



**SDI Review Form 1.6**

Journal Name:	<a href="#">International Journal of Plant &amp; Soil Science</a>
Manuscript Number:	<b>Ms_IJPSS_50026</b>
Title of the Manuscript:	<b>EDAPHIC FACTORS AND FLOODING PERIODICITY DETERMINING FOREST TYPES IN A TOPOGRAPHIC GRADIENT IN THE NORTHERN BRAZILIAN AMAZONIA</b>
Type of the 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)
<b>Compulsory</b> REVISION comments	<p>The authors have examined the abiotic factors associated with three forest types (treed and forested shade-loving, area of ecological tension, and open ombrophylous) along an elevation gradient (31m to 64.8m above sea level) in northern Amazonia.</p> <p>The methods included (1) characterizing the flooding regime in each of these forest types, (2) taking measurements of soil samples, and (3) characterizing the forest structure in each forest type. The soil sampling consists of one profile for each forest type – a 1m wide, 1m long, 80cm deep profile. Soil type, pH, organic matter and several nutrients and micronutrients were measured at three depths in each profile.</p> <p>The results are interesting as a general survey of forest types and their abiotic factors associated with them. However, there is no statistical design and treatment of data. Only one profile was measured in each forest type. So the scientific value is somewhat limited. The authors should discuss whether measurement at only one point in each forest type are adequate for drawing conclusions.</p> <p>The flooding regime seems to be important in shaping the types of forest, as the authors mention. The authors should explain more about the relationship between the flooding and both soil and tree type. They should start out with some hypothesis for how flooding regime affects forest type, based on other work on Amazonian flood forests, and test this with their data. The authors state that 'seasonal flooding and sediment trawling are part of the process of formation of the main forest types' (Lines 329-330), but they should explain more of the reasons.</p> <p>Lines 144-147. "All information was aggregated into an ecosystem conceptual model that faithfully followed the observed topographic gradient". Although the authors describe in some detail the abiotic conditions associated with each forest type, I did not see an overall ecosystem conceptual model. This comment is related to the one above. The authors should attempt to make a clear integrative explanation of how the changing flooding regime along the elevation gradient affects the ecosystems. There are a few sentences in the Conclusion, but these should be expanded.</p> <p>Overall, I think this manuscript is interesting, providing data from a region where scientific study has been lacking and is difficult to work in. However, it needs improvement in the ways stated above. In particular, although the measurements appear to be accurate, some explanation is needed of why only one soil profile was taken per forest type. Also a more detailed explanation, or hypothesis, for how the various flooding regimes shape the soil and forest characteristics is needed.</p> <p>The English needs a lot of improvement. The manuscript is generally understandable, but the English is not standard in many places. Ordinarily, I would suggest specific changes.</p>	The paper has been modified
<b>Minor</b> REVISION comments		
<b>Optional/General</b> 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)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	