

## SUPPLEMENTARY MATERIAL

### Picoplankton diversity in the South-East Pacific Ocean from cultures

Table S1. List of strains deposited to the Roscoff Culture Collection (RCC) ordered according to the sampled station. Steps 1, 2 and 3 refer to the different purification steps performed before the culture was entered to the RCC database. Sorting targets were mostly defined on cytograms of side scatter (a function of cell size) vs. red fluorescence (a function of chlorophyll content) as follows: small eukaryotes corresponded to cells with signatures similar to *Ostreococcus* or *Micromonas*, big eukaryotes to cells with a signature similar to *Phaeocystis*, very big eukaryotes to cells with a signature similar to *Dunaniella* (see Fig. 4 in Vaultot et al., 2004). Other occasional sorting targets observed in specific samples were defined on the basis of their different fluorescence (green, orange, or red). Size corresponds to average cell diameter of the cultures.

RCC	Lost	Station	CTD	Depth (m)	Preculture	Class	Genus	Size (µm)	Mixed	Hetero-trophic	Step 1	Step 2	Step 3	Sorting target	Step 1 medium
923		MAR3	22	10	273_FL1-2	Unknown	Unknown	2.5	+		TFF enriched	Serial dilution			None
959		MAR3	22	10	273_FL2-2	Unknown	Unknown	2.5			TFF enriched	Serial dilution			None
960		MAR3	22	10	273_FL2-3	Unknown	Unknown	3			TFF enriched	Serial dilution			None
961		MAR3	22	10	273_FL2-7	Unknown	Unknown	3			TFF enriched	Serial dilution			None
907		MAR3	22	60	271_FL1-4	Prasinophyceae	<i>Prasinoderma</i>	3.5			TFF enriched	Serial dilution			None
1000		MAR4	28	10	30 A	Prymnesiophyceae	<i>Phaeocystis</i>	3.5			Filtration < 3µm	Sorting		Big eukaryotes	K/100
872		MAR4	28	10	30 A2	Unknown	Unknown	3	+		Filtration < 3µm	Dilution			K/100

RCC	Lost	Station	CTD	Depth (m)	Preculture	Class	Genus	Size (μm)	Mixed	Hetero-trophic	Step 1	Step 2	Step 3	Sorting target	Step 1 medium
1001		MAR4	28	10	30 B	Prymnesiophyceae	<i>Emiliana</i>	3.5			Filtration < 3μm	Sorting		Small eukaryotes	K/100
1002		MAR4	28	10	31 A	Unknown	Unknown	4.7	+		Filtration < 3μm	Sorting		Big eukaryotes	K/100
1003		MAR4	28	10	31 B	Unknown	Unknown	3			Filtration < 3μm	Sorting		Small eukaryotes	K/100
1004		MAR4	28	10	32 B	Prymnesiophyceae	Unknown	5			Filtration < 3μm	Sorting		Small eukaryotes	K/100
1048		MAR4	28	10	32 B2	Unknown	Unknown	3			Filtration < 3μm	Sorting		Eukaryotes	K/100
911		MAR4	28	10	32B_FL1-2	Prymnesiophyceae	<i>Emiliana</i>	3.5			Filtration < 3μm	Sorting	Serial dilution	Small eukaryotes	K/100
962		MAR4	28	10	32B_FL1-3	Prymnesiophyceae	<i>Emiliana</i>	3.5			Filtration < 3μm	Sorting	Serial dilution	Small eukaryotes	K/100
963		MAR4	28	10	32B_FL2-2	Unknown	Unknown	5			Filtration < 3μm	Sorting	Serial dilution	Small eukaryotes	K/100
955		MAR4	28	10	32B_HO22	Unknown	Unknown	3			Filtration < 3μm	Sorting	Micropipette	Small eukaryotes	K/100
920		MAR4	28	10	32B_HO3	Prymnesiophyceae	<i>Emiliana</i>	3.5			Filtration < 3μm	Sorting	Micropipette	Small eukaryotes	K/100
921		MAR4	28	10	32B_HO8	Prymnesiophyceae	<i>Emiliana</i>	3			Filtration < 3μm	Sorting	Micropipette	Small eukaryotes	K/100
1005	+	MAR4	28	10	33 A	Unknown	Unknown				Filtration < 3μm	Sorting		Eukaryotes	K/100
1049		MAR4	28	10	33 A2	Unknown	Unknown	2.5			Filtration < 3μm	Sorting		Eukaryotes	K/100
1006		MAR4	28	10	34 A	Prymnesiophyceae	<i>Phaeocystis</i>	3.5			Filtration < 3μm	Sorting		Big eukaryotes	K/100
854		MAR4	28	10	34 B2	Unknown	Unknown	2.5	+		Filtration < 3μm	Sorting		Big eukaryotes	K/100
956		MAR4	28	10	34B_HO16	Unknown	Unknown	3.5			Filtration < 3μm	Sorting	Micropipette	Eukaryotes	K/100
912		MAR4	28	10	34B_HO17	Prymnesiophyceae	<i>Emiliana</i>	4			Filtration < 3μm	Sorting	Micropipette	Eukaryotes	K/100

