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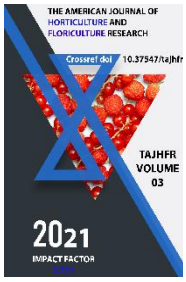

The Importance Of Irrigating Cotton Through Artificial Pipe Against Soil Erosion

Shakhstakhan Madaminovna Khalmatova
PhD, Fergana State University, Fergana, Uzbekistan

Khusniddin Abdurakhimov
Master's Degree Student, Fergana State University, Fergana, Uzbekistan

Ergashali Abdullaev
Master's Degree Student, Fergana State University, Fergana, Uzbekistan

ABSTRACT

Erosion is the erosion of rocks and soil by water and wind. Landslides are always associated with accumulation. The occurrence of the erosion process depends mainly on the climate, the total amount, type, duration, intensity of precipitation.

At present, many issues related to the problem of soil erosion have been sufficiently studied. There is a sufficient collection of information on the distribution patterns of eroded and deflated soils in Uzbekistan, their level of fertility, resistance to erosion.

The article scientifically explores the importance of irrigating cotton through artifical tubular pits in the fight against soil erosion.

KEYWORDS

Erosion, ecology, soil, water, artificial irrigation, soil fertility, irrigation methods.

INTRODUCTION

Erosion (from the Latin erosio - erosion) is the process of soil destruction under the influence of water and wind. Soil erosion is understood not only as the washout and erosion of the soil cover by the surface runoff of precipitation, but also its blowing, scattering by the wind. "The traditions of our ancestors in relation to nature, flora and fauna, developed traditions

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and folk ecological culture from ancient times, combining experiences. As an integral and most important part of folk culture, national values related to environmental protection have matured"[1].

MAIN PART

It is known that nature protection is one of the important factors in shaping a healthy lifestyle in society. Therefore, attention should be paid to the formation of ecological culture in society. "Ethno-ecological culture is concerned to all sides of life as a multilateral and complex event. In the line any kind of field is impossible to develop without ethno-ecology. This situation shows assessing socially feature of development. So, adjoining to concrete-history to ecological culture can make it explain right"[1].

Soil is the most precious, irreplaceable wealth of mankind. Gold, silver, iron are eroded, exchanged. Oil, gas and coal eventually run out. If humans protect the soil from any processes, it will serve all existence. Using with artificial pipe at the bottom of furrow against irrigation erosion to increase soil fertility, improve the yield of cotton, efficient use of fertilizers and water, protecting the environment from pollution, producing more harvest of cotton we conducted the following field experiments on the typical gray soils which were subject to irrigation erosion of the central. Experimental farm of the cotton Research institute of Uzbekistan.

1. Waternig the cotton through furrow as usual.
2. Irrigation through artificial pipe formed at a depth of 12-15sm at the bottom of furrow.
3. Irrigation through artificial pipe formed at a depth of 22-25sm at the bottom of furrow.
4. Irrigation through artificial pipe formed at a depth of 32-35sm at the bottom of furrow.

Soil erosion is understood not only as the washout and erosion of the soil cover by the surface runoff of precipitation, but also its blowing, scattering by the wind. The destruction of soil by the action of water is called water erosion, and by the action of the wind - wind erosion, or deflation. Preserving soil from erosion and combating it is the most important task of rational land use.

RESULTS AND DISCUSSIONS

The study of the processes of erosion and deflation and the development on this basis of methods for protecting the soil cover from them are becoming especially important. Therefore, it is extremely important that specialists in various branches of agriculture represent the danger of these types of soil destruction, know the factors that cause them, and methods of dealing with them.

Artificial pipes create using special adaption established to cultivator after the first irrigation of cotton. Observations show that the velocity of water flowing in the furrow depending on the irrigation methods and the depth of the artificial pipes cavities formed at the bottom of the furrows. The highest water velocity (0,30-0.31m/s) was in normal straight furrows, when cotton irrigated through artificial tubular are at a depth of 12-15sm per second decrease 1,5-1,8 time and 0,20-0,22 meters per second when the artificial tubular cavities are at depth of 22-25sm, when artificial tubular cavities are at a depth of 0,16-0,17,when (artificial) cavities are at a depth of 32-35sm, then will be 0,16-0,17m. This cause to better water absorption reduced leakage and reduced washing processes. The leaching of soil particles is 1.6 tons per hectare when irrigated through a simple straight field. When

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irrigated through artificial pits formed at a different depth at the bottom of furrows, the soil washing decreased 7.82-7,5 tons namely by 2.5 times per hectare.

1.1 Table

Option	Experiment option	Number of irrigation					Total for the season	Average of 3 years
		1	2	3	4	5		
1.	Cotton is irrigated through the ferrow and the mineral fertilizers are filled with a tractor	2,28	3,51	5,14	5,29	-	16,2	14,6
2.	The cotton is irrigated at the bottom of ferrow through artificial pipe 12-15sm	-	2,16	3,21	4,01	-	9,3	7,82
3.	The cotton is irrigated at the bottom of ferrow through artificial pipe 22-25sm	-	2,30	3,44	3,78	-	9,52	7,50
4.	The cotton is irrigated at the bottom of ferrow through artificial pipe 32-35sm	-	2,47	3,56	3,35	-	9,38	7,12
5.	Mineral fertilizers to cotton are dissolved by	-	2,10	2,70	2,87	-	7,67	7,21

	water The depth of artificial pipe is 12-15 sm							
6.	Mineral fertilizers to cotton are dissolved by water The depth of artificial pipe is 22-25 sm.	-	2,03	3,02	2,91	-	7,96	6,91
7.	Mineral fertilizers to cotton are dissolved by water The depth of artificial pipe is32-35 sm	-	1,56	2,17	2,33	-	6,06	6,22

CONCLUSION

The effect of tubular pipes formed at different depth on the bottom of the furrows on the washing of the soil.

So when cotton is irrigated through artificial pipes in the bottom of the furrow soil particles is reduced, water is saved and the environment is purified.

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