

Review Form 3

Journal Name:	Asian Journal of Advanced Research and Reports
Manuscript Number:	Ms_AJARR_130852
Title of the Manuscript:	Comprehensive Evaluation of the Anti-hyperglycemic Efficacy of Tinospora cordifolia in Rodent Models Coupled with a Detailed Assessment of Its Adverse Effect Profile
Type of the Article	Original Research Article

General guidelines for the Peer Review process:

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

<https://r1.reviewerhub.org/general-editorial-policy/>

Important Policies Regarding Peer Review

Peer review Comments Approval Policy: <https://r1.reviewerhub.org/peer-review-comments-approval-policy/>  
Benefits for Reviewers: <https://r1.reviewerhub.org/benefits-for-reviewers>

PART 1: Comments

	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
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.	The study titled "Comprehensive Evaluation of the Anti-hyperglycemic Efficacy of <i>Tinospora cordifolia</i> in Rodent Models Coupled with a Detailed Assessment of Its Adverse Effect Profile" provides new evidence on the therapeutic role of extracts derived from aromatic and medicinal plants in controlling blood sugar levels. The authors observed significant restoration of hepatic and renal damage in alloxan-induced diabetic rats treated with <i>Tinospora cordifolia</i> extract, and this restoration was confirmed through detailed biochemical analyses.	
Is the title of the article suitable? (If not please suggest an alternative title)	Revise the title to specify the type of diabetes.	
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 objective of your study is not clearly defined in this section. Please rewrite this part to clarify the aim of your research.	
Is the manuscript scientifically, correct? Please write here.	The manuscript requires revisions.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Epidemiological data on diabetes should be updated (include more recent data worldwide and regional). It could be helpful to use this reference in your work.  EL KHIAT, Abdelaati, BOUFTINI, Khadija, LAFHAL, Karima, <i>et al.</i> Evaluation of the Anti-hyperglycemic Activity of Ononis natrix aqueous extract against alloxan-induced experimental model of insulinopenic diabetes in albino Swiss mice. <i>ACADEMIC JOURNAL</i> , 2024, vol. 39, no 4, p. 57-64.	

Review Form 3

Is the language/English quality of the article suitable for scholarly communications?	In general, English should be thoroughly revised since there are some errors, missing words, or sentences that are not correctly written, making adequate comprehension difficult in some paragraphs	
Optional/General comments	<p><b>The following minor concerns should be addressed to strengthen the manuscript:</b></p> <p><b>1. Revise the title to specify the type of diabetes.</b></p> <p>- <b>In the introduction part:</b></p> <p>2. Epidemiological data on diabetes should be updated (include more recent data worldwide and regional). It could be helpful to use this reference in your work.</p> <p>EL KHIAT, Abdelaati, BOUFTINI, Khadija, LAFHAL, Karima, <i>et al.</i> Evaluation of the Anti-hyperglycemic Activity of Ononis natrix aqueous extract against alloxan-induced experimental model of insulinopenic diabetes in albino Swiss mice. <i>ACADEMIC JOURNAL</i>, 2024, vol. 39, no 4, p. 57-64.</p> <p>- <b>In material and method section:</b></p> <p>3. Change the section title to "Materials and Methods" instead of "Methods and Materials."</p> <p>4. Please provide more detailed information on the extraction method in the form of an illustrated diagram to better explain the different steps of the process.</p> <p>5. Authors should provide more details on the handling procedure (number of day's prior experiments and duration per day for each animal).</p> <p>6. Provide details on the rats' age used for the current experiments (toxicity tests and pharmacology) since the animal age contributes to the responsiveness to drugs.</p> <p>7. Provide detail on the timing of blood sampling for serum glucose level assessment, since, plasma glucose concentration displays circadian variation, with the highest levels during the beginning of the active phase.</p> <p>8. What about the mortality rate in your experiments, include a brief statement on the mortality rate in the alloxan induced diabetes group,</p> <p>9. What about the diabetes reversibility, did the authors observed any case of normal blood glucose recovery in the alloxan group?</p> <p>10. In Biological Sample Collection section: Please remove the following sentence: " The kidneys, livers, and pancreas were immediately removed from the animal's body after sacrifice and meticulously cleaned with ice-cold saline in order to perform histopathological tests and enzymatic activity.," as there are no results related to histopathological analysis or enzymatic activity measurements in your manuscript.</p> <p><b>Major revisions needed as a brief report</b></p> <p>11. The authors concludes that the <i>Tinospora cordifolia</i> extract restored liver and kidney damage induced by</p>	

Review Form 3

	<p>alloxan, but only evaluated certain biochemical parameters of liver and kidney function. Further studies are needed, such as histological analyses of the liver, pancreatic islets, and kidneys.</p> <p>12. Additionally, the authors could perform immunofluorescence or immunohistochemistry for insulin to confirm the absence of an increase in alpha cell mass.</p> <p>13. The author could also quantify insulin levels in plasma.</p> <p>14. Lastly, the author did not mention the range of blood glucose levels under basal conditions nor provide the inclusion or exclusion criteria.</p> <p>15. No specific data or measurements have been provided to demonstrate the safety of <i>Tinospora cordifolia</i>; therefore, a toxicity evaluation is necessary.</p> <p>16. In result section: The quality of Figure 1 is insufficient. It is necessary to review the resolution of this figure.</p> <p>17. In discussion section: An in-depth discussion of the mechanisms of action of the <i>Tinospora cordifolia</i> extract against diabetes should be included.</p> <p>Overall, the study is well designed and relevant to the field of diabetes therapy and the scope of the journal.</p>	
--	---	--

PART 2:

	Reviewer’s comment	Author’s comment (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)
Are there ethical issues in this manuscript?	(If yes, Kindly please write down the ethical issues here in details)	

Reviewer Details:

Name:	El Khat Abdelaati
Department, University & Country	Higher Institute of Nursing Professions and Health Techniques, Morocco