

Review Form 3

Journal Name:	Asian Journal of Soil Science and Plant Nutrition
Manuscript Number:	Ms_AJSSPN_121719
Title of the Manuscript:	Design and Comparison of Vertical and Horizontal Hydroponic Systems for Coriander and Lettuce Growth
Type of the Article	Original Research Article

Review Form 3

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 offers insightful information about the productivity and efficiency of two different hydroponic systems, which is essential for promoting environmentally friendly farming methods. The study addresses important issues regarding crop production, resource efficiency and space optimization by contrasting vertical and horizontal setups. This will help to foster the creation of creative solutions for urban farming and food security. The results could help both researchers and industry practitioners by directing future studies and defining best practices in hydroponic farming.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title states research has been done on Coriander & Lettuce but the entire manuscript shows research is carried on using Coriander & Spinach. Kindly, make the necessary correction.</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>Abstract is well-defined.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Introduction: 1. Please provide more information on advantages of hydroponics over traditional agricultural methods 2. Also, briefly explain the comparison between vertical and horizontal hydroponics method with advantages and disadvantages 3. Add references supporting this information.</p> <p>Material and methods: 1. Please include the contents of nutrient solution along with amount added in the solution. 2. How did the pH of water is measured? Please elaborate 3. Images in this section are realistic and I appreciate the efforts of the students.</p> <p>Results and Discussion: 1. Kindly include images and graphs to show shoot and root lengths in both the systems. 2. Add discussion with the reference of research articles aligning with your study and results.</p> <p>Conclusion is well-defined.</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 experimental design is well-structured, methodology contains realistic and detailed images. The data analysis is perfectly done, utilizing appropriate statistical method to validate the findings.</p> <p>In summary, the research offers substantial insights into the efficacy and efficiency of vertical and horizontal hydroponic systems for optimizing plant development, so contributing significantly to the field of sustainable agriculture.</p>	

Review Form 3

<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>-</p>	<p>Kindly add more references to this manuscript.</p> <p>For instance,</p> <ol style="list-style-type: none"> 1. Dutta, M., Gupta, D., Javed, Y., Mohiuddin, K., Juneja, S., Khan, Z. I., & Nauman, A. (2023). Monitoring root and shoot characteristics for the sustainable growth of barley using an IoT-enabled hydroponic system and aquacrop simulator. <i>Sustainability</i>, 15(5), 4396. 2. Kulkarni, S., Abraham, P. S., Mohanty, N., Kadam, N. N., & Thakur, M. (2018). Sustainable raft based hydroponic system for growing spinach and coriander. In <i>Techno-Societal 2016: Proceedings of the International Conference on Advanced Technologies for Societal Applications</i> (pp. 117-125). Springer International Publishing. 	
<p><u>Minor REVISION</u> comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The writing is concise and clear.</p>	
<p><u>Optional/General</u> comments</p>	<p>Great work by the team. I really appreciate the efforts. Additionally, team can look for more evaluation parameters for further research on both hydroponic systems.</p>	

PART 2:

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

Reviewer Details:

<p>Name:</p>	<p>Smital Poojary</p>
<p>Department, University & Country</p>	<p>India</p>