Review of: "Toxicological evaluation of aqueous extracts of Clematis hirsuta and Rhamnus prinoides"

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Potential competing interests: No potential competing interests to declare.

General comment: The Author evaluated the Toxicological potential of aqueous extracts from*Clematis hirsuta* and *Rhamnus prinoides*. Results from the presented study are highly relevant as they provide useful information on the Biosecurity and Bio-safety of the medicinal plant to users. The study has also uncovered the previously unknown knowledge on the toxicological potential of *Clematis hirsuta* and *Rhamnus prinoides* hence providing *bio-safety* assurance to users of herbal medicine while also contributing new knowledge to science.

- Specific issues:

Title of the study: Brief, articulating, and well-related to the study objective and manuscript contents

Abstract: Well written, however, there are several issues as follows.

- Can the author clarify, how was it possible that besides a significant decrease in feed and water intake, the animal's body weight was maintained?
- For instance , The mean feed and water consumption in the*R. prinoides* treatment group was significantly lower than that in the control group but the body weight was not affected.
- Normally, a significant decrease in feed intake will lead to a decrease in body weight.

Background: it is comprehensive and relevant to the subject matter.

Methodology: The methodology part has been well-detailed, relevant and valid

However, the author needs to answer the following

i. For how long did the plant materials soaked in distilled water before filtering? (Subsection 2.4)
ii. Did the extraction process involve regular shaking of the mixture during the incubation? (Subsection 2.4)
iii.
iv. What was the basis for the dilution ratio of 1:10? Was it adopted from some previous studies? Give citation(Subsection 2.4)
v. The author has not indicated whether the guidelines for the proper use of laboratory animals were adequately followed during the rats' handling and restraints. (Subsection 2.5)
vi. Under the acute toxicity test, (subsection 2.6) the author has not indicated the exact treatment duration, whether it was

a single dose or a regular dose given for a certain period.

vii. The statement “Over a two-week period” used under the toxicity test (subsection 2.6) is too general, I advise mentioning the exact number of treatment days

viii. How were the distilled water and plant extract given to the rats? Was it by gastric gavage? Through drinking a bottle? Was it given through feeds?

ix. Similar to subsection 2.7 the sab-acute test doesn’t show the exact treatment duration of the plant extracts. Kindly explain everything clearly for another person to be able to follow the methodology in future studies.

Results: The result section is well presented. However, should clarify the following

i. In the abstract, the author reported presenting results as MEAN±SD. Yet in the results section of the manuscript data for hematology and biochemical parameters are presented as MEAN±SE, kindly clarify this.

ii. Can you kindly use either standard deviation or standard error and not both? I would advise you to use standard error and therefore make changes in the abstract as well

iii. What are the error bars representing? Standard deviation? Or Standard error please kindly clarify

Discussion: The discussion of results has been well done, and a detailed comparison with other studies has been presented. However, the unexplained increased body weights in rats that were not eating well their food after consuming the plant extracts probably required the investigators to analyze the nutritional composition of the plant extracts.

Lastly, I recommend the publication of the manuscript after addressing the issues raised above.