

Decolourisation of textile effluent by *Pseudomonas aeruginosa* in low nutrient medium

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SUMMARY

Water soluble azo dyes are important class of synthetic organic compounds. The coloured pigments produced by these dyes are first sign of the contamination of waste water or any other water bodies. This paper describes the use of bacterial cell, as pure culture of *Pseudomonas aeruginosa* in its ability to remove colour from textile effluent aerobically. Degradation of reactive red, an azo dye, was used for the experiment at the concentration of 50 ppm and 100 ppm. The decolourisation efficiency achieved for these concentrations of dyes were 51.71 per cent and 65.42 per cent, respectively in five days of study. The effect of co-substrate glucose was also investigated, with modification in the medium by lowering nutrient content.

Key Words : Decolourisation, Primary degradation, *Pseudomonas aeruginosa*, Glucose, Reactive red

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