

Supplementary files

Table S1. Mean \pm standard deviation of metal concentration for various macrophyte species parts among seasons

Variables	Cool dry			Hot dry			Hot wet		
	Roots	Stem	Leaves	Roots	Stem	Leaves	Roots	Stem	Leaves
<i>Phragmites australis</i>									
Na (mg kg ⁻¹)	982.0 \pm 222.5	1098.8 \pm 613.9	295.0 \pm 180.5	1705.5 \pm 553.2	1941.5 \pm 449.2	318.0 \pm 55.3	1529.3 \pm 609.4	1545.0 \pm 609.7	354.8 \pm 155.2
Mn (mg kg ⁻¹)	3694 \pm 6014.4	383.0 \pm 446.8	545.8 \pm 525.9	1714.5 \pm 1235.9	338.5 \pm 453.8	776.0 \pm 497.0	481.8 \pm 233.3	211.3 \pm 148.1	221.3 \pm 142.5
Fe (mg kg ⁻¹)	3002.3 \pm 11591.5	1302.5 \pm 844	1163.3 \pm 867.8	29496.8 \pm 11683.3	1091.0 \pm 1041.8	1350.5 \pm 480.8	17450.0 \pm 1191.4	2785.0 \pm 597.9	944.8 \pm 247.9
Cu (mg kg ⁻¹)	37.5 \pm 4.4	5.3 \pm 2.6	4.8 \pm 1.5	30.0 \pm 9.5	3.0 \pm 1.8	3.5 \pm 1.9	19.1 \pm 12.6	4.1 \pm 2.6	1.7 \pm 0.5
Zn (mg kg ⁻¹)	37.8 \pm 12.7	17.0 \pm 5.2	20.8 \pm 8.6	39.0 \pm 8.8	13.8 \pm 4.9	15.5 \pm 5.8	19.5 \pm 4.8	17.3 \pm 4.6	10.9 \pm 4.4
B (mg kg ⁻¹)	31.8 \pm 12.4	2.3 \pm 0.5	4.0 \pm 0.8	33.5 \pm 14.2	2.3 \pm 1.3	6.0 \pm 2.7	10.9 \pm 1.4	2.7 \pm 0.9	2.5 \pm 1.0
N (%)	1 \pm 0.3	1.1 \pm 0.5	2.6 \pm 0.4	0.9 \pm 0.1	0.9 \pm 0.3	2.5 \pm 0.6	0.8 \pm 0.4	0.9 \pm 0.3	2.6 \pm 0.5
P (%)	0.1 \pm 0.0	0 \pm 0.0	0.2 \pm 0.1	0.1 \pm 0.0	0.1 \pm 0.0	0.2 \pm 0.1	0.1 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.1
K (%)	0.3 \pm 0.2	1.4 \pm 0.7	2 \pm 0.5	0.6 \pm 0.4	1.3 \pm 0.7	1.5 \pm 0.6	0.6 \pm 0.5	1.4 \pm 0.5	1.5 \pm 0.6
Ca (%)	0.2 \pm 0.1	0.1 \pm 0.0	0.4 \pm 0.1	0.3 \pm 0.2	0.1 \pm 0.0	0.6 \pm 0.2	0.1 \pm 0.0	0.1 \pm 0.0	0.3 \pm 0.2
Mg (%)	0.1 \pm 0.0	0 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0	0 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0
<i>Schoenoplectus corymbosus</i>									
Na (mg kg ⁻¹)	240.0 \pm 51.4	833.7 \pm 579.1	1075.7 \pm 1048.2	547.0 \pm 296.4	2353.3 \pm 1012.5	3338.0 \pm 1768.6	1603.3 \pm 95.0	2263.3 \pm 349.3	405.0 \pm 164.4
Mn (mg kg ⁻¹)	676.0 \pm 191.8	2856.3 \pm 2124.2	897.3 \pm 747.3	755.3 \pm 350.2	2094.7 \pm 1809.8	1002.3 \pm 205.9	1980.0 \pm 285.1	1227.0 \pm 638.6	569.3 \pm 62.6
Fe (mg kg ⁻¹)	2561.0 \pm 2096.6	19418.7 \pm 16286.4	1981.0 \pm 1502.1	3732.3 \pm 2374.6	28870.3 \pm 8415.5	2819.3 \pm 3365.7	20546.7 \pm 3630.8	1783.3 \pm 726.2	2139.0 \pm 1261.1
Cu (mg kg ⁻¹)	78.7 \pm 61.4	23.3 \pm 21.5	6.0 \pm 3.5	9.3 \pm 4.2	28.7 \pm 17.9	5.7 \pm 2.3	32.6 \pm 3.5	3.9 \pm 0.8	6.9 \pm 3.2
Zn (mg kg ⁻¹)	28.3 \pm 3.2	27.7 \pm 5.7	23.0 \pm 14.5	29.7 \pm 3.8	30.7 \pm 11.0	19 \pm 5.6	34.2 \pm 14.4	15.1 \pm 4.3	24.7 \pm 4.2
B (mg kg ⁻¹)	28.3 \pm 18.8	20.7 \pm 15.5	5.7 \pm 4.0	47.3 \pm 19.3	35.3 \pm 8.7	8.0 \pm 3.5	14.5 \pm 2.7	5.6 \pm 0.4	17.1 \pm 1.9
N (%)	1.4 \pm 0.2	1.1 \pm 0.8	0.9 \pm 0.6	1.3 \pm 0.4	0.8 \pm 0.3	1.2 \pm 0.5	0.5 \pm 0.1	1 \pm 0.6	1.6 \pm 0.6
P (%)	0.2 \pm 0.0	0.1 \pm 0.1	0.1 \pm 0.0	0.2 \pm 0.1	0.1 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0	0.1 \pm 0.0	0.2 \pm 0.0

