

Dear Editor

Thank you for your invitation for reviewing the article ‘Changes in raised bed soil biological activity and other soil properties of Longan orchards over long time periods in the Vietnamese Mekong Delta’. In my opinion, this study is an important contribution to the field of fruit sciences. However, I have observed many drawbacks that should be rectified before the paper is accepted for publication. My suggested revisions are as follows:

1. Title: I feel that the present title is relatively long, and may be considered for change to ‘Long-term changes in soil biological activity and other properties of raised beds in longan orchards’. However, this is conditional to journal norms, if permitted to do so.
2. Abstract: The abstract should be presented under different sub-sections such as Introduction, Materials and Methods, Key Findings, Conclusions and Future directions.
3. I did not find any key words next to abstract. The same should be provided and key words should not have similarity with the words given in the paper title.
4. Overall, English language is satisfactory and the article has been presented in a clear manner. However, there are some minor grammatical mistakes that should be corrected before revised submission.
5. Vague sentences should be avoided and rephrased wherever applicable. For example, the information given in lines 136-138 reads as: The most common productive cultivars grown in the Mekong River Delta provinces include with a mean value of 10 t year⁻¹. Here, it should be simply written as mean productivity or average productivity.
6. The information furnished in lines 142-150 under the head site description is incomplete and should be supplemented using the relevant references for the claims/data: 1. The study site has an altitude 0.6-1.2 m above sea level; receiving 1450-1504 mm year⁻¹ annual precipitation with a flooding season between September and November; 2. The Mekong River’s influence during the Holocene retrograde marine sedimentation processes left behind marine sandy soils and saline soils from saltwater intrusion.
7. Lines 153-154 mention the fact that ‘Soil samples were obtained in July, 2023 with a total of 20 soil samples collected from 4 different groups of Longan orchards based on age of the raised bed.’ Here, obtained term is appropriate. Further, a sample size of 20 seems to be very small and may not be considered representative of the whole study area. Please explain your line of argument.
8. The formula given for soil porosity needs to be checked and verified.
9. Overall, the information presented under the head ‘Soil sample collection’ is ambiguous and needs to be revised for a better understanding.

10. The make, model and country of origin for each and every equipment used in the study should be clearly mentioned.
11. The description under the head 'Soil enzyme activities' (lines 227-239) is very short and should be elaborated. Relevant references should be added wherever applicable.
12. The unit for electrical conductivity should be in dS/m and not as $\mu\text{S cm}^{-1}$; wherever applicable throughout the manuscript. Accordingly, the values will also change.
13. In statistical analysis, PCA description should be elaborated. It should be mentioned whether PCA was performed on mean data or replicated data. Similarly, was any rotation like Varimax applied? Did authors check the suitability of data for PCA using appropriate statistical tests such as Bartlett's test and KMO test?
14. The resolution of pictures given in Fig. 3 (PCA) and Fig. 4 (correlation) is not good. If possible, these should be replaced with better resolution pics. Again, the variables on PCA biplot should be in acronyms to avoid overcrowding and improve clarity. Their expanded forms should be placed in the caption. Same is the case with correlation plot. The correlation coefficients given in lower diagonal may be presented as Supplementary information and only the figure (upper diagonal) may be given and interpreted.
15. The information presented in Table 1 may be moved to supplementary material.
16. There are some minor mistakes in the Results and Discussion part. These should be critically looked into and rectified. Discussion should be improved further.
17. In the conclusions part, authors should add a few lines about the future directions of research without adding any reference/insight.