Production of Fungal Amylase Enzyme from *Aspergillus japonicus*

Cavalieri, N.[1], Dias, K.[1], Sorgatto, M.[1], Tomassoni, F.[3], Silveira, J.X.[3], Guerino, A. C.[3], Zanoelo, F.F.[2], Marques, M.R.[1], Giannesi, G.C.[1]

[1]Departamento de Morfofisiologia, Laboratório de Bioquímica, Universidade Federal do Mato Grosso do Sul, Campo Grande, MS;
[2]Departamento de Ciências do Ambiente, Campus do Pantanal, Universidade Federal do Mato Grosso do Sul, Corumbá, MS;
[3]Faculdade União das Américas, Uniamérica, Foz do Iguaçu, PR.

Amylases are important enzymes employed in the starch processing industries for the hydrolysis of this polysaccharide. Microbial amylases meet industrial demands; a large number of them are commercially available. A newly isolated *Aspergillus japonicus* strain was cultured in liquid media containing starch to produce α-amylase and the objective of this work was to characterize the amylase produced by *A. japonicus.* The fungus produced an extracellular amylase in carbon sources such as wheat flour, starch, sugar-cane syrup, sucrose, being starch the best source. Maximum enzyme production was achieved after 96h of cultivation. The enzyme optimal pH and temperature were 4.0 and from 4.5 up to 60^{o}C, respectively. The amylase was stimulated by Ca^{+2}, Mg^{+2}, Cu^{+2} and Mn^{+2} but Zn^{+2}, Al^{+3}, Hg^{+2}, Ag^{+1} and Co^{+2} inhibited the activity. For determination of industrially availability advanced experimental properties such as characterization and enzyme kinetics will be investigated.

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