RCC	Lost	Station	CTD	Depth (m)	Preculture	Class	Genus	Size (µm)	Mixed	Hetero-trophic	Step 1	Step 2	Step 3	Sorting target	Step 1 medium
957		MAR4	28	10	34B_HO23	Unknown	Unknown	3.5			Filtration < 3µm	Sorting	Micropipette	Eukaryotes	K/100
914		MAR4	28	10	34B_HO5	Prymnesiophyceae	<i>Emiliania</i>	3			Filtration < 3µm	Sorting	Micropipette	Eukaryotes	K/100
958		MAR4	28	10	34B_HO6	Prymnesiophyceae	<i>Emiliania</i>	3.5			Filtration < 3µm	Sorting	Micropipette	Eukaryotes	K/100
916		MAR4	28	10	34B2_FL2-5	Prasinophyceae	<i>Prasinoderma</i>	5			Filtration < 3µm	Sorting	Serial dilution	Big eukaryotes	
1076		MAR4	28	10	37	Bicosoecid	<i>Caecitellus</i>	3.5		+	Filtration < 3µm				Rice/100
1007		MAR4	28	10	40 A	Dictyochophyceae	<i>Florenciella</i>	3.5			Filtration < 0.6 µm	Sorting		Small eukaryotes	Pro2/100
857		MAR4	28	10	40 A2	Prasinophyceae	Unknown	2.5			Filtration < 0.6 µm	Sorting		Big eukaryotes	Pro2/100
1008		MAR4	28	10	40 B	Dictyochophyceae	<i>Florenciella</i>	4			Filtration < 0.6 µm	Sorting		Big eukaryotes	Pro2/100
855		MAR4	28	10	40 B2	Pelagophyceae	<i>Pelagomonas</i>	3.5			Filtration < 0.6 µm	Sorting		Very big eukaryotes	Pro2/100
952		MAR4	28	10	41 A2	Unknown	Unknown	2.5			Filtration < 0.6 µm	Dilution			Pro2/100
1009		MAR4	28	10	41 S	Unknown	Unknown	4			Filtration < 0.6 µm	Sorting		Small eukaryotes	Pro2/100
856		MAR4	28	10	42 A2	Prasinophyceae	Unknown	2			Filtration < 0.6 µm	Sorting		Small eukaryotes	Pro2/100
954		MAR4	28	10	43 A2	Unknown	Unknown	2.5			Filtration < 0.6 µm	Dilution			Pro2/100
1010		MAR4	28	10	43 PK	Pelagophyceae	<i>Pelagomonas</i>	3			Filtration < 0.6 µm	Sorting		<i>Prochlorococcus</i>	Pro2/100
953		MAR4	28	10	44 A2	Pelagophyceae	<i>Pelagomonas</i>	3			Filtration < 0.6 µm	Dilution			Pro2/100
989		MAR4	28	60	15 A	Unknown	Unknown	3			Filtration < 3µm	Sorting		Small eukaryotes	K/100
982		MAR4	28	60	15 A2	Unknown	Unknown	2.5		+	Filtration < 3µm	Dilution			K/100

