

Review Form 3

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Ms_IJPSS_120632
Title of the Manuscript:	A Review on: Elevated Nighttime Temperature Impacts on Rice
Type of the Article	Review 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>
Please write few sentences regarding the importance this manuscript for scientific community. Why do you like (or dislike) this manuscript? Minimum 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 addition (or deletion) of some points in this section? Please write your suggestions here.		
Are subsections and structure of the manuscript appropriate?		
Please write few sentences regarding the scientific correctness of this manuscript. Why do think that this manuscript is scientifically robust and technically sound? Minimum 3-4 sentences may be required for this part.		
Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. =		

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<p>Minor REVISION comments</p> <p>Is language/English quality of the article suitable for scholarly communications?</p>		
<p><u>Optional/General</u> comments</p>	<p>Abstract</p> <p>The abstract effectively summarizes the key findings and implications of the review. It highlights the critical issues associated with high nighttime temperatures (HNT) on rice, such as reduced grain yield and quality, structural abnormalities in starch granules, and altered cooking properties. It also emphasizes the importance of considering these factors in rice breeding efforts to ensure sustainable production. This sets a clear and concise foundation for the detailed review that follows.</p> <p>Introduction</p> <p>The introduction provides a comprehensive background on the significance of rice as a staple food and the impact of climate change on rice production. The mention of specific studies and their findings adds credibility and context. However, it could benefit from a more structured outline of the article's key sections to guide the reader through the review's main points.</p> <p>Impact of HNT on Rice Grain Yield</p> <p>This section thoroughly details how HNT affects various aspects of rice grain yield, referencing multiple studies to support its claims. The inclusion of Table 1 is particularly helpful for summarizing the findings from different research projects. However, the text could be improved by highlighting the most critical findings more succinctly to avoid overwhelming the reader with too much detail.</p> <p>HNT-Induced Rice Chalkiness</p> <p>The discussion on rice chalkiness under HNT conditions is well-explained, with a clear description of the structural differences in starch granules and their implications for rice quality. The use of specific examples and data enhances the understanding of how HNT leads to increased chalkiness. Adding visual aids, such as diagrams or images of chalky vs. non-chalky rice grains, could further enhance this section.</p> <p>Impact of HNT on Starch Granular and Physiochemical Properties</p> <p>This section effectively explains the biochemical and physiological changes in rice starch due to HNT. It clearly outlines the differences in starch granule morphology and the resulting impact on rice quality. However, the section could benefit from a more detailed explanation of the underlying mechanisms driving these changes, potentially with a simplified diagram for clarity.</p> <p>Altered Cooking Properties Due to HNT</p>	

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	<p>The explanation of how HNT affects the cooking properties of rice is comprehensive and well- supported by research findings. The discussion on changes in amylose and amylopectin content and their impact on cooking quality is particularly insightful. To improve readability, the section could be broken down into smaller, more focused subsections.</p> <p>HNT Impact on Gene Expression</p> <p>This section provides an in-depth analysis of how HNT affects gene expression related to starch biosynthesis in rice. The detailed explanation of specific genes and their roles adds depth to the review. However, for readers less familiar with genetic terminology, a simplified overview or a glossary of key terms could be helpful.</p> <p>Conclusion</p> <p>The conclusion effectively summarizes the review's key points, emphasizing the significant impact of HNT on rice yield, quality, and genetic expression. It reiterates the importance of considering these factors in future rice breeding programs to mitigate the effects of climate change. Including specific recommendations or strategies for breeders could provide a more actionable takeaway for readers.</p> <p>References</p> <p>The references are extensive and well-chosen, providing a solid foundation for the review. Ensuring that all references are cited correctly and consistently throughout the text will enhance the article's professionalism and reliability.</p> <p>Overall Assessment</p> <p>This review article provides a comprehensive and detailed analysis of the impact of elevated nighttime temperatures on rice. It is well-structured and thoroughly supported by research findings. However, to enhance readability and accessibility, consider simplifying complex sections, adding visual aids, and providing clearer summaries of key points. This will make the review more engaging and useful for a broader audience, including researchers, breeders, and agricultural professionals.</p>	
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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>	

Reviewer Details:

Name:	Mayur A Dongre
Department, University & Country	Shri Shivaji Vidya Prasarak Sanstha's Late Karmaveer Dr. P. R. Ghogrey Science College, India