



STATUS OF HUMUS IN THE SOILS OF CHIRCHIK RIVER TERRACES

¹Rushana Kholmurodova, ²Tohirov Alpomish

Basic Doctoral student(PhD) ¹, Doctoral student at the Mirzo Ulugbek National University of Uzbekistan²
rushana.xolmurodova19@bk.ru

ABSTRACT

The article describes the humus of the irrigated soils of the right and left sides of the Chirchik River cone, the upper (Upper Chirchik, Kibray), middle (Middle) and lower (Chinoz and Kuyichirchik) parts (on the terraces).

Keywords: *soil, humus, fertility, cone spread, terrace.*

It is no secret that at a time when the population is growing, increasing the production of agricultural products is becoming one of the most important issues. Efforts are being made to harvest irrigated agricultural lands 2-3 times a year and to reclaim abandoned lands. It is important to maintain soil fertility and determine the level of nutrient and humus content of soils in order to achieve high yields without disturbing the balance of available nutrients, and to establish appropriate mineral fertilizer standards.

Soil is a great gift of nature and a place for all living things to live. Therefore, we need to take measures to prevent them from becoming dehumidified. (M. Nazarov, M. Gaibullaeva, D. Parpiev. 2020.)

The low content and low structure of humus in the soil leads to their compaction during irrigation and intercropping. (Kashkarov, 1969, Kondratyuk, 1972, Umarov, 1974, Mukhamedzhanov, 1974, Smetov, 1994, Ismailov, 2004, Khalikov, 2007, Salimbetov, 2018, Sultanov, 2020).

It should be noted that the productivity of the main irrigated lands in our country is low. The main indicator of soil fertility is the amount of humus, which is naturally low and varies from 0.6 to 1.5%, depending on the type of soil.

The results of many years of research conducted by Zh.M. It is important to develop a standard of fertilizers.

BA Sulaymonov, R. Tillayev note that the amount and quality of humus in the soil emphasizes its agronomically valuable properties, ie moisture and heat retention, nutrient reserves, biological, hydro-physical, in general, the ability to produce. It is necessary to control the state of humus in the soil in order to prevent a shortage of humus and achieve its positive balance.

Research methods. The research was conducted in the districts of Tashkent region. Field, laboratory and agrochemical methods were used in the research.

Soil analysis The generally accepted methods of UzPITI are based on Arinushkina's manual "Chemical analysis of soil" (1970), humus - Turin IV. was conducted on the basis of

Results and their analysis.

Distributed soils in our country differ from each other in terms of natural and climatic conditions, characteristics. The amount of humus in the upper, middle and lower parts of the soil of the Tashkent region, which we studied, is also distributed differently depending on the genetic diversity of the area where the soil is distributed. (See Table 1)

The right bank of the Chirchik River, the first soil section from Terrace II, has a humus content of 2.110% at a depth of 0-28 cm, and as it falls into the lower layers, the amount of humus decreases to 110-160 cm at a depth of 0.92%. The content of humus in the layer depth of 0-26 cm of the 2nd soil section from the terrace II of the left bank of the river was 1.983%. The amount of humus in the next layer was 1,076 at a depth of 111-160 cm. The 3rd soil section from Terrace III of the same shoreline was 1.983% in the 0-25 cm layer depth, while the change in the amount of humus in the subsequent layers decreased.

The humus content in the 0-25 cm layer depth of the 4th soil section in the middle part of the right bank of the Chirchik River was 0.696% and no change was observed in the subsequent layers. The content of humus in the 0-20 cm layer of the 5th soil section was 1.076%, and in the subsoil layers this amount decreased. Section 7 of the terrace II on the left bank of the river contained 1.583% of humus in the 0-25 cm layer, but the amount of humus decreased as it fell into the lower layers.

Humus content was 1.013% in the lower part of the Chirchik River, on the right bank, in the 0-30 cm layer of the 10th soil section from Terrace IV. The 11th soil section taken from the terrace II of the left bank of the river contained 1.372% of humus in the 0-10 cm layer, and the amount was significantly reduced in the subsequent layers. 75-130 cm of soil layer was 0.802%.

Table-1.

Humus content in the soil of the study area (%)

Intersection number (right bank)	Layer thickness, cm	Humus in the soil, %	Intersection number (left bank)	Layer thickness, cm	humus %
1	0-28	2,110	2	0-26	1,983
	28-45	1,688		26-45	1,350
	45-59	1,561		45-70	0,950
	59-82	1,308		70-94	0,844
	82-110	0,950		94-111	0,907
	110-160	0,992		111-160	1,076
4	0-25	0,696	3	0-25	1,983
	25-57	0,380		25-43	1,372
	57-70	0,295		43-69	1,245
5	0-20	1,076		69-93	1,055
	20-70	0,950		93-110	1,055
	70-150	0,464		110-168	1,203
6	0-30	1,414	7	0-25	1,583
	30-50	0,528		25-40	0,274
	50-75	0,781		40-65	0,232
	75-110	1,350		65-95	0,338
	110-135	0,485	8	0-30	0,802
10	0-30	1,013		30-65	0,612
	30-110	1,034		65-80	0,591
	110-160	0,464		80-150	1,034
			9	0-36	1,266
				36-50	0,612
				50-80	0,654
				80-97	0,633
				97-150	0,443
			11	0-10	1,372
				10-20	1,329
				20-36	1,139
				36-58	0,865
				58-75	0,591
				75-130	0,802

CONCLUSION

Based on the results of the analysis of soil sections, it is concluded that the amount of humus in the soil belongs to the upper, middle and lower part of the Chirchik River, and the middle part of the lower part.

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