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## OPTIMIZATION OF ENVIRONMENTAL FACTORS FOR DECOLOURIZATION OF ANAEROBICALLY DIGESTED MOLASSES SPENTWASH

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### Abstract

Fungal isolate *Aspergillus niger* V-8 (IITB) was isolated from the sludge of anaerobic digester of distillery wastewater treatment plant and was found to be an appropriate fungal isolate for the purposes of decolourization of anaerobically digested molasses spentwash (ADMS). The study aimed at optimization of the environmental parameters for achieving maximum decolourization of ADMS using isolated fungal species. Environmental parameters like initial pH, mixing, immobilization and surfactant addition were studied and their optimal conditions were assessed. Results show that initial pH 5.5, well mixed suspended growth without addition of any surfactant were best suited for growth of isolate *Aspergillus niger* V-8 (IITB).

*Key words:* decolourization, distillery, fungal treatment, spentwash

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