

Review Form 3

Journal Name:	Archives of Current Research International
Manuscript Number:	Ms_ACRI_126062
Title of the Manuscript:	Optimizing Hydroponics and Aeroponics Farming: A Comprehensive Review of AI and IoT Integration for Enhanced Efficiency and Sustainability
Type of the Article	Review 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.	This manuscript offers essential insights into the combination of Artificial Intelligence (AI) and the Internet of Things (IoT) within hydroponics and aeroponics farming methodologies. It tackles a relevant issue in sustainable agriculture, which is becoming increasingly vital as the worldwide need for efficient food production methods escalates. The review delivers a thorough overview of cutting-edge technological applications, highlighting prospective advantages such as improved resource efficiency and optimization of crop yields. Nevertheless, the manuscript could benefit from a more comprehensive examination of scalability and accessibility, which would enhance the applicability of its findings to diverse agricultural settings globally.	
Is the title of the article suitable? (If not please suggest an alternative title)	The existing title, "Optimizing Hydroponics and Aeroponics Farming: A Comprehensive Review of AI and IoT Integration for Enhanced Efficiency and Sustainability," accurately reflects the manuscript's subject matter. However, "AI and IoT Integration in Hydroponics and Aeroponics: A Path to Sustainable and Efficient Farming" could be an alternative.	
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.	The abstract effectively underscores the main aims and conclusions of the work. Still, it lacks specific quantitative information, particularly regarding the efficiency improvements or environmental advantages of the technologies discussed. Incorporating brief quantitative figures would enhance the abstract's clarity and impact. Additionally, addressing potential uses in varied environmental scenarios could widen the study's relevance and appeal.	
Are subsections and structure of the manuscript appropriate?	The manuscript is well-structured, featuring clear subsections that facilitate comprehension. The organization of sections ensures a logical progression from background context to applications of AI and IoT. However, the introductory segment could benefit from more fluid transitions between concepts to increase readability and coherence.	
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.	The manuscript is technically accurate, providing a well-grounded overview of AI and IoT applications in agriculture. The methodology is thorough, and the discussion encompasses recent technological advancements. However, acknowledging potential limitations—such as financial constraints, necessary technical expertise, and environmental variability—would offer a more balanced perspective on the suggested solutions, thereby increasing the scientific rigor of the work.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =	The references are pertinent and effectively support the study. Nevertheless, including a few recent publications from the past two years, especially those addressing AI-driven agriculture and IoT-enabled crop monitoring breakthroughs, would strengthen the study's position within a contemporary scientific dialogue.	
Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The manuscript's language generally meets academic standards. However, minor adjustments could improve clarity and eliminate redundancies, such as rewording "AI algorithms analyze data in real-time" instead of "AI algorithms analyze the data very quickly in real-time." A comprehensive language review would ensure consistency and precision.	
Optional/General comments	The figures and tables would benefit from more distinct labels and units where necessary, aiding interpretation. Clarifying all visual data presentation would enhance the manuscript's utility for a wider audience.	

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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)	

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