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HUMUS ACCUMULATION IN TECHNOZEMS WITH DIFFERENT LITHOLOGICAL COMPOSITION IN SOUTH STEPPE OF UKRAINE

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It is known that humus is biological accumulator of solar energy and depositor of elements causes edaphic properties of soil and its fertility. Therefore, investigation of factors influencing the transformation of fresh organic matter and the rate of accumulation of humus, and the ability to manage these processes is an important theoretical issues of soil formation. Its become more actual during recultivation of man-disturbed lands at the stage of young soil of various qualities for lithogenic composition of potentially fertile rocks, which in career mode mining submitted to the surface and become parent material of modern soil formation .

The purpose of the research is to study processes of humus accumulation and transformation of phytomass into organic matter on the early stages of biological development of technozems, formed from potentially fertile rocks.

effect compared with annual agrocenoses, especially from cereals.

In experiments used standard methods in soil science.

With the results of productive efficiency phytomass of agrocenoses 42 -year period of the development of technozems we can identify changes of humus content of technozems since their formation - the "zero - moment" of soil formation - 1971. These phytomass productivity of crops from the beginning of biological development technozems (for the period 1971-2009 years), are found in the works of M. Masuk and V. Zabaluev.

The total overall performance agrophytocenoses phytomass (aboveground and underground phytomass) for the period of their biological development depended from variant of crop rotation and the substrate from which technozem was formed.

To study the process of humus accumulation first of all we are interesting of productivity of underground phytomass (root mass) as the main sources of fresh organic matter and energy of materials in technozems.

Thus, accumulation and transformation processes of organic matter in the rocks under agricultural use in the early stages occur relatively quickly, despite differences and heterogeneity of the material composition and some edaphic factors that limit the vegetation of crops.

With agricultural development of technozems basic process of soil formation is humus accumulation, the speed of which depends not only on the structure and properties of technozems and bioclimatic potential of the territory, but also on phytomelioration possibilities of crops.

The quantity and quality of plant residues, which enter in technozems is the main energy material for and humus accumulation.

Acceleration of soil formation processes possible due to the saturation rotation with legumes and legume-cereal grasses.