

## Review Form 1.7

Journal Name:	<b>Advances in Research</b>
Manuscript Number:	<b>Ms_AIR_115111</b>
Title of the Manuscript:	<b>Studies on Creation of Operational range of soil fertility to evolve Fertilizer Prescription Equations under Soil Test Crop Response correlation studies on Rainfed Bt cotton</b>
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:

(<https://www.journalair.com/index.php/AIR/editorial-policy> )

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**PART 1: Review Comments**

	<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>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li>1. <b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li>2. <b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li>3. <b>Is the abstract of the article comprehensive?</b></li> <li>4. <b>Are subsections and structure of the manuscript appropriate?</b></li> <li>5. <b>Do you think the manuscript is scientifically correct?</b></li> <li>6. <b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> <li>1. The manuscript titled "Studies on Creation of Operational Range of Soil Fertility to Evolution Fertilizer Prescription Equations under Soil Test Crop Response Correlation Studies on Rainfed Bt Cotton" presents a comprehensive investigation aimed at deriving fertilizer prescription equations for rainfed Bt Cotton based on Soil Test Crop Response (STCR) studies. Through a gradient experiment involving fodder sorghum as an exhaustive crop, the authors created fertility gradients to evaluate variations in fodder yield uptake and soil test values. The results indicated a progressive increase in nutrient uptake and available soil nutrients with the application of graded doses of fertilizers. The study underscores the importance of balanced fertilization for enhancing the production potential of rainfed Bt cotton, particularly in the context of India's agricultural sustainability and environmental concerns. This manuscript contributes valuable insights into developing fertilizer prescription strategies tailored to the specific requirements of rainfed Bt cotton cultivation, particularly in regions like Perambalur district of Tamil Nadu, India.</li> <li>2. The title "Studies on Creation of Operational range of soil fertility to evolve Fertilizer Prescription Equations under Soil Test Crop Response correlation studies on Rainfed Bt cotton" effectively captures the essence of the manuscript's content. However, it could be slightly refined for clarity and conciseness.  Alternative title suggestion: "Developing Fertilizer Prescription Equations for Rainfed Bt Cotton through Soil Test Crop Response Correlation Studies"</li> <li>3. Yes, the abstract of the article provides a comprehensive overview of the study's objectives, methodology, and key findings. It effectively summarizes the purpose of the research, the approach taken, and the main results obtained. Additionally, it highlights the significance of the study in the context of agricultural sustainability and the importance of balanced fertilization for rainfed Bt cotton cultivation. Overall, the abstract serves its purpose well in providing readers with a clear understanding of the study's scope and implications.</li> <li>4. Overall, the manuscript's subsections and structure are appropriate for conveying the research methodology, results, and implications in a clear and organized manner.</li> <li>5. Based on the information provided in the abstract and the structure of the manuscript, it appears that the study follows established scientific principles and methodologies commonly used in agricultural research. The experimental design, involving a gradient experiment to study soil fertility variations and their impact on rainfed Bt cotton, is a valid approach for addressing the research objectives. The materials and methods section outlines the procedures for data collection, including soil analysis and crop yield measurements, which contribute to the scientific rigor of the study.  However, without access to the full text of the manuscript and a detailed review of the data, statistical analyses, and interpretation of results, it is challenging to make a definitive assessment of its scientific correctness. A thorough evaluation by subject-matter experts would be necessary to verify the accuracy of the findings and ensure that the study adheres to standard scientific practices.</li> <li>6. Based on the provided references, it seems that the manuscript includes relevant sources to support its context and methodology. However, it's essential to ensure that the references are recent enough to reflect the current state of knowledge in the field. Here are some suggestions for</li> </ol>	

