

Table S1 summary of results from dilution experiments. m : microzooplankton grazing rate; μ_n : growth rate with nutrient enrichment; μ_0 : growth rate without nutrient enrichment.

Station	station type	Bot. Depth [m]	Depth [m]	Pro					Syn					peuk					
				density (cells/mL)	m	μ_n	μ_0	r^2	density (cells/mL)	m	μ_n	μ_0	r^2	density (cells/mL)	m	μ_n	μ_0	r^2	
summer																			
24/8/2009	YZ13	coastal	28.32	0	0.0E+00					7.0E+03	1.97	2.21	2.58	0.98	9.0E+02	2.58	2.63	2.83	1.00
24/8/2009	YZ13	coastal	28.32	10	0.0E+00					2.6E+03	0.94	1.18	1.37	0.83	7.0E+02	0.85	1.09	1.20	0.82
24/8/2009	PN09	coastal	58.01	0	0.0E+00					5.2E+04	0.67	1.16	0.66	0.98	1.2E+03	1.50	2.07	2.17	1.00
24/8/2009	PN09	coastal	58.01	25	0.0E+00					8.2E+04	-0.04	0.25	0.05	0.97	1.7E+04	0.00	0.16	0.00	0.99
20/8/2009	DH22	coastal	50.62	0	0.0E+00					7.5E+04	2.39	0.86	1.02	0.97	9.8E+02	1.20	1.75	1.75	0.98
20/8/2009	DH22	coastal	50.62	10	0.0E+00					1.7E+04	0.67	0.48	0.59	0.98	1.2E+03	0.36	0.24	0.43	0.40
27/8/2009	DH04	coastal	60.91	0	0.0E+00					1.9E+05	0.35	0.63	0.51	0.94	2.2E+03	0.70	1.15	1.04	0.99
27/8/2009	DH04	coastal	60.91	15	0.0E+00					1.6E+05	0.77	0.33	0.86	0.78	1.0E+03	1.05	0.88	1.26	0.90
25/8/2009	PN07	transitional	63.76	0	2.9E+05	0.44	-0.15	-0.01	0.99	2.4E+04	0.44	0.43	0.52	0.99	1.8E+03	0.43	0.39	0.36	0.84
25/8/2009	PN07	transitional	63.76	40	2.0E+05	0.43	0.19	0.24	0.32	5.0E+04	0.42	0.58	0.54	0.25	9.1E+03	0.28	0.12	0.02	0.13
25/8/2009	PN04	transitional	118.92	0	2.7E+05	0.51	0.08	0.23	0.55	1.8E+04	0.92	1.45	1.28	0.99	9.4E+02	0.37	0.81	0.74	0.79
25/8/2009	PN04	transitional	118.92	50	3.8E+05	0.20	0.02	-0.03	0.46	3.8E+04	0.24	0.01	-0.07	0.25	2.5E+03	0.00	-0.16	-0.33	0.00
21/8/2009	DH37	transitional	111.31	0	1.1E+05	0.15	-0.01	0.04	0.38	2.8E+04	0.36	1.53	0.64	0.78	1.1E+03	0.64	1.12	0.66	0.78
21/8/2009	DH37	transitional	111.31	50	4.3E+04	0.20	0.24	0.32	0.98	4.4E+04	0.47	0.61	0.69	0.75	1.9E+04	0.38	-0.01	0.14	0.80
22/8/2009	DH34	transitional	77.57	0	0.0E+00					6.9E+04	0.34	1.23	1.29	0.78	1.6E+03	0.61	1.16	1.15	0.89
22/8/2009	DH34	transitional	77.57	25	0.0E+00					2.0E+04	0.15	0.67	0.33	1.00	3.4E+03	0.11	0.72	0.34	0.97
19/8/2009	DH53	transitional	100.83	0	1.2E+05	0.27	0.16	-0.02	1.00	3.6E+04	0.33	0.81	0.74	0.96	1.4E+03	0.20	0.99	0.49	0.85
19/8/2009	DH53	transitional	100.83	50	4.1E+03	0.53	0.54	0.62	0.79	1.2E+04	0.76	1.07	1.26	0.99	6.1E+03	0.34	0.27	0.34	0.87
18/8/2009	KP01	transitional	55.7	0	1.9E+04					1.9E+05	0.22	0.18	0.06	0.83	1.5E+04	0.25	0.34	0.07	0.98
18/8/2009	KP01	transitional	55.7	15	0.0E+00					1.0E+04	0.22	0.18	0.76	0.84	2.8E+03	0.20	0.23	0.21	0.99
19/8/2009	KP13	kuroshio	200	0	1.9E+04	0.32	0.45	-0.04	0.61	1.6E+04	0.54	1.36	0.84	0.99	2.6E+03	1.26	1.09	1.17	0.61
19/8/2009	KP13	kuroshio	200	30	3.1E+04	0.04	0.43	0.37	0.12	5.2E+03	0.20	1.17	0.95	0.99	3.7E+03	0.16	0.75	0.66	0.97

