

INFLUENCE OF HERBICIDES ON PRODUCTIVITY AND QUALITY OF POTATOES AND SPRING BARLEY IN WESTERN STEPPE

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Given the intensification of agricultural production is an urgent problem effectively protect crops from weeds as one of the factors limiting obtain high yields. The negative impact of weeds on crop yields caused by the loss of a significant amount of nutrients and moisture from the soil.

In practice agriculture, to increase productivity of any crop is almost impossible without systematic and persistent weed. Therefore, in each intensive technologies important given the system of protection of crops from weeds.

The research was conducted within 2014-2016 on dark gray forest podzolic soil research field Lviv National Agrarian University. The reaction of soil solution slightly acid (pH - 5.5-6.5), hydrolytic acidity - 2,0-4,2 mEq / 100 g soil. The degree of saturation of the basics of 75-90%, N (for Kornfildom) - 51.2, P₂O₅ (by Chirikov) - K₂O and 92 (on Maslow) - 107 mg / kg soil.

The research was conducted as follows:

I. For spring barley (variety Sontsedar): 1. Black film (absolute control). 2. Without herbicide application (control). 3. Kalibr - 50 g / ha. 4. Granstar - 25 g / ha + Aksial - 1 l / ha (phase out of the tube). 5. Prima - 2/3 (0.5 l / ha) + Lontrel - 1.3 (60 g / ha) + Aksial - 1 l / ha (phase out of the tube). 6. Lancelot - 33 g / ha + Aksial - 1 l / ha (phase out of the tube);

II. For potatoes (sort Volya): 1. Black film (absolute control). 2. Without herbicide application (control). 3. Zenkor Liquid - 1 l / ha + Titus - 50 g / ha. 4. Zenkor Liquid - 1 l / ha + Titus - 30 g / ha + Titus - 20 g / ha. 5. Roundup - 4 l / ha. 6. Gezaghard - 4 l / ha + Panthera - 1 l / ha.

Adding herbicides provided agrocenoses reduce weed-infested test cultures, enabling them to compete effectively with segetal vegetation and form a quality harvest.

Found that weediness agroecosis reductions in productivity and deterioration of quality indicators as potato and spring barley.

Investigated the relationship between the use of herbicides and quality indicators potato and spring barley. In the field of potato (control) starch content in the average years of study was 1.2 times less compared to the version №6 (Gezagard - 4 l / ha + Panther - 1 l / ha). The content of protein in the grain of spring barley to control an average of 3 years was 1.3 times less compared to the version №6 (Lancelot - 33 g / ha + Aksial - 1 l / ha (phase out the tube)).

Because a significant reduction in weed-infested crops of test cultures created optimal conditions for their growth and development that had a positive influence on the formation of the crop capacity and productivity of potato and spring barley.

Use of herbicides influenced the formation of the yield and productivity of test cultures. Found that the highest yield of potatoes on average over three years of research provides making preparations Gezagard- 4 l / ha + Panther - 1 l / ha - 28.8 t / ha (+ 35.8% for control) and spring barley - making Lancelot - 33 g / ha + Aksial - 1 l / ha (phase out the tube) - 4.8 t / ha (+ 26.3% for control).

Established that productivity of test crops on average 3 years was: potatoes – 10,6t / ha of forage. units. application of herbicides in the version Gezagard - 4 l / ha + Panther - 1 l / ha (+ 34.2% for control), spring barley – 7,2 feed. units. in the version making preparations Lancelot - 33 g / ha + Aksial - 1 l / ha (phase out of the tube) (+ 26,3% for control).