RCC	Lost	Station	CTD	Depth (m)	Preculture	Class	Genus	Size (µm)	Mixed	Hetero-trophic	Step 1	Step 2	Step 3	Sorting target	Step 1 medium
965		MAR4	28	60	16B_FL2-1	Bodoniid	Unknown	5		+	Filtration < 3µm	Sorting	Serial dilution	<i>Prochlorococcus</i>	Pro2/100
983		MAR4	28	60	17 A2	Unknown	Unknown	2			Filtration < 3µm	Dilution			K/100
990		MAR4	28	60	17 B	Unknown	Unknown	2.5			Filtration < 3µm	Sorting		Small eukaryotes	K/100
991		MAR4	28	60	18 A	Unknown	Unknown	2.5			Filtration < 3µm	Sorting		Small eukaryotes	K/100
992		MAR4	28	60	18 B	Prymnesiophyceae	<i>Phaeocystis</i>	3.5			Filtration < 3µm	Sorting		Big eukaryotes	K/100
993		MAR4	28	60	19 B	Prymnesiophyceae	<i>Phaeocystis</i>	3			Filtration < 3µm	Sorting		Big eukaryotes	K/100
994	+	MAR4	28	60	19 C	Unknown	Unknown	5			Filtration < 3µm	Sorting		<i>Prochlorococcus</i>	K/100
1073	+	MAR4	28	60	22	Unknown	Unknown				Filtration < 3µm				Rice/100
984		MAR4	28	60	25 A2	Unknown	Unknown	2			Filtration < 0.6 µm	Dilution			Pro2/100
1024		MAR4	28	60	25 B2	Pelagophyceae	Unknown	4			Filtration < 0.6 µm	Dilution			Pro2/100
985		MAR4	28	60	26 A2	Pelagophyceae	<i>Pelagomonas</i>	2			Filtration < 0.6 µm	Dilution			Pro2/100
986		MAR4	28	60	27 A2	Pelagophyceae	<i>Pelagomonas</i>	2.5			Filtration < 0.6 µm	Dilution			Pro2/100
1043		HLN3	51	30	47 B1	Unknown	Unknown	3.5			Filtration < 3µm	Dilution			K/10
1011		HLN3	51	30	47 C1S	Unknown	Unknown	2.5			Filtration < 3µm	Sorting		Small eukaryotes	K/100
852		HLN3	51	30	47 C2	Bolidophyceae	<i>Bolidomonas</i>	2			Filtration < 3µm	Dilution			K/100
1044	+	HLN3	51	30	47 C3	Unknown	Unknown				Filtration < 3µm	Dilution			K/100
1045	+	HLN3	51	30	47 D1	Unknown	Unknown				Filtration < 3µm	Dilution			K/100

RCC	Lost	Station	CTD	Depth (m)	Preculture	Class	Genus	Size (µm)	Mixed	Hetero-trophic	Step 1	Step 2	Step 3	Sorting target	Step 1 medium
1030		HLN3	51	30	48 A2Y	Cyanophyceae	<i>Synechococcus</i>	1			Filtration < 0.6 µm	Sorting		<i>Synechococcus</i>	Pro2/10
850		HLN3	51	30	48 A5	Unknown	Unknown	2			Filtration < 0.6 µm	Dilution			Pro2/10
1046		HLN3	51	30	48 A6	Unknown	Unknown	3			Filtration < 0.6 µm	Dilution			Pro2/10
1027		HLN3	51	30	48 B3Y	Cyanophyceae	<i>Synechococcus</i>	1			Filtration < 0.6 µm	Sorting		<i>Synechococcus</i>	Pro2/10
1012		HLN3	51	30	48 B6V	Unknown	Unknown	10			Filtration < 0.6 µm	Sorting		Very big eukaryotes	Pro2/10
1031		HLN3	51	30	48 B6Y	Cyanophyceae	<i>Synechococcus</i>	1			Filtration < 0.6 µm	Sorting		<i>Synechococcus</i>	Pro2/10
1013		HLN3	51	30	48 C1S	Pelagophyceae	<i>Pelagomonas</i>	2			Filtration < 0.6 µm	Sorting		Small eukaryotes	Pro2/100
858		HLN3	51	30	48 C3	Unknown	Unknown	2.5			Filtration < 0.6 µm	Dilution			Pro2/100
1014		HLN3	51	30	48 D5V	Unknown	Unknown	2.5			Filtration < 0.6 µm	Sorting		Very big eukaryotes	Pro2/100
880		HLN3	51	100	45 A2 475	Pelagophyceae	<i>Pelagomonas</i>	1.5			Filtration < 3µm	Dilution			K/10
1019		HLN3	51	100	45 A2 478	Unknown	Unknown	2.5			Filtration < 3µm	Dilution			K/10
995		HLN3	51	100	45 A2S	Pelagophyceae	<i>Pelagomonas</i>	2.5			Filtration < 3µm	Sorting		Small eukaryotes	K/10
881		HLN3	51	100	45 A3E	Pelagophyceae	<i>Pelagomonas</i>	2			Filtration < 3µm	Dilution			K/10
883		HLN3	51	100	45 A5	Pelagophyceae	<i>Pelagomonas</i>	2			Filtration < 3µm	Dilution			K/10
879		HLN3	51	100	45 B2E	Pelagophyceae	<i>Pelagomonas</i>	2.5			Filtration < 3µm	Sorting		Eukaryotes	K/10
1016		HLN3	51	100	45 B4 461	Cyanophyceae	<i>Synechococcus</i>	1			Filtration < 3µm	Dilution			K/10
1061		HLN3	51	100	45 B4 462	Pelagophyceae	<i>Pelagomonas</i>	2			Filtration < 3µm	Dilution			K/10

