

Table 3. Elemental ratios (molar C:N, C:P, and N:P) for marine phytoplankton cultures, bacteria, and particulate organic matter. Arithmetic means are presented, with standard deviation between brackets.

Sample	C:N	C:P	N:P	Reference
<i>Prochlorococcus</i> Med4				
P-replete	5.7 (0.7)	121 (17)	21.2 (4.5)	This study
P-limited	7.4 (0.2)	464 (28)	62.3 (14.1)	
<i>Synechococcus</i> WH8012				
P-replete	5.4 (1.1)	130 (19)	24.0 (3.6)	This study
P-limited	7.5 (0.8)	723 (61)	96.9 (37)	
<i>Synechococcus</i> WH8103				
P-replete	5.0 (0.2)	165 (8)	33.2 (5.2)	This study
P-limited	7.1 (0.9)	779 (122)	109 (10.5)	
Exponential* <i>Prochlorococcus</i> (6 strains)				
	8.5–9.9	156–215	15.9–24.4	Heldal et al. 2003
Exponential* <i>Synechococcus</i>				
WH8103	10	150	15	Heldal et al. 2003
WH7803	8.9	113	13.3	
Exponential <i>Synechococcus</i>				
WH7803	7	115	16.4	Cuhel and Waterbury 1984
Marine phytoplankton cultures†				
Average	7.7 (2.6)	75 (31)	10.1 (3.9)	Geider and La Roche 2002
Range	4–17	27–135	5–19	
Marine particulate matter‡				
Average	7.3 (1.7)	114 (45)	16.4 (6.2)	Geider and La Roche 2002
Range	3.8–12.5	35–221	5–34	
Marine bacterial cultures				
Exponential	3.8–6.3	26–50	5.5–7.9	Vrede et al. 2002
P-limited	7.7–12	176–180	16–19	

* Cells cultured in PCR-S11 medium (Partensky et al. 1999), sampled in exponential phase.

† Meta-analysis of nutrient-replete eukaryotic marine phytoplankton cultures.

‡ Meta-analysis of marine particulate matter.