

POSSIBILITIES OF PRODUCTION INCREASE OF THE WHEAT CARIOPS UNDER REGULATORS INFLUENCE OF DIFFERENT BIOSTYMULATORS CONCENTRATIONS

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Abstract

In the ecological conditions on the farm Ezăreni-Iași was organized research regarding the effect of some biodegradable biostymulators at concentrations of 50 ppm, 25 ppm and 12.5 ppm in the period 2008-2011. The treatments were performed with biostymulators BCO-4 K (potassium salt of the acid-amido-4-chloro-phenoxyacetic sulfonyl), with and without zinc acetate and BCO - 4 DMA (dimethylamine salt of the acid chloride 4 2 amidosulfonil - phenoxyacetic) to varieties Boema, Crina and Flamura 85 (in 2010 to 2011 variety Arieșan). The research was conducted on a cambic chernozem soil, climatic conditions are favorable wheat, especially in 2010-2011. Research results revealed that on average three years, the highest yield of 7569 kg/ha was recorded in biostymulators BCO - 4 K + zinc acetate, with a production increase of 23.47% from control variant (water treatment) and 7.57% compared to the control variant 2 (BCO - 4 DMA). Averaged over three years, the concentration of 50 ppm achieved the highest yield of 7506 kg/ha and to Boema variety 7568 kg/ha. The best interaction between factors was found BCO - 4 K + acetate Zn x 25 ppm x Boema with 7942 kg/ha, averaged over three years, with 14.85% higher than in control variant (BCO - 4 DMA x 12 , 5 ppm x Flamura 85). Use of biostymulators for winter wheat is a sustainable action.

Key words: biostymulators, concentrations, wheat