



# Correction to: Phosphorus addition enhances gross microbial N cycling in phosphorus-poor soils: a $^{15}\text{N}$ study from two long-term fertilization experiments

Yi Cheng<sup>1</sup> · Jing Wang<sup>2</sup> · Nan Sun<sup>3</sup> · Minggang Xu<sup>3</sup> · Jinbo Zhang<sup>4,5</sup> · Zucong Cai<sup>1,6</sup> · Shenqiang Wang<sup>7</sup>

Published online: 9 July 2018

© Springer-Verlag GmbH Germany, part of Springer Nature 2018

## Correction to: Biology and fertility of soils

<https://doi.org/10.1007/s00374-018-1294-5>

The original version of this article, unfortunately, contained errors.

In Table 1 pH, Total C, Total N and C/N ratio should be 4.09 (0.01)b, 9.50 (0.13)ab, 1.24 (0.02)ab and 7.65 in NPK treatment in QY soil, respectively.

In the end of the first paragraph in Results and discussion section, “Soil total C concentration ranked as CK<NK<PK<NP<NPK and CK≤NK≤N≤NP≤NPK, and soil total N concentration ranked as CK≤NK<PK<NP<NPK and CK≤N≤NK<NP≤NPK, at the FQ and QY sites, respectively (Table 1). This indicated that long-term field fertilization increased soil total C and N concentrations at both sites. The comparison of data among the NP, NK, PK, and NPK treatments at FQ with those among the N, NK, NP, and NPK treatments at QY suggest that the soil total C and N accumulations were limited more easily by the availability of P, followed by N, and least by K at FQ site, and by **P at QY site.**” [bold text used to highlight problem area].

---

Yi Cheng and Jing Wang contributed equally to this work.

The online version of the original article can be found at <https://doi.org/10.1007/s00374-018-1294-5>

✉ Jinbo Zhang  
zhangjinbo@njnu.edu.cn

<sup>1</sup> School of Geography Sciences, Nanjing Normal University, Nanjing 210023, China

<sup>2</sup> College of Forestry, Nanjing Forestry University, Nanjing 210037, China

<sup>3</sup> Institute of Agricultural Resources and Regional Planning, Chinese Academy of Agricultural Sciences/National Engineering Laboratory for Improving Quality of Arable Land, Beijing 100081, China

<sup>4</sup> Jiangsu Center for Collaborative Innovation in Geographical Information Resource Development and Application, Nanjing 210023, China

<sup>5</sup> State Key Laboratory Cultivation Base of Geographical Environment Evolution (Jiangsu Province), Nanjing 210023, China

<sup>6</sup> Key Laboratory of Virtual Geographic Environment (Nanjing Normal University), Ministry of Education, Nanjing 210023, China

<sup>7</sup> State Key Laboratory of Soil and Sustainable Agriculture, Institute of Soil Science, Chinese Academy of Sciences, Nanjing 210008, China