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Title: STANDARDIZATION OF PARAMETERS FOR OPTIMAL ACTIVITY OF Eleusine coracana L.Gaertn. AMYLASE

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**Abstract:** Amylase is an enzyme which breaks down starch, the reserve carbohydrate in plants, into reducing fermentable sugars, mainly maltose, and reducing non fermentable or slowly fermentable dextrins. The activity of finger millet malting enzymes are very high and come next only to barley, the world's premier beer grain. The present study was undertaken to standardize the parameters for optimal activity of finger millet amylases. Finger millet seeds were germinated for 24hrs. and then grounded in CaCl<sub>2</sub> for extraction of amylases. The enzyme extract were then analyzed for pH optima, temperature optima, optimum incubation time, optimum substrate concentration, and enzyme concentration and germination duration. The optimum pH for amylases was found to be 4.6. Optimum temperature was found to be 50°C. Amylase activity showed steady increase with increasing time of incubation. Optimum substrate concentration was found to be 1%. Finger millet malted for 72 hrs was found to be best with respect to the amylase activity.

Description: STANDARDIZATION OF PARAMETERS FOR OPTIMAL ACTIVITY OF Eleusine coracana L.Gaertn. AMYLASE

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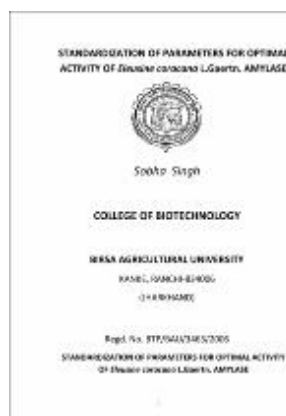
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