the making of khora khumtok, the surplus left in the salty khumtok and the small branches that have grown from the axils of this year's branch are removed by hand, gradually slanting to one side before the body hardens into wood. After each knot, the branches are tied to the basket by pulling it a little. If pruning is carried out on time, the complex biological processes that take place in the vine in the first half of the summer will also take place under normal conditions, thereby preparing the ground for a rich harvest next year.

Fertilization. In vineyards grown on irrigated gray soils, the main norm of mineral fertilizers is Nitrogen 120 kg, Phosphorus 90 kg, Potassium 45 kg (pure).

Also, it is recommended to increase the potassium and phosphorus rate to 90-120 kg in vineyards grown on sandy and rocky lands.

Along with potassium and phosphorous mineral fertilizers, organic fertilizers are given mainly in the autumn before plowing, 15-20 tons per hectare every two years. Nitrogen fertilizers are applied in the spring after bud awakening at the rate of 30 kg/ha in pure form, 35-45 kg/ha in fruiting, and 35 kg/ha (in pure form) after picking. In vineyards, young seedlings are treated with ammonium sulfate or AFU nitrogen fertilizer 90-100 g 2 times per bush during the vegetation period.

Watering. Irrigation of the vines is carried out taking into account the characteristics of their varieties and soil and climatic conditions. In the Fergana valley, the method of irrigation is mainly spread by irrigation, the distance between the irrigation depends on the soil of the vineyard and the width of the rows. The vine's need for water changes in different stages of development and depending on soil conditions, i.e. during growth, it is watered 2-4 times in heavy soils, 7-8 times in sandy, stony soils. Sizot water is carried out depending on the level of moisture in nearby soils. It is recommended to stop watering in the middle of September, depending on the weather conditions for the ripening of the vine branches, the preparation of the branches for the winter and the ripening of the crop. The vines are also watered during burial, because moist soil is necessary for burying 30-40 cm. The vines are watered twice in the winter season with chilled water.

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