Biomonitoring of Potentially Toxic Elements in an Abandoned Mining Region using Taraxacum officinale: A Case Study on the "Tsar Asen" Mine in Bulgaria

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Table S1. Comparison of the ICP-MS results obtained of plant, soil and sediment reference materials with certified/literature values and experimentally determined detection limits.

Elem.	CRM DC73348 [µg g⁻¹]		SRM NIST 1547 [µg g⁻¹]		IAEA-Soil-5 [µg g⁻¹]		STSD-4 [µg g⁻¹]		DL [ng mL⁻¹]
	Experimental	Certified or published	Experimental	Certified or published	Experimental	Certified or published	Experimental	Certified or published	
Ag	0.025±0.005	0.027±0.006	0.0011±0.0004	0.0013; 0.003#	2.07±0.08	(1.9)	0.4±0.1	<0.5	0.065
Al	0.23±0.05%	0.214±0.022 %	246±7	248.9±6.5	8.2±0.2	8.19±0.28%	6.1±0.3%	6.40%	0.07
As	0.98±0.12	0.95±0.12	0.052±0.012	0.062±0.014	99.5±0.4	93.9±9.5	14±1	15	0.013
Ba	20±3	19±3	121±3	123.7±5.5	558±10	561±53	2073±120	2000	0.09
Be	0.047±0.012	0.056±0.014	0.0088±0.0002	0.0089#	1.72±0.04	1.77±0.27	1.65±1.7	1.7	0.011
Bi	0.022±0.005	(0.022)	0.012±0.001	0.0015; 0.002#	13.4±0.6	(12)	2.3±0.2	-	0.002
Ca [%]	2.23±0.14	2.22±0.13	1.52±0.02	1.559±0.016	2.32±0.16	(2.2)	2.7±0.2	2.85	0.78
Cd	0.12±0.06	0.14±0.06	0.024±0.003	0.0261±0.0022	1.45±0.06	(1.5)	1.1±0.2	-	0.002
Co	0.36±0.05	0.39±0.05	0.067±0.008	(0.07)	14.4±0.6	14.8±0.76	12±1	13	0.011
Cr	2.2±0.2	2.3±0.3	1.01±0.08	(1)	29.0±0.5	28.9±2.8	92±8	93	0.05
Cu	5.1±0.5	5.2±0.5	3.7±0.4	3.75±0.37	78.2±0.8	77.1±4.7	69±6	65	0.045
Fe	1050±57	1020±67	228±12	219.8±6.8	4.31±0.24	4.45±0.19%	4.4±0.3%	4.1%	1.3
K [%]	0.81±0.04	0.85±0.05	2.42±0.03	2.433±0.038	1.81±0.12	1.86±0.15	1.41±0.4	1.32	1.01
La	1.28±0.10	1.23±0.10	8.9±0.7	(9)	27.3±0.9	28.1±1.5	22.5±2.5	24	0.012
Mg [%]	0.27±0.02	0.287±0.018	0.44±0.01	0.432±0.015	1.6±0.1	(1.50)	1.29±0.03	1.24	0.03
Mn	53±5	58±6	95±3	97.8±1.8	873±25	852±37	1580±90	1520	0.011
Mo	0.25±0.04	0.26±0.04	0.058±0.007	0.0603±0.0068	1.81±0.05	(1.7)	3.8±0.2	<5	0.025
Na	1.08±0.11%	1.10±0.10%	27±3	23.8±1.6	1.89±0.14%	1.92±0.11%	2.2±0.2%	2.0%	1.98

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Ni	1.73±0.04	1.7±0.4	0.68±0.07	0.689±0.095	14.6±0.7	(13)	32±3	30	0.02
P	820±50	830±40	0.136±0.008%	1371±82	0.137±0.006%	(0.11)%	0.09±0.01%	0.087%	0.25
Pb	7.2±1.0	7.1±1.1	0.89±0.03	0.869±0.018	132±4	129±26	17±2	16	0.44
Rb	4.3±0.2	4.2±0.2	18.7±1.1	19.65±0.89	142±6	138±7.4	38±2	39	0.013
Sb	0.079±0.02	0.078±0.020	0.022±0.003	(0.02)	14.1±0.4	14.3±2.2	7.9±0.2	7.3	0.024
Se	0.18±0.01	0.184±0.013	0.13±0.01	0.120±0.017	1.6±0.3	(1.4)	20±2	-	0.11
Sn	0.31±0.06	0.33±0.08*	0.08±0.01	(<0.2); 0.089#	13.2±0.2	-	2.1±0.2	2	0.078
Th	0.38±0.02	0.37±0.02	0.038±0.002	(0.05); 0.039#	11.9±0.7	11.3±0.73	4.2±0.1	4.3	0.08
Ti	90±12	95±18	18±6	7.58#	0.51±0.04%	(0.47)%	4465±140	4530	1.5
Tl	0.023±0.002	0.021±0.002*	0.021±0.002	0.018; 0.020#	0.71±0.01	-	<0.012	-	0.012
U	0.11±0.01	(0.11)	0.012±0.002	(0.015); 0.010#	2.78±0.03	3.04±0.51	2.8±0.1	3	0.013
V	2.5±0.3	2.4±0.3	0.33±0.03	0.367±0.038	152±1	(151)	98±15	106	0.032
Zn	20.1±2.2	20.6±2.2	18.0±0.4	17.97±0.53	374±7	368±8.2	119±9	107	0.08

