



SDI Review Form 1.6

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	Ms_IJPSS_29745
Title of the Manuscript:	Assessment of some Tropical Plants for use in the Phytoremediation of Petroleum Contaminated Soil: Effects of Remediation on Soil Physical and Chemical Properties
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:

(<http://www.sciencedomain.org/page.php?id=sdi-general-editorial-policy#Peer-Review-Guideline>)



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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)
Compulsory REVISION comments	<p>Please check the journal's website for instructions. Abstract with sub-headings and <i>P</i>-values From the journal's website:</p> <p>SAMPLE ABSTRACT:</p> <p>Aims: Here clearly write the aims of this study. Sample: To correlate platelet count, splenic index (SI), platelet count/spleen diameter ratio and portal-systemic venous collaterals with the presence of esophageal varices in advanced liver disease to validate other screening parameters.</p> <p>Study design: Mention the design of the study here.</p> <p>Place and Duration of Study: Sample: Department of Medicine (Medical Unit IV) and Department of Radiology, Services Institute of Medical Sciences (SIMS), Services Hospital Lahore, between June 2009 and July 2010.</p> <p>Methodology: Please write main points of the research methodology applied. Sample: We included 63 patients (40 men, 23 women; age range 18-75 years) with liver cirrhosis and portal hypertension, with or without the medical history of gastrointestinal bleeding. Clinical as well as hematological examination (platelet count) and ultrasonography (gray as well as color Doppler scale including splenic index and splenorenal/ pancreaticoduodenal collaterals)</p>	