26/8/2009	DH13	kuroshio	200	0	2.2E+05	1.52	-0.45	-0.61	0.63	1.9E+04	0.40	0.50	0.22	0.83	1.4E+03	0.85	0.21	-0.19	0.99
26/8/2009	DH13	kuroshio	200	75	2.1E+04	0.00	-0.18	-0.18	0.39	2.7E+03	0.00	0.29	0.20	0.17	3.0E+03	0.00	-0.22	-0.32	0.21
winter																			
28/12/2009	YZE	coastal	23	0	0.0E+00					8.1E+02	0.44	0.86	1.04	0.59	7.5E+02	0.72	1.25	1.21	0.79
29/12/2009	DH33	transitional	69	0	0.0E+00					3.2E+03	0.04	1.16	1.21	0.47	2.5E+03	0.18	1.39	1.40	0.55
29/12/2009	DH33	transitional	69	25	0.0E+00					5.7E+03	0.07	0.41	0.42	0.10	3.8E+03	0.11	0.46	0.46	0.22
31/12/2009	DH23	transitional	78	0	3.7E+02					7.3E+03	0.35	0.42	0.43	0.99	4.9E+03	0.25	0.25	0.29	0.93
31/12/2009	DH23	transitional	78	25	3.3E+02					7.4E+03	0.06	0.25	0.20	0.30	4.9E+03	0.13	0.22	0.23	0.54
04/01/2010	KP01	transitional	64	0	0.0E+00					6.9E+03	0.07	0.49	0.47	0.87	1.9E+04	0.28	0.84	0.79	0.98
04/01/2010	KP01	transitional	64	15	0.0E+00					3.7E+03	0.24	0.32	0.41	0.78	9.1E+03	0.18	0.26	0.18	0.62
27/12/2009	PN07	transitional	68	0	0.0E+00					5.9E+03	0.03	0.58	0.57	0.80	3.4E+03	0.00	0.60	0.68	0.00
27/12/2009	PN07	transitional	68	25	0.0E+00					5.7E+03	0.03	0.44	0.38	0.19	3.1E+03	0.08	0.55	0.57	0.16
28/12/2009	PN09	transitional	58	0	0.0E+00					2.7E+03	0.05	0.57	0.68	0.04	3.5E+03	0.00	0.42	0.44	0.00
28/12/2009	PN09	transitional	58	25	0.0E+00					2.6E+03	0.45	0.59	0.60	0.72	3.4E+03	0.24	0.13	0.17	0.98
29/12/2009	DH36	transitional	107	0	2.0E+03	0.28	0.72	0.76	0.99	1.4E+04	0.06	0.76	0.75	0.92	8.0E+03	0.13	0.54	0.51	0.79
29/12/2009	DH36	transitional	107	50	3.2E+03	0.10	0.28	0.25	0.13	1.5E+04	0.14	0.36	0.43	0.60	7.1E+03	0.12	0.24	0.30	0.39
24/12/2009	DH02	transitional	42	0	0.0E+00					1.5E+03	0.07	1.61	1.62	0.04	2.1E+03	0.22	2.10	2.01	0.26
24/12/2009	DH04	transitional	64	0	0.0E+00					1.6E+03	0.29	1.16	1.17	0.95	1.8E+03	0.00	0.61	0.55	0.01
04/01/2010	KP10a	Kuroshio	102	0	1.5E+04	-0.01	0.01	0.00	0.96	2.2E+04	0.02	0.34	0.21	0.99	9.6E+03	0.39	0.73	0.62	0.90
04/01/2010	KP10a	Kuroshio	102	25	1.3E+04	0.06	0.20	0.28	0.13	1.8E+04	0.10	0.53	0.53	0.23	1.1E+04	0.15	0.25	0.14	0.15
26/12/2009	PN03b	Kuroshio	209	0	1.2E+05					1.1E+04	0.00	0.08	0.17	0.00	5.5E+03	0.17	-0.09	-0.06	0.72
26/12/2009	PN03b	Kuroshio	209	50	1.1E+05					1.6E+04	0.70	-0.15	-0.16	0.75	5.4E+03	0.66	0.00	0.01	0.85
25/12/2009	DH12	Kuroshio	105	0	1.8E+03	0.26	0.45	0.46	0.12	6.9E+03	0.04	0.33	0.28	0.04	4.6E+03	0.15	0.27	0.26	0.30
25/12/2009	DH12	Kuroshio	105	25	2.0E+03	0.44	0.41	0.33	0.59	7.0E+03	0.01	0.15	0.15	0.02	4.8E+03	0.00	-0.15	-0.23	0.00
30/12/2009	DH27b	Kuroshio	200	0	3.5E+04	0.05	0.40	0.40	0.26	6.8E+03	0.07	0.48	0.48	0.14	3.6E+03	0.18	0.32	0.20	0.97
30/12/2009	DH27b	Kuroshio	200	50	4.9E+04	0.00	0.16	0.22	0.00	6.2E+03	0.00	0.29	0.30	0.00	3.8E+03	0.16	0.03	0.07	0.23
03/01/2010	DH53	Kuroshio	107	0	1.3E+04	0.32	0.75	0.79	0.95	2.8E+04	0.32	0.73	0.79	0.78	1.1E+04	0.28	0.85	0.73	0.70
03/01/2010	DH53	Kuroshio	107	50	1.1E+04	0.12	0.54	0.60	0.32	2.2E+04	0.13	0.52	0.56	0.66	8.8E+03	0.13	0.62	0.55	0.71

