

Review Form 3

Journal Name:	Microbiology Research Journal International
Manuscript Number:	Ms_MRJI_125021
Title of the Manuscript:	Principal Component Analysis (PCA) of MALDI-TOF for the Identification of Waterborne Pathogenic Bacteria
Type of the Article	Short communication

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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.	This manuscript addresses a critical issue in public health, highlighting the presence of various pathogenic bacteria in wastewater that pose significant risks to community health. By documenting the prevalence of these opportunistic pathogens in diverse geographic locations, the study underscores the urgent need to improve wastewater management and sanitation practices worldwide. The findings contribute to completing the existing results in the specialized literature on environmental microbiology, but also provide a basis for future research aimed at developing effective public health strategies.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title is quite generic; it does not accurately reflect the type of water from which the bacteria were identified. Here is an alternative title suggestion that may better capture the scope and importance of the study: "Monitoring Wastewater for Pathogens: Insights into Public Health Risks from Opportunistic Bacteria".	
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.	Consider adding a sentence emphasizing the global relevance of wastewater monitoring for pathogens, especially in light of increasing urbanization and pollution. Make the objectives more explicit by mentioning the significance of identifying specific bacteria and their potential impact on public health. Include a brief statement of the methods used to isolate and identify the bacterial species. This could improve the scientific rigor of the abstract. Summarize the findings in a more quantitative way, perhaps noting the total number of wastewater samples collected and the diversity of pathogens found. Strengthen the conclusion by explicitly stating the need for specific public health interventions or policy recommendations based on the findings.	
Are subsections and structure of the manuscript appropriate?	Subsections and article structure are appropriate.	
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 article is scientifically important for its rigorous methodology and comprehensive analysis of pathogenic bacteria present in wastewater. The identification and characterization of different bacterial isolates are supported by well-established and described techniques, so that the results are reliable and reproducible. In addition, the discussions effectively integrate the results with the existing literature, highlighting the significance of the study in the broader context of public health and sanitation. The manuscript's focus on the global prevalence and implications of microbial contamination underscores its technical soundness, making a valuable contribution to the understanding of wastewater management and public health risks associated with opportunistic pathogens.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Yes, the references are representative of this study, they are sufficient and relatively recent.	

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Minor REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?	The English quality of the article is generally suitable for scholarly communication.	
Optional/General comments	<p>Here are some possible weaknesses of the manuscript:</p> <ol style="list-style-type: none">1. Limited Sample Size and Geographic Coverage: The number of samples collected may be inadequate for drawing broad conclusions regarding the prevalence of pathogens in wastewater across various geographic locations. Increasing the sample size and diversity would enhance the reliability and applicability of the findings.2. Absence of Longitudinal Data: The manuscript could be improved by incorporating a longitudinal study design to examine how the prevalence of these pathogens changes over time. In the absence of long-term data, it is challenging to determine whether the findings indicate a persistent issue or are merely the result of temporary environmental conditions.3. Insufficient Mechanistic Insights: Although the study identifies the presence of pathogens, it does not adequately explore the mechanisms that allow these bacteria to survive and proliferate in wastewater. Gaining insights into these mechanisms could offer valuable information for developing targeted interventions.	

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

Reviewer Details:

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