

**Review Form 3**

Journal Name:	<a href="#">Journal of Experimental Agriculture International</a>
Manuscript Number:	Ms_JEAI_124313
Title of the Manuscript:	<b>Standardization of hormone-based seed coating formulation for coriander Dosage and Formulation optimization</b>
Type of the Article	<b>Original Research Article</b>

**Review Form 3**

**PART 1: Review Comments**

<b>Compulsory</b> 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><b>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.</b></p>	<p>I appreciate the manuscript's clear focus on practical applications for sustainable agriculture and its detailed analysis of seedling growth parameters. However, while the experimental results are strong, I would suggest incorporating more recent literature to further strengthen its contribution to the current body of knowledge.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>YES</p>	
<p><b>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.</b></p>	<p>The sentence "To standardize the dosage of hormone-based seed coating formulation for enhanced germination and seedling growth of coriander seeds" could be rephrased for clarity. For example: "This study aimed to standardize the dosage of hormone-based seed coating formulations to enhance germination and seedling growth in coriander seeds."</p> <ul style="list-style-type: none"> <li>• "Place and Duration of Study" should specify the time period of the study.</li> <li>• The phrase "different concentration of Hormone based seed coating polymer" should be "different concentrations of hormone-based seed coating polymer."</li> <li>• "roll towel method" should be clarified; it's more appropriate to use "rolled towel method," as this is a standard technique in seed germination studies.</li> <li>• The usage of "polymer" in the context of seed coatings may confuse readers, especially if the hormone is not actually polymer-based. It would help to specify what type of polymer was used if applicable.</li> <li>• The description of the methodology is too vague. What hormones were used in the coating formulation? It would also be better to state that the study was carried out in a lab setting or field trials if applicable.</li> <li>• No mention of controls. What was the untreated seed or control condition?</li> <li>• There is no mention of statistical tests, despite the claim of "significantly higher" results. The abstract should indicate the statistical methods used (e.g., ANOVA, t-tests) and their corresponding p-values.</li> <li>• Data presentation is incomplete. There's no mention of the range, standard deviation, or error margin for these results. It is important to state the variability in the findings.</li> <li>• The conclusion should be more specific in describing the practical application of the findings. What is the recommended dosage for future applications, and how do these results compare to other studies?</li> <li>• "10g polymer/kg of seed" should be spaced as "10 g polymer/kg of seed."</li> <li>• "ml" should be capitalized as "mL."</li> </ul>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p><b>Introduction</b></p> <ul style="list-style-type: none"> <li>• "Its leaves were used for culinary purpose" should be: "Its leaves are used for culinary purposes." (Change tense to present and correct singular/plural form).</li> <li>• "seed is used as scented fruit, and flavoring agent" is awkwardly phrased. A clearer version would be: "Its seeds are used as aromatic fruits and flavouring agents."</li> <li>• More details on why hormone-based seed coatings are particularly promising or useful would enhance the reader's understanding of the study's motivation.</li> <li>• The statement "The exact dosage required will be depends on the product applied, targeted seed and application method" is grammatically incorrect. It should be "The exact dosage required depends on the product applied, the targeted seed, and the application method."</li> </ul> <p><b>Materials and Methods</b></p> <p>Shoot length (cm): The description incorrectly states, "Root lengths were measured from tip of the primary leaf to the collar region." This should be "Shoot lengths were measured from the tip of the</p>	

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	primary leaf to the collar region."  <b>Results and Discussion</b> "10g polymer/kg of seed" should be consistently spaced as "10 g polymer/kg of seed" throughout the text (with a space between the number and unit). Similarly, "290ml" should be "290 mL" (with a space and correct capitalization for milliliters).	
<b>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.</b>	The study follows standard methodologies for germination testing, including clear measurement of key parameters like root length, shoot length, dry matter production, and vigor indices, making the results reproducible. Additionally, the statistical analysis shows significant differences among treatments, indicating that the findings are not random but rather the result of specific treatments. The manuscript also builds on prior research, making it grounded in established scientific principles.	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	A more comprehensive review of recent advancements in hormone-based seed treatments and their physiological effects would add depth. For example: Hossain, M.A. et al. (2020). "Recent advancements in seed priming technologies and their use in cereal crops." <i>Frontiers in Plant Science</i> , 11:1156. <a href="https://doi.org/10.3389/fpls.2020.01156">https://doi.org/10.3389/fpls.2020.01156</a> .	
Minor REVISION comments		
<b>Is the language/English quality of the article suitable for scholarly communications?</b>	YES	
Optional/General comments		

**PART 2:**

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

**Reviewer Details:**

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