

Review Form 3

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_124242
Title of the Manuscript:	To evaluate the effect of seed priming treatments on yield and quality of wheat seed (<i>Triticum aestivum</i> L.) under rainfed conditions.
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>
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.	Seed priming treatments improve the rate and uniformity of seed germination. By activating metabolic processes within the seed, they help reduce the germination period and improve seedling establishment, especially in stress conditions like rainfed environments where water availability is erratic.	
Is the title of the article suitable? (If not please suggest an alternative title)	Evaluating the Efficacy of different Seed Priming on Wheat Yield and Seed Quality in Rainfed Systems	
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>Although results are backed up by references to prior studies, the discussion lacks depth. The comparisons to previous research (e.g., Avinash Karjule et al., 2019, and Gayatri et al., 2022) are mentioned but not elaborated upon. More emphasis on the physiological mechanisms behind how GA3 and other treatments improve productivity would add valuable insight. There's little exploration of the biological mechanisms behind seed priming. Why do GA3, IAA, and other treatments affect tillering, spike length, and grain yield? A more in-depth discussion of the physiological processes could improve the depth of the paper, rather than just reporting numbers.</p> <p>The conclusion should be strengthened. The study indicates that GA3 priming (50ppm) for 12 hours is superior in improving yield and quality traits in wheat. However, a broader discussion of the potential applications, limitations, and future research directions is missing. For example, the authors could discuss whether these findings are applicable to other wheat varieties or crops and what further research is needed to optimize these priming treatments under various environmental conditions.</p>	
Are subsections and structure of the manuscript appropriate?	Separating the Discussion from the Results section is an excellent approach to enhance clarity and comprehension of the research findings. This will help readers differentiate between the observed data (results) and the interpretation or implication of those findings (discussion). Below is a possible structure:	
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>While the experimental design is robust (using RBD with three replications), more detail on the rationale behind choosing specific durations (12 vs. 24 hours) and concentrations (50ppm GA3 and IAA) would enhance the reader's understanding. Why were these parameters chosen, and were they based on previous studies?</p> <p>Clarification is required on the methodology of protein estimation.</p>	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	Need more reference in discussion part to establish the result perfectly.	

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Minor REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?		
Optional/General comments	The introduction needs stronger ties between the research objectives and the challenges faced in rainfed agriculture. A more detailed discussion of the physiological basis of seed priming is needed. More recent and relevant references would add value to the literature review. Simplification of the data presentation and a clearer narrative in the discussion could enhance readability. The conclusion should discuss broader implications and future research opportunities.	

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>	

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