

## THEORETICAL AND METHODOLOGICAL BASIS OF AGRICULTURAL AREAS PROTECTION IN THE SYSTEM OF BIOLOGICAL FARMING

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The aim of the work is to study the possibilities and develop recommendations for the formation of sustainable agricultural land use, primarily in relation to the protection and preservation of agricultural land in the system of biological farming (bio-farming). The article characterizes the fundamentals of bio-agriculture, the role in its implementation of the law of soil fertility (Yu. S. Larionov, 2010), which determines a new vision of the theoretical and methodological substantiation of the principles for the formation of sustainable agricultural landscapes. The main result of the research is determined as the system of basic land protection measures, which provides land fertility in the system of biological farming based on root turnover and regulation of edaphytic and epiphytic processes, and includes: the crop rotation of different root system types on each field; green manuring and mulching; performing agricultural melioration measures, providing additional conditions for interaction of biota and inert matter; saving and collecting of water, as the basic energoinformational component of the agroecosystem in root layer; preservation of the integrity of arable and other soil horizons with living organisms living in them and in adjacent areas (in the biocenosis); biological regulation of the growth and development of cultivated plants to ensure their protection; carrying out biostimulation of the organic residues decomposition processes. This is the main content of the soil protection system of agricultural land, the stable preservation of their fertility in the system of bio-farming, which can become the basis of ecologically verified agricultural production in the near future.

**Keywords:** sustainable land use, soil, methodology, principles, biotic regulation, priority, complex evaluation

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