

Table S1 PAHs composition (total and freely dissolved fraction) and calculated values of log K_d (granular rubber-water) partitioning coefficients calculated for all 16 PAHs.

PAHs	Total PAHs [mg/kg]			C _{free} PAHs [ng/L]			log K _d [L/kg]		
	<1.5 mm	1–3 mm	3–6 mm	<1.5 mm	1–3 mm	3–6 mm	<1.5 mm	1–3 mm	3–6 mm
NAP	0.44 ± 0.14	0.70 ± 0.10	0.54 ± 0.43	26.4 ± 0.81	48.4 ± 3.10	53.0 ± 4.35	4.22	4.16	4.01
ACE	0.58 ± 0.09	0.98 ± 0.02	0.62 ± 0.60	13.1 ± 0.05	21.7 ± 0.11	19.3 ± 0.04	4.65	4.66	4.50
ACY	0.31 ± 0.02	0.31 ± 0.03	0.59 ± 0.43	22.4 ± 0.40	23.4 ± 1.24	63.0 ± 1.06	4.14	4.12	3.97
FLO	0.96 ± 0.11	1.15 ± 0.17	0.96 ± 0.78	32.8 ± 1.30	31.1 ± 1.08	43.6 ± 0.28	4.47	4.57	4.34
PHE	11.65 ± 1.03	10.26 ± 1.13	7.84 ± 0.85	183.6 ± 17.69	161.6 ± 7.32	145.5 ± 3.50	4.80	4.80	4.73
ANT	1.69 ± 0.14	1.77 ± 0.17	0.89 ± 0.86	15.1 ± 0.37	12.2 ± 1.49	9.8 ± 0.58	5.05	5.16	4.96
FLA	13.77 ± 1.24	7.64 ± 0.64	6.93 ± 0.60	90.0 ± 1.34	87.1 ± 1.48	42.5 ± 2.44	5.19	4.94	5.21
PYR	45.32 ± 0.98	21.82 ± 1.64	16.47 ± 1.12	155.8 ± 1.36	81.3 ± 14.89	67.2 ± 5.03	5.46	5.43	5.39
BaA	2.12 ± 0.87	2.24 ± 0.09	0.76 ± 0.02	0.43 ± 0.047	0.74 ± 0.184	0.16 ± 0.044	6.69	6.48	6.68
CHR	8.67 ± 0.32	6.36 ± 0.47	3.63 ± 0.85	3.53 ± 0.148	3.72 ± 0.440	1.17 ± 0.121	6.39	6.23	6.49
BbF	2.19 ± 0.56	1.63 ± 0.08	0.81 ± 0.06	0.11 ± 0.023	0.20 ± 0.020	0.06 ± 0.004	7.29	6.92	7.10
BkF	2.13 ± 0.63	1.96 ± 0.05	0.41 ± 0.43	0.10 ± 0.025	0.10 ± 0.001	0.03 ± 0.005	7.32	7.31	7.17
BaP	2.56 ± 1.18	2.32 ± 0.03	1.40 ± 0.55	0.04 ± 0.005	0.09 ± 0.011	0.02 ± 0.007	7.77	7.43	7.77
IcdP	5.37 ± 0.20	4.16 ± 0.12	1.83 ± 0.47	0.11 ± 0.047	0.08 ± 0.009	0.02 ± 0.002	7.69	7.72	7.96
DahA	0.74 ± 0.30	0.91 ± 0.14	0.17 ± 0.17	0.034 ± 0.0186	0.017 ± 0.0009	0.004 ± 0.0024	7.34	7.73	7.63
BghiP	9.13 ± 0.48	9.66 ± 1.46	5.25 ± 1.59	0.032 ± 0.0114	0.060 ± 0.0003	0.028 ± 0.0120	8.46	8.20	8.27

Table S2 Root growth inhibition of *Lepidium sativum* depending on the leachates dilution (100, 50, 10)

Granulate size [mm]	Lepidium sativum (leachates dilution)			EC50
	100	50	10	
<1.5	57	34	14	83.0
1-3	23	18	10	195.0
3-6	22	19	8	195.3

Table S3 Luminescence inhibition of *Aliivibrio fischeri* depending on the leachates dilution (100, 50, 10)

Granulate size [mm]	Microtox (leachates dilution) —5 min			Microtox (leachates dilution) —15 min		
	100	50	10	100	50	10
<1.5	100	50.0	32,1	100	50	42,4
1–3	100	50.0	27,9	100	50	38,2
3–6	100	50.0	25,9	100	50	32,7

