

# Review of: "Unravelling the Phytochemical and Pharmacognosy Contour of Traditional Medicinal Plant: *Pterocarpus Marsupium* Roxb"

Radha Kushwaha<sup>1</sup>

<sup>1</sup> University of Allahabad

Potential competing interests: No potential competing interests to declare.

Here is my opinion on this review paper:

The paper is a review article that summarizes the phytochemistry and pharmacology of *Pterocarpus marsupium* Roxb, a medicinal plant widely used in traditional systems of medicine in India and other tropical and subtropical regions. The paper provides a comprehensive overview of the plant's morphology, distribution, phytoconstituents, and various pharmacological activities.

1. The introduction is too short and does not provide enough context and rationale for the review. It should be expanded to include the following points: Start with a general overview of the importance and challenges of herbal medicine and natural products research and then describe of the botanical, geographical, and ethnopharmacological aspects of *P. marsupium*, including its common names, distribution, morphology, and traditional uses. Finally give objective to the review.
2. I think organize the phytochemicals into different classes, such as flavonoids, terpenoids, phenolic compounds, etc., and providing their chemical structures and names. Then compare the phytochemical profiles of different parts of the plant, such as leaves, stem, bark, heartwood, etc., and explain the possible factors affect their variation, such as extraction methods, environmental conditions, genetic diversity, etc.
3. Discuss more the biological activities and mechanisms of action of the major phytochemicals, and citing relevant studies that support their claims.
4. Not only summarize the main findings and evidence from the literature, but also highlight the similarities and differences among the studies, such as the doses, extracts, models, parameters, and outcomes used.
5. Evaluate the strengths and weaknesses of the studies, and addressing the methodological issues and limitations, such as the lack of standardization, reproducibility, and clinical relevance of the results. Do not just put the findings from authors. Also, whenever you start a heading for ex. 5.3 do not just start with findings give a brief introduction about the headings. Add more in headings 5.6 and 5.8.
6. Discussing the possible mechanisms of action and molecular targets of the extracts and phytochemicals, and citing relevant studies that support their claims.
7. In conclusion identify the gaps and challenges in the pharmacological research and add suggestion of the future directions and recommendations for further research and development of *P. marsupium*.

8. Language and Grammar: There are some grammatical errors and awkward phrasing in the paper.
9. Scientific name should be italic.
10. When you are writing the data should be uniform format like: 2.5 mg/kg, or 2.50 mg/kg; 36.5µl or 36.50µL, ml or mL.  
Also, have data in [22mm] in two places other has different formatting (22mm), choose one.