

Table S2. The heavy metal values in soils, crops and other WEPS in previous studies

Site	Media	Cu	Ni	Pb	Zn	Cd	Mn	Cr	Co	Hg	As	Fe	Al	Reference
Earth Crust Average	Soil	60	84	14	70	0.15	950	102	25	0.085	1.8	56300	82300	(Champion, 2008)
Iron and steel production area, China	Soil	42.42±23.41	33.76±8.42	82.77±58.40	267.62±123.50	0.3±0.11		91.19±22.98		0.13±0.10	10.64±0.99			(X. Zhang et al., 2022)
Paper and paperboard production area, Poland	Soil	12.38±7.801	9.05±5.557	0.21±0.972	47.03± 29.586			16.40±9.435		0.04±0.022				(Jaworska, Matuszczak, & Róžański, 2020)
	Plant (Pine Bark)	1.42-16.61	0-6.20	0-61.81	49.91-105.21			0		0.10-0.32				
Industrialized city, India	Soil	9.8-19.30		2.9-10.3	83-133	0.6-2.3								(Sharma, Agrawal, & Marshall, 2009)
	Lady's finger	9.5-21.8		0.3-1.2	29.6-39.2	0.5-1.2								
	Cauliflower	9.8-24.1		0.2-1.8	38.6-63.3	0.6-2.1								
	Palak	12.8-25.6		0.7-1.4	30.1-45.50	0.4-1.5								
Organized Industrial Zone, Turkey	Soil	95.88±157		246 ±1120	632 ±1562	4.41±23.37	1824±2523	118 ±236		0.1±0.37	9.53±9.25			(Yaylali-Abanuz, 2011)
Industrialized city, Italy	Agricultural Soil	7.3-354	11-303	0.4-46.2	29.3-139.9			9.3-192.8	7.3-34.6					(Facchinelli, Sacchi, & Mallen, 2001)
Industrialized city, Spain	Agricultural Soil	22.5±8.9	20.9±5.1	22.8±16.1	52.8±14.9	0.34±0.2	295±61	26.5±5.9	7.1±1.7			13608±3107		(Micó, Recatalá, Peris, & Sánchez, 2006)
Industrialized city, China	Soil	25.76±11.69		26.3±20.82	71.97±26.56	1.47±1.78		75.82±15.32		0.80±0.14	9.33±3.8			(Wang, Duan, & Wang, 2020)
Industrial Zone, UK	Soil	28.8	27.8	68.9	114	0.38	540	35.7		0.14	12.5			(Alloway, 2012)
Chemical industry park, China	Soil	466.00±15.40	69.30±4.32	394.00±5.43	1729.00±23.90			248.00±7.03						(T. Zhang et al., 2021)
Coal chemical industrial area, China	Soil			17.087±1.104		0.553±0.065		93.432±8.663		0.092±0.038	12.840±1.174			(K. Zhang, Qiang, & Liu, 2018)
Industrial Zone, India	Soil	4-55	6.5-32		14.1-672	0.06-176		103-191	3-11					(Govil, Reddy, & Krishna, 2001)
Iron and steel production area, Czech Republic	Soil	10.37-101.44		81-5286	40-9288	1.41-63.61								(Friedlova, 2010)
General	Uncontaminated soil	2–100	0.0–5	2–200	10–300	0.01–0.7	100-4000	5-3000	1–40			7000–55000		(Allaway, 1968)
	Agricultural crops	4–15	1.0	0.1–10	15–200	0.2–0.8	15–100	0.2–1.0	0.05–0.5					

Site	Media	Cu	Ni	Pb	Zn	Cd	Mn	Cr	Co	Hg	As	Fe	Al	Reference
Contaminated field trial	Soil	60.34	61.05	52.69	146.39	25.91								(Singh, Zacharias, Kalpana, & Mishra, 2012)
	Potato	26	27	43	96	30								
