

Supplementary Material

Fluoride hyperaccumulation in *Gastrolobium* species (Fabaceae) from Western Australia

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Table S1. Water-soluble and acid-extractable F, Cl and SO₄ concentrations in young leaves of different species of *Gastrolobium* after exposure to different levels of NaF as analysed by ion chromatograph (IC).

NaF treatment levels (µg g ⁻¹)	Species	Water-soluble concentrations (µg g ⁻¹)			Acid-extractable concentrations (µg g ⁻¹)		
		F	Cl	SO ₄	F	Cl	SO ₄
Control	<i>G. bilobum</i>	15 ± 5.6 ^j	12 ± 4.0 ^j	60 ± 15 ^j	15 ± 2.9 ^j	59 ± 10 ^h	18 ± 4.6 ⁱ
	<i>G. parviflorum</i>	16 ± 4.2 ^j	24 ± 1.9 ⁱ	17 ± 2.0 ^l	14 ± 3.2 ^j	35 ± 7.2 ⁱ	30 ± 16 ^h
	<i>G. parvifolium</i>	20 ± 14 ⁱ	13 ± 7.0 ^j	13 ± 5.5 ^l	14 ± 4.8 ^j	45 ± 18 ⁱ	32 ± 12 ^h
1	<i>G. bilobum</i>	29 ± 8.2 ⁱ	75 ± 20 ^h	75 ± 24 ^j	76 ± 3.4 ⁱ	39 ± 5.7 ⁱ	90 ± 24 ^g
	<i>G. parviflorum</i>	54 ± 20 ^h	95 ± 33 ^h	47 ± 16 ^k	69 ± 7.8 ⁱ	17 ± 2.3 ^j	70 ± 35 ^g
	<i>G. parvifolium</i>	44 ± 14 ^h	16 ± 8.0 ^j	40 ± 13 ^k	58 ± 6.2 ⁱ	22 ± 10 ^j	55 ± 17 ^g
10	<i>G. bilobum</i>	127 ± 17 ^g	1470 ± 305 ^d	299 ± 26 ^h	120 ± 16 ^h	1660 ± 204 ^e	4300 ± 2010 ^c
	<i>G. parviflorum</i>	270 ± 64 ^e	716 ± 110 ^g	118 ± 54 ⁱ	485 ± 71 ^g	1060 ± 110 ^f	680 ± 345 ^f
	<i>G. parvifolium</i>	128 ± 39 ^g	2080 ± 455 ^c	748 ± 82 ^g	304 ± 60 ^g	410 ± 102 ^g	2010 ± 603 ^d
50	<i>G. bilobum</i>	166 ± 22 ^f	1220 ± 95 ^e	1480 ± 435 ^f	896 ± 13 ^f	3208 ± 1350 ^d	5070 ± 1000 ^b
	<i>G. parviflorum</i>	1580 ± 134 ^d	1820 ± 120 ^d	4110 ± 2005 ^d	4960 ± 980 ^d	3780 ± 855 ^d	2300 ± 370 ^d
	<i>G. parvifolium</i>	1745 ± 534 ^c	1150 ± 325 ^e	3270 ± 1240 ^e	5840 ± 555 ^c	6425 ± 3000 ^b	1870 ± 785 ^e
100	<i>G. bilobum</i>	1840 ± 32 ^c	1067 ± 87 ^f	8810 ± 3210 ^a	7970 ± 3007 ^b	8480 ± 4600 ^a	4570 ± 640 ^c
	<i>G. parviflorum</i>	8100 ± 2063 ^a	4120 ± 740 ^a	6950 ± 1720 ^c	8960 ± 588 ^a	6860 ± 2360 ^b	9570 ± 5200 ^a
	<i>G. parvifolium</i>	6940 ± 1680 ^b	3990 ± 1003 ^b	7140 ± 4025 ^b	3625 ± 340 ^e	6050 ± 2020 ^c	1360 ± 145 ^e

Values are average of three replicates ± standard error. Mean ± standard error followed by the same superscript letter are not significantly different ($P > 0.05$) according to Duncan–Waller K-ratio t -test.

