

## Abstract

Esterase activity was detected in the supernatant of *Aspergillus niger*, when wheat bran used as an inducer of enzyme in solid-state fermentation. At 60-70% fraction of ammonium sulphate precipitation, it shows maximum enzyme activity as well as protein (mg). It demonstrates the pH optima of 6 as well as temperature optima of about 50 °C. However partially purified enzyme was secured at pH of 6.0 for up to 3 hours and at temperature of 50 °C for 1 hour. Ca<sup>2+</sup>, Mg<sup>2+</sup> and k<sup>+2</sup> play an important role in the increasing of enzyme activity. Among organic solvents methanol, isopropanol and n-butanol also increase the esterase activity. EDTA and DMSO are the good inhibitors for esterase enzyme.