ACTIVE PRODUCERS OF PEROXIDASE BASIDIOMYCETES STRAINS SCREENING

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The paper is devoted to the analysis of the research data peroxidase activity of the strains of xylotrophic basidiomycetes in the dynamics of the growth. The objects of study were 57 strains, 5 of which belongs to 5 species of the order *Polyporales*, and 52 of which belongs to 7 species of the order *Agaricales*. In order to search for active producers of peroxidase the strains were cultured by the surface method in a liquid glucosepeptone medium. The accumulation of oven-dry biomass was determined by the weight method. The content of soluble protein and peroxidase activity were determined by the spectrophotometry. The studies set the level of accumulation of oven-dry biomass and peroxidase activity of the strains in 9 and 12 days of growth. The results allowed selecting the strains, which are characterized by high levels of peroxidase activity in mycelium and in the culture filtrate, including *Agrocybe cylindracea* 167, *Pleurotus ostreatus* P-кл, *Agrocybe cylindracea* 960 and 218. These strains which are active producers of peroxidase may be used in the enzyme preparations obtaining technology.

**Key words:** basidiomycetes, peroxidase activity, mycelium, culture filtrate.

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