ABSTRACT

The removal of hexavalent chromium from aqueous solution was carried out in batch experiments using dried biomass of the fungal strain *Aspergillus oryzae.* The effect of pH, initial chromium concentration, biomass sizes and contact time on the biosoption of chromium by *Aspergillus oryzae* was examined. Fungal biomass completely removed Cr (VI) from aqueos solution after 96 hrs of contact. The percentage removal of Cr (VI) increased with a increase in pH from 3-5 and then decreased with a increase in pH from 5-7. The percentage removal of Cr (VI) increased with a increase in biomass size from 0.1g to 0.7g until equilibrium was attained and decreased with a increase in initial metal (Cr(VI)) concentration from 50 – 100ppm. The Langmuir model and Freundlich equation were applied to the experimental data and Freundlich model was found to be in better correlation with the experimental data.