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Decolorization and Phenol Removal of Palm Oil Mill Effluent by Termite-Associated Yeast

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Abstract : A huge of dark color palm oil mill effluent (POME) cannot pass the discharge standard. It has been identified as the major contributor to the pollution load into ground water. Here, lignin-degrading yeast isolated from a termite nest was tested to treat the POME. Its lignin-degrading and decolorizing ability was determined. The result illustrated that Galactomyces sp. was successfully grown in POME. The decolorizing test demonstrated that 40% of Galactomyces sp. could reduce the color of POME (50% v/v) about 74-75% in 5 days without nutrient supplement. The result suggested that G. reessii has a potential to apply for decolorizing the dark wastewater like POME and other industrial wastewaters.

Keywords : decolorization, palm oil mill effluent, termite, yeast
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