

Table S2

Tukey's HSD results for the specific growth rates showing significant interaction between the CO₂ and temperature treatments in the *Synechococcus* strains.

CO ₂ concentration: Temperature level	<i>Synechococcus</i> Strain	P value
600 ppm: 22°C- 400 ppm: 22°C	WH7803	0.007
	RCC2673	0.035
800 ppm: 22°C- 400 ppm: 22°C	WH7803	0.023
	RCC2673	1.3 x 10 ⁻⁴
400 ppm: 24°C- 400 ppm: 22°C	RCC2673	2.6 x 10 ⁻⁴
600 ppm: 24°C- 400 ppm: 22°C	RCC2673	6.5 x 10 ⁻⁵
	WH8102	0.026
400 ppm: 26°C- 400 ppm: 22°C	RCC2673	0.006
	WH8102	1.3 x 10 ⁻⁵
600 ppm: 26°C- 400 ppm: 22°C	WH8102	0.053
800 ppm: 26°C- 400 ppm: 22°C	WH8102	0.019
400 ppm: 24°C- 600 ppm: 22°C	RCC2673	0.05
600 ppm: 24°C- 600 ppm: 22°C	RCC555	0.002
800 ppm: 24°C- 600 ppm: 22°C	RCC555	0.006
	RCC2673	0.026
	WH8102	0.019
	WH7803	0.007
400 ppm: 26°C- 600 ppm: 22°C	WH8102	9.8 x 10 ⁻⁶
	WH7803	0.001
600 ppm: 26°C- 600 ppm: 22°C	WH8102	0.038
	WH7803	9.7 x 10 ⁻⁴
800 ppm: 26°C- 600 ppm: 22°C	WH8102	0.013
	WH7803	8.0 x 10 ⁻⁵
400 ppm: 24°C- 800 ppm: 22°C	WH8109	0.033
	RCC2673	0.007
600 ppm: 24°C- 800 ppm: 22°C	WH8109	0.025
	RCC555	3.4 x 10 ⁻⁴
	RCC2673	0.015
	WH7803	0.023
800 ppm: 24°C- 800 ppm: 22°C	WH8102	0.053
	RCC555	0.001
	RCC2673	0.003
	WH7803	0.004
400 ppm: 26°C- 800 ppm: 22°C	WH8102	2.5 x 10 ⁻⁵
	WH8109	0.004
600 ppm: 26°C- 800 ppm: 22°C	WH7803	0.003
800 ppm: 26°C- 800 ppm: 22°C	WH7803	2.4 x 10 ⁻⁴
	WH8102	0.038
600 ppm: 24°C- 400 ppm: 24°C	RCC555	0.035
400 ppm: 26°C- 400 ppm: 24°C	WH7803	0.052
	WH8102	9.4 x 10 ⁻⁵
600 ppm: 26°C- 400 ppm: 24°C	WH7803	0.040
	RCC2673	0.007
800 ppm: 26°C- 400 ppm: 24°C	WH7803	0.003

400 ppm: 26°C- 600 ppm: 24°C	RCC2673	2.1×10^{-4}
	WH8102	3.5×10^{-5}
600 ppm: 26°C- 600 ppm: 24°C	RCC555	0.035
	RCC555	1.9×10^{-4}
800 ppm: 26°C- 600 ppm: 24°C	RCC2673	0.015
	WH7803	0.03
	WH8102	0.053
	RCC2673	4.3×10^{-4}
400 ppm: 26°C- 800 ppm: 24°C	WH8102	0.027
	WH8109	0.025
600 ppm: 26°C- 800 ppm: 24°C	RCC555	6.0×10^{-4}
	RCC2673	0.003
800 ppm: 26°C- 800 ppm: 24°C	RCC2673	1.0×10^{-4}
600 ppm: 26°C- 400 ppm: 26°C	WH8102	0.013
800 ppm: 26°C- 400 ppm: 26°C	WH8102	0.034
	RCC2673	0.011
