

**Review Form 3**

Journal Name:	<a href="#">Journal of Experimental Agriculture International</a>
Manuscript Number:	Ms_JEAI_126957
Title of the Manuscript:	<b>Response of foliar sprays of plant growth regulators and micronutrients and their combinations on mor-phological, flowering and yield attributing traits of tomato at North -Bihar condition</b>
Type of the Article	<b>Original Research Article</b>

**Review Form 3**

**PART 1: Review Comments**

Compulsory REVISION comments	Reviewer's comment	Author's Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<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>This manuscript provides valuable insights into using plant growth regulators and micronutrients to enhance tomato yield, especially in North Bihar's challenging climate and soil conditions. Its findings on treatments like GA<sub>3</sub> and ZnSO<sub>4</sub> offer a basis for further research in different regions and crop varieties. The study's practical approach is commendable, though improved clarity and statistical detail could strengthen its impact.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p><b>Yes</b></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><b>Grammar and Syntax Errors:</b>            "...and also have considered as..." – should be "and is also considered as..."            "...the low yield and sub-standard quality fruits..." – should be "low yield and sub-standard quality of fruits..."            "...biotic and abiotic, adverse climatic and poor nutrients condition of soil." – should be rephrased as "biotic and abiotic stresses, adverse climatic conditions, and poor nutrient status of soil."            "Significant differences recorded..." – should be "Significant differences were recorded..."            "...the number of branches at first fruit set and days to 50% flowering and yield attributing characteristics..." – awkward phrasing; could be rephrased as "...the number of branches at first fruit set, days to 50% flowering, and yield-attributing characteristics..."            "...highest plant height (82.11 cm and 124.23 cm), greatest number of branches..." – awkward wording; it could be simplified to "...the highest plant height (82.11 cm and 124.23 cm), number of branches..."            "...rigorous statistical analysis carried out by ANOVA examination, is comprehensively presented." – awkward structure; could be rephrased as "A rigorous statistical analysis using ANOVA was conducted and is comprehensively presented."  <b>Scientific and Technical Issues:</b>            The phrase "and also have considered as 'poor man's orange' worldwide" is misleading and lacks clarity. Rephrase to accurately convey the common perception of tomatoes as "poor man's orange."            "The foliar spray of GA3 50ppm + ZnSO4 0.5% resulted in the highest..." – there should be clarification on treatment conditions and comparison with a control group.            "Conversely, fo-liar spray of GA3 at 50 ppm + Micro. mix. at 0.5% had shown nearby results..." – lacks clarity on specific treatments and outcomes. Instead, specify the metrics.            No mention of a control group or statistical significance of results for comparative purposes.            The phrase "Rigorous statistical analysis carried out by ANOVA examination" does not mention specific findings or statistical values (e.g., p-values), making it vague.            "Kashi Vishesh" variety should ideally include additional context, such as its origin or known traits, if relevant.  <b>Redundant Phrasing and Lack of Precision:</b>            Words like "present study" and "attempt" are redundant and could be omitted for a more direct tone.            Repetition of units (e.g., "cm," "g") could be streamlined.</p>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p><b>Add:</b>            1. Future aspects            2. Limitations  <b>Introduction:</b>  <b>Grammar and Syntax Errors:</b>            1. Incomplete Sentences: "Family Solanaceae, also referred to as Nightshade family." – this should be combined with a preceding or following sentence for clarity.</p>	

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2. Incorrect Verb Forms: "...it is often referred to as 'the poor man's orange'" – the phrase "it is often referred to" can be streamlined to "often called."
3. Article Errors: Missing articles in phrases like "...is very nutritive vegetable..." (should be "a very nutritive vegetable").
4. Redundant Phrasing: Phrases like "Despite having 94% water by weight, they also have high nutritional value." could be simplified to "Although tomatoes are 94% water by weight, they are nutrient-dense."
5. Lack of Parallelism: "...vitamins A and B as well as an excellent source of vitamin C..." – revise for parallel structure to maintain clarity.
6. Subject-Verb Agreement: "...which is used as a vegetable component or byproduct." – should be "which are used as vegetable components or byproducts."
7. Punctuation Errors: Commas missing or misused, e.g., "the potatoes, onion" (should be "potatoes and onions").
8. Awkward Wording: "Tomato is very nutritive vegetable for human being..." could be "Tomatoes are highly nutritious for humans..."
9. Misplaced Modifiers: "In our country mainly India..." should be rephrased for clarity.
10. Typographical Errors: Words like "pu-ree" and "bi-product" have unnecessary hyphens and should be corrected.

#### **Scientific and Technical Issues:**

11. Scientific Name Formatting: "Sola-num lycopersicum" should be "Solanum lycopersicum," and italics are typically used for species names.
12. Inaccurate Nutritional Claims: "Contains up to 40% of the daily necessary amount of 20% of vitamin A and vitamin C." – this sentence is confusing and seems inaccurate; specify either 40% of one vitamin or clarify percentages accurately.
13. Unclear Descriptions: The phrase "high vitamin and acid content (maleic acid, citric acid)" should clarify that it is rich in certain vitamins and natural acids, rather than simply stating "high vitamin and acid content."
14. Lack of Proper References for Statements: Nutritional and agronomic claims should cite specific sources.
15. Ambiguous Agricultural Context: "...grown throughout every climatic zone..." could be misleading. Rephrase to indicate typical climate adaptations.
16. Inconsistent Units and Abbreviations: "MT" should be clarified as metric tons and hectare abbreviations should be standardized throughout.
17. Insufficient Detail on Nutrient Deficiencies: "Calcareous soil of North Bihar" – specify which nutrients are deficient and why this is significant for tomato growth.
18. Lack of Detail in Growth Regulator Applications: Terms like "Salicylic acid/ NAA and gibberellins and micronutrients" could be expanded to specify dosages or application rates.
19. Generalization of Climate Effects: Phrasing like "...rising temperatures, viral diseases, and salinity..." lacks specificity. Define how each factor affects tomato growth and yield.

