SIMULATION MODELING OF TECHNOLOGICAL PROCESSES OF SUGAR BEET PRODUCTION

M. P. Voloha

Abstract. *The analysis of the ability of a comprehensive study of the technology of sugar beet production through the development and application of simulation models. Study of parameters of technological processes of production of sugar beet is proposed to carry out the method of agent-based simulation that allows to simulate the technological process at different levels of aggregation of the indicators based on a common methodological approach. Statistics simulation a set of parameter values and their subsequent processing by statistical methods allow to analyze relations between the values of the parameters. In the end, the simulation results are used for decision-making about the choice of the optimal variant from the set of the admissible taking into account the criterion that expresses the efficiency of TP. The purpose of simulation of technological processes of production of sugar beet is to increase their productivity through the definition and justification of optimum parameters. Research of technological processes based on simulation, in particular agent-based modeling as one of its types, allows you to define process variables, their relationships and interactions, to highlight the technical and economic indicators, to assess the impact on profitability, to determine directions of development and ways of improvement of technical and technological base of the industry sugar beet.*

Key words: ***modeling, sugar beet, technological process, technical means, working body***