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Purification of α-amylase from *Aspergillus* species

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There is a high demand for amylases in textile industry as a hydrolytic enzyme. In this study we have attempted to purify α-amylase from *Aspergillus* species grown in starch medium. We have purified α-amylase successfully using DEAE cellulose ion exchange chromatography. The enzyme elutes at 600 mM NaCl concentration and the yield is ~96%. The molecular weight of purified α - amylase is 54 kDa. The activity of the purified enzyme was determined by the Dinitrosalicylic acid colour reagent (DNSA) assay. The enzyme was most active at pH 5.0–6.0 toward soluble starch and stable is relatively thermostable with an optimum temperature of 60 °C. Further we have investigated other carbohydrate sources such as manioc (*Manihot esculenta*) to study the viability of scaling up this method for industrial scale production.