

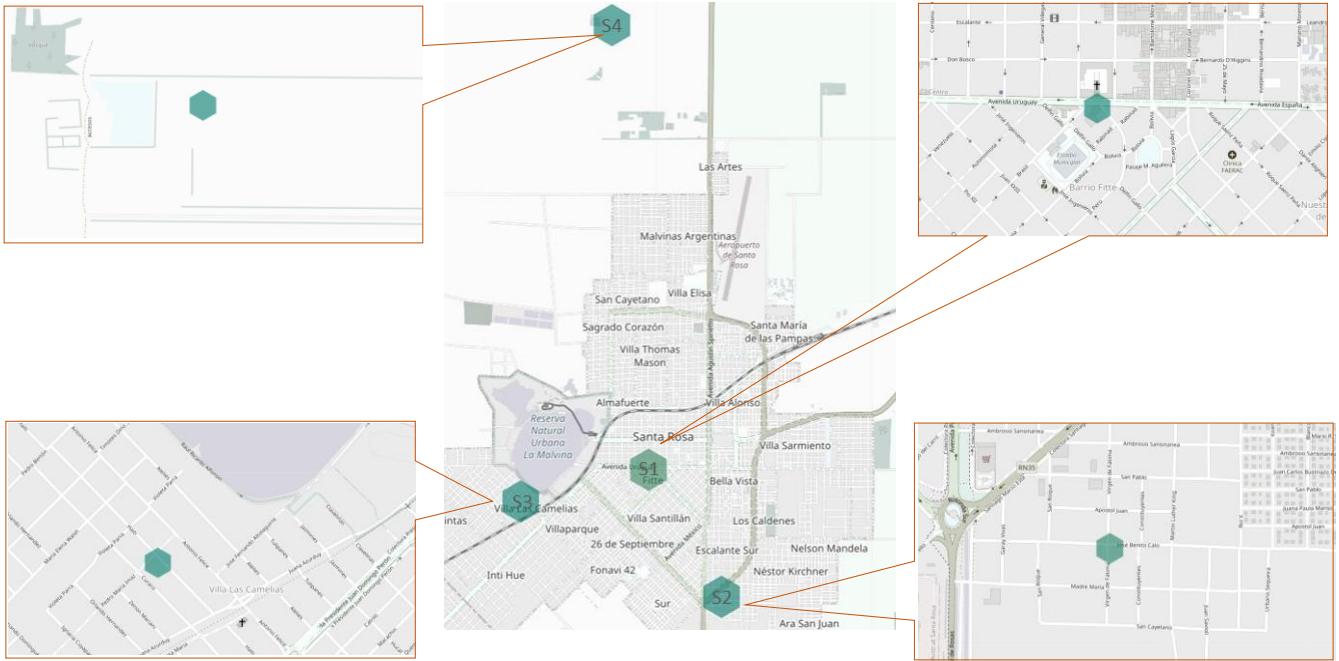


Figure S1. Site locations, Santa Rosa City, La Pampa province, Argentina. (a) Site 1, urban area with high intensity of car traffic; (b) Site 2, suburban area with moderate car traffic and unpaved street; (c) Site 3, residential area with moderate car traffic; (d) Site 4, rural area with low intensity of car traffic, based on Google Maps Traffic.

