

BGD-11-17729-2014 (MS No. bg-2014-570)

Soil moisture and land use are major determinants of soil microbial community composition and biomass at a regional scale in northeastern China

Biogeosciences Discuss

Dear editor,

Thank you for your positive decision on our manuscript entitled “Soil moisture and land use are major determinants of soil microbial community composition and biomass at a regional scale in northeastern China”. We found the comments from editor are very constructive and helpful in improving the quality of this manuscript. We revised the manuscript based on comments and suggestions given by the editor. All changes were highlighted with color.

Below you will find our responses to the comments.

We appreciate your consideration of our manuscript.

Sincerely,

Linna Ma, Renzhong Wang

Responses to editor:

1) L30, what do you mean by spatial structure? need to be a bit more precise.

We added a bit more precise information in MS. Please see [L30](#).

2) L40, in undisturbed ecosystems? see citation later

Yes, in undisturbed soils.

3) L43, need to specify in the studied region

Thank you. We added studied region in the MS. Please see [L45](#).

4) L45, it's not a general rule, isn't it? It's the case in the study region who seems

deeply influenced by irrigated agriculture. Need to be specified.

We revised these sentences. Please see [L41-45](#).

5) L64, what is this type of forest, specify a bit.

Please see [L62](#).

6) L66, Your scales are not always clear: here larger scale means larger than regional scale since this is the scale described until now. But later in the paragraph L68 you again discuss about regional scale

Thank you. We corrected these mistakes in MS. Please see [L67, 100, 115, 313, 365](#).

7) L291, Try to turn your writing to highlight the novelty of your work (or turn it more positive: allow to generalize a trend)

We rewrote this sentence. Please see [L291-292](#).

8) L298, in which conditions?

Please see [L298-299](#).

9) L301, why does this ratio has been proposed as a proxy of anaerobic conditions?

Please see [L302-303](#).

10) L338, yes but in the same time your results show that this soil property has few effect on communities structure...(next paragraph). The idea is interesting but try to find a rationale that does not contradict your results

We corrected this section. Please see [L340-342](#).

11) L346, you mean forest?

In this region, there is no forest. We mean wood and shrub. Please see [L349](#).

12) L352, Should be written: These results are consistent with the study of Drenovsky et al. (2010) who reported ...

Thank you. We corrected this mistake. Please see [L354-355](#).

13) L361, here the tense is not correct: could control and not "could controlled". but check whether I've well understood the meaning of the sentence

The word “control” was used instead of “controlled”. Please see [L364](#).

We appreciate these helpful comments and suggestions that have helped us improve the quality of our paper.