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Research Article

Bioremediation of pulp and paper mill effluent using isolated *Bacillus* strain and its impact on the pH of effluent

■ NUPUR JOSHI, R.K. JAIN AND A.K. DIXIT

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ABSTRACT : This study focussed on the effect exerted by *Bacillus* strain on the pH of the pulp and paper mill effluent. The study aimed at bioremediation of paper mill effluent using *Bacillus stratosphericus*, the result of the experiment indicated that after 48 hours of treatment a reduction in colour (47%), COD (73%) and lignin (33%) was observed suggesting its potential tool for treatment of wastewater. In addition, the pH of the effluent was varied from 4-9 at regular interval of 1 unit and was inoculated with bacterial strain and was kept at 35°C at 200 RPM for 48 hours. The study indicated that *Bacillus* possessed inherent capacity to adjust pH favourable for its growth ranging from pH 7.4-8.7.

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Key Words :

Bioremediation, Colour, Lignin, COD

Author for correspondence :

NUPUR JOSHI Biotechnology Division, Central Pulp and Paper Research Institute, SAHARANPUR (U.P.) INDIA Email : nupurjoshi3@ gmail.com

See end of the article for **Coopted authors'**