

Supplementary data for article:

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## Supplementary data

### Phytoextraction of metals by *Erigeron canadensis* L. from fly ash landfill of power plant „Kolubara“

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Table A. Results of determination of elements in reference material ERM-CD281 (rye grass)

elements	ERM-CD281 (rye grass)	
	Certified value $\pm$ uncertainty* (mg/kg)	Found value $\pm$ uncertainty (mg/kg)
As	0.042 $\pm$ 0.010	0.040 $\pm$ 0.012
Cd	0.120 $\pm$ 0.007	0.112 $\pm$ 0.008
Cr	24.8 $\pm$ 1.3	25.0 $\pm$ 0.2
Cu	10.2 $\pm$ 0.5	10.4 $\pm$ 0.3
Ni	15.2 $\pm$ 0.6	15.0 $\pm$ 0.2
Pb	1.67 $\pm$ 0.11	1.80 $\pm$ 0.05
Zn	30.5 $\pm$ 1.1	30.3 $\pm$ 0.7
	Additional material information (g/kg)	Found value (g/kg)
Fe	0.18	0.1795

\*Uncertainty for 95 % confidence level (coverage factor k = 2)

Table B. Correlation matrix for metals in root samples

	Al	As	Ba	Cd	Cr	Cu	Fe	Ni	Pb	Zn	Ag	Co
Al	1											
As	0.8037	1										
Ba	0.9318	0.8281	1									
Cd	0.0155	-0.0786	-0.0504	1								
Cr	0.9812	0.8292	0.9531	-0.1142	1							
Cu	0.3219	0.0282	0.2892	0.6750	0.2156	1						
Fe	0.9821	0.7929	0.9250	-0.0781	0.9921	0.2670	1					
Ni	0.8216	0.5384	0.7762	0.0002	0.8037	0.5834	0.8320	1				
Pb	-0.3077	-0.0440	-0.2172	-0.3592	-0.1905	-0.4236	-0.2179	-0.3228	1			
Zn	-0.0306	0.0085	0.0246	-0.0589	0.0475	0.1117	0.0538	0.1833	0.7075	1		
Ag	0.7815	0.5593	0.7687	-0.1039	0.7828	0.4989	0.8047	0.9792	-0.2125	0.2373	1	
Co	0.9471	0.6635	0.8748	-0.0932	0.9299	0.3966	0.9483	0.9124	-0.3390	-0.0314	0.8887	1

Table C. Correlation matrix for metals in stalk samples

	Al	As	Ba	Cd	Cr	Cu	Fe	Ni	Pb	Zn	Ag	Co
Al	1											
As	0.1662	1										
Ba	0.6956	0.1903	1									
Cd	-0.1956	-0.2457	0.2723	1								
Cr	0.9699	0.3169	0.7746	-0.1942	1							
Cu	0.6022	0.2922	0.9165	0.3128	0.7156	1						
Fe	0.9457	0.3687	0.7907	-0.2009	0.9902	0.75326	1					
Ni	0.5377	0.0913	0.7788	0.1768	0.6167	0.83373	0.6613	1				
Pb	0.5141	0.6175	0.6786	-0.0738	0.6780	0.67317	0.6803	0.4079	1			
Zn	0.4523	0.4598	0.7273	0.2477	0.6004	0.83836	0.6573	0.7966	0.6198	1		
Ag	0.6600	0.2882	0.8470	0.1316	0.7503	0.87985	0.8056	0.9124	0.6018	0.8475	1	
Co	0.8616	0.4708	0.7551	-0.2724	0.9453	0.75489	0.9723	0.6733	0.7307	0.7188	0.8202	1

Table D. Correlation matrix for metals in inflorescence samples

	Al	As	Ba	Cd	Cr	Cu	Fe	Ni	Pb	Zn	Ag	Co
Al	1											
As	-0.0979	1										
Ba	0.8560	-0.0121	1									
Cd	0.2420	-0.4051	0.5567	1								
Cr	0.9970	-0.0702	0.8747	0.2594	1							
Cu	0.1969	-0.5229	0.2795	0.7634	0.1846	1						
Fe	0.9907	-0.0242	0.8754	0.2549	0.9964	0.1553	1					
Ni	0.3958	-0.5372	0.3234	0.5901	0.3923	0.6780	0.3808	1				
Pb	0.5126	0.4823	0.5361	-0.0272	0.5570	-0.3767	0.6008	0.0434	1			
Zn	0.1910	-0.3254	0.4268	0.8166	0.2217	0.6778	0.2036	0.6702	0.0740	1		
Ag	0.4815	-0.4498	0.4578	0.6591	0.4890	0.6585	0.4869	0.9739	0.1908	0.6992	1	
Co	0.9675	0.0630	0.8503	0.1879	0.9739	0.0573	0.9787	0.3611	0.6527	0.1950	0.4588	1

Table E. Correlation matrix for metals in root, stalk and inflorescence samples with metals for each phase of sequential extraction of fly ash

	Root	Stalk	Inflorescence	I phase	II phase	III phase	IV phase	V phase	Total
Root	1								
Stalk	0.9912	1							
Inflorescence	0.9960	0.9971	1						
I phase	0.9579	0.9426	0.9396	1					
II phase	0.7508	0.7583	0.7866	0.5873	1				
III phase	0.9404	0.9387	0.9563	0.8330	0.9307	1			
IV phase	0.6083	0.6195	0.6526	0.4199	0.9805	0.8418	1		
V phase	0.9788	0.9737	0.9866	0.8954	0.8699	0.9900	0.7578	1	
Total	0.8365	0.8404	0.8652	0.6905	0.9899	0.9730	0.9437	0.9309	1

Table F. Statistical results of PLS-DA models for *Erigeron Canadensis* L. samples

	<b>Root</b>	<b>Stalk</b>	<b>Inflorescence</b>
$R^2_{\text{cal}}$	0.7484	0.6419	0.7604
$R^2_{\text{CV}}$	0.6824	0.6160	0.7163
<i>RMSEC</i>	0.2364	0.2820	0.2308
<i>RMSECV</i>	0.2771	0.2945	0.2528