

Algal richness of temperate biological soil crusts in forests depends on management intensity and correlates with inorganic phosphorus

General Comments:

I appreciate the revisions that the authors made - to me the manuscript is much more understandable and comprehensive now. The extended Introduction matches the research better. Included Figure 1 showing the sampled crusts and extended Table 1 definitely adds valuable information and help to understand the research done in this paper (and distinguish it from the research already published in Baumann et al., 2017). Changes in wording in various parts of the manuscript make the reading of the paper more fluent and the main message much clearer. However, since the inorganic P only “*showed a tendency to correlate with the richness*” I do not think this finding is bold enough to be shortened to the title to “*correlates*”. Thus, the title still provides slightly misleading information and should be adjusted.

Specific Comments:

p.2, l.18: *Seed germination of vascular plants strongly benefits from biogeochemical activities of BSCs.* – that is not completely true even in the desert areas, seed germination of some vascular plants can be actually suppressed by the presence of BSCs

Conclusion (p.10) l.8: maybe “tree fall” instead of “wind fall”?

Table 3: Would it be possible to include the direction of the studied effects to this table? So it was clear for the readers whether for example algae richness increased with increasing water content or vice versa directly from this table? This may also help the authors with making the title of the paper more specific and corresponding more accurately with their results.

Figure 3: B – does not show any features of *M. vaginatus* (actually this piece of filament could be nearly anything), please, replace it with more illustrative picture