

Evaluation of *Moringa oleifera* in Decolourization of Dyes in Textile Wastewater

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Abstract : The purpose of this paper is to irradiate the dyes biologically through the use of *Moringa oleifera*. The study confirms the potential use of *Moringa oleifera* in decolourization of dyes and thus opens up a scope for future analysis pertaining to its performance in treatment of textile effluent. In this paper, the ability of natural products in removing dyes was tested using two reactive dyes and one acid dye. After a preliminary screening for dye removal capacity, a vegetal protein extract derived from *Moringa oleifera* seed was fully studied. The influences of several parameters such as pH, temperature or initial dye concentration were tested and the behavior of coagulants was compared. It was found that dye removal decreased as pH increased. Temperature did not seem to have a considerable effect, while initial dye concentration appeared to be a very important variable.

Keywords : *Moringa oleifera*, decolourization, waste water, reactive dyes, acid dyes

Conference Title : ICABB 2016 : International Conference on Applied Biology and Biotechnology

Conference Location : Jeddah, Saudi Arabia

Conference Dates : January 26-27, 2016