

Galotti *et al.*, 2018. An abrupt CO₂-mediated decrease in pH affects growth rates, cellular features and the interspecific interaction of *Scenedesmus (Acutodesmus) obliquus* and *Cryptomonas pyrenoidifera*. *Limnetica* 37(2): 267-281 (2018)

SUPPLEMENTARY INFORMATION

Table S1. *S. obliquus* endpoint results in the monoculture. *Resultado de los criterios de referencia en el monocultivo de S. obliquus.*

Endpoint	culture	Days					
		0	1	2	7	10	14
Cell Density (10 ⁶ cells/ml)	Low-pH	0.2	0.2	0.5	3.2	6.3	9.1
	SD±	0.01	0.04	0.18	1.03	0.71	1.77
	Control	0.2	0.2	0.3	0.9	3.1	7.2
	SD±	0.01	0.02	0.05	0.39	1.16	1.77
Growth Rate (· d ⁻¹)	Low-pH		0.23	0.69	0.58	0.51	0.40
	SD±		0.26	0.28	0.07	0.02	0.02
	Control		-0.05	0.23	0.32	0.40	0.37
	SD±		0.16	0.16	0.09	0.06	0.03
Cell Size (FSC-H Geo-Mean)	Low-pH	69.7	54.9	44.4	37.2	42.8	42.6
	SD±	0.14	2.23	1.44	1.54	1.39	1.10
	Control	69.7	70.7	57.3	37.6	41.7	42.8
	SD±	0.14	2.49	1.79	1.45	1.04	1.56
Granularity (SSC-H Geo-Mean)	Low-pH	118.6	110.2	98.9	87.4	98.2	94.8
	SD±	0.35	3.35	4.57	2.83	1.59	2.43
	Control	118.6	127.8	117.7	83.7	93.7	88.5
	SD±	0.35	6.92	5.07	4.16	6.10	3.11
Colony Formation (colony %)	Low-pH	23.6	27.4	18.0	5.8	5.0	4.6
	SD±	2.7	2.7	7.4	2.8	4.6	2.6
	Control	23.6	21.2	26.5	15.9	18.7	9.8
	SD±	2.7	4.0	7.5	5.1	7.7	3.5

Table S2. *C. pyrenoidifera* endpoint results in the monoculture. *Resultado de los criterios de referencia en el monocultivo de C. pyrenoidifera.*

Endpoint	culture	Days					
		0	1	2	7	10	14
Cell Density (10 ⁶ cells/ml)	Low-pH	0.020	0.020	0.039	0.039	0.223	0.325
	SD±	0.001	0.002	0.003	0.003	0.036	0.049
	Control	0.020	0.015	0.029	0.108	0.214	0.253
	SD±	0.001	0.0004	0.002	0.013	0.007	0.013
Growth Rate (· d ⁻¹)	Low-pH		0.01	0.49	0.33	0.35	0.29
	SD±		0.15	0.06	0.06	0.02	0.02
	Control		-0.39	0.26	0.34	0.35	0.27
	SD±		0.01	0.06	0.03	0.01	0.003
Cell Size (FSC-H Geo-Mean)	Low-pH	84.1	121.7	132.1	132.1	135.9	121.2
	SD±	3.25	1.32	2.41	2.41	4.10	1.77
	Control	84.1	118.1	126.4	116.5	112.5	108.9
	SD±	3.25	3.10	1.42	1.63	1.60	5.62
Granularity (SSC-H Geo-Mean)	Low-pH	426.5	519.6	487.7	487.7	540.0	472.2
	SD±	3.25	10.13	22.76	22.76	27.65	14.42
	Control	426.5	499.1	530.6	496.0	487.3	486.1
	SD±	3.25	2.60	11.32	2.75	4.69	11.02

Table S3. *S. obliquus* endpoint results in the competition experiment. *Resultado de los criterios de referencia de S. obliquus en el experimento de competición.*

