

Investigation of the properties of colloidal mycelium of basidiomycetes with the aim of using it as a carrier of BAS

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Abstract

The paper presents the study of colloidal properties of mycelium of basidiomycetes. The aim is to study the adsorption on the mycelia of basidiomycetes *Abortiporusbiennis* and *Poliporusciliatus*, as well as the possibility of using mycelium as a carrier for drugs. The effect of glycine, aspartic acid, imidazole and tetrazole on the surface properties of mycelium were studied. p*H*_{iep} value in the presence of an amino acid or an azole shifted to the acidic region, indicating a predominance of anionic amino acids of specific adsorption or azole. It has been shown that at pH greater than 3.0 the mycelium surface both in amino acid solutions and in the solution of azoles is negatively charged due to the dominance of the adsorption of the anionic form. It is known that amino acids and the azoles are present in the solution as both cations and anions. The predominance of the sorption of the anionic form speaks of selective sorption on the surface of the mycelium. Therefore, as the transported drug substance it is better to use a drug substance in the solution of which anionic form prevails.