

Review Form 3

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_122804
Title of the Manuscript:	Genetic analysis on frequency distribution using measures of skewness and kurtosis in F2, F3 segregating populations of six rice crosses (<i>Oryza sativa</i> L.)
Type of the Article	

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<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 provides a detailed genetic analysis of skewness and kurtosis in F2 and F3 segregating populations of six rice crosses. The study contributes to the understanding of the genetic architecture of key agronomic traits in rice, which is crucial for improving rice breeding strategies. The focus on statistical measures like skewness and kurtosis offers valuable insights into the underlying gene actions and interactions, making the research highly relevant to plant geneticists and breeders. However, the manuscript could benefit from clearer explanations and a more focused discussion on the implications of the findings for practical breeding applications.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title is somewhat descriptive but could be more concise and focused. A suggested alternative title could be: "<i>Genetic Analysis of Skewness and Kurtosis in Segregating Populations of Six Rice Crosses (Oryza sativa L.)</i>".</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 is comprehensive but could be refined to improve clarity. Specifically, the abstract could better highlight the significance of the findings for rice breeding. The sentence structure could be more concise, and the implications of the skewness and kurtosis patterns should be emphasized more clearly. Additionally, the abstract could benefit from a brief mention of the practical applications of these findings in breeding programs.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The manuscript's structure is generally appropriate, with well-defined subsections. However, the flow between sections could be improved for better readability. The methodology section is detailed but could be simplified to make it more accessible to readers who are not specialists in statistical genetics. Additionally, the discussion section could be more focused on the practical implications of the findings.</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, with a thorough application of genetic analysis techniques. The use of skewness and kurtosis as measures to explore gene actions is appropriate and provides meaningful insights. However, the interpretation of results could be expanded to include a discussion on the limitations of these measures and how they complement other genetic analysis methods. The statistical methods are well-applied, but the manuscript could benefit from a more critical discussion of the results in the context of existing literature.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =</p>	<p>The references are sufficient but could be updated with more recent studies that have explored similar topics. Adding references to recent advancements in rice genetics and breeding would strengthen the manuscript. To enhance the reference list, you might consider including articles that discuss newer genetic analysis tools or more recent findings in plant breeding. For instance:</p> <ul style="list-style-type: none"> • Zhu, C., Gore, M., Buckler, E. S., & Yu, J. (2008). Status and prospects of association mapping in plants. <i>The Plant Genome</i>, 1(1), 5-20. - This could provide insight into association mapping, a modern approach to studying genetic variability. • Hickey, L. T., Hafeez, A. N., Robinson, H., Jackson, S. A., Leal-Bertioli, S. C., Tester, M., ... & Godwin, I. D. (2019). Breeding crops to feed 10 billion. <i>Nature Biotechnology</i>, 37(7), 744-754. - This article discusses modern breeding techniques and the future of plant breeding. Adding these references or similar recent studies could strengthen the literature review by ensuring it covers the latest developments in the field. 	

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Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	<ol style="list-style-type: none">1. The language and English quality of the article are generally suitable for scholarly communication, but there are areas where clarity could be improved. Some sentences are overly complex and could be simplified for better readability.2. The manuscript would benefit from a thorough proofreading to correct minor grammatical errors and improve sentence structure.	
Optional/General comments	The manuscript provides a valuable contribution to the field of rice genetics and breeding. However, a more detailed discussion on how the findings can be applied in breeding programs would enhance its impact. Additionally, revising the manuscript to improve clarity and flow would make it more accessible to a broader audience in the scientific community.	

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>	No

Reviewer Details:

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