

REVIEWER'S REPORT

Manuscript No.: IJAR-50554

Date: 08-03-2025

Title: ISOLATION OF TRICHODERMA SPP. IN RURAL AREAS OF FIVE DISTRICTS IN ITAPÚA, PARAGUAY

Recommendation:

Accept as it is.....**YES**.....
 Accept after minor revision.....
 Accept after major revision
 Do not accept (*Reasons below*)

Rating	Excel.	Good	Fair	Poor
Originality	√			
Techn. Quality		√		
Clarity		√		
Significance			√	

Reviewer's Name: Tahir Ahmad

Reviewer's Decision about Paper: **Recommended for Publication.**

Comments (*Use additional pages, if required*)

Reviewer's Comment / Report

General Overview: The manuscript presents a study focused on isolating native *Trichoderma* spp. strains from five districts in the Itapúa region of Paraguay. The study is relevant, given the increasing importance of *Trichoderma* spp. as a biological control agent in sustainable agriculture. The research addresses an important gap in Paraguay, where commercial products based on native isolates are currently unavailable. The findings contribute to the broader field of agricultural microbiology and biocontrol, emphasizing the potential of locally adapted strains for sustainable farming.

Abstract: The abstract effectively summarizes the research objective, methodology, key findings, and implications. The information is concise and well-structured, providing a clear overview of the study's significance. The mention of *Trichoderma* spp. characteristics and their potential application highlights the study's practical importance.

Introduction: The introduction provides a comprehensive background on *Trichoderma* spp., its significance in biological control, and its commercial applications. The discussion of its global usage and biotechnological potential establishes the context for the study. The rationale for focusing on native strains in Paraguay is well-articulated, and the research objective is clearly stated. The literature review is well-integrated, with relevant references supporting the study's foundation.

REVIEWER'S REPORT

Materials and Methods: The methodology is detailed and systematically structured, allowing for reproducibility. The preparation of rice traps, their placement, and collection are well-documented, demonstrating a rigorous approach to field sampling. The use of PDA medium for fungal isolation follows established protocols, ensuring reliable identification of *Trichoderma* spp. The stepwise description of sample inoculation and isolation processes contributes to methodological clarity.

Results and Discussion: The results indicate the successful isolation of *Trichoderma* spp. in four out of the five study districts. The description of colony morphology aligns with established macroscopic characteristics of *Trichoderma* spp. The discussion effectively connects the findings to broader agricultural implications, emphasizing the fungus's potential role in biological control and soil health improvement. The interpretation of results is supported by relevant literature, reinforcing the study's scientific validity.

Conclusion: Although not explicitly presented, the study implicitly concludes that native *Trichoderma* spp. strains are present in the region and may serve as valuable biological control agents. The findings underscore the importance of further characterization and potential application in local agricultural systems.

References: The references cited are relevant and up-to-date, covering key studies on *Trichoderma* spp. and its agricultural applications. The inclusion of both global and regional studies enhances the manuscript's credibility.

Final Remarks: The manuscript presents a well-structured and scientifically sound study. The clarity of objectives, detailed methodology, and relevant discussion contribute to its significance. The research findings hold practical value for sustainable agriculture in Paraguay. The study effectively highlights the importance of native *Trichoderma* spp. in enhancing disease control and reducing agrochemical dependence.