

**Review Form 3**

Journal Name:	<a href="#">International Journal of Pathogen Research</a>
Manuscript Number:	Ms_IJPR_125669
Title of the Manuscript:	<b>Biological Control of Post Harvest Fungal Rot of Water Yam (<i>Dioscorea alata</i> L.) Tubers in Storage with <i>Cryptococcus nemorosus</i>, <i>Rhodotorula toruloides</i> and <i>Nakaseomyces glabratus</i></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 is important for the scientific community because it offers an eco-friendly approach to managing post-harvest rot in water yam tubers, a significant crop in tropical regions. The use of biological antagonists like <i>Cryptococcus nemorosus</i>, <i>Rhodotorula toruloides</i>, and <i>Nakaseomyces glabratus</i> presents an innovative alternative to synthetic fungicides, which can be expensive and harmful to the environment. I appreciate the well-detailed experimental design and its potential practical applications for sustainable agriculture.</p>	
<p><b>Is the title of the article suitable? (If not please suggest an alternative title)</b></p>	<p>The title is clear but a bit lengthy. To improve conciseness and appeal while maintaining its key focus, I suggest the following alternative:</p> <p><b>"Biological Control of Post-Harvest Rot in Water Yam (<i>Dioscorea alata</i> L.) Using Antagonistic Fungi"</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>The current abstract already provides some of the information mentioned, but it lacks clarity and emphasis on certain key aspects.</p> <ol style="list-style-type: none"> <li>1. The abstract discusses the general focus on fungal rot but does not clearly highlight the specific research goal (i.e., evaluating the efficacy of biological antagonists as an alternative to chemical fungicides).</li> <li>2. There is a brief mention of the fungi used, but the methods (in vitro and in vivo testing) are not well-described.</li> <li>3. Key Findings: While some findings are mentioned, the abstract lacks specific results (e.g., inhibition zones, growth rates) that would make the findings more impactful.</li> <li>4. Conclusion: The conclusion suggests the use of biological control agents, but it doesn't fully emphasize the potential benefits (like being eco-friendly and cost-effective) that could make the study more significant.</li> </ol>	
<p><b>Are subsections and structure of the manuscript appropriate?</b></p>	<p>The subsections and structure of the manuscript are largely appropriate for the topic, providing a logical flow of content from introduction to methodology and results. However, some subsections, particularly in the methodology and results sections, could benefit from consolidation to avoid redundancy and enhance readability. Streamlining these sections by combining related points and ensuring each subsection directly supports the study's objectives would strengthen the overall structure and clarity of the manuscript.</p>	
<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>As already mentioned above, all of these</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>Need to improve the reference section. This time I find just one reference of 2022-2023. The uploaded literature is full of biocontrol activities of bio-agents so authors should need to add more recent studies.</p>	

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<p>Minor REVISION comments</p> <p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>No, should be improve by combining the sentences in Introduction section and in Discussion section according to better scientific way.</p>	
<p><b>Optional/General</b> comments</p>	<p>Comments</p> <p>Dear Editor, Thank you very much for the opportunity to review this article. This study presents notable novelty and offers promising strategies for future disease management. The findings contribute significantly to our understanding of the subject and provide a solid foundation for further research in this area. I have some queries to improved this research. Please see below some minor corrections and address them caredfully.</p> <p>Comments on the abstract section</p> <p>Some sentences are quite lengthy and could be broken down for clarity. For instance, the sentence beginning with "The results of the in vitro assessment..." could be split for better readability.</p> <ul style="list-style-type: none"> <li>In "the highest zone of inhibition (13.50+0.12 mm) on Botryodiplodia theobromae while the least zone of inhibition (9.14+0.26 mm) was recorded for Fusarium solani," consider using a semicolon instead of "while" to separate two independent clauses.</li> <li>Ensure consistency in the use of spaces before and after plus signs and mm (e.g., "13.50 + 0.12 mm" vs. "13.50+0.12 mm").</li> <li>The term "zone of inhibition" is used frequently; consider varying word choice or restructuring sentences to avoid repetition.</li> <li>Instead of "The diseased tissues of the water yam samples were inoculated on PDA in the Petri dishes," consider "Diseased tissues from the water yam samples were inoculated on PDA plates."</li> <li>When mentioning the fungitoxic potentials as an alternative to synthetic fungicides, consider adding a sentence about the limitations of synthetic fungicides to strengthen your argument for using biological antagonists.</li> <li>Authors should suggest potential areas for further research or practical applications of your findings. For instance, "Future studies could investigate the effectiveness of these biological antagonists in field trials or their integration into existing pest management practices."</li> </ul> <p>Comments on the introduction section</p> <p>Overall, this introduction effectively communicates the significance of yam; however, enhancing clarity, coherence, and structure will improve its impact. Addressing grammatical errors and expanding on specific points will further enrich the narrative.</p> <ul style="list-style-type: none"> <li>Ensure parallel structure in lists and correct "inadequate of" to "inadequate."</li> <li>Avoid redundancy; "wide species" can be changed to "numerous species."</li> <li>Add "The six most important cultivated species of yam in Nigeria are" for clearer context.</li> <li>"Yams are the fifth most harvested crops in Nigeria, following after cassava..." can be revised to "Yams are the fifth most harvested crop in Nigeria, following cassava..."</li> <li>"the attention to its production is still questionable" could be rephrased for clarity: "the attention given to its production remains insufficient."</li> <li>"lack of access to inputs, finance, poor producer prices, inadequate of storage facilities, incidences of pests and diseases have negatively affected yam production." could be improved to "lack of access to inputs, financing, poor producer prices, inadequate storage facilities, and incidences of pests and diseases have negatively affected yam production."</li> <li>"the factors of production such as labour, finance and material inputs like fertilizer have influenced yam production in the region." could be more succinct: "Factors such as labor, financing, and material inputs (e.g., fertilizers) influence yam production in the region."</li> <li>When discussing the underutilization of yam in research, consider elaborating on specific areas where research is lacking, such as disease resistance, yield improvement, or post-harvest handling techniques.</li> <li>There are instances of repeated information. For example, the significance of Dioscorea alata is mentioned multiple times in similar contexts. Consolidating these points could enhance the flow and reduce redundancy.</li> <li>The concluding statement could be strengthened by clearly articulating the objectives of your current research. For example, "This study aims to investigate indigenous storage practices of water yam in Southeastern Nigeria, addressing critical gaps in the existing literature."</li> </ul> <p>Comments on the Materials and Methods section</p>	

