

Review Form 3

Journal Name:	Journal of Scientific Research and Reports
Manuscript Number:	Ms_JSRR_130962
Title of the Manuscript:	Correlation and path analysis studies in some mutant and non-mutant lines of Indian mustard (Brassica juncea L. Czern & Coss.) for seed yield and related traits
Type of the Article	Research Article

PART 1: Comments

	Reviewer’s comment	Author’s Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This manuscript is important for the scientific community as it provides valuable insights into the relationships between seed yield and its component traits in Indian mustard. The study's findings on the correlation and path analysis of various yield-attributing traits can inform breeding programs aimed at improving Indian mustard yields. Additionally, the research contributes to the understanding of the complex interactions between different traits in Indian mustard, which can have implications for crop improvement and food security.	Yes
Is the title of the article suitable? (If not please suggest an alternative title)	The title "Correlation and path analysis studies in some mutant and non-mutant lines of Indian mustard (Brassica juncea L. Czern & Coss.) for seed yield and related traits" is suitable, but it could be shortened for better readability. Here's an alternative title: "Correlation and Path Analysis of Yield-Attributing Traits in Indian Mustard Mutants and Non-Mutants."	Yes, corrected
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.	The abstract is comprehensive, but it could benefit from a clearer summary of the study's key findings and implications. Here are some suggestions:  - Provide a brief overview of the experimental design and materials used. - Summarize the main correlations and path analysis findings. - Highlight the implications of the study for Indian mustard breeding and crop improvement.	
Is the manuscript scientifically, correct? Please write here.	The manuscript appears to be scientifically correct, but need to include conclusion chapter	Included
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	I would like to see more recent references (post-2020) to support the discussion. Some references cited are from 2013, 2016, and 2018, which may not reflect the latest research in the field.	

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Is the language/English quality of the article suitable for scholarly communications?	Yes	
Optional/General comments	<p>As a reviewer, I have evaluated and provided comments to improve it for publication:</p> <p><b>Abstract</b></p> <p>Clarity and Conciseness The abstract is clear and concise, providing essential information about the study. However, some sentences could be rephrased for better clarity.</p> <p>Specificity The abstract could benefit from more specific details about the study's objectives, methods, and findings. For example, what specific traits were evaluated, and what were the key results?</p> <p>Technical Accuracy The abstract appears to be technically accurate, but some terms could be defined or explained for non-expert readers. For instance, what is meant by "M4-5 mutants" and "F6-7 lines"?</p> <p>Relevance and Impact The abstract could emphasize the relevance and impact of the study's findings. How do the results contribute to the existing knowledge on Indian mustard, and what are the potential applications or implications?</p> <p>Keywords The keywords are relevant, but consider adding more specific terms related to the study's focus on correlation and path analysis.</p> <p>Minor Errors</p> <ul style="list-style-type: none"><li>- "Rabi 2019-20 and Rabi 2020-21" could be rephrased as "two consecutive Rabi seasons (2019-2020 and 2020-2021)".</li><li>- "genotypic level" could be rephrased as "genotypic correlation level".</li></ul> <p><b>Introduction</b></p> <ol style="list-style-type: none"><li>1. Specificity: The introduction could benefit from a clearer research question or hypothesis. What specific aspect of Indian mustard production does the study aim to address?</li><li>2. Relevance: While the introduction provides a good overview of the importance of oilseeds and Indian mustard, it would be helpful to emphasize the relevance of the study to the current state of Indian mustard production in Assam.</li><li>3. Citations: The introduction relies heavily on a single source (Jat et al., 2019). Consider adding more recent or diverse sources to support the introduction.</li><li>4. Clarity: Some sentences are wordy or awkwardly phrased. For example, "In India, growing of rapeseed mustard serves as an important source of income for small and marginal farmers." could be rephrased for better clarity.</li></ol> <p><b>Materials and Methods</b></p> <ol style="list-style-type: none"><li>1. Specificity: The materials and methods section could benefit from more specific details about the experimental design, such as the plot size, spacing, and fertilization regime.</li><li>2. Clarity: The section jumps abruptly from describing the experimental materials to describing the experimental design. Consider adding transitional phrases or sentences to improve the flow.</li><li>3. Consistency: The section mentions that the experiment was conducted during Rabi 2019-20 and Rabi 2020-21, but it is unclear whether the same experiment was repeated over two seasons or whether the data was combined.</li><li>4. Accuracy: Double-check the accuracy of the latitude and longitude coordinates provided for the experimental farm.</li></ol> <p>Minor Errors</p> <ol style="list-style-type: none"><li>1. "DRMR, 2022" is cited, but the reference is not provided in the text.</li><li>2. "Table 1" is mentioned, but the table is not provided in the text.</li></ol> <p><b>Morpho-phenological observations</b></p> <ol style="list-style-type: none"><li>1. Clarity: The section could benefit from a clearer explanation of the procedures used to record the 14 quantitative characters.</li><li>2. Specificity: Provide more specific details about the "standard procedure" used to record the characters.</li><li>3. Citations: The section relies heavily on older sources (Dabholkar, 1999; Dewey and Lu, 1959). Consider adding more recent sources to support the methodology.</li></ol>	

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	<p><b>Results and discussion</b></p> <p>1. Organization: The section jumps abruptly between discussing the results of the correlation analysis and the path analysis. Consider breaking the section into clear subsections.</p> <p>2. Clarity: Some sentences are wordy or awkwardly phrased. For example, "Considering both the years, it was observed that SYP was positively correlated with SMS and negatively correlated with DF at the genotypic level." could be rephrased for better clarity.</p> <p>3. Relevance: While the discussion provides a good overview of the results, it would be helpful to emphasize the relevance of the findings to the broader context of Indian mustard breeding.</p> <p>4. Citations: The discussion relies heavily on older sources. Consider adding more recent sources to support the discussion.</p> <p>Minor Errors</p> <p>1. "Table 2", "Table 3", "Table 4", and "Table 5" are mentioned, but the tables are not provided in the text.</p> <p>2. Some citations are missing (e.g., Pandey et al., 2020; Tiwari et al., 2018).</p> <p><b>Conclusion Chapter</b></p> <p>A conclusion chapter is missing. Consider adding a conclusion chapter to summarize the key findings, implications, and future directions.</p>	
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PART 2:

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