Electronic supplementary information

Exploiting flow analysis as a tool for monitoring the leaching process of micronutrients using laboratory scale soil columns (LSSCs)

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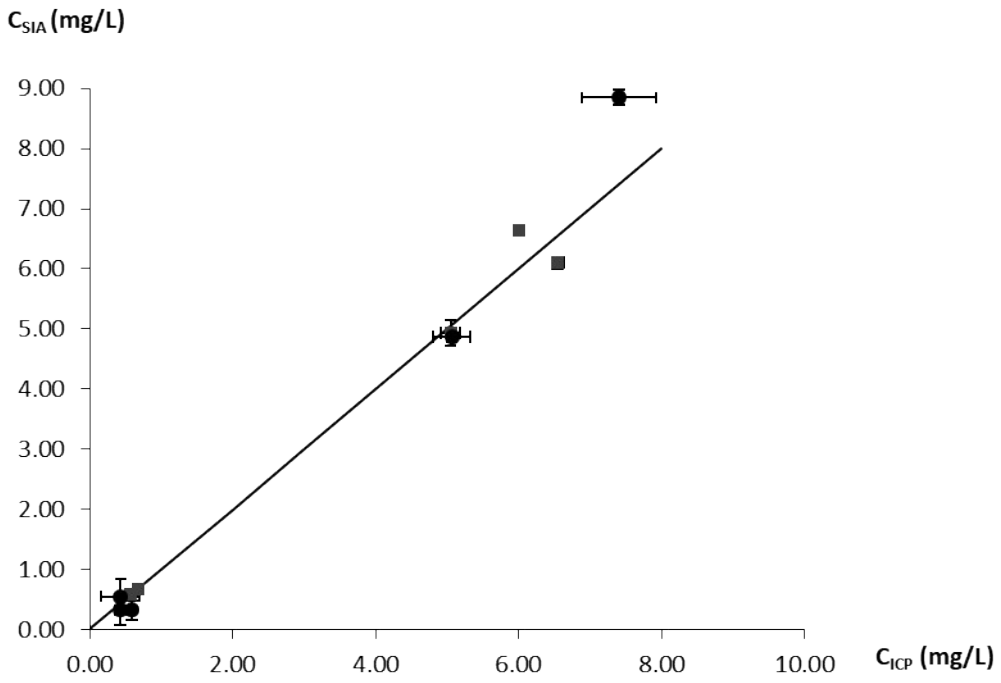
ESI Table 1. Average pH and conductivity (G) values registered for rainwater and leachates obtained from the different soil cores (U1, U2, F1, F2 and F2 burned) over an eight-day interval (t0 and t8). RSD, Relative standard deviation.

Sample	Time (days)	Average pH	RSD (%)	Average G (µS cm^{-1})	RSD (%)
Rainwater		6.40	-	9.90	-
U1*	t0	7.48	-	537	-
	t8	7.93	-	520	-
Rainwater		6.58	-	24.6	-
F1	t0	5.24	6	241	1
	t8	6.73	9	193	2
Rainwater		6.25	-	40.4	-
U2	t0	6.38	1	109	10
	t8	7.15	1	65.3	8
Rainwater		4.16	-	31.0	-
F2	t0	4.07	1	176	5
F2 burned	t0	5.64	4	1.57E+03	0.2
Rainwater		4.93	-	25.0	-
F2	t8	4.18	2	266	10
F2 burned	t8	5.64	10	1.58E+03	3

*Since only one column was set-up with U1 soil, registered pH and G values refer only to that column, and not to an average value.



ESI Fig. 1. Accuracy assessment for the determination of calcium (■) and magnesium (●).

ESI Table 2. Average magnesium and calcium concentration values registered for rainwater and leachates obtained from the different soil cores (U1, U2, F1, F2 and F2 burned) over an eight-day interval (t0 and t8). RSD, Relative standard deviation of the column replicates.

Sample	Time (days)	Average Mg^{2+} concentration (mg /L)	RSD (%)	Average Ca^{2+} concentration (mg /L)	RSD (%)
Rainwater		0.320	-	2.27	-
U1	t0	4.43	-	20.1	-
	t8	6.20	-	14.5	-
Rainwater		0.320	-	2.27	-
F1	t0	10.1	1	32.6	10
	t8	10.9	5	15.5	5
Rainwater		0.320	-	2.27	-
U2	t0	3.52	6	16.4	1
	t8	1.62	1	4.57	0.3
Rainwater		0.118	-	0.592	-
F2	t0	2.43	1	0.737	2
F2 burned	t0	89.9	8	66.9	4
Rainwater		1.35	-	0.676	-
F2	t8	3.72	10	0.872	2
F2 burned	t8	103	9	62.1	5