

Table S16. Correlations among the levels of heavy metals and other elements in soil and root samples

		Correlations														
		Ro- Cd	Ro- Cr	Ro- Cu	Ro- Ni	Ro- Pb	Ro- Zn	Ro- Al	Ro- Fe	Ro- K	Ro- Na	Ro- Mg	Ro- Mn	Ro- P	Ro- S	Ro- Ti
S- Cd	r	0.026	-0.171	0.275	-0.140	0.529	0.509	-0.479	-.569*	0.539	0.006	0.065	0.027	0.283	0.460	-0.379
	p	0.933	0.577	0.363	0.649	0.063	0.075	0.097	0.042	0.057	0.984	0.832	0.931	0.349	0.114	0.202
S- Cr	r	-0.285	-0.184	0.013	-0.323	-0.242	-0.040	0.326	0.423	-0.035	0.040	0.012	0.319	0.031	0.217	0.108
	p	0.345	0.548	0.967	0.282	0.426	0.897	0.277	0.150	0.910	0.898	0.969	0.289	0.919	0.477	0.725
S- Cu	r	0.380	.761**	-0.469	.787**	-0.406	-.879**	-0.260	0.000	-0.467	-0.403	-0.426	-0.245	-0.301	-.612*	0.507
	p	0.201	0.003	0.106	0.001	0.168	0.000	0.391	0.999	0.108	0.173	0.146	0.420	0.317	0.026	0.077
S- Ni	r	-0.003	.628*	-0.343	0.405	-0.426	-.730**	0.062	0.289	-0.251	-0.108	-0.211	-0.027	-0.077	-0.468	0.394
	p	0.992	0.021	0.252	0.170	0.147	0.005	0.841	0.339	0.407	0.726	0.490	0.930	0.802	0.107	0.183
S- Pb	r	0.065	-0.465	0.533	-0.328	0.351	.652*	-0.120	-0.159	0.096	-0.002	0.070	0.227	0.021	0.144	-0.440
	p	0.833	0.109	0.061	0.273	0.240	0.016	0.696	0.604	0.754	0.995	0.819	0.455	0.945	0.640	0.133
S- Zn	r	-0.402	-.606*	0.105	-.734**	0.311	.652*	0.521	0.280	0.204	0.480	0.497	0.016	0.086	.567*	-0.390
	p	0.173	0.028	0.733	0.004	0.301	0.016	0.068	0.355	0.504	0.097	0.084	0.959	0.779	0.043	0.188
S- Al	r	0.000	.565*	-0.340	0.437	-0.480	-.755**	0.126	0.213	-0.201	-0.021	-0.129	-0.102	-0.020	-0.514	0.436
	p	0.999	0.044	0.256	0.135	0.097	0.003	0.683	0.486	0.510	0.945	0.675	0.739	0.949	0.072	0.137
S- Fe	r	0.019	.619*	-0.418	0.453	-0.438	-.775**	0.109	0.221	-0.243	-0.056	-0.171	-0.149	-0.083	-0.511	0.483
	p	0.951	0.024	0.155	0.120	0.134	0.002	0.724	0.469	0.424	0.856	0.576	0.626	0.788	0.074	0.095
S- K	r	-0.102	0.484	-0.309	0.333	-0.515	-.677*	0.207	0.284	-0.166	0.074	-0.070	-0.019	0.041	-0.387	0.345
	p	0.741	0.094	0.304	0.266	0.071	0.011	0.497	0.347	0.587	0.809	0.820	0.950	0.895	0.191	0.248
S- Na	r	0.437	0.173	-.580*	0.421	0.080	-0.327	-0.002	-0.231	-0.371	-0.166	-0.090	-.740**	-0.454	-0.343	0.493
	p	0.135	0.572	0.038	0.152	0.795	0.276	0.994	0.447	0.212	0.589	0.770	0.004	0.119	0.251	0.087
S- Mg	r	0.156	.647*	-0.403	.586*	-0.514	-.837**	0.005	0.193	-0.395	-0.189	-0.277	-0.114	-0.197	-0.517	0.454
	p	0.611	0.017	0.172	0.035	0.072	0.000	0.987	0.527	0.181	0.536	0.359	0.710	0.519	0.071	0.119
S- Mn	r	0.053	.607*	-0.304	0.519	-0.524	-.773**	0.029	0.133	-0.169	-0.081	-0.218	-0.100	-0.012	-.553*	0.449
	p	0.863	0.028	0.313	0.069	0.066	0.002	0.926	0.665	0.582	0.794	0.475	0.744	0.969	0.050	0.124
S- P	r	-0.042	0.448	-0.442	0.394	-.672*	-.671*	0.243	0.481	-0.390	-0.032	-0.130	-0.108	-0.100	-0.364	0.273
	p	0.892	0.124	0.130	0.183	0.012	0.012	0.424	0.096	0.188	0.916	0.671	0.725	0.745	0.221	0.367
S- S	r	-0.417	-0.080	-0.127	-0.141	-0.310	0.017	0.511	0.483	-0.087	0.375	0.348	-0.042	0.115	0.095	-0.161
	p	0.157	0.795	0.679	0.645	0.302	0.957	0.074	0.094	0.777	0.207	0.244	0.892	0.708	0.757	0.600
S- Ti	r	0.000	0.524	-0.257	0.463	-0.545	-.764**	0.095	0.223	-0.275	-0.017	-0.104	0.053	0.027	-0.485	0.347
	p	1.000	0.066	0.396	0.111	0.054	0.002	0.756	0.464	0.363	0.957	0.736	0.863	0.931	0.093	0.246

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

p shows the statistical significance of the correlations among the studied parameters