

Review of: "The use of Phytochemical, GC-MS Analysis and Hepatoprotective Effect of the Methanol Leaf Extract of *Camellia Sinensis* (L.) Kuntze on Paracetamol-Induced Liver Injury in Wistar Rats"

Arome Solomon Odiba¹

¹ University of Nigeria

Potential competing interests: No potential competing interests to declare.

1. The title of the manuscript has a major correction to be made. Perhaps **Hepatoprotective Effect of the Methanol Leaf Extract of *Camellia Sinensis* (L.) Kuntze on Paracetamol-Induced Liver Injury in Wistar Rats** is sufficient. I recommend deleting the other parts.
2. Generally, the language of the manuscript is poor. It will benefit from professional English editing.
3. I suggest the authors patiently go through the work to correct the vast array of scientific errors (facts and formatting) in the work, including italics where necessary, etc.
4. The word "**screening**" is missing in the title (2.3. *Preliminary phytochemical of C. sinensis methanol leaf extract*)
5. It is important to specifically cite the source for the methods employed in the qualitative phytochemical screening, not just to say "**standard procedures**" [The qualitative phytochemical screening was carried out on the extracts using **standard procedures** to identify major constituents such as alkaloids, flavonoids, tannins, terpenoids, saponins, anthraquinones, cardiac glycosides, sterols, and phytosterols.]
6. The units of temperature require correction in the section titled "2.4. *GC-MS analysis of the methanol leaf extract*" as degrees (°) are missing.
7. Under the section "2.7. *Experimental animals*," the authors stated that "Local and international ethical guidelines for the use of these animals were strictly followed." It would be appropriate to provide the "Ethical ref. number/code and the name of the evaluation committee" that oversaw the process.
8. The authors need to make the required corrections where they stated that "The acute oral toxicity study was carried out following OECD guideline 452, which stipulates the use of only five animals." Actually, OECD Guideline 452, which is for chronic toxicity studies, does not stipulate the use of only five animals. These studies involve prolonged and repeated exposure to a substance, typically for a period of 12 months, to assess long-term health effects. In fact, it recommends the use of at least 20 animals per sex per group for rodent species, which are most commonly used in these studies. For non-rodent species, a minimum of 4 animals per sex per group is recommended¹. Please note that this guideline is for chronic toxicity studies, and the requirements may differ for acute oral toxicity studies. Moreover, the correct guideline for acute oral toxicity testing is OECD Guideline 425: Acute Oral Toxicity: Up-and-Down Procedure (UPD). This guideline does not stipulate the use of only five animals for the acute oral toxicity study. It utilizes a sequential approach designed to minimize animal use.

9. It will be great to update the references on the methods used where such information is missing. This is to foster reproducibility of the work by other researchers.
10. More information describing the figures needs to be provided in the figure captions. This is essential for the reader to comprehend the observations.
11. The unit of the scale in figure 3 should be “ μ ” not “u.”