RCC	Lost	Station	CTD	Depth (m)	Preculture	Class	Genus	Size (µm)	Mixed	Hetero-trophic	Step 1	Step 2	Step 3	Sorting target	Step 1 medium
1017		HLN3	51	100	45 B5 463	Cyanophyceae	<i>Synechococcus</i>	1			Filtration < 3µm	Dilution			K/10
1062		HLN3	51	100	45 B5 464	Pelagophyceae	<i>Pelagomonas</i>	2.5			Filtration < 3µm	Dilution			K/10
1018		HLN3	51	100	45 B6 465	Cyanophyceae	<i>Synechococcus</i>	1			Filtration < 3µm	Dilution			K/10
884		HLN3	51	100	45 B6 466	Pelagophyceae	<i>Pelagomonas</i>	2.5			Filtration < 3µm	Dilution			K/10
1020		HLN3	51	100	45 C4Y	Cyanophyceae	<i>Synechococcus</i>	1			Filtration < 3µm	Sorting		<i>Synechococcus</i>	K/100
996		HLN3	51	100	46 B4S	Prasinophyceae	Unknown	3			Filtration < 0.6 µm	Sorting		Small eukaryotes	Pro2/10
997		HLN3	51	100	46 B5S	Prasinophyceae	Unknown	2			Filtration < 0.6 µm	Sorting		Small eukaryotes	Pro2/10
1021		HLN3	51	100	46 B6	Prasinophyceae	Unknown	4			Filtration < 0.6 µm	Dilution			Pro2/10
1032		HLN3	51	100	46 B7	Prasinophyceae	Unknown	4			Filtration < 0.6 µm	?			Pro2/10
998		HLN3	51	100	46 C3S	Prasinophyceae	Unknown	2.5			Filtration < 0.6 µm	Sorting		Small eukaryotes	Pro2/100
999		HLN3	51	100	46 C4S 144	Unknown	Unknown	2.5			Filtration < 0.6 µm	Sorting		Small eukaryotes	Pro2/100
859		GYR2	87	180	74 A5	Prasinophyceae	<i>Prasinococcus</i>	4			Sorting	Dilution		Small eukaryotes	K/100
853	+	GYR2	87	180	74 B1	Unknown stramenopile	Unknown	2.5			Sorting	Dilution		Small eukaryotes	K/100
1047	+	GYR2	87	180	74 B4	Unknown	Unknown	6			Sorting	Dilution		Small eukaryotes	K/100
863	+	GYR2	87	180	74 D5	Unknown	Unknown	3			Sorting	Dilution		Small eukaryotes	K/100
964		GYR2	87	300	70_FL1-1	Unknown	Unknown	2.5			Filtration < 3µm	Serial dilution			K/100
1065		GYR2	87	300	71	Bodonid	Unknown	4		+	Filtration < 3µm				Rice/100
1068		GYR2	87	300	72	Unknown	Unknown	3		+	Filtration < 3µm				Rice/100
987		STB11	121	200	79 A2	Unknown	Unknown	3	+		Filtration < 3µm	Dilution			K/100