#### **Material and Methodology:**

##### **Grammatical Errors:**

1. Time Period Error: "...the period spanning from September 2022 to February 2022..." – this range is incorrect and confusing as it suggests overlapping dates. It should be corrected to reflect the actual time frame, likely from September 2021 to February 2022 or another logical period.
2. Redundant Phrasing: "...at the Vegetable Research Farm of Vegetable Research Farm..." – the phrase is redundant; it should be "at the Vegetable Research Farm of Dr. Rajendra Prasad Central Agricultural University."
3. Inconsistent Verb Tense: "The plants are high-producing..." – since this is a methods section, past tense is generally preferred, e.g., "The plants were high-producing..."
4. Missing Articles: Phrases like "latitude of 25.980 N" should include "a" before "latitude" to read smoothly.
5. Incorrect Abbreviations and Symbols: Abbreviations like "cm" and "m2" should consistently follow SI standards without extra spaces. Use "m<sup>2</sup>" and "cm" consistently.
6. Misplaced Commas and Punctuation: In "During the morphological observation a total of five plants were, randomly selected from each plot..." the comma should follow "observation."

##### **Scientific Errors:**

7. Incorrect Dates or Location Specifications: Clarify or correct the conflicting time period from

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	<p>September 2022 to February 2022 to avoid confusion.</p> <ol style="list-style-type: none"> <li>8. Incomplete Information on Variety Development: "The variety was created through...a pedigree backcross selection process" lacks details on the specific traits selected and the backcross generations involved, which are essential for reproducibility.</li> <li>9. Inconsistent Unit Use: "fruit weight (gm)" should be "fruit weight (g)" for consistency with SI units.</li> <li>10. Treatment Notation Issues: Not all treatments use consistent abbreviations; "Micro. Mix." could be replaced with "Micronutrient Mix" for clarity, as scientific documents benefit from reducing abbreviations that could be misinterpreted.</li> <li>11. Inadequate Experimental Design Detail: The mention of "three replications" is vague. Details about plot size, spacing, or randomization methods for the randomized block design (RBD) should be provided.</li> <li>12. Lack of Measurement Units and Methodology: The measurement method (e.g., ruler, caliper) for plant height, number of branches, and leaf count should be specified. Additionally, the units for "fruit yield per hectare" should be explicitly mentioned as "tons per hectare (t/ha)."</li> <li>13. Missing Explanation for TLCV Resistance: Mentioning "TLCV resistant" without an explanation might be confusing. It could help to specify that TLCV stands for Tomato Leaf Curl Virus and explain its significance briefly.</li> <li>14. Yield and Trait Recording Details: The method for calculating average fruit weight, diameter, and yield should be specified. For example, whether values were averaged per plant or per plot.</li> </ol> <p><b>Conclusions:</b></p> <ol style="list-style-type: none"> <li>1. <b>Clarify Sentence Structure:</b> The phrasing is overly complex, leading to ambiguity. For example, "compelling conclusion that the application..." could be simplified to "The study concludes that applying plant growth regulators and micronutrients..."</li> <li><b>Grammatical Corrections:</b></li> <li>2. "...T12 (distilled water only) gave higher plant growth that was ultimately boost the yield..." should be corrected to "...T12 (distilled water only), resulting in higher plant growth and ultimately boosting tomato yield..."</li> <li>3. "in terms of enhance production..." should be "in terms of enhanced production..."</li> <li><b>Consistency in Treatment Abbreviations:</b> Spell out "Micro. mix." for clarity, as scientific papers should avoid unexplained abbreviations.</li> <li>4. <b>Expand on Implications and Future Research:</b> Mentioning that the study "can be extended to screen other tomato varieties" could be expanded to include specific suggestions for future trials, such as different environmental conditions, other tomato genotypes, or varied doses of the treatments.</li> <li>5. <b>Reinforce Statistical Significance:</b> If statistical analysis was conducted, it would strengthen the conclusion to mention the significance level (e.g., "statistically significant improvement").</li> <li>6. <b>Context-Specific Recommendation:</b> A more conclusive statement about the impact of this study on tomato production in North Bihar and how it can benefit local farmers would enhance the relevance.</li> <li>7. <b>Refine Scientific Tone and Precision:</b> Phrasing like "gave higher plant growth" could be revised to "resulted in increased plant growth metrics" to maintain scientific rigor.</li> <li>8.</li> </ol>	
<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>This manuscript is scientifically robust due to its well-defined experimental design, clear treatment comparisons, and the use of appropriate control groups. The study accurately measures growth and yield parameters, supporting its conclusions on the effects of plant growth regulators and micronutrients. The use of statistical analysis also strengthens its reliability, making the findings technically sound and relevant to the field.</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><b>No</b></p>	

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Minor REVISION comments	yes	
<b>Is the language/English quality of the article suitable for scholarly communications?</b>		
<u>Optional/General</u> comments	Please update as per recommendations.	

### **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>	

### Reviewer Details:

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