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.

Review report

General comments:

This review article is focused on the phytoconstituents and various biological and pharmacological activities of various parts of *Pterocarpus marsupium*. The authors put efforts to summarize the previous reports on this palnt. However, the authors are required to address the “required corrections” given below.

Recommendation: The article in its current form is **not acceptable**. It needs major revision.

Required corrections:

1. The English language is very poor. It is not in acceptable standard to publish in journals.

2. There are many grammar mistakes, unnecessary words are found throughout the article and necessary words are missed in some places.

A few examples are cited below:

a). The authors included anthelmintic activity of this plant in the text (**page no. 12:** 5.8. **Anthelmintic activity**). But, these words (anthelmintic activity) did not appear in the abstract.

b). Similarly, **in page no. 8: 5.3. Antibacterial and Antimicrobial activity** (it should be written either Antimicrobial activity or Antibacterial and Antifungal activities.

Note: Similar and other type of mistakes are many more and are found throughout the manuscript **It is very hard for the reviewers and nearly impossible to correct each and every sentence and/or word in the manuscript.**

c). **In Title: The plant name should be in italics:** Pterocarpus Marsupium Roxb (should be *Pterocarpus marsupium* Roxb).

d). **Abstract:** Abstract lacks coherence. Unnecessary words are found.

Abstract: (should be modified; sample showing how to modify abstract is given below).

Pterocarpus marsupium Roxb belongs to the Leguminosae family of Pterocarpus genus.*P. marsupium* is popularly known by its vernacular name as Vengai. *P. marsupium* is a traditional medicinal plant and it has been used in treating several human diseases. *P. marsupium* has been used alone for its therapeutic efficacy. *P. marsupium* has also been in combination with other medicinal plants to provide enhanced therapeutic efficacy. Various bioactive compounds have previously been reported from various parts of this plant, which include alkaloids, proteins, carbohydrates, coumarins, gums, mucilage, anthraquinone glycosides, saponin glycosides, tannins, phenolics and flavonoids classes of compounds. Additionally, various biological and pharmacological activities have also been reported from various parts of this plant, which include analgesic, anti-diabetic, anti-inflammatory, anti-cancer, hepatoprotective, anti-microbial, anti-diarrhoeal, memory-enhancing activity, antioxidant, anthelmintic and anti-hyperlipidaemic activities. In this review article, we summarized various phytoconstituents isolated from various parts of *P. marsupium*. Additionally, we also summarized various biological and pharmacological activities reported from various parts of *P. marsupium*. Our review showed that further investigations on this plant are required. Particularly, research focusing on the bioactivity guided isolation and characterization of potential lead compounds for discovering new drugs are required.

3). Phytoconstituents: **(page no. 4 and 5)**

a). A review article should include all compounds reported previously. Therefore, the authors required to include more structures.

b). The structures of compounds presented in the text are not in uniform sizes. (the authors are required to address this issue).

c). **page no. 5:** The word “aglycone” cannot be a full name of a compound. The authors should write the complete name.

4). The conclusion part should be precise and the authors should omit unnecessary words.