

عنوان مقاله:

Effect of the Medium Composition on Formation of Alpha Amylase by Bacillus licheniformis GMAF438149

محل انتشار:

سومین کنفرانس بین المللی علوم و مهندسی (سال: 1395)

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خلاصه مقاله:

A new medium was developed to induce high level of α - amylase from Bacilluslicheniformis GMAF438149. The strain of Bacillus licheniformis was grown on the presence of different carbon , nitrogen and metal ions. The high level α - amylase has been produced when potato starch and xylose were added to medium. Meat extract ,as an organic nitrogen source, had affected on enzyme yield , while inorganic sources were not found to be effective. Calcium chloride increased activity of the produced enzyme ;however, a slight activity was observed by increase of oxygen concentration. The optimum temperature of Bacillus licheniformis GMAF 438149 for α -amylase production was determined 39°C and the optimum pH was 6.8 . Enzyme was stable at elevated temperature ,and was unstable at varied pH values .Inhibitory effects of Zn and Cu were observed on α -amylase production

کلمات کلیدی:

Medium Composition -Alpha Amylase -enzyme production

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