

Supplemental Table S4. Correlation of the contents of Fe, Zn, Cu, Mn, As and Cd in maize kernel compared to soil.

Trait	Source	Df	Sum Sq	Mean Sq	F value	Pr(>F)	
Fe	Genotype	489	19054.00	38.97	2.49	6.20E-09	***
	Location	2	577.00	288.47	18.43	1.06E-07	***
	Genotype × Location	781	10087.00	12.91	0.83	0.93	
	Residuals	119	1862.00	15.65			
Zn	Genotype	489	70799.00	145.00	1.46	6.08E-03	**
	Location	2	7356.00	3678.00	37.06	2.65E-13	***
	Genotype × Location	782	33616.00	43.00	0.43	1.00	
	Residuals	122	12107.00	99.00			
Cu	Genotype	489	755.90	1.55	1.78	1.12E-04	***
	Location	2	317.90	158.96	182.95	< 2e-16	***
	Genotype × Location	777	692.50	0.89	1.03	0.44	
	Residuals	117	101.70	0.87			
Mn	Genotype	489	7031.00	14.40	2.82	5.12E-11	***
	Location	2	5296.00	2647.90	519.58	< 2e-16	***
	Genotype × Location	786	5063.00	6.40	1.26	0.05	
	Residuals	122	622.00	5.10			
As	Genotype	487	3.62	7.40E-03	30.82	<2e-16	***
	Location	2	2.74	1.37	5690.54	<2e-16	***
	Genotype × Location	704	4.75	6.80E-03	28.03	<2e-16	***
	Residuals	122	0.03	2.00E-04			
Cd	Genotype	487	2.08E-01	4.27E-04	2.16	4.42E-07	***
	Location	2	2.45E-03	1.23E-03	6.19	2.75E-03	**
	Genotype × Location	704	5.55E-02	7.89E-05	0.40	1.00	
	Residuals	122	2.42E-02	1.98E-04			