

Review Form 3

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_129595
Title of the Manuscript:	Development of a Robotic Weed Control System for Greenhouse
Type of the Article	

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 holds significant importance for the scientific community as it presents an innovative solution for sustainable and efficient weed control in cucumber greenhouses. Robotic weed management is a relatively unexplored area, particularly in controlled environments like greenhouses, where precision and crop protection are crucial. The design and experimental validation of the proposed robot, along with detailed parameter optimization (arm motor speed, blade rotation speed, and blade design), provide valuable insights for researchers and practitioners. This study not only advances the field of agricultural robotics but also contributes to reducing labour costs and chemical herbicide usage, thereby promoting eco-friendly farming practices.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title "Development of a Robotic Weed Control System for Greenhouse" is clear and informative but could be slightly improved to enhance precision and readability. Here is a suggestion: "Design, Development and Optimization of a Robotic Weed Control System for Greenhouses"	
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.	Clarify the objective: The abstract begins with a clear description of the robot's purpose but could benefit from explicitly stating the main goal of the study—developing and optimizing a robotic weed control system for greenhouses. Summarize key findings: The abstract mentions the results briefly, but it could highlight specific findings, such as which blade design performed best under what conditions. Refine the experimental description: The abstract includes detailed information about the experimental setup (motor speeds, blade types, etc.), which is good, but it can be condensed slightly to make room for a stronger emphasis on the results and implications. Add significance of the study: Including a brief sentence on the broader impact of the study (e.g., reducing labor costs and herbicide use) would enhance the conclusion. Keywords: Add some more keywords and replace repeated keywords	
Is the manuscript scientifically, correct? Please write here.	The manuscript appears scientifically correct and novel.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The most references are relatively old, with many dating from the 1990s to early 2000s. Since robotic systems and machine vision technologies have advanced significantly in recent years, incorporating more recent studies would strengthen the manuscript. Ensure consistent formatting across all references, particularly with author initials and publication details (e.g., spacing and punctuation).	

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Is the language/English quality of the article suitable for scholarly communications?	The language quality of the article is understandable, but it requires improvement in terms of grammar, punctuation, spacing, and word choice to meet the standards of scholarly communication. The manuscript's language quality needs moderate revision to improve clarity, grammar, punctuation, and flow. I suggest rewriting key sentences for better scholarly tone and coherence.	
<u>Optional/General</u> comments	The manuscript needs to be streamlined by removing redundant information and improving the organization with clearer sections and subheadings. Language and grammar improvements are required for clarity and conciseness, and more structured reporting of results with statistical support would enhance the interpretation. Additionally, simplifying the recommendations for farmer adoption and ensuring consistent formatting will improve the overall quality.	

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>	

Reviewer Details:

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