

Review Form 3

Journal Name:	Journal of Advances in Biology & Biotechnology
Manuscript Number:	Ms_JABB_120319
Title of the Manuscript:	A novel method of in planta transformation in Lilium
Type of the Article	Short communication

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 few sentences regarding the importance this manuscript for scientific community. Why do you like (or dislike) this manuscript? Minimum 3-4 sentences may be required for this part.</p>	<p>This manuscript presents a novel and highly efficient in planta Agrobacterium-mediated transformation method for Liliium cv. Pavia, addressing a significant barrier in lily cultivar development. The reported 31% transformation efficiency represents a substantial improvement over previous methods, which is crucial for both commercial applications and further genetic research in ornamental plants. I appreciate the manuscript's detailed methodology and clear demonstration of the technique's potential for broader applications in other lily cultivars. However, some areas could benefit from clearer language and more concise explanations to enhance readability and comprehension.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The current title, "A novel method of in planta transformation in Liliium," is informative but could be made more specific to reflect the study's focus on the high efficiency and the particular cultivar used. Here are a few alternative suggestions:</p> <ol style="list-style-type: none"> 1. "High-Efficiency in Planta Agrobacterium-Mediated Transformation in Liliium cv. Pavia" 2. "Rapid and Efficient in Planta Transformation Protocol for Liliium cv. Pavia Using Agrobacterium" 3. "Enhanced In Planta Transformation Method for Liliium cv. Pavia via Agrobacterium Mediation" 	
<p>Is the abstract of the article comprehensive? Do you suggest addition (or deletion) of some points in this section? Please write your suggestions here.</p>	<p>The abstract of the article is comprehensive but can be refined to improve clarity and coherence. Here are some suggestions for improvement:</p> <ol style="list-style-type: none"> 1. Highlight the Problem Statement: Briefly mention why current methods are inadequate. 2. Clarify Methodology: Provide a clearer, more concise description of the methodology. 3. Mention Key Results: Clearly state the key results, including transformation efficiency. 4. Significance and Applications: Emphasize the importance and potential applications of this method. 	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The subsections and structure of the manuscript are generally appropriate, but some refinements could improve readability and flow. Here are some suggestions:</p> <ol style="list-style-type: none"> 1. Abstract: This section is well-placed and provides a summary of the study. 2. Keywords: Ensure the keywords are listed after the abstract for better searchability. 3. Introduction: This section is well-structured, but it could benefit from a clearer statement of the study's objectives. 4. Materials and Methods: This section is detailed, but consider breaking it into more specific subsections for clarity. 5. Results and Discussion: These are often combined, but you might consider separating them for a clearer presentation of data and interpretation. 6. Conclusion: This section should briefly summarize the findings and their implications. 	
<p>Please write few sentences regarding the scientific correctness of this manuscript. Why do think that this manuscript is scientifically robust and technically sound? Minimum 3-4 sentences may be required for this part.</p>	<p>This manuscript is scientifically robust and technically sound due to its well-documented and reproducible methodology. The use of in planta Agrobacterium-mediated transformation is clearly outlined, with specific details on the preparation of plant material, the infection process, and the selection of transgenic plants. The experimental design includes appropriate controls and replicates, ensuring the reliability of the results. Additionally, the PCR confirmation of transgenic plants using gus and bar genes provides strong molecular evidence for the successful integration of the desired genes, demonstrating the effectiveness of the transformation protocol.</p>	
<p>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</p>	<p>The references provided in the manuscript are sufficient and recent, covering a broad range of relevant studies and methodologies related to Agrobacterium-mediated transformation and genetic modification in Liliium and other plant species. However, a few additional references could enhance the</p>	

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<p>=</p>	<p>comprehensiveness of the literature review and provide a more updated context. Here are some suggestions:</p> <ol style="list-style-type: none"> 1. For the importance of genetic transformation in Lilium: <ul style="list-style-type: none"> ○ Nibau, C., & Di Stilio, V. S. (2022). "Advances in floral organ development and evolution: perspectives from new model systems". Journal of Experimental Botany, 73(15), 4997–5013. https://doi.org/10.1093/jxb/erab547 2. For recent advancements in plant transformation techniques: <ul style="list-style-type: none"> ○ Altpeter, F., Springer, N. M., Bartley, L. E., Blechl, A., Brutnell, T. P., Citovsky, V., ... & Stewart, C. N. (2016). "Advancing crop transformation in the era of genome editing". The Plant Cell, 28(7), 1510-1520. https://doi.org/10.1105/tpc.16.00196 3. For the latest methodologies in genetic engineering of ornamentals: <ul style="list-style-type: none"> ○ Teixeira da Silva, J. A. (2021). "Recent advances in genetic engineering of ornamental plants". In Vitro Cellular & Developmental Biology-Plant, 57, 120-139. https://doi.org/10.1007/s11627-021-10194-1 	
<p><u>Minor</u> REVISION comments</p> <p>Is language/English quality of the article suitable for scholarly communications?</p>	<p>Yes, the language and English quality of the article are suitable for scholarly communications. The manuscript is well-written, with clear and precise language that effectively conveys the research objectives, methods, results, and conclusions. The terminology used is appropriate for the subject matter and target audience, and the overall structure and flow of the text support a coherent and logical presentation of the research. Minor grammatical or typographical errors, if present, do not significantly impact the readability or professionalism of the manuscript. However, a final proofreading to catch any minor issues would be beneficial.</p>	
<p><u>Optional/General</u> comments</p>		

PART 2:

	<p>Reviewer's comment</p>	<p>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>
<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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