

NO_3 – 0.2-1.1 mg/100 g of rock; P_2O_5 – 1.3-32.8 mg/100 g of rock; K_2O – 8.1-22.7 mg/100 g of rock, which indicates the passage of weathering processes.

UDC 631.431

SOIL DEGRADATION PROCESSES OF THE CHERNIGOV REGION

Kucher L., Kucher T., Rozomiuk A.

National university of life and environmental sciences of Ukraine, Kiev,

Land degradation is the deterioration of their condition, composition, functions and useful properties. Land degradation also includes the concept of soil degradation - the deterioration of useful properties and soil fertility due to the influence of natural or anthropogenic factors. Land degradation is characterized by a gradual increase in rates simultaneously with the agricultural development of the region and the state.

Among the degradation processes in recent years, erosion dominates the lands of Ukraine, which has covered 14.9 million hectares of land (32% of the total area of agricultural land), of which 10.6 million hectares are suitable for agricultural production. The main factors causing erosion processes include mechanical (agrotechnical), wind, water and chemical erosion.

Due to the lack of state funding for radical land improvement in the region, the area of acidic soils has increased by 8% in 5 years and constitutes 59% of arable land. Compared to the previous round, the soils in the Kulykivskyi district became acidified by 10%, in Prylutskyi by 3%.

As a result of the conducted research, a number of priority processes of arable land degradation were established, among which the most common are dehumification and depletion of soils to biogenic elements (>75% of the arable land area), acidification (>39%), waterlogging and waterlogging (>16%),

salinization and salinization processes , erosion and deflation and ^{137}Cs pollution covered respectively 7.7, 4.2 and 2.9% of the total area of arable land. Based on indicators of territorial distribution, intensity of manifestation and coefficients of severity of degradation processes, a summary indicator of soil cover degradation is determined.

Sod-slightly podzolic soils are characterized by a strong degradation of the upper genetic horizon by humus. According to the acidity of the soil solution and the density of the composition, the degree of degradation is estimated as average with an indicator of pH_{KCl} of 4.6 and 1.33 g/cm^3 .

The degree of agrochemical degradation of these soils is assessed as weak in terms of compounds of easily hydrolyzed nitrogen and medium in terms of potassium.

The gray podizolized soil is more fertile than the previous one, but according to the humus content, it is estimated as moderately degraded with a decrease of 10.8% compared to the standard, and according to the acidity of the soil solution and the potassium content, it is rated as slightly degraded.

The chernozem is gold-plated - according to the humus content, the degree of its degradation is estimated as weak - 4.2%, and according to the density of composition - average. The content of mobile phosphorus and exchangeable potassium (according to Chirikov) in these soils is of increased importance.

UDC 632.122

CHARACTERISTICS OF THE SOILS OF SOUTH-EAST UKRAINE

Kucher L., Kucher T., Rozomiuk A.

National university of life and environmental sciences of Ukraine, Kiev,

The southern part of the territory of Donetsk region belongs to the chernozem-steppe semi-arid and arid province of the steppe subzone of the chernozem zone.