

## **Studies on production of single cell protein by aspergillus niger in solid state fermentation of rice bran**

### **Abstract**

An attempt was made to apply the solid state fermentation (SSF) for the production of single cell protein (SCP) using oil free rice bran waste as substrate. A local isolate of *Aspergillus niger*, was used as protein source for the studies. Total proteins were extracted to estimate the mycelial biomass from the moldy bran. Carbonate-bicarbonate extraction buffer and a pH 10 was found to be most efficient among the buffers used for the extraction of the proteins from the organism. The effect of supplementation by various sources of nitrogen and mineral solution on the final biomass yield was compared. The influence of C/N ratio on the protein yield was also studied. Sodium nitrate at C/N ratio of 1.387 was found to be an effective nitrogen-supplementing source, as it gave the higher biomass yield.