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	<p>These comments aim to enhance clarity, consistency, and rigor in the "Materials and Methods" section while maintaining scientific integrity.</p> <p>Grammatical Errors and Suggestions</p> <ul style="list-style-type: none"> <li>• "was authenticated by the head of yam programme" should be "was authenticated by the head of the Yam Program" (capitalize "Yam Program").</li> <li>• "the five States that made up the South East, Nigeria" to "the five states that comprise the Southeast region of Nigeria" (use lowercase for "states" and ensure consistency in regional naming).</li> <li>• "Ten fresh and healthy tomato, orange and lime fruits each were collected" should be "Ten fresh and healthy tomatoes, oranges, and limes were collected"</li> <li>• "Potato Dextrose Agar (PDA) was used as the medium for the growth and maintenance of the fungal isolates." Should be "Potato Dextrose Agar (PDA) was used as the medium for growing and maintaining the fungal isolates."</li> <li>• "Thirty-nine (39g)" to "Thirty-nine grams (39 g)" (consistent unit format).</li> <li>• "the pH was measured using a digital pH meter to ensure compliance with the standard (5.4 to 5.8)" to "the pH was measured with a digital pH meter to ensure it was within the standard range of 5.4 to 5.8" (clarity).</li> <li>• "using 3mm diameter cork borer" to "using a 3 mm diameter cork borer" (add "a" and space in "3 mm").</li> <li>• inoculated on the solidified Potatoes Dextrose Agar (PDA) in Petri dish." Should be "inoculated onto the solidified Potato Dextrose Agar (PDA) in Petri dishes."</li> <li>• "using slants of PDA in McCartney bottle" to "using PDA slants in McCartney bottles"</li> <li>• "to removed soil (dirt)" should be "to remove soil (dirt)"</li> <li>• "was made by dipping each yam tuber in to 10% concentration of sodium hypochlorite" should be "was done by dipping each yam tuber in a 10% sodium hypochlorite solution"</li> <li>• "placed in a 500ml beaker" should be "placed in a 500 mL beaker" (spacing for units).</li> <li>• "such as Fluconazole viz 2, 5, 10, 20, 40, 60, 100, 200, 500, 1000, 2000 and 4000 (µg/ml)" should be "such as Fluconazole at concentrations of 2, 5, 10, 20, 40, 60, 100, 200, 500, 1000, 2000, and 4000 µg/mL" (improve clarity and consistency).</li> <li>• "were commonly 300 mm long with a girth of 55 mm (middle region)" should be "were approximately 300 mm long with a girth of 55 mm (measured at the middle region)"</li> <li>• "were commonly 300 mm long with a girth of 55 mm (middle region)" should be "were approximately 300 mm long with a girth of 55 mm (measured at the middle region)"</li> <li>• "Duncan's Multiple Range Test (DNMRT) at P&lt;0.05" change with "Duncan's Multiple Range Test (DMRT) at P &lt; 0.05"</li> </ul> <p>The results section is well define and described. The minor grammatically error should be remove.</p> <p>The Diacussion section is poorly described. Author should revised and corelated the discussion with reported litrature, and update ths discussion with recent studies. The minor grammatically error should be remove.</p> <p>The conclusion should revise criticaly. Author needs to recomend the best dose and biocontrol agenst for Further future research. Authors also need to write the next future direction to futher proceeds this biocontrol agents and the present stduy.</p> <p>Minor Revision required.</p>	
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**PART 2:**

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

### Review Form 3

#### Reviewer Details:

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