

## عنوان مقاله:

Elimination of copper ions from industrial wastewater by Penicillium ochro-chloron

## محل انتشار:

سومین همایش یافته های نوین در محیط زیست و اکوسیستم های کشاورزی (سال: 1395)

تعداد صفحات اصل مقاله: 7

## نویسنده:

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## خلاصه مقاله:

Penicillium ochro-chloron ATCC36741 was applied to remove copper ions from aqueous solutions in shake flask experiments with different bead numbers and initial copper ion concentrations. A considerable copper removing yield of 99% was obtained with initial copper concentration of 100 mg. L<sup>-1</sup>. For dissolved oxygen concentrations below the critical oxygen concentration for the fungus (20% saturation) there was minimal copper removal. Produced biomass concentration didn't show any significant impact on copper removal yield. 94% removal efficiency was obtained for all cases of biomass concentrations of 0.0615, 0.123 and 0.246 g cell dry weight per liter. 99% copper removal yield was recorded with different bead numbers above 25. However the results showed only about 80% removal efficiency with using 5 beads. Removal of copper contaminants from industrial wastewater is a necessity for many industries, due to environmental concerns. Using of biological traps instead of physic-chemical methods for wastewater refining has more economical advantages

## کلمات کلیدی:

Copper ions, Filamentous fungus, Heavy metals, Penicillium ochro-chloron, Wastewater

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/586382>

