

Review Form 3

Journal Name:	Journal of Experimental Agriculture International
Manuscript Number:	Ms_JEAI_121596
Title of the Manuscript:	Molecular confirmation of gall midge resistance in the phenotypically promising rice cultures by using SSR markers
Type of the Article	Original Research Article

Review Form 3

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>
<p>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.</p>	<p>The abstract should briefly summarize the problem, methods, key results, and the significance of the findings. For example:</p> <p>Problem: "Gall midge (<i>Orseolia oryzae</i>) is a significant pest affecting rice production in many regions."</p> <p>Methods: "We used SSR markers to confirm the presence of resistance genes in phenotypically promising rice cultures."</p> <p>Key Results: "The study confirmed the presence of the gm3 and Gm4 resistance genes in 70% of the tested cultures."</p> <p>Significance: "These findings provide a basis for developing gall midge-resistant rice varieties."</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>. Title and Abstract Title: While the title is straightforward, it could benefit from greater specificity by mentioning the number of rice cultures evaluated or the implications of the results.</p> <p>Abstract: The abstract is succinct but does not provide sufficient detail regarding the results and their statistical significance. Incorporating essential findings along with numerical data or percentages would enhance the overall impact of the abstract.</p> <p>Consider making the title more descriptive. For example: "Molecular Confirmation of Gall Midge Resistance in Phenotypically Promising Rice Cultures Using SSR Markers: Implications for Breeding Programs."</p>	
<p>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.</p>	<p>Consistency: There is a lack of uniformity in the capitalization of species names and gene designations (e.g., "gm3" versus "Gm4"). It is essential that all gene names adhere to a consistent format throughout the document.</p> <p>Reference Formatting: The references cited in the introduction exhibit inconsistent formatting. For instance, "Himabindu et al., 2010 et al., 2020" should be corrected to "Himabindu et al., 2010; Leelagud et al., 2020." It is important to maintain a consistent citation style.</p> <p>Background Information: While the introduction effectively outlines the issue at hand, it would be advantageous to include a brief discussion on the importance of utilizing SSR markers for this specific study.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>Spelling and Grammar: The section title "MATERIALS AND METHORDS" should be corrected to "MATERIALS AND METHODS."</p> <p>Details on PCR: While the PCR conditions are well-described, the exact source or company of the reagents used (e.g., Taq DNA polymerase) could be mentioned to enhance reproducibility.</p> <p>Statistical Analysis: There's no mention of any statistical methods used to analyze the data. If statistical tests were performed, they should be included; if not, consider explaining why.</p> <p>Material Description: Provide a comprehensive overview of the rice varieties utilized in the research, detailing their origins and any pertinent phenotypic characteristics.</p> <p>SSR Marker Justification: Explain the rationale behind the selection of SSR markers. For instance, "The SSR markers were chosen due to their established effectiveness in pinpointing resistance genes in rice."</p> <p>DNA Extraction and PCR Methodology: Elaborate on the DNA extraction technique and the</p>	

Review Form 3

	<p>origin of the reagents used. For example, "Genomic DNA was isolated employing the CTAB method (Doyle and Doyle, 1987), with Taq polymerase sourced from XYZ Company for the PCR amplification process."</p> <p>Statistical Evaluation: If statistical analysis was conducted, include a dedicated section for it. If not, clarify the reasons for the absence of statistical methods. For example, "The data were subjected to ANOVA to assess the significance of the findings."</p>	
<p>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.</p>	<p>Ensure that scientific names are italicized and consistently formatted, e.g., <i>Orseolia oryzae</i>.</p> <p>Use clear and concise language. For example, instead of "Molecular markers such as SSRs are widely used because they are simple," say "Simple Sequence Repeat (SSR) markers are widely used due to their simplicity and reliability."</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>=</p>	<p>Data Presentation:</p> <p>It is essential to verify that all figures and tables referenced are included in the manuscript. For example, if Figure 1 is cited, it should be accompanied by a comprehensive legend and description.</p> <p>Utilize subheadings to systematically arrange the results. Suggested headings include: "PCR Amplification Outcomes," "Resistance Gene Identification," and "Phenotypic Data Comparison."</p>	
<p><u>Minor</u> REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>Summary of Findings: Provide a clear summary of the study's primary findings. For example, "This research successfully identified gall midge resistance genes in 70% of the rice cultures tested using SSR markers."</p> <p>Broader Impact: Discuss the wider implications of the findings. For instance, "These results will aid in the creation of new rice varieties resistant to gall midge, enhancing crop yields and food security in impacted areas."</p> <p>Future Directions: Propose avenues for future research. For example, "Subsequent studies should concentrate on field trials to confirm the resistance observed at the molecular level and evaluate the performance of these cultures under natural infestation scenarios."</p>	
<p><u>Optional/General</u> comments</p>	<p>Correct Formatting:</p> <p>Ensure that all references adhere to the journal's specified style consistently. For instance, citations like "Himabindu et al., 2010; Leelagud et al., 2020" must be punctuated and formatted uniformly.</p> <p>Address any typographical mistakes, such as correcting "Divya et al., 1013" to "Divya et al., 2013."</p> <p>Enhance the text's flow by ensuring that each section logically transitions from the preceding one. Utilize transitional phrases to assist the reader, such as: "After identifying resistance genes, we proceeded to analyze their distribution among the rice cultivars."</p> <p>Simplify intricate sentences for better clarity. For example, "The complexity of interactions between rice and gall midge makes it challenging to identify resistance genes solely through phenotypic methods" can be rephrased to "Identifying resistance genes through phenotypic methods is difficult due to the complex interactions between rice and gall midge."</p>	

Review Form 3

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>	

Reviewer Details:

Name:	Aashish Gyawali
Department, University & Country	Institute of Agriculture and Animal Science, Tribhuvan University, Nepal