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JournalName:	ArchivesofCurrentResearchInternational
ManuscriptNumber:	Ms_ACRI_129776
TitleoftheManuscript:	EFFECTOFMEMBRANEFouLINGONCLARIFICATIONOFPOMEGRANATEJUICE
TypeoftheArticle	

PART1: Comments

	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This manuscript is significant for the scientific community as it provides valuable insights into the mechanisms of membrane fouling during the clarification of pomegranate juice, an area of interest for food and beverage processing. By utilizing Hermia's empirical models, the study offers a detailed understanding of the fouling phenomena, which is crucial for optimizing filtration processes and improving efficiency in juice production. The findings on intermediate pore blocking and gel layer formation contribute to the development of better filtration techniques, potentially reducing operational costs and improving product quality. Furthermore, the research enhances the knowledge base concerning the processing of non-citrus tropical fruits, which can aid in the innovation of new fruit-based beverage products.	
Is the title of the article suitable? (If not please suggest an alternative title)	NO Membrane Fouling Dynamics in the Clarification of Pomegranate Juice Using Egg Albumin Pretreatment: A Study on Hermia's Empirical Models"	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	NO The study focused on understanding membrane fouling during the clarification of pomegranate juice, which was pretreated with egg albumin. Pomegranate, known for its appealing aroma, refreshing taste, and balanced Brix/acid ratio, is a highly popular tropical non-citrus fruit. The variety used, Ganesh, was sourced from a local market in Bapatla, Andhra Pradesh, due to its high juice yield, favored by juice producers. Hermia's empirical models were applied to assess fouling in microfiltration and ultrafiltration of pineapple and pomegranate juices. The flux data aligned with existing fouling models, revealing intermediate pore blocking transitioning to gel layer formation, with R ² values between 0.804 and 0.977 for a 0.2 μm pore size membrane during pomegranate juice filtration.	
Is the manuscript scientifically correct? Please write here.	The manuscript seems to contain scientific inaccuracies upon my initial review. Nonetheless, I suggest a comprehensive peer review to verify that all information is accurate and current.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references seem to be outdated and lack recent studies that reflect the current state of research. It's important to include more recent publications to ensure the information is up-to-date. Additionally, expanding the range of sources could provide a more comprehensive understanding of the topic. https://doi.org/10.3390/su151813389 https://doi.org/10.1016/j.jwpe.2023.104317 , https://doi.org/10.1016/j.jodeng.2024.112217 https://doi.org/10.1016/j.mtcomm.2019.02.002 https://link.springer.com/chapter/10.1007/978-981-32-9804-0_19 https://doi.org/10.1016/j.molliq.2021.115743 https://doi.org/10.1016/j.colsurfa.2021.126941 https://doi.org/10.1016/j.jmrt.2020.02.102	

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<p>Isthe language/English quality of the articles suitable for scholarly communications?</p>	<p>The language of the article requires significant improvement to meet the standards of scholarly communications. It contains numerous grammatical errors and lacks the formal tone expected in academic writing. Revising the article for clarity, coherence, and proper citation will enhance its suitability for scholarly publication.</p>	
<p>Optional/General comments</p>	<ol style="list-style-type: none"> 1. Your manuscript needs to be restructured so that it is well-written 2. Ensure the manuscript is numbered for ease of reading. 3. Include a comprehensive list of abbreviations. 4. Revise the title to make it more engaging. 5. Improve the clarity of all figures, as they currently lack quality. 6. Correct any spelling and grammatical errors throughout the manuscript. 7. Enhance the discussion in the results section by comparing it with current literature and updating references. 8. Craft an abstract that succinctly summarizes the study's purpose, methods, results, and conclusions, making it intriguing for readers. 9. Rewrite the introduction to improve its quality and coherence, making a strong first impression. 10. Avoid using overly short sentences. 11. In this study, you did not mention membrane type, characteristic, etc. There are not enough references, so you should add more juice compare to those in pineapple juice? Were there any variations in the effectiveness of the gel layer model across different pore sizes? 12. What specific pretreatment methods were used, and how did they impact membrane fouling? How did variations in transmembrane pressures and flow velocities influence the fouling process? What were the observed differences in fouling behavior between different pore size membranes during the clarification of pomegranate juice? 13. What is the specific reason for choosing the Ganesh variety over other pomegranate varieties? How was the quality of the extracted juice assessed to ensure it meets industry standards? Were there any specific storage conditions or preservation methods used for the juice after extraction? 14. What impact does the concentration of egg albumin have on the flavor and nutritional content of the juice after pretreatment? How does the effectiveness of egg albumin compare to other fining agents used for similar purposes? Are there any potential allergen concerns associated with using egg albumin in juice processing, and how can they be mitigated? 15. Revise all tables to make them more visually appealing. 16. Strengthen the Results & Discussion section by expanding the discussion and integrating comparisons with existing studies. 17. Keywords are not good. By including good keywords, the manuscript will be more comprehensive and relevant to the subject matter. 18. There are some titles in your manuscript that are not attractive, long and not professionally. 19. It seems to me that your conclusion section of the paper is very poor. 20. It is recommended that the following citations be added to the introduction section on Ultrafiltration: https://doi.org/10.1016/j.jwpe.2023.104317, https://doi.org/10.1016/j.molliq.2021.115743 https://doi.org/10.1016/j.colsurfa.2021.126941 https://doi.org/10.1016/j.jmrt.2020.02.102 https://doi.org/10.1016/j.mtcomm.2019.02.002 	

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PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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