ABSTRACT

20 strains were isolated from local habitat. After identification one, strain of Saccharomyces cerevisiae (S- 10) and one strain of Aspergillus niger (AS-20) were used for cell biomass cultivation in 250 ml conical flask containing delignified wheat bran. Effect of different diluent.. concentrations into different pH, organic and inorganic nitrogen sources, different incubation temperature and size of the inoculum were optimized using delignified wheat bran. Control experiment shows that delignificatiori i effective for the production of cell mass. The result shows that cell mass of S. cerevisiae (2.2 g/100 ml) was achieved using delignified W.B., 10 ml of pH 5 buffer as a diluent, 5% inoculum at 25°C for 5 days. In case of A. niger (2.4) g/100 ml) cell biomass was obtained using delignified W.B. (10 g), 10 ml of pH 5 buffer as diluent 5% inoculum at 25°C for 5 days. Peptones has stimulatory effect on the production of both S. cerevisi (S-b) and A. niger (AS-20) whereas inorganic sources are not so effective for the enhanced production of cell biomass.