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INFLUENCE OF HERBICIDES ON THE INTENSITY OF MICROBIOLOGICAL ACTIVITY OF SOIL IN CROPS OF SPRING BARLEY AND POTATOES

The plant, together with soil and microorganisms create complex groupings of which is formed of soil fertility, and hence the productivity of crops. Therefore, the study of soil microbiota in crops cultures are grown using biological and chemical agents is extremely important.

Soil microflora significant impact on the transformation of chemicals herbicides, thus between herbicides and soil microorganisms are closely interrelated. In different soil-climatic conditions consist various thermal regimes and differing levels of moisture and soil acidity. Currently, the problem of interaction between crops with soil microorganisms studied not enough and is of particular relevance because of the use of pesticides and plant growth regulators.

In connection with this objective of our study was to determine how different herbicides affect the total number of microorganisms by expanding flax linen.

The paper found that the application of herbicides in crops of spring barley and potatoes have a negative impact on soil microbial activity relative to control, especially evident in the first period after the introduction of herbicide, in the future the number of bacteria recovered, but not higher than the control variant.

In addition, the article noted how the herbicides influenced on the yield of spring barley and potatoes. For three years, the study found that the highest average yield of potatoes provides application of preparations Gezagard – 4 l/ha + Pantera –1 l/ha – 28,8 t/ha (+ 35,8 % for control) and spring barley yield – application of Lantselot – 33 g/ha + Aksial – 1 l/ha (phase out the tube) – 4,9 t/ha (+ 28,9 % for control).