

Decolorization of acid black 52 in suspended and immobilized cultures with *Funalia trogii*

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Responsible enzymes for the decolorization of synthetic dye solutions were investigated with *Funalia trogii*. The enzymes include laccase, lignin peroxidase (LiP), and manganese peroxidase (MnP), which are extracellular oxidases released from fungus under the condition of slow growth or in its stationary phase. The production of enzyme was compared between suspended and immobilized fungal mycelia during the decolorization process with various pH and temperature conditions. The immobilized mycelium showed the higher stability in high pH and high temperature conditions than the suspended one.