

Review of: "Haematological and Biochemical Patterns in the Liver Function of a Syrup Made From Vitex Doniana Fruit"

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Potential competing interests: No potential competing interests to declare.

1. The manuscript language needs revision. Ex. (page 4), the title "Assay for Biochemical"—what does it mean?
2. Authors missed in the aim of the study to clarify whether the study was conducted on normal healthy mice or on animals with liver insufficiency.
3. The number of groups and animals in the abstract, experimental animals, and experimental design is not compatible with that mentioned in the results section; please revise. The methodology part in the abstract section mentioned 7 groups during the study, and in the experimental animals part (page 3), the authors mention the total number is 35 mice. Moreover, the experimental design section (page 4) mentioned that the study involves 7 groups with five mice in each group. Group 1 was a control, and groups from 2-6 received different concentrations of syrup. Tables 2-6 showed only the results of 6 groups; what about the seventh one?
4. The group dealing with the calculation of LD50 misses the number of animals and the concentration profile administered to mice. Only the range 25-100 mg/kg is mentioned.
5. The low number of mice in all groups requires testing only one sex (male or female) to neglect conflicts or sex differences during data analysis.
6. What about the method of extraction of vitex fruit and the preparation of syrup? If the syrup is present in the market ready for use, please mention the source and concentration of the total extract in the syrup.
7. Slaughtering of animals and sampling are not mentioned in the methods section. Please mention and clarify.
8. Authors mentioned the dose delivered to each animal one time by ml/kg and another time by mg/kg. Which one is correct?
9. The results paragraph in the abstract section mentions that there is an increase in many parameters in the blood count, but results showed a decrease in lymphocytes and neutrophils percent. I think a 3-day treatment has no effect on the CBC. This also applies to the results of uric acid.
10. Treatment of animals for 3 days is not sufficient to give any effect. I think that no drug has an effect during this very short period on the liver or any organ.
11. During the determination of HB%, authors used Sahli's method. The automated hematologic analyzer SYSMEX report includes HB%, so why did they use the semi-quantitative Sahli's method instead of the accurate analyzer report?
12. In the results section, page 6, table 2, the selection of animals among groups is not appropriate. The mean wt. in the control group is 27 g, while in group 6 it is 45 g, while the methodology part in the abstract section authors mentioned the animal weight considered in this study ranges between 25-35 grams.
13. Table (3) data is not clear for superscripts from (a) to (c). Please clarify what each symbol means.

14. Authors waste their time in histopathological findings to catch infiltration, focal lesions, or necrosis, which needs months to start.

Final decision: rejected