

CHANGES IN THE PHYSICAL PROPERTIES OF SOUTH FERGHANA SOIL WATER UNDER THE INFLUENCE OF AGRICULTURAL CULTURE

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Abstract: *The thickness of the agro-irrigation deposits of humus accumulative layer soil with high cultural status reaches 62 cm. Carbonate stains are mainly found in that layer. Starting from the 80 cm deep floor, such spots increase dramatically.*

Key words: *soil, water, moisture, wilting, recovery, porosity, hydromorph, nutrition*

Since the water resistance of the soil structure of Central Asia is much lower than that of other soils, it is natural that their fertility is also low. But with the proper use of agrotechnical measures, it is possible to get abundant harvests from all crops in exchange for watering and fertilizing the land. Irrigation is one of the common soil impact measures in Central Asia.

Irrigation is one of the most important factors in improving soil fertility. Due to irrigation, agro-irrigation runoff increases, as a result, the direction and speed of soil formation processes change, and the conditions of moisture change.

Irrigated soils were considered a special type of cultivated soils in oases. In them, agro-irrigation discharges play a major role in the process of soil formation. However, it is difficult to determine the current level of soil fertility, depending on the thickness of the layers formed from runoff and the antiquity of irrigation.

It is known that in cultivated oasis soils, the humus-infiltrated layer is lower than in gray soils, and nitrogen and phosphorus are more in the 70 cm layers of these soils.

The data obtained as a result of the experiment showed that regardless of the origin of both soils and the type of crops planted on them, the productivity of the soils under the arable layer is very low. Therefore, it is not based on the thickness of the irrigation water, but it is created due to the past and current level of farming (M.A. Orlov). can be relieved.

Among all agrotechnical and reclamation activities, fertilization, crop rotation and crop care have the strongest effect on the soil. Watering, drying of soil. Desalination of saline soils and some other activities have specific effects on soil and in most cases do not directly affect soil fertility.

All these data show that crop rotation has a strong effect on improving the physical properties of the soil and finally increasing its productivity. Planting perennial grass increases the water resistance of the soil structure, increases the organic matter and nitrogen content of the soil.

Together with S.N.Rijov and S.P.Suchkov, he conducted special inspections to study the fertility of soils with different cultural conditions. For this, samples were taken from Yangiyol district of Tashkent region. The samples consisted of soils with high, medium and weak cultural status and non-irrigated dry gray soils.

The sampled soils are geographically close to each other. All these soils were formed under the same conditions, but they differ from each other in terms of the antiquity of their exploitation and the thickness of the layer of agro-irrigation runoff.

The thickness of the agro-irrigation deposits of humus accumulative soil with a high cultural condition reaches 62 cm. Carbonate stains are mainly found in that layer. Starting from the 80 cm deep floor, such spots increase dramatically.

In the soil with an average cultural condition, the agro-irrigation layer with humus continues to a depth of 48 cm. All other characteristics of these types of soils do not differ from those of soils with high cultural status. In soils with poor cultural conditions, the accumulative layer with humus reaches a layer of 30 cm; Starting from the 25 cm depth layer, new carbonate cracks are found. The arable layer of non-irrigated dry soils is thin and does not exceed 16 cm. The carbonate horizon begins after the 2.5 cm layer.

In soils with a high level of development, the increase in muddy fractions and fine dust leads to a heavier mechanical composition. Aggravation of the mechanical structure can be due to thickening of agroirrigated deposits or eluvial sedimentation. A.N. Rozanov was the first to express the same opinion. Such a phenomenon was also proven in desert oasis soils in subsequent investigations. Muttasil irrigation, human activity has a great influence on the change of physical properties of soil water.

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