

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

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Potential competing interests: No potential competing interests to declare.

## Title

I will suggest **"Toxicological evaluation of ethanolic extract of *Olea africana* in mice and brine shrimp (*Artemia salina*)"**

## Abstract

- "Some hematological and biochemical parameters in extract-treated mice were significantly different from control group mice". Kindly mention them instead.
- The abstract needs to be rewritten because the information is disjointed. Also, where there's significance kindly give the  $p$  value ( $p = \dots$  Or  $p < 0.05$ )

## Introduction

## Materials and Methods

### 2.2 Collection of the Plant

- Kindly give the GPS if its possible and also quote the voucher number obtained.

### 2.3. Sample preparation and extraction

- Change to 20 kg,
- Also, were the leaves washed and air dried or you just collected the leaves and straight to milling because the information wasn't captured.
- Change to "The filtrate was evaporated using rotary evaporator at 40°C

### 2.4. Animals used in experiments

- Mice were obtained from the University of Nairobi. How many? Kindly state
- The mice were housed in polypropylene cages and given time to acclimatize to conditions in the laboratory. How long? Kindly state

### 2.5. Brine shrimp cytotoxicity assay



What informed the choice of concentration used? i.e., 10 µg/mL, 100 µg/mL, and 100 µg/mL

## 2.6. Acute toxicity assay in mice

How was the dose determined since no LD<sub>50</sub> was carried out?

## 2.8. Hematological parameters

- Kindly state how the blood was collected. Were they sacrificed by jugular venesection?
- State reference for the procedures for the hematology and biochemical parameters (2.9)

## 2.10. Histopathology

- Magnification level is missing.

## Result

- Table 1; the procedure should be stated in materials and methods section
- Figure 1; check your significance difference again because the graph is clearly showing a significance but the p value isn't. please re-evaluate.
- Table 2;
- There should be a caption showing the direction of the significance, whether it's along the column or rows. Also, abbreviations should be stated under the table (Same as Table 3).
- Kindly change the tables to reflect mean ± SEM instead of having the SEM in brackets
- Figure 3, A is not having the same magnification as the rest, kindly reconcile. Also, A should be the normal control and not 100 mg/kg
- Figure 4, A and C is not having the same magnification as the rest, kindly reconcile. Also, A should be the normal control and not 100 mg/kg

## Discussion

- From your study, the extract was found to be toxic over 28 days but still you observed no effect with regards to weight for the mice? How can you correlate this
- There was no significance on RBC indices but there was increased MCV, don't you think this will have an effect?
- Kindly provide explanations for the pathology observed.

## Conclusion

- Acute study was not reflected