

Supplementary Information.

Table S1. Mean standardized concentration of individual metals in control and limed soil microcosms. The final column summarizes the results of one-tailed t-tests comparing standardized treatment differences to zero, corrected for multiple testing (in italics). Metals are listed from rare to most common.

Heavy metal	Standardized mean [95% CI]		P-value (a <i>b</i> *)
	Control	Lime	
Ag	0.499 [0.006, 0.993]	1.484 [0.260, 2.708]	0.932 <i>0.932</i>
Cd	0.948 [-0.145, 2.042]	1.053 [0.583, 1.523]	0.553 <i>0.671</i>
Cr	1.170 [0.244, 2.096]	0.830 [0.484, 1.176]	0.249 <i>0.456</i>
Co	1.103 [0.182, 2.023]	0.897 [0.539, 1.523]	0.338 <i>0.532</i>
Mn	1.333 [0.518, 2.148]	0.678 [0.347, 1.009]	0.029 <i>0.068</i>
Cu	1.150 [0.880, 1.421]	0.845 [0.768, 0.951]	0.009 <i>0.047</i>
Zn	1.161 [0.705, 1.617]	0.839 [0.639, 1.062]	0.031 <i>0.068</i>
Ni	0.964 [0.569, 1.359]	1.036 [0.694, 1.378]	0.610 <i>0.671</i>
Al	1.233 [0.714, 1.752]	0.767 [0.375, 1.159]	0.006 <i>0.047</i>
Mg	1.123 [0.670, 1.588]	0.871 [0.552, 1.190]	0.014 <i>0.052</i>
Fe	0.976 [0.403, 1.548]	1.024 [0.643, 1.406]	0.560 <i>0.671</i>

* P-values were corrected for multiple testing (*'p.adjust'* function with method = *fd*r).

Figure S1. Relative abundance of common phyla before (T_0) and after experimental manipulation: microbial communities were incubated for 12 weeks in paired soil microcosms that were either supplemented with (L) a single dose of hydrated lime (L) or an equal volume of sterilized *ddH2O* (C).

