

"1. The review PDF does not include any of the tables or figures. I was able to download each table and figure individually [staff note - this was a technical issue that has been corrected]; however there are no Figure captions available. The captions are needed to understand and evaluate the figures.

2. The authors say they used ANOVA followed by Tukey's HSD as well as Kruskall-Wallis tests to check for statistically significant differences but none of these results are reported in the text, figures or tables. The Results refer to x being higher than y when they were likely not statistically different (no P-values are given) and therefore they should not be referred to as being different.

3. Looking at table 1, there appears to be only one spatial sample from *Pinus massoniana* forest and one sample for Unmanaged tea garden. In that case, it is not possible to draw generalized conclusions about differences between the tea garden, unmanaged tea garden, and *Pinus massoniana* forest. The number of independent replicate samples should be conveyed on Table 1. Reviewer #2 pointed out "The experimental design is not clear and does not provide sufficient information." And although some information has been added, if the samples were not replicated in the different habitat types then no valid claims can be made regarding differences among habitat types.

4. Figure 9 and corresponding tables are not described at all in the Results – instead, they are only described just before the concluding paragraph of the manuscript. The statistical algorithm used to produce this analysis (Figure 9, tables 2 and 3) needs to be described in the Methods and the reason for producing this analysis needs to be described somewhere in the manuscript. It's not clear to me why 5 decimal places are presented on the PCA loadings – this precision is meaningless.

5. Title – It is not clear why the title refers to "Spatial variation" since there was no analysis of spatial variation among the tea farm samples. Does "spatial variation" refer to the *Pinus* forest versus unmanaged areas versus the managed tea farm area? In that case I think it is not spatial variation per se that is being analyzed but instead you might consider a title something like "Interaction of Soil pH, Organic Matter, Exchangeable Acidity, and Cation Exchange Capacity in a managed tea farm, with comparison to neighboring unmanaged areas and *Pinus* forest"; however as pointed out above, if you don't have replicated samples from the unmanaged areas and *Pinus* forest then meaningful inferences cannot be made.

6. Oddly, spatial maps of various variables recorded on the farm are presented as Supplemental figures, but no meaning description / discussion of spatial patterns was presented in Results. Furthermore, the statistical algorithm used to interpolate the values shown on these maps has not been described in the Methods.

7. The English language of this manuscript needs to be carefully edited before it can be considered for publication. There are many basic English errors that can be easily corrected, but more troubling are instances where I could not understand the meaning of phrases or sentences. A few examples: First sentence of the Abstract: what is a "long-planted history tea garden"? L 90 What does it mean to "provide a scientific theoretical basis for tea garden management for green sustainability"? Methods: What is meant by "sampling soil depth arrived at 130 cm"? Having the manuscript edited by a professional service would address these issues.

8. Small comment: Figure S1 refers to pine forest but none of the photos illustrate the pine forest."