## Kutkovetska T. O.

## EVALUATION OF THE ENVIRONMENTAL AND ECONOMIC LEVEL OF FRUIT AND BERRY PRODUCTION EFFICIENCY

In modern conditions ecologization is a main indicator of national competitiveness and harmonization of natural resources exploitation. Ecologization is a process consistent implementation of new technology, new forms of production organization and other performance management solutions that enable more efficient use of natural resources while preserving the environment and improving it at different levels. An important indicator of production ecologization is products' environmental capacity. Environmental capacity of agricultural production describes the state and environmental production and it is an important factor in its economic effectiveness.

The article aims to assess the level of environmental performance and economic efficiency level of fruit and berry production in Vinnytsia region and determine the impact of environmental factors on the results of horticulture production and profit.

The study used methods: proportional participation technic – for standardization of specific environmental attributes with different units of measurement; index method – for normalization of variables; correlation and regression analysis. The object of the research is the horticulture of Vinnytsia region.

This article provides an estimation of production ecological compatibility level of fruit and berry products in Vinnytsia region based on complex of statistical indicators characterizing the processes of destructive ecological impact on natural objects and an imbalance in the natural environment. It was determined that environmental factors have a characteristic influence on the development of horticulture in the region. The calculation of aridity indices, land degradation, the complex index of ecological compatibility and generalizing integral index of natural environmental conditions was made. Correlation and regression analysis shows the dependence of profit per 1 ha in horticultural areas Vinnitsa region and the integral index of natural environmental conditions. The evaluation of environmental capacity of production and the impact of environmental factors on the growth of horticulture production are presented. According to these calculations the best and the worst natural environmental conditions in each district of Vinnytsia region, grouped and divided into three groups were determined. Recommendations for output and profits increase due to right site of horticulture production placement in Region are proved.

The study was concluded that consideration of the impact of environmental factors will make it possible to achieve growth of competitive environmentally friendly gardening products at lower production costs, focusing on the requirements as domestic and global markets.

**Key words:** fruit and berry products, production, ecological compatibility, aridity, land degradation, profit.