Review Form 3

Journal Name:	**Biotechnology Journal International**
Manuscript Number:	**Ms_BJI_121958**
Title of the Manuscript:	**Biophysical properties of thermostable Amidase produced by Aspergillus fumigatus in submerged fermentation**
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION 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. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	Comments The manuscript titled "**Biophysical properties of thermostable Amidase produced by Aspergillus fumigatus** in submerged fermentation" presents a comprehensive study on the purification and characterization of amidase from *Aspergillus fumigatus*. The research is well-structured and covers various aspects of enzyme characterization, including temperature, pH, substrate concentration, and metal ion effects. The study offers significant insights into the biochemical properties and potential industrial applications of amidase. **Strengths:** 1. **Comprehensive Characterization**: The manuscript thoroughly examines the effects of different conditions on amidase activity, including temperature, pH, substrate concentration, and metal ions. This comprehensive analysis provides a deep understanding of the enzyme's properties. 2. **Industrial Relevance**: The discussion on the potential industrial applications of the purified amidase, especially in high-temperature processes, is well-articulated. The emphasis on thermal stability and enzyme efficiency under various conditions highlights the enzyme's industrial potential. 3. **Clear Methodology**: The experimental procedures are described in detail, allowing for reproducibility. The use of standard methods for enzyme purification and characterization adds to the credibility of the findings. 4. **Figures and Data Presentation**: The inclusion of figures that illustrate the effects of various factors on amidase activity enhances the manuscript's clarity and helps the reader visualize the results effectively. **Areas for Improvement:** 1. **Introduction**: o The introduction provides a solid background on amidases but could benefit from a more focused discussion on why *Aspergillus fumigatus* was specifically chosen for this study. A brief mention of its relevance or uniqueness compared to other microorganisms could strengthen the rationale for the research. o The current introduction is a bit lengthy and could be condensed to emphasize the study's significance. 2. **Results and Discussion**: o The discussion could be more critical in comparing the findings with existing literature. While some comparisons are made, a deeper analysis of why certain results differ from previous studies would add value. o The manuscript mentions the Michaelis-Menten kinetics and compares the Km and Vmax values of crude and purified amidases. However, a more detailed discussion on the implications of these differences in an industrial context would enhance the reader's understanding of the practical applications. o The section on metal ion effects is well-detailed, but the variability in metal ion responses could be further explored. For example, discussing potential reasons for the observed differences in metal ion effects across various studies could provide more insight. 3. **Conclusion**:	

	o The conclusion effectively summarizes the study but could be strengthened by explicitly stating the potential industrial applications of the findings. Additionally, suggesting future research directions, such as enzyme engineering or exploring other microbial sources, would make the conclusion more impactful. 4. **References**: o The reference section appears thorough, but ensuring that all citations are up-to-date and relevant to the discussion points is crucial. If possible, including more recent studies in enzyme purification and characterization could improve the manuscript's relevance. **Suggestions:** • **Language and Style**: The manuscript is generally well-written, but a few sentences could be simplified for better readability. For example, the sentence in the introduction, "These amidases usually exist in two forms..." could be rephrased for clarity. • **Formatting**: Ensure that all figures are consistently labeled and that the font size is uniform throughout the manuscript. Double-check for any typographical errors or inconsistencies in the text. **Conclusion:** Overall, this manuscript presents valuable research with potential industrial implications. By addressing the areas for improvement, particularly in the discussion and conclusion sections, the manuscript could be further strengthened, making it a more impactful contribution to the field of enzyme research and biotechnology.	
Is the title of the article suitable? (If not please suggest an alternative title)		
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.		
Are subsections and structure of the manuscript appropriate?		
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.		
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.		

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Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**		
Optional/General comments		

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?	*(If yes, Kindly please write down the ethical issues here in details)*	

Reviewer Details:

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