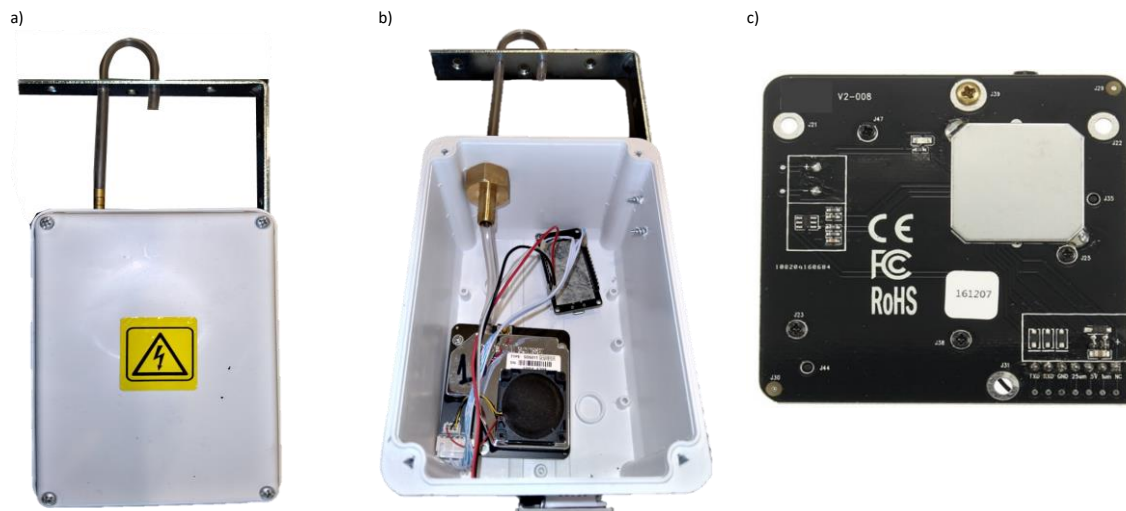


Figure S2. Particulate matter monitoring station. (a) Operative monitoring station; (b) Inside monitoring station; (c) Detail of particulate matter sensor (Nova fitness SDS011).

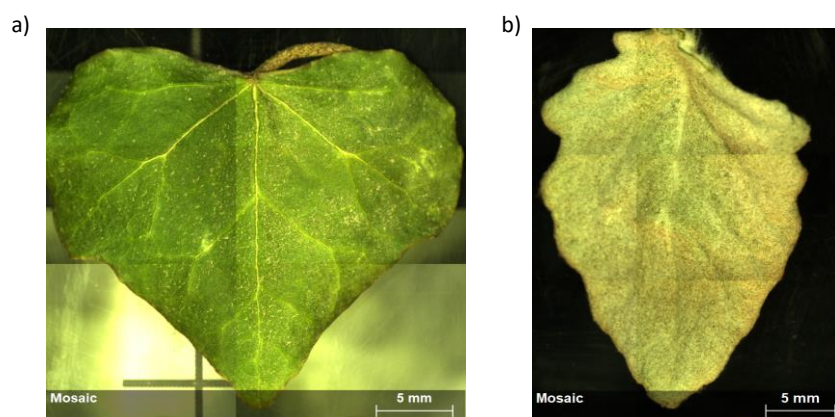


Figure S3. Image acquired by XRF camera applying background correction and reduced image range. (a) *Hedera helix*; (b) *Senecio cineraria*.

