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## Yields of spring barley under the influence of seeding rate and application of foliar bio-fertilization and microfertilizers

The level of modern grain production doesn't provide the total state needs in it; that's why the needs in the technology improvement of growing cereals including spring barley arise.

To solve this problem the researches were carried out on the experimental plots of Kharkiv National Agrarian University named after V.V. Dockuchajev. Their aim is to determine the influence of various rates of seeds sowing along with the nutrition of sowings by biopreparations and microfertilizers on the crop production of spring barley grain (Monomakh variety).

The results of the conducted research show that the optimum rate of sowing for Monomakh variety of spring barley that ensures the formation of higher crop production is the rate of 5,0 mln/ha. The highest barley production was achieved under complex nutrition of sowings by preparations (crystalon and agrarian Effective Microorganisms).

The increase of grain yield while optimizing the studied elements of cultural practices comparing with the control variant was 6,8%.

*Keywords:* spring barley, rate of sowing, foliar fertilization, biopreparations, microfertilizers, crop productivity.