Review of: "Analyzing the Effects of Organic Amendments on Soil Erosion Dynamics: A Comprehensive Study on Application Methods and Timing"

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Potential competing interests: No potential competing interests to declare.

Dear Editor

The introduction of your article provides a comprehensive overview of the topic of soil erosion and its global implications. It effectively highlights the urgency of addressing soil erosion due to its cascading effects on agriculture, environmental conservation, and sustainable management of natural resources.

The introduction also does a good job of introducing soil amendments as a promising strategy to combat soil erosion. The distinction between organic and inorganic amendments and their respective roles in enhancing soil quality is well explained. The mention of specific materials and their impact on soil fertility adds depth to the discussion.

The section discussing the importance of organic amendments in arid and semi-arid regions is particularly compelling. It underscores the necessity of these amendments in areas where soil organic matter is often deficient. The inclusion of specific examples of experiments demonstrating the efficacy of these amendments in enhancing soil properties and preventing erosion strengthens your argument.

The results suggested that the use of soil amendments can have a significant impact on soil composition, potentially helping in mitigating soil erosion and enhancing soil fertility. These findings can contribute valuable insights to the field of soil conservation and sustainable agriculture.

The following are some of the points to note

1. Lack of data on soil characterization and also on the thermodynamic and kinetic parameters that might affect the absorption capacity of the soil.

2. The is lack of information on the chemical composition of the soil, the stability of the soil and the influence of pH of the soil activity

3. Lack of statistical data like root mean square, standard deviation or confidence intervals

Suggestion:

1. **Statistical Analysis**: Including statistical analysis of the results, such as standard deviations or confidence intervals,

would give a better sense of the variability and reliability of your findings

2. Soil characterizations are requested: XRD, FTIR, SEM-EDS, TGA in order to provide information on the microstructure of the soil, soil texture, stability, morphology, and soil composition, as well as the absorption capacity of the soil.
3. Further data should be given on the thermodynamic and kinetic parameters
4. The author can use this article for guidance “Soil Use and Management, 00, 1–16.

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96: 1358–1369. wileyonlinelibrary.com https://doi.org/10.1002/jctb.6657,