	Spinach	29	11	23	86	20								
	Fenugreek	88	5	36	64	4								
	Cauliflower	13	40	29	53	3								
	Okra	71	7	33	65	7								
Agricultural area, Spain	Soil	35.4 ± 8.1	19.9 ± 5.2	56.1 ± 84.3	76.8 ± 20.9	0.358 ± 0.221	408 ± 119	32.2 ± 9.3	7.9 ± 2.0			17487 ± 5270		(Peris, Micó, Recatalá, Sánchez, & Sánchez, 2007)
	Lettuce	13.2 ± 4.1	3.84 ± 7.24	1.99 ± 1.74	41.7 ± 16.6	1.47 ± 2.16	63 ± 37	3.35 ± 5.54	0.57 ± 0.54			431 ± 692		
	Soil	36.0 ± 10.8	19.4 ± 3.1	85.5 ± 251.8	94.5 ± 53.6	0.352 ± 0.154	379 ± 82	32.2 ± 5.2	7.3 ± 1.3			17 373 ± 3 515		
	Artichoke	8.7 ± 2.2	1.32 ± 0.92	0.28 ± 0.17	44.3 ± 12.3	0.24 ± 0.12	21 ± 4	0.68 ± 0.72	-			65 ± 43		
Minin area (Pyrite), China	Soil	271 ±132		190±79	349±201	3.13±1.22								(Zhuang, Zou, Li, & Li, 2009)
	Rice	6.34		1.44	34.8	0.82								
	Vegetables	10.4		1.53	89	1.99								
Nonferrous-metal production area, Bulgaria	Soil (0.5 km away)	95.7		200.3	536.1	12.2								(Angelova, Ivanova, & Ivanov, 2004)
	Sunflower*	5.9 ± 0.03		0.7 ± 0.004	41.9 ± 1.2	0.34 ± 0.06								
	Sesame*	5.3 ± 0.1		1.9 ± 0.2	26.2 ± 0.1	0.10 ± 0.08								
	Rapeseed*	4.6 ± 0.05		2.6 ± 0.2	66.9 ± 1.5	0.62 ± 0.02								
	Peanut*	7.3 ± 0.03		-	13.9 ± 0.2	1.1 ± 0.01								
	Soil (15 km away)	16.0		24.6	33.9	2.7								
	Sunflower*	6.6 ± 0.03		0.2 ± 0.001	21.7 ± 0.1	0.12 ± 0.01								
	Sesame*	3.8 ± 0.1		0.5 ± 0.04	20.4 ± 0.3	0.04 ± 0.001								
	Rapeseed*	5.2 ± 0.05		0.7 ± 0.04	33.6 ± 1.0	0.22 ± 0.05								
	Peanut*	3.7 ± 0.01		-	8.7 ± 0.1	0.1 ± 0.001								
General, Thailand	Thailand Soils	0.16-350	0.01-0.270	0.1-550	0.1-140	0.01-1.3		0.14-295	0.1-113	0.01-0.27	0.08-124			(Zarcinas, Pongsakul, McLaughlin, & Cozens, 2004)
	Agricultural soil	59-348	43.8-68.2	15.5-550	94.8-125	0.01-0.76		28.1-64		0.03-0.14	3-69.8			
	Cabbage	0.1-0.4	0.02-0.2	0.01-0.04	1.1-2.1	0.003-0.02		0.01-0.07		0.0002-0.0003	0.06-0.16			
	Agricultural soil	1.73-50	0.63-270	1.5-63.8	2.9-71.9	0.004-0.29		1.6-295		0.001-0.063	0.5-108			
	Corn	0.1-0.2	0.05-0.09	0.01	1.3-3.2	0.0001-0.002		0.01-0.04		0.0001-0.0004	<0.04			
General, Malaysia	Agricultural soil	2-49	3-45	11-90	10-136	0.01-0.35		5-64		0.02-0.33	4-39			(Zarcinas, Ishak, McLaughlin, & Cozens, 2004)
	Cabbage	0.005-20.3	0.015-0.26	0.0005-0.065	0.5-6.1	0.002-0.046		0.005-0.227		0.00005-0.0019	0.06-0.17			
	Agricultural soil	4-58	9-28	15-49	16-63	0.02-0.15		2-48		0.05-0.31	3-61			
	Corn	0.32-0.38	0.015-0.11	0.0005-0.01	0.6-2.2	0.002-0.012		0.005-0.021		0.00005-0.00039	0.04-0.08			
