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.

The study is devoted to the actual problem of improving the treatment of epilepsy. It is multifaceted, dedicated to determining the phytochemical composition of fresh Musa paradisiaca L. stem juice and determining its effect on model convulsions, as well as elucidating acute toxicity.

The research was carried out using classical methods.

The pharmacological experiment was performed using the basic model of pentylenetetrazol-induced seizures.

The results indicate a fairly high anticonvulsant activity of Musa paradisiaca juice.

Among the shortcomings of the study, it is appropriate to note the following:

1. Insufficient connection of the phytochemical and pharmacological parts. There is no experimental evidence linking the anticonvulsant activity to certain juice compounds. References to studies of other plants with a different phytochemical composition are used in the discussion.

2. It remains unclear what substances the authors propose to standardize the juice under study.

3. The dosage of 50%, 75%, and 100% (v/v) also remains insufficiently understood; it is advisable to indicate it in units of weight per 1 kg of animal weight.

4. The difference in the weight of rats (120-220 g) is quite large; the lack of standardization of animals can reduce the accuracy of the results.

In general, this study, which is obviously preliminary, deserves a positive assessment.