

Reply on RC1

Ling Mao et al.

Author comment on "Soil nutrient contents and stoichiometry within aggregate size classes varied with tea plantation age and soil depth in southern Guangxi in China" by Ling Mao et al., SOIL Discuss., <https://doi.org/10.5194/soil-2021-147-AC1>, 2022

Dear editor Jocelyn Lavallee and reviewer #1,

We really appreciate you to give us the chance of revision. Thanks for your comments concerning our manuscript entitled "Dynamics of soil aggregate-related stoichiometric characteristics with tea-planting age and soil depth in the southern Guangxi of China" (SOIL-2021-147). We have made the corrections which we hope will meet with your approval. The revised portions are marked in blue ink in the paper. The main corrections and our responds to the comments are as follows.

Reviewer #1:

The manuscript (Ref. No. soil-2021-147) reported an interesting work on varied stoichiometric characteristics resulted from different tea growing age and soil depth. Such topic fits the scope of the journal very well.

Response: Thank you so much for your time and comments.

However, there are some concerns deserve further clarification before publication. The title needs to be polished due to the unclear expression, e.g., Stoichiometric characteristics of ... varied with tea-planting age and soil depth at an aggregate scale in the southern Guangxi of China.

Response: Revised (L 1-2).

Numerous syntaxes and/or grammar problems or misuses existed in the current version, which makes great difficulties in understanding the main points. Native English editing service for the draft was strongly recommended.

Response: We have invited a native English speaker to edit the manuscript in order to improve the logical flow and make the relevant expressions more clear, and also carefully inspected and corrected the details such as word spelling, document information, and English grammar. Please see the revised manuscript.

The research needs or gap for the present study should be clearly indicated and justified as well as the work at the aggregate scale that maybe a potentially important innovative aspect.

Response: Revised (L 79-90). As the basic unites of soil structure, soil aggregates are complex ensembles composed of primary particles as well as organic matter (OM). According to the differences of binding agents, soil aggregates can be classified into microaggregates (< 0.25 mm) and macroaggregates (> 0.25 mm). In general, persistent binding agents (like humified OM and polyvalent metal cation complexes) contribute to the binding of primary particles into microaggregates. Differently, temporary binding agents (like fungal hyphae, plant roots, and polysaccharides) aggregating with microaggregates conduces to the formation of macroaggregates. As shown above, soil aggregates with various sizes exert different abilities in the supply and reserve of soil OC and nutrients. Thus, to improve the comprehension about the structure and function of soil ecosystems, more efforts should be made to observe the soil stoichiometric characteristics at the aggregate scales.

Some detailed comments for your reference:

P1 Line9, "... a sort of effective way ..." should be "... an effective way...".

Response: Revised (L 9).

P1 Line10, "this study was aim to..." changes to "the aim of this study was to...", or "this study was aimed to...", better?

Response: Revised (L 10).

P1 Line 15-16, in various sized aggregates should be in different sizes of aggregates. In different aged tea plantations? Confusing expression. Among different ages of tea gardens or cultivations?

Response: Revised (L 15-16).

P2 Line 27, "an appropriate increase" could be more quantitative or specific?

Response: We deleted this inaccurate sentence.

P2 Line 28, During the process of tea planting, tea growth, better?

Response: Revised (L 24).

P2 Line 31, tea plant should be tea plants or trees. Same as the remaining context.

Response: Revised (L 27 and elsewhere).

We believe that we have revised and improved this manuscript to the best of our abilities. In addition, we have made further changes according to the useful and helpful comments you have provided. We sincerely appreciate your time and effort on our behalf, and we truly hope that these corrections will meet with your approval.

Best regards,

Shengqiang Wang

Please also note the supplement to this comment:

<https://soil.copernicus.org/preprints/soil-2021-147/soil-2021-147-AC1-supplement.pdf>