

Review Form 3

Journal Name:	Asian Plant Research Journal
Manuscript Number:	Ms_APRJ_124856
Title of the Manuscript:	Antisalmonella Activities of Essential Oil of Psidium guajava leaves: An in vitro and in vivo study.
Type of the Article	Original Research 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 contributes significantly to the scientific community by exploring alternative treatments for multidrug-resistant <i>Salmonella typhi</i>, which is an emerging global health concern. The investigation into the essential oil of <i>Psidium guajava</i> offers promising insights into both its <i>in vitro</i> and <i>in vivo</i> antisalmonella activities, making it a potential natural remedy for managing typhoid infections. The combination of antimicrobial, anti-biofilm, and DNA-protective properties highlights the broad therapeutic potential of the oil. I appreciate the manuscript for its robust experimental design and relevance to ongoing efforts to combat antibiotic resistance.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>The research's principal focus is clearly conveyed by the title, "Antisalmonella Activities of Essential Oil of <i>Psidium guajava</i> Leaves: An <i>in vitro</i> and <i>in vivo</i> Study," which is quite appropriate. It takes into account both the <i>in vitro</i> and <i>in vivo</i> studies conducted to determine how the essential oil affects <i>Salmonella</i>. Nonetheless, a somewhat altered version might be as follows to improve clarity: "<i>In vitro</i> and <i>in vivo</i> Antisalmonella Activities of <i>Psidium guajava</i> Leaf Essential Oil." The main points of the study are still communicated in this shorter title.</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 there are areas where more clarity or detail would enhance its utility. Here are some of my suggestions:</p> <ul style="list-style-type: none"> • Background: Clarify the specific resistance mechanisms of <i>Salmonella typhi</i> (e.g., biofilm formation). • Results: It would be helpful to include some relative comparison to the control group or standard treatments like ciprofloxacin. • Conclusion: A statement linking the findings to potential clinical or practical applications would strengthen the abstract's impact. Overall, the abstract could benefit from minor rephrasing to enhance readability and flow. • 	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The manuscript follows a clear structure, typical of scientific research articles, with well-defined sections such as introduction, methods, results, and discussion. The subsections in the methods are appropriately detailed, although it might be helpful to split lengthy sections (such as "2.0 Materials and Methods") for better readability. For instance, the "GC/MS Analysis" subsection could be expanded into its own section for easier navigation.</p>	
<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. The methodologies used, including bioassays, bioautography, and GC/MS analysis, are appropriate and well-executed for identifying the antibacterial potential of the essential oil. The <i>in vivo</i> and <i>in vitro</i> components provide a comprehensive analysis of both the biochemical mechanisms and practical efficacy. Additionally, the data on the reduction of bacterial load and immune response markers add significant strength to the findings.</p>	
<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :</p>	<p>The references are generally sufficient, but some are outdated. For instance, recent studies (within the last 5 years) on meta-analyses of <i>Salmonella</i> resistance could further solidify the paper's context. I recommend integrating more reviews or studies focused on the therapeutic potential of essential oils against antibiotic-resistant bacteria to ensure the manuscript is up-to-date. Consider adding the following recent references to bolster the literature review:</p> <p>Adetutu, A., Olaniyi, T. D., & Owoade, A. O. (2023). Mechanism of antibacterial action of n-hexane and ethyl acetate soluble fractions of <i>Psidium guajava</i> leaves against <i>Salmonella enterica</i> serovar <i>Typhi</i>. <i>Biologia</i>, 78, 2965–29731.</p> <p>Park, H., Kim, B., Kang, Y., & Kim, W. (2024). Study on Chemical Composition and Biological Activity of <i>Psidium guajava</i> Leaf Extracts. <i>Current Issues in Molecular Biology</i>, 46(3), 2133-21432.</p> <p>Díaz-de-Cerio, E., Verardo, V., Gómez-Caravaca, A. M., Fernández-Gutiérrez, A., & Segura-Carretero,</p>	

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	<p>A. (2017). Health Effects of <i>Psidium guajava</i> L. Leaves: An Overview of the Last Decade. <i>International Journal of Molecular Sciences</i>, 18(4), 8973.</p> <p>Othman, A., & Ahmad, A. (2020). Antimicrobial Activity of <i>Psidium guajava</i> Leaves Extract Against Foodborne Pathogens. <i>ResearchGate</i></p>	
<p><u>Minor REVISION</u> comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language is generally suitable for scholarly communication, but there are a few grammatical errors and awkward phrasings. Some sentences could be reworded for clarity. For example:</p> <ul style="list-style-type: none"> • Instead of "A mere 13±0.2 compared to 31±0.3 mm," rephrase to "Only 13±0.2 mm, compared to 31±0.3 mm." • The use of scientific terms like "ameliorated" can be replaced with more direct terms like "improved" for better comprehension. <p>I suggest a careful proofreading to correct these minor issues.</p>	
<p><u>Optional/General</u> comments</p>	<p>Please make sure that the scientific names are italicized and that the references are properly according to journal style.</p>	

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)
<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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