



SDI Review Form 1.6

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_49664
Title of the Manuscript:	Germination at the Constant Temperature of Amaranth Seeds BRS Alegria Stored with Different Conditions of Sealing of Packaging and Water Content
Type of the Article	Original Research Article

General guideline for 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 guideline for Peer Review process, reviewers are requested to visit this link:

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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)
Compulsory REVISION comments	<p>Authors present the germination of Amaranthus sp. seeds following adjustments of seed moisture content, use of sealed and un-sealed packaging, and the experiment was conducted under constant temperature. The authors claimed that seed germination parameters were improved by the different storage conditions and moisture content of the seeds. Although, this study presents somewhat promising results, the methodology used, results and justification of the findings still need to be reworked. Given the few reports in this subject (particularly, amaranth seeds), I believe that this manuscript could be valuable to readers and add to literature in the subject, after the following suggested major and minor amendments.</p> <p>Major issues:</p> <ul style="list-style-type: none"> - The title of this study need to be reworked. I am of the view that, the title must grab the attention of the reader, must accurately -very briefly describe the manuscript and make readers to continue reading the manuscript. I feel that wont be the case in this regards-wording and mixed inappropriate tenses in the title are confusing..... the title should identify the study, like "The effect of moisture content, temperature and packaging on the germination of amaranth seeds, var. BRS Algeria".... - The manuscript raise several issues on the methodology which create confusion; (1) it appears that seeds were harvested (at 22% seed moisture content, which was not shown how was determined), and then subjected to sun-air drying (which decreased seed moisture to 12%), removal of impurities also have affected the seeds (% not known), and elevated temperature (of 105±3°C) used in the fourth paragraph, following all other steps. Why perform this further drying if the above methods already dried the seeds to required moisture content...Furthermore, is storing seeds for 10 ± 3 months period cause decrease in seed moisture? Is it does then its only logical that original weight and evaluated changes (or longevity experiments) could have worked very well in this study..... meaning that, it can not be said that the findings were based on 8 and 10% moisture, whereas the seeds had way below this percentages..???? - Table 1 is also confusing since it shows results of pre-data, but not clear as to; when was this data recorded and moisture state of the seeds is not clear...On the abstract and entire manuscript, it is said that 8 and 10% moisture, but Table 1 show different values... 	<ul style="list-style-type: none"> - The title was reformulated in order to attract readers, as suggested. - Elevated temperature (of 105±3°C) is the methodology used to obtain water content in grains and seeds, it is carried out in 24 hours as described in the text. - 12% water content is common for seed storage. Minor water contents are stressful conditions. - Done. - Done.



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	<p>avoid rounding off, use exact values to avoid this confusion.</p> <ul style="list-style-type: none"> - Please address the direct and indirect effects of sodium hypochlorite solution on amaranth seeds. As this was reported in rice and Alectra to have influenced germination by stimulating it (Chun 1997; Okonkwo and Nwoke 2006)....this creates an impression that, the results can not be attributed to seed moisture only....???? - Avoid use of words like physiological germination, while the germinations observed are effects of these physiological responses, which in this case they were not evaluated. <p>Results:</p> <ul style="list-style-type: none"> - Table 2 is confusing. %PG is the same as % of non-germinated seeds, which does not make sense. FGC is similar to GSI. Please clarify..... - Table 3 ..water lost, or gained...how do you compare the means on the last row with means in the last fourth columnsthis is not even clarified in the text. <p>The overall assumption is that, 10% and Sealed package seeds gave high germination rates.....but it was mentioned in the text that seeds took longer to germinates...this will definitely have effects on percentage germination of the seeds, or it is a contradiction. Clarity is required, including the duration used for incubating the seeds for germination....Tables present a different case as well, or data on Table 4 is similar to Table 5, please clarify.....</p>	<ul style="list-style-type: none"> - Done. - Done. It is a nomality test. The variables can present the same values. - Done. - Done.
Minor REVISION comments	<ul style="list-style-type: none"> - Abstract need to be reword... - There is typo and several grammatical errors on the manuscript...this need to be checked. - Last paragraph under Results, Costa and Dantas citation not according to the Journal format. - Citation 22 is missing in the text. - Please check reference numbering, it is repeating..... - References need to be reworked, since they are not according to the Journal's instructions and format. 	<ul style="list-style-type: none"> - Done - Done - Done - This is a reference for the formula used for mean germination time, in the methodology. It is important. - The references are repeated as it is the same subject - Done
Optional/General comments		

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>	