

### ReviewForm3

JournalName:	<b>JournalofExperimental AgricultureInternational</b>
ManuscriptNumber:	<b>Ms_JEAI_121337</b>
TitleoftheManuscript:	<b>RoleofConservationTillagePracticesinSustainableAgriculturalSystems</b>
Typeofthe Article	<b>ReviewArticle</b>

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**PART1:ReviewComments**

<b>Compulsory</b> REVISIONcomments	Reviewer'scomment	Author'sFeedback(Pleasecorrectthemanuscriptandhighlightthatpartinthemanuscript.Itismandatorythatauthorsshouldwritehis/herfeedbackhere)
<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>The article is well-researched and provides a thorough overview of conservation tillage practices and their role in sustainable agriculture. The structure is logical and easy to follow, with each section building on the previous one to provide a comprehensive understanding of the topic. The use of references to support the claims made in the article adds credibility to the discussion.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>Yes, the title is suitable</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 succinctly captures the essence of the article, emphasizing the need for sustainable land management techniques to balance food supply with environmental conservation. It outlines the goals of conservation tillage, including protecting soil health, enhancing crop productivity, and promoting sustainability.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Yes, they are appropriate</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 introduction effectively sets the context by highlighting the pressing need for increased agricultural output to meet the demands of a growing global population. It introduces conservation tillage as a solution to achieve sustainable food production while preserving environmental integrity. The references to global population growth and food security provide a solid foundation for discussing the importance of sustainable agricultural practices.</p> <p><b>Conservation Tillage (CT): Types</b> The section on the types of conservation tillage techniques provides a clear and concise overview of different CT methods, including mulch tillage, ridge tillage, contour tillage, reduced tillage, and zero tillage. Each method is briefly explained, giving readers a good understanding of the variety of CT practices available.</p> <p><b>Conservation Tillage (CT) and its Effect on Soil Properties</b> This section is well-organized into subsections addressing the physical, chemical, and biological impacts of CT on soil properties. The inclusion of a table summarizing the impacts of CT on soil properties is particularly helpful. Key points include:</p> <p><b>Physical Properties:</b> Improved hydraulic conductivity, prevention of soil erosion, enhanced soil aggregation, and increased soil organic carbon (SOC) and organic matter (SOM).</p> <p><b>Chemical Properties:</b> Enhanced cation exchange capacity (CEC), improved nutrient content, and carbon sequestration.</p> <p><b>Biological Properties:</b> Increased microbial activity, nutrient cycling, and enzymatic activities, leading to improved soil fertility and productivity.</p> <p><b>Conservation Tillage (CT) and its Effect on Crop Yield</b> This section discusses the impact of CT on crop yield, highlighting how CT practices can improve soil structure, water storage, and crop productivity. The examples of mustard, rapeseed, and spring wheat provide concrete evidence of the benefits of CT in different crops.</p> <p><b>Conservation Tillage (CT) and the Environment</b> The environmental benefits of CT are explored in this section, focusing on the reduction of runoff and soil erosion, as well as the decrease in greenhouse gas emissions. The discussion on how CT practices</p>	

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	contribute to carbon sequestration and mitigate climate change is particularly relevant.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	References are sufficient and most of them are fairly recent	
Minor REVISION comments		
Is the language/English quality of the articles suitable for scholarly communications?	Yes	
Optional/General comments	<p>The conclusion effectively summarizes the main points of the article, reiterating the benefits of conservation tillage in enhancing soil health, reducing erosion, and promoting sustainable agriculture. It emphasizes the importance of CT practices in achieving sustainable food production and addressing environmental challenges. The article is a well-written and informative piece on the role of conservation tillage in sustainable agricultural systems, effectively highlighting its benefits for soil health, crop productivity, and environmental sustainability.</p> <p>Including more detailed case studies or examples from different regions and crop types could provide practical insights into the implementation and benefits of CT practices.</p>	

**PART 2:**

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

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