ABSTRACT

Eight nickel resistant yeast strains designated as GC-Ni-Y1, GC-Ni-Y2, GC-Ni-Y3, GC-Ni-Y4, GC-Ni-Y5, GC-Ni-Y6, GC-Ni-Y7 and GC-Ni-Y8 were isolated from effluents of Zacotex Pvt. Ltd., Khas Pvt. Ltd. and Master cables Lahore. Physical and biochemical tests were performed in order to identify and characterize the yeast strains. The optimum growth conditions were also determined that showed that these yeast strains can grow in wide range of temperature and pH. Cross heavy metal resistance of all the eight strains was determined against Cd, Co, Mn and Sn.

Nickel processing ability of all the yeast isolates was also checked that showed that they can remove upto 80 % of nickel from the culture medium. Proteins isolated from the yeast strains were also analysed by SDS-PAGE.