

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

Juliana Ferreira¹

¹ Universidade Federal de Uberlândia

Potential competing interests: No potential competing interests to declare.

1. Abstract: Lactic acid is a major industry for biomass-derived chemicals. Did The authors mean in terms of economy value or in a particular country? Could they more specific? For instance, in Brazil, Etanol is the major industry for biomass-derived-chemicals
2. Abstract: lower optical purity.. But there is strains that synthesis only one of the forms D- or L-.
3. Highlights: What does SBC mean? (Sugarcane Bagasse). Suggestion: include the abbreviation in the Abstract, and LA too
4. Introduction:
 - a. with Pakistan ranking the fifth globally position in sugarcane production, with an annual yield of 67 million tons, producing significant by-products
 - b. SCB : write the name for the first time that is written in the text.
 - c. Figure 1 is not complete. For instance, It's missing bioethanol from SCB, and there are also 2G biohydrogen. I suggest to make it more complete as possible.
 - d. What do they mean: LCB , DES, SSCF (or SSF)?
5. Biomass Recalcitrance and Carbohydrate Recovery: Is it a rule to insert Table only at the end of the manuscript? If it is not, please, present Table as soon as it is mentioned in the text
6. Valorization of Bagasse:
 - a. Suggestion: Figure 2: include arrows
 - b. It is necessary better information on lactic acid process illustrated in Figure 2. How about the membrane separation unit operation follow by MF and NF (micro and nanofiltration?)
7. Microbes-based LA Production: the authors did not mention none of the main strains. And what does it mean: OPEX and CAPEX?
8. Figure 4 should be improved. It is not well formatted. And for all Figures, I suggest the same I did for Figure 2. It is necessary to describe what it illustrated on the Figures

