

Review of: "Recycling of Waste Bamboo (*Bambusa vulgaris*) into Value-Added Platform Chemicals: Bioethanol and Bioethylene"

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Potential competing interests: No potential competing interests to declare.

Abstract

Authors must inform the research results in the abstract.

Keywords

Insert keywords different from those in the article title.

Introduction

Authors must make the objective of the research clear at the end of the introduction.

Literature Review

What are FMCG products?

Fig.1 was not indicated in the text.

The chemical formula for sodium carbonate (NaCO_3) is incorrect..... Na_2CO_3

Format here..... and ammonia (NH_3)),..... NH_3

Explain the Bioethanol Dehydration process better through chemical equations. What catalysts are commonly used in the process? Place in the text of the article the chemical equation that represents the ethanol dehydration reaction using the catalyst.

Methodology

The authors could insert a schematic drawing at the beginning of the methodology with all the activities carried out in the research.

The methodology figures were not indicated in the text. This must be done.

What is the moisture content of raw biomass?

Format....in to 250ml conical..... .in to 250 mL conical..... 100 mL

Figures 5, 6, and 7 were not indicated in the text of the article.

Indicate the bibliographic references used in the research methodology.

Indicate bibliographic reference here. “The enzyme, cellulase, was added to the pretreated bamboo at 9 FPU/g (fatty acid unit per gram). This was to break the high carbon molecules into smaller ones in order to yield sugar (de-polymerizing the cellulose to glucose).”

Figures 8, 9, and 10 were not indicated in the text of the article.

Format.... (Al₂O₃)..... (Al₂O₃).

The information below should be placed in the search results:

Yield: 0.21 kg of bio-ethylene gas was obtained from 500 mL of bio-ethanol.

Percentage yield of bio-ethylene gas: Bio-ethylene gas produced was 53% from 500 mL of bio-ethanol.

Results and Discussion

Have the chemical characteristics of the biomass (cellulose, hemicellulose, and lignin) been determined? If not, I find it interesting to inform these characteristics of the biomass studied through data from a literature review.

Tables 1 and 2 must be indicated in the text.

Suggestion: Place the two tables (1 and 2) in a single table, as they present the same information for bio-ethanol and conventional ethanol.

Check the writing in English.....instead of “Bio-ethanol and ethanol do have similar boiling points”.....write.... “Bio-ethanol and ethanol have similar boiling points”

Compare the following information with other literature review works (0.21 kg of bio-ethylene gas was obtained from 500 mL of bio-ethanol).

Compare the following information with other literature review works (Percentage yield of bio-ethylene gas: Bio-ethylene gas produced was 53% from 500 mL of bio-ethanol). Was this percentage of 53% expected? Is this 53% value high or low?