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The Main Purpose of Drip Irrigation in Irrigation Farming and Its Propagation

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Abstract: *the article describes the scientific basis of the method of drip irrigation saving water relative to the method of conventional irrigation. In the drip irrigation method, water is given only to the root part of the plant, this is primarily due to the fact that it saves irrigation water up to 40-60% and allows to obtain a higher yield from the crops.*

Key words: *drip irrigation, plant, greenhouse, feeding, humidity, productivity, pipe, measures, fertilizers.*

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Water is one of the main factors of socio-economic well-being and environmental preservation of Central Asian countries. As the shortage of Water Resources has been observed in all countries of Central Asia, it is also significantly showing its impact in our Republic. In order to meet the socio-economic and environmental needs of the growing population and natural ecosystems among the countries of the region, ensuring sustainable development, Negaki maintains a high level of water demand.

Today, one of the important factors that negatively affects the agricultural and Environmental Protection of our country is soil salinity. About 2.0 million hectares or 46.6% of irrigated lands in our country are soils prone to salinity and salinity at various levels, which are affected by the drying of the Aral Sea, irregular use of Land, Water Resources, global climate changes and other factors. Another of the main causes of soil salinity is the absorption of water resources used in agriculture from irrigation networks during the growing season to the ground in large quantities, the use of water resources for excessive irrigation to the field and the increase in the level of sizot water, which is caused by the constant evaporation of groundwater near the

The independence of the Republic of Uzbekistan and its transition to market relations necessitated the implementation of radical structural reforms in the agrarian sphere. In particular, in agriculture, legal foundations that guarantee the ownership of land and property are being formed and improved. In addition, measures have been taken to increase the level of crops that improve soil fertility in the placement of crops, introduce modern technologies of production of agricultural products, as well as economic incentives for the effective use of Land-Water Resources, improve the land reclamation situation. As a result of this, the fertility of the lands, the ecological situation improved, the yield of crops increased, agricultural products increased. However, modern development requires the development and implementation of completely new approaches to the improvement of reforms in this regard. For this reason, in the agricultural sector, the prospect of "the introduction of modern agrotechnologies, which primarily save water and resources...issues such as" reduction of cotton and grain crop areas with a spike, planting of potato, vegetable, nutrient and oil-extracted crops on vacant lands, as well as further optimization of crop areas on account of new intensive garden and vineyard Placement", 2 were identified as strategic tasks.

Saving and rational use of water in gardening has shown to be a complex issue.A serious problem with this is the reduction in the percentage of water vaporization expended. It is practically impossible to reduce the consumption of water for filtration when using roughing irrigation. Its minimum amount of water given to the field is 10.....It will not be possible to reduce even on a scale of less than 15%. The use of irrigation water in the old, uncomplicated irrigation systems (trunk, farmlararo, farm canals) and useful working coefficient (fig) when crops are raked and watered will be equal to 0,3...0,4, the Fig of the system will be equal to 0,5... 0,6.

This means that it is necessary to increase the figs of all branches of the irrigation system in order to increase the FIC of the system and to use water resources more efficiently. Under these conditions, special attention is paid to the method of drip irrigation. Based on many years of experience in gardening in Uzbekistan and developed countries, the result of drip irrigation experiments showed that the use of this method allows to obtain a high yield from the garden with low water consumption, and in this way it will be possible to fully automate and automate irrigation works.

Research conducted on several farms in Uzbekistan using this method showed that productivity increased to 8-10 c/ha. The average seasonal irrigation standard is 600-8000 m3/ha in rut irrigation, while in drip irrigation it is 300-4000 m3/ha. ga was equal. 1 s. for the cultivation of the crop, 200-300 and 50-70 m3 of water were required respectively [31].

Drip irrigation is one of the most advanced methods for moistening the soil and allows plants to adjust the amount of water they give according to their need, not per day, but per hour. Drip irrigation consists of a source, a swimmer and a pump, a pressure-regulating device, a trunk and a distribution pipe, a drip irrigation pipe with a dropper (gidropodkormshik), which prepares to Melt OG. Irrigation water is supplied mainly with a pressure of 0,07-0,28 mPa, or with its own flow when low pressure is required. Low pressure is formed with the help of the difference between the Earth and the water source vending machines, or the difference between the pressure water bashnyas and irrigation field vending machines.

The use of centrifugal pumps, whose work efficiency and capacity are not so great, is more effective. Since the drip irrigation system is very sensitive to the degree of turbidity of the water supplied to the irrigation, it is necessary to filter the water thoroughly. The maximum permissible size of the tiny particles that fall into the system must necessarily be several times smaller than the size of the hole through which the dropper descends water, otherwise the tiny particles can stick together and hide the passage hole. To clean the water supplied to the irrigation, sprinklers,separators and filters with sand and gravel, set are used. Filters of various structures with water permeability up to 90 m3/h have been developed. To keep the granules smaller than 10 mk in diameter, sand filters are used, for

granules with a diameter of 10 - 100 mk, 1 cm sq.at 30-40 holes are used with existing set filters. Cleaning the filters from the sludge is carried out by automation or manual washing. For the trunk and distribution pipes, black polyethylene and less often polyvinyl chloride pipes with a diameter of 38-160 mm are used. Irrigation pipes are made of polyethylene materials for the tight installation of droplets in pipes. The inner diameter of the pipes is 6-19 mm, the thickness is 1 - 6 mm, respectively. The following requirements are imposed on droppers:

During the entire period of operation, the water consumption does not change, the drip water consumption does not depend on which part of the pipe it is located, does not depend on the change in pressure in the system and the change in ambient temperature, can be cleaned without stopping the system, the cost is low.

Plastic droppers installed or put in the pipe are widely used. The amount of pressure in the bun is spent to overcome the friction when the water flows through the labyrinthine cracks or through the hole formed when the dropper is attached to the pipe: “Driplex”, “Varodrip”, etc.

Installation of droppers is a serious problem of drip irrigation. The cost of cleaning the system is up to 10% of the total cost of the drip irrigation system, and in addition, during the irrigation season, most droplets require regular cleaning, it is necessary to replace them with a new one after 7-8 years of use. Such a situation requires constant work on the discovery of a new type of dropper, as well as the development of a drip irrigation system, with the exception of shortcomings.

Of great interest was the "Vatermantik" drip hose, which was produced by the firm in the US and England. It consists of a two-layer pipe (groove in the groove). On the walls of the internal and external pipes there are holes with a diameter of 0,62 mm. The holes in the walls of the groove are placed so that the distance between them is 4 or 8 times greater than on the outer walls in the inner walls. Water, falling through each hole of the internal pipes, falls into 4-8 holes of the external pipes, resulting in uniform irrigation along the entire length of the pipe. There are also irrigation pipes that work without drip. The function of the dropper is performed by the walls of the pipe made of special porous materials. Such pipes can also be placed on top of the soil and into the soil to a depth of up to 38 cm. The length of the pipe is 300 m, the water consumption is 0,02-0,0 3,8 l/h when the pressure is 7,6-0,0 3 MPa.

The filter size, which is part of the drip irrigation system, ensures the filtration of particles up to 25 mm. Such pipes can work for 10-20 years without a hangover.In the drip irrigation system, mineral fertilizers are given to the roots of plants along with irrigation water in the form of a solution. Fertilizer solution is given to the trunk pipe using gidropodkormshik..

List of literature:

1. Decree of the president of the Republic of Uzbekistan on measures to ensure more effective organization of the process of acquisition of rights over land parcels and other immovable property as part of the South Caucasus pipeline expansion project more ...
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3. Internet data.