

Review Form 3

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_126091
Title of the Manuscript:	Molecular Confirmation for Gall Midge (Biotype 3) Resistance in Phenotypically Resistant Rice Genotypes using Functional Markers
Type of the Article	Research paper

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PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
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.	The paper makes significant scientific contributions by identifying and confirming the presence of multiple gall midge resistance genes (gm3, Gm4, and Gm8) in specific rice genotypes, thereby enhancing understanding of genetic resistance mechanisms. It employs functional markers (gm3del3, LRR del, PRP), providing a reliable method for screening and validating these resistance genes, which is valuable for molecular plant breeding. The findings support the application of marker-assisted selection, promoting sustainable agricultural practices by reducing reliance on chemical pest control. Additionally, the research emphasizes the importance of pyramiding multiple resistance genes to combat the evolving nature of pests, addressing the challenges of resistance breakdown in previously deployed single-gene varieties. By identifying promising genotypes for breeding programs, the study aids in the development of resilient rice varieties, ultimately contributing to food security in regions affected by gall midge infestations. Overall, this research advances knowledge in plant genetics, breeding methodologies, and sustainable agricultural practices.	
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, some minor corrections were suggested.	
Are subsections and structure of the manuscript appropriate?	Yes	
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.	By identifying promising genotypes that can be utilized in breeding programs aimed at creating resilient rice varieties, the study not only contributes to the advancement of knowledge in plant genetics and breeding methodologies but also plays a pivotal role in enhancing food security in regions that are adversely affected by gall midge infestations, illustrating the comprehensive impact of this research on both scientific inquiry and practical agricultural outcomes.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Yes	
<u>Minor</u> REVISION comments Is the language/English quality of the article suitable for scholarly communications?	Suggested in manuscript	
<u>Optional/General</u> comments	For the benefit of researcher, I thoroughly checked the entire manuscript and suggest some minor corrections in track change mode. So, it will be easy for the authors to simply accept or reject the correction suggested by me.	

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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>	

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