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TITLE: AGROLANDSCAPE RESEARCH OF GEOSYSTEMS IN THE SOUTH OF CENTRAL SIBERIA

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ABSTRACT BODY: Minusinskaya basin, the area under research, is situated in the south of Central Siberia and is an agrarian region, which differs from another territories of Siberia. The territory provides for foodstuff not only its population but another regions as well.

Nature-climate conditions favour the development of agriculture and cattle-breeding.

Complex geographical study of rural lands, which is implemented by two approaches: a natural and industrial system block is necessary for rational use of agrolandscapes.

Agrolandscapes are objects for rationalization of land management in agricultural regions. From our point of view application of a landscape map as a base for working out of agrolandscape map (Fig. 1a) and a map of agronatural potential of geosystems (Fig. 2), gives an opportunity to take stock of reserves of agricultural lands not only in quantitative but qualitative respects and also to determine the ways of optimal transformation of arable lands depending on nature conditions of regions and their development.

Landscape maps that reflect differentiation of not only natural formations, changed by anthropogenous influence and also natural analogues, concern to a number of important tools of planning for optimal land use. The main principles of working out of typological landscape map of a medium scale aroused from targets and tasks of agrolandscape estimation of the territory [1].

The landscape map was worked out according to V.A. Nikolaev's methodology [2]: types of landscapes correlated with types of lands use, composition of cereals in rotation of crops, agro-techniques, crop capacity, climate indices, etc. Existing natural-agricultural systems are shown in the map. Their characteristics includes information about natural and agricultural blocks.

Agronatural potential had been calculated by summarize estimations of its component parts. As a result of these calculations 30 arable agrolandscapes, marked out into the landscape map, were joined according to summ of points into 3 groups of agrolandscapes, which have high, medium and low medium agronatural potential.

Thus the typological landscape and agrolandscape medium scale map had been worked out, estimation of agronatural potential, and the map had been worked out on the base of detailed agrolandscape research and study of natural geosystems of Minusinskaya Basin.

Consideration of agronatural potential of a territory helps to determine regions of perspective development of its separate types, proceeding from presents of natural and economical preconditions. Successful development of agriculture is mainly connected with the right agrolandscape use. That is why the optimum variant of land use could be and should be found with the definite ratio of transformational organizational-economical and adaptive landscape-ecological measures, which could allow abruptly increase the potential of their self-regulation.

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