

Extracellular Laccase Production by Co-culture between *Galactomyces reesii* IFO 10823 and Filamentous Fungal Strains Isolated from Fungus Comb Using Natural Inducer

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Abstract : Extracellular laccases are copper-containing microbial enzymes with many industrial biotechnological applications. This study evaluated the ability of nutrients in coconut coir to enhance the yield of extracellular laccase of *Galactomyces reesii* IFO 10823 and develop a co-culture between this yeast and other filamentous fungi isolated from the fungus comb of *Macrotermes* sp. The co-culture between *G. reesii* IFO 10823 and *M. indicus* FJ-M-5 (G3) gave the highest activity at 580.20 U/mL. When grown in fermentation media prepared from coconut coir and distilled water at 70% of initial moisture without supplement addition, G3 produced extracellular laccase of 113.99 U/mL.

Keywords : extracellular laccase, production, yeast, natural inducer

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