Mycopath (2007) **5**(1)**:** 49-52

Decolorization of textile dyes and their effluents using white rot fungi

Zahida Nasreen, Rukhsana Bajwa and Tasnim Kusar

Biotechnology and Food Research Centre, PCSIR Labs Complex, Lahore 54600, Pakistan

Abstract

The ability of four different species of white rot fungi i.e. *Coriolus versicolor*, *Termetomyces* sp, *Pleurotus ostreatus* and *Schizophyllum commune* to remove azo dyes from aqueous solutions were evaluated in batch culture under laboratory conditions. *C. versicolor* found to be was the most efficient colour removing species for the three dyes investigated. Maximum removal capacity of *C. versicolor* for acid green, disperse red and basic orange was 98, 76 and 61 % respectively. Glucose as the carbon source in growth medium was more suitable for the decolouration of dyes in comparison with starch at the same concentration. Preliminary studies indicate that *C. versicolor* has the potential to remove colour from aqueous solutions and may be used as an efficient biological agent for the decolouration of dyes in industrial effluents.

Keywords: White rot fungi**,** decolorization Azo dyes.