

Review Form 3

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_126608
Title of the Manuscript:	Physiological responses of Vegetables in changing climate
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>
<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>This manuscript provides a critical assessment of the impact of climate change on vegetable production, focusing on temperature stress, pest and disease dynamics, and overall crop resilience. It is highly relevant to the scientific community as it addresses a pressing global concern that affects food security, particularly in regions vulnerable to extreme weather patterns. The thorough review of physiological impacts, along with the emphasis on the need for resilient crop breeding, adds substantial value to existing literature. I appreciate the manuscript's comprehensive approach to connecting physiological, ecological, and agronomic perspectives, though a more detailed discussion on practical adaptation strategies could enhance its application.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title of the article could be more specific to better reflect its comprehensive analysis of the effects of climate change on vegetable production, particularly concerning temperature, pest dynamics, and crop physiology. Here are a few alternative title suggestions:</p> <p>"Impacts of Climate Change on Vegetable Production: Temperature Stress, Pest Dynamics, and Crop Resilience"</p> <p>"Challenges and Adaptation Strategies for Vegetable Crops Under Climate-Induced Temperature Stress and Pest Pressures"</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 provides a general overview of the manuscript's focus on climate change impacts on vegetable production, but it could benefit from additional clarity and detail. Here are a few suggestions to improve its comprehensiveness:</p> <ol style="list-style-type: none"> Highlight Key Factors in Climate Change: While temperature stress is mentioned, including a brief mention of other climate factors like CO₂ enrichment, precipitation changes, and extreme weather events would give a fuller picture of the topics covered. Specify Major Findings or Impacts: Mentioning specific physiological impacts (e.g., effects on photosynthesis, water-use efficiency, and nutrient content) would help readers grasp the main findings at a glance. Inclusion of Adaptation and Mitigation Strategies: If the manuscript discusses adaptive strategies, including a brief mention in the abstract would enhance its relevance to researchers and practitioners. Summarize the Conclusion Briefly: The abstract would benefit from a concise conclusion statement, underscoring the urgency for developing climate-resilient vegetable crop varieties and practices. <p>Adding these points would make the abstract more informative and give readers a clear summary of the manuscript's scope, findings, and implications.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The manuscript's structure is suitable, with subsections on CO₂ effects, temperature stress, and pest dynamics, offering clear organization. To improve readability, consider adding specific subheadings (e.g., "CO₂ Enrichment Effects" and "Temperature Stress") and introducing a section on adaptation strategies. Arranging sections from physiological impacts to practical implications would enhance flow and coherence, guiding readers through complex topics more effectively.</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>This manuscript demonstrates scientific robustness by thoroughly referencing recent studies on the impact of climate change on vegetable crops. The authors provide well-documented evidence on physiological changes in plants due to elevated CO₂ levels and high-temperature stress, as well as detailed insights into pest and disease dynamics under changing climate conditions. The use of established sources and scientific principles supports the accuracy of their claims, and the integration of empirical data adds technical soundness. Overall, the manuscript aligns well with current research,</p>	

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	making it a reliable and valuable contribution to understanding climate change impacts on agriculture.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =	The references in this manuscript are largely sufficient and include a mix of foundational and recent studies, effectively supporting the discussions on climate change impacts on vegetable crops. Many references are within the last two decades, with several from the past 10 years, which keeps the content relevant. However, adding a few more recent studies (from 2020 onward) on climate change effects on pest dynamics and crop physiology could further enhance the manuscript's currency. Examples could include recent research on extreme weather impacts on crop yields or advances in plant stress physiology under climate change.	
<u>Minor REVISION</u> comments Is the language/English quality of the article suitable for scholarly communications?	The language quality of the article is generally suitable for scholarly communication, with clear articulation of ideas and accurate terminology relevant to plant physiology and climate science. However, there are minor grammatical issues and occasional awkward phrasing that could benefit from careful proofreading or editing to improve readability and flow. Refining sentence structure in some sections would enhance clarity and make the manuscript more accessible to a wider scientific audience.	
<u>Optional/General</u> comments	The manuscript provides a valuable overview of climate change's impact on vegetable crops, detailing how factors like elevated CO ₂ , high temperatures, and changing precipitation patterns affect growth, yield, and pest dynamics. This review brings together a wide array of studies, making it a useful resource for researchers, agronomists, and policymakers focused on climate resilience in agriculture. I suggest adding more recent references, particularly in sections discussing pest and disease dynamics, as these aspects are evolving with climate change. Additionally, consider a brief section on potential adaptation strategies, such as breeding resilient varieties, which would add practical relevance for stakeholders. Overall, this is a well-researched and informative manuscript with broad relevance to agricultural and environmental sciences.	

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>	

Reviewer Details:

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