PEMURNIAN AMILASE DARI Endomycopsis fibuligera ITB.R.cc.64 DENGAN TEKNIK KROMATROGRAFI

Abstrak:

Endomycopsis fibuligera ITB.R.cc.64 is superior as amylase producer. It produces two kinds of extracellular amylases, those are saccharifying and liquefying activities which hydrolyze amylum synergistically. The aim of this research is to purity amylase produced by E. fibuligera, which will be characterized intensively in the next research. It has been done the following treatments respectively, those are fractionation by ammonium sulphate precipitating method, concentration by freeze drying, dialysis with cellophane membrane, ion exchange column chromatography with DEAE-cellulose and gel filtration column chromatography with Sephadex G-200. Electrophoresis has been done to know whether amylases have been separated. In this research has been purified amylases crude extract from E. fibuligera ITB.R.cc.64. At ammonium sulphate precipitation level, crude extract of 24.24 specific activity was purified to 65-90% ammonium sulphate fraction of 80.01 specific activity, so the purification factor is 3.3 fold. The purification of 65-90% ammonium sulphate fraction by chromatography technique provided amylase solution of 3.86 spectivity. The separation of a part of amylase forming a peak in the ion exchange chromatography is responsible to the deceasing in specific activity at chromatography level. The amylase solution purified chromatographically provided several bands in PAA gel electrophoresis, which means that these amylases can not separated by this technique.

Keyword:

Endomycopsis fibuligera ITB.R.CC.64, amylase, purification