Review Form 3

Journal Name:	**Asian Journal of Soil Science and Plant Nutrition**
Manuscript Number:	**Ms_AJSSPN_124733**
Title of the Manuscript:	**Growth rate and nutrient uptake of Stevia Rebaudiana Bertoni as influenced by organic manures in laterite soils of Kerala, India**
Type of the Article	**Original Research Article**

Review Form 3

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.	This manuscript is significant for the scientific community, particularly in the context of sustainable agriculture and organic farming. By examining the nutrient uptake and growth rates of Stevia rebaudiana in laterite soils, it offers valuable insights into the potential benefits of using organic manures instead of synthetic fertilizers. I appreciate the manuscript for its practical applications and its focus on an emerging natural sweetener like stevia. However, it would benefit from a more in-depth analysis of the biological mechanisms driving the observed outcomes.	
Is the title of the article suitable? **(If not please suggest an alternative title)**	Impact of Organic Manures on Growth and Nutrient Uptake of Stevia Rebaudiana in Laterite Soils of Kerala, India	
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 provides a solid overview of the study but can be enhanced for clarity and comprehensiveness. One key improvement would be to include a clearer statement of the research objective or hypothesis, which is currently implied but not directly stated. The abstract would benefit from a concise conclusion that highlights the broader implications of the study. This could include a statement on how the findings support sustainable agricultural practices by demonstrating that higher levels of organic manure, especially FYM, significantly improve growth and nutrient uptake in stevia. A brief conclusion like this would tie the abstract together and emphasize the practical applications of the research.	
Are subsections and structure of the manuscript appropriate?	The Materials and Methods section is appropriately structured, but some subsections could be renamed for greater clarity. For example, instead of simply Crop Growth Rate (CGR) and Relative Growth Rate (RGR), consider renaming these subsections to Measurement of Crop Growth Rate (CGR) and Measurement of Relative Growth Rate (RGR). The combination of results and discussion in one section is generally acceptable. However, the manuscript could benefit from separating them into two distinct sections—Results and Discussion—for greater clarity. Additionally, the Discussion section could be organized with more subsections that directly address key findings, such as Effect on Crop Growth Rate, Effect on Relative Growth Rate, and Nutrient Uptake. This would make it easier for readers to follow the interpretation of results for each major variable.	
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 appears to be scientifically robust and technically sound due to its well-defined experimental design, which follows a randomized block design (RBD) with multiple treatments and replications, ensuring statistical rigor. The authors have employed appropriate metrics, such as crop growth rate (CGR) and relative growth rate (RGR), to quantify plant performance. These metrics are standard and scientifically accepted methods for assessing plant growth.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. **-**	The references in the manuscript are generally sufficient, covering a range of studies relevant to the topic of Stevia rebaudiana cultivation, organic manures, and nutrient uptake. However, a significant portion of the references is somewhat dated, with many from the 1980s, 1990s, and early 2000s. To strengthen the manuscript, it would benefit from the inclusion of more recent studies, particularly those published in the last 5 to 10 years, to ensure the research is contextualized within current scientific understanding.	

Review Form 3

Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**	The manuscript employs appropriate technical and scientific terminology that is commonly understood within the field. There are occasional minor grammatical issues, such as missing commas and articles, which can affect the flow of the text. Careful proofreading will help eliminate these issues. In some instances, acronyms like CGR and RGR are used without proper introduction or are introduced too late. Ensure that all acronyms are defined the first time they appear.	
Optional/General comments	The introduction offers a detailed background on Stevia rebaudiana, emphasizing its importance as a natural sweetener. However, the flow of information could be improved, as key points, such as the benefits of organic farming, are introduced late in the section. To enhance clarity and focus, the introduction could be restructured to first introduce the global significance of Stevia rebaudiana as a natural sweetener, outlining its increasing demand and health benefits. Following this, the discussion could shift to the relevance of sustainable farming practices, particularly organic farming, in the context of growing environmental concerns. This would provide a natural transition to the study's focus on organic manure. Lastly, the introduction should highlight the knowledge gap in nutrient management for stevia in Indian conditions, especially with organic manure, to underscore the need for this research. Additionally, the section lacks a clear research question or hypothesis, which should be explicitly stated to guide the reader through the study's objectives and significance. The methodology section is described in detail, but a few areas require clarification for better comprehension. In the experimental design, the description of treatments includes three levels of farmyard manure (FYM) and three levels of vermicompost (VC), but the treatment labels in Table 1 (T5, T6, T7) appear redundant. It is important to double check the consistency of the treatment descriptions to avoid unnecessary repetition. In the measurement of crop growth rate (CGR) and relative growth rate (RGR), while the formulas are clearly presented, providing a brief explanation of the significance of these metrics to the study would enhance understanding. Lastly, the statistical analysis section lacks detail regarding the methods used to compare means and determine significance, beyond just mentioning the randomized block design (RBD). Including information about the specific statistical tests employed would improve the clarity of the analysis process. In the Results and Discussion section, the results are well-presented through tables, but the discussion could be deepened in several areas. For CGR, the manuscript mentions the significant effect of FYM at 15 t ha^{-1}, but it lacks a thorough explanation of the biological processes behind these results, such as enhanced nutrient availability or root proliferation. Expanding on these factors would strengthen the argument. For RGR, the manuscript acknowledges the expected decline in the later growth stages due to plant senescence, but this section could be further elaborated by considering environmental factors like soil pH or weather conditions during the experiment, which might have contributed to this decline. Regarding nutrient uptake, while the findings on nitrogen, phosphorus, and potassium (NPK) uptake are significant, the discussion would benefit from comparing these results to other relevant studies. Citing literature that supports or contradicts the results could provide a broader understanding of the implications and strengthen the manuscript's argument. In scholarly publications, table captions are typically placed above the tables to clearly indicate their content before the reader views the data. In the manuscript, it would be appropriate to move all table captions to the top of their respective tables to maintain consistency with standard academic formatting. The conclusion is present but lacks a strong connection to the broader context of sustainable agriculture and its implications for commercial stevia cultivation. Strengthen this section by summarizing the main findings more explicitly, highlighting the practical applications of these results for farmers in Kerala and other regions with similar soil conditions, and suggesting future research directions, such as long-term studies on soil health or the integration of other organic inputs.	

Review Form 3

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:

Name:	**Md. Asif All Azad**
Department, University & Country	**Khulna University of Engineering & Technology, Bangladesh**