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.

Dear Editor,

I hope this letter finds you well. I regret to inform you that, after the careful review process, we are unable to publish the article titled "Recycling of Waste Bamboo (Bambusa vulgaris) into Value-Added Platform Chemicals: Bioethanol and Bioethylene" due to numerous flaws. Upon review, it was found that the article did not adhere to scientific standards in writing, lacked sufficient references and evidence to support the claims made, had inaccuracies in presenting data and research findings, and lacked logical coherence between different sections of the article. Therefore, I reject it.

Best regards,

Comments:

The paper "Recycling of Waste Bamboo (Bambusa vulgaris) into Value-Added Platform Chemicals: Bioethanol and Bioethylene" presents several areas that could be critiqued for improvement. Firstly, the introduction and literature review sections, while comprehensive, are somewhat verbose and include excessive background information that could be more succinctly summarized to maintain focus on the core research objectives. The methodology, though detailed, lacks clarity in the explanation of certain procedures, such as the specific conditions under which the enzymatic hydrolysis and fermentation were carried out, potentially leading to reproducibility issues.

Furthermore, the study's approach to pretreatment using NaOH and H2O2, while common, does not explore more innovative or potentially efficient pretreatment methods that could improve yield or reduce costs, such as the use of ionic liquids or advanced enzymatic cocktails. The results section reports the yield of bioethanol and bioethylene but does not provide sufficient comparative data or statistical analysis to validate the efficiency and viability of the processes. Additionally, the absence of detailed characterization data for the bioethylene, due to the lack of test equipment, significantly weakens the robustness of the findings and limits the ability to confirm the chemical identity and purity of the product.

The economic viability and environmental impact assessments are mentioned but not thoroughly analyzed or supported with quantitative data, which is crucial for evaluating the feasibility of scaling up the process. Lastly, the conclusions and recommendations, while acknowledging areas for improvement, do not offer concrete strategies or innovative approaches for optimizing the process. Addressing these weaknesses could significantly enhance the study's contribution to the field of biomass conversion and biofuel production.