

Table 3. Bacteriochlorophyll *a* (Bchl *a*) content and the number of PSUs per AAP bacterium.

Organism or region	Bchl content (10^{-19} mol cell ⁻¹)	PSUs per cell	Reference
<i>Erythrobacter longus</i>	6.2	10 978	Yurkov and Beatty (1998)
<i>Erythromicrobium hydrolyticum</i>	1.5–6.2	2 700–11 000	Yurkov and Beatty (1998)
<i>Erythrobacter</i> sp. NAP1	0.50	885	Koblížek and colleagues (2003)
<i>Erythrobacter</i> sp. MG3	0.42	753	Koblížek and colleagues (2003)
<i>Erythrobacter</i> sp. NJ3Y	0.23	398	Koblížek and colleagues (2003)
<i>Roseobacter</i> COL2P	0.5–2	900–4 000	Koblížek and colleagues (2010)
North Atlantic	0.86	1 520	Sieracki and colleagues (2006)
Coastal North Atlantic	0.87	1 550	Cottrell and colleagues (2006)
Gulf Stream	0.12	210	Cottrell and colleagues (2006)
Chesapeake	1.24	2 200	Cottrell and colleagues (2010)
South Pacific	0.32	565	Lami and colleagues (2007)
Coastal Mediterranean	0.7–1.8	1 200–3 110	Koblížek and colleagues (2010) ^a
Coastal Mediterranean	0.9–1.6	1 570–2 910	Hojerová and colleagues (2011)
Mediterranean Sea	1.4	2 550	Hojerová and colleagues (2011)
	Average of field studies	1 740	

a. Using Lami and colleagues (2009b) data.

To estimate Bchl *a* per cell for the pure culture studies, we assume that protein makes up 50% of 1.5×10^{-13} g dry weight for one cell. To calculate PSU per AAP bacterium, we assume that each PSU (light harvesting plus reaction centre) has 34 Bchl (Yurkov and Beatty, 1998).

Cottrell, M.T., Mannino, A., and Kirchman, D.L. (2006) Aerobic anoxygenic phototrophic bacteria in the Mid-Atlantic Bight and the North Pacific Gyre. *Appl Environ Microbiol* **72**: 557–564.

Cottrell, M.T., Ras, J., and Kirchman, D.L. (2010) Bacteriochlorophyll and community structure of aerobic anoxygenic phototrophic bacteria in a particle-rich estuary. *ISME J* **4**: 945–954.

Hojerová, E., Mašín, M., Brunet, C., Ferrera, I., Gasol, J.M., and Koblížek, M. (2011) Distribution and growth of aerobic anoxygenic phototrophs in the Mediterranean Sea. *Environ Microbiol* **13**: 2717–2725.

Koblížek, M., Beja, O., Bidigare, R.R., Christensen, S., Benitez-Nelson, B., Vetriani, C., *et al.* (2003) Isolation and characterization of *Erythrobacter* sp strains from the upper ocean. *Arch Microbiol* **180**: 327–338.

Koblížek, M., Mičoušková, J., Kolber, Z., and Kopecký, J. (2010) On the photosynthetic properties of marine bacterium COL2P belonging to *Roseobacter* clade. *Arch Microbiol* **192**: 41–49.

- Lami, R., Cottrell, M.T., Ras, J., Ulloa, O., Obernosterer, I., Claustre, H., *et al.* (2007) High abundances of aerobic anoxygenic photosynthetic bacteria in the South Pacific Ocean. *Appl Environ Microbiol* **73**: 4198–4205.
- Lami, R., Cuperova, Z., Ras, J., Lebaron, P., and Koblížek, M. (2009b) Distribution of free-living and particle-attached aerobic anoxygenic phototrophic bacteria in marine environments. *Aquat Microb Ecol* **55**: 31–38.
- Sieracki, M.E., Gilg, I.C., Thier, E.C., Poulton, N.J., and Goericke, R. (2006) Distribution of planktonic aerobic anoxygenic photoheterotrophic bacteria in the northwest Atlantic. *Limnol Oceanogr* **51**: 38–46.
- Yurkov, V.V., and Beatty, J.T. (1998) Aerobic anoxygenic phototrophic bacteria. *Microbiol Mol Biol Rev* **62**: 695–724.