Supplementary data:

Temperature and light regulated patterns of physiology, morphology and elemental stoichiometry in geographically distinct isolates of a cosmopolitan diatom

Alyson M. Theseira[1], Daniel A. Nielsen[1], Penelope Ajani[1], Katherina Petrou[1]

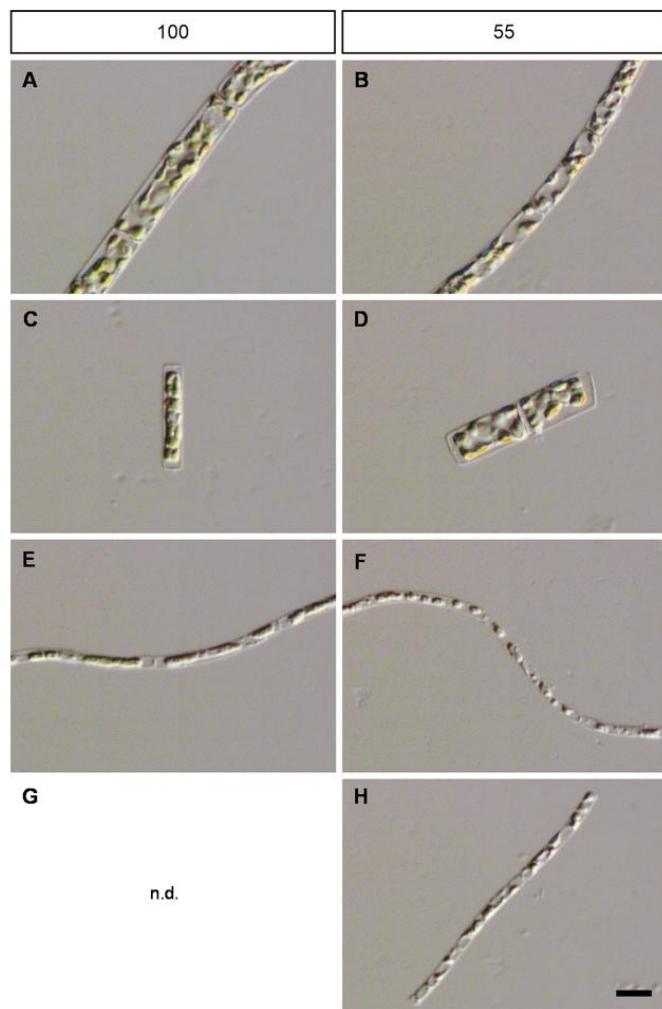
[1]School of Life Sciences, University of Technology Sydney, 15 Broadway, Ultimo, NSW 2007, Australia

Correspondence to: Katherina Petrou (Katherina.Petrou@uts.edu.au)

Supplementary Tables:

Supplementary Table S1. Macronutrient concentrations. Initial (T0) and final (T24) concentrations of macronutrients: nitrate/nitrate (NO_x) and phosphate, following 24 h PDMPO incubation of Leptocylindrus danicus strains in response to temperature at each light treatment. Data represent the mean of four biological replicates ± SD.

Light (µmol photons m^{-2} s^{-1})	Temp (°C)	Strain isolation location	T0		T24	
			NO_x (µmol L^{-1})	Phosphate (µmol L^{-1})	NO_x (µmol L^{-1})	Phosphate (µmol L^{-1})
100	22	Coffs Harbour	153.17 ± 9.68	3.212 ± 0.659	108.86 ± 6.58	0.397 ± 0.263
	20	Forster	168.92 ± 3.97	4.674 ± 0.241	124.63 ± 6.26	1.503 ± 0.520
	18	Maroubra	175.78 ± 4.93	4.665 ± 0.259	156.65 ± 2.26	3.010 ± 0.120
	16	Twofold Bay	n.d.	n.d.	n.d.	n.d.
55	22	Coffs Harbour	151.57 ± 1.22	4.539 ± 0.160	136.82 ± 5.53	2.998 ± 0.248
	20	Forster	148.50 ± 1.65	5.207 ± 0.183	130.20 ± 6.36	3.376 ± 0.346
	18	Maroubra	155.23 ± 2.73	5.732 ± 0.058	147.33 ± 1.35	4.124 ± 0.417
	16	Twofold Bay	161.28 ± 1.34	6.094 ± 0.037	161.08 ± 3.97	5.605 ± 0.314

Supplementary Figures:

35 **Supplementary Figure S1 | Strain morphology.** Micrographs of Leptocylindrus danicus strains used in the current study. The left column row shows strains grown under 100 µmol photons m^{-2} s^{-1}, and right column shows strains grown under 55 µmol photons m^{-2} s^{-1} (A, B Coffs Harbour, C, D Forster, E, F Maroubra and G, H Twofold Bay strains). Black scale bar represents 10 µm.