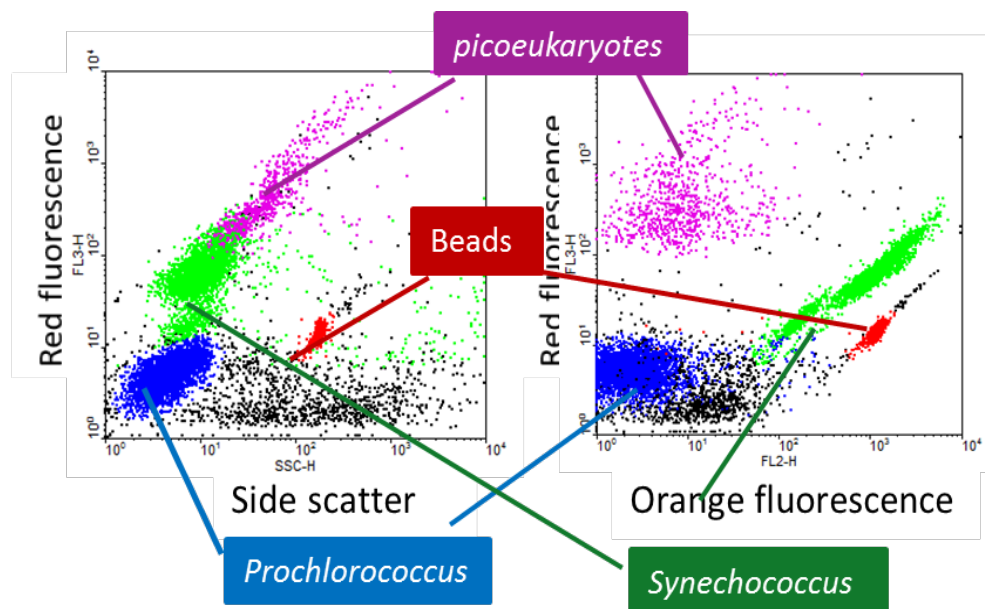


Fig. S1 typical cytometric plot graph of picophytoplankton populations.