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| Book Name: | [Research Perspective on Biological Science](https://www.bookpi.org/bookstore/product/research-perspective-on-biological-science-vol-1/) |
| Manuscript Number: | **Ms\_BPR\_4894** |
| Title of the Manuscript: | **Establishment of a Simple Plant Regeneration System Using Callus from Apomictic and Sexual Seeds of Guinea Grass (Panicum maximum)** |
| Type of the Article | **BOOK CHAPTER** |

**Special note:**

**A research paper already published in a journal can be published as a Book Chapter in an expanded form with proper copyright approval.**

**Source Article:**

**This chapter is an extended version of the article published by the same author(s) in the following journal.**

**British Biotechnology Journal7(4): 183-190, 2015.**

**DOI: 10.9734/BBJ/2015/17215**

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(Please correct the manuscript and highlight that part in the manuscript. 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.** | This study introduces a straightforward and effective method for plant regeneration using callus derived from both apomictic and sexual seeds of *Panicum maximum* (Guinea grass). Since apomixis plays a vital role in agriculture by enabling the production of genetically uniform, high-yielding crops, this research offers valuable insights into the functional analysis of genes specific to apomixis. The findings have significant implications for breeding programs focused on enhancing forage crops and developing genetically stable varieties. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | The title, *"Establishment of a Simple Plant Regeneration System Using Callus from Apomictic and Sexual Seeds of Guinea Grass (Panicum maximum)"*, is clear and informative. It accurately reflects the core research focus of the manuscript. |  |
| 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. | The abstract effectively summarizes the study’s objectives, methodology, results, and conclusions. However, the language could be refined for greater clarity and readability. Certain details, such as the biological significance of the findings and their practical applications, should be stated more explicitly. The study design section is somewhat lengthy and could be more concise. While informative, the abstract would benefit from minor restructuring and grammatical improvements to enhance scholarly communication. |  |
| **Is the manuscript scientifically, correct? Please write here.** | The manuscript demonstrates scientific rigor in its methodology, data collection, and analysis. The selection of media and growth regulators is well-supported by previous research. However, certain aspects require further clarification:   * The biological reasoning behind the variation in callus formation rates between sexual and apomictic accessions should be expanded upon. * While the effects of L-proline on plant regeneration are acknowledged, a more in-depth discussion of its role in plant metabolism would enhance the study. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | The references consist of classic and contemporary studies, with significant citations from the 1990s and early 2000s. However, there are limited references from the past decade. Integrating more recent research on apomixis, tissue culture innovations, and callus-mediated regeneration would enhance the study. |  |
| Is the language/English quality of the article suitable for scholarly communications? | The manuscript is generally understandable but requires substantial improvements in grammar, clarity, and conciseness. Some sentences are overly complex or awkwardly structured, such as, *"After the plantlets rooting in MS hormone-free medium, the complete plants were planted in pots for hardening,"* which could be revised to *"After rooting in hormone-free MS medium, the plantlets were transplanted into pots for hardening."* Additionally, there are inconsistencies in verb tense that need correction. A thorough language review by a native or proficient English speaker is recommended before submission. |  |
| Optional/General comments | The study is generally well-structured, though certain sections, particularly the methodology, could be more concise. Figures and tables should have clear labels and descriptive captions for better clarity. Additionally, the discussion would benefit from stronger links to practical agricultural applications. Overall, the study is well-executed but requires revisions to improve writing quality, clarify biological mechanisms, and incorporate more recent references. |  |

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| **PART 2:** | | |
|  | Reviewer’s comment | Author’s comment *(if agreed with the 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?** |  |  |

**Reviewer details:**

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