Symposium on Biotechnology in Textile Industry

Póvoa de Varzim
Novotel Vermar
Portugal, 3-7 May 2000

BOOK OF ABSTRACTS

Supported by

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Fundação para a Ciência e a Tecnologia
MINISTÉRIO DA CIÊNCIA E DA TECNOLOGIA

TBT
THE WORKING PARTY ON
TEXTILE BIOTECHNOLOGY

UNIVERSIDADE DO MINHO

DE2 - BIODEGRADATION OF BIOACCESSIBLE TEXTILE AZO DYES BY *PHANEROCHAETE CHRYSOSPORIUM*, M.ª Adosinda Martins, Isabel Ferreira, Isabel Santos, M.ª João Queiroz and Nelson Lima, Instituto de Biotecnologia e Química Fina (IBQF), Universidade do Minho, 4700-320 Braga, Portugal. E-mail: mjrpq@ci.uminho.pt

Azo dyes are important chemical pollutants of industrial origin. Textile azo dyes with bioaccessible groups, such as guaiacol and 2,6-dimethoxyphenol, for lignin degrading fungi were synthesized, using different aminobenzoic and aminosulfonic acids as diazocomponents. The inocula of the better biodegradation assays were obtained from pre- growth media containing one of the synthesized dyes. The results were evaluated each 7 days, by the decrease of the absorbance at the maximum wavelength of the dye, decrease of the saccharose concentration in the culture medium and by the increase of the biomass, during the 28 days of assay. The extension of the biodegradation depends on the saccharose concentration used, on the degraded dye structure and on the dye present in the pre-growth medium.