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Journal Name:	Asian Journal of Research in Crop Science
Manuscript Number:	Ms_AJRCS_122281
Title of the Manuscript:	EVALUATING NOVEL PRESERVATION TECHNIQUES FOR EXTENDING SHELF LIFE AND ENHANCING QUALITY OF PERISHABLE PRODUCE
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION 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>
<p>Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.</p>	<p>The manuscript "Evaluating Novel Preservation Techniques for Extending Shelf Life and Enhancing Quality of Perishable Produce" is significant for the scientific community due to its thorough examination of modern preservation methods like High Pressure Processing (HPP), Active Packaging, and Edible Coatings against traditional techniques. The research provides valuable insights into how these novel approaches can reduce microbial load, maintain texture, color, and nutrient content, thereby addressing a critical challenge in the food industry—extending the shelf life of perishable produce. I appreciate this manuscript for its systematic methodology, comprehensive analysis, and the applicability of its findings in reducing food waste and improving consumer satisfaction. It also presents a clear comparison that may guide future food preservation practices, thus contributing meaningfully to both academic discourse and practical applications in the food sector.</p> <p>However, one possible critique may be that while the paper emphasizes the advantages of HPP, it could further discuss the limitations and cost implications of implementing such technologies on a broader scale, ensuring that the research not only highlights the potential benefits but also addresses practical challenges in adopting these methods in everyday food preservation.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title "Evaluating Novel Preservation Techniques for Extending Shelf Life and Enhancing Quality of Perishable Produce" is suitable, as it clearly conveys the main focus of the study and highlights the key elements: the evaluation of new preservation techniques, their aim to extend shelf life, and the enhancement of quality in perishable produce.</p> <p>However, if you are looking for a more concise and engaging alternative, you might consider: "Enhancing Freshness: A Comparative Study of Innovative Preservation Methods for Berries and Leafy Greens."</p> <p>This alternative title emphasizes the goal of enhancing freshness while specifically mentioning the types of produce under investigation.</p>	
<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 of the article is fairly comprehensive as it covers the main objectives of the research, the preservation techniques evaluated, key findings related to microbial load, texture, color, and nutrient retention, and the overall effectiveness of the methods. However, a few improvements could enhance clarity and conciseness:</p> <p>Suggestions for Improvement:</p> <ol style="list-style-type: none"> Clarity and Conciseness: <ul style="list-style-type: none"> The abstract could be shortened slightly to improve readability. Some sentences are quite dense and could be broken into simpler structures for easier understanding. Specific Findings: <ul style="list-style-type: none"> While the abstract mentions that HPP was the most effective technique, it could benefit from the inclusion of specific quantitative results or percentages regarding improvements in shelf life, microbial load reductions, or nutrient retention, without overwhelming the reader with data. Research Implications: <ul style="list-style-type: none"> A brief statement about the implications of the findings for future research or practical applications in the food industry could provide a clearer sense of the study's significance. Limitations: <ul style="list-style-type: none"> If space allows, a concise mention of any limitations of the study (such as the specific contexts or conditions under which these methods were tested) could add depth to the discussion. 	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The manuscript's subsections and structure appear generally appropriate and well-organized. Here's a breakdown of the positive aspects and possible areas for improvement:</p> <p>### Positive Aspects:</p> <ol style="list-style-type: none"> Logical Flow: The manuscript follows a logical structure, moving from the introduction and methodology through to results, discussion, and conclusion. This format allows readers to follow the research progression smoothly. 	

