

Supplementary Data 1. Bioaccumulation factor and levels of Pb and Cd in roots of sunflower and soils at the University of Dodoma.

Pots and Metals	Root heavy metal (mg/kg)	Soil heavy metal (mg/kg)	BAF
S1 Pb	1870.30	2134.11	0.88
S2 Pb	265.00	338.91	0.78
S3 Pb	15.48	22.11	0.70
S4 Pb	76.97	102.63	0.75
S5 Pb	977.06	1221.33	0.80
S6 Pb	85.27	100.32	0.85
S7 Cd	2.79	4.29	0.65
S8 Cd	149.99	299.97	0.5
S9 Cd	18.67	45.54	0.41
S10 Cd	145.26	198.99	0.73
S11 Cd	44.63	91.08	0.49
S12 Cd	2.13	4.62	0.46
S13 Cd	0.19	0.99	0.19
S14 Cd	1.27	3.63	0.35
S15 Cd	0.24	1.32	0.18
S16 Cd	0.23	ND	NA
S17 Cd	0.23	0.99	0.23
S18 Cd	14	66.99	0.21
S13 Pb	0.17	ND	NA
S14 Pb	0.17	0.33	0.52
S15 Pb	0.79	1.98	0.40
S16 Pb	0.47	0.99	0.47
S17 Pb	15.8	32.34	0.49
S18 Pb	0.13	0.33	0.39

BAF = Bioaccumulation factor

Supplementary Data 2. Translocation factor and levels of Pb and Cd in leaves and roots of sunflower at the University of Dodoma.

Pots and metals	Leaf heavy metal (mg/kg)	Root heavy metal (mg/kg)	TF
S1 Pb	250.05	1870.30	0.13
S2 Pb	50	265.00	0.19
S3 Pb	6.29	15.48	0.41
S4 Pb	15.41	76.97	0.20
S5 Pb	198.73	977.06	0.20
S6 Pb	17.84	85.27	0.21
S7 Cd	3.10	2.79	1.11
S8 Cd	124.56	149.99	0.83
S9 Cd	22.41	18.67	1.20
S10 Cd	142.00	145.26	0.98
S11 Cd	60.90	44.63	1.36
S12 Cd	2.91	2.13	1.37
S13 Cd	0.41	0.19	2.16
S14 Cd	1.99	1.27	1.57

S15 Cd	0.51	0.24	2.13
S16 Cd	0.50	0.23	2.17
S17 Cd	0.742	0.23	3.23
S18 Cd	30.24	14	2.16
S13 Pb	ND	0.17	NA
S14 Pb	0.11	0.17	0.65
S15 Pb	1.25	0.79	1.58
S16 Pb	0.30	0.47	0.64
S17 Pb	9.96	15.8	0.63
S18 Pb	0.11	0.13	0.85

TF = Translocation factor