

The Development of Humus Providence in Zafarabad Regions of Jizzak Region of the Republic of Uzbekistan

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Annotation:

The farm attached to the Zafarabad district of the Jizzakh region of the Republic of Uzbekistan is the most important part that ensures the fertility of the humus soil with 1270 samples of 6350 hectares of land. It contains the main plant nutrients (carbon, nitrogen, phosphorus, etc.). Simple compounds are formed from plant decay. It absorbs calcium, magnesium and other chemical elements and keeps them in the soil, binds the mineral part of the soil with each other and creates granularity. As a result, a strong, water-resistant composition of the soil is formed. Accumulation of humus is a process determined by the amount of organic residues (roots) falling into the soil every year, their biological and chemical changes, and the nature of the soil microflora (fungal, bacterial, anaerobic or aerobic).

Keywords: Humus, yield, quality, Agricultural crops.

Introduction. The results of the analysis were obtained from September 10, 2022 to March 2023 in the test laboratory of the Agrochemical Analysis Center of the Jizzakh Region under the Plant Quarantine and Protection Agency;

Primary macronutrients play a very important role in increasing the yield and quality of crops. The three main elements are nitrogen, phosphorus, and potassium (N, P, and K), which are required in large quantities. External symptoms of nitrogen deficiency include poor plant growth and pale green or yellow leaves, because they cannot produce enough chlorophyll. In this case, the leaves are called chlorotic. The lower leaves (old leaves) show symptoms first because the plant transfers more

nitrogen from the old leaves to the new leaves. Visual assessment is important in determining the need for soil analysis. If the above condition is observed in the crops, there is a high probability of nitrogen deficiency in the soil.

The role of phosphorus in increasing the productivity and quality of agricultural crops

The group and fractional composition of humus in the soils of the Jizzakh oasis largely depends on natural and anthropogenic factors. It has a positive effect on the group and fractional composition of soil humus. A similar situation was observed in hydromorphic soils. Among the hydromorphic soils, the most widespread are meadow soils, which have a relatively high content of humus and a relatively high percentage of calcium-bound fractions in the fractional composition. In the ratio of humic and fulvic acids, the proportion of humic acids is predominant. The humus condition of meadow soils depends on their level of cultivation. The quantity and quality of humus was noted to be higher in the old irrigated grassland soils. It was found that the quality of humus in newly developed and newly irrigated grassland soils is lower than the aforementioned grassland soils.

Humus supply and fertility of the soil

Phosphorus is second only to nitrogen as an important plant nutrient. It is very important for plant growth, especially at early jointing stages, and for increasing grain yield and yield components. In wheat, phosphorus is especially important for the development of roots, early growth and germination of shoots, increasing early yield, increasing internodal length, increasing yield and quality. Adding phosphorus to cotton increases growth and yield. The number of bolls per plant, boll weight and seed cotton yield were increased. Good nutritional value and improved drought tolerance of crops such as wheat and maize. Cotton quality components (cotton age, fiber length, and fiber strength) improved by 2% to 5% when phosphorus was added.

Table of soil humus availability

Table of soil humus availability	Level of security	In terms of humus % in the soil	
	Very little	0.41-0.80	
	Little	0.81-120	
	Average	1.21-1.60	
	High	1.61-2.00	
	Very high	2.01-<	

The mass fraction of humus compounds in the soil is based on GOST 26205-91 clause



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The date given for the analysis of the sample is February 23, 2023																																																																		
Sample address: S. Rahimov																																																																		
Labor in the desert f																																																																		
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: center;">№</th><th style="text-align: center;">Cons</th><th style="text-align: center;">Layer</th><th style="text-align: center;">Humus %</th><th style="text-align: center;">Level of security</th></tr> </thead> <tbody> <tr><td style="text-align: center;">1</td><td></td><td style="text-align: center;">0-30</td><td style="text-align: center;">0,96</td><td style="text-align: center;">Little</td></tr> <tr><td style="text-align: center;">2</td><td></td><td style="text-align: center;">0-30</td><td style="text-align: center;">1,19</td><td style="text-align: center;">Little</td></tr> <tr><td style="text-align: center;">3</td><td></td><td style="text-align: center;">0-30</td><td style="text-align: center;">1,29</td><td style="text-align: center;">Average</td></tr> <tr><td style="text-align: center;">4</td><td></td><td style="text-align: center;">0-30</td><td style="text-align: center;">1,13</td><td style="text-align: center;">Little</td></tr> <tr><td style="text-align: center;">5</td><td></td><td style="text-align: center;">0-30</td><td style="text-align: center;">1,28</td><td style="text-align: center;">average</td></tr> <tr><td style="text-align: center;">6</td><td></td><td style="text-align: center;">0-30</td><td style="text-align: center;">1,28</td><td style="text-align: center;">average</td></tr> <tr><td style="text-align: center;">7</td><td></td><td style="text-align: center;">0-30</td><td style="text-align: center;">1,08</td><td style="text-align: center;">little</td></tr> <tr><td style="text-align: center;">8</td><td></td><td style="text-align: center;">0-30</td><td style="text-align: center;">1,07</td><td style="text-align: center;">Little</td></tr> <tr><td style="text-align: center;">9</td><td></td><td style="text-align: center;">0-30</td><td style="text-align: center;">1,17</td><td style="text-align: center;">Little</td></tr> <tr><td style="text-align: center;">10</td><td></td><td style="text-align: center;">0-30</td><td style="text-align: center;">1,41</td><td style="text-align: center;">Average</td></tr> <tr><td style="text-align: center;">11</td><td></td><td style="text-align: center;">0-30</td><td style="text-align: center;">1,30</td><td style="text-align: center;">Average</td></tr> <tr><td style="text-align: center;">12</td><td></td><td style="text-align: center;">0-30</td><td style="text-align: center;">1,41</td><td style="text-align: center;">Average</td></tr> </tbody> </table>		№	Cons	Layer	Humus %	Level of security	1		0-30	0,96	Little	2		0-30	1,19	Little	3		0-30	1,29	Average	4		0-30	1,13	Little	5		0-30	1,28	average	6		0-30	1,28	average	7		0-30	1,08	little	8		0-30	1,07	Little	9		0-30	1,17	Little	10		0-30	1,41	Average	11		0-30	1,30	Average	12		0-30	1,41	Average
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Conclusion

Implementation of the tasks defined in the strategy of agricultural development of the Republic of Uzbekistan for 2020-2030 in 2023, increasing the volume of production of food products through the effective use of available resources, ensuring the demand of the population in the domestic market and a number of reforms are being carried out in order to maintain price stability and provide economic and financial support to agricultural producers. In this regard, according to the results of our small scientific research conducted in a part of the Zafarabad district of Jizzakh region in the laboratory of the Agrochemical Analysis Center of Jizzakh Region, it can be seen from the soil analysis of the area that the level of phosphorus supply of the soil is very low according to the table, in rare cases it is red or It is being presented to farms on the basis of cartograms, scientifically justifying that it is yellow in color. Meeting the soil's demand for phosphorus based on the results of scientific analysis. High yielding, providing the national economy with quality food is another solution to increase productivity.

Literature

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