

DRIP IRRIGATION IN ORCHARDS AND ESTABLISHMENT OF HEDGEROWS TO PREVENT WATER WASTAGE.

Abdumutalipova Xurmatoy Turg'unboyevna

Senior teacher of Andijan Institute of Agriculture and Agro-Technology.

Andijan, Uzbekistan

Olimboyeva Shirmonxon Abdumannob qizi

Student of Andijan Institute of Agriculture and Agrotechnology. Andijan,

Uzbekistan

Abstract. In this article, promising methods of irrigation in order to plant and care for seedlings of fruit plants, to prevent and eliminate unfavorable conditions and to create favorable conditions for their growth and development. Information is provided on the importance of tillage and planting of surrounding trees.

Key words: hydrocyclone, drip irrigation, intensive apple orchards, perennial trees, cultivation works, irrigation quantity and norm periods, infiltration furrow, ditch water.

Introduction. The role and importance of the agricultural sector in ensuring the food security of the population on a global scale is increasing day by day. In particular, in our country, it is an urgent issue to use the available resources and opportunities to provide the population with guaranteed agricultural products, to further increase productivity and interest, and to introduce scientific achievements and modern approaches to the field.

In this process, it was made a priority to increase the income per hectare of land from the current average of 2,000 dollars to at least 5,000 dollars. It was determined that we should widely introduce achievements in the field.

The growth, development and productivity of fruit plants largely depend on external environmental factors. In particular, climatic and soil factors have a great

influence on the growth and development of fruit crops. This requirement is different during the year (spring, summer, winter, autumn) during growth and rest phases in different periods of plant age (seedling, yielding and senescence).

Light is considered the main factor of photosynthesis, it helps the growth and formation of plant organs, affects transpiration, direction of growing organs, etc. With the change of light, the plant soil and air temperature, humidity, chemical composition of the soil and microbiological environment change.

Table 1

Intensive apple orchard system

№	Apple varieties	The number of planted seedlings	Planting schemes			
			4x0,8	4x1,2	4x2	4x3
1.	Golden delishes	1100	4x0,8	4x1,2	4x2	4x3
2.	Pink Ledi	193	4x0,8	4x1,2	4x2	4x3
3.	Gala	1640	4x0,8	4x1,2	4x2	4x3
4.	Argus	750	4x0,8	4x1,2	4x2	4x3
5.	Fuji	1875	4x0,8	4x1,2	4x2	4x3
6.	Krimpson Kreps	440	4x0,8	4x1,2	4x2	4x3
7.	Saltanat	192	4x0,8	4x1,2	4x2	4x3

Apple varieties are planted in 4 different planting schemes

Table 2

System of intensive plum orchard

№	Varieties of plums	The number of planted seedlings	Planting scheme
1.	Ispolinskiy	550	4x3
2.	Чуорныу bagira	780	4x3
3.	Samarkandskiy chyornosliv	340	4x3
4.	Leto	340	4x3

Plums are planted in the same planting scheme

When perennial trees that grow quickly and tall are planted around gardens and along highways between neighborhoods, they protect fruit trees from wind, heat and cold, spillage of crops in the wind, breakage of branches, autumn, in the winter and spring seasons, it protects them from frostbite, evaporation of soil moisture, soil salinity, and prevents the rise of the water level.

In order for hedgerows to withstand the wind, they must have the following

characteristics:

- a) the orchard should be suitable for the soil and climatic conditions of the region where it will be established;
- b) it should be fast-growing, not branching widely and strong with high growth;
- c) should have sufficient density to protect against wind;
- g) the root should have a small size;
- d) it should not be infected with diseases and pests.



To protect the newly established gardens from animals and to mark the boundaries of the garden, it is advisable to fence the garden.

The number and frequency of irrigation in fruit trees depends on the depth of the ground water. The deeper the ground water, the better the fruit trees will drink fresh water and grow and develop better. Harvested apple trees are extremely intolerant of harmful salts, so it is recommended to irrigate such orchards once every two years with a floor of 5-10 hectares at a height of 50-60 cm. After 24 hours of infiltration furrow irrigation, salt rises as a result of water breaking up through capillaries. Therefore, it is necessary to carry out salt washing every year during the irrigation of fruit trees with water or during the growing season.

Summary. In order to plant and care for seedlings of fruit plants, to

prevent and eliminate unfavorable conditions and to create favorable conditions for their growth and development, when a garden is established on large areas, ditches between gardens should be made in order to reduce the force of the wind. It is stated that planting poplars in two rows per year is good, that it is necessary to fight against diseases and pests in these orchards every year, otherwise they can become a source of diseases and pests, and the number of times of watering fruit trees, terms, it is very important to pay attention to the quality and maintenance of water.

References:

1. Decision No. PQ-144 of March 1, 2022 of the President of the Republic of Uzbekistan on "Measures to further improve the introduction of water-saving technologies in agriculture"

2. Decision PQ-144 of March 1, 2022 of the President of the Republic of Uzbekistan on "Measures to further improve the introduction of water-saving technologies in agriculture".

3. M. Sarimsaqov, M. Sarimsaqova "Effect of irrigation method on soil agrophysics and apple productivity" Agro science 2023 issue 1, special page 62.

4. Sh. Berdiyev, D. Mamatova "Application of water-saving irrigation technologies in partially submerged lands of irrigation fields." Agro science, 2023, issue 1, special page 47.

5. N. Khodjayeva, A. Isashov. "Irrigation standards and seasonal water consumption of soybean varieties planted as a repeated crop" Bulletin of the Agricultural Science of Uzbekistan No. 6 (12) 2023 B 127-130.