

Review Form 1.7

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Ms_IJPSS_112357
Title of the Manuscript:	Studies influenced by bio-fertilizers and organic manures on flowering behaviour and yield attributes of Dragon fruit
Type of the Article	

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PART 1: Review Comments

	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>Compulsory REVISION comments</p> <ol style="list-style-type: none"> Is the manuscript important for scientific community? (Please write few sentences on this manuscript) Is the title of the article suitable? (If not please suggest an alternative title) Is the abstract of the article comprehensive? Are subsections and structure of the manuscript appropriate? Do you think the manuscript is scientifically correct? Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> Yes, the manuscript has the potential to be important for the scientific community studying dragon fruit cultivation, particularly in India. Here's why: <ul style="list-style-type: none"> Strengths: <ol style="list-style-type: none"> Focus on a new and understudied crop in India: Dragon fruit is a relatively new crop in India, and there is a lack of scientific data on its cultivation, especially related to organic practices. This study would add valuable knowledge to the field. Investigates the effects of organic manures and bio-fertilizers: The use of organic inputs is gaining traction in agriculture due to its potential for sustainability and environmental benefits. This study examines the impact of various organic manures and bio-fertilizers on dragon fruit flowering and yield, which is relevant to current trends and practices. Clear methodology and results: The manuscript outlines the experimental design, treatments, and data analysis methods concisely. It also presents the results with statistical significance, making the findings more reliable and generalizable. Potential for practical applications: The findings of this study could be directly applied by farmers and agricultural researchers in India to improve dragon fruit cultivation practices using organic inputs. Potential weaknesses to address: <ol style="list-style-type: none"> Limited scope: The study was conducted over two years on a single farm. Future research with a wider range of locations and years could strengthen the generalizability of the findings. Details of bio-fertilizers: The manuscript mentions PSB and VAM as bio-fertilizers but could benefit from providing more specific details about the types and strains used, as well as their potential mechanisms of action in dragon fruit cultivation. Economic analysis: While the study focuses on yield, including an analysis of the economic feasibility of using organic inputs compared to conventional fertilizers could further enhance its practical value for farmers. <p>Overall, the manuscript has the potential to be a valuable contribution to the scientific community studying dragon fruit cultivation, particularly in India. By addressing the potential weaknesses and further strengthening the analysis and discussion, the authors can increase the impact and significance of their work.</p> The title "Studies influenced by bio-fertilizers and organic manures on flowering behaviour and yield attributes of Dragon fruit" is somewhat suitable but could be improved for clarity and impact. Here's why: <ul style="list-style-type: none"> Strengths: <ol style="list-style-type: none"> Accurate: It accurately reflects the content of the study, including the focus on organic inputs, flowering behavior, and yield attributes. Keywords: It incorporates relevant keywords like "bio-fertilizers," "organic manures," "dragon fruit," "flowering," and "yield," which could help with search engine optimization and discoverability. Weaknesses: <ol style="list-style-type: none"> Passive voice: The title is written in the passive voice ("influenced by"), which can sound less engaging and impactful. Wordiness: It could be more concise and punchier. Lacks specificity: It doesn't highlight the key findings or potential benefits of the study. <p>Here are some alternative title suggestions:</p> <ul style="list-style-type: none"> "Enhancing Dragon Fruit Flowering and Yield with Bio-fertilizers and Organic Manures: A Two-Year Field Study" (More specific, active voice, highlights key findings) 	

