

Review Form 3

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_122269
Title of the Manuscript:	"Effect of Biochemical parameters in Traditional varieties of rice against Sitophilus oryzae (L.) infestation"
Type of the 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: 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>
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.		
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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<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>		
<p>Optional/General comments</p>	<p>This paper examines the effects of biochemical parameters in traditional rice varieties against <i>Sitophilus oryzae</i> (L.) infestation. The study presents valuable insights, but there are several areas that need to be addressed before the paper can be accepted.</p> <p>Major points:</p> <ul style="list-style-type: none"> • Improve the clarity and detail of the methods and controls used, ensuring sufficient explanation for replication. • Present results in a more structured and clearer format to enhance readability and interpretation. • Expand the discussion to compare findings with similar studies and discuss practical implications in more depth. • Broaden the conclusion to include recommendations for future research and practical applications. <p>Minor points:</p> <p>Abstract</p> <ol style="list-style-type: none"> 1. The abstract provides a concise summary of the study but could benefit from clearer articulation of the research objectives and key findings. For instance, explicitly state the research question and the significance of the findings related to the biochemical parameters. 2. Include a discussion or conclusion in the abstract, to give readers a clearer understanding of the study's impact. 3. To improve readability, I recommend avoiding long sentences throughout the entire text. For example, the second sentence of the "Abstract" and the second sentence under the subtitle 'Sexing and Mass Multiplication' in the 'Materials and Methods' section could be revised for clarity and conciseness. Applying this approach consistently throughout the text will enhance overall comprehension. <p>Introduction</p> <ol style="list-style-type: none"> 4. Please ensure consistent spacing between words throughout the text. There are instances where there are two spaces between words and others where there is none. Consistent formatting will improve the overall readability and professionalism of the paper. 5. Please correct the typo in the sentence: 'These varieties often exhibit unique traits such as resilience to local environment conditions and resistance to certain pest and diseases.' The word 'resilience' should be corrected to 'resilience.' <p>Additionally, consider revising 'pest and diseases' to 'pests and diseases' for grammatical accuracy.</p> <ol style="list-style-type: none"> 6. The "Introduction" does a good job of explaining the importance of the study and the broader implications of rice weevil infestations. However, it could be improved by including a more detailed review of previous work on the biochemical parameters affecting insect infestation in grains. 7. Clearly state the gap in the existing research that this study aims to address. For example, explain why understanding biochemical parameters in traditional rice varieties is crucial for pest management and what you are going to do. This information should be included in the last paragraph of the "Introduction" to provide a clear rationale for the study and its significance. <p>Materials and Methods</p> <ol style="list-style-type: none"> 8. I noticed that there is a lack of explanation regarding the controls used in the experiment. The table includes entries labeled 'Resistant check' and 'Susceptible check,' but there is no accompanying description of these controls. Ensure that the criteria for selecting these checks are well justified. Please provide a detailed explanation of the controls used, including their purpose and how they were implemented in the experimental design. This information is crucial for understanding the validity and context of the results. 9. Ensure that all methods are described in sufficient detail to allow for replication. For example, please clarify the process of moisture content standardization and provide additional details on the number of replications performed. This will help ensure that the study can be accurately replicated and verified by other researchers. 	

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	<p>10. Please ensure uniformity in the use of 'per cent', 'percent', and 'percentage' throughout the text. Consistency in terminology will enhance clarity and professionalism. Choose one term and use it consistently in all instances.</p> <p>Results</p> <p>11. I find the current reporting style for seed damage in rice varieties somewhat difficult to follow. To enhance clarity, I recommend presenting the data in a more structured format. For example, consider using a table or a clear narrative to describe the results. For instance, in section 3.3 "Seed damage (per cent)", you could group your data as follows:</p> <ul style="list-style-type: none">• Lowest seed damage: Kabirajsal (1.3%)• Moderate seed damage: MTU 1010 (3.3%), Rajamudi (3.7%), Kavuni (4.3%), Rajbhog (4.7%), Bahurupi (6.0%), BPT 5204 (7.0%), Ambemohar (7.7%)• Highest seed damage: Navara (11.0%), Kalabati (9.3%), Manipuriblack (7.7%), Chittimuthyalu (8.0%) <p>12. The phrase "which was on par with" is used multiple times in Sections 3-1 to 3-5 of the Results, but it is not clearly defined. To enhance clarity and ensure consistency, please specify the statistical method used to determine that some varieties are "on par" with each other. It would be helpful to define what constitutes "on par with" in terms of statistical significance. For example, does this indicate that differences are not statistically significant at a particular level (e.g., $p > 0.05$)? Providing this information will improve the reader's understanding of the comparisons and the statistical validity of the results.</p> <p>13. Ensure that all figures and tables are clearly labeled and that the data they present are easy to interpret. It may be useful to provide some explanation of the significance of key results directly in the text rather than relying solely on tables.</p> <p>14. It appears that the author forgot to italicize the scientific name '<i>S. oryzae</i>' in the text. Please ensure that all scientific names are italicized consistently throughout the paper.</p> <p>Discussion</p> <p>15. The "Discussion" effectively interprets the results but could benefit from a more detailed comparison with findings from similar studies. This would provide a more comprehensive understanding of the significance of the study's findings.</p> <p>16. Discuss the practical implications of the findings more extensively. For example, how can these results be applied in pest management strategies for traditional rice varieties?</p> <p>17. The paper demonstrates a clear correlation between higher ash content and reduced pest infestation, which is a valuable finding. It would be beneficial to discuss the mechanism through which ash content affects pest resistance. Or the study shows that high nitrogen and protein levels are associated with increased pest damage. It would be useful to explore if these components directly contribute to pest attraction or if other factors are involved.</p> <p>Conclusion</p> <p>18. The "Conclusion" summarizes the findings well but could be expanded to include recommendations for future research. Suggest specific areas where further studies could build on the current research.</p> <p>19. Highlight how the findings could influence agricultural practices or pest management strategies.</p> <p>20. Consider providing more detailed recommendations for improving traditional storage practices based on the study's findings.</p> <p>21. Suggest extending the research to include other pest species or environmental conditions to validate the findings.</p> <p>22. Recommend exploring the biochemical mechanisms through which ash content and protein levels affect pest resistance.</p> <p>References</p> <p>23. Ensure that all references are cited correctly and consistently. Check that all references listed are cited in the text and vice versa.</p> <p>To ensure accuracy and consistency in citation formatting, I recommend using citation management software such as Mendeley, EndNote,... These tools can help maintain uniform citation styles throughout the paper and ensure that all references are properly listed and cited.</p> <p>24. Confirm that all references are relevant and up-to-date. Consider including more recent studies to strengthen the background and context of the research.</p> <p>General Comments</p>	
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	25. Ensure that the paper is written in clear, concise language. Check for any grammatical errors or awkward phrasing that could hinder understanding. 26. Please maintain consistency in the use of terminology and units (e.g., 'g' vs. 'grams,' 'h' vs. 'hours') throughout the paper. For instance, standardize the reporting of percentages and other measurements to ensure uniformity. This will enhance clarity and professionalism in the text.	
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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>	No

Reviewer Details:

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