

ABSTRACT

The present study deals with the production of lipases by *Rhizopus delemar* using solid state fermentation. Different agricultural by products such as wheat bran, rice husk, almond meal, soyabean meal and sun flower meal were used as substrate. Maximum lipase activity (50.11 U/g) was observed with wheat bran. Tween 80 at 0.5% was used as the best carbon source. The best organic and inorganic nitrogen sources for lipolytic activity were soyabean meal (1%) and ammonium sulphate (3%). The best diluent was phosphate buffer with pH 7.5. Addition of egg yolk to the fermentation medium enhanced the lipase production at 30°C in 48 hour. Other cultural conditions such as inoculum size (1.0 ml) and substrate to diluent ratio (1:10) were also optimized.