Table S1. Summary of experimental conditions as well as the measured maximum (TW_{max}) and final (TW_{final}) TW concentrations during all experiments.

Experiment ID	Experimental fluid	Particulate Mass [mg/kg] - type	duration [days]	Initial pH	pH range	$TW_{initial}$ x10^4 [cells/kg]	TW_{max} x10^4 [cells/kg]	TW_{final} x10^4 [cells/kg]	factor increase rel. to biotic ctrl	Observations
TW1 1	IO + 100 % f/2	biotic ctrl	6.6	8.20	8.2-9.4	1.87 ± 0.04	45.72 ± 1.57	45.72 ± 1.57		exp. Growth
TW1 2	IO + 100 % f/2	500 MS	6.6	8.22	8.2-9.3	1.77 ± 0.08	47.20 ± 0.32	47.20 ± 0.32	1.03 ± 0.04	exp. Growth
TW1 3	IO + 100 % f/2	500 ICE	6.6	8.23	8.2-9.3	1.67 ± 0.14	55.20 ± 1.67	55.20 ± 1.67	1.21 ± 0.05	exp. Growth
TW1 4	IO + 100 % f/2	500 MS	6.6	8.20	8.2-8.4		abiotic ctrl			
TW1 5	IO + 100 % f/2	500 ICE	6.6	8.18	8.2-8.4		abiotic ctrl			
TW2 1	IO + 5 % f/2	biotic ctrl	21.8	8.34	8.1-8.6	0.99 ± 0.03	7.90 ± 0.51	4.77 ± 0.03		exp. Growth
TW2 1b	IO + 5 % f/2	biotic ctrl BIG	21.8	8.35	8.2-8.5	0.96 ± 0.05	12.62 ± 0.63	10.51 ± 0.53		exp. Growth
TW2 2	IO + 5 % f/2	500 MS	21.8	8.35	8.2-8.5	0.99 ± 0.01	15.16 ± 0.64	14.02 ± 0.22	1.92 ± 0.08	exp. Growth
TW2 2b	IO + 5 % f/2	500 MS BIG	21.8	8.35	8.2-8.6	0.92 ± 0.05	17.96 ± 0.90	16.60 ± 0.83	1.42 ± 0.07	exp. Growth
TW2 3	IO + 5 % f/2	500 ICE	21.8	8.35	8.2-8.5	0.94 ± 0.01	10.46 ± 0.43	8.39 ± 0.43	1.32 ± 0.08	exp. Growth
TW2 3b	IO + 5 % f/2	500 ICE BIG	21.8	8.35	8.1-8.5	1.05 ± 0.05	14.93 ± 0.75	14.04 ± 0.70	1.18 ± 0.07	exp. Growth
TW2 4	IO + 5 % f/2	75 MS	21.8	8.36	8.3-8.5	0.94 ± 0.06	8.43 ± 1.42	5.60 ± 0.99	1.07 ± 0.18	exp. Growth
TW2 5	IO + 5 % f/2	75 ICE	21.8	8.37	8.3-8.5	0.94 ± 0.13	8.37 ± 0.53	7.14 ± 1.20	1.06 ± 0.09	exp. Growth
TW2 6	IO + 5 % f/2	500 MS	21.8	8.35	8.4-8.5		abiotic ctrl			
TW2 7	IO + 5 % f/2	500 ICE	21.8	8.35	8.3-8.5		abiotic ctrl			
TW2 8	IO + 5 % f/2	75 MS	21.8	8.34	8.3-8.5		abiotic ctrl			
TW2 9	IO + 5 % f/2	75 ICE	21.8	8.35	8.2-8.5		abiotic ctrl			
TW3 1	IO	biotic ctrl	27.7	8.32	8.3-8.4	1.08 ± 0.01	1.08 ± 0.01	0.12 ± 0.03		no growth
TW3 2	IO	500 MS	27.7	8.31	8.3-8.4	0.95 ± 0.03	1.66 ± 0.10	1.59 ± 0.28	13.55 ± 0.31*	linear growth
TW3 3	IO	500 ICE	27.7	8.31	8.2-8.4	0.82 ± 0.05	0.92 ± 0.04	0.74 ± 0.05	6.30 ± 0.26*	linear growth
TW3 4	IO	100 MS	27.7	8.32	8.3-8.4	0.95 ± 0.07	0.99 ± 0.04	0.45 ± 0.08	3.86 ± 0.31*	initially lin. growth

