

Review Form 3

Journal Name:	Journal of Advances in Microbiology
Manuscript Number:	Ms_JAMB_123596
Title of the Manuscript:	INSIDIOUS INCREASE IN ITS COLISTIN RESISTANCE TOGETHER EXTENDED-SPECTRUM BETA-LACTAMASE-PRODUCING ESCHERICHIA COLI IN DAIRY COWS IN TÜRKIYE
Type of the Article	Original Research 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.	This manuscript addresses a critical issue in veterinary and public health, highlighting the increasing resistance to colistin in <i>Escherichia coli</i> strains, particularly those producing extended-spectrum beta-lactamases (ESBLs), isolated from dairy cows in Türkiye. Colistin is considered a last-resort antibiotic, and the rise in resistance poses a significant challenge to both animal and human health, as it can lead to treatment failures. I appreciate the manuscript for its focus on antimicrobial resistance, a topic of global concern, but it could benefit from a more detailed analysis of the underlying mechanisms driving this resistance and the potential impact on food safety and public health.	
Is the title of the article suitable? (If not please suggest an alternative title)	No. I suggest: Emergence of Colistin Resistance in Extended-Spectrum Beta-Lactamase-Producing <i>Escherichia coli</i> Isolates from Dairy Cows in Türkiye	
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.	Do not say the aim of the study in the Methods section; put it in the Background section. Why is there no section on results? Separate the results from methods and write specific results before the conclusion section.	
Are subsections and structure of the manuscript appropriate?	Yes	
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.	This manuscript appears to be scientifically robust and technically sound due to its clear methodology, focusing on the detection of colistin resistance in <i>Escherichia coli</i> isolates alongside their extended-spectrum beta-lactamase (ESBL) production. The study utilizes established microbiological techniques and antimicrobial susceptibility testing to draw reliable conclusions, ensuring reproducibility. Furthermore, the sampling from dairy cows, a relevant agricultural source, strengthens the manuscript's relevance to both veterinary medicine and public health. However, a deeper exploration of genetic factors and resistance mechanisms could enhance its scientific value further.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	Yes	

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<p>Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?</p>	<p>Yes. The manuscript needs major revision in the Language quality.</p>	
<p>Optional/General comments</p>	<p>The authors could significantly strengthen the discussion section by addressing an important topic in nanotechnology, specifically the use of nanocoatings as a potential solution to combat antimicrobial resistance. Nanocoatings have shown promising results in reducing bacterial contamination in various environments, including dairy farming. Additionally, it would be valuable for the authors to discuss the development and application of vaccines and nano-vaccines, which are increasingly being explored as innovative strategies for preventing infections caused by antibiotic-resistant bacteria like <i>Escherichia coli</i>. Integrating these emerging technologies could provide new insights into how we might tackle the growing problem of antimicrobial resistance in both veterinary and human health sectors.</p> <p>Suggested articles for using them:</p> <ol style="list-style-type: none"> 1. Sadr S, Poorjafari Jafroodi P, Haratizadeh MJ, Ghasemi Z, Borji H, Hajjafari A. Current status of nano-vaccinology in veterinary medicine science. <i>Veterinary Medicine and Science</i>. 2023 Sep;9(5):2294-308 2. Prasad M, Ghosh M, Kumar R, Brar B, Surjith KP, Lambe UP, Ranjan K, Banerjee S, Prasad G, Kumar Khurana S, Kharb P. The importance of nanomedicine in prophylactic and theranostic intervention of bacterial zoonoses and reverse zoonoses in the Era of microbial resistance. <i>Journal of Nanoscience and Nanotechnology</i>. 2021 Jun 1;21(6):3404-52. 3. Ioannou P, Baliou S, Samonis G. Nanotechnology in the Diagnosis and Treatment of Antibiotic-Resistant Infections. <i>Antibiotics</i>. 2024 Jan 25;13(2):121. 	

PART 2:

	<p>Reviewer's comment</p>	<p>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>
<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>	

Reviewer Details:

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<p>Department, University & Country</p>	<p>Ferdowsi University of Mashhad, Iran</p>