



Correction to: Establishing a soil quality index to assess the effect of thinning on soil quality in a Chinese fir plantation

Yuqian Ye¹ · Xiaodan Sun^{1,2} · Jiahao Zhao¹ · Meiquan Wang¹ · Qingwei Guan¹

Published online: 27 September 2022
© Springer-Verlag GmbH Germany, part of Springer Nature 2022

Correction to: European Journal of Forest Research
<https://doi.org/10.1007/s10342-022-01471-7>

In the original publication of the article, in “Conclusions”, the last sentence was published incorrectly. The correct sentence is given in this correction.

Conclusions

Our results indicated that thinning had a significant effect on soil quality, and MBN, SOC, and pH were identified as the key drivers of soil quality. Improved microclimatic conditions and substrate input in MIT and HIT may increase soil microbial activity and nutrient availability, thus increasing soil quality. These findings can help managers make better decisions regarding the maintenance of soil quality. Further, a 50–70% thinning intensity can be applied to improve soil quality in areas with characteristics similar to those of our experimental site. Our results also confirmed that MDS can be used to adequately represent TDS to calculate SQI. However, the application scope of the different methods must be carefully considered given the complexity and diversity of soil systems. Furthermore, in this study, the nonlinear weighted additive method showed the best performance. These findings notwithstanding, future studies on soil quality should involve more potential indicators of soil quality, such as soil structure, microbial community composition,

and soil macrofauna, and should also involve the exploration of the relationship between soil quality and stand productivity. Additionally, the applicability of SQIs to other tree species and soil types also needs further verification.

The original article has been corrected.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

The original article can be found online at <https://doi.org/10.1007/s10342-022-01471-7>.

✉ Qingwei Guan
guanjuan999@163.com

¹ College of Biology and the Environment, Nanjing Forestry University, Nanjing 210037, China

² Marine Ecology Research Center, First Institute of Oceanography, Ministry of Natural Resources, Qingdao 266061, China