

## Review of: "The impact of land use practice on the spatial variability of soil physicochemical Properties at Wondo Genet, Southern Ethiopia"

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Potential competing interests: No potential competing interests to declare.

The current study is interesting as it observed the various physicochemical characteristics of soil under various Land use types and tried to observe their spatial variability at the Wondo Genet in Ethiopia. Although the study tried to analyze and compile a lot of data, it is often very hard to follow and should be edited to make it more understandable. There are a few edits that I would like to suggest:

- 1. In the abstract and throughout the text keep your abbreviations consistent. Define it on the first appearance and then use the abbreviations consistently. For example, in the abstract, you mentioned NF as a natural forest without defining it
- 2. There is no mention of spatial variability of the soil properties in your abstract and it seemed discontinued at the end.
- 3. In your introduction, paragraphs 1 and 2 felt disconnected.
- 4. If possible, please denote the various land-use classes in your map with different colors.
- 5. The subsection "Soil Sampling Techniques" is not clear and needs to be rewritten. Please clearly mention the number of samples that you collected from each land use type and each depth.
- 6. Describe the various parameters that you used in your equations (section 2.3). For example, I suppose NF is nonfumigated, however, you need to define them in your text.
- 7. What does HUSD stands for, please elaborate in the text.
- 8. Check the porosity values for agricultural land in your results.
- 9. In addition, if there is no significant difference among your land uses for the porosity values, you cannot write that your natural forest had more porosity as compared to agricultural land.
- 10. Your statistical analysis is not clear and please describe them precisely in your materials and method section.
- 11. The discussion on the natural forest having low macro-aggregates is not clear and needs to be rephrased.
- 12. You need to describe what you did in your section 3.3 in your materials and methods. Did you use the girded soil database of HUSD to do ordinary kriging for your study site? The methodology is not clear.
- 13. I am still confused about the parameters that you measured and that you obtained from girded soil database of HUSD.
- 14. The description of the nugget/sill ratio is not clear and needs rephrasing.
- 15. There is no mention of rhizobia anywhere in the text before the conclusion.
- 16. Overall, I am failing to find your major conclusions from the study and the section must be rewritten.