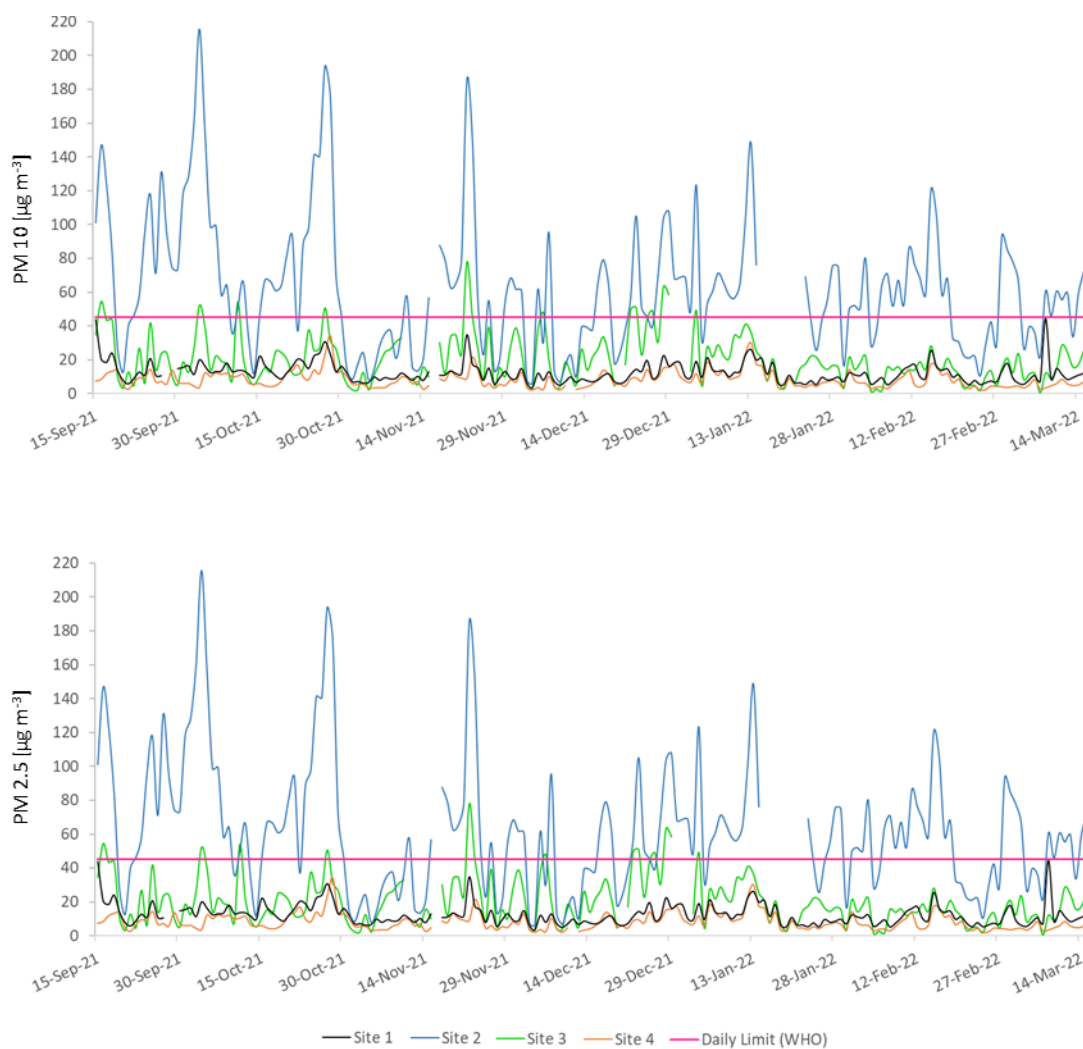


Figure S4. Daily average concentrations of PM 10 and PM 2.5 recorded at each site. Pink line represents the WHO annual threshold (PM 10= 15 $\mu\text{g m}^{-3}$; PM2.5= 5 $\mu\text{g m}^{-3}$).

Table S1. Semi quantitative element concentrations Normalized weight % in leaf tissue by XRF.