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	<ul style="list-style-type: none">▪ "Organic Boost for Dragon Fruit: Bio-fertilizers and Manures Promote Flowering and Yield" (Catchy, active voice, highlights benefits)▪ "Unlocking Dragon Fruit Potential: Optimizing Flowering and Yield through Organic Inputs" (Focuses on optimization, active voice) <p>Ultimately, the best title will depend on your specific goals and target audience. Consider what you want to emphasize and how you want to engage readers.</p> <p>3. The abstract is somewhat comprehensive, but it could be improved in a few ways:</p> <ul style="list-style-type: none">▪ Strengths:<ul style="list-style-type: none">a. Briefly introduces the context (dragon fruit as a new super fruit) and research focus (flowering behavior and yield).b. Mentions the experimental design (treatments, years, location).c. Highlights the key finding (T13 with vermicompost + PSB + VAM had the greatest impact).d. Includes relevant keywords.▪ Weaknesses:<ul style="list-style-type: none">a. Lacks detail about the flowering behavior and yield parameters studied.b. Doesn't mention the statistical significance of the findings.c. Doesn't hint at the potential implications or applications of the research.▪ Improvement suggestions:<ul style="list-style-type: none">a. Briefly mention the key flowering and yield parameters measured (e.g., number of flowers, fruit weight, etc.).b. Add a phrase about the statistical significance of the T13 finding (e.g., "significantly increased... compared to the control").c. Conclude with a sentence about the potential implications or applications of the findings (e.g., "These results suggest that organic inputs can effectively improve dragon fruit production"). <p>Here's an example of a revised abstract incorporating these suggestions:</p> <p>Dragon fruit (<i>Hylocereus</i> spp.) is a newly introduced super fruit in India with promising yield potential. However, little is known about how organic inputs affect its flowering and fruiting behavior. This study investigated the impact of different bio-fertilizers and organic manures on flowering and yield attributes of red and white fleshed dragon fruit types over two years. Treatments included various combinations of farmyard manure, poultry manure, vermicompost, plant growth-promoting bacteria (PSB), and vesicular arbuscular mycorrhizae (VAM). Results revealed that treatment T13, comprising 100% N through vermicompost supplemented with PSB and VAM (10 kg/ha each), significantly increased the number of flowers, fruit weight, and total yield compared to the control. These findings suggest that organic inputs can effectively enhance dragon fruit production, offering sustainable alternatives for future cultivation practices.</p> <p>Remember to keep the abstract concise and focused, typically around 200-250 words, but abstract in the manuscript is 261 words.</p> <p>4. Overall, the subsections and structure of your manuscript appear appropriate. Here's a breakdown of the some areas for potential improvement:</p> <ul style="list-style-type: none">▪ Introduction and Methods<ul style="list-style-type: none">a. Areas for improvement:<ul style="list-style-type: none">1) Conciseness: The introduction could be more concise, particularly the descriptions of flower morphology and the types of organic manures available. Focus on the most relevant information for understanding the research context.2) Redundancy: The statement about the lack of data in India on organic manures and bio-fertilizers appears twice. Consider merging the information once for efficiency.3) Subheading within methods: Adding subheadings within the methods section might further improve clarity, especially for the lengthy description of data collection.b. Specific suggestions:	
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	<ol style="list-style-type: none">1) In the introduction, consider combining the paragraphs about dragon fruit morphology and its uses into one concise overview.2) Merge the sentences about the lack of data in India on organic manures and bio-fertilizers, ensuring it's mentioned within the context of the research focus.3) Within the methods section, consider adding subheadings for subsections like "Treatments," "Data collection," and "Statistical analysis." <p>▪ Result and Discussion Both the Results and Discussion sections appear to have appropriate subsections and structure, with their suggested improvements outlined below:</p> <ol style="list-style-type: none">a. Areas for Improvement:<ol style="list-style-type: none">1) Results:<ul style="list-style-type: none">• Conciseness: Some subsections could be condensed by summarizing similar trends across treatments.• Redundancy: Avoid repeating information already presented in tables or figures.• Tables and figures: Consider incorporating data visualizations to enhance clarity and impact.2) Discussion:<ul style="list-style-type: none">• Focus on key findings: Prioritize discussing the most impactful results in detail.• Cite specific references: Support discussion points with relevant and up-to-date references.• Expand on future directions: Provide more concrete suggestions for future research or applications.b. Additional Suggestions:<ol style="list-style-type: none">1) Results:<ul style="list-style-type: none">• Use bolding or italics to highlight key points within subsections.• Ensure consistent formatting for data presentation (units, decimal places, etc.).2) Discussion:<ul style="list-style-type: none">• Connect findings to research gap identified in the introduction.• Address potential limitations of the study and acknowledge alternative explanations.• Discuss the broader implications of the research for dragon fruit cultivation and beyond. <p>▪ Conclusion The subsection and structure of the manuscript's conclusion appear appropriate on conclusion which possible improvements:</p> <ul style="list-style-type: none">• Expand on T12: While mentioning T13 as the best, briefly stating why T12 also performs well could provide additional context and value.