Review Form 3

Journal Name:	**Journal of Scientific Research and Reports**
Manuscript Number:	**Ms_JSRR_122109**
Title of the Manuscript:	**ESTIMATION OF PATH COEFFICIENT ANALYSIS AND GENETIC DIVERSITY STUDIES IN OKRA (Abelmoscus esculentus L.)**
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)*
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.	=The traits with the highest positive direct effects on fruit yield per plant were observed for number of branches per plant, number of internodes, fruit length, fruit diameter, no. of fruits per plant, as determined through phenotypic path analysis. =These identified traits can serve as effective selection criteria for strategizing an efficient breeding programme to enhance fruit yield in okra. =Based on D^2 analysis, 20 genotypes were grouped into five clusters. =The maximum inter-cluster distance was observed between cluster 5 and cluster 3 indicating that the genotypes falling in these clusters were highly divergent from each other implying a large amount of diversity within and between groups, which could be exploited in breeding programmes. =The minimum Inter-cluster distance was found between cluster 5 and cluster 4 indicating that this cluster is less divergent	
Is the title of the article suitable? **(If not please suggest an alternative title)**	The title of the article is suitable	
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 of the article is comprehensive	
Are subsections and structure of the manuscript appropriate?	Subsections and structure of the manuscript are appropriate	
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.	The manuscript is scientifically correct	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are sufficient and recent	

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Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**	English quality of the article is suitable for scholarly communications	
Optional/General comments	=The purpose of the present study was to evaluate the path analysis and D^2 analysis on 20 different okra genotypes, including one check variety. The experiment was carried out during the *Kharif* season of 2023-2024 at Research Farm, College of Agriculture Saralgaon, Murbad, Thane. A randomized block design with three replications was employed for the study. The observations were recorded on thirteen traits *viz.,* days to 50% flowering, plant height (cm), number of branches per plant, number of internodes, internodal length (cm), fruit length (cm), fruit diameter (cm), average fruit weight (gm), no. of fruits per plant, no. of seeds per fruit, seed index (%), and fruit yield per plant (g). =The traits with the highest positive direct effect in phenotypic path coefficient analysis were observed for number of fruits per plant. The genotypic path coefficient analysis revealed highest positive direct effect on fruit yield per plant is days to 50% flowering. =Thus, these characters need special attention during the time of selection strategy due to their contrasting direct effects. =The maximum inter-cluster distance was observed between cluster 5 and cluster 3 indicating that the genotypes falling in these clusters were highly divergent from each other implying a large amount of diversity within and between groups, which could be exploited in breeding programmes. =The minimum Inter-cluster distance was found between cluster 5 and cluster 4 indicating that this cluster is less divergent. The cluster means for different characters showed considerable difference among the clusters for all the characters.	

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?	*(If yes, Kindly please write down the ethical issues here in details)*	

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