

# 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.

## Title page

1. Write the names of the plants in italic in the title, specifying the names of the authors
2. Reword the abstract to make a clear distinction between the results of the acute toxicity study and those of the sub-acute toxicity study

## Introduction

1. What does pet extract mean?
2. Indicate that the aim of the study is to assess the acute and repeated-dose oral toxicity of *Clematis Hirsuta* and *Rhamnus prinoides* in Wistar rat over 28 days.

## Methods

What are the geographical or GPS coordinates of the sample collection sites?

What is the Voucher number under which the specimen was deposited?

What is the nutritional composition of Unga pellets?

The reference for the acute toxicity method (up and down procedure) does not correspond to reference 35. Please modify it

There is no Up and Down procedure for the 28-day subchronic toxicity test.

- The tests are not described appropriately.
- According to OECD line 407, groups must be composed of rats of both sexes. Why were only female rats used?
- What justifies the choice of doses used?
- What product did you use to anaesthetise the animals?
- Instead of subacute toxicity, use 28-day repeated-dose oral toxicity.

## Results

- What is the rationale for using two different control groups?

- No need to indicate the p-value. A sign such as \* is sufficient to indicate the significance of the differences.
- It is difficult to interpret the data as presented. We suggest that you present the weight in terms of weight change. This will enable you to determine weekly weight gains. The aim of is to superimpose weight gain on food consumption.
- The aim of a repeated-dose toxicity test is not to determine the LD<sub>50</sub> but rather the NOAEL (No Observable Adverse Effect Level).
- There is huge need to improve the level of English in the manuscript. Express your ideas in short and simple sentences.
- If possible, combine the data on a single graph (Figure 4) if it is the same control group.
- What do the asterisks above certain horizontal bars indicate (Figure 4)?
- Specify the levels of statistical significance corresponding to the asterisks (Figure 4).
- Why are all the parameters listed? They are already in Table I
- This text is not a faithful analysis of the data as presented in the table. The decrease in alkaline phosphatase was not observed at the highest dose for (CH)
- This text is not a reliable analysis of the data as presented in the table. The decrease in alkaline phosphatase was not observed at the high dose for (CH)
- This drop was significant only at 25 mg/kg for CH. We believe that the statistical treatment of the data needs to be reconsidered. Some of the differences shown as significant in Table 2 are improbable.

## Discussion

- We suggest that you state the main result of your study in the first few lines of the discussion.
- Ironically" is an example of an expression that should not be used. We suggest that you use neutral expressions such as "however, but"
- The discussion does not clearly indicate the LD50 and does not mention the category of the GSH classification to which *C.Hirsuta* and *R. prinoides* belong to.
- Why do you suppose your treatment with *C.Hirsuta* did not induce the clinical signs typical of plants of the genus *Clematis*?
- What is the usefulness of a repeated-dose toxicity test?
- What are the implications of the variations in haematological and biochemical parameters observed in rats treated with your extracts compared with the control group?
- This part of your discussion is of no interest since you have discussed repeated-dose toxicity. This repeated dose test is used to determine the No Observed Adverse Effect Level (NOAEL) and not the LC50 or IC50.
- Your partial conclusion revealed the major limitations of your study. We suggest that you discuss these a little further up so as not to leave the reader with the impression that your work is incomplete.
- In a toxicity study, organ histopathology is a crucial parameter. Not performing it alter the relevance of your results.