



SDI Review Form 1.6

PART 1:

Journal Name:	International Journal of Plant & Soil Science
Manuscript Number:	MS: 2013_IJPSS_3121
Title of the Manuscript:	Soil Properties Dynamics at Varying Heating Temperatures during Agricultural burning.

General guideline for Peer Review process is available in this link:

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

- This form has total 9 parts. Kindly note that you should use all the parts of this review form.



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PART 2: 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>Abstract: No statistical analysis to buttress the points stressed.</p> <p>Objective: In line 57 change the present tense to past tense because the experiment had been concluded.</p> <p>In line 58 separate the word 'thefire' to 'the fire'</p> <p>In line 70 change 'we prepared' to 'were prepar4ed'</p> <p>Line 72 we imposed is not scientific enough. Change the phrase.</p> <p>Line 73 change inoder to 'in order'.</p> <p>Materials and method:</p> <p>How did Authors measured the intensity of heat generated during the burning? Only temperature would not be enough. How clean the plots before biomass were applied? What type of biomass did the authors used? What was the basis of using 50, 100 and 150 kg/m³ ? How are we sure that introduction of biomass at this level were error free? Did farmers in Nigeria weigh biomass before they burn their biomass? If this experiment eventually succeeds, how do you convince them to weigh their biomass if I really get the message you are passing across?</p> <p>SPSS software is mainly used in social sciences for statistical analysis. Why not SAS?</p> <p>How many times did you carried out the experiment?</p> <p>Experiments need to be repeated for authentication purpose before it could be published in international journals.</p> <p>Result and Discussion:</p>	<ol style="list-style-type: none"> 1. Abstract – corrected 2. Line 57- corrected 3. Line 58 – separated 4. Line 70 – changed 5. Line 72- changed 6. Line 73 – changed 7. Well, incidentally we measured only temperature produced from different level of biomass. 8. The entire plots were cleared manually cleared and the trashes packed before applying the treatments 9. To produce different levels of fire intensities 10. To a large extent, our



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	<p>In this section, there is no need of showing non significant results.</p> <p>Justify sentence in lines 149 – 151</p> <p>Were 50, 100 and 150 kg/m³ not your treatments while 0 should represent non burnt plot? I thought you should compare the level of burning with the non-burnt plot - not finding their means. There was no doubt that burning would have impact on soil physical, biological and chemical properties. You claimed that you quickly removed ash after burning, how true is this statement? Are you saying you did not allow the ash to cool before you packed it? Even during burning, ash would have changed many soil properties. (Check lines 166 – 168). Also the increase in soil cations might have been as a result of the ash because ash is a liming material. Including data in the result makes the reading boring. What is the essence of tables? Why not used DMRT in tables 2 and 3?</p>	<p>measurements were error free. At least with the repetition of this experiment for four growing seasons.</p> <p>11. Actually, farmers in Nigeria don't measure biomass before they burn. This research tried to quantify the changes in soil properties resulting from continuous slash-and-burn of agricultural farmland that is commonly practiced among farmers in Nigeria and it implications on soil productivity. Thus, encouraging them to practice conservation agriculture on arable land.</p> <p>12. I disagree that SPSS software is mainly used for social science statistical analysis. Many soil researchers used SPSS in their analysis e.g. Romkens et. al,- Erodibility of selected clay sub soils in relation to physical and chemical properties. <i>American Journal of soil science Vol 41</i>. If I can get SAS software, I would like to use it</p> <p>13. The experiment lasted for four</p>
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		<p>growing seasons</p> <p>14. Immediately after burning, CaCO_3 contained in the ashes is occluded and could only be released to the soil when water is added to it. Therefore, soil sample collected from a burnt plot before mineralization of the CaCO_3 in the ashes gives information about modifications induced in soil physico-chemical parameters by experimental fires.</p>
<u>Minor</u> REVISION comments		All the comments have been addressed in the manuscript and coloured yellow.
<u>Optional/General</u> comments	Many findings in the research are already known facts.	