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| Journal Name: | [**Asian Journal of Microbiology and Biotechnology**](https://www.ikprress.org/index.php/AJMAB) |
| Manuscript Number: | **Ms\_AJMAB\_13526** |
| Title of the Manuscript: | **ISOLATION AND IDENTIFICATION OF SULPHATE-REDUCING BACTERIA IMPLICATED IN MICROBIOLOGICALLY INFLUENCED CORROSION OF GALVANISED STEEL IN SEA WATER** |
| Type of the 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 study reveals how sulfate-reducing bacteria corrode galvanized steel in seawater, helping improve marine infrastructure durability. By identifying key corrosive bacteria, it enables better anti-corrosion solutions for engineers and industries. The findings bridge microbiology and materials science, offering practical insights for combating microbial corrosion. | Thank you for your comment |
| **Is the title of the article suitable?**  **(If not please suggest an alternative title)** | Here's a more focused alternative that better reflects the study's specific contributions:  **Suggested Improved Title:** "Sulfate-Reducing Bacteria (SRB) in Seawater: Isolation, Identification, and Their Role in Accelerating Galvanized Steel Corrosion"  "Microbiologically Influenced Corrosion of Galvanized Steel by Sulfate-Reducing Bacteria in Marine Environments" | Yes, Thank you for your comment |
| **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 current abstract is detailed but could be improved for better clarity, conciseness, and scientific impact. | Yes, Thank you for your comment |
| **Is the manuscript scientifically, correct? Please write here.** | Yes | Yes |
| **Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.** | The references are relevant but somewhat limited in both quantity (only 15 cited works) and recency (mostly pre-2020, with only 4 from 2023-2024). Add 5–6 recent references (2021–2025) to strengthen novelty. | Yes |
| **Is the language/English quality of the article suitable for scholarly communications?** | Revise language and structure to improve flow. | Yes |
| **Optional/General** comments | The study offers valuable insights into the role of sulfate-reducing bacteria (SRB) in microbiologically influenced corrosion and presents potentially significant findings. However, it requires major revisions to address key shortcomings in statistical analysis, methodological detail, and depth of discussion. Improvements in data rigor, experimental reproducibility, and contextualization within existing literature are necessary to fully support the conclusions. With comprehensive revisions, the manuscript has the potential to make a meaningful contribution to the field.  1: The manuscript lacks logical flow, especially in transitions between Methods and Results. Reorganize sections in the standard sequence (Introduction → Methods → Results → Discussion) and add subheadings to improve readability.  2: No statistical tests are reported to support correlations between microbial activity, physicochemical changes, and corrosion. Include appropriate analyses (e.g., correlation, regression) to validate observed trends and strengthen conclusions.  3: Key experimental details such as sample size, measurement error margins, and control setup are missing. Clearly report replicates, uncertainties, and control conditions in the Methods section to ensure reproducibility.  4: The roles of Aeromonas and Mycobacterium in MIC are underexplored, and mechanistic explanations (e.g., metabolite production, biofilm effects) are lacking. Expand discussion with mechanistic insights and comparisons to relevant literature (e.g., Liu et al., 2023).  5: The text contains grammatical errors (e.g., "Microbiologyically") and awkward phrasing. A thorough professional edit is recommended to improve clarity, precision, and academic tone.  6: Figure 2 lacks labeled axes and units; Table 2 is fragmented and hard to follow. Revise all figures and tables to be self-explanatory, properly formatted, and clearly referenced in the text.  7: Some citations (e.g., Plocin et al., 2024) are not directly relevant to MIC. Prioritize references focused on microbial corrosion and biofilm-related metal degradation (e.g., Xu et al., 2023; Little et al., 2020) to strengthen scientific context.  8: Consider including SEM/EDS imaging to provide visual evidence of biofilm formation and localized corrosion damage. This would strengthen the link between microbial activity and material degradation. | Thank you for your comment |

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| **PART 2:** | | |
|  | **Reviewer’s comment** | **Author’s Feedback** (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)* | No ethical issue. |