

**Review Form 3**

Journal Name:	<a href="#">International Journal of Environment and Climate Change</a>
Manuscript Number:	<b>Ms_IJECC_124903</b>
Title of the Manuscript:	<b>Plastic in Agriculture: A Comprehensive Review of Benefits, Environmental Impacts, and Sustainable Alternatives</b>
Type of the Article	

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**PART 1: Review Comments**

<b>Compulsory</b> 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><b>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.</b></p>	<p>The manuscript titled "Plastic in Agriculture: A Comprehensive Review of Benefits, Environmental Impacts, and Sustainable Alternatives" is highly valuable to the scientific community, as it addresses a pressing environmental concern: the extensive use of plastics in modern agriculture. The review provides an in-depth analysis of both the agronomic benefits of plastics and the significant environmental challenges they pose, such as soil contamination and microplastic pollution. It also explores sustainable alternatives like biodegradable plastics and innovative agricultural practices. I particularly appreciate the manuscript's balanced approach, which highlights the need to maintain agricultural productivity while minimizing environmental harm. This comprehensive coverage makes it a critical resource for researchers, policymakers, and agricultural professionals seeking to mitigate the ecological footprint of plastic use in agriculture.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>The title "Plastic in Agriculture: A Comprehensive Review of Benefits, Environmental Impacts, and Sustainable Alternatives" is informative and clearly reflects the scope of the manuscript. However, it could be made more concise while maintaining clarity. Here's a suggestion for a more refined title:</p> <p>"Plastic Use in Agriculture: Balancing Benefits, Environmental Impacts, and Sustainable Solutions"</p> <p>This alternative captures the key themes—use, impact, and sustainability—while maintaining a balanced tone.</p>	
<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 of the manuscript is generally comprehensive, addressing key points such as the widespread use of plastics in agriculture, their agronomic benefits, and the associated environmental impacts. It also touches on the need for sustainable alternatives and waste management practices. However, there are a few suggestions for improvement to make it clearer and more focused:</p> <p># Suggestions for Improvement:</p> <ol style="list-style-type: none"> <li>1. Clearer Problem Definition**: While the abstract mentions environmental concerns, it could benefit from a stronger, clearer statement about the scale and urgency of the plastic pollution problem.</li> <li>2. Include Specific Examples**: The abstract could briefly mention a few specific examples of the environmental impacts (e.g., soil microplastic contamination or greenhouse gas emissions).</li> <li>3. Highlight the Review's Scope**: It would help to clarify that the review also covers potential solutions like biodegradable plastics and policy reform in more detail.</li> <li>4. Conclusion**: The abstract ends with a call for a balanced approach but could benefit from a stronger closing sentence summarizing the need for innovation and future research.</li> </ol>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p>The manuscript appears to be well-structured, with clear subsections that logically follow the flow of the review. It begins with an Introduction that sets the context of plastic use in agriculture, followed by sections that detail the historical evolution, types of plastics used, their benefits, and the environmental impacts. The manuscript also includes a thorough exploration of sustainable alternatives and concludes with policy frameworks and future directions for research.</p>	
<p><b>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.</b></p>	<p>The manuscript is scientifically robust and technically sound, as it is built on a comprehensive review of current literature, thoroughly examining both the benefits and environmental impacts of plastic use in agriculture. The detailed discussion on the lifecycle of plastics, including their role in pollution and ecosystem disruption, reflects a deep understanding of the subject matter. Additionally, the manuscript covers the latest developments in sustainable alternatives like biodegradable plastics and bio-based materials, providing credible, evidence-based solutions to the problems posed by traditional plastics. The inclusion of references to peer-reviewed studies further strengthens the scientific validity of the claims, ensuring that the review is well-supported and grounded in current research.</p>	

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<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>-</p>	<p>The references in the manuscript appear to be comprehensive and cover a broad spectrum of studies related to plastic use in agriculture, including both the benefits and environmental impacts. However, there are a few points to consider regarding the sufficiency and recency of the references:</p> <p># for Improvement:</p> <p>*Recency of References: While many references are relevant, some key references are over a decade old, such as sources from 2005, 2009, and early 2010s. Although they may still be valid, adding more recent studies (from the last 3-5 years) would strengthen the manuscript's relevance in rapidly evolving fields like biodegradable plastics and agricultural waste management.</p> <p>*Suggested Recent Studies: DOI: 10.55493/5003.v12i4.4654 Doi.10.1016/j.crgsc.2022.100273 These would help ensure the references are both up-to-date and reflective of the current scientific discourse on sustainable agricultural practices.</p>	
<p><u>Minor REVISION</u> comments</p> <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>Grammar and Syntax: While the overall grammar is solid, there may be occasional instances of awkward phrasing or complex sentence structures that could be simplified for better clarity.</p> <p>Consistency: Ensuring consistent use of terminology throughout the manuscript can enhance comprehension. For instance, the terms used to describe sustainable alternatives should be uniformly defined and applied.</p> <p>Proofreading: A thorough proofreading to catch any minor typographical errors or inconsistencies will further improve the manuscript's overall quality.</p> <p>Overall, the manuscript is well-suited for scholarly communication, with minor adjustments needed for clarity and consistency.</p>	
<p><u>Optional/General</u> comments</p>		

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

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