

Review Form 1.7

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_107251
Title of the Manuscript:	Influence of seed storage and priming on naturally aged seeds of aromatic Joha rice
Type of the Article	Original Research 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> <ol style="list-style-type: none"> Is the manuscript important for scientific community? (Please write few sentences on this manuscript) Is the title of the article suitable? (If not please suggest an alternative title) Is the abstract of the article comprehensive? Are subsections and structure of the manuscript appropriate? Do you think the manuscript is scientifically correct? Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>General Comments</p> <p>From my point of view, it is a very interesting topic and simultaneously it seems that to the best of my knowledge is an important study evaluated priming effects on naturally aged seeds of two varieties, <i>Kon Joha</i> and <i>Keteki Joha</i>, after 0, 3, 6 and nine months of storage under ambient conditions. Seeds were hydro-primed, osmo-primed with 5% and 10% PEG, halo primed with 1% and 2% KCl and primed with 5 ppm and 10 ppm GA₃ for 12 and 24 hours. Seed moisture percentage, germination percentage, germination index, mean germination time, seedling length and dry weight, seed vigour index, field emergence, seed reserve utilization rate, seed reserve use efficiency, seed reserve depletion percentage, and biochemical parameters like electrical conductivity, lipid peroxidation and α-amylase were observed. Seed quality was gradually deteriorating due to ageing over the storage period. The rate of deterioration was faster for seedling vigour traits than germination parameters. There was a varietal difference in the rate of deterioration; it was slower in <i>Kon Joha</i>, an indigenous variety which also showed dormancy. The priming treatments were able to ameliorate the effect of seed ageing on seed germination, seedling growth and biochemical parameters in <i>Kon Joha</i>. Treatments with 1% KCl, 10 ppm GA₃ and 5% PEG enhanced the germination parameters and vigour indicators. KCl (1%) priming was the best priming agent; 24 hours of priming for all agents was better than 12 hours. The paper consists of the sections: Introduction, Materials and Methods, Results and Discussion.</p> <p>However, I find some recommendations:</p> <ol style="list-style-type: none"> The abstract must contains the main purpose of the paper, the research method used in the research and the main contributions. It would be very useful to add in the "Introduction" section the purpose, objectives and hypothesis of the research. The Literature Review section cannot be missing from the paper. I consider an econometric model will increase the quality of the paper. The research is well based on science and the results are in agreement with the theoretical part. From my point of view, the paper is original and the topic addressed brings added value to the specialized literature regarding regional sector. The paper is well written and easy to read. The research is well based on science and the results are in agreement with the theoretical part. The model applied to the analyzed data is correctly used in the analysis undertaken, it is a strength point of this paper. In the same time, I consider the literature review section and conclusions section cannot missing from the paper and that is why we consider that the literature is not enough and that is why, we recommend the authors to refer to other recent works indexed in Web of Science, Scopus, Emerald, Cambridge, and of course MDPI Journals. We suggest that the authors cite papers published in MDPI journals and Web of Science Journals, such as: <ol style="list-style-type: none"> Batrancea I., Batrancea L., Nichita A., Gaban L., Masca E., Fatacean G., Moscviciov A. (2019). „An Econometric Approach on Production, Costs and Profit in Romanian Coal Mining Enterprises”. <i>Economic Research-Ekonomska Istraživanja</i> 32(1), 1019–1063; DOI: 10.1080/1331677X.2019.1595080 	

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	<p>2. Batrancea L., Batrancea I., Moscviciov A. (2009), The Roots of the World Financial Crisis, Annals of Faculty of Economics, 3(1):57-62.</p> <p>3. Moscviciov, A., Bătrâncea, I., Bătrâncea, M., Bătrâncea, L.M. (2010) Financial Ratio Analysis Used In the It Enterprises, Annals of the University of Oradea: Economic Science, 19(2):600-603.</p> <p>We recommend the authors to number the paragraphs: 1. Introduction; 2.Literature review; 3. Methods and Results, Discussions and Conclusions. In conclusion, the article should be thoroughly rebuilt (changes in structure recommended above). It should also be enhanced with a review of the literature adequate to the subject and a broader interpretation and commentary of the research results.</p>	
<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	Yes	
<p>Optional/General comments</p>	The Manuscript needs careful English proofreading because there are some shortcomings. For instance, the article “the” is sometimes missing in front of nouns, the message in some paragraphs is not clear enough.	

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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