

Review Form 1.7

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_116790
Title of the Manuscript:	Effect of light and GA3 on germination of Purple Passion Fruit (<i>Passiflora edulis</i> Sims) seeds
Type of the Article	

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PART 1: Review Comments

	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)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript)</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title)</p> <p>3. Is the abstract of the article comprehensive?</p> <p>4. Are subsections and structure of the manuscript appropriate?</p> <p>5. Do you think the manuscript is scientifically correct?</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p> <p>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p>	<p>1. The manuscript describes a study of great relevance to the scientific community, particularly for professionals and academics in agronomy and plant biology. The work is also extremely relevant for agricultural producers, as it offers valuable insights into how to obtain seedlings in a shorter period and with standardized planting techniques, which can mean a considerable improvement in the efficiency and productivity of agricultural practices.</p> <p>2. The title is relevant, guiding the reader on the topic of the article.</p> <p>3. Yes, it is understandable and sufficient.</p> <p>4. Answer in optional/general comments.</p> <p>5. Answer in optional/general comments.</p> <p>6. Answer in optional/general comments</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>1. Yes, the language is adequate.</p>	
<p>Optional/General comments</p>	<p>INTRODUCTION</p> <p>1. There was no discussion about the importance of culture. 2. You should consult more recent authors who discuss the topic with greater precision and up-to-date information.</p> <p>MATERIALS AND METHODS</p> <p>Description of Seed Treatment: Although it mentions the pre-treatment of seeds with GA3, the manuscript could detail more about how the treatment was carried out, such as the specific concentration of GA3 used for pre-treatment and its duration.</p> <p>1. Details about Irrigation: It is mentioned that watering was carried out regularly with a watering can in the morning and afternoon, but there are no details about the amount of water applied, which could influence the results of germination and seedling development.</p> <p>2. Experimental design: The most appropriate for the study in question would be a randomized block design, where the light treatments would act as blocks and the different concentrations of GA3 as plots within each block. This approach would allow us to isolate the effect of light intensity as a block variable, providing a more accurate analysis of the effect of GA3 on seed germination under different light conditions. Such structuring not only improves statistical precision by controlling light-associated variability, but also facilitates</p>	

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	<p>understanding of the interactive and independent effects of these critical factors on purple passion fruit seedling development.</p> <p>Using a completely randomized design (CRD) in experiments where environmental conditions, such as light, vary significantly can lead to lower statistical accuracy. This occurs because the CRD does not control variations between blocks, which could be mitigated with a randomized block design, isolating the effect of light per block. The choice of experimental design can affect the validity of the conclusions drawn. In the case of a CRD, variations caused by light intensity can be confused with the effects of GA3, which can lead to erroneous interpretations about the impact of each treatment on plant germination and growth.</p> <p>By adopting randomized blocks, more detailed insights can be gained into the optimal conditions for germination and early growth, essential for effective agricultural practices and the advancement of scientific knowledge in the field of horticulture.</p> <p>RESULTS AND DISCUSSION</p> <ol style="list-style-type: none">1. The tables presented with the study results do not adequately demonstrate the statistical differences between the treatments, and do not specify the level of significance used in the statistical analyses. <p>Recommendations for Correction</p> <p>After careful studies, I observed that the experimental design used may not be the most appropriate for the proposed objectives. This inadequacy of the experimental design led me not to carry out a more detailed evaluation of other sections of the manuscript, however, here are some recommendations:</p> <ol style="list-style-type: none">1. Adjusting the Experimental Design: I recommend revising the experimental design for a randomized block model, as mentioned previously. This adjustment will allow more effective control of the variables and will provide a more robust analysis of the effects studied.2. Reformulation of the Results Tables:<ul style="list-style-type: none">• Clarity and Detail: Tables should be reformulated to clearly include statistical differences observed between treatments. I recommend including significance letters or other statistical indicators that highlight significant comparisons between treatment groups.• Significance Level: It is essential to specify the significance level (e.g. p 0.05) used in the analyses. This information should be indicated in the table captions or the methods section.3. Text Adjustment: Expand the description of the statistical methods used, explaining how the differences between treatments were analyzed. This includes specifying the statistical tests applied, the criteria for determining significance, and how interactions between treatments were addressed.	
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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>	

Reviewer Details:

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