Forest, China	Soil	6.98-103.78		3.21-24.95	52.11-101.04	0.03-5.23	98-2744				2.1-8.61	290-4620		(Liu et al., 2015)
	Wild edible mushroom	1.53-35.68		0.48-10.18	8.71-59.53	0.17-2.88	1.54-110.5				0.76-11.86	2.00-826.50		
Roadsides, Jordan	Soil	33.44±1.5	144.45±2.2	15.33±2.2	42.12±4.1	1.77±1.2	215.74±7.3		25.63±2.1			475.44±9.4		(Semreen & Aboul-Enein, 2011)
	Wild edible mushroom	41.81±1.5	2.81±3.1	3.81±1.2	39.56±3.2	2.12±3.3	34.65±2.4		3.5±01			254.68±3.7		

Site	Media	Cu	Ni	Pb	Zn	Cd	Mn	Cr	Co	Hg	As	Fe	Al	Reference
Industrial Zone, Pakistan	Soil	8.88-357.40	41.4-57.5	2-29				40.24-927.2	7.26-24.73					(Malik, Husain, & Nazir, 2010)
	Portulaca oleracea Root	190.7-225.7	2.1-2.2	8-10	26.5-28.6			18.8-26.4	8.3-39.5					
	Portulaca oleracea Shoot	35.5-171.8	6.2-9.5	11-19	26.5-28.6			9.8-14.9	17.6-20.2					
Near waste disposal area, Italy	Soil	104-902	137-891		408-1150	0.95-1.72		459-1770						(Brunetti, Soler-Rovira, Farrag, & Senesi, 2009)
	Carduus pycnocephalus shoot	20.0-22.2	1.3-2.5	1.1-1.6	39.9-54.8	0.28-0.53		2.7-4.9						
	Carduus pycnocephalus root	12.3-13.6	0.8-0.9	0.9-1.1	23.1-24.4	0.29-0.39		7.3-8.2						
	Silybum marianum shoot	10.7-23.4	0.7-5.9	0.4-1.4	22.8-79.5	0.35-0.56		0.6-11.1						
	Silybum marianum root	21.3-30.1	0.3-2.6	0.4-1.8	28.4-57.9	0.15-0.35		2.0-11.3						
Industrial zone, Pakistan	Soil	73.5-576.7	124.8-710	103.7-3001		3.37-90.22		76.93- 677.2						(Ahmad, Gul, Irum, Manzoor, & Arshad, 2023)
	Roots of wild plants	11.87-278	8.14-93.8	25.85-670		2.49-45		31.16-245						
	Shoots of wild plants	20.5-386	30-79.5	8.77-1244		1.9-75		63.77-580						
Industrialized city, Türkiye	Brook coast soil	70.69 ± 5.64		73.44 ± 4.85	11.92 ± 1.13	2.35 ± 0.18								(Osma, Ozyigit, Demir, & Yasar, 2014)
	Brook Coast Wild Portulaca oleracea	16.78 ± 1.23		5.38 ± 0.92	43.19 ± 3.67	0.36 ± 0.05								
	Roadside soil	62.73 ± 5.54		36.68 ± 2.56	140.73 ± 10.56	2.29 ± 0.14								
	Roadside Wild Portulaca oleracea	17.03 ± 1.42		5.24 ± 0.92	59.49 ± 3.48	0.29 ± 0.07								
Metropolitan city, Italy	Portulaca oleracea (Countryside)	20.02±1.52	6.2±2.09	1.22±0.19	68.65±8.9	0.08±0.01	50.43±6.32	0.82±0.3	0.14±0.05			546.1±127.8		(Renna, Cocozza, Gonnella, Abdelrahman, & Santamaria, 2015)
	Portulaca oleracea (Roadside)	20.01±0.82	36.26±11.07	1.91±0.65	89.51±13.91	0.07±0.02	37.82±10.93	1.8±1.29	0.16±0.19			423.7±305.9		
Mountain, Türkiye	Eremurus spectabilis	1.379±0.113	0.279±0.029	0.047±0.001	6.809±0.703	n.d	4.886±0.420	n.d	n.d	n.d	0.008±0.001	49.720±4.35	33.489±2.954	(Ekin, 2022)