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"

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Potential competing interests: No potential competing interests to declare.

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

This study involves determining the phytochemicals in the fresh Musa Paradisiaca L. (Plantain) Stem Juice and evaluating their effects on seizures in an animal model induced using PTZ .

Correction "

Abstract:

- Correct to "the experimental animals were divided into six groups (n = 4) involved in the study."
- What is the difference between Group II given normal saline and Group II untreated? Are you reporting two controls (positive and negative controls)? Explain.
- The treatment protocol is not clear: "treatment lasted for 10 days, followed by PTZ (85 mg/kg b.w, i.p) administration 60 min later." Rephrase. Did you give PTZ for 10 days, then MP stem for how long? Explain.
- There is no consistency in the reference style for the in-text references; is it numerical or author name year citations? Correct.
- Authors should state categorically the aim of the study that will align with their research objectives, methods, and results. The word "further establish the scientific basis for the folkloric claim" is quite wide as the folklore claims, but you choose to work on epilepsy; hence, focus on how the plant averts epilepsy.
- State the voucher specimen name attached to the specimen that was authenticated in the herbarium unit of the Botany Department, University of Nigeria, Nsukka, for future reference.
- Authors should delete the section listing the equipment and chemicals used during this study. It is better mentioned when describing the protocol they were used for in the methodology section.
- What is the meaning of the standard laboratory conditions associated with your research location? Be specific. Mention the temperature/day-night cycle and humidity. It is important.
- Ensure the references listing is in chronological order; Trease and Evans (2002) comes before Harborne (2013).
- Ensure you name the device, manufacturer, and country of the apparatus for phytochemical screening.

- Where did you get the pentylenetetrazole (PTZ) - pharmacy or Sigma ??????
- Why did you use 4 animals per group and not 5 (did you consider power statistics)?
- How long did you treat with the graded dose of MP Stem juice? State clearly.
- Did you do a multiple test to compare differences between groups? This needs to be stated, and what test for multiple comparison did you use?
- List groupings in prose format as shown below:

Data is expressed as mean ± standard deviation (n = 4). Means with different alphabets as superscripts down the column are significantly ($p < 0.05$) different. Group I: Normal Control (Saline only), Group II: Untreated Control (saline + PTZ), Group III: Standard Control (4 mg/kg b.w. diazepam) + PTZ, Group IV: 50% (v/v) MP Stem Juice + PTZ, Group V: 75% (v/v) MP Stem Juice + PTZ, Group VI: 100% (v/v) MP Stem Juice + PTZ **(Correct in subsequent appearances)**

- Discussion
    - Tungmunnithum et al., 2018; Celestine et al., 2022; Szwajgier et al., 2017).=== correct

This study was aimed at determining the therapeutic value of fresh Musa paradisiaca L. (MP) stem juice as a potential treatment for epileptic convulsions using a pentylenetetrazole (PTZ)-induced seizure model in rats. The author should conclude by stating the dose of the study that was therapeutic for epileptic seizures based on their aim.