

### Review Form 3

Journal Name:	<a href="#">Asian Plant Research Journal</a>
Manuscript Number:	Ms_APRJ_130080
Title of the Manuscript:	<b>A comparative review of phytochemistry, applications in medicine and pharmacological potential of antimicrobial and anti-inflammatory activity between two species of Genus Rauvolfia: Rauvolfia serpentina and Rauvolfia tetraphylla</b>
Type of the Article	Minireview 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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#### **Important Policies Regarding Peer Review**

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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)
<b>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.</b>	This manuscript holds significant importance for the scientific community as it provides a comparative analysis of the phytochemical composition and pharmacological potential of <i>Rauvolfia serpentina</i> and <i>Rauvolfia tetraphylla</i> , two medicinally valuable species. By highlighting their antimicrobial and anti-inflammatory activities, this review bridges knowledge gaps and identifies opportunities for future research on their therapeutic applications. It also emphasizes the importance of alkaloids and other bioactive compounds, paving the way for the development of drugs. Additionally, the insights offered in this manuscript can guide sustainable utilization, conservation, and cultivation strategies for these vital medicinal plants.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	The current title is descriptive and provides a clear understanding of the article's focus. However, it can be made more concise and engaging to attract a broader readership. Here is a refined suggestion:  <b>"Phytochemical Composition, Medicinal Applications, and Pharmacological Insights: A Comparative Review of <i>Rauvolfia serpentina</i> and <i>Rauvolfia tetraphylla</i>"</b>  This version maintains clarity while emphasizing the key aspects of the review—phytochemistry, medicinal applications, and pharmacological potential.	
<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>	The abstract as it stands is quite brief and does not fully capture the scope of the manuscript. To make it comprehensive, the following suggestions can be incorporated:  <b>Suggestions for Improvement:</b>  1. <b>Expand on the Objective:</b> Clearly state the aim of the review, such as comparing the phytochemical profiles, pharmacological activities, and therapeutic potential of <i>R. serpentina</i> and <i>R. tetraphylla</i> . 2. <b>Highlight Key Findings:</b> Include a brief mention of the major phytochemicals (e.g., alkaloids like reserpine) and their known antimicrobial and anti-inflammatory effects. 3. <b>Mention the Relevance:</b> Explain the significance of studying these species in terms of their medicinal uses, conservation, or potential drug development. 4. <b>Focus on Outcomes:</b> Conclude with what the comparative analysis reveals or how it could guide future research and applications.	
<b>Is the manuscript scientifically, correct? Please write here.</b>	Your manuscript is scientifically robust, presenting a wealth of information on <i>Rauvolfia serpentina</i> and <i>Rauvolfia tetraphylla</i> , particularly their phytochemistry, morphology, and therapeutic potential, supported by credible references. However, clarity, flow, and consistency could be enhanced. The introduction effectively links nature to humanity but transitions to antimicrobial resistance and inflammation abruptly, requiring smoother connections. Morphological descriptions are detailed but lack uniformity, with <i>Rauvolfia serpentina</i> receiving more emphasis than <i>Rauvolfia tetraphylla</i> . In the phytochemistry section, while the alkaloid content of <i>Rauvolfia serpentina</i> is thoroughly detailed, <i>Rauvolfia tetraphylla</i> requires similar depth and organization. Grammar improvements, consistent formatting, and inclusion of a table summarizing major phytochemicals and their activities can enhance readability. A conclusion summarizing key findings and their medicinal potential would strengthen the manuscript further.	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	The references listed are diverse and encompass both recent and older studies, ensuring a balanced coverage of the topic. Recent references such as Ayele et al. (2024), Samaraweera et al. (2023), and Kumar et al. (2022) provide updated insights into ethnobotanical studies, antibacterial activity, and phytochemistry. Additionally, older but foundational studies like Gurib-Fakim (2006) and Srivastava et al. (2006) contribute to the historical and technical understanding of medicinal plants. However, more recent references focusing on advanced techniques, such as metabolomics, modern extraction technologies, or clinical trials involving <i>Rauvolfia</i> species, could enhance the comprehensiveness of the review. For example, recent publications on phytochemical analysis using high-throughput techniques	

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	or studies linking traditional medicine to current pharmacological innovations might be considered. Including these would not only provide a contemporary perspective but also reflect the latest trends and advancements in the field.	
<b>Is the language/English quality of the article suitable for scholarly communications?</b>	The language quality of the article appears generally suitable for scholarly communication, with clear and concise writing, appropriate terminology, and well-structured references. However, there are a few areas where improvements could be made to enhance clarity and flow. For instance, some sentences might benefit from minor rephrasing to avoid ambiguity or overly complex phrasing, ensuring that the information is conveyed more smoothly to the reader. Additionally, consistency in terminology and style (e.g., in the formatting of species names and chemical terms) should be maintained throughout the text. Overall, while the article meets the general expectations for scholarly work, small refinements could help elevate its professionalism and readability further.	
<b>Optional/General</b> comments	The article provides a detailed review of the ethnobotanical and pharmacological aspects of <i>Rauvolfia</i> species, supported by extensive references. It covers the plant's traditional uses, phytochemical composition, and pharmacological effects, highlighting its potential in modern medicine. To improve, the article could include more information on the cultural significance and modern applications of <i>Rauvolfia</i> species. It would benefit from clearer section organization and a more in-depth comparison of studies, especially regarding conflicting results. Adding insights into future research directions and ensuring consistency in citation formatting would enhance its quality.	

### **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:

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