

Optimization of the Conditions for the Decolorization of Batik Wastewater by *Aspergillus* sp. 3

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Abstract	<p>Most batik industries dispose of wastewater into the environment without being processed first. Biological wastewater treatment effectively can reduce color parameters. Optimization was carried out to determine the optimum condition of growth. The aim of this study were to obtain the optimum concentration of inoculum, pH, incubation time and culture condition in the decolorization of Indigosol blue batik wastewater by <i>Aspergillus</i> sp. 3 strain G-LnsP isolate. The isolate was isolated from batik wastewater. Variations of inoculum concentration were 100, 150, 200, 250 spores / ml, pH was 3, 4, 5, 6, 7, 8, the incubation time was 24, 48 and 72 hours, and the culture conditions were agitated. The parameters observed in the optimization were the percentage of decolorization analyzed by the spectrophotometer method. The optimization results showed that the best inoculum concentration was 100 spores / ml with decolorization 94.8%. The optimum pH was 3 with decolorization of 96.6%. The optimum incubation time was 24 hours with decolorization degradation 95.32%. Decolorization of culture conditions were found to be higher in agitated conditions than static conditions</p>
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