

Name:	<a href="#">UTTAR PRADESH JOURNAL OF ZOOLOGY</a>
Manuscript Number:	Ms_UPJOZ_4502
Title of the Manuscript:	Remote Sensing and Automated Monitoring Systems for Insect Pest Detection and Surveillance
Type Of The Article	Review Article

#### **PART 1: Comments**

	<b>Reviewer's comment</b>	<b>Author's Feedback</b> <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.</b>	This manuscript addresses a critical challenge in agriculture: the effective detection and surveillance of insect pests, which significantly impact crop yields and food security. By consolidating recent advancements in remote sensing and automated monitoring technologies, the manuscript provides a comprehensive framework for integrating these tools into precision agriculture. Its emphasis on scalable, real-time, and non-invasive techniques makes it highly relevant to researchers, practitioners, and policymakers aiming to enhance pest management strategies sustainably. Furthermore, the discussion of future challenges and potential research directions offers valuable insights for advancing this field.	Enhance the abstract's structure by clearly stating the research methodology, objectives, results obtained, and conclusions drawn from the study. This focuses on the key improvement needed while meeting the specified length requirement and maintaining a professional, direct tone.
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	The current title, "Remote Sensing and Automated Monitoring Systems for Insect Pest Detection and Surveillance," is suitable and effectively reflects the content. However, a more concise alternative could be: " <i>Advancements in Remote Sensing and Automated Systems for Insect Pest Surveillance.</i> "	

<p><b>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.</b></p>	<p>The abstract is comprehensive and well-structured, summarizing the key aspects of the study, including the technologies discussed, their advantages, limitations, and future research directions. However, it could be improved by briefly mentioning the role of decision support tools and the economic and environmental benefits, as these are highlighted later in the manuscript.</p>	<p>The enhanced abstract should maintain its current clear structure while incorporating these additional elements that are currently missing but significant to the overall work.</p>
<p><b>Is the manuscript scientifically, correct? Please write here.</b></p>	<p>The manuscript appears scientifically sound, providing a detailed and balanced overview of current technologies, their applications, and limitations. It integrates relevant case studies and references, strengthening its credibility. The discussion of challenges, such as data integration and operational costs, is realistic and aligns with practical experiences in the field.</p>	<p>The manuscript's balanced treatment of both advantages and limitations is commendable. To build on this foundation, consider including a more structured analysis framework for evaluating new monitoring technologies as they emerge in this rapidly evolving field.</p> <p>These enhancements will further strengthen the manuscript's scientific credibility while maintaining its practical value for the agricultural community.</p>
<p><b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b></p>	<p>The references are extensive and recent, covering key studies relevant to the topic. However, additional recent works focusing on IoT applications and AI advancements in pest management could further enrich the discussion. Suggestions include:</p> <ol style="list-style-type: none"> <li>1. Emerging AI techniques for pest management in agriculture.</li> <li>2. Recent developments in IoT-enabled pest monitoring systems.</li> </ol>	

<p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>The language is clear, scholarly, and suitable for academic communication. Minor improvements could enhance readability, such as simplifying technical terms for broader accessibility without compromising precision.</p>	
<p><b><u>Optional/General</u></b> comments</p>	<ol style="list-style-type: none"> <li>1. Figures and tables are well-constructed and enhance the manuscript's clarity. Including more real-world implementation examples or pilot studies could strengthen its practical applicability.</li> <li>2. A more detailed section on integrating these technologies with policy frameworks and funding models would add value, especially for stakeholders in developing countries.</li> </ol> <p>This manuscript is well-written, comprehensive, and addresses a significant challenge in modern agriculture by exploring advanced technologies for insect pest detection and surveillance. The integration of remote sensing, automated monitoring systems, and precision agriculture practices is timely and highly relevant to both researchers and practitioners. The scientific foundation is robust, the references are sufficient, and the language is suitable for scholarly communication. With minor improvements to the abstract and additional examples of real-world implementations, the paper is highly suitable for publication and will be a valuable contribution to the field.</p> <p>This manuscript provides a detailed and timely review of remote sensing and automated monitoring systems for insect pest detection and surveillance, addressing an important topic in agricultural sustainability. The content is well-organized, with a clear structure, logical flow, and appropriate use of references to support the arguments.</p> <p>Minor suggestions for editorial improvements include:</p> <p>Ensuring consistency in terminology throughout the manuscript</p>	<p>OK</p>

	<p>(e.g., "remote sensing systems" vs. "remote sensing technologies").</p> <p>Verifying all figures and tables for alignment with the text and ensuring high-quality resolution suitable for publication.</p> <p>Checking for any redundant sections or sentences to improve readability and conciseness.</p> <p>Ensuring that all abbreviations are defined upon first use to enhance accessibility for a diverse readership.</p> <p>Overall, the manuscript aligns well with the journal's scope and standards and is recommended for publication after minor revisions.</p> <p>The manuscript does not explicitly present any ethical concerns. It focuses on technological advancements for insect pest detection and surveillance, which are non-invasive and aim to promote sustainable agricultural practices. No experiments involving living organisms or sensitive data collection are reported, suggesting minimal ethical risks. However, the authors should ensure that all case studies and data used comply with ethical research standards, particularly in the handling of environmental data and pest management practices.</p> <p>The manuscript does not indicate any competing interest issues. If the authors have affiliations with companies or organizations providing the technologies discussed, it would be prudent for them to disclose these relationships to maintain transparency and objectivity. A declaration of no competing interests would strengthen the paper's credibility.</p>	
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**PART 2:**

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