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ASSESSMENT OF IRRIGATED SOILS BY THE LEVEL OF DEFLATION SUSCEPTIBILITY

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Abstract
This article presents the results of monitoring various deflation processes on irrigated lands in the districts of the Jizzakh region, as well as the results of determining the level of risk of deflation in soils.

Keywords. Deflation, soil fertility, intercropping, current issue, morphological features.

Introduction

The Resolution of the President of the Republic of Uzbekistan dated June 10, 2022 No. PP-277 "On measures to create an effective system to combat land degradation" sets out important tasks to prevent land degradation in Uzbekistan and eliminate its consequences.
Forecast indicators aimed at reducing and preventing land degradation processes in our country for 2022-2025 have been attached. With this decree, it is planned to increase the area for the creation of specialized farms on agricultural land from 5.0 thousand hectares to 10.2 thousand hectares.
All types of erosion are currently widespread on the territory of our country. Of these, more than 2 million hectares of irrigated land have been subjected to soil deflation. Studying the status of wind erosion-prone lands, assessing them, and developing anti-deflation measures is one of the most pressing issues in agriculture at the moment.
The total area of land on the administrative border of the Republic of Uzbekistan is 44892.4 thousand hectares. The total land used by enterprises, organizations, institutions, farms and citizens in the republic is 24057.1 thousand hectares, of which irrigated land is 4214.3 thousand hectares or 9.3% of the total land area (National Report on the State of Land Resources of the Republic of Uzbekistan).
Mirzachol has long been one of the largest cotton-growing regions in Uzbekistan. Mirzachol may refer to: about a hectare. Irrigated areas of Syrdarya and Jizzakh regions of Uzbekistan (471.2 thousand hectares), Chimkent region of the Republic of Kazakhstan (122.4 thousand

hectares) and Khojand region of the Republic of Tajikistan (14.2 thousand hectares) are scattered A.V. Shuravilin.

Mirzadesert soil is a variety of climatic conditions, which requires the implementation of specific agrotechnical and reclamation measures in this region. With the creation of new technologies and tillage of the soil, as well as measures for the cultivation of crops that absorb agro-reclamative and agrotechnical, as well as structure-forming nutrients, it is possible to increase the productivity and efficiency of their use. In subsequent years, the intensive influence of unceasing human activity, irresponsible attitude to soil protection caused soil erosion problems on a national scale.

At present, the study, assessment and development of measures to counteract deflation is one of the most pressing challenges for Mirzachol agriculture.

The degree of deflation susceptibility of irrigated soils of Mirzachol, the morphological features of irrigated soils, the influence of deflation processes on agrophysical and agrochemical properties, as well as the effect of intermediate (*kulis*) crops against wind erosion on soil fertility and goose yield are studied. In particular, the description of the morphological features of erosion hazards of different degrees of the Zaamin district of the Jizzakh region is given as an example of the following soil sections.

The basis of the research method is the generally accepted methods in soil science [1, 2, 3, 4, 5, 6].

Research results and their analysis

Cut-35. On 20.06.2004 the AXM "Chilanzor" of Zaamin district consists of a geomorphological area of the slopes of the foothills, consisting of a *subtropical desert region, Central Asian province, a region of open-frisky clay soils, deluvial, alluvial and proluvial deposits (*sclet-rocky).

Weak hazard to deflation, freshly irrigated meadow soil, moderately saline, cistern depression plain. Cotton field (M.Umarov).

0–25 cm Gray in color, moist, light sandy, finely grained, medium dense, small roots of the plants are very abundant (traces of carolite and crovina are abundant), gradually in density and mechanical composition of the transition to the next layer.

25–40 cm Gray, moist, medium sandy, fine-grained, dense, roots and salt spots are common. Its transition to the next layer is sharp in color and mechanical composition.

40–72 cm Light gray, moist, light sandy, grainy, moderately dense, sharp from moisture transition to the next layer.

72–96 cm Gray, wet, light sand, dense, leaky waters were observed.

Cut-19.

Moderate risk to deflation, irrigated wetlands, field of grain crops (M.Umarov).

0–25 cm Light gray, slightly moistened, sandy, moderately dense, small roots of plants, (*Traces of crovina are rare*), occurs in salty spots. Transition to the next layer gradually, from density.

25–45 cm Light gray, moderately moistened, sandy, dense, small plant has few roots, traces of insects, salt crystals (concrenations) are common. Transition to the next layer gradually, from density.

45–85 cm Light gray, soggy, sandy, dense, densely gypsum layer occurs in the gypsum layer. From the density of the transition to the next layer is noticeable.

85–120 cm Light gray, wet, sandy, medium dense, salt crystals (concrenations) occur.

From the morphological records of cross-sections placed on wind erosion hazards at different speeds, it can be concluded that soil properties will deteriorate as the level of erosion risk increases. This means that in the risk of severe deflation, the humus layer is hardly formed, so the transition between genetic layers is gradual. In such a case , there are distinctive signs of the layers, secondary genetic attributes serve as moisture, density and depth of sewage water. In weak and moderate deflation risk yesters, the genetic layers were more pronounced in weak and moderate deflation risk yesters: the boundary of the layer in which humus accumulated was clearly visible. Yörs without a risk of deflation differ from those with a risk of deflation by the thickness of the agroirrigated layer and the well-expressed expression of the genetic layers, the thickness of the A+V layer is more than 70 cm

Conclusion and recommendations.

1. To improve the morphogenetic properties of deflectioned soils, initially soil enrichment in organic matter, sowing of winter wheat and rye is carried out in the fall, and the spacing of the rows is pre-loosened in a softener device to a depth of 7-9 cm. As for wheat, it is necessary to water 2-3 times until the end of the growing season, in the spring it is recommended to add ammonium nitrate at the rate of 100 kg / ha of pure nitrogen per hectare to accelerate its growth.
2. Autumn wheatgrass, corn, corn, Sudanese grass and other fast-growing crops can be used to form protective crops from kulis crops. At the same time, the distance between protective crops should not exceed 15-25 m, and their width should not exceed 2-2.5 m.

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