

Optimization of inducer concentration in the medium for production of glutaminase from *Erwinia*

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This purpose of study was to determine effect of inducer concentrations in the medium for production of Glutaminase enzyme from *Erwinia*. For production of glutaminase enzyme from free cells of *Erwinia*, various physical and chemical parameters were optimized. The microorganism *Erwinia* which is a source of glutaminase was procured from Institute of Microbial Technology, Chandigarh and was grown on specified medium. The media was sterilized by autoclaving for 15 minutes at 15 psi/cm². The microorganism was maintained on agar slants and kept in refrigerator at 4.0 + 0.5 °C for further use and was sub-cultured after every 20 days. The viability check of microorganism was done by gram staining and tryphan blue. The work utilized Beef extract, Peptone, Yeast extract, Sodium chloride and Water as composition of growth medium for the production of glutaminase enzyme. The parameters such as Temp., pH, & Time were optimized. By using these parameters Glutaminase enzyme were produced by adding different concentration of inducers such as. Ammoniumsulphate, Inorganic phosphate & L- Glutamine. It was concluded that as we increase the concentration of inducers, enzyme activity was increases up to a certain concentrations. The enzyme activity was determined by Nessler's reagent method. So it is cleared from this study that Inducers are very helpful to increase the production of glutaminase enzyme from *Erwinia* & it was concluded that after adding inducer concentrations Ammoniumsulphate (100mM), Inorganic phosphate (200µL) & L- Glutamine (12.5%) the enzyme production was maximum.

Biography

Pushpinder paul has completed his Master degree in 2008 from Punjabi University Patiala in Biotechnology at age of 24 years. He is Executive Production at a premier Pharmaceutical organization. He has published 1 research paper at international level and also presented 2 research paper at international level. He has approximately 5 years of experience in pharmaceutical industry with the production of antibiotics (Penems & Cephalosporins).

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Hepatoprotective effect of *Coccinia Grandis*

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The methanolic leaf extract of *Coccinia Grandis* was screened for hepatoprotective activity using isoniazid – rifampicin induced hepatotoxicity model.

Methodology: The degree of hepatoprotection was determined by estimating levels of wet liver weight, liver volume and biochemical markers like SGPT, SGOT, ALP, direct and total Bilirubin. The extract at the dose of 200 mg and 400 mg/kg b.w. produced significant effect by decreasing the activity of serum enzymes (SGPT, SGOT, ALP, direct and total Bilirubin). Physical Parameters (wet liver weight and liver volume) also confirm these findings. The effects were comparable to that of standard drug silymarin.

Results: These results suggest that methanolic leaf extract of *Coccinia Grandis* possess hepatoprotective activity against isoniazid – rifampicin induced hepatic damage in rats

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