

Review Form 1.7

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_118502
Title of the Manuscript:	Expression profiling of MSP1 gene involved in mega-gametophyte development in ploidy series of Guinea grass (<i>Panicum maximum</i> Jacq.)
Type of the Article	Original Research Article

General guideline for Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

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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> <ol style="list-style-type: none"> Is the manuscript important for scientific community? (Please write few sentences on this manuscript) Is the title of the article suitable? (If not please suggest an alternative title) Is the abstract of the article comprehensive? Are subsections and structure of the manuscript appropriate? Do you think the manuscript is scientifically correct? Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> The manuscript is important for the scientific community as it investigates the expression patterns of the MSP1 gene, which is involved in apomixis, across different ploidy levels in guinea grass. Apomixis, the asexual reproduction pathway in plants, has significant implications for agriculture and plant breeding, as it can facilitate the preservation of hybrid vigor across generations. The study provides insights into the complex regulation of the MSP1 gene during different developmental stages and ploidy levels, contributing to our understanding of the molecular mechanisms underlying apomixis. The title "Expression profiling of MSP1 gene involved in mega-gametophyte development in ploidy series of Guinea grass (<i>Panicum maximum</i> Jacq.)" is suitable and accurately reflects the content of the study. The abstract provides a comprehensive overview of the study, including the background, objectives, experimental approach, key findings, and the potential implications of the research. The subsections and structure of the manuscript are appropriate. The introduction provides a clear background and context for the study, followed by detailed descriptions of the materials and methods used. The results and discussion sections are well-organized, presenting the findings and interpreting their significance in relation to previous research. Based on the information provided in the manuscript, the study appears to be scientifically correct. The authors have followed appropriate experimental procedures and have discussed their findings in the context of existing knowledge. However, a more thorough peer-review process would be necessary to assess the validity and accuracy of the study in greater detail. The references cited in the manuscript are relevant and cover both classic and recent literature related to apomixis, polyploidy, and the role of the MSP1 gene. However, some additional references that could be considered include: <ul style="list-style-type: none"> - Kaushal, P., Malaviya, D.R., Roy, A.K., Pathak, S., Agrawal, A., Khare, A., Siddiqui, S.A., 2008. Reproductive pathways of seed development in apomictic guinea grass (<i>Panicum maximum</i> Jacq.) cultivars. <i>J. Biosci.</i> 33, 147–158. (This study examined the reproductive pathways in apomictic guinea grass cultivars, providing additional context for the current research.) - Ozias-Akins, P., van Dijk, P.J., 2007. Mendelian genetics of apomixis in plants. <i>Annu. Rev. Genet.</i> 41, 509–537. (This review article provides a comprehensive overview of the genetic basis of apomixis, which could complement the introduction section of the current manuscript.) 	
<p>Minor REVISION comments</p> <ol style="list-style-type: none"> Is language/English quality of the article suitable for scholarly 		

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<p>communications?</p>	<p>The language and English quality of the article is generally suitable for scholarly communication, with some minor areas that could benefit from further polishing:</p> <p>Strengths:</p> <ul style="list-style-type: none"> - The writing is clear and easy to follow for the most part. - Technical terms and scientific concepts are explained well. - The sentence structure and grammar are largely correct. <p>Areas for improvement:</p> <ul style="list-style-type: none"> - There are a few instances of awkward phrasing or unclear sentences that could be rephrased for better clarity and flow. For example: "The findings indicate that the function of MSP1 suppresses the transformation of neighboring cells into male and female sporocytes." - Some sentences are quite long and could be broken down into shorter constructions for easier readability. - There are a handful of minor grammatical errors or typos, but nothing major that impedes understanding. <p>Overall, while not flawless, the language quality is acceptable for a scholarly publication after some minor editing and proofreading. The authors exhibit a good grasp of scientific writing in English. With some polishing by a professional editor or native English speaker, the language could be elevated to a fully publication-ready level for a peer-reviewed journal.</p>	
<p>Optional/General comments</p>	<p>Overall, the manuscript appears to be well-written, scientifically sound, and relevant to the field of plant reproductive biology and breeding.</p>	

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)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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