

Review Form 3

Journal Name:	Asian Journal of Research in Biochemistry
Manuscript Number:	Ms_AJRB_121932
Title of the Manuscript:	Phytochemical Analysis and In Vitro Antimicrobial Potential of Colocasia esculenta Tuber Peel Extract Against Pathogens Isolated from Water yam (Dioscorea alata) Tuber.
Type of the Article	Original Research Article

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PART 1: Review Comments

Compulsory REVISION 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>
<p>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.</p>	<p>The manuscript examines the microbial properties of extracts from the peel of tubers, which is a subject gaining popularity in the quest for natural alternatives to synthetic antimicrobial agents. A thorough examination of plant chemicals and data analysis gives important information to create new plant-derived treatments. It also contains meticulous methodology and clear presentation of results which increases the credibility of findings and makes this a great importance to scientific community.</p>	
<p>Is the title of the article suitable? (If not please suggest an alternative title)</p>	<p>As the title of the research article should be concise yet descriptive enough to convey the key focus of the research. The current title effectively highlights both phytochemical and antimicrobial potential of the extract, which are the central to the manuscript.</p>	
<p>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.</p>	<p>The abstract provides a comprehensive overview of the antimicrobial study conducted on <i>Colocasia esculenta</i> tuber peel extract. It covers the phytochemical screening, inhibitory effects on various fungi and bacteria, and the methodology used in the study. Suggestions: Include a summary of the statistical analysis methods used in the study. Just add a sentence highlighting the significance of findings in the context of combating drug-resistant microorganism. Also consider mentioning the potential applications of the extract in natural antimicrobial agents.</p>	
<p>Are subsections and structure of the manuscript appropriate?</p>	<p>The manuscript aligns with the standard scientific structure, featuring key sections such as the Abstract, Introduction, Materials and Methods, Results and Discussion, and Conclusion. I would suggest to consider dividing the combined "Results and Discussion" section into two distinct parts to enhance clarity. Update references by including more recent studies to ensure the research is grounded in current scientific discourse. You can incorporate more subheadings within major sections to guide readers through the content seamlessly. For example: Instead of original: "Materials and Methods <ul style="list-style-type: none"> • Collection of plant materials and authentication • Plant extract preparation • Plant extract procedure • Source of microorganisms • Preparation of culture media....." You can do; "Materials and Methods <ol style="list-style-type: none"> 1. Plant Material and Authentication <ul style="list-style-type: none"> • Collection of plant material • Authentication Process 2. Preparation of plant extract <ul style="list-style-type: none"> • Drying and Pulverization of Tubers • Extraction Procedure • Storage of Extracts 3. Microorganism Handling <ul style="list-style-type: none"> • Source of pathogens • Culture Media Preparation 4. Phytochemical Screening </p>	

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	<ul style="list-style-type: none"> • Test for Tannins • Test for Saponins • Test for <p>Overall, the manuscript is appropriate.</p>	
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.	It looks quite strong in terms of scientific and technical terms because of the thorough methodology, the important discovery of dose-dependent antimicrobial effects of tuber peel extract on pathogens, and meticulous examination of the phytochemicals and antimicrobial properties. The research utilizes well-known testing techniques. Findings show strong statistical significance, pointing to secure base. Discovering plant compounds and how they affect antimicrobial activity enhances the credibility of findings.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. -	About the relevancy of the cited references, I found that they are on topic and provide a solid foundation for the research. However, while some references are recent, a significant portion of them are older than 10 years, which could suggest the need for more current sources to ensure the inclusion of the latest findings and technologies. For example, many references date back to early 2000s, with some even from 1990s, which may not reflect the most recent advancements in the field. To strengthen the manuscript, I recommend focusing on the antimicrobial properties of <i>Colocasia esculenta</i> recent studies, especially those published within the last five years.	
Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The language of the manuscript is clear and suitable for scientific communication. However there are some areas where minor grammatical and typographical errors are present, which could be refined for scientific terms. For example, "ciproflaxacine" instead of "ciprofloxacin", and improving sentence structure would enhance the overall quality of the writing.	
Optional/General comments	For the final polish, I recommend a thorough proofreading to address these issues and ensure that the manuscript meets the highest standards of academic writing.	

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:	Saugat R.C.
Department, University & Country	National Biotechnology Research Center, Nepal