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THE MODEL PREDICTS CHANGES IN THE HUMUS CONTENT IN THE SOIL AND ITS VERIFICATION. *L.R. Petrenko, pHD Y.P. Manko,* Doctor of Agricultural Sciences, Professor

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The mathematical model of humus accumulation in view previously proposed coefficients of humification of organic residues in the transformation of the typical features of low-humus chernozems.

Humus, humification ratio, the mathematical model.

Conclusions. Thus, the calculation made to determine the mass formed root crop residues, the yield of the main product in black soil that give more accurate results compared to the equations G. Y. Chesnyaka and may be recommended for practical use. We have found mathematical dependence of the dynamics of humus carbon stocks over time in the form of differential equations, which takes into account the contribution of the transformation of organic residues in humus accumulation processes. On this basis the mathematical model humus accumulation as a linear dependence and recommended for practical use in forecasting and management of humus accumulation in arable typical chernozems. Conducted verification of the proposed model showed high predictive calculations spravdzhuvannya humus soil.