Endpoint	culture	Days					
		0	1	2	7	10	14
Cell Density (10^6 cells/ml)	Low-pH	0.16	0.08	0.11	0.50	1.49	3.63
	SD±	0.01	0.01	0.02	0.14	0.50	1.28
	Control	0.15	0.11	0.16	0.39	0.68	1.07
	SD±	0.01	0.005	0.02	0.11	0.04	0.04
Growth Rate ($\cdot d^{-1}$)	Low-pH		-1.00	-0.31	0.23	0.32	0.32
	SD±		0.15	0.14	0.06	0.04	0.04
	Control		-0.53	0.03	0.19	0.22	0.20
	SD±		0.07	0.10	0.06	0.01	0.004
Cell Size (FSC-H Geo-Mean)	Low-pH	7.2	10.8	9.6	8.8	8.6	7.6
	SD±	0.46	3.52	3.59	1.83	2.21	1.82
	Control	7.4	9.5	7.8	7.7	6.8	11.5
	SD±	1.06	1.70	0.35	2.69	0.64	3.89
Granularity (SSC-H Geo-Mean)	Low-pH	67.5	65.2	60.3	66.8	72.0	71.0
	SD±	0.62	4.28	2.34	4.84	2.74	2.65
	Control	74.3	81.3	71.2	59.7	60.6	67.6
	SD±	0.49	0.000	4.88	1.41	4.17	1.70
Colony Formation (colony %)	Low-pH	8.2	18.2	0	5.3	1.3	6.4
	SD±	6.9	0.8	0	2.3	1.8	3.0
	Control	7.4	10.7	10.4	8.8	27.0	21.9
	SD±	2.9	2.1	2.9	1.3	8.4	3.5
Total Biovolume ($\mu\text{m}^3 \cdot 10^8 \text{ml}^{-1}$)	Low-pH	0.17	0.08	0.11	0.53	1.56	3.80
	SD±	0.01	0.01	0.02	0.15	0.52	1.34
	Control	0.16	0.11	0.17	0.40	0.71	1.12
	SD±	0.01	0.01	0.02	0.11	0.04	0.04

Table S4. *C. pyrenoidifera* endpoint results in the competition experiment. *Resultado de los criterios de referencia de C. pyrenoidifera en el experimento de competición.*

Endpoint	culture	Days					
		0	1	2	7	10	14
Cell Density (10^6 cells/ml)	Low-pH	0.015	0.017	0.024	0.116	0.214	0.385
	SD±	0.001	0.001	0.005	0.018	0.044	0.066
	Control	0.014	0.022	0.036	0.110	0.223	0.257
	SD±	0.003	0.002	0.001	0.026	0.056	0.111
Growth Rate ($\cdot d^{-1}$)	Low-pH		0.20	0.32	0.42	0.38	0.33
	SD±		0.09	0.18	0.03	0.03	0.02
	Control		0.62	0.66	0.42	0.39	0.29
	SD±		0.14	0.02	0.05	0.04	0.05
Cell Size (FSC-H Geo Mean)	Low-pH	189.7	157.2	155.2	209.6	201.7	196.1
	SD±	2.66	5.50	1.84	11.34	6.85	10.24
	Control	178.2	172.7	183.1	207.5	160.5	147.3
	SD±	1.13	11.38	10.04	7.21	7.00	4.44
Granularity (SSC-H Geo Mean)	Low-pH	382.0	389.7	324.3	380.2	384.2	371.7
	SD±	10.61	5.60	8.29	12.90	11.81	37.24
	Control	268.4	307.8	231.5	251.5	217.9	323.6
	SD±	31.61	2.76	34.08	5.23	0.000	6.01
Total Biovolume ($\mu\text{m}^3 \cdot 10^8 \text{ ml}^{-1}$)	Low-pH	0.15	0.17	0.24	1.17	2.17	3.91
	SD±	0.01	0.01	0.05	0.18	0.44	0.67
	Control	0.15	0.23	0.36	1.12	2.26	2.61
	SD±	0.03	0.02	0.01	0.26	0.56	1.13

