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Influence of methods of tillage and fertilization rates on the productivity of agricultural crops in the conditions of check irrigated systems.

The main soil tillage and fertilizers play an important role in the formation of the harvest of any culture, as they are one of the main factors of development, and most effectively exposed to influence. The aim of the experience is to determine the optimal norms of fertilizers and resource-saving methods of tillage under predecessors of rice. The main task is to determine the impact of minimizing tillage and fertilization rates of crop productivity. The experimental data obtained on the basis of the formulation and carrying out of field and laboratory experiments and application of existing methods of assessment of plant productivity, economic diagnostics, as well as conventional methods and hypotheses, synthesis, analogy, logic and statistics. Maximum productivity of soybean crop of 5202,6 f/u is obtained on a variant with plowing and fertilizers norm $N_{30}P_{20}$, spring barley 5243 f/u is obtained on plowing and fertilizers norm $N_{45}P_{30}$, 6057 f/u of winter wheat is obtained on the plowing with fertilizers norm $N_{60}P_{40}$, and for millet as the primary tillage small disk tillage is better at a rate of fertilizers $N_{45}P_{30}$ where its productivity amounted to 2630 f/u. Maximum productivity of rice received after winter wheat at the rate of fertilizers $N_{120}P_{40} - 9672,8$ f/u.

Keywords: tillage methods, rice crop rotation, mineral fertilizers, productivity.