

Review Form 3

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_126552
Title of the Manuscript:	Effect of herbicidal weed management on crop growth, weed density, weed biomass, yield and economics of direct seeded rice (<i>Oryza sativa</i> L.): A review
Type of the 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 holds considerable importance for the scientific community as it offers an extensive review of herbicidal weed management in direct-seeded rice, a method that is increasingly favored for its efficient use of resources such as water, labor, and time. It examines the effects of various herbicides on weed density, biomass, crop growth, and yield, which are vital for refining weed control strategies aimed at boosting agricultural sustainability and enhancing farmers' economic returns. By emphasizing the effectiveness of herbicides and their economic implications, the manuscript highlights the critical role of effective weed management in improving rice productivity, a key staple crop. The study's findings on the interplay between economic advantages and environmental sustainability are especially beneficial for directing future research and establishing best practices.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title, "Effect of herbicidal weed management on crop growth, weed density, weed biomass, yield and economics of direct-seeded rice (<i>Oryza sativa</i> L.): A review," is mostly suitable, as it clearly conveys the study's focus on the impact of herbicidal weed control in direct-seeded rice. However, it could be slightly streamlined for clarity. Here's an alternative suggestion:</p> <p>"Herbicidal Weed Management in Direct-Seeded Rice (<i>Oryza sativa</i> L.): Impacts on Crop Growth, Weed Dynamics, Yield, and Economic Viability"</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 is generally thorough, addressing key elements such as the effects of herbicidal weed management on weed density, biomass, crop growth, yield, and economic factors in direct-seeded rice. However, it could be improved with a few modifications for better clarity and conciseness:</p> <p>Inclusion of Specific Metrics and Comparative Data: Adding precise metrics or comparative findings, such as percentage decreases in weed density or yield increases, would offer readers a clearer understanding of the impact.</p> <p>Expanded Discussion on Environmental and Sustainability Issues: Given that sustainability is a significant theme, a brief discussion on the environmental consequences of herbicide application or the importance of sustainable practices would enrich the abstract.</p> <p>Reference to Research Gaps or Future Research Directions: A concise mention of existing knowledge gaps or particular areas for future investigation would enhance the abstract's forward-looking perspective.</p> <p>Incorporating these elements would improve the abstract's informativeness and more effectively showcase the study's contributions.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Yes, the manuscript's structure and subsections are appropriate and well-organized. The use of subsections covering topics such as the impact of herbicides on weed density and biomass, crop growth, yield, and economic aspects provides a logical flow that guides readers through each aspect of herbicidal weed management in direct-seeded rice. Additionally, sections on specific weed management practices, critical periods of weed competition, and economic analysis enhance clarity and allow readers to locate relevant information easily.</p> <p>One possible improvement could be the addition of a dedicated "Future Directions" or "Research Gaps" subsection at the end. This would offer a focused space for discussing unresolved challenges or areas that need further investigation, which could provide valuable insights for researchers interested in advancing this field.</p>	

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<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 appears scientifically robust and technically sound, as it draws upon a wide range of studies and references to provide a comprehensive overview of herbicidal weed management in direct-seeded rice. It uses specific data points, such as weed density, biomass, yield metrics, and economic outcomes, which add credibility and specificity to its conclusions. By incorporating findings from both field experiments and economic analyses, the review balances practical field insights with financial considerations, reinforcing its relevance for both researchers and practitioners. The manuscript also emphasizes methodological consistency by comparing the effects of various herbicides and weed control practices across different studies, lending scientific rigor to its evaluations and recommendations.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =</p>	<p>The manuscript presents a considerable array of references, encompassing both seminal works and contemporary research. While the references are largely sufficient, there is an opportunity to place greater emphasis on the most recent findings, especially those published within the last five years, to ensure that the review accurately represents the latest developments in herbicidal technology and sustainable practices in direct-seeded rice.</p> <p>Suggested additional references may include:</p> <p>Recent investigations into the environmental consequences of herbicide use, which would address sustainability issues. Research examining the evolving patterns of weed resistance to commonly employed herbicides in direct-seeded rice systems. Studies focused on integrated weed management (IWM) strategies that merge herbicidal and non-chemical techniques, thereby enriching the manuscript's discourse on sustainable agricultural practices. Incorporating these references would enhance the manuscript's scientific rigor and its relevance to contemporary agricultural challenges.</p>	
<p><u>Minor REVISION</u> comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language quality of the article is generally suitable for scholarly communication. It is clear, uses appropriate technical terminology, and conveys the main points effectively.</p>	
<p><u>Optional/General</u> comments</p>		

PART 2:

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

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