Plant	Site	Time	Na	Mg	Al	Si	P	S	k	Ca	Ti	Mn	Fe	Zn
<i>Hedera helix</i>	Site 1	0m	0.30±0.30	2.26±1.25	2.73±1.87	15.60±8.58	1.93±0.36	4.03±1.21	35.54±14.27	36.30±4.88	0.16±0.15	0.34±0.39	0.76±0.47	0.04±0.03
		3m	2.17±0.89	1.97±1.59	2.72±2.08	14.71±11.93	1.51±0.41	3.39±0.74	32.70±13.92	38.94±5.77	0.23±0.21	0.31±0.23	0.97±0.27	0.37±0.06
		6m	2.18±0.89	2.06±1.61	2.74±2.08	14.82±11.98	1.55±0.41	3.41±0.73	32.90±13.75	39.24±5.77	0.23±0.22	0.32±0.24	1.00±0.29	0.38±0.06
	Site 2	0m	0.52±0.64	2.27±0.94	2.81±1.37	16.47±7.44	2.70±1.18	4.66±1.42	25.77±9.69	43.23±13.26	0.16±0.09	0.46±0.25	0.88±0.55	0.05±0.02
		3m	0.92±0.94	1.73±0.98	3.61±1.31	12.29±5.23	1.44±0.53	2.48±1.98	39.82±10.10	35.72±8.83	0.15±0.09	0.11±0.09	1.35±0.42	0.34±0.55
		6m	0.20±0.23	0.70±0.54	10.69±1.98	34.74±7.83	0.42±0.17	1.27±0.30	18.65±5.63	29.61±4.69	0.37±0.10	0.26±0.21	3.07±0.34	0.02±0.02
	Site 3	0m	0.29±0.37	2.53±1.06	2.24±0.79	13.71±9.16	2.10±0.68	3.53±1.99	41.21±4.91	33.34±9.59	0.12±0.08	0.07±0.05	0.81±0.35	0.04±0.03
		3m	0.33±0.21	0.79±0.52	3.46±1.10	17.96±8.52	0.79±0.51	3.29±1.20	31.67±9.80	40.23±8.85	0.13±0.09	0.26±0.16	0.96±0.28	0.12±0.03
		6m	0.96±1.01	0.66±0.59	4.98±2.12	16.33±7.05	0.98±0.49	2.28±0.49	29.09±13.93	39.98±15.50	0.23±0.08	2.09±2.03	2.12±0.76	0.28±0.28
	Site 4	0m	0.08±0.11	1.66±0.44	2.08±0.84	10.09±5.23	2.87±1.14	2.58±1.81	43.44±11.39	36.02±5.58	0.14±0.07	0.23±0.28	0.74±0.22	0.05±0.02
		3m	1.66±1.38	0.99±0.59	2.76±0.66	13.33±4.17	1.55±1.06	2.16±2.07	41.85±15.76	34.28±9.60	0.16±0.05	0.22±0.23	0.92±0.29	0.12±0.06
		6m	0.70±1.35	0.28±0.23	3.60±1.24	10.05±4.09	1.51±0.80	1.91±1.47	39.18±17.94	40.97±11.92	0.11±0.07	0.15±0.27	1.34±0.27	0.18±0.14
<i>Senecio cineraria</i>	Site 1	0m	1.40±2.01	1.81±1.25	2.06±1.24	8.02±5.63	1.60±0.91	2.56±1.23	41.33±11.60	38.03±6.10	0.44±0.69	0.34±0.10	2.36±2.18	0.03±0.02
		3m	1.40±2.11	0.88±0.51	3.42±1.32	14.46±5.36	3.53±1.29	2.63±0.89	24.15±17.03	33.24±7.19	1.51±0.77	0.26±0.20	9.88±4.66	4.63±3.57
		6m	1.51±2.05	0.93±0.55	3.52±1.32	14.64±5.41	3.59±1.27	2.65±0.87	23.71±16.26	33.14±7.24	1.52±0.77	0.34±0.22	9.98±4.66	4.69±3.56
	Site 2	0m	2.63±0.96	2.55±0.53	3.66±2.57	15.15±8.14	2.15±0.84	3.88±1.69	30.95±7.90	34.85±8.74	0.60±0.33	0.26±0.06	3.27±1.59	0.05±0.04
		3m	0.35±0.49	0.98±0.78	7.10±2.78	27.92±12.22	0.36±0.54	0.77±0.98	29.54±10.91	23.55±3.89	1.03±0.47	0.22±0.09	8.03±4.56	0.13±0.10
		6m	0.11±0.24	0.65±0.38	10.56±1.03	42.66±4.78	0.02±0.02	0.44±0.41	11.02±2.63	16.28±2.16	1.71±0.68	0.33±0.27	16.15±8.64	0.06±0.08
	Site 3	0m	2.56±4.79	2.02±1.17	3.46±1.61	14.38±8.03	2.312.32±	3.33±2.73	36.61±8.39	30.368.14±	0.61±0.58	0.28±0.06	4.04±3.65	0.03±0.02
		3m	1.46±1.93	0.81±0.98	6.17±1.85	27.93±9.63	0.10±0.07	0.54±0.45	16.27±4.46	37.34±8.97	1.17±0.59	0.36±0.11	7.75±4.18	0.10±0.05
		6m	0.48±0.65	0.80±0.77	3.77±2.31	15.02±8.84	0.74±0.59	1.99±2.02	22.96±11.33	45.13±7.32	0.66±0.47	0.77±0.62	7.46±3.37	0.22±0.15
	Site 4	0m	2.86±2.62	4.65±4.52	2.40±1.25	8.26±4.50	2.07±0.90	4.74±2.36	38.24±10.27	31.44±4.53	0.42±0.29	0.82±0.55	3.84±3.37	0.25±0.18
		3m	4.16±3.29	2.81±1.23	1.23±0.48	4.07±1.91	2.40±1.30	6.05±1.16	44.45±2.49	32.68±4.76	0.31±0.11	0.22±0.15	1.45±0.65	0.14±0.08
		6m	0.09±0.21	1.50±0.85	5.20±1.17	20.34±4.16	3.362.27±	3.22±1.50	15.06±5.89	31.85±7.77	1.83±0.89	0.56±0.32	16.65±8.34	0.13±0.22

