

ABSTRACT

The present study is concerned with the production of amyloglucosidase by *Aspergillus oryzae* GCB-32. The solid state fermentation was carried out by using wheat bran as a substrate. The wheat bran was moistened with sodium acetate (pH 4.8) buffer at the ratio of 1:1. The production of enzyme was reached maximum (947 U/g/min) 72 hours after inoculation. Effect of addition of different carbon sources (glucose, sucrose, lactose, maltose or starch) and nitrogen sources $\{(NH_4)NO_3, (NH_4)_2HPO_4, NH_4Cl, NaNO_3$ and urea on the production of amyloglucosidase was investigated. The enzyme production was maximum (1085 U/g/min) in the presence of starch (1%) as carbon source and NH_4Cl (1%) as nitrogen source. The enzyme was found to be highly active (1172 U/g/min) at 40°C and pH 5.0.