

**Review Form 3**

Journal Name:	<a href="#">Journal of Scientific Research and Reports</a>
Manuscript Number:	Ms_JSRR_124078
Title of the Manuscript:	Studies On Genetic Variability, Correlation And Path Analysis In Green gram [Vigna radiata (L.) Wilczek]
Type of the Article	Reaseach

**Review Form 3**

**PART 1: Review Comments**

<b>Compulsory</b> 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>
<p><b>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.</b></p>	<p>The manuscript appears to be a valuable resource for the scientific community. It provides insights into the genetic variability, heritability, and genetic advance of important agronomic traits in mung bean. This information is essential for breeding programs aiming to develop high-yielding and resilient mung bean varieties. I appreciate the detailed methodology and the comprehensive analysis presented in this study.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>Yes, the title is suitable. It highlights the key aspects of the study, making it easier for readers to understand the research's scope and relevance.</p>	
<p><b>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.</b></p>	<p>The abstract is fairly comprehensive, but it could benefit from a few minor tweaks for improved clarity and completeness.</p> <ul style="list-style-type: none"> <li>• <b>Quantify key findings:</b> Instead of just stating "high heritability," provide examples like "high heritability for plant height (over 90%)".</li> <li>• <b>Broader impact:</b> Consider adding a sentence at the end about the broader implications of this research. For example, "These findings contribute to our understanding of mung bean genetics and can inform breeding strategies for improved yield and climate resilience."</li> </ul>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p>Yes</p>	
<p><b>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.</b></p>	<p>This manuscript demonstrates scientific robustness and technical soundness through its comprehensive and systematic approach to investigating genetic traits in mung bean. The detailed experimental design, including the selection of ten genotypes and the creation of 45 F1 hybrids, ensures a thorough analysis of genetic variability. The application of established methodologies for calculating heritability, genetic advance, and correlation coefficients reflects a solid understanding of plant breeding principles and statistical analysis. The use of path coefficient analysis to determine direct and indirect effects on yield adds depth to the interpretation of results. Consistent findings with previous studies further validate the manuscript's conclusions, highlighting its reliability and contribution to the field of plant genetics and breeding.</p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p> <p>-</p>	<p>The references listed in the manuscript cover a broad range of studies related to genetic variability, heritability, and path analysis in mung bean, contributing to the manuscript's scientific depth. However, there are a few considerations to ensure the references are both sufficient and current:</p> <ol style="list-style-type: none"> <li>1. <b>Recent References:</b> The majority of the references are from the last decade, which is good practice, but including a few more recent studies, particularly those from the past 1-2 years, would enhance the manuscript's relevance and demonstrate that it incorporates the latest findings in the field.</li> <li>2. <b>Coverage:</b> While the references cover various aspects of mung bean research, there is a need for more recent studies focusing on emerging topics like climate change impacts on mung bean productivity or advancements in molecular breeding techniques.</li> <li>3. <b>Additional References:</b> To address these points, consider including recent reviews or studies that have been published in high-impact journals.</li> </ol>	

### Review Form 3

Minor REVISION comments

**Is the language/English quality of the article suitable for scholarly communications?**

The language quality of the article you've shared is generally suitable for scholarly communications, but there are areas where improvements can enhance clarity, coherence, and overall readability. Here's a detailed review:

#### **Strengths**

1. **Clarity of Purpose:** The abstract clearly outlines the study's objective, methodology, and key findings, which is essential for scholarly communication.
2. **Detail and Specificity:** The introduction, materials and methods, and results sections provide detailed descriptions and specific data, which are crucial for understanding the study's scope and implications.
3. **Use of Terminology:** The use of scientific terms and concepts (e.g., genotypic coefficient of variation, path coefficient analysis) is appropriate for a scholarly audience.

#### **Areas for Improvement**

##### **1. Abstract**

- **Conciseness:** While informative, the abstract could be more concise. Aim to streamline the text by focusing on the most critical findings and their implications.
- **Consistency:** Use consistent terminology (e.g., "MYMV severity" vs. "MYMVS").
- **Technical Terms:** Make sure that abbreviations are defined at first use (e.g., MYMV - Mung Bean Yellow Mosaic Virus).

##### **2. Introduction**

- **Structure and Flow:** The introduction could benefit from a more structured approach. Consider breaking it into clearly defined sections (e.g., background, significance, research gap).
- **Historical and Regional Context:** Ensure that historical and regional context is relevant and concise. Avoid repetitive information about the crop's geographical distribution.
- **References:** Ensure that all references are cited in a consistent format and integrated smoothly into the narrative.

##### **3. Materials and Methods**

- **Clarity:** Some sentences are a bit convoluted and could be simplified for better readability. For example, "All the possible 45 F1's hybrids, excluding reciprocals made among these ten parents during kharif season 2022" could be rephrased for clarity.
- **Details:** Ensure that methodological details are clear and complete. For instance, specify the statistical methods used for analysis more clearly.

##### **4. Results and Discussion**

- **Results Presentation:** The presentation of results should be more systematic. Use subheadings and bullet points where appropriate to enhance readability.
- **Consistency in Data Reporting:** Ensure consistency in how data are reported and interpreted. For instance, consistently use either percentages or actual values when discussing genetic coefficients.
- **Discussion of Results:** Link the results more explicitly to the existing literature and discuss their implications in a broader context.

##### **5. Conclusion**

- **Summarization:** The conclusion effectively summarizes the study's main findings, but it could

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	be more focused on practical implications and future research directions.	
<b>Optional/General</b> comments		

**PART 2:**

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

**Reviewer Details:**

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