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Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_125789
Title of the Manuscript:	Exploring Trait Interactions for Yield Improvement in Linseed (<i>Linum usitatissimum</i> L.): A Correlation and Path Analysis Approach
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION 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)
<p>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.</p>	<p>This manuscript is important for the scientific community as it provides valuable insights into trait interactions influencing seed yield in linseed, a crop with both economic and nutritional significance. The study's use of correlation and path analysis offers a robust method for identifying key traits like secondary branches, capsules per plant, and plant height that can be targeted for yield improvement. By simplifying the complex relationships between yield components, the research contributes to more effective breeding strategies. I appreciate the manuscript for its practical implications and clear methodology, though more emphasis on broader environmental interactions could further enhance its relevance.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title "Exploring Trait Interactions for Yield Improvement in Linseed (<i>Linum usitatissimum</i> L.): A Correlation and Path Analysis Approach" is clear and accurately reflects the study's focus on trait interactions and the methods used (correlation and path analysis). However, a slight revision could make it more concise and impactful. An alternative title could be:</p> <p>"Trait Interactions and Yield Enhancement in Linseed (<i>Linum usitatissimum</i> L.): Insights from Correlation and Path Analysis"</p>	
<p>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.</p>	<p>The abstract provides a clear overview of the study, including its objectives, methods (correlation and path analysis), and key findings regarding the traits that influence seed yield in linseed. However, it could benefit from a few adjustments to enhance clarity and completeness:</p> <p>Suggestions for Improvement:</p> <ol style="list-style-type: none"> 1. Clarify the Significance: The abstract could explicitly mention the importance of the study for improving linseed yield, especially in marginal growing conditions, which is mentioned later in the introduction. 2. Add Methodological Details: While the abstract mentions 75 linseed genotypes, it could briefly describe how the key traits were selected for analysis (e.g., based on correlation or path analysis). 3. Economic or Practical Implications: Including a sentence about the practical applications of these findings for breeders or farmers would help highlight the study's impact. 4. Delete Redundancies: Repeating "both at genotypic and phenotypic levels" multiple times in a short abstract can be simplified for brevity. 	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The structure and subsections of the manuscript appear appropriate for a scientific research paper, but a few improvements could make the organization clearer and more comprehensive. Here are my observations:</p> <p>Strengths:</p> <ol style="list-style-type: none"> 1. Logical Flow: The manuscript follows a typical research paper structure with sections like Introduction, Materials and Methods, Results and Discussion, and Conclusion, which helps in understanding the study's objectives, methodology, and findings. 2. Methodology: The "Materials and Methods" section clearly describes the experimental design, which is essential for reproducibility. <p>Areas for Improvement:</p> <ol style="list-style-type: none"> 1. Results and Discussion: <ul style="list-style-type: none"> - "Separation of Results and Discussion": Currently, the results and discussion are somewhat intertwined. It might improve readability if the "Results" and "Discussion" are separated, where one section focuses purely on findings and the other interprets them. 2. Tables and Figures: 	

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	<p>If tables or figures are included in the body section immediately after the correlation coefficients and path analysis, ensuring they are well-labeled and integrated within the text will help the reader navigate the data easily. A mention in the “Results” section referring to the tables/figures would enhance clarity.</p> <p>3. “Conclusion”: - While the “Conclusion” is clear, it could benefit from a dedicated subsection to emphasize key takeaways, practical implications, and future directions.</p> <p>Suggested Subsection Structure: 1. Introduction 2. Materials and Methods - Genotypes and Experimental Design - Data Collection (include a brief explanation of measured traits) - Statistical Analysis (Correlation and Path Analysis) 3. Results - Correlation Analysis - Path Coefficient Analysis 4. Discussion - Interpretation of Key Findings - Comparison with Previous Studies - Practical Implications for Breeding 5. Conclusion 6. References</p> <p>This structure would provide a clear, logical, and organized flow for the manuscript, making it easier for readers to follow and understand each section.</p>	
<p>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.</p>	<p>The manuscript appears to be scientifically robust and technically sound due to its clear and methodical approach in analyzing trait interactions for yield improvement in linseed. The use of “correlation and path analysis” is an appropriate and well-established method for identifying traits that influence complex characters like yield. The study uses a sufficiently large sample size (75 genotypes) and a “randomized block design”, which enhances the reliability and validity of the findings. Additionally, the results are carefully interpreted, with both “genotypic and phenotypic levels” of analysis considered, ensuring that the conclusions are data-driven and applicable for breeding strategies.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>I have found some old references; therefore, please use references from the past 10 years.</p>	

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<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language and English quality of the article are generally suitable for scholarly communication, but there are a few areas where improvements could enhance clarity and readability. Here are my observations:</p> <p>Strengths:</p> <ol style="list-style-type: none"> 1. Formal Tone: The manuscript maintains a formal and appropriate tone, suitable for scientific writing. 2. Technical Terms: The use of technical terms, such as "correlation analysis" and "path coefficient analysis," is precise and reflects the scientific nature of the work. <p>Areas for Improvement:</p> <ol style="list-style-type: none"> 1. Sentence Structure: Some sentences are overly long and complex, which could hinder readability. Breaking down long sentences into shorter, more concise ones would improve clarity. 2. Repetitive Phrases: Certain phrases (like "both at genotypic and phenotypic levels") are repeated frequently. Simplifying or varying the expression would reduce redundancy. 3. Minor Grammar Issues: There are occasional minor grammatical errors or awkward phrasing (e.g., "number of secondary branches per plant followed the number of primary branches"). Revising these would enhance fluency. <p>Suggested Edits:</p> <p>I have put inputs in abstract section with track change.</p> <ul style="list-style-type: none"> - Use shorter, clearer sentences where possible. - Remove unnecessary repetition or redundancy. - Proofread for minor grammatical and punctuation errors. <p>Overall, while the language is suitable for scholarly work, minor revisions could improve the manuscript's flow and precision.</p>	
<p>Optional/General comments</p>		

PART 2:

	<p>Reviewer's comment</p>	<p>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>
<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>Berhanu Bilate Daemo</p>
<p>Department, University & Country</p>	<p>Wolaita Sodo University, Ethiopia</p>