

**CARTOGRAPHIC SUPPORT OF MANAGED ADAPTIVE LANDSCAPE FARMING IN
AGRICULTURAL LANDSCAPES OF BELARUS**

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The article presents a structural and functional analysis of soil and agrochemical conditions using GIS, which cartographically provides a typical design of adaptive landscape farming systems in agricultural organizations and regions of Belarus. A technique of creating a spatial basis for optimizing the elements of the farming system based on the results of agrotechnological and agroecological assessments of the soil resource potential in the format of a georelational database is given. The results of geosystem accounting and geostatistical assessment of soil productivity factors for the purpose of precision management of adaptive landscape agriculture are presented. Soil combinations are used as an invariant of the state of soil and land resources of the territory. The map-metric parameters of the geosystems state within the boundaries of soil combinations were considered to determine the intended purpose of agricultural lands and the environmentally justified degree of their use intensification. The heterogeneity of the soil cover structure was assessed using the indicators of contrast and dissection of soil areas in a combination. An agrotechnological assessment of soil and land resources was based on significant agrochemical indicators and agrophysical properties. The soil-resource potential was calculated taking into account the correction coefficients for soil bonitet based on the results of the agrotechnological and agroecological assessments within the boundaries of typological (regularly repeated) soil combinations as territorial units of adaptive landscape agriculture. The description of the soil resource potential in the key areas, taking into account the buffering of geosystems to anthropogenic impact, makes it possible to carry out territorial planning at four levels: region - district - agricultural organization - working area. **Key words:** agricultural landscape, soil, soil cover structure, adaptive-landscape farming system, GIS, geosystem.