

# Review of: "An Investigation of The Phytochemical Richness of Fresh *Musa Paradisiaca* L. (Plantain) Stem Juice and Its Anticonvulsant Potential on Pentylenetetrazole (Ptz)-Challenged Rats"

Mark Joseph Desamero<sup>1</sup>

<sup>1</sup> University of the Philippines

Potential competing interests: No potential competing interests to declare.

To be considered for publication, the paper in its present form requires major revision.

## Title

1. Italicize the scientific name.

## Abstract

1. The authors should clarify in the abstract that groups II-VI were administered with PTZ to induce convulsions/seizures.
2. It should also be clarified that mice, instead of rats, were used in the toxicity assessment.

## Materials

1. Please indicate the specific strains of albino mice and rats that were used in the study.
2. The authors need to further specify the age and sex of adult mice and rats used in the study.
3. I think there is no need to have a separate section on the equipment used in the study. This equipment can be mentioned in the methodology section.

## Methods

1. Although the authors cited the pertinent publications for the phytochemical analysis, these should be mentioned succinctly in the study to guide the readers on what tests have been performed in the present study or whether modifications of the original protocols have been made.
2. For the acute oral toxicity study, please briefly describe the procedures performed. Since you followed OECD guidelines 425, I wonder why 42 animals were used. The said guidelines only require around 6 animals. Also, did you use both sexes?
3. Please describe the materials used for oral intubation.
4. In the induction procedure, for how long was the seizure monitoring performed? Were the animals placed in individual cages to better observe the latency, duration, and incidence of seizures/convulsions?
5. For the evaluation of seizures, did the authors employ a grading scale to monitor the severity of seizures aside from

monitoring the duration of seizures using a stopwatch?

## Statistical Analysis

1. Indicate the manufacturer and place of manufacturing of the SPSS software.
2. What post-hoc test was used to determine the statistical differences among groups?

## Results

1. In Table 1, the authors indicated the semi-quantitative assessment of the presence of phytochemicals. These parameters should be described in the methodology section.
2. For the acute toxicity assessment, aside from mortality, where are the results of other parameters such as hematology, serum biochemistry (kidney and liver function tests), and histopathology, since these parameters would better confirm the safety of the MP juice.
3. The findings on the effect of MP on the behavior of mice should be described in the results section.

## Discussion

1. The authors mentioned the effect of MP on behavioral and hematology parameters. This should be stated in the results section.

## References

1. Should be numbered instead of bulleted.