

**Table S1.** Pearson correlation coefficients (*r*) among elements concentrations in the shoots of maize plants var. Naudi at the 3–4 leaf stage after 41 days of cultivation in uncontaminated controls (Unt) and HM-metal-contaminated soil.

Unt											
	Ca	Cd	Co	Cu	K	Mg	Ni	P	Pb	S	Zn
Ca		0.21	-0.39	0.90	0.13	0.98*	0.37	0.55	0.05	-0.19	0.91
Cd	0.21		0.30	0.15	-0.92*	0.04	0.96*	-0.63	0.63	0.33	0.57
Co	-0.39	0.30		-0.0004	-0.60	-0.49	0.03	-0.22	0.87	0.98*	-0.11
Cu	0.90	0.15	-0.0004		0.07	0.87	0.20	0.67	0.36	0.22	0.85
K	0.13	-0.92*	-0.60	0.07		0.30	-0.78	0.74	-0.77	-0.57	-0.28
Mg	0.98*	0.04	-0.49	0.87	0.30		0.23	0.65	-0.09	-0.29	0.83
Ni	0.37	0.96*	0.03	0.20	-0.78	0.22		-0.56	0.43	0.07	0.67
P	0.55	-0.63	-0.22	0.67	0.74	0.65	-0.56		-0.19	-0.07	0.24
Pb	0.05	0.63	0.87	0.36	-0.77	-0.09	0.43	-0.19		0.93	0.38
S	-0.19	0.33	0.98*	0.22	-0.57	-0.29	0.07	-0.07	0.93		0.08
Zn	0.91	0.57	-0.11	0.85	-0.28	0.83	0.67	0.24	0.38	0.08	
HM											
	Ca	Cd	Co	Cu	K	Mg	Ni	P	Pb	S	Zn
Ca		0.86	0.99	0.99**	0.77	0.94	0.22	0.90	0.60	0.98*	0.74
Cd	0.86		0.93	0.80	0.85	0.98*	0.43	0.99**	0.13	0.74	0.48
Co	0.99*	0.93		0.96*	0.80	0.98*	0.26	0.96*	0.48	0.93	0.66
Cu	0.99**	0.80	0.96*		0.75	0.91	0.20	0.85	0.66	0.99**	0.78
K	0.77	0.85	0.80	0.75		0.87	0.78	0.82	0.04	0.75	0.78
Mg	0.94	0.98*	0.98*	0.91	0.87		0.39	0.99*	0.31	0.86	0.62
Ni	0.22	0.43	0.26	0.20	0.78	0.39		0.35	-0.46	0.24	0.55
P	0.90	0.99**	0.96*	0.85	0.82	0.99*	0.35		0.23	0.79	0.49
Pb	0.60	0.13	0.48	0.66	0.04	0.31	-0.46	0.23		0.69	0.48
S	0.98*	0.74	0.93	0.99**	0.75	0.86	0.24	0.79	0.69		0.85
Zn	0.73	0.48	0.66	0.78	0.78	0.62	0.55	0.49	0.48	0.85	

\* Significance at  $P \leq 0.05$  (in blue); \*\* Significance at  $P \leq 0.01$  (in red); ns: Not significant (in grey).

**Table S2.** Pearson correlation coefficients (*r*) between concentrations of each element in pore water and in shoots of maize plants var. Naudi at the 3–4 leaf stage after 41 days of cultivation in uncontaminated controls (Unt) and HM-metal-contaminated soil.

	r		
	All data	Unt	HM
Ca	0.85	0.00	0.54
Cd	0.09	n.d.	0.09
Co	0.78*	-0.95*	0.11
Cu	0.71*	0.61	-0.01
K	-0.93**	-0.08	-0.13
Mg	0.90**	-0.75	0.46
Ni	0.38	-0.40	-0.54
P	-0.27	0.30	-0.30
Pb	n.d.	n.d.	n.d.
S	0.88**	-0.07	0.45
Zn	0.50	0.91	-0.94*

\* Significance at  $P \leq 0.05$  (in blue); \*\* Significance at  $P \leq 0.01$  (in red); ns: Not significant (in grey).