

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

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Potential competing interests: No potential competing interests to declare.

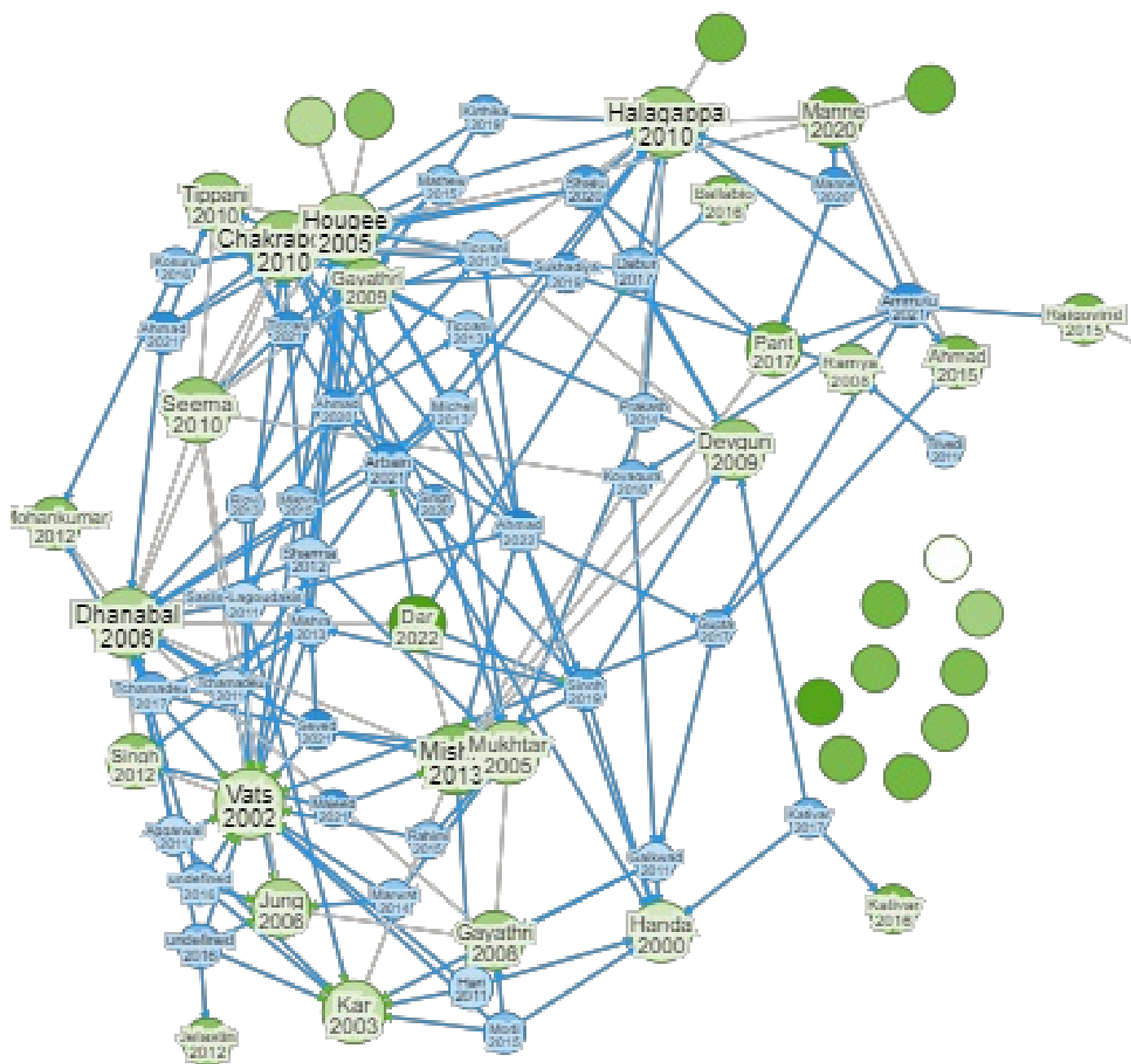
This comprehensive review delves into the phytochemical and pharmacognostic aspects of the traditional medicinal plant, *Pterocarpus marsupium* Roxburg. The authors have provided a thorough exploration of the plant's medicinal properties shedding light on its potential therapeutical applications.

