

### Review Form 3

Journal Name:	<a href="#">Asian Journal of Environment &amp; Ecology</a>
Manuscript Number:	Ms_AJEE_124192
Title of the Manuscript:	Evaluation of Phytoremediation Potential of some Leguminous Crops on Crude Oil Polluted Soil in the Niger Delta Area
Type of the 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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#### **Important Policies Regarding Peer Review**

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**PART 1: Review Comments**

<b>Compulsory</b> REVISION comments	Reviewer's comment	<b>Author's Feedback</b> (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 is important in the discourse of remediating oil polluted sites using natural solutions. Particularly in the Niger Delta Region of Nigeria which is faced by oil spills and crude oil contaminated soils, the study focus on phytoremediation using leguminous plants which are cost-effective and sustainable. I like the manuscript because it evaluates multiple plant and highlights eco-friendly methods.	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes, it is suitable	
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.	Key result on effect on soil properties was not included. I also suggest a conclusion and/or recommendation at the end.	
Are subsections and structure of the manuscript appropriate?	Materials and method: Data analysis method should be included. This should include description of the regression models and other statistical method employed. Result: No significant effect of the source of variation for a factorial experiment (Main effect and Interaction effect) was presented. Discussion: Discuss potential economic and environmental benefits of using phytoremediation as opposed to chemical treatments or traditional reclamation methods. Conclusion did not include findings on the effects on soil properties Recommendations should be included.	
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.	The manuscript is scientifically sound as it details experimental design is clear and appropriate. The findings regarding the differential tolerance of leguminous species to oil pollution and their potential for soil remediation are well-supported by data.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =	Some recent references, however, more contemporary studies can be included. Njoku, K. L., Akinola, M. O., & Oboh, B. O. (2016). Phytoremediation of crude oil contaminated soil using <i>Glycine max</i> (Merill) through Phytoaccumulation or Rhizosphere effect. <i>J. Biol. Environ. Sci.</i> , 10(30), 115-124 Oyedepi, A. A., & Oyedepi, O. F. (2022). Assessment of phytoremediation potentials of <i>Albizia procera</i> (Roxb.) Benth, A leguminous plant species in crude oil-polluted soil rehabilitation. <i>FUW Trends in Science &amp; Technology Journal</i> , 7(3), 48-54. Hussein, Z. S., Hamido, N., Hegazy, A. K., El-Dessouky, M. A., Mohamed, N. H., & Safwat, G. (2022). Phytoremediation of crude petroleum oil pollution: a review. <i>Egyptian Journal of Botany</i> , 62(3), 611-640.	

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Minor REVISION comments <b>Is the language/English quality of the article suitable for scholarly communications?</b>	The language is generally clear but could be refined for smoother readability in a few sections. Some grammatical issues should be addressed to ensure communication standards are met.	
<b>Optional/General</b> comments		

**PART 2:**

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

**Reviewer Details:**

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Department, University & Country	<b>University of Port Harcourt, Nigeria</b>