

### Decolorization of reactive black 5 by combined process

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Hybrid process with bioreactor and membrane process for the treatment of municipal and industrial wastewaters has led to the development for separation and recycle of microorganism etc. In wastewater treatment tighter controls on discharge limits have necessitated more elaborate and perhaps more expensive solutions than conventional biological treatment processes. One of the possible modification of conventional biological treatment processes is the replacement of a secondary process by membrane units, which is called a membrane bioreactor (MBR). The use of MBRs in wastewater treatment is now emerging as an attractive technology with considerable advantages over conventional treatment. In this study, membrane bioreactor using combined system of *Trametes versicolor* KCTC 16781 and ceramic membrane for the treatment of reactive black 5 solutions were investigated. Reactive dyes with two concentrations were decolorized by MBR. This process was suitable for the treatment of dye wastewater.