Evaluation of natural and anthropically induced conditions for the definition of soil productivity from the Covurlui Plain

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Soil – a complex biodynamic system - and its thorough research allow us to know and direct its most important properties in order to improve both qualitatively and quantitatively the whole agricultural production and of soil fertility, too. In order to ensure the best crop conditions necessary to the cultivated plants it is compulsory to relate plant research with environmental factors, as well. This paper has as major objectives the delimitation, the inventory and evaluation of soil resources, the delimitation and inventory of the limitative or restrictive factors in land ise , as well as the production levels estimation for agricultural lands expressed in terms of estimation records.

This paper presents several aspects concerning soil resources in the Branistea Village area, located on the Covurlui Plain. Appeared under various natural conditions, all the soils in the area differ very much both in quality and fertility, in their production capacities as well. That's the reason why soil and land resource quality determination and appreciation have a great importance. The Covurlui Plain, as an important geographical area, presents a great variety and variability of environmental factors which ultimately influence the conditions in which plants grow and thrive. Therefore, an ecopedological research is compulsory if we want to achieve a modern agriculture. Plant production requires a perfect knowledge of their productive and technological characteristics and of the unfavourable factors that inhibit production.

All these studies concerning soil evaluation have emphasized a series of limitative factors which negatively influence the production capacity of these soils in the given area. From 4,948 ha, some surfaces are degraded by various factors: surface erosion, land slides, nutrient deficiency, secondary compactness, deficient hydro-thermal sources. All these limitative or restrictive elements that affect the productive potential of soils may be altered through pedo-hydro-meliorative actions as well as new measures for degraded soil conservation and protection.

We may conclude that knowing the factors that either improve or diminish the production capacities of each area represents an efficient decision-taking instrument in choosing the right measures for land administration.