

Comments

This study not only investigated P species but also studied the relevant enzymes and microbes responsible for P transformation. It provides valuable information for understanding P cycling based on long-term fertilization management with different treatments. Thus, I would like to recommend it for publication after resolving the following problems:

1. The hypothesis seemed to have no meaning. A different response is obvious, but what specific difference should be given? Line 83-85. Please revise accordingly.
2. More information about the experimental field and design should be given since it is a long-term experiment (i.e., 38 years). Also, the previous studies involved in this research area should be properly cited. Line 93-99.
3. So, the author only conducted sampling once? The sampling details should be given. Line 102.
4. How many hours were used for determining moisture? Line 109-110
5. The pretreatment method for OC determination should be given. Line 110.
6. The solid-liquid ratio of soil extracts should be presented in line 112.
7. The author should explain why they determine acid and alkaline phosphatase activity in this study. Also, what kind of phosphatase is produced by microbes? Line 124-126.
8. In section 3 Results, there are many citations of others' studies. I think

it is better to describe the result of this study, while the comparison or explanation of this study should be presented in the Discussion. Please check Section 3 thoroughly and make this section clear and concise.

9. “bacteria” in line 372 should be “bacterial”.

10. Although the author proposed hypotheses in the introduction, they did not answer the hypothesis. In the Discussion, the author should mention whether they achieved the goal through this study.

11. Conclusion should be more concise.