

Table 1. Cellular attributes and heat production for eight marine phototrophic protists

Organism	Cells	Mass	Volume	Surface area	Heat	Heat	SA/vol	C/vol	C:SA	Heat flux
		pg C	μm^3	μm^2	pW cell ⁻¹	pW pgC ⁻¹	$\mu\text{m}^2/\mu\text{m}^3$	pg C/ μm^3	pg C/ μm^2	pW/ μm^2
<i>Micromonas pusilla</i> (2)*	2.23×10^6	2.36	0.904	4.5	0.081 ± 0.057	0.033 ± 0.024	5.0000	2.63	0.524	0.018 ± 0.012
<i>Thalassiosira pseudonana</i> (1)	6.18×10^5	9.17	31.4	56.5	0.66	0.069	0.8003	0.292	0.365	0.026
<i>Geminigera cryophila</i> (2)*	8.25×10^4	147.9	9.01×10^2	5.33×10^2	4.85 ± 0.69	0.032 ± 0.005	0.6111	0.164	0.269	0.009 ± 0.001
<i>Myrionecta rubra</i> (3)*	1.41×10^4	1711	8.19×10^3	1.65×10^3	70.67 ± 9.89	0.041 ± 0.013	0.2270	0.209	0.920	0.038 ± 0.010
<i>Coscinodiscus</i> sp. (2)	3.37×10^4	913	1.26×10^4	3.04×10^3	16.67 ± 1.66	0.018 ± 0.002	0.2403	0.072	0.301	0.006 ± 0.001
<i>Akashiwo sanguinea</i> (2)*	1.43×10^3	3763	5.32×10^4	1.42×10^4	203 ± 37.3	0.054 ± 0.010	0.266	0.071	0.266	0.014 ± 0.003
<i>Coscinodiscus wailesii</i> (2)	420	78000	2.66×10^6	1.08×10^5	1980 ± 347	0.025 ± 0.004	0.0406	0.029	0.722	0.018 ± 0.003
<i>Pyrocystis noctiluca</i> (2)*	37	22817	4.11×10^6	1.26×10^5	5004 ± 1260	0.182 ± 0.046	0.0300	0.005	0.181	0.039 ± 0.011

Number of replicates in parentheses. *, Capacity for motility