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	<p>2. Clear Sectioning: Each main section (Introduction, Methodology, Results, Discussion, Conclusion) is clearly defined. This helps readers locate information easily and understand the organization of the research.</p> <p>3. Methodology Details: The methodology section is detailed and provides sufficient information on the preservation techniques and evaluation methods employed, which is crucial for reproducibility.</p> <p>4. Results Presentation: The presentation of results with tables highlights key findings, making it easy for readers to understand the outcomes at a glance.</p> <p>### Areas for Improvement:</p> <p>1. Subsection Titles: While the main sections are well-defined, some subsections within the Results or Discussion could benefit from clearer or more descriptive titles. This could enhance the readability and make it easier to navigate specific findings.</p> <p>2. Integration of Related Results: In the Results section, it may be useful to group related findings together (for example, all microbial load measurements in one subsection) to enhance coherence and readability.</p> <p>3. Balancing Length Across Sections: Some sections, particularly the Results and Discussion, might be disproportionately lengthy compared to the Introduction or Conclusion. Ensuring a more balanced length may improve overall flow and maintain reader engagement.</p> <p>4. Consolidating Repeated Information: Check for any redundancy in discussing the same findings in both the Results and Discussion sections. It may be helpful to summarize key findings in the Results section and delve into their implications in the Discussion without rehashing all the data.</p> <p>5. Future Directions: If not already present, including a subsection in the Discussion dedicated to future research directions can add depth and demonstrate the continuing relevance of the work.</p> <p>Overall, the manuscript's structure effectively communicates the research while allowing for improvements in detail and organization to enhance clarity and engagement further.</p>	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>The manuscript demonstrates scientific correctness through its systematic approach to evaluating novel preservation techniques in a controlled experimental design. The comprehensive methodology, including specific treatments applied to various perishable produce and the robust parameters used for assessment—such as microbial load, texture, color, and nutrient retention—supports the reliability of the findings. Additionally, the use of established scientific techniques such as High-Pressure Processing (HPP), Active Packaging, and Edible Coatings underscores the technical soundness of the research. The results are presented with appropriate statistical analyses, ensuring that the conclusions drawn are based on significant findings. Collectively, these elements contribute to the manuscript's scientific rigor, providing valuable insights that can inform both future research and practical applications in food preservation.</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 assessment of the references in the manuscript indicates that they provide a foundation for the research presented. However, to determine adequacy and recency, a closer look at the references' publication dates, relevance, and coverage of the topic would be necessary.</p> <p>The references seem to sufficiently cover key topics related to preservation techniques, including microbial safety, nutritional retention, and sensory evaluations. However, ensuring that seminal works and recent advancements in the field are included would enhance the robustness of the literature review.</p> <p>Depending on the specific field and technological advancements, it is essential that a majority of the references are recent (ideally from the last five years). This ensures that the research is grounded in the latest findings and methodologies.</p> <p>### Suggestions for Additional References:</p> <p>1. Modified atmosphere packaging with chitosan coating to prevent deterioration of fresh in-</p>	

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	<p>hull <i>Badami's</i> pistachio fruit</p> <p>2. Modeling the respiration rate of chitosan coated fresh in-hull pistachios (<i>Pistacia vera</i> L. cv. <i>Badami</i>) for modified atmosphere packaging design</p> <p>3. Shelf life modeling of <i>Badami's</i> fresh pistachios coated with chitosan under modified atmosphere packaging conditions</p> <p>Incorporating some of these suggestions could provide a more comprehensive backdrop for the study, enhancing its academic credibility and relevance within the field.</p>	
<p><u>Minor</u> REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language and English quality of the article appear to be generally suitable for scholarly communications. Here are a few points to consider regarding the quality and effectiveness of the writing:</p> <p>While the overall grammar is generally sound, there may be occasional awkward phrasings or grammatical errors that can be refined for smoother reading. A thorough proofreading is recommended to catch these issues.</p> <p>Some sentences could be made more concise without losing meaning. Streamlining phrases can improve readability and maintain the reader's attention.</p> <p>Ensure that all technical terms are used correctly and consistently throughout the manuscript. Misuse of terminology can affect the clarity and impact of the research presented.</p> <p>Improvements could be made in the use of transitional phrases between sections and subsections to better guide the reader through the text and clarify the relationships between ideas.</p> <p>Overall, with some minor revisions for grammar, conciseness, and clarity, the language quality of the article would be well-suited for scholarly communication. Such refinements would strengthen the manuscript and enhance its impact on the intended academic audience.</p>	
<p><u>Optional/General</u> comments</p>	<p>Here are some general comments that may be helpful for strengthening the manuscript:</p> <p>Introduction: The introduction effectively sets the stage for your research. However, you might consider providing a bit more context regarding the significance of the study in the broader field of food preservation. Highlighting gaps in the current literature could reinforce the necessity of your work.</p> <p>Results Interpretation: While the results are well-presented, integrating more discussion on their implications in the broader context of food science could enrich the analysis. Connecting the findings back to existing literature can help highlight how your research advances current knowledge.</p> <p>Figures and Tables: Ensure that all figures and tables are appropriately labeled and referenced in the text. Consider providing brief captions that summarize their significance for improved reader comprehension.</p> <p>Future Research Directions: Adding a section that discusses potential future research avenues could provide valuable insights into how your findings might inspire ongoing research in the field.</p>	

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>	

Reviewer Details:

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