

# ***THE CURRENT STATE OF UKRAINIAN CHERNOZEMS PRODUCTIVITY***

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Actuality and practical significance of the problem related to chernozem fertility reproduction is determined by such global functions as: providing food and the lives of Ukrainian and any people from the Earth – consumers of Ukrainian agricultural products. Unfortunately, due to the modern agriculture of Ukraine, the following degradation problems of soils are observed as: – the losses/emissions of C-CO<sub>2</sub> dynamics increasing up to 17.4 million tons in 2010; – annually humus losses around 0,5-0,8 t/ha<sup>-1</sup>; – over compaction, disaggregation, cloddy and crust formation on 17-; 14-; 4-; and 15.8 million hectares, respectively.

This paper represents: a system analysis of Ukrainian Chernozem properties changes based on the data from the I–X largescale soil surveys, modern monitoring studies, scientific professional literature sources. During the last – X<sup>th</sup> (2011-2015) Soil Survey, was showed, that despite a decreasing in a humus content by 2.5-4% compared to the previous IX round Survey (2006-2010), there was found a slight increasing of the exchangeable phosphates and potassium content in the Forest-Steppe and Steppe soils of Ukraine.

The geoecological state of Ukrainian environment has also been negatively affected by such processes and phenomena as: over-wetting (12-14.7%), landslides (0.3%), karst formation (37.6%) and technogenic disturbance of the lands - 0.3% to the whole territory of Ukraine. The article proposes also a general strategy of Ukrainian Chernozems conservation management and legislative protection policies.

Key words: soil survey, chernozem, fertility, degradation, erosion, humus, nutrition, geoecology, soil conservation.