

Review Form 3

Journal Name:	Journal of Complementary and Alternative Medical Research
Manuscript Number:	Ms_JOCAMR_129129
Title of the Manuscript:	An Assessment of Anti-diabetic Activity of Benincasa hispida Extract in Alloxan-induced Rat Model
Type of the Article	Original Research Article

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 highlights the potential of <i>Benincasa hispida</i> as a natural alternative for diabetes management, addressing the limitations of synthetic drugs. Its findings provide valuable insights into plant-based therapeutics, encouraging further exploration of traditional medicine for safer and cost-effective treatments.	
Is the title of the article suitable? (If not please suggest an alternative title)	The current title, " An Assessment of Anti-diabetic Activity of Benincasa hispida Extract in Alloxan-induced Rat Model ," is clear but could be more concise and specific. A more suitable title might be: " Anti-Diabetic and Lipid-Modulating Effects of Benincasa hispida Extract in Alloxan-Induced Diabetic Rats "	
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 not comprehensive enough. It should include a clear objective, concise methodology, and key findings. Mention significant effects observed at 900 mg/kg, highlight triglyceride reduction, and end with the potential of <i>B. hispida</i> as a therapeutic agent. Remove redundant details about non-significant lipid changes.	
Is the manuscript scientifically, correct? Please write here.	The manuscript is generally scientifically correct but needs clarity in methodology, more robust statistical interpretation, and deeper discussion to strengthen its findings.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are sufficient and include a mix of recent and relevant studies. However, some are slightly outdated, and additional recent studies on the anti-diabetic effects of <i>Benincasa hispida</i> or similar plant extracts could further support the findings. For example, references focusing on bioactive compounds in Cucurbitaceae or comparative studies on plant-based anti-diabetic therapies would be valuable additions.	

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<p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language of the article is generally understandable but requires significant improvement for scholarly communication. There are occasional grammatical errors, awkward phrasing, and redundant sentences. A thorough language review and editing for clarity, precision, and conciseness are recommended to enhance the manuscript's readability and professionalism.</p>	
<p>Optional/General comments</p>	<p>The manuscript explores an important topic in plant-based therapeutics, with potential implications for diabetes management. However, it requires substantial revisions to improve clarity, conciseness, and scientific rigor. Strengthening the discussion, refining the methodology, and improving data presentation will significantly enhance the quality and impact of the study. Additionally, careful proofreading is essential to address language issues and ensure consistency throughout the manuscript.</p> <p>Comments and Suggestions</p> <ol style="list-style-type: none"> 1. Abstract <ul style="list-style-type: none"> ○ Clarity and Specificity: The abstract lacks sufficient detail regarding the methodology and major findings. It is essential to specify the experimental model, critical results, and conclusion concisely. ○ Statistical Significance: Statistical results mentioned (e.g., triglyceride levels) should include clearer context about the biological implications. 2. Introduction <ul style="list-style-type: none"> ○ Scope and Focus: The introduction effectively highlights the significance of diabetes mellitus (DM) and traditional medicine. However, it could benefit from more explicit articulation of the gap in current research that this study aims to fill. ○ Relevance to Study: The discussion on statins and synthetic drugs, while informative, seems tangential. Align it more closely with the study's objective. 3. Materials and Methods <ul style="list-style-type: none"> ○ Experimental Design: The description of the grouping and dosing is repetitive and could be streamlined for clarity. ○ Control Groups: Clarify the role of multiple control groups (e.g., Metformin vs. physiological saline) to ensure the study design is comprehensible. ○ Ethical Considerations: Ethical approval details are present but could be expanded to include any measures taken to minimize animal distress. 4. Results <ul style="list-style-type: none"> ○ Presentation: The results section lacks visual clarity. Figures and tables need better labeling and captions that summarize key findings succinctly. ○ Statistical Analysis: While statistical significance is mentioned, effect sizes and confidence intervals should be included to enhance the robustness of the conclusions. 5. Discussion <ul style="list-style-type: none"> ○ Comparison to Literature: The discussion references previous studies but needs more critical analysis of similarities and discrepancies with current findings. ○ Mechanistic Insights: The study would benefit from hypothesizing possible mechanisms of action for the anti-diabetic effects observed. 6. Conclusion <ul style="list-style-type: none"> ○ Future Directions: The conclusion rightly calls for further research but should include more specific suggestions (e.g., isolating active compounds, testing on different models). 7. References <ul style="list-style-type: none"> ○ Completeness: Ensure all references cited in the text are included in the reference list and vice versa. ○ Formatting: Consistency in citation format (e.g., journal titles, volume, and page numbers) needs attention. 	

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	<p>General Observations</p> <ul style="list-style-type: none">• Language and Grammar: There are occasional grammatical errors and awkward phrasing. A comprehensive language review would improve readability.• Structure and Flow: Some sections are verbose, and key points are buried within redundant descriptions. A more concise and structured narrative is recommended.• Figures and Tables: Ensure consistency in formatting, and include units and legends where applicable. For example, Figure 1 and Table 2 require clearer legends to interpret the data effectively. <p>Specific Issues and Required Actions</p> <ol style="list-style-type: none">1. Abstract:<ul style="list-style-type: none">○ Current Issue: Lacks clarity and sufficient detail about methodology and findings.○ Action: Revise to include the experimental model, significant results (e.g., 900 mg/kg dose), and conclusions succinctly.2. Introduction:<ul style="list-style-type: none">○ Current Issue: The discussion on statins and synthetic drugs is tangential.○ Action: Focus on the gap in knowledge regarding <i>Benincasa hispida</i> as an anti-diabetic agent and streamline background information.3. Materials and Methods:<ul style="list-style-type: none">○ Current Issue: Redundant and unclear descriptions of control and treatment groups.○ Action: Simplify the grouping description and clarify the rationale for each control group. Add details on statistical tests used.4. Results:<ul style="list-style-type: none">○ Current Issue: Visual presentation is weak; statistical analysis lacks depth.○ Action: Improve figures and tables with clear legends and labels. Include effect sizes and confidence intervals for statistical results.5. Discussion:<ul style="list-style-type: none">○ Current Issue: Limited critical analysis of findings and insufficient comparison with existing literature.○ Action: Provide a more in-depth discussion of results relative to prior studies. Suggest potential mechanisms for observed anti-diabetic effects.6. Conclusion:<ul style="list-style-type: none">○ Current Issue: Lacks actionable recommendations for future research.○ Action: Specify next steps, such as isolating active compounds or testing on different models.7. Language and Formatting:<ul style="list-style-type: none">○ Current Issue: Occasional grammatical errors and inconsistent citation formatting.○ Action: Conduct a thorough language review and ensure references follow a consistent format.	
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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>	

Reviewer Details:

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