

Review Form 3

Journal Name:	Journal of Scientific Research and Reports
Manuscript Number:	Ms_JSRR_127740
Title of the Manuscript:	ULTRASOUND ASSISTED HYBRID TECHNOLOGIES FOR EXTRACTION OF BIOACTIVE COMPOUNDS
Type of the Article	Review Article

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PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
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 provides a comprehensive review of ultrasound-assisted extraction (UAE) and its hybrid technologies, highlighting their potential to revolutionize the extraction of bioactive compounds from natural sources. By discussing the mechanisms, advantages, and limitations of these techniques, the article offers valuable insights for researchers and industry professionals. Furthermore, the exploration of future trends and challenges in the field paves the way for further advancements in sustainable and efficient extraction processes.	
Is the title of the article suitable? (If not please suggest an alternative title)	It accurately reflects the main topic of the article and is concise and informative.	

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<p>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.</p>	<p>The abstract is comprehensive and provides a clear overview of the paper. It effectively summarizes the key points, including the challenges of conventional extraction methods, the potential of ultrasound-assisted extraction, and the benefits of hybrid technologies. However, to further strengthen the abstract, consider adding a brief mention of the specific bioactive compounds that can be extracted using these techniques. This would provide a more concrete understanding of the practical applications of the research.</p>	
<p>Is the manuscript scientifically, correct? Please write here.</p>	<p>Based on the provided manuscript, the scientific information presented seems accurate and well-supported by existing literature. The explanations of ultrasound principles, cavitation effects, and the mechanisms of hybrid extraction techniques are generally correct. However, to provide a more definitive assessment, it would be beneficial to delve deeper into specific examples and experimental data. This would allow for a more rigorous evaluation of the claims made in the manuscript.</p> <p>Potential Areas for Further Scrutiny:</p> <ol style="list-style-type: none"> Specific Examples and Data: <ul style="list-style-type: none"> While the manuscript provides a general overview of hybrid techniques, incorporating specific case studies with detailed experimental data would strengthen the claims. Discussing the optimal conditions for each hybrid technique, including factors like temperature, pressure, solvent type, and sonication time, would enhance the practical value of the review. Limitations and Future Directions: <ul style="list-style-type: none"> Acknowledging the limitations of ultrasound-assisted techniques, such as potential degradation of heat-sensitive compounds, would provide a more balanced perspective. Discussing emerging trends and future research directions, such as the use of advanced characterization techniques to study the mechanisms of extraction, would add value to the manuscript. <p>By addressing these points, the manuscript can further solidify its scientific credibility and provide a more comprehensive understanding of ultrasound-assisted hybrid technologies for the extraction of bioactive compounds.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>The references appear to be sufficient and relatively recent. However, a more thorough evaluation would require a detailed analysis of the specific citations.</p>	
<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language quality of the article is generally good, and the English is suitable for scholarly communication. The writing is clear, concise, and well-structured. However, there are a few minor grammatical errors and awkward phrasings that could be improved. Here are some specific suggestions:</p> <ul style="list-style-type: none"> Sentence Structure: Some sentences are a bit long and complex. Breaking them into shorter, more concise sentences can improve readability. Word Choice: While the word choice is generally appropriate, there are a few instances where more precise or impactful words could be used. Clarity and Conciseness: Some paragraphs could be streamlined by removing redundant information or rephrasing sentences to be more direct. 	
<p>Optional/General comments</p>	<p>The manuscript provides a comprehensive review of ultrasound-assisted extraction and its hybrid technologies. It is well-structured and informative, with a clear focus on the benefits of these techniques for extracting bioactive compounds. However, to further enhance the quality of the manuscript, I suggest the following:</p> <ol style="list-style-type: none"> In-Depth Analysis of Specific Case Studies: Incorporating detailed case studies with experimental data would strengthen the claims and provide practical insights into the application of these techniques. Economic and Environmental Considerations: A discussion on the economic and environmental implications of these techniques, including cost-benefit analysis and sustainability assessments, would add value to the review. Future Perspectives: Exploring emerging trends and future research directions, such as the use of artificial intelligence and machine learning for optimizing extraction processes, would broaden the scope of the review. 	

PART 2:

	Reviewer's comment	Author's comment (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)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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