

Table S1. The DFAA concentration in Teshio River waters along seven sampling stations in May 2007. Each measurement was performed in triplicate and is presented as mean \pm SEM ($n = 3$).

	St. 1	St. 2	St. 3	St. 4	St. 5	St. 6	St. 7
Ala	22.25 \pm 8.52	46.27 \pm 9.42	23.69 \pm 9.24	48.33 \pm 19.98	146.91 \pm 26.88	36.13 \pm 9.30	45.07 \pm 15.30
Arg	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00
Asn	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00
Asp	9.35 \pm 12.66	12.28 \pm 8.58	9.96 \pm 3.48	11.91 \pm 10.80	20.59 \pm 6.48	2.40 \pm 8.58	7.18 \pm 21.30
Cys	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	17.20 \pm 8.70	0.00 \pm 0.00
Gln	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00
Glu	27.61 \pm 7.74	26.52 \pm 5.28	21.07 \pm 8.70	37.73 \pm 18.66	34.89 \pm 3.82	20.64 \pm 5.88	38.68 \pm 10.02
Gly	18.22 \pm 5.34	47.71 \pm 4.68	37.92 \pm 11.88	50.79 \pm 11.88	122.87 \pm 26.52	42.89 \pm 9.30	34.85 \pm 13.98
His	34.74 \pm 7.44	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00
Concentration (nM) Ile	0.00 \pm 0.00	4.77 \pm 3.30	0.00 \pm 0.00	4.44 \pm 0.78	1.14 \pm 0.34	2.56 \pm 5.34	1.27 \pm 0.12
Leu	3.64 \pm 1.98	22.79 \pm 2.58	0.00 \pm 0.00	24.78 \pm 8.58	31.79 \pm 9.07	11.29 \pm 8.10	13.58 \pm 9.96
Lys	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	317.70 \pm 87.18	0.00 \pm 0.00	0.00 \pm 0.00
Met	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	4.11 \pm 1.50	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00
Phe	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00
Pro	8.96 \pm 4.26	13.64 \pm 4.02	8.71 \pm 4.56	12.69 \pm 5.88	1.51 \pm 0.75	8.91 \pm 5.22	8.24 \pm 3.42
Ser	6.67 \pm 5.88	20.24 \pm 13.86	9.50 \pm 8.58	14.85 \pm 5.34	74.25 \pm 20.36	12.04 \pm 9.30	9.89 \pm 8.10
Thr	11.48 \pm 8.64	24.29 \pm 8.76	7.34 \pm 5.88	14.68 \pm 4.08	13.29 \pm 2.47	16.35 \pm 9.18	10.30 \pm 11.22
Tyr	0.00 \pm 0.00	0.00 \pm 0.00	0.00 \pm 0.00	2.74 \pm 0.84	8.39 \pm 2.73	0.00 \pm 0.00	0.00 \pm 0.00
Val	9.22 \pm 7.32	20.73 \pm 9.24	9.31 \pm 5.28	20.59 \pm 2.64	30.28 \pm 9.06	12.57 \pm 6.84	13.88 \pm 9.96