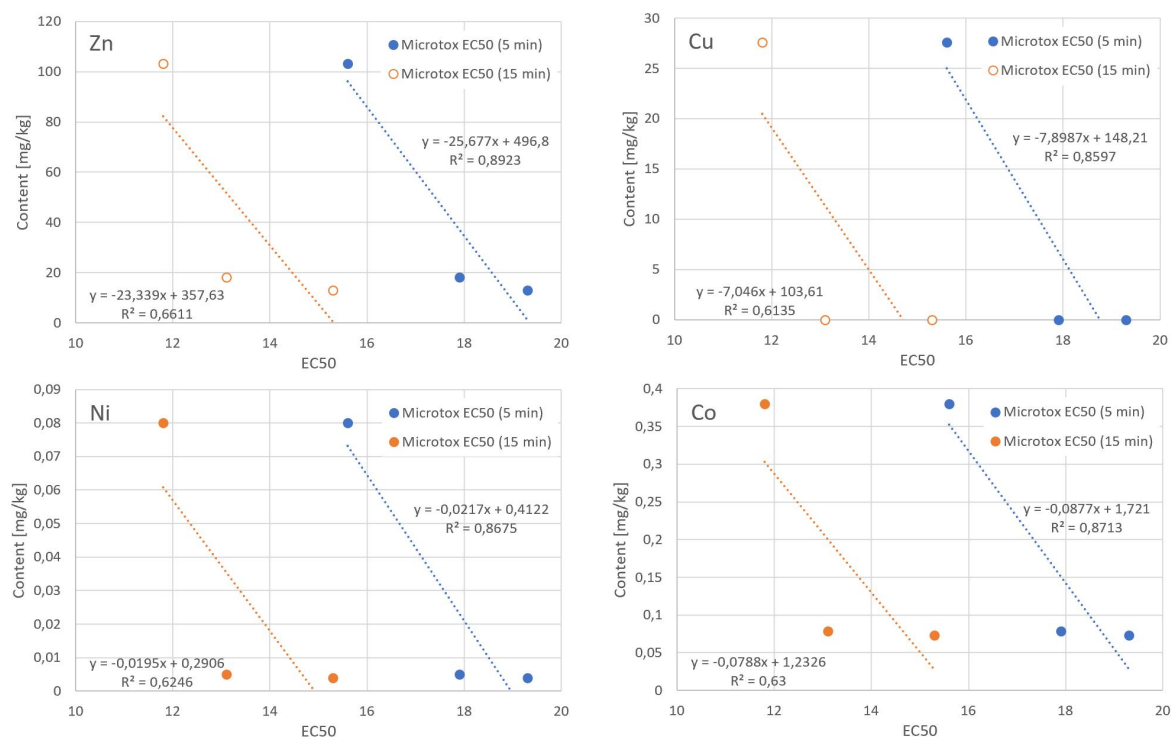


Fig. S1 Correlation between selected PTEs and EC50 values calculated for *A. fischeri* after 5 and 15 minutes.

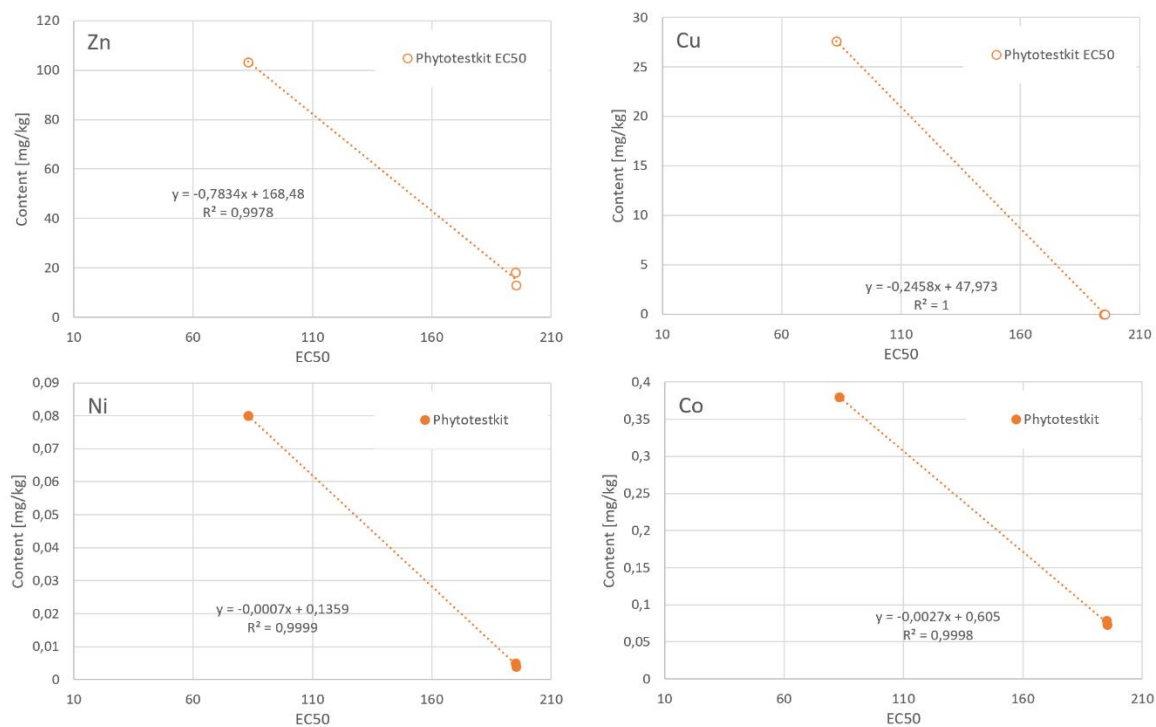


Fig. S2 Correlation between selected PTEs and EC50 values calculated for *L. sativum* root growth inhibition.