## Mineralogical response of Mediterranean crustose coralline algae *Lithophyllum cabiochae* to near-future ocean acidification and warming

Supplementary data, Nash et al.

Treatment	400	400T+3	700	700T+3
New crust		Mol%	MgCO <sub>3</sub>	
sample 1	14.7%	15.6%	14.9%	16.4%
sample 2	14.0%	16.4%	15.2%	16.3%
sample 3	15.1%	15.9%	15.1%	16.0%
sample 4	16.0%	15.3%	15.1%	16.4%
sample 5	14.8%	16.2%	15.6%	15.9%
sample 6	15.8%	16.0%	15.4%	15.8%
sample 7	15.6%	16.9%	14.7%	15.8%
sample 8	15.6%	15.8%	14.1%	15.7%
average	15.2%	16.0%	15.0%	16.1%
St. Dev	0.7%	0.5%	0.5%	0.3%

**Table 1:** XRD Mol% MgCO<sub>3</sub> for new crust.

400     sample 2     15.45%     16.16%     0.0       400     sample 3     15.49%     16.11%     0.0       400     sample 4     16.72%     17.68%     0.0       400     sample 5     15.99%     16.67%     0.0       400     sample 6     16.53%     18.15%     1.0       400     sample 7     16.25%     17.08%     0.0       400     sample 8     16.45%     18.09%     1.0       400     sample 8     16.0%     17.0%     0.0       St. Dev     0.5%     0.9%     0.0       400T+3     sample 1     16.35%     17.34%     0.0       400T+3     sample 2     15.57%     16.20%     0.0       400T+3     sample 3     15.69%     16.72%     1.0       400T+3     sample 4     16.14%     17.42%     1.0	
400     sample 2     15.45%     16.16%     0       400     sample 3     15.49%     16.11%     0       400     sample 4     16.72%     17.68%     0       400     sample 5     15.99%     16.67%     0       400     sample 6     16.53%     18.15%     1       400     sample 7     16.25%     17.08%     0       400     sample 8     16.45%     18.09%     1       average     16.0%     17.0%     0       St. Dev     0.5%     0.9%     0       400T+3     sample 2     15.57%     16.20%     0       400T+3     sample 3     15.69%     16.72%     1       400T+3     sample 4     16.14%     17.42%     1	.71% .62% .95% .68% .62% .83% .64%
400     sample 3     15.49%     16.11%     0       400     sample 4     16.72%     17.68%     0       400     sample 5     15.99%     16.67%     0       400     sample 6     16.53%     18.15%     1       400     sample 7     16.25%     17.08%     0       400     sample 8     16.45%     18.09%     1       average     16.0%     17.0%     0       St. Dev     0.5%     0.9%     0       400T+3     sample 1     16.35%     17.34%     0       400T+3     sample 3     15.69%     16.72%     1       400T+3     sample 4     16.14%     17.42%     1	.62% .95% .68% .62% .83% .64%
400     sample 4     16.72%     17.68%     0       400     sample 5     15.99%     16.67%     0       400     sample 6     16.53%     18.15%     1       400     sample 7     16.25%     17.08%     0       400     sample 8     16.45%     18.09%     1       average     16.0%     17.0%     0       St. Dev     0.5%     0.9%     0       400T+3     sample 1     16.35%     17.34%     0       400T+3     sample 2     15.57%     16.20%     0       400T+3     sample 3     15.69%     16.72%     1       400T+3     sample 4     16.14%     17.42%     1	.95% .68% .62% .83% .64%
400     sample 5     15.99%     16.67%     0       400     sample 6     16.53%     18.15%     1       400     sample 7     16.25%     17.08%     0       400     sample 8     16.45%     18.09%     1       average     16.0%     17.0%     0       St. Dev     0.5%     0.9%     0       400T+3     sample 1     16.35%     17.34%     0       400T+3     sample 2     15.57%     16.20%     0       400T+3     sample 3     15.69%     16.72%     1       400T+3     sample 4     16.14%     17.42%     1	.68% .62% .83% .64%
400     sample 6     16.53%     18.15%     1       400     sample 7     16.25%     17.08%     0       400     sample 8     16.45%     18.09%     1       average     16.0%     17.0%     0       St. Dev     0.5%     0.9%     0       400T+3     sample 1     16.35%     17.34%     0       400T+3     smaple 2     15.57%     16.20%     0       400T+3     sample 3     15.69%     16.72%     1       400T+3     sample 4     16.14%     17.42%     1	.62% .83% .64%
400     sample 6     16.53%     18.15%     1       400     sample 7     16.25%     17.08%     0       400     sample 8     16.45%     18.09%     1       average     16.0%     17.0%     0       St. Dev     0.5%     0.9%     0       400T+3     sample 1     16.35%     17.34%     0       400T+3     smaple 2     15.57%     16.20%     0       400T+3     sample 3     15.69%     16.72%     1       400T+3     sample 4     16.14%     17.42%     1	.83% .64% <b>0.9%</b>
400   sample 8   16.45%   18.09%   1     average   16.0%   17.0%   0     St. Dev   0.5%   0.9%   0     400T+3   sample 1   16.35%   17.34%   0     400T+3   smaple 2   15.57%   16.20%   0     400T+3   sample 3   15.69%   16.72%   1     400T+3   sample 4   16.14%   17.42%   1	.64% <b>0.9%</b>
average     16.0%     17.0%     0       St. Dev     0.5%     0.9%     0       400T+3     sample 1     16.35%     17.34%     0       400T+3     smaple 2     15.57%     16.20%     0       400T+3     sample 3     15.69%     16.72%     1       400T+3     sample 4     16.14%     17.42%     1	0.9%
St. Dev     0.5%     0.9%     0.9%       400T+3     sample 1     16.35%     17.34%     0.9%       400T+3     smaple 2     15.57%     16.20%     0.9%       400T+3     sample 3     15.69%     16.72%     1.9%       400T+3     sample 4     16.14%     17.42%     1.9%	
400T+3   sample 1   16.35%   17.34%   0.00     400T+3   smaple 2   15.57%   16.20%   0.00     400T+3   sample 3   15.69%   16.72%   1     400T+3   sample 4   16.14%   17.42%   1	0.5%
400T+3   smaple 2   15.57%   16.20%   0.0     400T+3   sample 3   15.69%   16.72%   1.0     400T+3   sample 4   16.14%   17.42%   1.0	
400T+3   smaple 2   15.57%   16.20%   0.0     400T+3   sample 3   15.69%   16.72%   1.0     400T+3   sample 4   16.14%   17.42%   1.0	
400T+3 sample 3 15.69% 16.72% 1   400T+3 sample 4 16.14% 17.42% 1	.99%
400T+3 sample 4 16.14% 17.42% 1	.63%
	.03%
400T+2 1.5 15.050/	.28%
400T+3 sample 5 15.95% 16.72% 0.	.77%
400T+3 sample 6 16.63% 17.58% 0.	.96%
400T+3 sample 7 15.89% 16.86% 0.	.97%
400T+3 sample 8 16.16% 16.93% 0.	.77%
average 16.0% 17.0% (	0.9%
St. Dev 0.3% 0.5% 0	0.2%
700 sample 1 15.57% 16.57% 1	.00%
	.83%
	.87%
The Part of the Pa	.45%
	.25%
	.95%
344475	.80%
	.34%
111,570	0.9%
	0.5%
700T+3 sample 1 16.87% 17.58% 0.	.71%
	.17%
1	.88%
700T+3 sample 5 15.51% 16.47% 0.	.88%

