

Journal Name:	Journal of Biochemistry International
Manuscript Number:	Ms_JOB1_12304
Title of the Manuscript:	Intercropping of African marigold with tomato for better productivity, pest control and economic returns in Arunachal Pradesh
Type of the Article	

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound.

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PART 1: Review Comments

<p>Compulsory REVISION comments</p>	<p>Reviewer's comment</p>	<p>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>
<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>I liked the manuscript titled "<i>Intercropping of African marigold with tomato for better productivity, pest control and economic returns in Arunachal Pradesh</i>" presents significant findings that are valuable to the scientific community. It demonstrates the benefits of intercropping marigold with tomato, particularly in managing the tomato fruit borer (<i>Helicoverpa armigera</i>), a major pest affecting tomato crops. The study provides empirical evidence that the presence of marigold not only reduces pest infestation but also enhances tomato yield and economic returns. By showcasing an environmentally friendly and economically viable pest control method, this research contributes to sustainable agricultural practices and offers practical solutions for farmers in Arunachal Pradesh and similar agro-climatic regions. The findings emphasize the importance of integrated pest management (IPM) strategies, particularly the use of trap crops, in minimizing pesticide use and promoting ecological balance.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title "<i>Intercropping of African Marigold with Tomato for Better Productivity, Pest Control, and Economic Returns in Arunachal Pradesh</i>" is suitable as it effectively captures the key elements of the study. It clearly indicates the main focus—intercropping marigold with tomato—and highlights the primary outcomes, including improved productivity, pest control, and economic benefits. Additionally, specifying "in Arunachal Pradesh" situates the study in a particular geographic context, which is helpful for readers interested in regional agricultural practices. The title is informative and concise, making it appropriate for the content and focus of the manuscript.</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 of the article is generally comprehensive, covering the key aspects of the study, including the objective, methodology, results, and conclusions. However, there are a few areas where it could be improved for clarity and completeness:</p> <ol style="list-style-type: none"> 1. Objective Clarification: The abstract could more clearly state the primary objective of the study at the beginning, such as investigating the effects of intercropping marigold with tomato on pest control, yield, and economic returns. 2. Details on Methodology: While the treatments are mentioned, it would be helpful to briefly describe the design (randomized block design) and the specific metrics used to evaluate outcomes (e.g., pest infestation rate, yield, net returns). 3. Results Summary: The results section could be more succinct and focus on the most significant findings. For instance, specifying the percentage reduction in pest infestation and the relative increase in yield and economic returns for the best-performing treatment compared to the control. 4. Conclusion and Implications: The abstract should conclude with a brief statement on the implications of the findings for farmers and the scientific community, emphasizing the potential benefits of this intercropping strategy. 	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The manuscript appears to have a generally appropriate structure and includes the necessary subsections. However, based on the content you've provided, there are a few suggestions for improvement:</p> <ol style="list-style-type: none"> 1. Title and Abstract: The title and abstract are clear and appropriate. The abstract should succinctly summarize the objective, methods, results, and conclusions, which it largely does. 2. Introduction: The introduction provides background information on the tomato fruit borer, its impact on crops, and the potential use of trap crops like marigold. However, it could benefit from a more explicit statement of the study's objectives and hypotheses. 3. Materials and Methods: This section is detailed, describing the study design, location, crop varieties, treatments, and measurement procedures. It would be beneficial to separate the study design and treatment descriptions from the cultural practices and data collection methods for clarity. 4. Results and Discussion: These sections seem to be combined. It might be more effective to separate the results from the discussion to clearly distinguish between the presentation of findings and their interpretation. Within the results section, data should be presented systematically, followed 	

	<p>by a separate discussion section where these results are interpreted in the context of existing literature and the study's objectives.</p> <ol style="list-style-type: none"> 5. Tables and Figures: The manuscript includes tables summarizing key data. It would be useful to include a brief description of each table in the text and ensure that all data presented in the tables are discussed in the results section. 6. Conclusion: While the implications of the findings are mentioned towards the end of the discussion, a separate conclusion section would help emphasize the practical recommendations and the significance of the study's findings. 7. References: The references seem to be adequately cited throughout the manuscript. Ensuring that they are formatted consistently and correctly according to the journal's guidelines is important. <p>Suggested Subsections and Structure</p> <ol style="list-style-type: none"> 1. Abstract 2. Introduction <ul style="list-style-type: none"> ○ Background ○ Objective and Hypothesis 3. Materials and Methods <ul style="list-style-type: none"> ○ Study Area and Design ○ Crop Varieties and Treatments ○ Data Collection and Analysis 4. Results <ul style="list-style-type: none"> ○ Pest Infestation ○ Crop Yield ○ Economic Analysis 5. Discussion <ul style="list-style-type: none"> ○ Interpretation of Results ○ Comparison with Previous Studies ○ Limitations and Implications 6. Conclusion 7. References 	
<p>Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this</p>	<p>The manuscript demonstrates scientific correctness through its clear research design and methodology. The use of a randomized block design with replicates ensures the reliability and reproducibility of the results, while the selection of appropriate treatments (including control and intercropped setups) allows for a valid comparison of outcomes. The data collection on key variables such as pest</p>	

<p>manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.</p>	<p>infestation rates, crop yield, and economic returns is comprehensive and relevant, providing a solid basis for assessing the effectiveness of the intercropping strategy. Additionally, the manuscript appropriately contextualizes its findings within existing literature, which supports the validity of the conclusions drawn and situates the study within broader agricultural research. These elements collectively contribute to the manuscript's robustness and technical soundness.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p>	<p>The manuscript includes a range of references that cover various aspects of the study, such as pest management, intercropping, and the specific pest and crops involved. However, many of the cited references appear to be somewhat dated, with several from the 1990s and early 2000s. While these foundational studies are valuable, it would strengthen the manuscript to include more recent research to demonstrate the current relevance of the topic and to align with the latest advancements and findings in the field</p>	
<p><u>Minor</u> REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language quality of the article is generally adequate but could benefit from some improvements to meet the standards of scholarly communication. While the manuscript effectively communicates the research and findings, there are areas where clarity and precision could be enhanced. For instance:</p> <ol style="list-style-type: none"> 1. Grammar and Syntax: Some sentences could be more concise, and there are occasional grammatical errors that need correction. This includes ensuring subject-verb agreement and proper use of tenses. 2. Terminology and Technical Language: The use of scientific and technical terms is appropriate; however, explanations should be clear and accessible, especially for a broad audience. It's important to define or clarify any specialized terms that may not be familiar to all readers. 3. Consistency: Consistency in terminology and formatting (such as units of measurement, abbreviations, and references) is essential. For instance, consistently using "t/ha" for yield and "Rs." for currency will help maintain clarity. 4. Style and Tone: The tone should be formal and objective, avoiding colloquial expressions. The language should be precise, with careful attention to avoid ambiguity or redundancy. 	
<p><u>Optional/General</u> comments</p>	<p>NIL</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>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

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