

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

Kimiya Yousefi¹

¹ East Carolina University

Potential competing interests: No potential competing interests to declare.

At abstract is better to pay attention to these parts:

Redundancy:

The phrase "This study compares soil amendment methods for their impact on runoff, erosion, and sedimentation" is repeated towards the end of the abstract. This repetition could be seen as redundant.

Conciseness:

The sentence "Various factors, including the type and duration of soil amendment interaction and application method, can significantly influence soil properties and loss" could be streamlined for brevity.

Transition:

The transition between the description of the study design/methods and the specific findings might need improvement for better flow.

While these are relatively minor issues, addressing them could enhance the overall clarity and readability of the abstract.

At the introduction, some sentences are complex and could be simplified for better readability.

"In regions characterized by aridity and semi-aridity, where soil organic matter is often deficient due to insufficient vegetation or inadequate return of plant residues to the soil, the application of suitable and cost-effective organic amendments becomes indispensable."

"The erosion process, intricate and interconnected, is significantly influenced by factors like soil organic carbon, aggregate stability, hydraulic conductivity, water retention ability, and overall soil fertility."

"This study aims to fill that gap by investigating the impact of various amendments, including biochar from barberry, vermicompost, poultry manure, and wheat straw, applied through complete mixing and surface spreading at 60-day intervals over 180 days, on runoff and soil loss."

Ensure a smooth transition between the general discussion on soil amendments and the specific focus on barberry biochar, vermicompost, poultry manure, and wheat straw. This transition could be enhanced for clearer comprehension.

Methods and materials

Please upload a higher-quality picture of Fig. 1; the numbers are challenging to read clearly.

Fig. 2, Please correct the shape of the picture and size, and also it is better to add more details to the caption instead of using the sign.

2.3. Acquisition of soil amendments and determination of their characteristics

Please rewrite this part; the sentence should be written clearly, and the parameters did not have the unit.

2.4. Characteristics of the rainfall simulator

Fig. 3, Please correct the shape of the picture and size, and also it is better to add more details to the caption instead of using the sign.

2.5. Preparation of treatments and assessment of soil and erosion characteristics

Also, here, parameters did not have the units.

Results:

The study claims to have replicated each experiment four times to bolster the robustness and reliability of the findings. However, it is evident that there is a need for a more lucid representation of the data. The inclusion of graphs and tables is crucial, and it is recommended to incorporate standard deviation (SD) values for each set of data. This addition would enhance the clarity and interpretability of the results. Are the data the mean of the data? Please write clearly in the caption for each of the table and graph.