BIOLOGICAL TREATMENT OF DISTILLERY WASTE WATER - AN OVERVIEW

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ABSTRACT

In whole world, cane molasses base distilleries are included under one of the polluting industries in concern to water pollution. After fermentation remains waste from bottom of distillation columns, termed stillage. This highly aqueous residue containing organic soluble is considered a troublesome and potentially polluting waste due to its extremely high BOD and COD values. The typical odour emanating from distilleries is a major nuisance. The color of the spent wash interferes with its oxygenation and self purification. The treatment of distillery wastes is a priority area for environmental sustenance and its quality. Due to the large volumes of effluents and presence of certain recalcitrant compounds the treatment of this stream is rather challenging by conventional methods. Therefore to supplement the existing treatments, a number of studies encompassing physic-chemical and biological treatments have been conducted. This review presents an account of the problem, biological treatment methods and role of enzymes in decolorizing waste water.

KEYWORDS: Spent Wash, Decolourization, BOD, COD, Enzymes