

Methods of Irrigation of Gardens and Vineyards in Salty Land

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ABSTRACT

This article presents the results of research on drip irrigation of vineyards in the conditions of medium sandy meadow gray soils of Tashkent region. In drip irrigation of vineyards in the order of 70-75-65% relative to ChDNS, when the depth of soil moisture was set at 0.5 m, 15% more water was saved than in the control, and the yield of grapes was higher by 4.5 ts / ha.

KEYWORDS: *unsalted, Shurozak sink, land areas, Vineyards, Experimental field, grape seed, vegetation*

Introduction

In all spheres of the country, including the development of fruit growing, increasing fruit yield and improving quality, meeting the demand of the population for fruit products, expanding exports, efficient use of irrigated land and other resources, steadily increasing soil fertility, improving living standards and economic development. plays an important role. It is important today to raise viticulture to a higher level, to create and place grape varieties suitable for soil climatic conditions, to use new and advanced agro-technologies with high efficiency in their cultivation, thereby expanding the share of grape growing, to fully meet the demand for fruit and grape products. and is one of the current issues. According to our seniors and health professionals, regular consumption of fresh and fresh fruits and grapes is an invaluable blessing for human health. It is no secret that the fruits and grapes grown in our country differ sharply from the fruits grown in other countries in their taste and flavor. Any fruit and grape varieties grown in the soil and climatic conditions of Uzbekistan receive fruitful energy from every season of the year, and in its fresh air and nature, in the sunlight, it becomes a refreshing and healing blessing [1-5]. According to our seniors and health professionals, regular consumption of fresh and fresh fruits and grapes is an invaluable blessing for human health. It is no secret that the fruits and grapes grown in our country differ sharply from the fruits grown in other countries in their taste and flavor. Any fruit and grape varieties grown in the soil and climatic conditions of Uzbekistan receive fruitful energy from every season of the year, and in its fresh air and nature, in the sunlight, it becomes a refreshing and healing blessing.

Results

The soils of the area we are experimenting with are composed of ancient irrigated, non-saline, medium sandy meadow gray soils, and the depth of groundwater is 1.8-2.0 m. In order to develop the scientific and practical basis of resource-efficient irrigation technologies in the irrigation of vineyards, scientific research is being conducted in the orchards and vineyards of OOMTV in OrtaChirchik district of Tashkent region [6-9]. The experimental field is located in the Shurozak basin of Mirzachul. It is old and has a low groundwater level (1.5-2.0 m). consists of. The Shurozak basin occupies the south-western part of the second terrace of the Syrdarya. The bulk density of the soil is 1.25 g / cm³ in the 0-30 cm layer at the beginning of the application period and 1.32 g / cm³ in the 30-50 cm layer.

Table 1. Number and norms of irrigation in the experimental field

Experimental area	Water consumption	On irrigation methods						Seasonal water norms, m ³ / ha	
		1 irrigation	2 irrigation	3 Irrigation	4 Irrigation	5 Irrigation	6 Irrigation		
Irrigation by tillage over the land									
“Syrdarya White Golden Fiber Garden” LLC	Brutto	685	856	897	882	893	782	4995	
	Netto	501	625	630	648	652	574	3630	
	Oqova	184	231	267	234	241	208	1365	
	Irrigation with a film cover								
	Brutto	495	645	650	667	685	569	3711	
	Netto	468	613	621	632	643	536	3513	
	Oqova	27	32	29	35	42	33	198	

The climate of the region is sharply continental, hot summers are harsh, resulting in groundwater evaporation, soil salinity, especially in Mirzaabad district, where the soil is very saline, the total productivity of the district is low, the temperature is warmer in summer than in Tashkent region. , moderate rainfall in the spring months and occasional snowfall are also likely. The land areas of the district are very low in nutrients nitrogen and phosphorus, and less than average in potassium. In the experiment, irrigation was carried out during the growing season from April 16 to September 28 and was irrigated 6 times [10-14].

According to the results of the study, in the traditional irrigated control variant, the gross irrigation rate during the season is 4995 m³ / ha, net irrigation rate is 3630 m³ / ha, in the variant irrigated using special trenches covered with film, the gross irrigation rate is 3711 m³ / ha, 3513 m³ / ha, or an average of 25.7% of irrigation water was saved by this method [15-16].

Conclusions

This means that the use of drip and sprinkler irrigation methods in these areas causes a number of inconveniences due to the fact that groundwater is located closer to the surface and mineralized than in other areas. Therefore, it is sufficient to improve the traditional above-ground irrigation methods in these areas. That is, it is advisable to use the method of watering the branches with a film. When irrigation is organized in this way, it is possible not only to lose water for infiltration, but also to control the flow of water supplied to the fields on a regular basis. This allows to save irrigation water by an average of 25.7%. It also prevents groundwater levels from rising.

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