

Review Form 1.7

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Original Manuscript_IJPSS_117773
Title of the Manuscript:	Biotechnological Approaches Toward Blast Disease Resistance in Finger Millet
Type of the Article	

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PART 1: Review Comments

	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)
<p>Compulsory REVISION comments</p> <p>1. Is the manuscript important for scientific community? (Please write few sentences on this manuscript) The manuscript addresses a significant issue in agriculture—blast disease in finger millet, caused by <i>Magnaporthe oryzae</i>—and discusses biotechnological strategies to develop resistant varieties. Considering the crop's importance in regions of Asia and Africa and the broader implications for food security and sustainable agriculture, the manuscript is indeed important for the scientific community, particularly in plant pathology and agricultural biotechnology fields</p> <p>2. Is the title of the article suitable? (If not please suggest an alternative title) Yes</p> <p>3. Is the abstract of the article comprehensive? No</p> <p>4. Are subsections and structure of the manuscript appropriate? Yes</p> <p>5. Do you think the manuscript is scientifically correct? Yes</p> <p>6. Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. Update the all references (Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</p> <p><u>It need major revision</u></p>	<p>The manuscript "Biotechnological Approaches Toward Blast Disease Resistance in Finger Millet" covers a crucial topic with significant implications for food security in climate-vulnerable regions. The comprehensive approach to discussing various biotechnological strategies is commendable. However, there are several key areas where I believe the manuscript could be significantly improved to meet the high standards of the journal.</p> <ol style="list-style-type: none"> "This review is discussing on strategies for developing blast-resistance finger millet varieties and sharing information of analyzed and highlighting advanced molecular tools for breeding programs aiding in the introgression of disease resistance genes." <p>The sentence structure is awkward and confusing. It could be revised for clarity and conciseness. The sentence contains redundancy (e.g., "also has long shelf life" could be simplified to "has a long shelf life") and could be broken into two sentences to improve readability.</p> <ol style="list-style-type: none"> "World production of millets is 89.17 million metric tons from an area of 74.00 million hectare during 2020 in which Sorghum and Pearl millet are the major millet crops grown constituting above 90% of the world millets production followed by Finger millet, Foxtail millet, Proso millet, Barnyard, Little millet, and Kodo millet." <p>Issue: This statement would be clearer with a source citation directly after the statistics. Additionally, it mixes multiple data points which may confuse readers about the specific contributions of each millet type to the total production.</p> <ol style="list-style-type: none"> "The forthcoming whole-genome sequencing of finger millet will enable in-depth research on important traits through multi-omics approaches." <p>Issue: This statement assumes reader familiarity with "multi-omics approaches" without providing context or definition, which may not be suitable for all readers of a broad-audience journal.</p> <ol style="list-style-type: none"> "Despite the benefits of gene pyramiding challenges such as long breeding periods have been addressed through innovative techniques like marker assisted selection and genetic engineering to streamline the process of combining multiple resistance genes into a single variety thus enhancing disease control strategies." <p>This sentence suggests significant scientific claims without appropriate citations, which could mislead readers or undermine the manuscript's credibility.</p> <ol style="list-style-type: none"> Some claims regarding the potential of biotechnological methods are not backed by sufficient data or detailed examples. Improvement Suggestion: Strengthen the manuscript by including data from case studies or research findings that demonstrate the effectiveness and practicality of these methods in real-world scenarios. Details on experimental setups and outcomes should be clearly presented to substantiate claims. The discussion on the limitations and challenges of implementing the suggested biotechnological strategies is minimal. Improvement Suggestion: Expand this section to discuss the technical, economic, and social challenges associated with these biotechnological approaches. Include potential regulatory hurdles and public acceptance issues that could affect the deployment of genetically modified or edited crops. Methodological descriptions are lacking in depth, particularly in the sections detailing genomic resources and the implementation of gene pyramiding. Improvement Suggestion: Provide comprehensive methodological details to ensure reproducibility and to enhance the scientific rigor of the manuscript. This includes specifying sample sizes, experimental 	

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	designs, and statistical analysis techniques used in the studies cited.	
Minor REVISION comments 1. Is language/English quality of the article suitable for scholarly communications?	Correct the Grammar Yes	
Optional/General comments	It need Major revision	

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>	

Reviewer Details:

Name:	Muhammad Tahir Khalil
Department, University & Country	College of Chemistry, Zhengzhou University, Pakistan