

**Review Form 3**

Journal Name:	<b>Journal of Experimental Agriculture International</b>
Manuscript Number:	<b>Ms_JEAI_121914</b>
Title of the Manuscript:	<b>Using biochemical and growth parameters to assess soybean yield potential</b>
Type of the Article	

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**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	<b>Reviewer's comment</b>	<b>Author's Feedback</b> (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p><b>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.</b></p>	<p><b>Advantages:</b></p> <p>This article provides an in-depth examination of the use of biochemical and growth indicators to evaluate the yield potential of soybeans, a critical topic in the agricultural and food production sectors. This assessment can contribute to improving crop yields and production efficiency, thereby addressing the growing global demand for food. The article also has the potential to open up new research directions regarding factors affecting crop productivity, which could lead to the development of higher-yielding soybean varieties.</p> <p><b>Limitations:</b></p> <p>The article may face limitations related to the practical application of its research findings, as biochemical and growth conditions can vary significantly depending on specific land and climatic conditions. Additionally, without comparison or analysis involving other methods, the article may lack a comprehensive approach, potentially limiting its broader applicability.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>Suitable</p>	
<p><b>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.</b></p>	<p><b>Advantages of the Abstract</b></p> <p>Providing specific information: The abstract provides specific information about the time, location, and objectives of the research, helping readers to clearly understand the context and scope of the study.</p> <p>Results and data analysis: The abstract clearly presents the main findings, including changes in chlorophyll content, growth rates (AGR, CGR, RGR, NAR), and analysis of yield components, thereby highlighting soybean genotypes with high yield potential.</p> <p>Stated significance: The abstract concludes by emphasizing the high-yield results for the soybean genotypes DLSb 5 and DSb 34, underlining key traits that can be leveraged to improve soybean yield.</p> <p><b>Limitation:</b> The phrasing and writing in the paper need revision to align with the conventions of scientific writing.</p>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p>Suitable</p>	
<p><b>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.</b></p>	<ul style="list-style-type: none"> <li>- The manuscript demonstrates scientific and technical robustness through its rigorous methodological approach and comprehensive analysis. The study employs well-established biochemical and growth parameters to evaluate soybean yield potential, which aligns with current research practices in plant science.</li> <li>- The use of randomized block design and detailed statistical analyses ensures the</li> </ul>	

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	<p>reliability and validity of the findings. Additionally, the identification of key traits associated with high-yielding soybean genotypes provides valuable insights that contribute to both theoretical understanding and practical applications in crop improvement.</p> <p>- Overall, the manuscript's adherence to scientific principles and methodological rigor underscores its strength in advancing knowledge in soybean yield assessment.</p>	
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p> <p>=</p>	<p><b>You can revise it as follows:</b></p> <p>"This study, conducted in 2022 at the All India Coordinated Research Project on Soybean Dharwad, aimed to evaluate the yield potential of ten soybean genotypes, including three checks, using biochemical and growth parameters. Employing a randomized block design, the study assessed variations in chlorophyll content, which was highest in genotypes DLSb 3, DSb 34, and DSb 23. Significant differences among genotypes were observed in absolute growth rate (AGR), crop growth rate (CGR), relative growth rate (RGR), and net assimilation rate (NAR). Notably, DSb 34 and DLSb 5 exhibited the highest AGR and CGR at 60-90 days after sowing (DAS), while RGR was most pronounced in DSb 39 at 30-60 DAS. NAR peaked at 60-90 DAS, with DLSb 1 showing the highest values. Yield component analysis identified DLSb 5 and DSb 34 as the top-yielding genotypes, with significant variations in the number of pods per plant among the genotypes. These findings highlight key traits for breeding higher-yielding soybean varieties and offer valuable insights for future research and practical applications in crop improvement."</p>	
<p><u>Minor</u> REVISION comments</p> <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>The article adheres to the academic standards of a scientific paper, but some minor errors need to be corrected</p>	
<p><u>Optional/General</u> comments</p>	<p>Correct the minor errors in the article (highlighted in red). The research materials and methods section needs to clarify three points as per the reviewer's comments.</p>	

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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><b>Are there ethical issues in this manuscript?</b></p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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