However to enhance the scholarly value of the review, it is crucial to address a few points:

1. Ghost Citations: Ensure the exclusion of the ghost papers which are quite a few to maintain the integrity of the research. e.g.: Reference no. 2, 3,7,10,15,18,22,23,28,38, 43,45,54,60,61 and 62. Like, reference no. 15 can be changed with better reference of the book it is taken from by Pillai et al, 2021, Apple Academic. Press. 323-349 ^[1].
2. DOI inclusion: Each referenced paper should have a digital object identifier (DOI) for easy identification and accessibility. Please verify and include the DOIs for all cited works.
3. Language and Grammar: Perform a meticulous review for language and grammar correction to elevate the overall readability and professionalism of the review.
4. Inclusion of some important papers: By incorporating the essential papers of important works like Saslis-Lagoudakis et al 2011 ^[2], Tchamadeu et al. 2011^[3], Ammulu et al. 2021^[4] for the evaluation of bioactivities of the plant will benefit the review.
5. Chromatographic profiling: It is imperative to underscore the importance of chromatography techniques like LC-MS. The inclusion of a paper by Singh et al 2019^[5], for the LC-MS analysis and Mathew et al 2015^{[6][7][8]} for bioassay guided fractionation will emphasize the contribution of the review to the understanding of *Pterocarpus marsupium* Roxb. medicinal potential .
6. Anti-neoplastic in place of anti-cancer activity: The plant's activity has shown its efficacy in controlling the uncontrolled growth of the oncogenic or prooncogenic invitro models which suggests its activity to be antineoplastic. It encompasses treatments and substances that target not only cancer but also other abnormal cell growth, including malignant and benign conditions. Make a table and compare the data by statistical means to show the variation in the data and importance of the plant against already established herbal, polyherbal or synthetic drugs.
7. Anti-microbial/antibacterial: Consider using term "antimicrobial" as "antibacterial" inherently falls under the category.
8. Memory enhancing: The correct scientific term for the substances or interventions that enhance memory is often described as "cognitive enhancers or more specifically "nootropic". The plant is also found to be possessing

neuroprotective activities which is to be considered as well [9][10] .

9. Latest Research Findings: Emphasize the inclusion of the most recent research findings to ensure the review is up-to-date and reflects the current state of knowledge. Provide a more comprehensive analysis by exploring additional dimensions or facets of the topics not covered in the latest reviews [11][12] [13][14][15][16]. Clearly state how the review addresses gaps in existing literature, showing a keen awareness of the limitations in previous reviews and how this work fills those gaps.
10. Inclusion of tools like Research rabbit, Scholarcy and scite: The AI tools currently freely available will significantly augment the scholarly impact of the review. These facilitates the extensive exploration of pertinent literature, build personalized collections for efficient organization, providing smart citations offering contextual insights into the citations. It can be used to offer support or contrast evidence to the citations enriching the review's critical analysis. Here is a shareable link as an example of the references which can be used in comprising the review:
<https://www.researchrabbitapp.com/collection/public/R6D59Y886P>



i.e: A Correlation by using research rabbit tool between the papers cited in the review vs important papers which can be added based on similarity

index and better citations.

