

Copper Uptake by *Penicillium brevicompactum*

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The copper binding properties of *Penicillium brevicompactum* biomass were influenced by growth phase of mycelium and concentration of copper in reaction mixtures. The efficiency of copper uptake increased with growth time and was largest at the mid-logarithmic growth phase. The time course of copper uptake was biphasic. Double reciprocal plots of absorption velocity of copper vs. copper concentration gave straight lines at concentration between 0.5 to 4 mM. The apparent affinity of copper to the biomass of the stationary growth phase was the same as that of logarithmic growth phase and K_m values were about 1.4 mM. Pretreatment of the mycelium with glucose increased the amount of metal uptake about five times in comparison with the controls.