THE ROLE OF BACTERIAL AND FUNGAL DRUG PREPARATIONS IN INCREASING THE SOY YIELD IN THE DRY CLIMATE CONDITIONS OF THE PLAINS PART OF THE CENTRAL CAUCASUS

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The results of a production experiment conducted on dark chestnut soil of the settlement Uchebnoe of the Prokhladnensky district of the Kabardino-Balkarian Republic on the study of innovative fertilizing techniques consisting in the use of different doses of a bacterial and mushroom complex, which is a mixture of biological products based on two types of agronomically useful microorganisms: trichosan - based on the soil fungus antagonist of the genus Trichoderma harzianum, Trichoderma vide and vitoplanekzh - based on the bacterium Pseudomonas fluorescence, strain AP-33. The complex was introduced against the background of fermented granular organic fertilizer in the sowing of Vilan soybean. In the unfavorable arid conditions of the growing season of 2018 (SCC = 0.72), the use of granular organic fertilizers proved to be ineffective and ensured soybean yield of only 8.1 c / ha. At the same time, a high effect was achieved from the applied bacterial fertilizers in conditions of insufficient moisture supply: an increase in crop yield by 13-18 c / ha compared to the background (control) option, a significant improvement in the quality of the products (increase in the mass of 1000 seeds and protein content), the desired height was achieved tying lower beans, improving other structural indicators of yield formation and payback of 1 ruble of additional costs by 14.3 rubles of the cost of additional products.

Keywords: soybean, productivity, bacterial-mushroom complex, fermented organic fertilizer, protein content, efficiency.

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