

Table S1 Detection limit and quantification limit

Element	Limit of Detection ($\text{mg}\cdot\text{kg}^{-1}$)	Limit of Quantitation ($\text{mg}\cdot\text{kg}^{-1}$)
V	0.7	2.8
Cd	0.07	0.28
Mn	0.7	2.8
Co	0.02	0.07
Ni	0.6	2
Cu	0.5	2.0
Zn	7	28
As	0.6	2.4
Se	0.4	1.6
Cr	2	8
Ba	1.1	4
Pb	0.5	2

Table S2 Background values of soil elements in Gansu Province, China

Element	Elemental Background Values of Soil ($\text{mg}\cdot\text{kg}^{-1}$)
V	81.9
Cr	70.2
Mn	653
Co	12.6
Ni	35.2
Cu	24.1
Zn	68.5
As	12.6
Se	0.11
Cd	0.12
Ba	446
Pb	18.8