

Here we listed our responses to the comments of reviewer 1 in tabular form. The page and line numbers of the referee's comments refer to the original manuscript: soil-2018-40, (<https://doi.org/10.5194/soil-2018-40>).

Page and line numbers of the Author's reply refer to the revised manuscript.

We want to thank the anonymous reviewer for the valuable input to improve the manuscript.

In behalf of all authors, Jörg Niederberger

Index	Referee's comment	Author's reply
1	Like in the comment 3 of Referee #1, I would also encourage the authors to try splitting the collective into non-calcareous and calcareous soils.	<p>Although we included a large number of sites in our survey, there were only 8 out of 143 sites with a soil pH above 6.5. This number is too low to develop robust statistical models for these calcareous soils.</p> <p>However, we checked also models excluding these 8 calcareous sites and compared them with models including all sites.</p> <p>Model results for the group of soil samples with pH < 6.5 (non-calcareous soils) did not change substantially when compared to models including all sites. We found only some minor improvements as well as some minor deterioration of model quality. Nevertheless, we could not observe changes in the selected predictor variables or in the dominant predictor variable for non-calcareous soils. See Methods section chapter 2.4, P5 L 13 ff.</p> <p>However, it would be very interesting to address the issue of calcareous soils in a future study with a different collective of soil samples.</p> <p>(See our response to Reviewer 1 comment 3)</p>
P4 L3:	Total C or SOC?	We changed that to SOC
P4 L10:	Is it the most recent whorl? According to the BZE II manual by picea abies the 7th (to the 15th) whorl is recommended for needle analysis.	Indeed, we used the most recent needles from the 7 th whorl. We clarified this in the text, Method section 2.1, P 4 L13 ff.
P4 L10:	Needle and leaves were collected at the same time span (2006-2008 for GFSI II) not "at the same time"? For example sampling of beech leaves is not recommended in the autumn.	Yes, leaf samples were not taken "at the same time" in the sense of a simultaneous sampling, but samples, that were used here, were taken in the same year. This has been corrected.
P12 L16:	Or is it an effect of the soil texture since most of the P. sylvestris plots have sandy soils? Than there would be soil type-specific instead of species-specific differences.	The differences are certainly not caused by tree species; it seems that we expressed this ambiguously. We rephrased the introductory paragraph of this chapter to clarify that soil parameters and P content were the driving factors of P supply of trees.

P12 L16:	P. abies, not Pi. abies	We changed this in the text.
Table S6:	Better SOC (under predictor variables) instead of Carbon (total?). In Table 3 it is called SOC.	We harmonized this and changed to SOC
	In some pages are unnecessary hyphens in the text (for example: P1 L11, P1 L15, P10 L18&20, P11 L 12)	We deleted unnecessary hyphens.