

Review Form 3

Journal Name:	Journal of Scientific Research and Reports
Manuscript Number:	Ms_JSRR_128956
Title of the Manuscript:	Role of Plant Growth Regulators in Improving Vegetable Crop Productivity: 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 provides a comprehensive review of plant growth regulators (PGRs) and their significant role in enhancing vegetable crop productivity, stress resilience, and overall growth. By addressing the key physiological mechanisms influenced by PGRs, such as growth modulation, stress tolerance, and nutrient uptake, it offers valuable insights for researchers aiming to optimize vegetable production under challenging environmental conditions. The discussion of future research directions, including the integration of omics technologies and the development of climate-resilient crops, emphasizes the potential of PGRs in sustainable agricultural practices. This work contributes to the scientific community by advancing our understanding of PGR applications and identifying opportunities for further exploration to improve global food security.	
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.	<p>The abstract of your article is generally comprehensive, covering key aspects such as the importance of vegetable crops, the role of plant growth regulators (PGRs), and the physiological mechanisms influenced by these regulators. However, I have a few suggestions that could enhance the clarity and depth of the abstract:</p> <p>Suggestions for Improvement:</p> <ol style="list-style-type: none"> Inclusion of Specific Examples or Applications: <ul style="list-style-type: none"> The abstract mentions the role of PGRs in stress resilience and growth modulation but could be more impactful if it briefly highlighted specific examples or applications. For instance, you could mention how PGRs like abscisic acid are used to enhance drought tolerance or how jasmonates help with pest resistance. This would give the reader a clearer idea of the practical implications of the review. Clarifying the Scope: <ul style="list-style-type: none"> While you mention various categories of PGRs, specifying if the review covers both natural and synthetic PGRs could broaden the scope. If applicable, briefly indicating whether the review emphasizes certain PGRs over others based on their current relevance or recent advancements could make the abstract even more informative. Concise Future Research Directions: <ul style="list-style-type: none"> The abstract touches on the need for future research but does so in a general sense. Adding more specificity, such as "the role of integrated molecular approaches to enhance PGR efficacy" or "the need for field-based studies on PGR applications," could provide a clearer vision for future studies. Rephrasing for Flow: 	

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	<ul style="list-style-type: none"> ○ The sentence "This review discusses the major categories of PGRs, including auxins, gibberellins, cytokinins, ethylene, abscisic acid, brassinosteroids, jasmonates, and salicylic acid" could be reworded for better flow and conciseness. Consider a version like: "This review examines key PGR categories such as auxins, gibberellins, cytokinins, and others (ethylene, abscisic acid, brassinosteroids, jasmonates, and salicylic acid)." 	
Is the manuscript scientifically, correct? Please write here.	The manuscript appears to be scientifically correct. It accurately identifies key plant growth regulators (PGRs), such as auxins, gibberellins, cytokinins, and others, and their roles in regulating plant growth, stress resilience, and nutrient uptake. These aspects are well-established in the scientific literature, and the mention of PGRs enhancing stress tolerance and promoting growth is scientifically sound. The discussion on future research directions, such as integrating molecular approaches and developing climate-resilient crops, is timely and relevant to current trends in agricultural research. However, for increased scientific rigor, the manuscript could benefit from clarifying the distinction between natural and synthetic PGRs, providing molecular-level insights into how PGRs influence physiological processes, and addressing any potential limitations or drawbacks in their application. Overall, the manuscript seems scientifically accurate, provided that it includes up-to-date references, experimental data, and a comprehensive exploration of the molecular mechanisms involved.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Yes	
Is the language/English quality of the article suitable for scholarly communications?	Yes	
<u>Optional/General</u> comments		

PART 2:

	<u>Reviewer's comment</u>	<u>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)</u>
<u>Are there ethical issues in this manuscript?</u>	<u>(If yes, Kindly please write down the ethical issues here in details)</u>	

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