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	<p>was done besides upper GI endoscopy for esophageal varices. Platelet count/spleen diameter ratio was also calculated.</p> <p>Results: Kindly make sure to include relevant statistics here, such as sample sizes, response rates, P-values or Confidence Intervals. Do not just say "there were differences between the groups". sample: Out of 63 patients, 36 patients with small varices (F1/F2) and 27 with larger (F3) varices were detected on endoscope. Significant increase in mean splenic index from low (86.7 +/- 27.4) to high (94.7 +/- 27.7) grade varices was documented. Opposite trend was found with platelets (120.2 +/- 63.5 to 69.8 +/- 36.1) and platelets/ splenic diameter ratio (1676.7 to 824.6) declining significantly. Logistic regression showed splenic collaterals and platelets are significantly but negatively associated with esophageal varices grades.</p> <p>Conclusion: Non-invasive independent predictors for screening esophageal varices may decrease medical as well as financial burden, hence improving the management of cirrhotic patients. These predictors, however, need further work to validate reliability.</p> <p>Guideline for Reporting P values: P is always italicized and capitalized.</p> <p>i) Correct expression: (P = .05). Wrong Expression: (P < .05), unless P < .001. ii) The P value should be expressed to 2 digits whether or not it is significant. If P < .01, it should be expressed to 3 digits. iii) When rounding, 3 digits is acceptable if rounding would change the significance of a</p>	
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	<p>value (eg, $P = .049$ rounded to .05).</p> <p>iv) Expressing P to more than 3 significant digits does not add useful information since precise P values with extreme results are sensitive to biases or departures from the statistical model.</p> <p>v) Reporting actual P values avoids this problem of interpretation. P values should not be listed as not significant (NS) since, for meta-analysis, the actual values are important and not providing exact P values is a form of incomplete reporting.</p> <p>vi) Do not use 0 before the decimal point for statistical values P, alpha, and beta because they cannot equal 1.</p> <p>References must be listed at the end of the manuscript and numbered in the order that they appear in the text. Every reference referred in the text must also present in the reference list and vice versa. In the text, citations should be indicated by the reference number in brackets [3].</p> <p>Suggestions per line:</p> <p>Ln 11/74 soya bean (small letters) or soy bean? Stick to one term throughout the paper.</p> <p>Ln 34 widespread (one word)</p> <p>Ln 38 Marmirol and McCutcheon (though the reference style is wrong, you should only have a number.</p> <p>Ln 47-49 – need a reference for your statements</p> <p>Ln 50 – crude oil is LESS dense than water. Unless you are talking about heavy crude oil – but I suggest you nevertheless give values or references.</p> <p>Ln 71 Anikwe 2006 in list</p> <p>Ln 77/80 – Amendment means the act of changing for the better; improvement. I would therefore suggest that you change ‘amendments’ to ‘treatments’, since petroleum will surely never be an improvement for the soil. This for the whole paper.</p>	
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	<p>Ln 81 Full stop after experiments ■</p> <p>Ln 83/84 ... demarcated by a one meter pathway.</p> <p>Ln 85 ... into eight sub-plots each,</p> <p>Ln 92 No full stop after 50 cm. A total of 24 plants were ...</p> <p>Ln 93 Grasses like such as vetiver grass...</p> <p>Ln 98-99 ... in two split doses at planting and 21 days after planting (DAP).</p> <p>Ln 108 More than one analysis, therefore analyses.</p> <p>Ln 114 Reference for the Van Bemmeler factor</p> <p>Ln 119 Aluminium and hydrogen....</p> <p>Ln 132 Gomez or Gomes? Check spelling. List different.</p> <p>Ln 140/151 ... Table 1 indicates...Table 2 reveals that the... (reference to a table/figure always in present tense; all the rest in past tense.</p> <p>Lines 150-177: The following authors are not in the reference list: Rasiah, West, Amadi, Mbah, Awobajo, Ayodej.</p> <p>Ln 152/182/198/211/214/220 Correct P-value format</p> <p>Ln 161 parked?? packed perhaps??</p> <p>Ln 162: Lower bulk densities obtained ... are OR Lower bulk density obtained ... is</p> <p>Ln 179 The lowest moisture...</p> <p>Ln 185-6 Soils with... 1.6-1.7 g cm⁻³ show (OR soil with... shows...)</p> <p>Ln Keep to the same format: K cm³ hr⁻¹(also in tables)</p>	
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	<p>Not good practice to start a sentence with a reference to a figure/table. Rather describe the results and refer to the table in brackets. E.g. Petroleum treated soil had significantly the highest organic matter content (0.79%) while the control treatment had the lowest organic matter content (0.54%) (Table 3). Soil planted with African yam bean had the lowest organic matter content (0.32%)</p> <p>As to the content lines 195-208 I am confused. You say in line 196 that the soil from the control treatment had the lowest organic matter content compared to (not with) the other soils. Yet, in line 199 you say that the soil in which the African yam beans were grown had the lowest organic matter content. It seems as if you are referring to the means of the untreated and treated soils, but you don't say it. Be clear in your discussions. I would not suggest using the means of the contaminated soil that was planted to different crops, since the individual crops should have had an influence on the soil. Vetiver (and note the spelling) is known for decontaminating soils. You should have 10 treatments (eight different plants) and two controls (one with only petroleum added and one with no petroleum and no plants – though I don't see that in your trial lay-out.). I suggest you rewrite your discussion accordingly.</p> <p>Ln 205/221 Katsivela not in reference list</p> <p>Ln 229 ...contained lower lesser total porosity</p>	
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	<p>value (43.75%)...</p> <p>In 233 ... than the contaminated soils.</p> <p>Kb 236 At 90 days after planting, the cultivation of soya bean is recommended.... This sentence doesn't make sense. It seems as if you plant it with something and then 90 days later you plant soya beans?? I think you meant that the cultivation of soya beans is recommended on petroleum contaminated soils, since the analyses of soil samples taken 90 days after planting, showed that the soya beans suppressed the bulk density and increased the available potassium etc. Also: your statement that treating the soil with petroleum is not recommended – does this actually happen? Or is it a case of spills or other pollution that were never intended? Also, wasn't 90 days too short a period to really see the effect of the petroleum on the plants? How did the crops perform? Did it bear fruit (beans, groundnuts etc.) or did it grow well and produce biomass (grasses)? Did the plants really decontaminate the soil? How do you know? I would suggest that planting one crop on all the treated soils (where you had the different plants) after a season or more and comparing the yield would have given an indication of the ability of the specific plant's capability of decontaminating the soil. How else would you gauge if the plant is capable of phytoremediation? If you only look at the chemical and physical properties it is still not a</p>	
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	<p>given that the soil is actually remedied. Even so – is the performance of soya beans in this regard significantly better than the other plants?</p> <p>Tables: As per instruction from the journal: Tables & figures should be placed inside the text. Tables and figures should be presented as per their appearance in the text.</p> <p>I do not understand your tables. You have contaminated soil, soil and plant mean for all the properties you measured. Does that mean that you took the pH, moisture etc. from the plants themselves? Your text does not state that. If not, what does ‘plant mean’ means? The soil where these plants were planted? Then say so.</p> <p>Vetiver grass</p> <p>Fisher’s least....</p> <p>Table 1 – what are the units of Ca, Mg, K, Na??</p> <p>Table 3 KCl and not KCL</p>	
<u>Minor</u> REVISION comments		
<u>Optional/General</u> comments		

As per the guideline of editorial office we have followed VANCOUVER reference style for our paper.

Kindly see the following link: <http://sciencedomain.org/archives/20>

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