Review of: "Toxicity of Olea africana in Artemia Salina and Mice"

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Potential competing interests: No potential competing interests to declare.

REVIEW COMMENTS

GENERAL COMMENTS

The authors investigated the toxicity of *Olea africana* in brine shrimp and mice. A lot of work was done and the authors have enlightened the consumers of the plant. However, some minor recommendations and issues have been presented which could help the authors address some concerns that might have skipped them.

Abstract

A background to the study should have been included in the abstract. This would have generated more interest by readers and also outlined the research question or problem.

Background

The acclaimed lack of adverse effects of herbal medicines is not a strong point for the “indiscriminate” use of herbal medicines especially in the African setting. I think most consumers of orthodox drugs have little information on the adverse effects. Most people adhere to the dosages prescribed for them. The major barrier to the use of orthodox drugs is the availability and affordability. In the African setting, plants are readily available to most rural dwellers. Hence, they resort to them with foreknowledge from elders and ancestors passed on orally. The author ought to build his research question from that angle.

How is the plant used traditionally in the treatment of diseases? I think that should affect the solvent of extraction to mimic its traditional use.

Sample preparation and extraction

During the extraction process, 200 mg of the powder was macerated in 1 L of ethanol. What was the percentage yield because that method might not give enough extracts.

Acute toxicity assay

What informed the choice for the selection of method and doses. The reference materials took information for the OECD guidelines. In the OECD guidelines, samples such as *Olea africana* which has been used for a long time traditionally

without any demonstrable toxicity are taken through the limit test. If it shows toxicity, then the main test is conducted.

Also, what informed the doses selected for administration?

How was the median lethal concentration calculated in the acute toxicity studies?

Results

Figure 1: The extracts seem to increase weight gain as the dose increases. How does that compare to the negative control group?

The explanation to the increased in WBCs in the treatment groups is not very clear.