

EXPERIENCE OF EARTH FILLING ON MEADOW SOLONETZ IN THE PROLONGED AFTEREFFECT

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The study of the current state of meadow solonetz soils of Black Soil Region is particularly important in relation to changing cycles of soil moisture conditions. The project was conducted at the Agricultural Research Institute in the Central Black Soil Region on solonetz soils. The long-term field experiment was started in the autumn of 1971 in order to determine the possibility of a meadow solonetz soil improvement by topsoil translocation (replacement of a solonetz organic horizon for an organic horizon of black soil). The studies have shown high effect of the reclamation on the solonetz properties. The possibility of reclamation of the meadow solonetz without drainage was demonstrated. It was found that solonetz process of soil formation affected the soil humus content and the composition. A lower content of humus in the solonetz compared to the black soil was revealed. The values of ratio of the soil humic acids' carbon to fulvic acids' carbon were wider on the reclaimed and natural solonetz than on the natural black earth and the solonetz-covered black earth. The solonetz was characterized by lower content of insoluble organic residue as compared to the natural black soil and solonetz-covered black soil.

Key words: meadow solonetz, black soil, earth filling, reclamation, aftereffect, humus.