

BIOSORPTION OF COPPER IONS BY SUBMERGED MYCELIUM OF *SCHIZOPHYLLUM COMMUNE*

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Abstract

Biosorption of copper ions by the submerged mycelium of wood-rotting fungus *Schizophyllum commune* and the components of its cell wall were studied. Chitin-glucan complex (CGC I) exhibited the highest sorption capacity (0.3 mMol/g). The biosorbent CGC I was described in terms of microstructure, the effects of conditions on the Cu²⁺ sorption and sorption dynamics and selectivity. CGC I was suggested as a potential biosorbent for heavy metal removal from drinking water.

Key words:

Biosorption, chitin-glucan complex, *Schizophyllum commune*, copper, heavy metals