

Review Form 1.7

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_118903
Title of the Manuscript:	MULTIVARIATE ANALYSIS FOR DESIGNING OKRA CROP IDEOTYPE WITH ENHANCED YIELDS AND STRATEGY FORMULATION: A CROP PHYSIOLOGY PERSPECTIVE
Type of the Article	

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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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>	<p>Strengths</p> <ul style="list-style-type: none"> The methodology is very detailed, specifying the cultivar used, the precise geographical location of the experiment, and the experimental design. This clarity allows for reproducibility. The use of a randomized block design with ten treatments and three replications enhances the reliability of the results by reducing the impact of variability within the blocks. The study records a wide range of plant characteristics, covering various aspects of growth, development, and yield. This comprehensive data collection enables a holistic analysis of the treatment effects. The application of Pearson correlation analysis and principal component analysis (PCA) provides a solid statistical framework for data interpretation, enhancing the depth of the analysis. The use of commercially available formulations for plant growth regulators ensures that the study's findings are applicable in practical agricultural settings. <p>Weaknesses</p> <ul style="list-style-type: none"> The study does not specify whether there were controls for environmental variables (e.g., temperature, humidity) that could influence plant growth and development. This could affect the internal validity of the results. While Paclobutrazol was applied through soil drenching, all other growth regulators were applied as foliar sprays. The difference in application methods could introduce uncontrolled variability. The methodology specifies certain time points (e.g., 75 days after sowing for internode length, 60 DAS for leaf area) but does not provide justification for these specific times. This could affect the consistency and interpretation of the results. Although the design mentions three replications, the exact number of plants per treatment is not specified, which is crucial for understanding the robustness of the data. The data collection process relies on manually recorded measurements, which could introduce observer bias or human error, affecting the accuracy of the results. <p>Suggestions</p> <ul style="list-style-type: none"> Include controls or at least detailed records of environmental conditions (e.g., temperature, humidity) during the experiment to ensure that these factors do not confound the results. Consider using a uniform application method for all growth regulators to reduce variability and ensure that differences in plant responses are due to the treatments themselves, not the application methods. Provide justification for the selected time points for data collection to ensure that they are optimal for capturing the effects of treatments on plant growth and development. Clearly indicate the number of plants used per treatment to provide a better understanding of the statistical power of the experimental design. Where possible, use automated or standardized measurement tools to reduce human error and observer bias in data recording. Incorporate control treatments without growth regulators to provide a baseline for comparison and better isolate the effects of each treatment. Ensure a detailed report of the statistical methods and software packages used for analysis, including any assumptions tested and how missing data were handled. 	
<p>Minor REVISION comments</p> <ol style="list-style-type: none"> Is language/English quality of the article suitable for scholarly communications? 		

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

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