

**Review Form 3**

Journal Name:	<a href="#">Asian Journal of Soil Science and Plant Nutrition</a>
Manuscript Number:	Ms_AJSSPN_126752
Title of the Manuscript:	Effects of organic sources on earthworm density in sugarcane plant ratoon system under different planting methods
Type of the Article	

**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>
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 significant to the scientific community because it highlights the crucial role of organic farming practices, specifically green manuring with sunnhemp, in enhancing soil health and promoting soil biodiversity through the increase of earthworm populations. By focusing on the sugarcane plant-ratoon system, the study provides valuable insights into sustainable farming practices that can improve soil fertility, structure, and ecosystem services, which is especially relevant given the global concerns about soil degradation and the overuse of chemical fertilizers.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title of the article is generally suitable as it clearly conveys the focus of the research on the effects of organic sources on earthworm density in a sugarcane plant-ratoon system under different planting methods. However, it could be made more concise and specific to enhance clarity and impact. I proposed this title "Impact of Organic Amendments on Earthworm Population in Sugarcane Plant-Ratoon System Under Different Planting Methods"	
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.	<ul style="list-style-type: none"> <li>✓ The abstract briefly discusses the experimental design and treatments, but could provide more details on the application and measurement of these treatments, such as specific growth stages.</li> <li>✓ The use of terms like "organic sources" and "soil health management practices" can be a bit confusing in the abstract since they are used interchangeably but may refer to different types of treatments. It would be helpful to clarify that "organic sources" refers to green manuring and mulching practices while "soil health management practices" encompasses all treatment types (including control and nutrient levels).</li> </ul>	
Are subsections and structure of the manuscript appropriate?	Overall, the structure of the manuscript is appropriate, but it could benefit from minor adjustments to improve the flow and clarity. These changes would enhance readability, especially for those trying to interpret the results, and would ensure that each aspect of the study is fully addressed. The addition of clear subsections in the Results and Discussion sections and an expanded Conclusion would help in synthesizing the findings and their broader agricultural implications.	
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.	The manuscript appears scientifically robust and technically sound based on its clear experimental design, use of appropriate statistical methods, and the systematic collection of data across multiple growth stages of sugarcane. The use of a split-split plot design with multiple treatments and replications strengthens the reliability of the results and allows for a comprehensive analysis of the effects of organic amendments, planting methods, and nutrient levels on earthworm populations. Additionally, the study's focus on ecological indicators such as earthworms provides valuable insights into soil health, which is a key factor in sustainable agricultural practices. The methodology is clearly described, and the use of established soil management practices, such as green manuring with sunnhemp and trash mulching, further supports the technical soundness of the research. Overall, the manuscript presents well-	

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	<b>founded conclusions, backed by appropriate data collection and analysis, demonstrating its scientific credibility.</b>	
<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 manuscript provides sufficient references to support key concepts and methodologies discussed in the study, including studies on organic amendments, soil health, and earthworm populations. Citing key studies like Blouin et al. (2013) and Buck et al. (1999) lends credibility to the research. However, there is room for improvement in the manuscript's references. It would be beneficial to include more recent studies, particularly those from the last 5-10 years, on soil health management, integrating organic amendments with modern agroecological practices, and sustainable nutrient management practices. This would strengthen the manuscript's alignment with current trends and technologies in soil health research.</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><b>Grammar and Syntax:</b> There are some minor grammatical errors and awkward sentence constructions that can slightly hinder the flow. For example:</p> <ul style="list-style-type: none"> <li>• "Under the soil conditions, organic sources can improve both the physicochemical and biological properties of soil" could be rephrased for clarity: "Organic sources can improve both the physicochemical and biological properties of the soil under these conditions."</li> <li>• "The main plots consist of M1: conventional planting, M2: paired row planting, M3: dual row planting along with four soil health management practices..." This sentence could be clearer with better punctuation and structure: "The main plots consisted of three planting methods: M1 (conventional planting), M2 (paired row planting), and M3 (dual row planting), along with four soil health management practices..."</li> </ul>	
<p><u>Optional/General</u> comments</p>	<p>Overall, this manuscript presents valuable research on the effects of organic sources on earthworm density in sugarcane cultivation, specifically in a plant-ratoon system under different planting methods. The experimental design, including the use of split-split plot design with multiple treatments, is appropriate for addressing the research questions, and the results provide useful insights into soil health management and sustainable agricultural practices. The study contributes to the growing body of knowledge on the role of soil organisms, such as earthworms, in enhancing soil fertility and promoting sustainable crop production.</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)
<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>	

**Reviewer Details:**

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