

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

Temitope Samson Adu

Potential competing interests: No potential competing interests to declare.

The authors have done a great deal of works by putting this write-up together but there is still a need to put some adjustment.

- 1. **Introduction**: First line of the second paragraph. There error of typography should be corrected ......from **theLeguminosae** family.......
- Under Pharmacological activities', <u>P. marsupium Roxb</u> seems to have been reported effective for several
  therapeutic purposes. However, there is still need to report on the LD<sub>50</sub> and other safety doses of this plant extract.
- 3. 'Antidiabetic activity': Line 2, the author should reference the regenerative properties of *P. marsupium Roxb* and give more details on the mechanism responsible for the cell regeneration with the use of this extract.
- 4. Under 'Antioxidant activity': The molecular numbers in H2O2 should be subscripted as H<sub>2</sub>O<sub>2</sub> and this goes for all other molecular symbols in the whole write up. Also, other errors of typography should be corrected e.g. Under 'Abstract', remove the punctuation ......attempt.to unite.......
- 5. **Antibacterial and antimicrobial activity**: Sole report on plants' activities against different gram negative and positive bacteria may not be totally sufficient for evidence on antimicrobial activities. Rather, the authors are further advised to do more by reporting both MIC and MBC of the plant extract. Not only that, they should further give a report on the quorum sensing potentials of the plant extract.
- 6. **Anti-inflammatory activity**: Details about only two inflammatory markers (TNF-alpha and IL-6) may not absolutely express the whole phenomenon with both systemic and neuroinflammation. The authors are advised to delve more on the reports on inflammatory markers and the mechanisms responsible for their mitigation during the course of the administration of the plant extract. Also, the details about IC<sub>50</sub> should be transferred to the 'Pharmacological activities' sub-heading.
- 7. Memory enhancing activity: The authors may want to explore more by identifying the mechanistic input of the exact blood borne hormones or neurotransmitters as involved in memory acquisition and enhancing activity of the extract. The behavioural test battery may not be absolutely sufficient to ascertain the memory enhancing activity of the plant. However, there should have been biochemical quantification of neurotransmitters as involved in memory learning and consolidation.

Thank you.

