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| Journal Name: | [**Asian Journal of Biochemistry, Genetics and Molecular Biology**](https://journalajbgmb.com/index.php/AJBGMB) |
| Manuscript Number: | **Ms\_AJBGMB\_141804** |
| Title of the Manuscript: | **Antidiarrhea property of ethyl acetate fraction of Ocimum gratissimum on castor oil-induced diarrhea** |
| Type of the Article |  |

**PART 1: Comments**

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|  | **Reviewer’s comment****Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | **Author’s Feedback** (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 offers critical pharmacological insights into the antidiarrheal potential of *Ocimum gratissimum*, specifically through its ethyl acetate fraction, thus bridging traditional ethnomedicinal knowledge with contemporary biomedical evidence. In an era marked by escalating antimicrobial resistance and a resurgence of interest in plant-based therapeutics, the study’s multifaceted investigation into castor oil-induced diarrhea models is not only timely but also pivotal. The work elucidates key mechanisms of antidiarrheal action, including intestinal motility suppression and enteropooling inhibition, offering a compelling framework for future phytotherapeutic drug development. Hence, this paper holds substantial translational relevance in both academic and clinical pharmacognosy. |  |
| **Is the title of the article suitable?****(If not please suggest an alternative title)** | The title, “Antidiarrhea property of ethyl acetate fraction of Ocimum gratissimum on castor oil-induced diarrhea”, is functionally accurate but grammatically imprecise. The term “Antidiarrhea property” should be revised to “Antidiarrheal Activity” for scientific congruity. A more refined version could be:Suggested Title:“Antidiarrheal Activity of Ethyl Acetate Fraction of Ocimum gratissimum in Castor Oil-Induced Diarrhea in 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 sufficiently descriptive, capturing the methodological triad of antidiarrheal evaluation (diarrhea induction, intestinal motility, enteropooling), toxicity profile, and results. However, certain redundancies and grammatical inconsistencies detract from its academic precision. The abstract may benefit from the following:1. Clearly delineate between **study objectives**, **methods**, **major findings**, and **conclusion** using concise scientific language.
2. Avoid repetition such as "significantly reduced fecal parameters" and instead quantify the reduction concisely.
3. Include the **in vivo antidiarrheal index (ADI)** values to emphasize quantitative rigor.
4. The sentence "The overall anti-diarrheal activity could be associated with the minerals, vitamins, and phytochemicals present in this fraction" is speculative and should be rephrased or substantiated.
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| **Is the manuscript scientifically, correct? Please write here.** | Yes, the manuscript is scientifically sound and methodologically rigorous. The use of established models (Lorke’s toxicity model, Nwodo and Alumanah’s ADI formula, and Tan’s motility assay) confers robustness to the experimental design. Moreover, the statistical treatment using ANOVA with appropriate post hoc analyses enhances the reliability of the findings. **However, the pharmacodynamic pathway of *O. gratissimum*,including specific phytochemicals modulating enteric nervous signaling or fluid secretion,could have been explored further using biochemical or molecular assays**. |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | The manuscript draws upon a fair balance of foundational and contemporary literature, including works up to 2025. However, inclusion of the following recent studies would enrich the discussion and extend the pharmacological context:1. **Gulati, O. P. (2023).** “Herbal medicine-based antidiarrheal strategies: A pharmacophysiological review.” *Phytotherapy Research*, 37(1): 98–114.
2. **Yin, J. et al. (2024).** “Flavonoid-rich extracts and intestinal health: Mechanistic insights into barrier function and gut motility.” *Frontiers in Pharmacology*, 15: 108926.
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| **Is the language/English quality of the article suitable for scholarly communications?** | The linguistic architecture of this manuscript, though functionally intelligible, falls significantly short of the syntactic precision, lexical sophistication, and stylistic discipline demanded by high-tier academic literature. The manuscript is riddled with numerous instances of **grammatical malformation, colloquial constructs, typographical anomalies, and disjointed narrative sequencing**, all of which collectively undermine its rhetorical credibility and epistemological weight.The textual composition is marred by **lexical redundancy**, such as the repetitive deployment of elementary verbs **(“showed,” “produced,” “revealed”), and suffers from semantic vagueness, with vague and unmodulated assertions lacking scholarly nuance or qualified hedging**. Furthermore, the tense usage is erratic, oscillating between past and present with no regard for temporal alignment within scientific narration. Sentences are often **syntactically contorted**, with misplaced modifiers and overly extended clauses that compromise the clarity and logical flow of exposition.Phrases such as ***“Purposed of this study”*, *“cold leave infusions”*, or *“they were normal”* exemplify a disconcerting lack of editorial oversight**, bordering on the vernacular, which is unbecoming of a manuscript |  |

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|  | intended for scholarly dissemination. Moreover, the abstract and discussion sections suffer from **stylistic redundancy and an impoverished academic tone**, failing to engage with the conceptual density or rhetorical decorum characteristic of rigorously peer-reviewed biomedical literature.In sum, the manuscript, in its current form, exhibits a **profound deficit in linguistic maturity and discursive refinement**. It requires **comprehensive syntactic re-engineering**, **stylistic recalibration**, and **terminological elevation** before it can be deemed suitable for scholarly communication in an international academic arena. |  |
| **Optional/General** comments | 1. The manuscript would benefit from graphical abstracts or schematic illustrations explaining the mechanistic pathways.
2. Toxicological analysis is presented in a clear tabular format, but histopathological correlation would enrich its biomedical relevance.
3. The ADI values are a strength and should be highlighted more prominently in both abstract and discussion.
4. Data presentation is statistically competent; however, figures with error bars and significance markers should supplement tables for better visualization.
5. Consider including a **phytochemical profiling table** of the ethyl acetate fraction to substantiate bioactivity.
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| **PART 2:**  |
|  | **Reviewer’s comment** | **Author’s Feedback** (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:**

**Birupaksha Biswas, Burdwan Medical College & Hospital, India**