Values are mean (n = 5). Limits of detection (LD) Mn= 0.44; Fe= 5.41; Ni 2.60; Cu 0.47; Cr=1.83 Normalized wt %

Table S2. Element concentrations (mg.kg⁻¹) in leaf tissue of *Hedera helix* and *Senecio cineraria* by ICP.

Plant	Site	Time	Ca	Cd	Cu	Fe	K	Mg	Mn	Na	P	S	Zn
<i>Hedera helix</i>	Site 1	0m	32998.98 ±27408.30 ^a	Nd	3.47±0.62 ^a	282.60±84.9 ¹ ^a	10177.23±2375 ^{.02} ^a	2878.20±632 ^{.54} ^a	141.70±106.07 ^a	1960.00±1227.32 ^a	2860.35±398 ^{.44} ^a	2818.02±613.94 ^a	38.31±20.02 ^a
		3m	24550.20±8769 ^{.40} ^a	2.89±0.28 ^a	5.27±2.37 ^{ab}	278.83±118.10 ^a	13758.05±3142 ^{.70} ^a	4427.88±775 ^{.66} ^b	170.41±117.23 ^a	1032.23±342 ^{.76} ^a	5956.04±435 ^{.09} ^b	3523.38±767 ^{.15} ^a	259.68±73.0 ⁰ ^b
		6m	25406.80±8920 ^{.33} ^a	2.94±0.27 ^a	5.29±2.37 ^{ab}	283.83±114.90 ^a	13846.05±3147 ^{.12} ^a	4445.88±779 ^{.02} ^b	171.21±117.40 ^a	1040.63±343 ^{.05} ^a	6002.24±443 ^{.03} ^b	3551.38±793 ^{.25} ^a	266.88±71.0 ⁵ ^b
	Site 2	0m	23197.17±7330 ^{.51} ^a	Nd	4.81±1.68 ^a	383.47±225.47 ^a	9875.71±1534.85	3350.94±483 ^{.98} ^a	249.40±115.99 ^a	1961.76±895 ^{.02} ^a	5049.78±232 ^{9.52} ^b	3380.00±138 ^{8.36} ^a	56.00±22.86 ^a
		3m	48032.26±5140 ^{0.51} ^a	4.23±0.87 ^b	7.32±4.38 ^{ab}	321.38±70.7 ⁸ ^a	13599.53±4004 ^{.43} ^a	3787.71±144 ^{3.64} ^a	90.95±70.04 ^a	902.90±820.12 ^a	5355.60±190 ^{4.17} ^b	2865.20±973 ^{.93} ^a	112.76±90.1 ⁷ ^a
		6m	19401.31±5444 ^{.44} ^a	Nd	4.67±1.29 ^a	649.47±317.21 ^{ab}	11185.56±1650 ^{.25} ^a	3288.92±965 ^{.82} ^a	75.17±29.09 ^a	797.30±742.60 ^a	3611.54±719 ^{.13} ^a	3833.01±992 ^{.85} ^a	31.64±6.22 ^a
	Site 3	0m	25929.29±2312 ^{6.85} ^a	Nd	3.21±1.34 ^a	221.79±54.8 ⁵ ^a	11111.98±1172 ^{.28} ^a	2355.56±493 ^{.09} ^a	46.03±13.86 ^a	3046.21±227 ^{3.69} ^a	3146.16±636 ^{.60} ^a	2010.47±661 ^{.11} ^a	43.11±25.10 ^a
		3m	33938.87±3890 ^{9.77} ^a	Nd	2.48±0.80 ^a	179.69±52.5 ³ ^a	9353.99±729.0 ⁹ ^a	2163.34±570 ^{.93} ^a	56.97±12.56 ^a	1236.40±687 ^{.99} ^a	1741.14±400 ^{.99} ^a	2453.05±536 ^{.44} ^a	49.58±17.04 ^a
