Review Form 1.7

Journal Name:	**Annual Research & Review in Biology**
Manuscript Number:	**Ms_ARRB_115499**
Title of the Manuscript:	**Assessing the Efficacy and Biological Benefits of Withanolide-Rich Ashwagandha Root Extract**
Type of the Article	**Research Paper**

General guideline for 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 guideline for Peer Review process, reviewers are requested to visit this link:

(https://www.journalarrb.com/index.php/ARRB/editorial-policy)

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PART 1: Review Comments

	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)*
Compulsory REVISION comments 1. **Is the manuscript important for scientific community?** (Please write few sentences on this manuscript) 2. **Is the title of the article suitable?** (If not please suggest an alternative title) 3. **Is the abstract of the article comprehensive?** 4. **Are subsections and structure of the manuscript appropriate?** 5. **Do you think the manuscript is scientifically correct?** 6. **Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.** **(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)**	1. **Maybe.** 2. **Yes.** 3. **No.** 4. **Yes.** 5. **No.** 6. **Yes.** **Additional Comments:** **The manuscript "Assessing the Efficacy and Biological Benefits of Withanolide-Rich Ashwagandha Root Extract" seeks to explore the pharmacological potential of Ashwagandha, particularly focusing on the bioactivity of withanolide-rich extracts. Despite the topic's potential relevance to pharmacology and herbal medicine, I have the following concerns:** **1. The study's core objective, assessing the bioactivity of Ashwagandha extracts, is not novel. The pharmacological effects of Ashwagandha, especially its withanolide components, have been well-studied and documented. The paper needs to clearly define what new insights or advancements it brings to the existing body of knowledge.** **2. The description of the experimental design, including how the extracts were prepared, analyzed, and compared, lacks the necessary detail for scientific rigor. The paper should provide a comprehensive methodological framework, including control setups, extraction procedures, and the statistical analysis employed.** **3. While the paper compares the bioactivity of different extracts of Ashwagandha, it does not adequately benchmark these findings against current leading alternatives or standard treatments. A detailed comparative analysis, including a review of existing literature and how this research contributes to or contradicts current knowledge, is essential.** **4. The study's findings are based on a limited dataset without sufficient replication or cross-validation. Moreover, there is a lack of information on the reproducibility of the experiments, which is crucial for validating the claimed bioefficacy and bioavailability improvements.** **5. The paper discusses the potential of Ashwagandha extracts for therapeutic use, but it does not provide a clear pathway from these in vitro studies to clinical application. Discussions regarding dosage, administration routes, potential side effects, and interactions with other medications are necessary to assess the clinical relevance of the findings.** **6. While the abstract mentions evaluating the safety profile of the Ashwagandha Composition, the main text lacks detailed safety and toxicological assessment data. For the extract to be considered for therapeutic use, comprehensive safety, toxicity, and risk assessment studies are mandatory.**	

	7. The introduction and background sections need to be expanded to adequately situate the study within the context of existing research. A thorough literature review would help demonstrate the research gap the study intends to fill and justify the necessity of the research. **8. The manuscript contains several technical inaccuracies and language issues that hinder its readability and scientific communication. Clarification of terms, better structuring of sentences, and correction of grammatical errors are needed to meet academic standards.** **In conclusion, while the manuscript addresses a relevant research area,methodological rigor, comparative analysis, clinical applicability, and technical writing to contribute meaningfully to the field of herbal medicine and pharmacology.**	
Minor REVISION comments **1. Is language/English quality of the article suitable for scholarly communications?**	No.	
Optional/General comments		

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:

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