



## Comparative study of amylase production from bacteria and fungi

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**Abstract :** *In the present study amylase was produced by Bacillus and Aspergillus utilizing potato extract in a submerged fermentation. The activity of the crude enzyme from potato was determined using Caraway-Somogyi iodine/potassium iodide (IKI) method. The effects of varied pH and incubation time were also investigated. Amylase activity of the crude extract was measured by monitoring the amount of starch hydrolyzed by the crude extract over time. The results showed the presence of amylase activity in the extract, depicted by its ability to gradually decrease the concentration of the starch solution used as substrate. The optimum pH of*

*the crude enzyme obtained from fungus was at about 6 and that for bacteria was 7. The enzyme activity in case of fungus decreases as the pH rises from 6 to 8, comparing to bacterial enzymatic activity it was found to increase with the increase in pH. This study demonstrated that the abundant potato could be exploited for production of amylase.*

**Key Words:** *Amylase, Bacillus, Aspergillus, fermentation, submerged, potato extract*