

**Review Form 3**

Journal Name:	<a href="#">Journal of Advances in Biology &amp; Biotechnology</a>
Manuscript Number:	Ms_JABB_128935
Title of the Manuscript:	<b>Staphylococcus Aureus- Antimicrobial Resistance Analysis in Dairy Farms</b>
Type of the Article	

**PART 1: 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)
<b>Please write a few sentences regarding the importance of this manuscript for the scientific community. A minimum of 3-4 sentences may be required for this part.</b>	This manuscript provides critical insights into the prevalence and antimicrobial resistance (AMR) of <i>Staphylococcus aureus</i> in dairy farms, highlighting the significant public health implications of AMR at the animal-human-environment interface. The study's comprehensive approach, combining microbiological, molecular, and phenotypic analyses, underscores the complex transmission dynamics of resistant pathogens within dairy farming environments. By documenting resistance patterns and the presence of virulence genes, the research contributes to the growing body of knowledge on AMR in food production systems, emphasizing the need for sustainable antimicrobial practices in agriculture. This work is particularly important for shaping future surveillance and policy efforts aimed at controlling AMR in both veterinary and human medicine.	
<b>Is the title of the article suitable? (If not please suggest an alternative title)</b>	"Antimicrobial Resistance and Virulence Factors of <i>Staphylococcus aureus</i> in Dairy Farms: Insights from the Animal-Human-Environment Interface"	
<b>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.</b>	Including a brief statement on the need for future research or the study's implications for policy and surveillance could add a forward-looking element to the abstract.	
<b>Is the manuscript scientifically, correct? Please write here.</b>	Based on the provided information, the manuscript appears to be scientifically sound, as it follows a structured approach typical of studies on antimicrobial resistance (AMR) in bacterial pathogens. The methodologies mentioned—microbiological, molecular, and phenotypic analyses—are standard techniques used to assess bacterial resistance, and the focus on <i>Staphylococcus aureus</i> is well-justified, as it is a common pathogen in both human and veterinary medicine.  The manuscript also seems to address a timely and relevant issue, as AMR in dairy farms is an ongoing concern with significant public health implications. The focus on resistance patterns, genetic characterization, and the relationship between <i>S. aureus</i> and its resistance to common antibiotics adds value to the scientific community's understanding of AMR in this context.	
<b>Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.</b>	enough	

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<p><b>Is the language/English quality of the article suitable for scholarly communications?</b></p>	<p>Yes it s suitable</p>	
<p><b>Optional/General</b> comments</p>	<p>This manuscript presents a valuable contribution to the field of antimicrobial resistance in veterinary medicine]. The study design is sound, and the research addresses a pertinent issue that could have significant implications for both scientific understanding and practical applications. The methodology appears robust, and the data is presented clearly, with appropriate statistical analysis to support the conclusions.</p> <p>The use of <b>multiplex PCR</b> for confirming species identification and detecting virulence and resistance genes (e.g., <b>sau</b>, <b>sea</b>, <b>seb</b>, <b>tetM</b>) is robust and ensures accurate genotypic profiling of the isolates. This is an important strength of the study, as molecular confirmation provides higher specificity than phenotypic methods.</p> <p>Overall, this article provides valuable insights into the prevalence of Staphylococcus aureus and antimicrobial resistance in dairy farms. The findings highlight the importance of monitoring AMR in the dairy industry and its potential public health implications. With some improvements in geographic scope, environmental analysis, and inclusion of antibiotic usage data, the study could have even more profound implications for both animal health and human public health policy.</p> <p><b>research article</b> focusing on the antimicrobial resistance (AMR) in Staphylococcus aureus isolates from dairy farms in India. It includes both phenotypic and genotypic analyses, making it a combination of <b>empirical research</b> and <b>molecular microbiology</b>.</p> <p>From an ethical standpoint, the manuscript does not present any obvious ethical violations.</p> <p>The manuscript is a valuable contribution to understanding antimicrobial resistance in dairy farming, with significant public health implications. It could be improved by providing more clarity in the presentation of results, expanding the discussion on AMR drivers, and ensuring transparent reporting of any potential conflicts of interest. The study does not seem to have any overt competing interests based on the information provided, but the authors should disclose any relevant relationships or funding sources in the interest of transparency.</p>	

**PART 2:**

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

**Reviewer Details:**

<p><b>Name:</b></p>	<p><b>S. Ilavarasan</b></p>
<p><b>Department, University &amp; Country</b></p>	<p><b>Indian Veterinary Research Institute, India</b></p>