

Supplementary materials

Supplementary Table 1 SOC content in the administrative villages of the five apple orchards in 1985.

Sites	Distance (km)	Administrative village	SOC(g/kg)
			1985
1	5	Chugezhuang	6.21
2	4	Matuan	6.30
3	2	Matuan	6.24
4	1	Masizhuang	6.42
5	0.5	Xiaozhuang	6.24

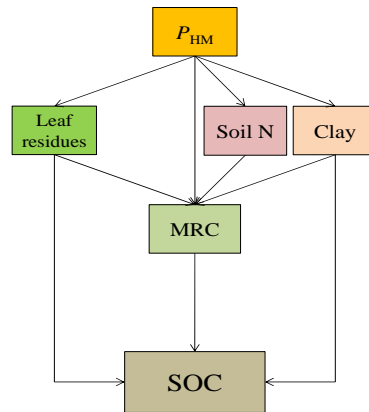
SOC content in 1985 was according to Yantai Soil Census Office (1985).

Before the foundation of Pb-Zn smelter (in 1985), the SOC content in the administrative village of the five orchards was in the range of 6.24 to 6.42 g kg⁻¹. The highest content of SOC was in the village nearest the Pb-Zn smelter, and now the soil was interpreted as the heavy pollution level.

Reference

Yantai Soil Census Office., 1985. Yantai Soil. Yantai Agricultural Press, Yantai.

Supplementary Fig.1



Supplementary Fig. 1 An a priori model for the structural equation modelling analysis to assess the complex interactions between heavy metal pollution and SOC through MRC. P_{HM} : the Nemerow composite index of soil heavy metal pollution; Leaf residues: the quantity of apple-leaf residues; Clay: soil clay content; Soil N: soil nitrogen; MRC: microbial residue carbon.