

Protection of potatoes from the Colorado beetle in the conditions of the foothills of RNO-Alania

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Annotation. The article presents the results of studying the influence of the precursor of white mustard and the biological preparations Boverin, Actofit on the decrease in the population of the Colorado beetle, as well as the height of potato varieties: Volzhanin, Zhukovsky early and Udacha on the 25th, 50th and 75th day after the germination of plants. The novelty of the research lies in the study of different options for using the precursor of white mustard and biologics to combat the Colorado potato beetle and determining the more effective ones. It was found that the grinding and plowing of white mustard contributed to a decrease in the population and development of both adults and larvae, the use of Boverine and Actophyte contributed to a decrease in egg laying. And their joint application, with the usage of the previous culture of white mustard, showed the highest possible results. Thus, the use of Boverin and Actofit biopreparations together with the usage of white mustard showed the highest possible results in reducing the number of Colorado beetle larvae in comparison with the control (20-84 pcs.): from 1 to 5 pcs. on day 25, 14 pcs. for 50 days and 12 pcs. larvae for 75 days on average. In addition, the height of potato plants was higher on the same variants of the experiment, i.e. the plants were less harmed by the adult Colorado potato beetle and its larvae. Based on the results obtained, it can be concluded that white mustard, due to its content of essential oils, helps to ward off insect pests and can reduce the amount of chemicals used to combat the Colorado potato beetle and obtain environmentally safer products.

Key words: potato varieties, Colorado potato beetle, adults, larvae, plant population, chemical load, biological products, green manure, population reduction, plant height

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