International Journal of Applied and Natural Sciences (IJANS)
ISSN(P): 2319–4014; ISSN(E): 2319–4022
Vol. 10, Issue 2, Jul–Dec 2021; 59–74

International Academy of Science, Engineering and Technology
Connecting Researchers; Nurturing Innovations

AN INVESTIGATION ON THE PURIFICATION EFFICACY OF BIOETHANOL PRODUCTION FROM DIFFERENT SOURCES OF BIOMASS

Izegaegbe Daniel Omoikhoje

Research Scholar, Department of Biotechnology Lifescience, Jain University, Bengaluru, India

ABSTRACT

There are huge biomass waste disposed every day in agricultural countries that can be useful and are potential to mankind. These wastes can be useful in production of biofuels like bioethanol. In future bioethanol can be used instead of petroleum fuels that pollute our environment. In biofuel production various process like saccharification and selection of proper microbial strains are important. Using biomass to make bioethanol is cheap and help to clean waste in environment. Although the biomass sources should be used in non-crop sources as this can affect food reserves. Bioethanol as sustainable source of energy requires purification technique like rectification by further distillation done in ethanol industry. This distillation limits bioethanol production as it's expensive and has limited separation capacity. However there are other methods being research on instead of distillation like non-heating fractional distillation like use of ultrasonic irradiation, oxidation of impurities by ozone, and adsorption of impurities by activated carbon. In this research will use high sugar grasses and bagasse, then the Purification efficacy with the bioethanol production technique as discusses in the literature.

KEY WORDS: *Bioethanol, Biomass, Fermentation, Distillation, Saccharification and Purification*

Article History

Received: *13 Sep 2021* **|** ***Revised:*** *15 Sep 2021* **|** ***Accepted:*** *21 Sep 2021*