ABSTRACT

Different strains of *Aspergillus* species were screened for the production of protease. The strains that gave significant production were further used for the optimization for the enhanced production of protease. Parameters for protease production included physical and cultural conditions while agricultural substrates were also used for enhancing protease production. The three *Aspergillus* sp. gave highest protease activity when Czapek Dox medium was used. *Aspergillus oryzae* was found to give the maximum protease production with up to 18.02 U/ml of protease activity and a biomass of 4.7g/100ml when incubated for 48 hrs, at 30 °C, with 1.5 % inoculum level when sucrose and rice bran were present in the medium at a pH of 4.0. *Aspergillus terreus* gave the second highest protease units up to 14.68 U/ml with a biomass of 5.4g/100ml when it was incubated for 72 hrs, at 30 °C, with 2% inoculum level when lactose and rice bran were present in the medium at a pH of 7.0. *Aspergillus niger* gave the lowest protease production of up to 10.85 U/ml with a biomass of 4.4 g/100ml when it was incubated for 72 hrs, at 30 °C, with 2% inoculum level when sucrose and soybean meal were used in the medium at pH 7.0.