Review Form 3

Journal Name:	**Journal of Experimental Agriculture International**
Manuscript Number:	**Ms_JEAI_127591**
Title of the Manuscript:	**Advance Research Under Modern Techniques and Agricultural Practices in Agronomy: A review**
Type of the Article	**Review**

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:

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Important Policies Regarding Peer Review

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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 important for the scientific community as it addresses advancements in agronomy, crop management, and sustainable agricultural practices, with a particular focus on the Indian context. Through integrating traditional knowledge with modern technological innovations, the paper highlights solutions to pressing challenges such as climate change, resource scarcity, and food security. Its multidisciplinary approach, which spans soil science, crop genetics, and precision agriculture, provides insights for researchers, policymakers, and practitioners aiming to promote sustainable agricultural development. However, while the manuscript covers a range of topics, it would benefit from stronger citations and data-backed examples to enhance its credibility and impact.	
Is the title of the article suitable? **(If not please suggest an alternative title)**	The title of the article, *"Advance Research Under Modern Techniques and Agricultural Practices in Agronomy: A Review,"* broadly captures the manuscript's focus on advancements in agronomy and modern agricultural practices. However, it could be more concise and specific to better reflect the content and attract scholarly interest. Advancements in Agronomic Research: A Review of Integrating Modern Techniques and Sustainable Practices in Agriculture	
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 an overview of the study. However, improvements could be made: • The abstract could be more structured, clearly outlining objectives, methods, findings, and implications. • Avoid overgeneralizations such as "reminder of how much agricultural technology has been integrated into society." • Introduce a specific research gap or key finding for better impact.	
Are subsections and structure of the manuscript appropriate?	**Introduction** • Expand briefly on "creative approaches" with specific examples to enhance clarity. • Clarify the phrase "balance between productivity and ecological stewardship." **Evolution of Research Under Agronomy**	

	• Some sections, such as "dynamic interaction between innovation and tradition," need clearer examples. • Integrate a critical evaluation of why certain research directions succeeded or faced limitations. • Include recent data or case studies to validate the points discussed. **Crop Management** • The section feels descriptive; consider adding a critical perspective on challenges in adoption. • More recent studies or quantitative outcomes from precision farming could strengthen the argument. **Agricultural Practices** • Better to integrate the socioeconomic impact of these practices. • The discussion on conservation agriculture could include more quantitative evidence. **Precision Farming** • Consider providing examples of successful large-scale implementations in India. • Address challenges, such as cost barriers and farmer education, in more depth. **Recent Advances in Soil Science** • Quantitative impacts of techniques like soil carbon sequestration could enhance discussion. • The section could benefit from a deeper analysis of policy support in soil science. **Crop Breeding and Genetics** • The section is repetitive (e.g., Bt cotton is mentioned multiple times in different sections). • Include a balanced view on controversies surrounding GM crops. **Integrating Technology in Agronomy** • Provide more real-life examples or case studies to substantiate claims. • Address barriers to adoption, such as digital literacy gaps among farmers. **Challenges and Future Directions** • The recommendations could be more prioritized and specific. • Expand on how farmer education can be practically implemented. **Conclusion** • The conclusion could be more impactful by summarizing the key findings and their implications for future research. • Avoid passive constructions, such as "It has been shown that," which dilute the paper's authority. • Ensure claims are properly cited throughout. I cannot find any citation in the introduction especially.	
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 is relatively robust as it provides an overview of advancements in agronomic research, supported by relevant literature and technological innovations. It demonstrates a multidisciplinary approach by covering diverse areas such as precision farming, soil science, crop genetics, and sustainable agricultural practices. The manuscript also addresses key challenges like climate change and resource scarcity, aligning its discussions with global trends and frameworks for sustainable agriculture. While the content is technically sound, including citations for all claims and providing more quantitative data or case studies would further enhance its scientific reliability and applicability.	

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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 relevant and provide a mix of foundational and contemporary sources. However, a few areas could benefit from more recent or specific references to strengthen the discussion, particularly regarding advancements in technology and sustainability. Suggestions for Additional References: **Precision Agriculture and Technology Adoption:** • Updated research on IoT, AI, and remote sensing applications in agriculture could enhance the section on technological integration. Consider citing: ○ Zhang, C., & Kovacs, J. M. (2021). "The application of small unmanned aerial systems for precision agriculture: A review." *Precision Agriculture, 22(3), 713–735.* **Climate Resilience and Sustainable Practices:** • To enrich the discussion on climate-smart agriculture, refer to: ○ Campbell, B. M., et al. (2018). "Sustainable intensification: What is its role in climate-smart agriculture?" *Current Opinion in Environmental Sustainability, 8(1), 39–43.* **Soil Science and Health Monitoring:** • For recent developments in soil health management, include: ○ Lal, R. (2020). "Soil health and climate change: An overview." *Sustainability, 12(3), 1–12.* **Crop Genetics and Biotechnology:** • Expand the section on crop breeding and GMOs with: ○ Hickey, L. T., et al. (2019). "Breeding crops to feed 10 billion." *Nature Biotechnology, 37(7), 744–754.*	
Minor REVISION comments **Is the language/English quality of the article suitable for scholarly communications?**	The language quality of the manuscript is generally suitable for scholarly communication, as it uses terminology and maintains a formal tone. However, some areas need improvement to enhance clarity, coherence, and precision. **Precision and conciseness:** • Phrases like *"This is a reminder of how much agricultural technology has been integrated into society"* are vague and could be replaced with more precise statements about technological impact. **Consistency and flow:** • The manuscript occasionally lacks smooth transitions between ideas, which can interrupt the reader's understanding. For example, the shift from traditional to modern agronomic practices could be more cohesive.	
Optional/General comments		

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:	**Frank Yeboah Adusei**
Department, University & Country	**Virginia Polytechnic Institute and State University, U.S.A**