

Review of: "Expansion of the Experimental Antifungal Activities Through in Silico Docking Study of Compounds From Albizia Lebbeck"

Syed Niaz Ali Shah¹

¹ King Fahad University of Petroleum and Minerals

Potential competing interests: No potential competing interests to declare.

The article provides a comprehensive investigation into the antimicrobial potential of compounds isolated from the Albizia Lebbeck fruit. The work is good, but needs to be revised thoroughly so that the readers and peers in this area can access the knowledge presented in this article. I have the following suggestions to improve the article.

1. The introduction is to be revised to make it more relevant. There is a lot of repetition and no relevance to the data. The relevant data needs to be cited.
2. You mentioned that, unfortunately, the antimicrobial study of the two isolated compounds was done. Why not the others? It would be beneficial to extend the experimental evaluations to the remaining compounds.
3. The molecular interactions, such as π - π interactions, H-bonds, hydrophobic interactions, π -cation, and salt bridge interactions, were thought to be responsible for the antimicrobial activity of the compounds. These molecular insights contribute to the understanding of structure-activity relationships, essential for the development of potential antimicrobial agents. It would be great to compare the results of the antimicrobial study with the already published data.
4. It was mentioned in the article, "The experimental antifungal assays, as well as all the reported compounds in this study, were obtained as previously reported by Leutcha et al. (2022)." If so, then change the title of the manuscript to the docking study of the compounds only. It is suggested that the word "Experimental" be excluded from the title.
5. There is a lot of repetition in the text; it needs to be removed from the text.
6. It seems the study is incomplete, in terms of experimentation (only 2 compounds checked).
7. A more comprehensive assessment of all isolated compounds could provide a holistic view of their antimicrobial activities and contribute to the identification of potential lead compounds for further development. These findings need to be summarized in the manuscript conclusion, intended for presentation to readers and peers in this field.