

### Review Form 3

Journal Name:	<a href="#">Journal of Advances in Biology &amp; Biotechnology</a>
Manuscript Number:	Ms_JABB_122505
Title of the Manuscript:	Tissue culture in banana cultivation: A review of its impact on disease management, yield improvement, and sustainable production
Type of the Article	Review

#### **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:

<https://r1-reviewerhub.org/general-editorial-policy/>

#### **Important Policies Regarding Peer Review**

Peer review Comments Approval Policy: <https://r1-reviewerhub.org/peer-review-comments-approval-policy/>

Benefits for Reviewers: <https://r1-reviewerhub.org/benefits-for-reviewers>

### Review Form 3

#### PART 1: Review Comments

Compulsory REVISION 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)
<b>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.</b>	It is an asset to review the current status of banana micropropagation in developing countries and it is a plus to the science community at large. I like the manuscript if the comments given are well addressed and the overall write-up is consistent and coherent, accordingly. A lot of run on, fragmented and standalone (not referenced) sentences are in the text. The manuscript should be modified to meet the standards of the journal.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	<b>Review: the impact of tissue culture on disease management, yield improvement, and sustainable production in banana cultivation.</b>	
<b>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.</b>	In several tropical and subtropical areas, bananas ( <i>Musa</i> spp.) are an important food source and commercial crop. Disease transmission and production uncertainty are common problems with traditional propagation techniques, such as suckers. Supplying consistent, high-quality, and disease-free planting material, tissue culture, known as propagation micropropagation, represents a potential alternative. The application of tissue culture has greatly enhanced disease management in banana cultivation. To reduce the incidence of ailments like Fusarium wilt, bacterial wilt, and banana bunchy top virus (BBTV), pathogen-free plantlets are grown in controlled conditions. In addition to encouraging better crops and reducing the environmental impact, this approach also reduces the need for chemical fertilizers. Compared to traditionally propagated plants, micro-propagated banana plants exhibited uniform growth, early fruiting, and higher output. These benefits result in more reliable and regular harvests and are attributed to tissue-cultured plants' strong development and genetic homogeneity. Tissue culture improves sustainability in banana production by encouraging effective land use and lowering chemical input requirements. Tissue culture techniques enable the large-scale production of improved banana cultivars rate year-round to satisfy the increasing demand for bananas without demanding the expansion of agricultural land. Furthermore, using planting material free of disease lowers input costs and crop losses, supporting more environmentally friendly farming methods. <b>Keywords:</b> Tissue culture, micropropagation, Composition composition, disease resistance, sterilization, genetic transformation	
<b>Are subsections and structure of the manuscript appropriate?</b>	Except few subheadings, it is fine! Comments are given in the manuscript.	
<b>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.</b>	It looks good but a lot has to be changed and updated. Comments should be addressed and the methodology section should be given due attention as this is a review paper, I don't think M&M section is appropriate. Do the Authors perform a laboratory research? If so, it should be changed to an Original Research Article.	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	Most of the references are recent. However, it should be written in Endnote format for ease of access to the references in the text and online. Suggestions and comments are given in the Manuscript.	

Commented [AGD1]: Too long and unclear to understand

Commented [AGD2]: Unclear statement

Commented [AGD3]: Too long to follow and understand. Fragment it!

Commented [AGD4]: Alphabetic order is recommended

**Review Form 3**

Minor REVISION comments		
<b>Is the language/English quality of the article suitable for scholarly communications?</b>	Looks good but a lot of comments are given in the manuscript.	
<b>Optional/General</b> comments	Serious Major revision required.	

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (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)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

Name:	<b>Adane Gebeyehu Demissie</b>
Department, University & Country	<b>Sweden</b>