

Table S1 The growth attributes of *L. esculentum* plants after treatment with single element (Cd, Zn or Ni) or co-contaminated conditions for 65d. (Data are shown as mean \pm SD, n = 3) .

	CK		Cd ₁		Cd ₂		Cd ₃	
Root fresh weight (g·plant ⁻¹)	1.900 \pm 0.124		1.321 \pm 0.322		1.632 \pm 0.211		1.651 \pm 0.036	
Stem fresh weight (g·plant ⁻¹)	6.065 \pm 0.329		8.034 \pm 0.211		6.949 \pm 0.309		2.327 \pm 0.321	
Leaf fresh weight (g·plant ⁻¹)	5.768 \pm 0.114		5.539 \pm 0.446		4.292 \pm 0.097		1.264 \pm 0.133	
Plant Height (cm·plant ⁻¹)	23.923 \pm 0.899		35.560 \pm 0.548		32.066 \pm 0.875		15.321 \pm 0.600	
	Zn ₁	Zn ₁ Cd ₁	Zn ₁ Cd ₂	Zn ₁ Cd ₃	Zn ₂	Zn ₂ Cd ₁	Zn ₂ Cd ₂	Zn ₂ Cd ₃
Root fresh weight (g·plant ⁻¹)	0.831 \pm 0.437	2.340 \pm 0.181	1.641 \pm 0.233	0.814 \pm 0.078	1.349 \pm 0.314	1.957 \pm 0.274	1.878 \pm 0.213	1.180 \pm 0.382
Stem fresh weight (g·plant ⁻¹)	3.506 \pm 0.225	3.835 \pm 0.339	2.197 \pm 0.096	1.292 \pm 0.172	5.601 \pm 0.229	1.321 \pm 0.113	1.675 \pm 0.345	2.093 \pm 0.312
Leaf fresh weight (g·plant ⁻¹)	6.279 \pm 0.227	2.796 \pm 0.270	1.349 \pm 0.133	0.983 \pm 0.218	5.016 \pm 0.307	0.700 \pm 0.138	0.874 \pm 0.224	0.611 \pm 0.219
Plant Height (cm·plant ⁻¹)	24.753 \pm 0.890	19.827 \pm 0.295	16.920 \pm 0.485	13.590 \pm 0.335	32.029 \pm 1.316	14.225 \pm 0.860	12.782 \pm 0.132	10.309 \pm 0.341
	Zn ₃	Zn ₃ Cd ₁	Zn ₃ Cd ₂	Zn ₃ Cd ₃	Ni ₁	Ni ₁ Cd ₁	Ni ₁ Cd ₂	Ni ₁ Cd ₃
Root fresh weight (g·plant ⁻¹)	1.626 \pm 0.253	0.849 \pm 0.024	0.934 \pm 0.417	0.753 \pm 0.274	1.783 \pm 0.199	1.994 \pm 0.512	1.696 \pm 0.098	1.314 \pm 0.226
Stem fresh weight (g·plant ⁻¹)	1.827 \pm 0.461	1.528 \pm 0.500	1.529 \pm 0.077	1.097 \pm 0.418	7.216 \pm 0.201	1.729 \pm 0.331	1.839 \pm 0.390	1.497 \pm 0.194
Leaf fresh weight (g·plant ⁻¹)	0.938 \pm 0.199	0.268 \pm 0.214	0.377 \pm 0.299	0.123 \pm 0.079	5.660 \pm 0.202	2.871 \pm 0.474	1.577 \pm 0.566	1.178 \pm 0.211
Plant Height (cm·plant ⁻¹)	16.231 \pm 1.166	9.634 \pm 0.349	8.286 \pm 0.072	6.064 \pm 0.593	32.399 \pm 1.399	20.975 \pm 0.674	16.899 \pm 1.068	12.627 \pm 0.504
	Ni ₂	Ni ₂ Cd ₁	Ni ₂ Cd ₂	Ni ₂ Cd ₃	Ni ₃	Ni ₃ Cd ₁	Ni ₃ Cd ₂	Ni ₃ Cd ₃
Root fresh weight (g·plant ⁻¹)	1.846 \pm 0.276	1.879 \pm 0.153	1.121 \pm 0.352	1.160 \pm 0.495	1.744 \pm 0.173	1.009 \pm 0.200	1.060 \pm 0.291	0.601 \pm 0.150
Stem fresh weight (g·plant ⁻¹)	5.113 \pm 0.043	1.648 \pm 0.224	1.705 \pm 0.274	1.5773 \pm 0.322	3.332 \pm 0.332	1.457 \pm 0.193	1.598 \pm 0.090	0.346 \pm 0.213
Leaf fresh weight (g·plant ⁻¹)	3.832 \pm 0.291	1.701 \pm 0.355	1.153 \pm 0.402	0.902 \pm 0.619	2.528 \pm 0.333	1.347 \pm 0.349	1.062 \pm 0.419	— —
Plant Height (cm·plant ⁻¹)	25.253 \pm 0.376	17.071 \pm 0.486	12.388 \pm 1.184	10.647 \pm 0.636	18.413 \pm 0.983	13.047 \pm 0.052	11.422 \pm 0.346	5.217 \pm 0.153