

BPI Review Form 070520

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| Book Name: | <u>Research Perspectives of Microbiology and Biotechnology</u> |
| Manuscript Number: | Ms_BP_12051F |
| Title of the Manuscript: | Molecular Characterisation of Antimicrobial Resistance in E. coli Isolates from Piglets in theWest Region of Romania |
| Type of the Article | Book Chapter |

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PART 1: Review Comments

| | Reviewer's comment | Author's comment <i>(If agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. Authors must write his/her feedback here)</i> |
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| Is the manuscript important for the scientific community? Please write a few sentences explaining your answer | <p>Yes, the manuscript is important for the scientific community as it provides valuable insights into the prevalence and characteristics of antimicrobial resistance in E. coli isolates from piglets in a specific region, in this case, the West Region of Romania. Understanding antibiotic resistance patterns in livestock is crucial for developing effective strategies to combat antimicrobial resistance, preserve the efficacy of antibiotics, and protect public health. Additionally, the study's findings on resistance phenotypes and genotypes contribute to the body of knowledge on antimicrobial resistance mechanisms in bacterial pathogens, aiding in the development of targeted interventions and antimicrobial stewardship practices.</p> <p>But performing PCR using plasmid templates can indeed provide more confidence in identifying plasmid-borne resistance genes compared to using whole DNA. By specifically amplifying the target genes from plasmid DNA, researchers can directly confirm the presence of resistance genes on plasmids rather than on chromosomal DNA. This approach helps to differentiate between chromosomal and plasmid-mediated resistance, providing valuable information on the mechanisms of antimicrobial resistance transmission. Including this methodological detail in the manuscript would strengthen the validity and reliability of the findings regarding plasmid-borne resistance.</p> | |
| Is the title of the article suitable? Do you have any alternative Title in your mind? | Yes | |
| Is the abstract of the article comprehensive? If your answer is No, please provide suggestions | Yes | |
| Do you think the English quality of the article is suitable for scholarly communications? If your answer is No, please provide suggestions | Yes | |
| Please provide your comments regarding the appropriateness of different sections of the manuscript. | <p>Introduction: The introduction seems appropriate as it outlines the significance of the study by addressing the widespread use of antibiotics in pig farming and the associated risks of antimicrobial resistance. It sets the context for the research question and the objectives of the study.</p> <p>Materials and Methods: This section appears to be appropriate as it describes the methodology used for sample collection, identification of E. coli isolates, phenotypic susceptibility testing, and genotypic analysis of resistance genes. Clear descriptions of the procedures are essential for reproducibility and understanding the study's Methods.</p> <p>Results: The results section seems appropriate as it provides key findings on antibiotic resistance phenotypes and genotypes in E. coli isolates from piglets in the West Region of Romania. It appears to present relevant data on the prevalence of resistance to different antibiotics and the occurrence of resistance genes.</p> <p>Discussion: This section should discuss the significance of the findings in relation to previous research, potential implications for antimicrobial resistance management, and limitations of the study. It should also address any discrepancies between phenotypic and genotypic resistance and provide insights into the mechanisms driving antibiotic resistance in the study population.</p> <p>Conclusion: The conclusion should summarize the main findings of the study and their implications for antimicrobial resistance control in pig farming. It should also suggest areas for further research or recommendations for practice based on the study's findings.</p> | |
| Do you think that the references in the manuscript are proper, recent and sufficient? If you have any suggestions, please write here. | Yes | |

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

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