

# Review of: "Techno-Economic Fermentative Microbe-Based Industrial Production of Lactic Acid (LA): Potential Future Prospects and Constraints"

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Potential competing interests: No potential competing interests to declare.

Dear Author,

Thank you for submitting your manuscript titled "Sugar Mills and Second Generation Lactic Acid Production: Challenges and Opportunities". We appreciate your detailed discussion on the advantages and challenges of utilizing second generation lactic acid production in sugar mills. The manuscript provides a comprehensive overview of the potential benefits in terms of economic viability, waste reduction, product diversification, and indirect promotion of bio-based activities in rural areas. Additionally, the manuscript highlights key challenges that need to be addressed, such as optimizing lactic acid concentration, yield, production efficiency, and optical purity.

While the manuscript has several strong points, there are a few areas that need further attention before it can be considered for publication. Specifically, we suggest incorporating more specific examples to demonstrate the challenges faced in lactic acid production within sugar mills. By including examples, the manuscript will be more persuasive in elucidating the potential difficulties that must be overcome to achieve successful second generation lactic acid production within this context.

Furthermore, while the manuscript provides a useful overview of the indirect advantages, it would be beneficial to focus more on the direct advantages of second generation lactic acid production, such as those related to human health and nutrition. By discussing the potential direct benefits that can be derived from lactic acid production, in addition to waste reduction and economic benefits, the manuscript will become more compelling.

Lastly, in order to enhance reader comprehension, we recommend expanding on the technical explanations and defining any specialized terminology used.

In conclusion, by addressing these issues through appropriate revisions, we believe your manuscript will make a valuable contribution to the existing literature in this field.

Thank you for considering our suggestions.

Best regards,

Dr Yuan Fu

