## **Abstract**

As a result of large-scale soil research in Central part of Republic Moldova was established that chernozems stagnic are spread on the uniform horizontal surfaces of the river Răut basin or on the inconsistent interfluvial hills, lithological substrate of which is represented by clays. Landscape elements that formed these soils are the primary denudation areas that outcome of raising Alpine territory nowadays occupies absolute altitudes of 200-250 m. Pedogenesis of stagnic chernozems determined by non salinization clay texture of parental rocks. Chernozems stagnic differ from the zonal chernozems by presence of a gleyic horizon in the lower bioaccumulative layer, clay texture, higher cation exchange capacity and humus content. They have a high fertility potential, but not always give the corresponding results due to air – humidity regime in the years with abundance rainfall or due to hard tillage during the dry autumns. Chernozems stagnic are a difficulties object for use in arable. In view of risk the stagnic chernozems are capability, primary for perennial grasses, apple and plum plantation, if the gleyic horizon is located deeper than 70-80 cm; secondary – for winter grain crops: in the third – for weeding crops. Chernozems stagnic tillage is recommended only to corresponding humidity of soil physical maturity. Average soil rating of chernozems stagnic consists 85 points.

Key words: chernozem stagnic, clay texture, gleyic horizon, pedogenesis