Abstract

Aegerolysin like proteins are abundant in most of the fungal species, famously in *Aspergillus sp.* and basidiomycetes such as *Pleurotus sp* and *Agrocybe sp.* Majority of these proteins are capable of pore formation in cell membranes and causing hemolysis of erythrocytes. Therefore, these proteins are prominent biomarkers for diagnosing opportunistic fungal infections. Production of Aegerolysin through submerged fermentation was highest at optimized parameters. Maximum Aegerolysin from *Pleurotus ostreatus* was produced at incubation temperature of 25°C (0.29mg/ml aegerolysin), incubation time of 8 days (0.031mg/ml aegerolysin), medium pH of 6.0 (0.031mg/ml aegerolysin), glucose as carbon source (0.021mg/ml aegerolysin), ammonium nitrate as inorganic carbon source (0.025mg/ml aegerolysin), malt extract as organic nitrogen source (0.026mg/ml aegerolysin). Extraction of aegerolysins by AS precipitation with 35%, 55% and 65% fractions precipitate out Aegerolysins from *Pleurotus ostrearus.* Anion exchange chromatography purified Aegerolysin to a greater degree.