

A REVIEW ON BIOETHANOL FROM CELLULOSIC MATERIALS: A BIOMASS-BASED RENEWABLE MOTOR FUEL

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ABSTRACT

The most commonly utilized liquid biofuel is ethanol. It's an alcoholic beverage that's made from sugars, starches, or cellulosic biomass. Bioethanol may be made from cellulosic resources. Bioethanol is a significant renewable liquid fuel for automobiles. Bioethanol production from biomass is one method to decrease crude oil use while also reducing pollution. Conversion methods for generating ethanol from cellulosic biomass resources including forest materials, agricultural leftovers, and urban wastes are still in the works and have yet to be commercialized. A pretreatment procedure is used to decrease the sample size, break it down the hemicelluloses to sugars, or open up the framework of the cellulose component in order to generate bioethanol from cellulosic biomass. Acids or enzymes undergo hydrolysis the cellulose to produce glucose sugar, which is fermented to produce bioethanol. Hemicellulose sugars are also fermented to produce bioethanol. The usage of bioethanol as a motor fuel dates back to the invention of the automobile. It all started with the introduction of ethanol into internal combustion engines.

KEYWORDS: *Bioethanol, Biomass, Ethyl Alcohol, Fermentation, Hydrolysis, Sugar.*

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