

Review Form 3

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Ms_IJPSS_125594
Title of the Manuscript:	Germination and Seedling Performance of Watermelon as affected by Seed Priming
Type of the Article	Original Research Article

General guidelines for the Peer Review process:

This journal’s peer review policy states that **NO** manuscript should be rejected only on the basis of ‘**lack of Novelty**’, provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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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.	The subject of this manuscript is quite interesting. It reveals how seed priming with different reagents can enhance seed germinability parameters such as seed germination percentage and seed germination index. Furthermore, it indicates how seed priming can promote dry matter which important for phenological studies. SEE ATTACHMENT	Thank you.
Is the title of the article suitable? (If not please suggest an alternative title)	Yes, the title of the manuscript is suitable.	Thank you.
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.	Basically the abstract should contain problem statement, introduction of the study, results, and conclusion. Please revise your abstract accordingly.	Revised accordingly.
Are subsections and structure of the manuscript appropriate?	Yes, the sub-sections are appropriate.	Thank you.
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's subject is very interesting as it indicates the benefits of seed priming on how to improve watermelon's germinability and growth, but this manuscript needs to be improve significantly. You need to improve introduction, materials and methods, and results and discussion.	Revised accordingly.
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references which used are good but more related references are need to be cited and used in discussion to compare the results of the current study.	Revised accordingly.
Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The written language of this article should be improved.	Revised accordingly.
Optional/General comments	<ol style="list-style-type: none">1. Please add keywords such as seed priming and seed germination2. In the introduction, please focus more on seed priming and review more related articles.3. At the end of introduction, please write the importance of this study.4. In the materials and methods, you need to explain different things here:<ol style="list-style-type: none">a. The concentration of priming treatments.b. How did you prepare the priming solutions?c. For PEG (Polyethylene Glycol), did you use PEG6000 or PEG8000?d. How did you calculate the concentration?e. How did you decide the duration of seed priming, I think 12 hours is not enough for priming the watermelon seeds. Could you provide some references showing that 12 hours is efficient. I think the minimum should be 24 to 48 hours.5. In the results and discussion, you need to discuss your results with several other reports in the discussion part.6. In figure 1, please add the significance using Tukey's on the bars.7. For unprimed treatment, you can use the word 'control' instead of unprimed and explain it in the materials and methods.	Revised accordingly. Reference of 12 hours seed priming in watermelon: Acharya P, Jayaprakasha GK, Crosby KM, Jifon JL, Patil BS. Nanoparticle-mediated seed priming improves germination, growth, yield, and quality of watermelons (<i>Citrullus lanatus</i>) at multi-locations in Texas. Scientific Reports. 2020; 10:5037; https://doi.org/10.1038/s41598-020-61696-7 .

PART 2:

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