

Review Form 3

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| Journal Name: | Journal of Advances in Biology & Biotechnology |
| Manuscript Number: | Ms_JABB_130708 |
| Title of the Manuscript: | Effect of temperature and light on callus of critically endangered arid species <i>Commiphora wightii</i> through slow grow storage |
| Type of the Article | Original Research Article |

General guidelines for the 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 guidelines for the Peer Review process, reviewers are requested to visit this link:

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PART 1: Comments

| | Reviewer's comment | 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) |
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| 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 manuscript is significant for the scientific community as it addresses the conservation of <i>Commiphora wightii</i> , a critically endangered medicinal plant species. The study provides valuable insights into the effects of temperature and light on callus cultures, which are crucial for the development of effective <i>in vitro</i> conservation strategies. | |
| Is the title of the article suitable? (If not please suggest an alternative title) | The title of the article, "Effect of temperature and light on callus of critically endangered arid species <i>Commiphora wightii</i> through slow grow storage," is suitable as it accurately reflects the study's focus on temperature and light effects on callus cultures for conservation purposes. However, to make it more concise, it could be revised to: "Optimizing Temperature and Light Conditions for <i>In Vitro</i> Conservation of <i>Commiphora wightii</i> Callus Cultures." | |
| 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 is comprehensive and covers the key aspects of the study, including the objectives, methods, results, and conclusions. However, it could be improved by briefly mentioning the specific findings related to the optimal temperature (10°C) and the extended survival of callus in complete darkness (120 days). This would provide a clearer summary of the study's outcomes. Additionally, the abstract could briefly highlight the practical implications of the findings for conservation efforts. | |
| Is the manuscript scientifically, correct? Please write here. | The manuscript appears to be scientifically correct. The experimental design, methodology, and statistical analysis are well-described and appropriate for the study's objectives. The results are presented clearly, and the conclusions are supported by the data. The study follows a logical progression from callus induction to the evaluation of storage conditions, and the findings are consistent with previous research on slow growth storage techniques. | |
| Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. | The references are sufficient and include a mix of classic and recent studies, providing a good background for the research. However, a few more recent studies (within the last 5 years) on <i>in vitro</i> conservation techniques and the effects of light and temperature on plant tissue cultures could be added to strengthen the literature review. For example, recent studies on the molecular mechanisms underlying plant responses to low temperatures and darkness could provide additional context. | |

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| Is the language/English quality of the article suitable for scholarly communications? | The language and English quality of the article are suitable for scholarly communication. The text is clear, well-structured, and free of major grammatical errors. However, there are a few minor issues, such as occasional awkward phrasing or redundancy, which could be improved with careful editing. For example, in the abstract, the phrase "the survival of callus kept in dark was around 60 days higher than the callus stored in light" could be rephrased for clarity. | |
| Optional/General comments | Overall, the manuscript is well-written and presents a valuable contribution to the field of plant conservation. The study is well-designed, and the results are clearly presented and discussed. The findings have practical implications for the conservation of <i>Commiphora wightii</i> and could be applied to other endangered species. The manuscript could benefit from a more detailed discussion of the broader implications of the findings for conservation strategies and the potential for future research. Additionally, including a section on the limitations of the study and suggestions for future work would enhance the manuscript's depth and relevance. | |

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

Reviewer Details:

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| Name: | Hafiz Muhammad Asadullah |
| Department, University & Country | Crop Sciences Institute, NARC, Pakistan |