

Review Form 3

| | |
|--------------------------|--|
| Journal Name: | Asian Journal of Biochemistry, Genetics and Molecular Biology |
| Manuscript Number: | Ms_AJBGMB_125645 |
| Title of the Manuscript: | Effects of Anacardium Occidentale Leaf Extract on Lipid Profile and Antioxidant Levels in Diabetic Albino Rats |
| Type of the 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>

Review Form 3

PART 1: Review Comments

| Compulsory REVISION 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. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part. | This manuscript is important for the scientific community because it offers valuable insights into the potential use of <i>Anacardium occidentale</i> leaf extract as a natural therapeutic agent for managing diabetes-induced dyslipidemia and oxidative stress. By demonstrating significant reductions in harmful lipids and improvements in antioxidant levels in diabetic albino rats, the study contributes to the growing body of research on plant-based treatments for diabetes. I appreciate this manuscript because it highlights the possibility of using natural compounds to alleviate diabetes complications, which could lead to more affordable and accessible treatment options. However, further studies in humans would be necessary to fully validate these findings. | OK |
| Is the title of the article suitable? (If not please suggest an alternative title) | The title is concise, informative, and aligns well with the content of the abstract. However, it could be slightly refined by specifying the type of diabetes (alloxan-induced) to give a more precise context. | Noted |
| 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 of the article is generally comprehensive, covering the key elements of the study, including the experimental model (alloxan-induced diabetic albino rats), the intervention (<i>Anacardium occidentale</i> leaf extract), and the observed effects on lipid profile and antioxidant levels. It also highlights the significant findings, such as the reduction in harmful lipids and improvements in antioxidant enzymes, and concludes by suggesting the therapeutic potential of the extract for diabetes-related complications. | Effectuated |
| Are subsections and structure of the manuscript appropriate? | Yes | |
| Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part. | The manuscript appears scientifically robust and technically sound based on the provided description. The use of standard assays (ALT, AST, ALP, TC, TG, HDL, LDL, etc.) to evaluate biochemical parameters in diabetic rats is well-established, ensuring that the results are reliable and comparable to other studies. The inclusion of a control group, a diabetic control group, and a standard drug (Glibenclamide) strengthens the validity of the findings by providing reference points for the effects of the <i>Anacardium occidentale</i> extract. Additionally, the use of GC-MS analysis to identify bioactive compounds in the extract adds scientific rigor, as it confirms the presence of key components responsible for the biological effects. | Revision made |
| Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. | Yes | |
| Minor REVISION comments | | |
| Is the language/English quality of the article suitable for scholarly communications? | <ul style="list-style-type: none">The language of the article is generally suitable for scholarly communication, but there are areas where clarity and precision can be improved. Some sentences are quite long and could be broken into shorter, more concise statements for better readability. For example, "However, the plant extract significantly decreased more when compared to Glibenclamide treated group" could be rephrased to "The plant extract caused a more significant decrease in ALT levels compared to the Glibenclamide-treated group."The phrase "slight decrease" is used multiple times, which could be quantified or replaced with more precise terms to better convey the magnitude of the changes observed.Check the spelling in results especially in figure 1 | |
| Optional/General comments | Overall, the manuscript presents a scientifically sound and valuable contribution to the field, particularly in exploring the potential of <i>Anacardium occidentale</i> leaf extract for managing diabetes-induced dyslipidemia and oxidative stress. The experimental design is robust, with well-defined control groups and appropriate biochemical assays used to measure the effects | |

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) | |