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Biological Treatment of Agro- based Pulp and Paper Mill from the Isolated Bacillus Strain

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Abstract—*With the increase in global demand of paper, paper production has been tremendously increased resulting in generation of large amount of wastewaters, which are not only toxic but remain recalcitrant in the environment. Of late, the biological treatment has emerged as potential source of wastewater treatment. In the present study Bacillus strain was isolated from the ETPs Sludge and was used for the treatment of agro- based paper mill effluent. It was observed that there was a reduction 35% in Color, 26% in Lignin and 72% in COD respectively was observed after 48 hours of treatment, at 35ºC, 180 RPM and pH 8. The study confirmed that the Bacillus strain could be used to degrade the pollutants from the paper mill effluent effectively.*

Keywords*: COD, Color, Lignin, Wastewater.*

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