

Supplementary materials

Heavy metal(loid)s pollution of agricultural soils and health risk assessment of consuming soybean and wheat in a typical non-ferrous metal mine area in Northeast China

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Table S1. Kolmogorov-Smirnov (K-S) test of normality for the data sets.

		DM soil	TM soil	DDS soil	Soybean	Wheat grains	Soybean BCF	Wheat grain BCF
<i>p</i> values	As	0.157	0.386	0.977	0.394	0.060	0.197	0.045
	Cd	0.811	0.160	0.932	0.481	0.127	0.100	0.211
	Cr	0.411	0.999	1.000	0.455	0.230	0.371	0.296
	Cu	0.317	0.960	0.997	0.869	0.266	0.474	0.200
	Hg	0.886	0.781	0.976	0.117	0.563	0.287	0.621
	Pb	0.548	0.063	0.999	0.918	0.354	0.684	0.121
	Zn	1.000	0.032	1.000	0.784	0.751	0.929	0.442
	Se	0.816	0.448	0.908	0.070	0.671	0.033	0.270
	Mo	0.865	0.785	1.000	0.430	0.636	0.322	0.194
	Mn	0.578	0.998	0.929	0.970	0.625	0.896	0.131

Notes: *p* values (>0.05) indicate the data set is normally distributed.

Table S2. Soil nutrients of surface soils.

Studied area	Statistical values	TN (mg/kg)	TP (%)	NH ₄ ⁺ -N (mg/kg)	NO ₃ ⁻ -N (mg/kg)	Olsen-P (mg/kg)	AK (mg/kg)
Duobaoshan mine (DM, <i>n</i> =12)	Min.	2500	0.13	5.64	3.58	38.4	160
	Max.	4430	0.20	8.93	8.80	120.0	349
	Mean.	3679	0.17	7.38	5.37	74.3	229
	S.D.	547	0.02	1.18	1.87	25.8	58
	CV ^a (%)	14.9%	13.7%	16.0%	34.8%	34.7%	25.4%
Tongshan mine (TM, <i>n</i> =10)	Min.	2310	0.11	5.43	3.58	17.6	138
	Max.	6380	0.18	8.60	8.68	107.0	504
	Mean.	3539	0.14	7.69	6.13	61.5	252
	S.D.	1501	0.02	0.93	1.83	34.7	110
	CV ^a (%)	42.4%	17.2%	12.0%	29.9%	56.5%	43.6%
Downstream of Duobaoshan stream (DDS, <i>n</i> =3)	Min.	3310	0.13	7.78	4.03	33.8	240
	Max.	6290	0.19	8.30	5.65	50.8	451
	Mean.	4330	0.15	8.04	5.05	43.3	314
	S.D.	1698	0.03	0.26	0.89	8.7	119
	CV ^a (%)	39.2%	21.0%	3.2%	17.5%	20.0%	37.7%
Tongshan min- ing area (KQ, <i>n</i> =1)		998	0.14	6.92	6.58	19.2	193

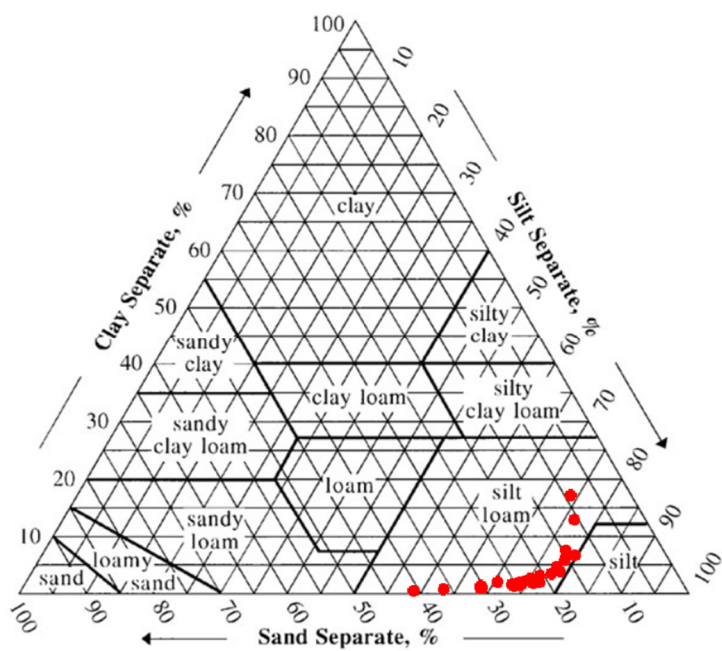


Figure S1. Ternary diagram for sand-silt-clay distribution of soils.