

Review Form 3

Journal Name:	Microbiology Research Journal International
Manuscript Number:	Ms_MRJI_127292
Title of the Manuscript:	EXPLORING THE POTENTIAL OF CITRUS PEELS: A COMPARATIVE STUDY OF AGROINDUSTRIAL WASTE
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:

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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.	The manuscript explores an important topic of repurposing citrus peels, an agro-industrial waste, for nutritional, antioxidant, and antimicrobial applications. This area is relevant for promoting sustainable practices in waste management and resource efficiency. However, the manuscript fails to clearly align its objectives with the actual content and outcomes. The potential significance of nanocellulose production from citrus waste, mentioned in the Introduction, is not explored in the Results or Discussion sections. Additionally, the excessive background details and lack of critical analysis dilute its impact. A more focused and structured approach could enhance its value for the scientific community.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title, "EXPLORING THE POTENTIAL OF CITRUS PEELS: A COMPARATIVE STUDY OF AGROINDUSTRIAL WASTE," is suitable for capturing the general idea of the study. However, it does not highlight the specific focus on nutritional, antioxidant, and antimicrobial properties or the nanocellulose production mentioned in the Introduction. A more descriptive title, such as " <i>Nutritional, Antioxidant, and Antimicrobial Properties of Citrus Peels: A Sustainable Valorization Approach</i> ," could better reflect the study's content.	
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 lacks focus and does not adequately summarize the study's aim, methodology, or key findings. The first five sentences are general background information and would be better placed in the Introduction. The author should focus on concrete points, such as the aim of the study, specific methodologies, and quantitative key results (e.g., vitamin C levels, antioxidant activity percentages, and inhibition zone diameters). The term "nutraceutical" in the keywords is misspelled and should be corrected to "nutraceutical."	
Are subsections and structure of the manuscript appropriate?	The subsections and structure require significant revision. The title and subtitle formatting do not conform to the journal's template (e.g., "Materials and Methods" should be bold and capitalized as " 2. MATERIALS AND METHODS "). Subtitles like "Sample Taken" are vague and should be revised to more specific and formal titles, such as "Sample Collection and Preparation." Inconsistent numbering (e.g., There is no 1,2 or 3 but 3.2.1 and 3.3. Besides, 3.2.1 and 3.3 shouldn't be on different levels) also needs correction. Furthermore, some sections, like the Results, are overly repetitive and lack proper interpretation of findings.	
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 lacks scientific robustness due to fragmented and vague presentation of methodologies and results. Key findings are stated without sufficient context, explanation, or connection to existing literature. For example, there is no mention of statistical significance in the comparisons, and phrases like " <i>enough protein</i> " and " <i>good amount of vitamin C</i> " are unscientific. While the study touches on relevant topics, such as antioxidant and antimicrobial activities, it fails to deliver meaningful insights due to insufficient analysis and poor presentation of results.	

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<p>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</p> <p>-</p>	<p>The references are insufficient and do not adequately cover recent studies in the field. Suggested additions include:</p> <ul style="list-style-type: none"> • Rosaria Ciriminna et al., "Nanocellulose and microcrystalline cellulose from citrus processing waste: A review," <i>International Journal of Biological Macromolecules</i>. • "CytroCell: Valued Cellulose from Citrus Processing Waste," https://doi.org/10.3390/molecules26030596 • "Alkali + cellulase-extracted citrus pectins exhibit compact conformation and good fermentation properties," https://doi.org/10.1016/j.foodhyd.2020.106079. • "Waste Orange Peels as a Source of Cellulose Nanocrystals and Their Use for the Development of Nanocomposite Films," https://doi.org/10.3390/foods12050960. • "Management of citrus waste by switching in the production of nanocellulose," https://doi.org/10.1049/iet-nbt.2015.0116. <p>These references are relevant only if the manuscript clarifies its aim and content to align with the suggested additions.</p>	
<p>Minor REVISION comments</p> <p>Is the language/English quality of the article suitable for scholarly communications?</p>	<p>The language is not suitable for scholarly communication in its current state. There are frequent grammatical errors, awkward phrasing, and vague expressions. For example, phrases like "usual method" and "diagrammatic representation" are unscientific and unclear. The manuscript requires substantial editing for language, tone, and structure to meet the standards of scholarly communication.</p>	
<p>Optional/General comments</p>	<ul style="list-style-type: none"> • Figures, especially those showing antimicrobial activity, lack clarity and consistency. Combining graphs and images (e.g., 6a, 6b) into a single figure with a unified presentation would improve readability. • Providing a clear legend for all axes (y-axis) and ensuring uniform formatting across figures is essential. • While "SD measured (n=3)" is mentioned throughout the manuscript, a more detailed explanation of statistical methods, such as confidence intervals or p-values, would greatly enhance the credibility of the results. • The study mentions nanocellulose extraction in the Introduction, but there is no follow-up in the Results or Discussion sections. If this aspect is not explored in detail, it might be better to omit it entirely from the manuscript to avoid misleading readers. • There are no directions for future works. A brief mention of potential research directions in the Conclusion, such as optimizing extraction techniques, isolating active compounds, or industrial applications. • Consider linking findings to broader themes like sustainability, circular economy, or green technologies. <p>The manuscript may have potential but requires substantial revisions to align its content with the stated aims, improve language quality, and adhere to scientific conventions.</p> <p>Key issues include:</p> <p>Poor alignment between the objectives and results. Insufficient statistical and contextual analysis. Vague and unscientific phrasing. Formatting inconsistencies and lack of adherence to journal guidelines.</p> <p>With significant effort, the manuscript could be improved and reconsidered for publication.</p>	

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)
<p>Are there ethical issues in this manuscript?</p>	<p><i>(If yes, Kindly please write down the ethical issues here in details)</i></p>	

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