

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.

The presented study is related to medicinal plant toxicity, which is currently a very important topic with huge need of more data. The study methods are appropriate. The aim is clear and sound, the experiment is well-structured.

However, there are some remarks and questions, which should be addressed:

1. All binomial plant names should contain authors' names also at their first mention in the text.
2. According to the database "Plants of the world" the currently accepted name for the synonym *Thevetia peruviana* (Pers.) K.Schum is *Cascabela thevetia* (L.) Lippold and respectively for *Chenopodium ambrosioides* L. - *Dysphania ambrosioides* (L.) Mosyakin & Clemants.
3. The number of the plant voucher material should be specified. The abbreviation "NAI" should be added in brackets after "University of Nairobi Herbarium", as it is officially recognized and listed in Index Herbariorum.
4. It is not clear enough how the 21 test animals for the acute toxicity experiment were distributed into groups of 5 animals. How many were these groups – *C. hirsuta* extract treated rats (n=5), *R. prinoides* extract treated rats (n=5), control group (n=5), are there any other groups to the final sum of 21 animals?
5. It is advisable to be cleared what exactly is the measured index in 3.1.3. Mean body weight. In my perception the terms "mean body weight gain" and "mean body weight" were used interchangeably.
6. The hematological parameters listed in 3.3. (the end of page 5 and the beginning of page 6) should be moved to the appropriate part of Material and Methods.
7. The selected statistical methods for data analysis are appropriate. However, it is advisable the raw data on which are based Table 1 and Table 2 to be checked out for possible technical errors or whether some of the rules for assigning superscript letters to indicate statistically significant difference after Tukey post hoc test were not violated. Otherwise, it is necessary to be explained the logic behind the superscript letters to the following values of hematological parameters, e.g. Table 1: LYM – $6.49^a \pm 1.58$, $7.27^b \pm 0.90$, $7.38^a \pm 1.66$; BAS – $0.06^{ab} \pm 0.04$, $0.07^a \pm 0.02$, $0.18^{ab} \pm 0.11$; PET – $107.80^a \pm 52.92$, $171.20^{ab} \pm 65.20$, $239.00^a \pm 88.55$. Similar discrepancies can also be found in Table 2 for parameters ALP, Chloride, Creatinine.
8. Page 7 – the platelets, eosinophils and basophils should be removed from the hematological characters, which are claimed not to show statistical difference between the values for *C. hirsuta* treated rats, *R. prinoides* treated rats and the control group. According Table 1 is otherwise.

