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| Journal Name: | **[Archives of Current Research International](https://journalacri.com/index.php/ACRI)** |
| Manuscript Number: | **Ms\_ACRI\_138738** |
| Title of the Manuscript: | **Addressing Bacterial Resistance Selection in Antibiotic-Enriched Animal Drinking Water: Findings from an Experimental Study for Chicken Farmss** |
| Type of the Article | **Original Research Article** |

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| PART 1: Comments | | |
|  | Reviewer’s comment **Artificial Intelligence (AI) generated or assisted review comments are strictly prohibited during peer review.** | Author’s Feedback *(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. A minimum of 3-4 sentences may be required for this part.** | This manuscript presents important experimental findings on bacterial resistance selection in antibiotic-enriched animal drinking water, which is a significant global health concern. By investigating the time-dependent and species-dependent nature of resistance development, the study provides crucial insights for managing antibiotic use in chicken farms. The findings highlight the necessity of understanding the major bacterial types targeted and the specific antibiotics used before implementing interventions, thereby linking biosafety and biosecurity in addressing resistance traits. This research contributes to the scientific community by offering evidence-based strategies to mitigate antimicrobial resistance, which is currently estimated to cause 700,000 deaths annually worldwide and could rise to 10 million by 2050 if effective policies are not implemented. |  |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | No, the title of the article is not suitable.  Here are a few alternative titles:  \* "Time-Dependent Bacterial Resistance Selection in Antibiotic-Enriched Chicken Drinking Water"  \* "Impact of Antibiotic Exposure Duration on Bacterial Resistance in Chicken Farm Drinking Water" |  |
| 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. | The abstract is largely comprehensive, hitting the key aspects of the study: aim, methods, key findings, and conclusion. However, to enhance its comprehensiveness and clarity for a broader scientific audience, I have a few suggestions for additions:  Suggestions for Addition to the Abstract:  \* Specific bacterial strains identified in initial susceptibility tests: The abstract mentions the isolation of Escherichia coli, Morganella morganii, and Proteus mirabilis from animal drinking water, but it only mentions "initial susceptibility tests" without providing any details about their outcomes. Including a brief statement about whether these isolates were initially found to be resistant or susceptible to common antibiotics would add valuable context.  \* Method for assessing susceptibility patterns in antibiotic-free environments: While it states "susceptibility patterns based on the inhibition diameters," it would be beneficial to explicitly state that an "increase in inhibition diameter" indicates "increased susceptibility" in these antibiotic-free conditions. This clarifies the "gradual increased susceptibility" finding.  \* Quantification of "gradual decreased susceptibility": The abstract states "susceptibility gradually decreased as exposure time extended." While Figure 3 illustrates this, a brief quantifiable example or a general trend (e.g., "inhibition diameters reduced for most antibiotics after 24h exposure") would strengthen this point in the abstract. |  |
| Is the manuscript scientifically, correct? Please write here. | Yes |  |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | Yes |  |
| Is the language/English quality of the article suitable for scholarly communications? | the language and English quality of the article are not consistently suitable for scholarly communication. While the content conveys scientific information, there are numerous instances of grammatical errors, awkward phrasing, and imprecise language that detract from its scholarly presentation. |  |
| Optional/General comments |  |  |

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| **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?** | *(If yes, Kindly please write down the ethical issues here in details)* |  |

**Reviewer details:**

**Hadeel Mahdi Hussein, Tikrit University, Iraq**