

INDUCTION OF MUTATION IN *ASPERGILLUS TERREUS* GC-81 GROWN ON PRETREATED SUBSTRATE FOR HYPER-PRODUCTION OF LOVASTATIN

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This study was conducted to improve the *Aspergillus terreus* GC-81 strain by treating it with N- Ethidium bromide (EB) using acid treated corncob as substrate in solid state fermentation for hyper production of cholesterol lowering drug lovastatin. Corncob was treated with potassium hydroxide for delignification of agro industrial substrate for better utilization and growth of microorganism. Surface morphology of corncob before and after acid treatment was studied by scanning electron microscope (SEM). High Performance liquid chromatography (HPLC) was carried out to analyze the concentration of lovastatin. Kinetic growth parameters such as μ (h^{-1}), $Y_{p/s}$, $Y_{p/x}$, $Y_{x/s}$, q_s , q_p also studied to calculate the substrate consumption and product formation for maximum production of lovastatin. Furthermore, mutant *Aspergillus terreus* strain was immobilized on calcium alginate beads to improve the stability and efficiency of drug.

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