

Review Form 1.7

Journal Name:	International Journal of Environment and Climate Change
Manuscript Number:	Ms_IJECC_109970
Title of the Manuscript:	Correlation and Path Coefficient Analysis in Wheat (<i>Triticum aestivum</i> L.)
Type of the 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>	<ol style="list-style-type: none"> 1. Importance to the Scientific Community: The manuscript is of significant importance to the scientific community, particularly in the field of wheat breeding and agriculture. The study employs correlation and path coefficient analysis to understand the relationships among various quantitative traits affecting wheat yield. The findings contribute valuable insights into selecting elite genotypes with improved yield, which is crucial for addressing global food security concerns. The study's relevance is underscored by its potential impact on wheat breeding strategies. 2. Suitability of the Title: The title, "Correlation and Path Coefficient Analysis in Wheat (Triticum aestivum L.)," is appropriate as it accurately reflects the content of the manuscript. It clearly conveys the focus on analytical methods used in understanding trait relationships in wheat. However, a slightly more specific title could be beneficial, such as "Trait Correlations and Path Coefficients: Insights for Wheat Breeding." 3. Abstract's Comprehensiveness: The abstract is comprehensive in providing an overview of the study's objectives, methods, key findings, and implications. It effectively summarizes the correlation and path coefficient analyses, making it accessible to readers seeking a quick understanding of the study. However, specifying the direction (positive or negative) of the correlation coefficients in the abstract could enhance clarity. 4. Appropriateness of Subsections and Structure: The subsections and overall structure of the manuscript are generally appropriate. The introduction, material and methods, results, and discussion follow a logical flow. However, the results and discussion sections could be more clearly delineated to enhance readability. Consider grouping findings related to the same characters together for a more coherent presentation. 5. Scientific Correctness: The manuscript appears scientifically sound. The methods used for the field experiment and statistical analyses are well-described. The results are logically interpreted, and the discussion aligns with existing literature. However, for improved clarity, the manuscript could explicitly state the significance level chosen for correlations and path coefficients. 6. References Sufficiency and Recency: The references provided are relevant to the study, supporting the background, methods, and interpretation of results. However, the manuscript could benefit from more recent references, especially in the introduction and discussion sections. Including studies published in the last 2-3 years would strengthen the manuscript's currency and relevance to the latest advancements in wheat breeding and agricultural research. 	
<p>Minor REVISION comments</p> <ol style="list-style-type: none"> Is language/English quality of the article suitable for scholarly communications? 	<p>Abstract: The abstract provides a concise overview of the study, mentioning the number of genotypes, the experimental design, and the quantitative characters observed. The key findings, especially the correlations and direct effects on grain yield, are highlighted. However, the abstract could be improved by specifying the nature of the correlation coefficients (positive or negative) for each character and briefly mentioning the significance of the study in wheat breeding.</p> <p>Introduction: The introduction provides a comprehensive background on wheat, its significance, and the need for improving yield. It adequately justifies the importance of studying the correlation and path coefficient analysis for better understanding the factors contributing to grain yield. The introduction, however, could benefit from a more concise presentation, focusing on the specific objectives and</p>	

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	<p>rationale for the study.</p> <p>Material and Methods: The material and methods section provides details on the field experiment, genotypes studied, and the characters observed. The information is presented clearly, and the statistical methods are appropriately referenced. However, it lacks details on the statistical significance level chosen for the correlations and path coefficients, which is crucial information for interpretation.</p> <p>Results and Discussion: The results section effectively presents the correlation coefficients and path coefficient analysis. The use of previous research findings to support the results adds credibility to the study. The discussion interprets the findings well and relates them to existing literature. However, the results and discussion could be organized more logically, perhaps by grouping findings related to the same characters.</p> <p>Tables: The tables are well-structured, providing a clear presentation of correlation coefficients and path coefficients. However, Table 1 could benefit from grouping related characters for easier interpretation. Additionally, the tables lack footnotes or captions explaining the significance levels, which is essential for understanding the reliability of the results.</p>	
<p>Optional/General comments</p>	<ol style="list-style-type: none"> 1. The manuscript could benefit from a clearer structure, with distinct sections for results and discussion. 2. Consideration should be given to specifying the statistical significance level chosen for correlations and path coefficients. 3. Including a conclusion section summarizing the key findings and their implications would strengthen the manuscript. 4. The abstract could be more specific about the direction (positive or negative) of the correlation coefficients. 5. A more concise and focused introduction would improve the flow of the manuscript. 	

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:

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