Review Form 3

Journal Name:	**International Journal of Plant & Soil Science**
Manuscript Number:	**Ms_IJPSS_130673**
Title of the Manuscript:	**Effect of Integrated Nitrogen Management and Sulphur Fertilization on Seed yield, Nutrient concentration and uptake and soil parameters of Sesame (Sesamum indicum L.) in semi-arid condition of Rajasthan**
Type of the Article	Full length Research Paper

PART 1: 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. A minimum of 3-4 sentences may be required for this part.	The study on Integrated Nitrogen Management (INM) and Sulphur Fertilization in sesame (Sesamum indicum L.) holds significant importance for improving crop productivity and soil health in the nutrient-deficient, semi-arid soils of Rajasthan. Nitrogen and sulphur are vital for seed formation, oil synthesis, and overall plant growth, yet their interactions in sesame cultivation remain underexplored. This research provides critical insights into optimizing nutrient application for enhanced yield, nutrient uptake efficiency, and soil fertility, paving the way for sustainable agricultural practices. By refining fertilization strategies, it supports eco-friendly farming, resource-efficient input management, and climate-resilient cropping systems, ultimately benefiting researchers, agronomists, policymakers, and farmers striving for higher productivity in marginal environments.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title is too big, I would suggest reconsidering it to make it look more catchy and easy to read. "Optimizing Sesame (Sesamum indicum L.) Productivity and Quality through Integrated Nitrogen and Sulphur Management under Semi-Arid Conditions of Rajasthan". We can add term quality as you are focused on enhancement of nutrient concentration along with protien and oil content.	
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 is well-written; however, it requires some rephrasing as suggested in the manuscript. You may also consider making it more concise for better clarity and readability. Methodology portion of Abstract can be rephrased as "The experiment followed a split-plot design with three replications, comprising seven integrated nitrogen management treatments (various combinations of RDN, FYM, and vermicompost) in the main plots and four sulphur levels (0, 20, 40, and 60 kg/ha) in the sub-plots", to make it brief and concise.	
Is the manuscript scientifically, correct? Please write here.	Yes, the manuscript is scientifically accurate. It presents well-structured research with appropriate methodology and valid interpretations. However, the title of the experiment is too big and can be refined as suggested in the manuscript.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	References cited in the text especially in discussion are very old and suggestions are to incorporate latest findings to validate the results of research. Some of the latest citations can be **Verma and Saxena (2022)** conducted an experiment on INM practices in sesame and found that integrating 50% recommended dose of nitrogen (RDN) with 50% nitrogen from organic sources like vermicompost or farmyard manure (FYM), improved growth and yield parameters, such as plant height and seed yield. **Yadav et al. (2023)** investigated the impact of sulphur application at different levels (0, 20, 40, 60 kg/ha) on sesame. They found that sulphur significantly enhanced seed yield, oil content, and other quality traits in sesame, with the 40 kg/ha level showing the best results. **Kumar and Sharma (2021)** studied integrated nutrient management, including sulphur application, and observed that these practices improved growth attributes and microbial activity in sesame, leading to higher yields and better oil quality. • Verma, P., & Saxena, A. (2022). Integrated nutrient management in sesame (Sesamum indicum L.) with organic amendments and *Azospirillum* inoculation. *Agriculture and Natural Resources*, 56(4), 1–10. https://doi.org/10.1016/j.anr.2022.04.001 • Yadav, K., Sharma, R., & Singh, S. (2023). Effect of sulphur application on seed yield and quality of	

	sesame (Sesamum indicum L.) under varying fertility regimes. *Journal of Soil Science and Crop Protection*, 23(2), 135-146. https://www.researchgate.net/publication/385574270 Kumar, S., & Sharma, M. (2021). Impact of integrated nutrient management on growth and yield attributes of sesame (Sesamum indicum L.) under semi-arid conditions. *International Journal of Chemical Studies*, 9(4), 1687-1692. https://www.researchgate.net/publication/320806064	
Is the language/English quality of the article suitable for scholarly communications?	The language quality of the article is moderate and suitable for scholarly communication, but it especially needs revision in the **Introduction** section. The language in the introduction should be made more precise and coherent to improve clarity and flow, ensuring it meets the expected academic standard for scholarly publications.	
Optional/General comments	The overall quality of the paper is moderate, with a clear focus on an important topic in agricultural research. The study addresses significant aspects of integrated nitrogen management and sulphur fertilization in sesame, which has substantial implications for improving crop productivity and sustainability, particularly in semi-arid regions. However, to enhance its scholarly communication and meet publication standards, the manuscript requires several revisions, particularly in the introduction section where clarity and precision are crucial. Once the suggested changes are implemented, especially regarding the language and structure, the paper will be in a much stronger position for publication. This topic has great scope, as improving nutrient management practices for crops like sesame can have a lasting impact on both agricultural productivity and environmental sustainability. With further refinement, the paper holds promise for contributing valuable insights to the scientific community and expanding research in this field. No instances of plagiarism were detected, and the manuscript adheres to its intended type and purpose. **PLEASE SEE ATTACHMENT**	

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)*	

Reviewer Details:

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