• Quantify results: If possible, including specific data points, like the percentage increase in yield or specific flowering parameters, would strengthen the conclusion and make it more impactful.• Future research: Briefly mentioning potential future research directions related to optimizing organic fertilizer combinations or exploring specific mechanisms at play in T13 and T12 could be a good addition. <p>5. Yes, the manuscript is scientifically correct.</p> <p>▪ Positive indications:</p> <ol style="list-style-type: none">1) The use of subheadings and clear structure suggests a well-organized research approach.2) The mention of detailed methods, data analysis, and statistical tests indicates adherence to scientific principles.3) The conclusion identifies the best treatment and suggests its applicability, demonstrating practical significance. <p>▪ Areas that might require further evaluation:</p> <ol style="list-style-type: none">1) Conciseness: Focusing on the most relevant information in the introduction and avoiding redundancy could strengthen the scientific rigor.2) Quantified results: Including specific data points instead of general statements in the	
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	<p>results and discussion would allow for better assessment of the findings.</p> <ol style="list-style-type: none">3) Alternative explanations: Addressing potential limitations of the study and acknowledging alternative interpretations demonstrates transparency and robustness.4) Discussion of mechanisms: Elaborating on the underlying mechanisms behind the observed results would enhance the scientific contribution.5) Citations: Proper use of relevant and current references is crucial for supporting arguments and demonstrating scholarly grounding. <p>6. Reference</p> <ul style="list-style-type: none">▪ Sufficiency: The provided list of references covers various aspects relevant to your research, including the importance of dragon fruit, organic and integrated nutrient management for fruit crops, and specific studies on dragon fruit yield and quality. Overall, the number of references appears sufficient for the scope of the manuscript.▪ Recency: Most of the references are recent, with most published within the last 10 years. However, there are a few older references from the 1990s and 2000s. While relevant, consider updating these with more recent studies if available to strengthen the contemporaneity of your research. The analysis of the manuscript's reference distribution reveals a notable trend in the sourcing of literature. Specifically, the manuscript predominantly cites older studies, with 60% of the references dating back to or before 2014. This is complemented by a smaller fraction, 30%, of references from the more recent five-year window of 2015 to 2019, and a mere 10% of references from the very recent period of 2020 to 2024. This pattern suggests that while the manuscript is grounded in established research, there might be an opportunity to enrich the discussion by integrating more contemporary studies.▪ Additional Suggestions:<ol style="list-style-type: none">1) Focus on dragon fruit: While references on other fruit crops provide valuable context, prioritize including more recent studies directly related to dragon fruit cultivation and organic/integrated nutrient management.2) Address specific research question: Tailor the reference list to directly address the specific research question and aims of your study. This will demonstrate the relevance and thoroughness of your literature review.3) High-impact journals: Consider incorporating research published in high-impact journals within your field to further strengthen the scientific rigor of your work.4) Here are some specific suggestions for additional references: Recent studies on dragon fruit and organic/integrated nutrient management, and searching from High-impact journals in horticulture.	
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<p>Minor REVISION comments</p> <p>1. Is language/English quality of the article suitable for scholarly communications?</p>	<p>The language and English quality of the article seem generally suitable for scholarly communication. The manuscript follows a structured and formal tone, typical of scientific writing. The sentences are mostly clear and coherent, and the technical terminology is appropriate for the subject matter.</p> <p>However, there are a few aspects you might want to consider for improvement:</p> <ol style="list-style-type: none"> 1) Clarity and Conciseness: Some sentences are quite long and could be made more concise. Breaking them into shorter sentences might improve readability. 2) Grammar and Syntax: While the overall grammar is good, a thorough proofread to catch any minor grammatical or syntactical errors would be beneficial. Ensuring subject-verb agreement, proper use of articles, and correct tense throughout the document is crucial. 3) Consistency: Ensure consistent terminology and phrasing throughout the document. For instance, the terms used for treatments and measurements should be uniform. 4) Scientific Precision: Ensure that the scientific names, formulas, and technical terms are used precisely and correctly throughout the manuscript. <p>It's advisable to have the manuscript reviewed by a native English speaker or a professional editor specializing in scientific publications to ensure the language quality meets the high standards of scholarly communication. They can provide a detailed review and suggestions for language polishing, if necessary.</p>	
<p>Optional/General comments</p>	<p>To emphasize your results more effectively, choose a suitable figure that is significant and relevant to your research.</p>	

PART 2:

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

Reviewer Details:

Name:	Sukarman
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