

Review Form 3

Journal Name:	<u>International Journal of Environment and Climate Change</u>
Manuscript Number:	Ms_IJECC_125103
Title of the Manuscript:	Monitoring Water Depth and Seepage Rates in Pitcher Irrigation
Type of the Article	Original Research Article

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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 holds significant importance for the scientific community, particularly in the context of sustainable agriculture and water conservation. The study provides valuable insights into the efficiency of pitcher irrigation, a traditional yet highly relevant method for modern water-scarce regions. By monitoring water depth and seepage rates, the paper offers practical data that can help optimize irrigation practices, making it a crucial resource for agricultural innovations aimed at improving water use efficiency. I appreciate the manuscript for its relevance, the clarity of its methodology, and its potential to contribute to sustainable farming solutions.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The current title, "Monitoring Water Depth and Seepage Rates in Pitcher Irrigation", is informative but could be more specific to highlight the focus on agricultural applications and the study's scope. A more suitable title might be: "Evaluating Water Seepage and Efficiency of Pitcher Irrigation for Sustainable Crop Water Management" This alternative title emphasizes the key aspects of the research—water efficiency and the role of pitcher irrigation in sustainable farming.</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>The abstract provides a good overview of the research, summarizing the key aspects of the pitcher irrigation system, its monitoring, and the study's main findings. However, a few improvements could make it more comprehensive:</p> <ul style="list-style-type: none"> • Objective Clarity: The abstract could explicitly state the study's main objective, such as evaluating the efficiency of pitcher irrigation in conserving water and supporting crop growth. • Quantitative Results: Adding specific numerical data, such as average seepage rates or percentage differences in water retention across different pots, would enhance the abstract's precision. • Broader Implications: Briefly mention the broader implications of the findings for sustainable agriculture, particularly in water-scarce regions. <p>I recommend including these points to make the abstract more informative and impactful.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The subsections and structure of the manuscript are generally appropriate. The paper follows a standard format with sections like Abstract, Introduction, Materials and Methods, Results and Discussion, and Conclusion, which makes it easy to follow and understand. However, to enhance clarity and flow, I suggest:</p> <ul style="list-style-type: none"> • Combining the Results and Discussion: This section could benefit from clearer differentiation between the presentation of results and their interpretation. • Seepage Rate Calculations: A dedicated subsection for "Seepage Rate Calculation" under the "Materials and Methods" would improve clarity. • Conclusion: A standalone section for "Implications for Future Research" or "Practical Applications" could provide a more robust closing. <p>These changes would streamline the manuscript and make it more reader-friendly.</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 manuscript is scientifically robust and technically sound. It employs a well-defined methodology to monitor water seepage and depth in a controlled environment using pitcher irrigation. The continuous monitoring and detailed analysis of water levels across different times of day, combined with a clear explanation of seepage rates, show that the study is grounded in empirical data. I find the approach of evaluating water efficiency under different conditions to be methodologically solid, providing insights into sustainable irrigation practices. The manuscript's reliance on established agricultural techniques further enhances its scientific validity.</p>	

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<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>The references in this manuscript are generally sufficient and relevant, with a good mix of foundational studies and recent research. The inclusion of studies from 2020 to 2024 demonstrates that the authors have considered contemporary work in the field. However, the reference list could benefit from a broader range of more recent studies focusing on the latest advancements in water management, sustainable agriculture, and alternative irrigation methods.</p> <p>I would suggest adding references related to:</p> <ul style="list-style-type: none"> • Advancements in water-saving irrigation technologies to offer a more comprehensive comparison between pitcher irrigation and modern methods like drip or subsurface irrigation. • Studies on climate resilience in agriculture that discuss how traditional methods like pitcher irrigation can help combat climate-induced water stress. <p>These additions would further strengthen the manuscript's scientific foundation by providing a more detailed context for the research.</p>	
<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language quality of the manuscript is generally suitable for scholarly communication. The technical terms are used appropriately, and the overall structure of the writing is clear and coherent. However, there are occasional instances of awkward phrasing or overly complex sentence structures that could be simplified for better readability. Additionally, a few sections may benefit from minor grammatical corrections to enhance fluency and precision. I recommend a thorough proofreading and possibly engaging a language editor to ensure that the manuscript is polished and meets the highest standards of academic writing. This would improve the flow and clarity without altering the technical content.</p>	
<p>Optional/General comments</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>Md. Tahmidul Huque</p>
<p>Department, University & Country</p>	<p>Bangladesh University of Business and Technology, Bangladesh</p>