

Review Form 3

Journal Name:	Archives of Current Research International
Manuscript Number:	Ms_ACRI_124837
Title of the Manuscript:	EFFECT OF SUCROSE, SALICYLIC ACID (SA), SULFOSALICYLIC ACID (SSA), SILVER NANO AND AJOWAN E.O ON VASE LIFE OF SINGLE TUBEROSE (POLIANTHES TUBEROSA L.)
Type of the Article	

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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)
<p>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.</p>	<p>This manuscript offers significant value to the floriculture industry by exploring chemical treatments to extend the vase life of <i>Polianthes tuberosa</i>, a flower valued for its aesthetics and fragrance. The study's focus on solutions containing sucrose, salicylic acid, and silver nanoparticles can guide commercial florists, horticulturists, and researchers in developing methods that enhance the longevity of cut flowers, improving the profitability and customer satisfaction in this sector. The use of innovative treatments like silver nanoparticles makes it relevant to both traditional and emerging areas of floriculture research. Overall, the study contributes to the growing body of literature on post-harvest preservation techniques for cut flowers.</p> <p>Opinion on the Manuscript</p> <p>I like the manuscript for its practical application in the floriculture industry and the clear experimental design. The study provides actionable insights into the use of chemical solutions to improve flower longevity, which can have economic and scientific implications. However, I would have appreciated more discussion on the potential environmental impact of using certain chemicals, such as nanoparticles, in commercial settings.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The title of the article, "EFFECT OF SUCROSE, SALICYLIC ACID (SA), SULFOSALICYLIC ACID (SSA), SILVER NANO AND AJOWAN E.O ON VASE LIFE OF SINGLE TUBEROSE (POLIANTHES TUBEROSA L.)," is informative but somewhat long and includes unnecessary abbreviations.</p> <p>Suggestion: "Enhancing the Vase Life of Tuberose (<i>Polianthes tuberosa</i> L.) using Sucrose, Salicylic Acid, Silver Nanoparticles, and Essential Oils"</p>	
<p>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.</p>	<p>The abstract is generally comprehensive but could benefit from slight modifications to improve clarity. The following points could enhance it:</p> <ul style="list-style-type: none"> • Introduction of Context: Mention the specific challenge of short vase life in tuberose, as opposed to other flowers, to contextualize the need for the study. • Clarification of Findings: The results mention different parameters but could specify more clearly the primary outcome (e.g., vase life extension). Additionally, the mention of Ajowan essential oil in the title but not in the results could cause confusion. <p>Suggestions for Improvement:</p> <p><input type="checkbox"/> Add a more explicit statement regarding the overall significance of the findings in the context of floriculture.</p> <p><input type="checkbox"/> If Ajowan essential oil did not significantly impact vase life, clarify its role.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The manuscript has an appropriate structure, with clear sections like the Introduction, Materials and Methods, Results and Discussion and Conclusion, which are standard for scientific studies. The Introduction section provides a good foundation by presenting background information, the problem of short vase life in tuberose, and the relevance of finding chemical treatments to enhance their longevity. The Materials and Methods section is well-organized and appropriately structured. It provides a clear description of the experimental design, treatments, and observational parameters. A minor improvement could involve adding subheadings for Experimental Setup, Treatments, and Data Collection and Analysis for clarity. The subsections in the Results and Discussion section are appropriate and ensure that the results are logically organized and easy to follow.</p>	

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<p>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.</p>	<p>The manuscript is scientifically robust and technically sound due to its clear experimental design and reliance on well-established scientific methods, such as randomized design and detailed observation of parameters like fresh weight, spike length, and vase life. The inclusion treatments, such as silver nanoparticles and essential oils, combined with traditional treatments like sucrose and salicylic acid, demonstrates a comprehensive approach. Additionally, citing relevant research to justify the use of certain treatments adds to the manuscript's scientific merit. The clear and methodical presentation of the data, along with appropriate references to previous studies, strengthens the manuscript's validity.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>=</p>	<p>The references cited in this manuscript are generally sufficient and relevant, covering both classic and foundational studies (e.g., Halevy & Mayak, 1981) as well as more recent research (e.g., Pérez-Arias et al., 2019). However, the majority of the references are relatively older, and there is a need to incorporate more recent studies, especially from 2021 onwards, to ensure the manuscript reflects the latest developments in the field. Given the increasing focus on eco-friendly and sustainable methods in postharvest technology, it would also be beneficial to include recent research on alternatives like essential oils and the environmental impacts of silver nanoparticles.</p> <p>Suggestion of additional reference:</p> <p>El-Sayed, I. M., & El-Ziat, R. A. (2021). Utilization of environmentally friendly essential oils on enhancing the postharvest characteristics of <i>Chrysanthemum morifolium</i> Ramat cut flowers. <i>Heliyon</i>, 7(1), e05909. https://doi.org/10.1016/j.heliyon.2021.e05909. This paper is particularly relevant given the manuscript's inclusion of Ajowan Essential Oil.</p>	

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<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The article is understandable and scholarly but would benefit from minor revisions in grammar, word choice, and sentence structure for improved precision and readability.</p> <p>Here are some observations:</p> <ol style="list-style-type: none"> 1. Grammatical Issues: <ul style="list-style-type: none"> ○ Phrasing such as "cut spikes are physiologically active enough to grow even harvested from the plants" is awkward and could be restructured for clarity. A suggestion might be: "Cut spikes remain physiologically active even after being harvested from the plants." ○ Minor grammar and punctuation errors appear throughout, such as inconsistent tenses or missing articles. For example: "Longevity of individual florets ranged from 2.17 days to 5.00 days" could be rephrased as "The longevity of individual florets ranged from 2.17 to 5.00 days." 2. Word Choice and Sentence Structure: <ul style="list-style-type: none"> ○ Some sentences are unnecessarily complex or lengthy, which can hinder readability. Simplifying sentence structure can help. For instance: "The reduction in fresh weight could be attributed to decreased vase solution uptake and elevated respiration rates" can be made clearer by writing "The reduction in fresh weight likely resulted from lower vase solution uptake and higher respiration rates." 3. Scholarly Tone: <ul style="list-style-type: none"> ○ While the tone is mostly appropriate for a scholarly article, there are occasional instances where the wording could be more formal. Phrases like "likely due to" could be replaced with more definitive academic language, such as "attributable to." 4. Clarity and Flow: <ul style="list-style-type: none"> ○ The flow of the discussion is mostly good, but transitions between subsections could be smoother. Adding transitional phrases to clearly guide the reader from one result to the next would enhance the paper's overall readability. 	
<p>Optional/General 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>	

Reviewer Details:

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