

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

João Moreira Neto<sup>1</sup>

<sup>1</sup> Universidade Federal de Lavras

Potential competing interests: No potential competing interests to declare.

The manuscript entitled "Techno-Economic Fermentative Microbe-Based Industrial Production of Lactic Acid (LA): Potential Future Prospects and Constraints" develops an interesting and important topic. However, there is a lack of exploration of the technical-economic aspects relating to the production of lactic acid. Therefore, it is necessary to adapt the title of the paper to its content. There are many grammatical errors, and some sentences are complicated to understand. I don't recommend the paper for publication in its current form. My comments and suggestions are as follows.

- 1 - Full names of all abbreviations should be defined at their first appearance in the text.
- 2 – The representation of chemical names is missing subscripts.
- 3 - The abstract should be more concise and focus on technical-economic aspects related to lactic acid production.
- 4 - The abstract emphasizes the production of lactic acid using sugarcane bagasse; however, in the manuscript, there are few reports where the feedstock is bagasse.
- 5 – Page 4: "Lignin is a major constituent, accounting for 60%." This information is incorrect; the principal constituent is cellulose.
- 7- Page 4: "Pakistan leads in sugarcane production with 67 million tons annually." This information must be reviewed. It was previously mentioned that countries such as Brazil, India, and China have larger sugarcane cultivation areas than Pakistan.
- 8 - The process of producing high-purity lactic acid depicted in Figure 2 is unclear. The steps involved in the process must be detailed in the manuscript.
- 9 - Figure 3 describes the bioethanol production from sugarcane bagasse. This figure must be correlated with lactic acid production; otherwise, it makes no sense to remain in the paper.