P89

Semicontinuous decolorization of azo dyes by rotating disks contactor attached *Aspergillus sojae* B-10

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Abstract

The azo dyes of Amaranth, Sudan? and Congo Red were designed as possible altenatives in the culture of *Aspergillus sojae* B-10. The model wastewater containing 10ppm these dyes was treated at attached cells in the use of rotating disks contactor.

Amaranth was easier decolorized than Sudan? and Congo-Red. Decolorization of Amaranth began within 1day and almost completely decolorized within incubation of 4 days. Sudan ?was completely decolorized after operation times of 5 days. However, Congo-Red was not completely decolorized until 5 day.

In order to improve the azo dyes decolorization by *Aspergillus sojae* B-10 by use of RDC. Semicontinuous decolorization of azo by reusing attached mycelia indicated almost constant decolorization during 20 days.

This experiment indicated that degradation and absorption on the fungal mycelia were point out both important process for the removing azo dyes from the cultivation of *Aspergillus sojae* B-10.

Keywords : Azo dye, decolorization, rotating disk contactor, *Aspergillus sojae.*