

Review Form 3

Journal Name:	Asian Journal of Biochemistry, Genetics and Molecular Biology
Manuscript Number:	Ms_AJBGMB_130262
Title of the Manuscript:	SUBACUTE TOXICITY STUDY OF STEM EXTRACT OF Telfairia occidentalis IN RODENTS
Type of the Article	Research

PART 1: Comments

	Reviewer’s comment	Author’s Feedback (Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.	This manuscript is well-developed.	Thank you.
Is the title of the article suitable? (If not please suggest an alternative title)	The title is suitable.	Thank you.
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract is well-developed.	Thank you.
Is the manuscript scientifically, correct? Please write here.	The manuscript is scientifically well-described.	Thank you for your valuable comments.
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Some suitable references need to be added.	Okay.

Review Form 3

Is the language/English quality of the article suitable for scholarly communications?	Well drafted.	
<u>Optional/General</u> comments	<p>The paper titled "SUBACUTE TOXICITY STUDY OF STEM EXTRACT OF <i>Telfairia occidentalis</i> IN RODENTS</p> <p>General comments:</p> <ul style="list-style-type: none"> Confirms <i>Telfairia occidentalis</i>' traditional use in Ibibio ethnomedicine for malaria, diabetes, and gastrointestinal disorders. Higher doses (400–600 mg/kg) reduced ovary weight and caused histological damage, indicating potential reproductive risks. Elevated ALT and AST levels, along with widespread microvesicular steatosis, indicate liver damage even at low doses (200 mg/kg). Insignificant reductions in cholesterol, LDL, VLDL, and triglycerides suggest potential cardiovascular benefits. Elevated urea at 200 mg/kg suggests mild kidney toxicity without affecting creatinine or electrolytes, sparing glomerular filtration. <p>The authors need to address the following comments:</p> <ul style="list-style-type: none"> No evaluation of long-term safety or cumulative effects. This point needs to be explained further in the main text to highlight the importance of assessing chronic toxicity. Biochemical and histological changes lack detailed exploration of underlying pathways like oxidative stress or inflammation. In this regard, it is necessary to elaborate on these mechanisms in the main text for a more comprehensive understanding of the observed toxicities. Ovary damage highlights possible sex-specific risks, but hormonal and fertility effects remain unexamined. In this context, 1–2 sentences should be added to the main text to address the potential implications for hormonal balance and reproductive health. Hepatotoxicity at low doses but not at higher ones raises questions about inconsistent dose-response relationships. In this regard, the main text should include an explanation to clarify these patterns and discuss possible underlying reasons. The extract's phytochemical profile is not correlated with the observed toxicities, leaving uncertainty about the active compounds involved. In this regard, it is necessary to provide an explanation in the main text to address this gap. <p>The following references provides additional support in the introduction section:</p> <p>Subramaniyan V, Chakravarthi S, Jegasothy R, Seng WY, Fuloria NK, Fuloria S, Hazarika I, Das A. Alcohol-associated liver disease: A review on its pathophysiology, diagnosis and drug therapy. Toxicology reports. 2021;8:376-85.</p> <p>Malik MK, Bhatt P, Kumar T, Singh J, Kumar V, Faruk A, Fuloria S, Fuloria NK, Subrimanyan V, Kumar S. Significance of chemically derivatized starch as drug carrier in developing novel drug delivery devices. The Natural Products Journal. 2023;13(6):40-53.</p>	<p>These points highlighted by the reviewer have been addressed in the main text one by one, Long term study has been advocated to study the chronic effects of the extract considering the effect of low dose on the liver and kidney as wellas the effect on female reproductive system with emphasis on hormonal level and fertility. Moreso, the prooxidant nature of the low dose of the extract has been highlighted in the text. Also the main constituentsPUFAs which are known to aggravate oxidative stress due to its catabolism and production of lipid peroxides have been implicated in this activity.</p> <p>This has been done</p> <p>Few references has been incorporated</p>

Review Form 3

	<p>Das A, Nyahatkar S, Sonar S, Kalele K, Subramaniyan V. Unlocking the potential of exosomes: A new frontier in liver cancer liquid biopsy. The Journal of Liquid Biopsy. 2024;6.</p> <p>The following references provides additional support in the discussion section:</p> <p>Venkateshan S, Subramaniyan V, Chinnasamy V, Chandiran S. Anti-oxidant and anti-hyperlipidemic activity of Hemidesmus indicus in rats fed with high-fat diet. Avicenna journal of phytomedicine. 201;6(5):516.</p> <p>Huqh MZ, Abdullah JY, Wong LS, Jamayet NB, Alam MK, Rashid QF, Husein A, Ahmad WM, Eusufzai SZ, Prasad S, Subramaniyan V. Clinical applications of artificial intelligence and machine learning in children with cleft lip and palate—a systematic review. International Journal of Environmental Research and Public Health. 2022 ;19(17):10860.</p> <p>Bhat AA, Thapa R, Goyal A, Subramaniyan V, Kumar D, Gupta S, Singh SK, Dua K, Gupta G. Curcumin-based nanoformulations as an emerging therapeutic strategy for inflammatory lung diseases. Future Medicinal Chemistry. 2023;15(7):583-6.</p> <p>Report: After addressing the suggested comments, this paper can be published in the Asian Journal of Biochemistry, Genetics and Molecular Biology.</p>	
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PART 2:

	Reviewer’s comment	Author’s comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	