

Table S2. Effect of As treatment on selected free amino acid content in *Pteris cretica* and *Spinacia oleracea* shoots. Values represent mean \pm SE of three biological and four technical replicates per sample. Data with the same letter are not significantly different. Different letters indicate significant differences ($p \leq 0.05$) among treatments according to the Kruskal-Wallis test. Abbreviations: control – 0 mg As/kg soil; As20 – 20 mg As/kg soil; As100 – 100 mg As/kg soil; Ala – free alanine; Glu – free glutamic acid; Pro – free proline; Gly – free glycine; Phe – free phenylalanine; Ser – free serine.

Amino acid	<i>P. cretica</i>			<i>S. oleracea</i>		
	control	As20	As100	control	As20	As100
Ala ($\mu\text{mol/kg FW}$)	633.17 \pm 12.20 ^b	315.46 \pm 4.46 ^{ab}	196.09 \pm 3.94 ^a	145.95 \pm 6.09 ^a	287.92 \pm 10.22 ^{ab}	429.36 \pm 6.27 ^b
Glu ($\mu\text{mol/kg FW}$)	3448.24 \pm 387.57 ^b	2443.81 \pm 245.28 ^{ab}	1981.28 \pm 158.82 ^a	2160.81 \pm 108.05 ^a	2839.12 \pm 278.71 ^{ab}	3126.21 \pm 109.71 ^b
Pro ($\mu\text{mol/kg FW}$)	482.88 \pm 9.78 ^b	105.51 \pm 1.52 ^{ab}	62.79 \pm 1.25 ^a	160.09 \pm 4.64 ^a	390.02 \pm 9.43 ^b	149.94 \pm 1.23 ^a
Gly ($\mu\text{mol/kg FW}$)	132.77 \pm 2.87 ^a	146.86 \pm 2.12 ^a	514.79 \pm 10.03 ^b	38.42 \pm 1.45 ^a	55.95 \pm 1.43 ^{ab}	75.41 \pm 2.50 ^b
Phe ($\mu\text{mol/kg FW}$)	957.24 \pm 123.99 ^b	599.42 \pm 16.38 ^b	417.97 \pm 20.96 ^a	80.90 \pm 3.73 ^b	84.25 \pm 2.60 ^b	61.76 \pm 1.13 ^a
Ser ($\mu\text{mol/kg FW}$)	972.34 \pm 26.48 ^b	582.44 \pm 59.62 ^a	618.67 \pm 34.02 ^a	612.42 \pm 27.11 ^a	829.68 \pm 81.35 ^a	698.39 \pm 42.62 ^a