

Review Form 1.7

Journal Name:	South Asian Journal of Research in Microbiology
Manuscript Number:	Original Manuscript_SAJRM_117905
Title of the Manuscript:	Antibiotics Resistance Pattern and Molecular Detection of ESBL Genes in E. coli from both Surface and Underground Water used for Domestic Purposes in some selected Locations in Ibadan, Oyo State.
Type of the Article	Research article

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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)
<p>Compulsory REVISION comments</p> <ol style="list-style-type: none"> 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. <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<ol style="list-style-type: none"> 1. Authors have an important contribution to the social health in that area. The results of this research could contribute to the body of knowledge on antibiotic resistance patterns, in particular the detection of extended-spectrum beta-lactamase (ESBL) genes. It could add valuable data to the global database on antibiotic resistance, which will help other researchers and policy-makers. 2. The title of the article is suitable but I suggest that the authors remove the "dot" at the end of the title. 3. the abstract of the manuscript is comprehensive and includes all the required parts, in particular: objective, method, results 4. The subsections and structure of the manuscript are appropriate. 5. The combination of a rigorous methodology, precise molecular analyses, and comparisons with existing literature makes this manuscript a scientifically sound and credible contribution to antibiotic resistance research 6. the references used are recent, as evidenced by a reference from the year 2024. in addition, a total of 38 references were used, which is scientifically sufficient for a research article <p style="text-align: center;"><u>Additional suggestions</u></p> <p>2.7. In this section, you don't explain how you perform susceptibility testing. You have used the agar diffusion test but how did you proceed? Please expand on the methodology</p> <p>2.8. and 2.9. Which method did you use for DNA extraction? Please provide the composition of your reaction mixture for the multiplex PCRs or indicate if a PCR mastermix was used</p> <p>3. Below Table 2 (and similarly for Tables 3, 4, and 5) in your results section, you should consider using smaller characters for the abbreviations and providing the meaning of the letters in Tables 2, 3, and 4. For example: 'In a row, the mean values followed by different letters are statistically different</p> <p>In section 3.3 Molecular Identification of β-lactamase Coding Genes in Selected E. coli, label the different figures as 2, 3, and 4 instead of 'plates' and provide captions for the figures. On the different gels, please indicate the negative and positive controls (C- and C+)</p> <p>Revise Figure 1: label the y-axis 'Resistance Rate (%)', remove the commas from the numbers on the y-axis, harmonize the font of the figure with that of the manuscript, remove the legend from the figure as it makes the figure too cluttered (a table already presents the antibiotics and their charges) (instead, place the abbreviations of the antibiotics below the histograms on the x-axis and then put the abbreviations and their meanings below the figure in smaller font before the title. Add labels above the histograms.</p> <p>Revise the title of Figure 2, rename the y-axis 'ESBL-producing E. coli strains (%)'. Add value labels above the histograms so the percentages represented by each histogram are visible</p>	

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	Use impersonal forms in the conclusion, removing 'we, our, ours...' and instead use 'in this study' rather than 'in our study'. Shorten the conclusion. Merge your recommendations with the conclusion and reduce them to only the key recommendations	
Minor REVISION comments		
1. Is language/English quality of the article suitable for scholarly communications?	English quality of the article is suitable for scholarly communications	
Optional/General comments	<p>The manuscript is important for the scientific community for several reasons:</p> <p>Public Health Implications: It highlights the presence of antibiotic-resistant E. coli in water sources used for domestic purposes. This is crucial for public health as it indicates a potential risk for waterborne diseases that are harder to treat due to resistance.</p> <p>Environmental Impact: The study provides insights into the environmental spread of antibiotic resistance, which is a growing global concern. Understanding how resistance genes disseminate in different water sources can help in formulating strategies to mitigate this issue.</p> <p>Local Relevance and Global Significance: While the study is localized to Ibadan, Oyo State, its findings have broader implications. Similar patterns could be observed in other regions, making the study relevant for understanding and addressing antibiotic resistance worldwide.</p> <p>Policy and Regulation: The findings can inform local and national policies on water quality management and antibiotic usage. This can lead to improved regulations and practices to ensure safer water for domestic use and better antibiotic stewardship.</p> <p>By addressing these points, the manuscript provides critical information that can help in tackling the pressing issue of antibiotic resistance both locally and globally.</p> <p>Hence, I highly recommend the article to be published in the journal</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)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Kone Boko Tadiogo Naty Amine
Department, University & Country	Nangui Abrogoua University, Côte D'ivoire