

Review Form 1.7

| | |
|--------------------------|--|
| Journal Name: | International Journal of Environment and Climate Change |
| Manuscript Number: | Ms_IJECC_108777 |
| Title of the Manuscript: | Seed quality behaviour variation of moth bean during storage in different packaging |
| Type of the Article | |

Review Form 1.7

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><u>Compulsory</u> 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><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p> | <p>This article describes how vacuum-packed bags effectively preserved moth bean seeds for 18 months, preventing moisture fluctuation and bruchid infestation, while maintaining seed quality parameters. This suggests the potential of vacuum packaging for long-term seed storage without the need for chemical treatments. These data may help retailers and farmers understand the impact of packaging, which can enhance their livelihoods. Therefore, I accept the article with major revisions since many parts of the text were not adequately explained.</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Yes</p> <p>Abstract – gunny, and HDPE bags (Conventional Packaging’s) due to the pervious nature of packaging materials whereas what 'previous' is doing there. Please remove it for better understanding Introduction –</p> <p>Significant agricultural production could be impacted due to the variations in periodicity and intensity of climatic events like floods and droughts, temperature, and rainfall patterns [1]. – Rewrite as “Agricultural product can be significantly impacted due to the variations in periodicity and intensity of climatic events like floods and droughts, temperature, and rainfall patterns.</p> <p>FAO estimated worldwide annual losses of about 10 per cent in stored grains [2]. – Rewrite as 10 %</p> <p>FAO estimated worldwide annual losses of about 10 per cent in stored grains [2]. – After global statistics, Provide the one- or two-line statements about how much grain loss is happening in India</p> <p>these plant derived extracts, in spite of many advantages, have certain limitations such as slow in action, easy degradability [11]. – After this statement, you should provide at least two or three references regarding the types of packaging that have already been used and explain the</p> | |

Review Form 1.7

| | | |
|--|---|--|
| | <p>rationale behind choosing vacuum packaging. We all know that vacuum-based packaging can increase shelf life, so you must interlink your study with proper justification.</p> <p>c) Moisture content (%): It was calculated on a dry weight basis as per the procedure described by the International Seed Testing Association, 2013. – Provide the references</p> <p>d) Protein content: The protein content was obtained by multiplying per cent nitrogen content of seeds with a factor 6.25 [13]. – Please provide detailed methods, as there are various methods available for calculation.</p> <p>Result and discussion and conclusion</p> <p>While the text is generally easy to follow, it requires a more rigorous scientific approach. For instance, For example, Similar results of an infestation of seeds with insects in pervious packaging were reported by Patel <i>et al.</i> [19] and Khadtar <i>et al.</i> [20].. To enhance the comprehension, it is necessary to elaborate on what these studies have observed and how their findings are comparable. The conclusion section needs revision as well. It should provide insights into the potential impact of these findings, both in the context of India and on a global scale. Furthermore, addressing the bottlenecks that need to be resolved in the future is essential.</p> | |
| <p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p> | <p>Needs improvement</p> | |
| <p>Optional/General comments</p> | | |

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) |
|--|---|---|
| <p>Are there ethical issues in this manuscript?</p> | <p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p> | |

Reviewer Details:

| | |
|---|---|
| <p>Name:</p> | <p>Ramesh Subramani</p> |
| <p>Department, University & Country</p> | <p>PSGR Krishnammal College for Women, India</p> |