700T+3	sample 8	16.51% <b>16.1%</b>	18.04% 17.3%	1.54%
	average	16.1%	17.3%	1.1%

**Table 2:** XRD Mol% MgCO<sub>3</sub> for main thalli.

Dissolution of	chips			
Treatment		mol% MgCO <sub>3</sub>	Asymm. mol%	Asymm. Diff
400T	sample 1	15.11%	15.60%	0.49%
400T	sample 2	15.76%	16.49%	0.74%
400T	sample 3	15.56%	16.42%	0.85%
400T	sample 4	14.66%	15.67%	1.00%
400T	sample 5	14.95%	16.21%	1.26%
400T	sample 6	16.35%	17.38%	1.03%
400T	sample 7	15.35%	16.43%	1.07%
400T	sample 8	15.44%	16.26%	0.81%
	average	15.4%	16.3%	0.9%
	St. Dev	0.5%	0.6%	0.2%
400T+3	sample 1	15.72%	16.51%	0.79%
400T+3	sample 2	15.80%	16.58%	0.79%
400T+3	sample 3	15.79%	16.63%	0.84%
400T+3	sample 4	15.71%	16.80%	1.09%
400T+3	sample 5	16.40%	17.48%	1.08%
400T+3	sample 6	14.95%	15.40%	0.45%
400T+3	sample 7	15.36%	16.04%	0.68%
400T+3	sample 8	15.12%	15.69%	0.58%
	average	15.6%	16.4%	0.8%
	St. Dev	0.5%	0.7%	0.2%
700T	sample 1	15.43%	15.95%	0.52%
700T	sample 2	15.53%	16.28%	0.75%
700T	sample 3	15.12%	15.68%	0.56%
700T	sample 4	16.59%	17.53%	0.94%
700T	sample 5	15.14%	15.88%	0.73%
700T	sample 6	15.85%	16.38%	0.52%
700T	sample 7	15.32%	15.67%	0.34%
700T	sample 8	15.73%	16.64%	0.91%
	average	15.6%	16.2%	0.7%
	St. Dev	0.5%	0.6%	0.2%
700T+3	sample 1	15.54%	15.90%	0.36%
700T+3	sample 2	15.68%	16.27%	0.60%

700T+3	sample 3	15.79%	16.71%	0.92%
700T+3	sample 4	15.12%	15.64%	0.52%
700T+3	sample 5	15.62%	16.15%	0.53%
700T+3	sample 6	15.35%	16.23%	0.88%
700T+3	sample 7	16.11%	17.33%	1.22%
700T+3	sample 8	15.07%	15.68%	0.62%
	average	15.5%	16.2%	0.7%
	St. Dev	0.3%	0.6%	0.3%

**Table 3:** XRD Mol% MgCO<sub>3</sub> for dissolution chips.