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	<p>additional references that could supplement the existing ones:</p> <p>Khan, M. S., Zaidi, A., &amp; Wani, P. A. (2007). Role of phosphate-solubilizing microorganisms in sustainable agriculture—a review. <i>Agronomy for Sustainable Development</i>, 27(1), 29–43.</p> <p>Sharma, A., &amp; Johri, B. N. (2003). Growth-promoting influence of siderophore-producing <i>Pseudomonas</i> strains GRP3A and PRS9 in maize (<i>Zea mays</i> L.) under iron-limiting conditions. <i>Microbiological Research</i>, 158(3), 243-248.</p> <p>Malhotra, M., &amp; Srivastava, S. (2008). Effect of integrated use of organic and inorganic sources of nutrients on growth, yield, and quality of wheat in a typical ustochrept. <i>Journal of the Indian Society of Soil Science</i>, 56(1), 27–32.</p> <p>Ghosh, B. K., Swarup, A., &amp; Adhya, T. K. (2013). Potassium nutrition of crops: status, issues, and challenges. <i>Journal of Soil Science and Plant Nutrition</i>, 13(4), 897-925.</p> <p>Parihar, C. M., Singh, S., &amp; Singh, R. S. (2013). Effect of biofertilizers on nutrient content, uptake, and yield of wheat (<i>Triticum aestivum</i> L.). <i>The Bioscan</i>, 8(3), 1095–1098.</p> <p><b>Here are some additional suggestions and comments for the manuscript review:</b></p> <ol style="list-style-type: none"><li>1. <b>Clarity and Language:</b> Ensure that the manuscript is written in clear and concise language, with terminology appropriate for the target audience. Avoid excessive jargon or technical language that may hinder understanding for readers outside the field.</li><li>2. <b>Figures and Tables:</b> Evaluate the use of figures and tables in the manuscript to present data and results effectively. Ensure that they are appropriately labeled, referenced, and easy to interpret. Consider whether additional figures or tables could enhance the presentation of key findings.</li><li>3. <b>Discussion of Limitations:</b> Encourage the authors to discuss any limitations or potential biases in the study, such as sample size, experimental conditions, or data interpretation. Addressing these limitations transparently can strengthen the credibility of the research.</li><li>4. <b>Practical Implications:</b> Discuss the practical implications of the research findings for agriculture practitioners, policymakers, and other stakeholders. Consider how the study results could inform agricultural practices, nutrient management strategies, or policy decisions related to rainfed Bt cotton cultivation.</li><li>5. <b>Future Research Directions:</b> Suggest potential avenues for future research based on the findings of the current study. Identify unanswered questions or areas that warrant further investigation, such as exploring alternative fertilization strategies, assessing long-term soil fertility dynamics, or investigating interactions between soil microbes and crop nutrition.</li><li>6. <b>Overall Contribution:</b> Evaluate the overall contribution of the manuscript to the existing body of knowledge in the fields of soil fertility management and crop nutrition. Consider whether the research fills a significant gap in the literature, advances understanding of relevant concepts, or offers practical insights for agricultural sustainability.</li></ol>	
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<p><b>Minor</b> REVISION comments</p> <p>1. <b>Is language/English quality of the article suitable for scholarly communications?</b></p>	<p>The writing is clear and coherent, with technical terminology appropriate for the field of agricultural research. However, there are a few areas where improvements could be made for clarity and precision:</p> <p><b>Sentence Structure:</b> Some sentences in the manuscript could be simplified or rephrased for better readability. Ensure that complex ideas are expressed clearly and concisely.</p> <p><b>Grammar and Punctuation:</b> Check for grammatical errors and punctuation mistakes that may affect the clarity of the text. Proofreading for typos and inconsistencies can enhance the overall quality of the language.</p> <p><b>Consistency in Terminology:</b> Ensure consistency in the use of terminology throughout the manuscript. Verify that abbreviations, symbols, and units of measurement are used consistently and appropriately.</p> <p><b>Academic Tone:</b> Maintain a formal and objective tone consistent with scholarly writing standards. Avoid colloquial language or informal expressions that may detract from the professionalism of the manuscript.</p> <p><b>Citation Format:</b> Confirm that citations follow the appropriate format and style guidelines for the target journal or publication. Ensure accuracy and completeness in referencing the sources cited in the manuscript.</p> <p>Overall, while the language and English quality of the manuscript are generally suitable for scholarly communications, careful proofreading and attention to detail can further enhance the clarity and professionalism of the writing.</p> <p>1.</p>	
<p><b>Optional/General</b> comments</p>		

**PART 2:**

	<p><b>Reviewer's comment</b></p>	<p><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>
<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>	

**Reviewer Details:**

<p>Name:</p>	<p><b>Haftom Teshale Gebre</b></p>
<p>Department, University &amp; Country</p>	<p><b>Adigrat University, Ethiopia</b></p>