

Interactive comment on “Bryophyte-dominated biological soil crusts mitigate soil erosion in an early successional Chinese subtropical forest” by Steffen Seitz et al.

Steffen Seitz et al.

steffen.seitz@uni-tuebingen.de

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Thank you very much for taking the time to revise this manuscript and for giving this positive evaluation with constructive comments.

In this reply, we address your four general suggestions:

1. "While authors analyzed the influence of vegetation, soil, and terrain on biocrusts cover, they should emphasized the interactive impact of different factors, but not only single factor's influence"

- This work benefits from the large dataset of the BEF China project and we tried to include a high number of single influences. Nevertheless, we agree with you that

interactions of different factors are of high importance and more explanations regarding interactions are needed in the manuscript. We already tried to address this issue by using linear mixed effects models, which account for a combination of fixed and random effects. We will now widen the discussion part of the manuscript in this regard and try to better explain combined effects of single factors.

2. "the authors must quantitatively describe the effects of biocrusts on sediment and runoff, and also in the discussion section, they should compare their results with other researchers' conclusions"

- We agree with you and reviewer #2. More quantitative description will be added to the manuscript as well as further comparisons with other studies in particular. Nevertheless, we want to underline, that, as you and both other reviewers stated, there are only very few studies on biocrust development under forest in this climate to compare with.

3. "generally, this manuscript present too much emphasis on qualitative description instead of quantitative analysis"

- We will consider this point for a revised version of the manuscript and try to give this work a better-balanced ratio of quantitative and qualitative aspects (see comment above).

4. "the experiment was conducted in PR China, however, there is none of authors or affiliation from Chinese territory, which is not logical or even not permitted by China government"

- The BEF China project is a joint Sino-German research project with a high level of close cooperation between Chinese and German universities. Thus, our author's team also includes a Chinese national. Nevertheless, we agree that affiliations are not sufficiently presented and we are currently in contact with our Chinese partners for this purpose.

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Thus, we generally agree with your comments and we will carefully consider all your suggestions to improve the manuscript.

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Interactive
comment