

Production of Pectinase from *Aspergillus flavus* using Dried Cashew Apple Powder as Substrate.

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Abstract

Aspergillus flavus is a fungus that principally obtains resources for growth in a saprophytic mode. Yet it also possesses the characteristics of an opportunistic pathogen with a wide, non-specific host range (plants and animals). It is known for a high level of agricultural significance due to production of the carcinogen, aflatoxin, which significantly reduces the value of contaminated crops. Studies were carried out on the production of pectinase using dried cashew powder by *Aspergillus flavus* in fermentation condition. High pectinase activity was observed when medium was supplemented with carbon (4% glucose and 6% sucrose in the fermentation medium) and nitrogen (ammonium sulphate.3% in the fermentation medium) sources. A high yield of pectinase activity (18u/ml) was observed at a fermentation period of 96 hrs with the presence of dried cashew as the substrate compared to the low activity recorded in medium without cashew powder as substrate. It was thus concluded that cashew apple powder is a good substrate for the production of pectinase enzyme by *Aspergillus flavus*.