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## NATURAL SCREEN SANDED SANDS FIELD WATER CAPACITY

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### ABSTRACT

*In countries around the world, including Central Asia and Uzbekistan, scientists and practitioners have studied the properties and characteristics of sandy soils, studied the main dimensions of wind erosion, identified ways to combat it and tested key measures. The results of the study were determined at the lowest moisture control option during the growing season in the experimental area with an artificial layer of soil. Based on the results of field and laboratory tests, the most convenient ways to create a natural screen in the hilly flat sands were developed to improve the physical, water-physical, agrochemical, reclamation properties of flat sands and to get 39 ts / ha of cotton from 18 ts / ha in areas without screens.*

**KEYWORDS:** *Artificial, Dimensions, Practitioners*

### INTRODUCTION

Decree of the First President of the Republic of Uzbekistan No. PF-4533 of April 19, 2013 "On measures to radically improve the system of land reclamation" and Presidential Decree No. 4947 of February 7, 2017 "On the Strategy for further development of the Republic of Uzbekistan" as well as the implementation of the tasks set out in the regulations relating to this activity.

Research is being carried out around the world to improve the properties, genesis and production efficiency of sands in the following priority areas: protection of sands and sand dunes from erosion; improving the agrophysical and agrochemical properties of sandy soils; improvement of agro-technologies that increase the productivity of sandy and light soils; development of resource and energy-saving, cost-effective technologies in the use of sandy soils. In countries around the world, including Central Asia and Uzbekistan, scientists and practitioners have studied the properties and characteristics of sandy soils, studied the main dimensions of wind erosion, identified ways to combat it and tested key measures. However, sands are a resource-intensive agro-technological method that has a special scientific and practical solution to improve the

agrophysical properties of soils, restore and increase productivity, ie in different proportions of different fertilizers (N, P, K, local fertilizer, lignin) in natural and artificial screens. the technology of application in convenient terms, norms and methods has not been developed.

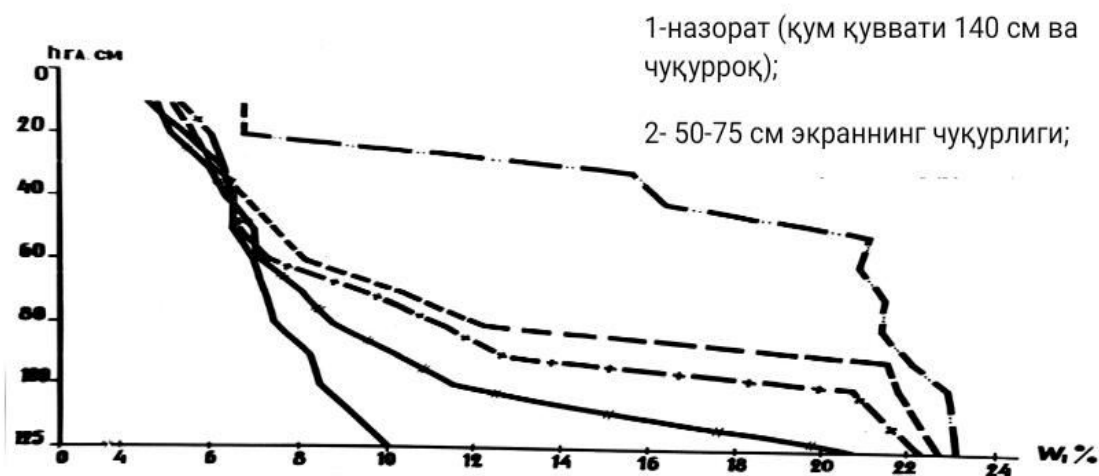
Improving the reclamation, water-fertilization regime of sands by allowing the growth and development of cotton and wheat at a moderate rate through the organization of special screens; creation of favorable conditions for the planned harvest of high-quality cotton and wheat, evaluation of the formation of artificial and natural screens that further improve the water-physical, nutritional regime of sands; increase their efficiency in the cultivation of cotton and winter wheat in the deflated sand dunes of Central Fergana through the application of the most favorable rates of mineral and organic fertilizers; by determining the optimal amount of mineral and organic fertilizers, the yield and yield of cotton and wheat have been proven to improve during cultivation in fertile, sandy soils, in areas affected by deflation; the agro physical and agrochemical properties of the sands have been improved and the nutrient regime has been enriched; the morphological structure of the sands lying in the topsoil was determined.

Based on the results of field and laboratory tests, the most convenient ways to create a natural screen in the hilly flat sands were developed to improve the physical, water-physical, agrochemical, reclamation properties of flat sands and to get 39 ts / ha of cotton from 18 ts / ha in areas without screens. Recommended. In order to protect the cotton from wind damage by leveling the sand on the soil, special agrotechnics, planting and care of rye crops and leaving them with a stem of 14-15 cm in April, leaving a thickness of 170-200 pieces / m<sup>2</sup>, in the flowering phase the organization of the harvest ensured efficiency. As the volume mass changes, the water permeability of the soil also changes. The water permeability in the experimental area was 15,350 m<sup>3</sup> / ha without artificial screen for 6 hours during the control period, which decreased to 6,026 m<sup>3</sup> / ha when grounded to 1000 t / ha. Such a decrease in water permeability, as noted by A.F. Lebedev, S.N.

Water permeability is directly related to the natural condition of the soil and the depth of the soil condition in the experimental area, the higher the sand layer, the higher the water permeability of the soil. For example, at a depth of 0-110 (130) cm, the soil bed is 11758 m<sup>3</sup> / ha for 6 hours, and at a depth of 0-50 (75) it is 5868 m<sup>3</sup> / ha.

Water is important in the soil and in the formation of plants during growth. From the amount of water in the soil changes the rate of humification of plant residues, its decay, mineralization of simple salts.

The results of the study were determined at the lowest moisture control option during the growing season in the experimental area with an artificial layer of soil. Soil moisture in the 0–40 cm layer was 64% of the total flowering period before irrigation, and 7.87 on the third day after irrigation; 6th day - 6.18; Day 9 was 3.96%. Although the moisture in the upper layers was low, such consistency was maintained.



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