		6m	30095.36±2284 ^{3.27} ^a	Nd	3.96±2.98 ^a	309.19±95.2 ⁰ ^a	12189.52±3214 ^{.23} ^a	3452.43±119 ^{0.64} ^a	349.01±227.08 ^b	1267.34±127 ^{7.31} ^a	5211.00±180 ^{1.86} ^b	4396.05±220 ^{4.44} ^a	85.82±41.79 ^a
	Site 4	0m	43931.55±3754 ^{9.14} ^a	Nd	2.20±0.81 ^a	247.16±77.1 ¹ ^a	13281.14±1698 ^{.19} ^a	2130.03±688 ^{.09} ^a	101.30±130.88 ^a	2260.15±105 ^{9.64} ^a	4830.25±230 ^{4.66} ^a	1998.10±147 ^{9.04} ^a	41.17±21.86 ^a
		3m	18168.02±6224 ^{.95} ^a	Nd	2.25±0.57 ^a	215.74±57.7 ⁴ ^a	13351.28±3530 ^{.92} ^a	2526.43±626 ^{.98} ^a	107.40±147.84 ^a	1221.94±602 ^{.59} ^a	4110.69±931 ^{.49} ^a	2191.61±101 ^{4.37} ^a	63.94±18.51 ^a
		6m	13619.08±5789 ^{.33} ^a	0.32±0.47 ^c	6.03±3.36 ^{ab}	203.90±57.8 ⁵ ^a	13245.27±5173 ^{.38} ^a	2653.63±507 ^{.95} ^a	54.49±60.57 ^a	600.77±560.78 ^a	6978.94±161 ^{3.66} ^a	3121.97±554 ^{.38} ^a	72.78±23.90 ^a
<i>Senecio cineraria</i>	Site 1	0m	43003.87±4188 ^{9.75} ^b	Nd	3.47±1.04 ^c	235.83±203.76 ^b	13576.72±1680 ^{.00} ^b	3377.58±890 ^{.75} ^b	91.99±37.43 ^c	7524.43±404 ^{2.97} ^b	3918.28±180 ^{2.97} ^c	3081.96±739 ^{.87} ^b	19.60±2.89 ^c
		3m	87656.37±1906 ^{6.81} ^{ab}	3.53±0.54 ^d	8.78±2.91 ^d	2190.97±210 ^{6.59} ^d	8507.05±4559.51 ^b	2050.04±223 ^{.34} ^{bc}	78.46±65.85 ^c	1896.24±240 ^{2.75} ^c	5738.16±142 ^{3.92} ^c	2119.96±552 ^{.69} ^b	1064.59±712 ^{.99} ^d
		6m	88316.37±1964 ^{5.60} ^{ab}	3.69±0.63 ^d	9.46±3.17 ^d	2216.97±211 ^{2.24} ^d	8565.05±4585.26 ^b	2098.04±191 ^{.59} ^{bc}	86.90±72.92 ^c	1941.84±243 ^{5.27} ^c	5822.16±143 ^{4.75} ^c	2185.96±575 ^{.67} ^b	1074.59±712 ^{.99} ^d
	Site 2	0m	88507.02±1611 ^{7.84} ^{ab}	Nd	4.24±1.90 ^c	730.86±164.83 ^c	10782.14±1315 ^{.85} ^b	3018.09±548 ^{.62} ^b	73.32±21.72 ^c	8541.73±253 ^{7.09} ^b	3559.17±310 ^{.35} ^c	2963.39±355 ^{.52} ^b	17.86±10.12 ^c
