

RESEARCHES REGARDING SOME DEHYDROGENASES ACTIVITY IN FUNGUS *RHYZOPUS NIGRICANS* GROWN ON MEDIUM WITH DIFFERENT CONCENTRATION OF GRINDED WHEAT CARYOPSIS

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Abstract

This study followed the activity of dehydrogenases in the Krebs cycle: malate dehydrogenase, isocitrate-dehydrogenase, succinate dehydrogenase, alpha-ketoglutarate dehydrogenase, and glucose-6-phosphate dehydrogenase, an enzyme enzyme of pentose phosphate pathway in fungus *Rhizopus nigricans*. For conducting experiments, the fungus was cultivated on medium with different concentrations of grinded wheat caryopsis. From the composition of the liquid medium Czapeck Dox, carbon source (sucrose) was replaced with different amounts of grinded wheat caryopsis, resulting three variants: V1 = 1g/100ml, V2 = 2g/100ml, V3 = 3g / l and a control variant, in which the composition of medium remains unchanged. Experimental measurements were carried out at two intervals: 7 and 14 days, and were performed using fungus mycelium. The results showed the influence of fungus age and different concentrations of grinded wheat caryopsis from the culture medium composition, with significant differences between the two measurements and between the working versions.

Key words: *Rhizopus nigricans*, dehydrogenases, Krebs cycle, wheat caryopsis

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