K (%)	1 ± 0.2	0.9 ± 0.6	2 ± 1.0	1.1 ± 0.6	0.7 ± 0.3	3 ± 0.5	0.4 ± 0.3	2.3 ± 0.8	1.2 ± 0.3
Ca (%)	0.6 ± 0.4	0.6 ± 0.6	0.3 ± 0.3	0.6 ± 0.2	0.3 ± 0.1	0.4 ± 0.1	0.2 ± 0.0	0.4 ± 0.1	0.3 ± 0.0
Mg (%)	0.2 ± 0.2	0.2 ± 0.2	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.2 ± 0.1	0.1 ± 0.0	0.2 ± 0.0	0.1 ± 0.0
<i>Typha capensis</i>									
Na (mg kg ⁻¹)	7951.5 ± 3083.7	3767.5 ± 1501.2	11283.5 ± 3392.0	5574.5 ± 4038.3	8407.0 ± 3392.0	5259.0 ± 5757.3	3455.0 ± 982.9	10585.0 ± 3392.0	5870.0 ± 2644.6
Mn (mg kg ⁻¹)	2797.5 ± 178.9	1206.0 ± 15.6	1424.0 ± 396.0	3423.5 ± 1282.0	1729.0 ± 396.0	3797.5 ± 2235.2	1855.0 ± 162.6	1126.5 ± 396.0	2570.0 ± 862.7
Fe (mg kg ⁻¹)	725.0 ± 642.1	28062.0 ± 9244.7	2905.5 ± 65.8	24040.0 ± 3790.1	4071.0 ± 65.8	784.5 ± 512.7	26235.0 ± 473.8	3260.0 ± 65.8	856.5 ± 372.6
Cu (mg kg ⁻¹)	5.5 ± 0.7	92.5 ± 65.8	9.5 ± 0.7	28.5 ± 2.1	9.0 ± 0.7	4.0 ± 0.0	36.6 ± 14.1	9.5 ± 0.7	4.7 ± 1.3
Zn (mg kg ⁻¹)	21.0 ± 8.5	47.0 ± 5.7	40.5 ± 17.7	283.5 ± 352.8	61.0 ± 17.7	19.5 ± 9.2	37.4 ± 13.9	28.5 ± 17.7	16.2 ± 1.8
B (mg kg ⁻¹)	12.5 ± 3.5	31.0 ± 8.5	10.5 ± 0.7	31.5 ± 4.9	13.5 ± 0.7	8.5 ± 0.7	18.4 ± 4.3	11.4 ± 0.7	9.8 ± 0.6
N (%)	2 ± 0.4	0.7 ± 0.0	0.9 ± 0.1	0.8 ± 0.1	0.9 ± 0.0	1.3 ± 0.2	0.7 ± 0.4	0.7 ± 0.1	1.7 ± 0.1
P (%)	0.2 ± 0.1	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0	0.1 ± 0.0
K (%)	2.3 ± 0.6	0.8 ± 0.2	2.3 ± 1.3	1.2 ± 0.1	2.2 ± 0.1	2.1 ± 0.2	1 ± 1.0	2.2 ± 1.4	1.5 ± 0.4
Ca (%)	1 ± 0.4	0.4 ± 0.0	1 ± 0.1	0.5 ± 0.1	1.3 ± 0.6	1.4 ± 0.2	0.4 ± 0.3	1.1 ± 0.2	1.2 ± 0.4
Mg (%)	0.3 ± 0.0	0.2 ± 0.0	0.3 ± 0.1	0.3 ± 0.0	0.3 ± 0.2	0.3 ± 0.0	0.2 ± 0.1	0.3 ± 0	0.3 ± 0.0