TW3 5	IO	100 ICE	27.7	8.32	8.2-8.4	0.88 ± 0.06	0.88 ± 0.06	0.25 ± 0.05	2.16 ± 0.32*	initially lin. growth
TW3 6	IO	500 MS	27.7	8.30	8.3-8.4		abiotic ctrl			
TW3 7	IO	500 ICE	27.7	8.32	8.2-8.4		abiotic ctrl			
TW3 8	IO	100 MS	27.7	8.31	8.3-8.4		abiotic ctrl			
TW3 9	IO	100 ICE	27.7	8.32	8.2-8.3		abiotic ctrl			
TW4 1	IO + 5 % f/2	biotic ctrl	21.8	8.44	8.3-8.4	0.86 ± 0.06	6.83 ± 0.45	3.17 ± 0.36		exp. Growth
TW4 2	IO + 5 % f/2	750 MS	21.8	8.43	8.3-8.6	0.81 ± 0.09	8.67 ± 0.34	7.01 ± 0.68	1.27 ± 0.08	exp. Growth
TW4 3	IO + 5 % f/2	750 ICE	21.8	8.44	8.2-8.4	0.65 ± 0.06	7.08 ± 0.79	5.40 ± 0.53	1.04 ± 0.13	exp. Growth
TW4 4	IO + 5 % f/2	250 MS	21.8	8.44	8.3-8.5	0.91 ± 0.03	7.54 ± 0.16	4.49 ± 0.11	1.10 ± 0.07	exp. Growth
TW4 5	IO + 5 % f/2	250 ICE	21.8	8.44	8.2-8.4	0.70 ± 0.05	7.39 ± 0.42	4.01 ± 0.71	1.08 ± 0.09	exp. Growth
TW4 6	IO + 5 % f/2	750 MS	21.8	8.43	8.4-8.6		abiotic ctrl			
TW4 7	IO + 5 % f/2	750 ICE	21.8	8.43	8.2-8.5		abiotic ctrl			
TW4 8	IO + 5 % f/2	250 MS	21.8	8.44	8.4-8.6		abiotic ctrl			
TW4 9	IO + 5 % f/2	250 ICE	21.8	8.44	8.2-8.5		abiotic ctrl			
TW5 1	IO	biotic ctrl	21.0	8.10	8.1-8.4	0.89 ± 0.06	0.89 ± 0.06	0.27 ± 0.04		no growth
TW5 2	IO	750 MS	21.0	8.09	8.1-8.4	0.73 ± 0.01	2.14 ± 0.16	2.14 ± 0.16	7.87 ± 0.16*	linear growth
TW5 3	IO	750 ICE	21.0	8.09	8.1-8.4	0.67 ± 0.04	1.50 ± 0.26	1.16 ± 0.10	4.25 ± 0.17*	linear growth
TW5 4	IO	250 MS	21.0	8.10	8.1-8.4	0.76 ± 0.01	1.34 ± 0.08	0.78 ± 0.06	2.87 ± 0.17*	initially lin. growth
TW5 5	IO	250 ICE	21.0	8.10	8.1-8.4	0.70 ± 0.11	1.03 ± 0.16	0.33 ± 0.05	1.20 ± 0.20*	initially lin. growth
TW5 6	IO	750 MS	21.0	8.18	8.1-8.4		abiotic ctrl			
TW5 7	IO	750 ICE	21.0	8.14	8.1-8.4		abiotic ctrl			
TW5 8	IO	250 MS	21.0	8.14	8.1-8.4		abiotic ctrl			
TW5 9	IO	250 ICE	21.0	8.14	8.1-8.4		abiotic ctrl			

*In experimental series TW3 and TW5, where no exponential growth occurred, the factor relative to the biotic control is based on the final TW concentration and not on the maximal concentration as for experimental series TW1, TW2 and TW4 where exponential growth occurred.