RESEARCHES REGARDING CATALASE AND PEROXIDASE ACTIVITY IN FUNGUS *RHYZOPUS NIGRICANS* GROWN ON MEDIUM WITH DIFFERENT CONCENTRATION OF GRINDED WHEAT CARYOPSIS

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Abstract
The purpose of this study was to assay catalase and peroxidase activity in the saprophytic fungus *Rhizopus nigricans*, grown on mediums containing grinded wheat caryopsis. For the conduct of the experiments, from the composition of culture medium Czapeck Dox, the carbon source - sucrose was replaced with different amounts of grinded wheat caryopsis, resulting three experimental variants: V1 = 10 g/l, V2 = 20 g/l, V3 = 30 g/l. The control variant composition remained unchanged. Measurements were made at two time intervals: 7 days and 14 days after inoculation, using fungus mycelium and culture liquid. Determination of catalase activity was performed using Sinha method (Artenie Vl., et al., 2008), and determination of peroxidase was carried out on the basis of ortho-dianisidine method (Cojocaru D.C., 2009). The results show that there are significant differences between the two determinations and between work options. Enzyme activity is influenced by both: the age of fungus and different concentration of grinded wheat caryopsis.

Key words: *Rhizopus nigricans*, peroxidase, catalase, wheat caryopsis

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