|  |  |
| --- | --- |
| Journal Name: | Asian Research Journal of Current Science |
| Manuscript Number: | **Ms\_ARJOCS\_2022** |
| Title of the Manuscript: | **Varietal Reaction and Efficacy of Trichoderma in Managing Tomato Collar Rot Disease Caused by Sclerotium rolfsii** |
| Type of the Article | **Original Research Article** |

|  |  |  |
| --- | --- | --- |
|  | **Reviewer’s comment**  **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | **Author’s Feedback** (It is mandatory that authors should write his/her feedback here) |
| **Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.** | **Varietal Reaction and Efficacy of *Trichoderma* in Managing Tomato Collar Rot Disease Caused by**  ***Sclerotium rolfsii Mention authority*** |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | **YES** |  |
| **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.** | **YES** |  |
| **Is the manuscript scientifically, correct? Please write here.** | **Need some revisions** | We have already revised the manuscript according to the suggestions and comments of the reviewers. |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention**  **them in the review form.** | **NO** |  |

PART 1: Comments

|  |  |  |
| --- | --- | --- |
| **Is the language/English quality of the article suitable for scholarly communications?** | **Need some revisions** |  |
| **Optional/General** comments | **Reviewer Comments:**   1. The use of isolates names like “YAU-Tri.sp4” and “DAR-Tri.sp” is inconsistent and ambiguous. A clear isolate naming system with linkage to their species (e.g., *T. viride* YAU4) should be adopted throughout the manuscript to avoid confusion. 2. The study refers to disease incidence and severity, but there is no clear description of how collar rot symptoms were scored or quantified. Specify whether a disease rating scale was used and define the parameters for "moderately susceptible" and "susceptible" categories. 3. Only ten tomato varieties were tested, and Red Diamond 115 was found to be moderately susceptible. The authors should clarify the genetic background or resistance traits (if known) of these varieties and justify their selection. Broader varietal screening would strengthen conclusions. 4. Although PCR-based identification was performed using species-specific primers, the absence of sequencing data or gel images limits confidence in the molecular confirmation of *T. harzianum* and *T. viride*. Sequencing or at least amplicon size confirmation should be presented. 5. All experiments appear to have been conducted under controlled conditions. Given the variability of *S. rolfsii* virulence in different soil types, climates and agroecosystems, the conclusion that YAU-Tri.sp4 is field-viable is premature without further validation. 6. The manuscript states that YAU-Tri.sp4 promoted tomato growth, but specific growth parameters (e.g., shoot length, root biomass, dry weight) and statistical significance are not reported. Such data are critical to substantiate claims of plant growth promotion. 7. The observed difference in pathogenicity among *S. rolfsii* isolates is interesting, especially the avirulence of SR7, but the manuscript does not explore possible biological or ecological explanations (e.g., genetic diversity, environmental origin). This discussion would add depth. 8. The conclusion suggests that YAU-Tri.sp4 could be used as a commercial biocontrol agent, but no formulation stability, shelf-life, or large-scale application strategies are discussed. These are critical for real-world applicability. 9. The manuscript contains several grammatical issues and awkward phrasing (e.g., “Red Diamond115 variety,” “showed the highest disease control ability”). A thorough language edit is recommended to improve clarity and readability. 10. The manuscript can be revised as per the given suggestions. | 1. Thank you very much for your suggestion. We do not want to change the name of the *Trichoderma* isolates if it is possible, because the name of the isolates had been published in Zaw et al. (2024). In that paper, species identification had not been done yet. The species identification with PCR was performed in the present manuscript. 2. Thank you very much for your comments. In our research, we determined the pathogenicity of the collected *S. rolfsii* isolates were determined based on the disease incidence (%) only, and the varietal reaction of tomato varieties was also categorized based on the seedling mortality (%) before and after germination of tomato plants. We didn’t mention the disease severity throughout the works. 3. We appreciate your suggestion, but unfortunately, we didn’t have any knowledge of genetic background of Red Diamond 115.This variety was obtained from East West seed Co.Ltd from local market. 4. Thank you very much for your comments. There is no facility for DNA sequencing in Myanmar. We cannot send the PCR products abroad for sequencing. Therefore, we can only use species specific primers for species identification. 5. Thank you very much for your comment. The YAU *Trichoderma* isolates were collected form farmer field soil (not mention in this manuscript), and we can assume that it will be viable in the field soil. These isolates were tested in another study (Zaw, et al. 2024) under field condition. 6. The data and statistical significance are stated in Table 6 in the manuscript. 7. Thank you very much for your comments. The pathogenicity of SR7 isolate was lower virulent than other isolates, and we add some discussions in the manuscript (with highlight). 8. Thank you very much for your suggestion, we changed the conclusion of the manuscript (with highlight). 9. Thank you very much for this comment. All the authors have already checked this manuscript. Unfortunately, we cannot apply the manuscript for English proof reading by native speakers because of lack of financial support. 10. We have already checked and revised in Original Manuscript\_ARJOCS\_2022\_Revised1.docx according to your suggestion. Thank you very much. |

|  |  |  |
| --- | --- | --- |
| **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?** | *(If yes, Kindly please write down the ethical issues here in details)* |  |