DATABASE OF AGRICULTURAL LAND QUALITY INDEX IN DRĂGUȘENI VILLAGE, IAȘI COUNTY

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Abstract

Land quality index is based not only on soil fertility, which is undoubtedly the most important factor, but also on climatic factors, landscape and hydrology. The edaphic cover is an essential constituent of the environment, as well as a natural resource with multiple uses for mankind. Soil quality is affected to a lesser or greater extent by one or several restrictions determined either by natural factors, or by anthropical agricultural and industrial activities. The latter can act synergically, in a negative sense, resulting in a decreased soil quality and even in annulling their functions. The administrative unit used in this study comes under the category of temperate climate, with a multi-annual temperature average of 9.0°C and a multi-annual rainfall average of 560 mm. The landscape is typically hilly with altitudes of up to 310 meters. The hydrographic network is part of the lower basin of the Stavnicul river. It is relatively dense, characterized by intermittent watercourses and temporary pools in depression areas. The productive capacity of the soil on the agricultural land of 1729 ha, which constitutes the object of this study, is affected by surface erosion (48.66%), landslide (26.84%), gleization (12.19%), stagnogleyzation (5.89%) and salinization in 9.10%. The soils in Drăguşeni commune belong to the classes of Cernisols (65.07%), Luvisols (10.41%), Protisols (9.89%), Antrisols (7.40%) and Hydrisols (7.23%).

Keywords: agricultural land evaluation, gleying, stagnogleying, erosion, landslide