		3m	59156.13±3889 ^{8.75} ^b	4.14±0.64 ^d	6.24±2.60 ^{cd}	2818.65±209 ^{8.26} ^d	16404.67±2925 ^{.56} ^c	3944.36±181 ^{5.69} ^b	101.35±65.4 ³ ^c	9709.67±539 ^{3.01} ^b	5175.05±160 ^{5.05} ^c	4113.68±212 ^{6.64} ^b	52.44±29.48 ^c
		6m	18171.57±7147 ^{.07} ^b	0.31±0.20 ^e	11.64±3.2 ⁸ ^d	6084.31±153 ^{3.21} ^d	15767.24±3801 ^{.27} ^c	6859.51±195 ^{9.25} ^d	162.11±49.2 ⁴ ^c	14061.89±71 ^{21.0} ^b	7615.10±503 ^{1.09} ^c	7365.76±277 ^{0.72} ^c	83.95±29.79 ^d
	Site 3	0m	47180.13±3322 ^{3.00} ^b	Nd	2.34±1.05 ^c	778.30±188.21 ^c	12669.43±2541 ^{.18} ^b	3200.89±901 ^{.71} ^b	84.08±33.99 ^c	8664.28±728 ^{0.34} ^b	5181.14±337 ^{9.99} ^c	3079.68±135 ^{7.29} ^b	18.20±4.22 ^c
		3m	39425.96±3509 ^{2.92} ^b	Nd	4.36±3.20 ^c	1146.82±394 ^{.87} ^d	11196.75±3419 ^{.12} ^b	3716.50±100 ^{2.07} ^b	81.51±19.01 ^c	7279.63±129 ^{5.19} ^b	3892.59±827 ^{.82} ^c	4391.16±725 ^{.90} ^b	29.80±8.65 ^c
		6m	83017.81±7816 ^{6.32} ^{ab}	Nd	6.98±5.01 ^{cd}	1109.90±614 ^{.07} ^d	14541.05±1243 ^{5.81} ^b	4379.37±212 ^{6.98} ^b	109.61±61.3 ⁵ ^c	7949.80±339 ^{2.24} ^b	8947.63±606 ^{2.20} ^c	6508.40±324 ^{9.88} ^b	61.93±41.55 ^d
	Site 4	0m	37841.02±3717 ^{8.86} ^b	Nd	4.23±2.40 ^c	324.66±71.9 ⁹ ^b	14974.45±1196 ^{.15} ^b	3917.13±862 ^{.73} ^b	126.87±65.1 ⁰ ^c	12689.41±46 ^{29.01} ^b	7830.11±223 ^{6.98} ^c	5344.27±109 ^{5.24} ^b	26.25±7.07 ^c
		3m	50865.89±4134 ^{8.93} ^b	Nd	4.76±3.16 ^c	282.47±83.9 ⁶ ^b	14674.16±1360 ^{.47} ^b	3796.20±748 ^{.57} ^b	54.37±17.25 ^c	9090.10±212 ^{7.22} ^b	5650.92±132 ^{7.42} ^c	5662.42±192 ^{5.06} ^b	53.36±13.71 ^c
		6m	54148.55±3932 ^{4.89} ^b	0.69±0.13 ^e	4.34±2.33 ^c	2084.22±123 ^{6.25} ^d	4875.76±1035.63 ^d	3567.87±118 ^{2.56} ^b	120.40±67.4 ² ^c	1360.68±338 ^{.54} ^c	4823.98±136 ^{7.35} ^c	2243.05±529 ^{.26} ^b	87.31±45.13 ^d

Values are mean (n = 5); values in a column followed by the same letter are not significantly different at $p \leq 0.05$ by Kruskal-Wallis and Tukey test.

Limits of detection (LD) Cd= 0.012 mg Kg⁻¹, Cu= 0.006 mg Kg⁻¹; Pb=0.054 mg Kg⁻¹; Zn=0.16 mg Kg⁻¹. nd: not detected.