

**Table S3.** Superoxide data for *Ruegeria pomeroyii* DSS-3 life cycle experiments.

Timepoint	OD	Time h	Cell Number cells ml <sup>-1</sup>	Mean Steady-State Concentration		Mean Cell Normalized Concentration		Mean Cell Normalized Production Rate			Mean Half-life		Mean Decay Rate	
				nM	Std Dev	amol/cell	Std Dev	amol cell <sup>-1</sup> h <sup>-1</sup>	Std Dev	min	Std Dev	s <sup>-1</sup>	Std Dev	
1	0.025	18	2.4E-07	1.245	0.067	0.053	0.003	6.31	0.34	2.76	0.28	0.004	0.000	
2	0.067	23	5.0E+07	2.658	0.104	0.054	0.002	6.42	0.25	0.42	0.09	0.028	0.006	
3	0.127	27	7.4E+07	4.008	0.151	0.054	0.002	6.49	0.24	1.08	0.12	0.011	0.001	
4	0.216	31	1.1E+08	5.601	0.267	0.050	0.002	5.97	0.28	1.56	0.68	0.008	0.004	
5	0.364	35	1.70E-08	9.934	0.492	0.059	0.003	7.00	0.35	0.70	0.00	0.017	0.000	
6	0.628	43	1.9E+08	10.996	1.177	0.058	0.006	7.00	0.75	0.00	0.00	>>0.1	n/a	
7	0.651	54	2.5E+08	0.482	0.270	0.002	0.001	0.23	0.13	0.00	0.00	>>0.1	n/a	