

Table S3

Tukey's HSD results for the C/N (mol/mol) ratios showing significant interaction between the CO₂ and temperature treatments in *Synechococcus* RCC555.

CO₂ concentration: Temperature level	P value
600 ppm: 26°C- 400 ppm: 22°C	0.002
600 ppm: 26°C- 600 ppm: 22°C	0.003
600 ppm: 26°C- 800 ppm: 22°C	0.006
600 ppm: 26°C- 400 ppm: 24°C	9.1 x 10 ⁻⁴
600 ppm: 26°C- 600 ppm: 24°C	0.019
600 ppm: 26°C- 800 ppm: 24°C	0.017
600 ppm: 26°C- 400 ppm: 26°C	0.001
800 ppm: 26°C- 600 ppm: 26°C	0.010