Recycling Sugary Remnants to Produce Ethanol

Al-Sulaiti, Abdulaziz
Shams, Abdulaziz
E.Ahmednooh, Majid

Introduction: One of the reasons for doing this research is to obtain ethanol from sugar remnants that lead to the spread of some harmful insects and how to take advantage of these materials to obtain alternative energy to fossil fuels. Problem: How to produce alternative energy from sugary remnants. The aims of the research: The importance of the research lies in the following points: 1- Recycling sugary remnants to obtain Ethanol by fermentation of sugary solutions 2- Making use of the produced Ethanol in medical uses and in making soap 3- Using the produced Ethanol as an alternative for fossil fuel to obtain clean thermal energy 4- Preserving the strategic inventory of fossil fuel 5- Avoiding environment pollution Hypotheses: 1-There is a relation between released thermal energy and the chemical composition of a compound 2- There is a direct proportion between the concentrations of sugar solution and the amount of ethanol 3-There is a direct proportion between the quality of fuel and the resulting pollution The Methodological procedures of the research: Using of sugary solution fermentation to produce ethanol. Simple distillation to purify ethanol Then using Ethanol to produce clean energy. Results: Fermentation process produces: 1. Ethanol with 99.5% concentration that will be used as an alternative for fuel energy. 2. Carbonic acid that will be used in general industry.

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