() Information value

*results obtained in [39]

#-results obtained in [45-47]
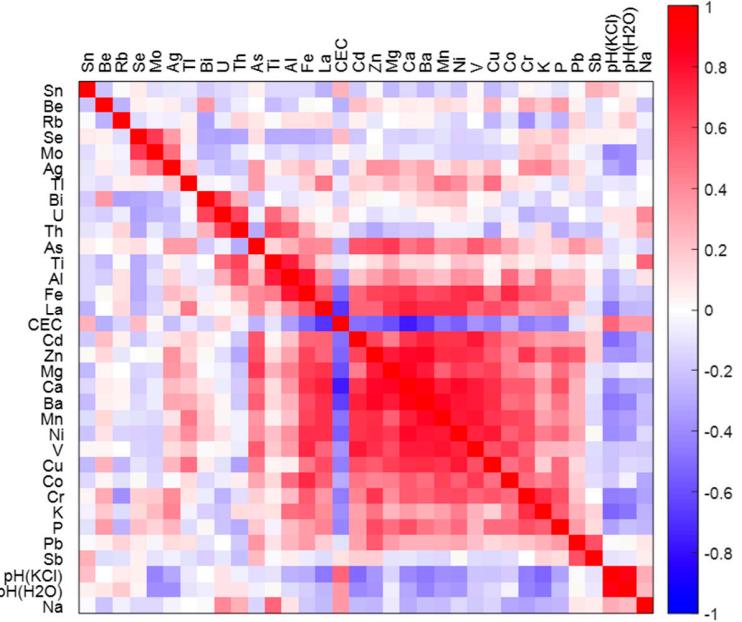
Figure S1. Correlation map of the TF, pH (H₂O), pH (KCl) and CEC (variables are reordered by absolute value of correlation coefficients).
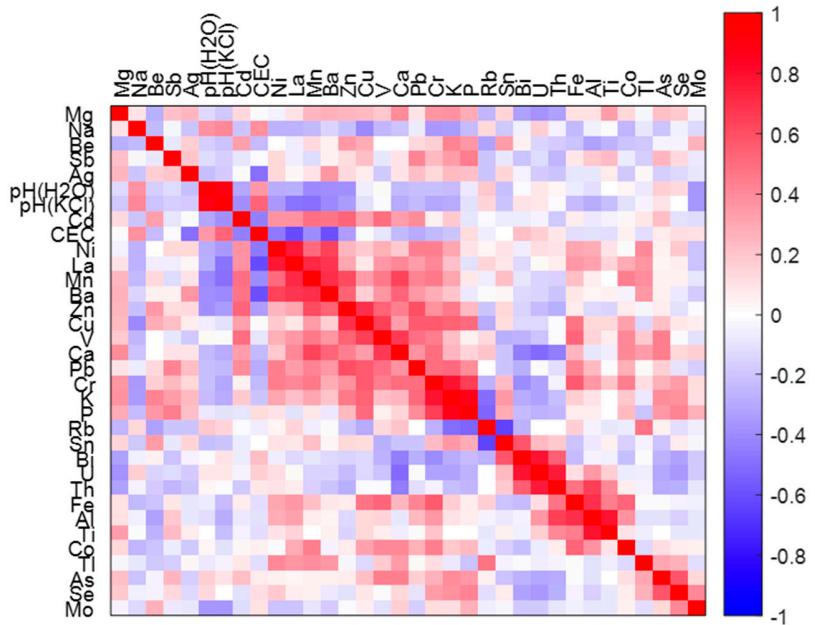
Figure S2. Correlation map of AF, pH (H₂O), pH (KCl) and CEC (variables are reordered by absolute value of correlation coefficients).