References

1. ^ P. K. Chandrasekhara Pillai. (2021). *Seed Handling of Tropical Forestry Species*. doi:10.1201/9781003145318-13.
2. ^ C. Haris Saslis-Lagoudakis, Bente B. Klitgaard, Félix Forest, Louise Francis, et al. (2011). *The Use of Phylogeny to Interpret Cross-Cultural Patterns in Plant Use and Guide Medicinal Plant Discovery: An Example from Pterocarpus (Leguminosae)*. PLoS ONE, vol. 6 (7), e22275. doi:10.1371/journal.pone.0022275.
3. ^ MarieClaire Tchamadeu, PaulDésiré Djomeni Dzeufiet, Nelly Blaes, Jean-Pierre Girolami, et al. (2017). *Antidiabetic effects of aqueous and dichloromethane/methanol stem bark extracts of Pterocarpus soyauxii Taub (Papilionaceae) on streptozotocin-induced diabetic rats*. Phcog Res, vol. 9 (1), 80. doi:10.4103/0974-8490.199767.
4. ^ Manne Anupama Ammulu, K. Vinay Viswanath, Ajay Kumar Giduturi, Praveen Kumar Vemuri, et al. (2021). *Phytoassisted synthesis of magnesium oxide nanoparticles from Pterocarpus marsupium roxb heartwood extract and its biomedical applications*. J Genet Eng Biotechnol, vol. 19 (1). doi:10.1186/s43141-021-00119-0.
5. ^ Pratibha Singh, Vikas Bajpai, Abhishek Gupta, Anil N. Gaikwad, et al. (2019). *Identification and quantification of secondary metabolites of Pterocarpus marsupium by LC–MS techniques and its in-vitro lipid lowering activity*. Industrial Crops and Products, vol. 127, 26-35. doi:10.1016/j.indcrop.2018.10.047.
6. ^ Merin Maria Mathew, Nguyen Vinh Han, A. Murugesan, E. Arun Raj, et al. (2015). *Evaluation of the protective effect of Pterocarpus marsupium on acetic acid-induced ulcerative colitis in rats*. Inflammopharmacol, vol. 23 (4), 195-201. doi:10.1007/s10787-015-0234-3.
7. ^ Camilia Michel, Moshera El-sherei, Wafaa Islam, Amani Sleem, et al. (2013). *Bioactivity-guided fractionation of the stem bark extract of Pterocarpus dalbergioides Roxb. ex Dc growing in Egypt*. Bulletin of Faculty of Pharmacy, Cairo University, vol. 51 (1), 1-5. doi:10.1016/j.bfopcu.2012.07.003.
8. ^ Mohammad Irfan Dar, Sahar Rafat, Kapil Dev, Sageer Abass, et al. (2022). *Heartwood Extract of Pterocarpus marsupium Roxb. Offers Defense against Oxyradicals and Improves Glucose Uptake in HepG2 Cells*. Metabolites, vol. 12 (10), 947. doi:10.3390/metabo12100947.
9. ^ Dayar Arbain, Gita Ayu Saputri, Ghalib Syukrilah Syahputra, Yuli Widiyastuti, et al. (2021). *Genus Pterocarpus: A review of ethnopharmacology, phytochemistry, biological activities, and clinical evidence*. Journal of Ethnopharmacology, vol. 278, 114316. doi:10.1016/j.jep.2021.114316.
10. ^ Neethi Shaju, Mrinmoy Gautam, Abdul Khayum, Gunasekaran Venkatesh. (2020). *Prevention and Healing of Calcium Signaling Mediated Neuronal Damage on successive Administration of Flavonoid Enriched Pterocarpus Marsupium Roxb in Peripheral Neuropathy Model*. CBC, vol. 16 (9), 1346-1355. doi:10.2174/1573407216666200218112305.
11. ^ Dayar Arbain, Gita Ayu Saputri, Ghalib Syukrilah Syahputra, Yuli Widiyastuti, et al. (2021). *Genus Pterocarpus: A review of ethnopharmacology, phytochemistry, biological activities, and clinical evidence*. Journal of Ethnopharmacology, vol. 278, 114316. doi:10.1016/j.jep.2021.114316.
12. ^ Muhammed Majeed, Kalyanam Nagabhushanam, Shaji Paulose, Lakshmi Mundkur. (2023). *A Short-Term Safety Evaluation of Silbinol[@]- an Extract from <i>Pterocarpus marsupium</i> in Healthy Adults- a Randomized*.

Double-Blind, Placebo-Controlled Study. J Evid Based Complementary Altern Med, vol. 28 .

doi:10.1177/2515690x231198312.

13. [^] Anees Ahmad, Firoz Ahmad Ansari, Mohammad Anis, Asma Sattar Khan. (2023). Micropropagation of Pterocarpus marsupium Roxb. through synthetic seeds and its novel antibiofilm activities against ESKAPE pathogens. Industrial Crops and Products, vol. 198 , 116681. doi:10.1016/j.indcrop.2023.116681.
14. [^] Santhivardhan Chinni, Ravilla Jyothsna. (2023). Chemical Composition and Biological Properties of Pterocarpus marsupium Roxb. (Family: Fabaceae). doi:10.1201/9781003304555-15.
15. [^] Anees Ahmad, Shoeb Ahmed Ansari, Asma Sattar Khan, Usha Devi, et al. (2023). Pharmacognostical authentication of heartwood of Pterocarpus marsupium Roxb. - An important drug used in traditional systems of medicine. J Pharmacogn Phytochem, vol. 12 (2), 138-145. doi:10.22271/phyto.2023.v12.i2b.14640.
16. [^] Kishor Danao, Shruti Kale, Vijayshri Rokde, Deweshri Nandurkar, et al. (2023). In Silico Prediction of Antidiabetic Activity of Phytoconstituents of Pterocarpus Marsupium Targeting α -Amylase Enzyme. Biosci., Biotech. Res. Asia, vol. 20 (1), 147-162. doi:10.13005/bbra/3077.