Table S2. Water-soluble and acid-extractable F, Cl and SO₄ concentrations in old leaves of different species of *Gastrolobium* after exposure to different levels of NaF as analysed by ion chromatograph (IC).

NaF treatment levels (µg g ⁻¹)	Species	Water-soluble concentrations (µg g ⁻¹)			Acid-extractable concentrations (µg g ⁻¹)		
		F	Cl	SO ₄	F	Cl	SO ₄
Control	<i>G. bilobum</i>	9.5 ± 0.3 ⁱ	43 ± 2.5 ^f	21 ± 9.0 ⁱ	32 ± 7.2 ^j	32 ± 7.0 ^f	27 ± 4.0 ^g
	<i>G. parviflorum</i>	14 ± 8.8 ⁱ	29 ± 13 ^h	23 ± 11 ⁱ	30 ± 7.4 ^j	37 ± 12 ^f	25 ± 8.45 ^g
	<i>G. parvifolium</i>	10 ± 3.3 ⁱ	38 ± 15 ^g	18 ± 6.8 ^j	14 ± 9.2 ^k	64 ± 34 ^e	11.8 ± 5.6 ^h
1	<i>G. bilobum</i>	27 ± 1.7 ^h	20 ± 4.5 ^h	45 ± 24 ^h	13 ± 4.0 ^k	28 ± 8.7 ^g	42 ± 15 ^f
	<i>G. parviflorum</i>	23 ± 5.0 ^h	35 ± 6.2 ^g	13 ± 1.0 ^j	69 ± 24 ⁱ	15 ± 7.2 ^g	48 ± 17 ^f
	<i>G. parvifolium</i>	17 ± 1.7 ⁱ	22 ± 8.5 ^h	15 ± 3.3 ^j	49 ± 18 ⁱ	10 ± 1.3 ^g	62 ± 20 ^e
10	<i>G. bilobum</i>	125 ± 3.3 ^g	1750 ± 125 ^d	113 ± 76 ^g	155 ± 70 ^g	1255 ± 440 ^d	1770 ± 735 ^d
	<i>G. parviflorum</i>	140 ± 11 ^f	225 ± 55 ^e	200 ± 92 ^f	320 ± 60 ^f	1800 ± 300 ^c	2200 ± 890 ^c
	<i>G. parvifolium</i>	145 ± 70 ^f	2760 ± 637 ^c	170 ± 45 ^f	105 ± 25 ^h	2550 ± 1600 ^a	1240 ± 520 ^d
50	<i>G. bilobum</i>	1450 ± 25 ^c	1945 ± 320 ^d	1960 ± 260 ^d	1320 ± 105 ^e	1100 ± 445 ^d	2720 ± 155 ^c
	<i>G. parviflorum</i>	1300 ± 875 ^d	1650 ± 565 ^d	1810 ± 210 ^d	3040 ± 110 ^d	1230 ± 730 ^d	2450 ± 585 ^c
	<i>G. parvifolium</i>	1092 ± 105 ^e	2620 ± 775 ^c	2850 ± 1030 ^c	3190 ± 165 ^c	2745 ± 795 ^a	3510 ± 1340 ^b
100	<i>G. bilobum</i>	1570 ± 14.5 ^c	2510 ± 502 ^c	3290 ± 1065 ^b	8000 ± 1210 ^a	2075 ± 900 ^a	2170 ± 646 ^c
	<i>G. parviflorum</i>	6250 ± 2590 ^a	3110 ± 260 ^b	1430 ± 580 ^e	6450 ± 203 ^b	1420 ± 850 ^b	4140 ± 2500 ^a
	<i>G. parvifolium</i>	5473 ± 1500 ^b	8475 ± 3900 ^a	4010 ± 1900 ^a	3010 ± 101 ^d	1370 ± 208 ^b	3840 ± 1700 ^b

Values are average of three replicates ± standard error. Mean ± standard error followed by the same superscript letter are not significantly different ($P > 0.05$) according to Duncan–Waller K-ratio t -test.