THE ACTIVITY OF ANTIOXIDANT ENZYMES IN GERMINATING WHEAT SEEDS (*TRITICUM AESTIVUM* L.) UNDER THE IMPACT OF LEAD NITRATE

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First obtained results the influence of increasing concentrations of lead nitrate on the rate of entry of water into germinating seeds, germination energy and germination of winter wheat seeds (*Triticum aestivum* L.) varieties Kuyalnik. The obtained data of activity of enzymes of the antioxidant defense system (catalase and peroxidase) in germinating seeds exposed to lead nitrate. It is established that with increasing concentration of lead ions in the medium enhanced the growth inhibitory effect on the extent of the flow of water in wheat seeds, germination energy and germination of seeds. When the maximum metal concentration (10^{-2}M) the flow of water is slowed by 18 %,

germination energy by 33 %, laboratory germination – by 26 %. Low doses of lead had not had such a negative impact on these indicators.

The response of germinating seeds on the effect of different concentrations of salts of lead is to reduce the activity of enzymes catalase and peroxidase. With the time of seed germination the enzyme activity increased in all variants of experience. On the third day, there was a decrease functioning of antioxidant enzymes compared with the control, particularly peroxidases. In the variant with a maximum lead concentration of 10^{-2}M catalase activity 21 % higher readings in the control variant during the first day, and on others the activity of catalase decreased in 4 times compared to control. The activity of peroxidase during the germination of the seeds was below control values in all variants of experience.

***Keywords*:** wheat seeds (*Triticum aestivum* L.), antioxidant enzymes, peroxidase, catalase, lead nitrate.

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