

Review Form 1.6

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| Journal Name: | Chemical Science International Journal |
| Manuscript Number: | Ms_CSIJ_89311 |
| Title of the Manuscript: | Phytochemical Constituent and Anticorrosion Properties of the Root Extract of Phyllanthus mellerianus (Nvo-nkwu) Plant on Mild Steel in 1.5M HCl Medium |
| Type of the Article | Original Research Article |

General guideline for 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 guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journalcsij.com/index.php/CSIJ/editorial-policy>)

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PART 1: Review Comments

| | 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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| Compulsory REVISION comments | <p>Thank you for giving me the chance to review this interesting work.</p> <p>The work is dealing with “Phytochemical Constituent and Anticorrosion Properties of the Root Extract of <i>Phyllanthus mellerianus</i> (Nvo-nkwu) Plant on Mild Steel in 1.5M HCl Medium”. This work is very important for readers to improve their awareness of pollution control, especially in water and wastewater research. The paper is carefully prepared but for more benefits of this work, some comments must be fixed before the publication of this paper.</p> <ul style="list-style-type: none">• The title is precise for the core message of this research.• The introduction covered the period from 1973 to 2022 and this literature is satisfactory but for more benefit for the readers, kindly add some related references, especially in the microstructure <ol style="list-style-type: none">1. Y. Reda, H. M.Yehia, A. M.El-Shamy, Microstructural and mechanical properties of Al-Zn alloy 7075 during RRA and triple aging, Egyptian Journal of Petroleum 31 (2022) 9–13 https://doi.org/10.1016/j.ejpe.2021.12.0012. R. El-Bindary, A. El-Shamy, M.A. Elhadek, A. Nassef, (2021). Statistical Analysis of the Inhibition of Carbon Steel Corrosion in 3.5 wt.% NaCl Solution Using Lawsonia Extract, Port-Said Engineering Research Journal 25(1), 101-113. DOI: 10.21608/pserj.2020.35020.10503. A. M. El-Shamy, M. A. El-Hadek, A. E. Nassef, R. A. El-Bindary, (2020). Box-Behnken design to enhance the corrosion resistance of high strength steel alloy in 3.5 wt.% NaCl solution, Mor. J. Chem. 8(4), 788-800. https://doi.org/10.48317/IMIST.PRSM/morjchem-v8i4.215944. A. M. El-Shamy, M. A. El-Hadek, A. E. Nassef, R. A. El-Bindary, (2020). Optimization of the influencing variables on the corrosion property of steel alloy 4130 in 3.5 wt.% NaCl solution, Journal of Chemistry 2020, Article ID 9212491. https://doi.org/10.1155/2020/92124915. Elshafie A. Gad, Ashraf M. El-Shamy, Mechanism of Corrosion and Microbial Corrosion of 1,3-Dibutyl Thiourea Using the Quantum Chemical Calculations, Journal of Bio- and Tribo-Corrosion, (2022) 8:71. https://doi.org/10.1007/s40735-022-00669-x6. Amal M. Abdel-Karim, Ashraf M. El-Shamy, Y. Reda, (2022). Corrosion | |

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| | <p>and Stress Corrosion Resistance of Al Zn Alloy 7075 by Nano-Polymeric Coatings, Journal of Bio- and Tribo-Corrosion 8:57. https://doi.org/10.1007/s40735-022-00656-2</p> <p>7. Amal M. Abdel-Karim, Ashraf M. El-Shamy, A Review on Green Corrosion Inhibitors for Protection of Archeological Metal Artifacts, Journal of Bio- and Tribo-Corrosion (2022) 8:35. https://doi.org/10.1007/s40735-022-00636-6</p> <ul style="list-style-type: none"> • The experimental work is satisfied. • The results are promising, and I have no comments about this part of the research. • The conclusion is well written but needs one more sentence to highlight the benefits of this work in application because it is cost-effective and efficient in pollution control • The references are listed according to the requirements of the journal. • The paper contains some minor editing and grammatical mistakes. Please see the revised paper. <p>I recommend publishing this paper after minor revision.</p> | |
| Minor REVISION comments | | |
| Optional/General comments | | |

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> | |

Reviewer Details:

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| Name: | Ashraf El-Shamy |
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