

Review Form 3

Journal Name:	Asian Food Science Journal
Manuscript Number:	Ms_AFSJ_128953
Title of the Manuscript:	Extremophiles And Their Potentials In The Food Industries: A Review
Type of the Article	Review Article

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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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 underscores the significance of extremophiles in advancing the food industry, showcasing their potential to enhance food preservation, safety, and product quality through unique biochemical adaptations. By harnessing extremophilic enzymes and compounds, the research paves the way for sustainable and innovative solutions, addressing contemporary challenges in food processing. As the understanding of these microorganisms grows, their applications can significantly impact food science and technology, promising a more efficient and eco-friendly future for food production.	
Is the title of the article suitable? (If not please suggest an alternative title)	yes	
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.	The abstract is comprehensive but could benefit from improved clarity and structure by briefly outlining key themes or sections it covers. Including some of the challenges associated with the application of extremophiles, such as large-scale cultivation and process optimization, would provide a more balanced perspective. Additionally, mentioning future research directions could enhance the abstract by indicating the ongoing importance of studying extremophiles in the food industry.	
Is the manuscript scientifically, correct? Please write here.	<ol style="list-style-type: none"> 1. The abstract effectively introduces extremophiles and their significance in the food industry but could clarify the specific types discussed to better inform readers about the scope of the review. 2. Including key terms or technologies related to preservation techniques and fermentation processes would provide more context and depth to the applications mentioned. 3. Adding specific examples of food products or processes that benefit from extremophiles would strengthen the relevance and practicality of their applications in the food industry. 4. Concluding with a statement on future research directions or the importance of ongoing exploration would give a more rounded perspective on the potential of extremophiles in food science. 	
Are the references sufficient and recent? If you have suggestions of additional references, please	Please remember to incorporate recent references from 2021 to 2024 to increase the scholarly relevance and foreign money of your	

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mention them in the review form.	manuscript, as your topic is new and interesting.	
Is the language/English quality of the article suitable for scholarly communications?	Yes	
<u>Optional/General</u> comments	<ol style="list-style-type: none"> 1. Additional examples of specific extremophiles beyond <i>Rhodothermus marinus</i> would strengthen the breadth of the discussion. 2. A clearer explanation of the mechanisms through which extremophilic enzymes enhance food preservation could improve understanding. 3. More emphasis on the economic benefits of using extremophiles in food production would provide valuable context for industry stakeholders. 4. Inclusion of current challenges and limitations facing the application of extremophiles in large-scale food production would present a balanced view. 5. A summary of recent advancements in research methodologies for studying extremophiles could inform future researchers in the field. 6. Further exploration of consumer acceptance and regulatory considerations regarding products derived from extremophiles would enrich the discussion. 7. Specific case studies or success stories involving extremophiles in commercial food products would illustrate their practical applications effectively. 8. A section addressing the environmental impact and sustainability benefits of using extremophiles in food processing would add depth to the manuscript. 9. The abstract is comprehensive but could benefit from improved clarity and conciseness to enhance readability. 10. Consider including a section that reviews recent advancements in extremophile research to provide context for their applications in the food industry. 11. A clearer distinction between various types of extremophiles and their specific functions would strengthen the discussion. 12. Addressing potential regulatory concerns surrounding the use of extremophiles in food products would offer a more balanced perspective. 13. The manuscript would benefit from more detailed examples of successful applications of extremophiles in commercial food processing. 	

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

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