## PHYSICAL AND CHEMICAL PECULIARITIES OF QUALITATIVE COMPOSITION OF ABANDONED AGRICULTURAL LANDS. *M.M. Bilous*

Current status of lands in the country does not meet their productive capacity and requirements of environmental management. Among 92% of the land fund are in use that leads to violation of the ecological state of the environment and agricultural landscapes. Most of the lands are exposed to water and wind erosion, man-made pollution, destruction of soil structure. As a result of above mentioned and other negative processes a violation of the integrity of agroecosystems and bioproductivity stability take place, reduced fertility of soil causes the fall of ecological efficiency of land use.

Forest vegetation plays dominant role in maintenance of environmental sustainability of agrolandscapes. Afforestation of abandoned agricultural lands will ensure sustainable use of the territory, expanded reproduction and maintaining productivity and quality of lands, environmental stabilization of landscapes by establishing a balanced ratio between natural and artificial areas, conservation of biological as well as landscape diversity and development of recreational potential. New forests can offset the shortage of farmlands due to improvement of the environment, increment of productivity of surrounding lands, restoration of useful fauna as well as obtaining additional industry resources.

Lands on Polissja that have been used previously in agriculture occupy a large area of sod-podzolic sandy and clayey-sandy soils, much smaller areas are presented by sandy soil. Relief of these lands mainly flat. The fertility of the land depends on soil-forming bedrock, particularly on the depth of moraine. Moraine as waterproof bedrock holds water precipitation, which contributes to increment of the content of soluble forms of nutrients.

Abandoned agricultural lands of Polessia are characterized by considerable thickening of some genetic horizons of the soil profile, which adversely affect the development of root systems of woody plants. Also, these lands have impaired permeability of the soil, which creates conditions for the development of erosion or waterlogging. According to the agrochemical research it was found that such areas are depleted long-term use of inefficient and require restoration of physical and chemical properties. In terms Polessia it is possible to create mixed stands, introducing birch trees. The admixture of birch activates the decomposition of forest litter and contributes to the accumulation of nutrients in the soil.

Agroecosystems, forest crops, soil fertility, species composition of forest stands.