Review Form 3

Journal Name:	**Journal of Scientific Research and Reports**
Manuscript Number:	**Ms_JSRR_124113**
Title of the Manuscript:	**Drones for Monitoring Soil Moisture and Optimizing Irrigation Scheduling in Horticultural Farms**
Type of the Article	**Review Article**

General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

https://r1.reviewerhub.org/general-editorial-policy/

Important Policies Regarding Peer Review

Peer review Comments Approval Policy: https://r1.reviewerhub.org/peer-review-comments-approval-policy/
Benefits for Reviewers: https://r1.reviewerhub.org/benefits-for-reviewers

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 highly valuable to the scientific community as it addresses the need in precision agriculture by exploring the use of drones for soil moisture monitoring and irrigation management. By integrating advanced sensor technologies and data analytics, the manuscript offers innovative solutions to optimize irrigation scheduling, which can lead to significant water savings and enhanced crop productivity. This focus on real-world applications, such as high-value fruit and vegetable crops, makes it relevant and actionable for both researchers and practitioners. Additionally, by addressing the challenges, limitations, and future directions, it provides a comprehensive perspective and guidelines for further research and development in this evolving field.	
Is the title of the article suitable? **(If not please suggest an alternative title)**	**Yes**	
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.	**Yes** Suggested to highlight challenges and connect to the reviewed articles and the findings provided in the manuscript**.**	
Are subsections and structure of the manuscript appropriate?	Yes (suggested to give and connective summary for each tabular explanation) and highlight the issues.	
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.	This manuscript appears scientifically robust and technically sound because it covers key aspects of drone technology and soil moisture monitoring, grounded in established scientific principles like remote sensing and electromagnetic spectrum interactions. It provides a well-rounded approach by discussing various sensor types (optical, thermal, hyperspectral) and the necessary data processing techniques, such as radiometric corrections and machine learning, which are critical for accurate soil moisture estimation. The inclusion of case studies adds practical validation to the scientific claims, and the discussion of challenges, such as data accuracy and regulatory issues, shows a balanced understanding of the field. Overall, the manuscript addresses both the theoretical foundations and practical applications, making it scientifically credible.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. **-**	**No** Latest references from 2020 onward should be included to reflect advancements in drone and sensor technology. Additional references can be added to Section 5.2 to support discussions on machine learning and data fusion in soil moisture estimation.	
Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**	Yes □ Update references with the latest from 2020 onwards. □ Ensure all citation formats are correct and consistent. □ Revise the abstract to reflect the latest research and focus of the study. □ Summarize tables clearly, emphasizing the identified gaps in the current research.	
Optional/General comments	The manuscript should be elaborated to address technological gaps more comprehensively, providing insights into areas where advancements are needed. Additionally, the introduction should be compressed for conciseness while retaining essential information. Graphical representations can be utilized to summarize key findings and concepts effectively, enhancing clarity and visual appeal.	

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:	**S.Jayalaxmi**
Department, University & Country	**Lovely Professional University, India**