RCC	Lost	Station	CTD	Depth (m)	Preculture	Class	Genus	Size (µm)	Mixed	Hetero-trophic	Step 1	Step 2	Step 3	Sorting target	Step 1 medium
1079		STB11	121	200	83	Bicosoecid	Unknown	3		+	Filtration < 3µm				Rice/100
862	+	STB12	125	40	90 A6	Unknown stramenopile	Unknown	2.5			Sorting	Dilution		Small eukaryotes	K
1066		STB13	129	0	105	Unknown	Unknown	3		+	Filtration < 3µm				Rice/100
968		STB13	129	160	92 B	Pelagophyceae	<i>Pelagomonas</i>	2.5			Filtration < 3µm	Sorting		Big eukaryotes	K/100
969		STB13	129	160	93 B	Pelagophyceae	<i>Pelagomonas</i>	2			Filtration < 3µm	Sorting		Big eukaryotes	K/100
1077		STB13	129	160	97	Bicosoecid	Unknown	3		+	Filtration < 3µm				Rice/100
988		STB13	129	160	98 A	Pelagophyceae	<i>Pelagomonas</i>	2.5			Filtration < 3µm	Dilution			Add Fe and P
866		STA14	132	5	108 B1	Prymnesiophyceae	Unknown	4	+		Sorting	Dilution		Small eukaryotes	K; K/100
971		STB14	133	150	109 A1	Pelagophyceae	<i>Pelagomonas</i>	2			Sorting	Dilution		Small eukaryotes	K; K/100
972		STB14	133	150	109 B1	Pelagophyceae	<i>Pelagomonas</i>	2			Sorting	Dilution		Big eukaryotes	K; K/100
973		STB14	133	150	109 B2	Pelagophyceae	<i>Pelagomonas</i>	2.5			Sorting	Dilution		Big eukaryotes	K; K/100
974		STB14	133	150	109 B3	Pelagophyceae	<i>Pelagomonas</i>	2.5			Sorting	Dilution		Big eukaryotes	K; K/100
1022		STB14	133	150	109 C2	Cyanophyceae	<i>Synechococcus</i>	1			Sorting	Dilution		<i>Synechococcus</i>	Pro2; Pro2/100
975		STB14	135	75	110 A1	Pelagophyceae	<i>Pelagomonas</i>	2.5			Sorting	Dilution		Very small eukaryotes	K; K/100
970		STB15	137	100	111 B1	Bicosoecid	<i>Cafeteria</i>	3		+	Sorting	Dilution		Small eukaryotes	K; K/100
980		STB15	137	100	111 B2	Pelagophyceae	<i>Pelagomonas</i>	2			Sorting	Dilution		Small eukaryotes	K; K/100
981		STB15	137	100	111 C1E	Pelagophyceae	<i>Pelagomonas</i>	2			Sorting	Dilution		Big eukaryotes	K; K/100
978		STB15	137	100	111 D1E	Pelagophyceae	<i>Pelagomonas</i>	2	+		Sorting	Dilution		Big eukaryotes	K; K/100
1023		STB15	137	100	112 B6	Cyanophyceae	<i>Synechococcus</i>	1			Sorting	Dilution		<i>Synechococcus</i>	Pro2; Pro2/100
869		EGY2	146	5	121 A	Pelagophyceae	<i>Pelagomonas</i>	2.5			Filtration < 0.6 µm	Sorting		Small eukaryotes	K/100
870	+	EGY2	146	5	121 B	Prymnesiophyceae	<i>Phaeocystis</i>	5			Filtration < 0.6 µm	Sorting		Big eukaryotes	K/100
938		EGY2	146	5	122 A	Pelagophyceae	<i>Pelagomonas</i>	2			Filtration < 0.6 µm	Sorting		Small eukaryotes	K/100

RCC	Lost	Station	CTD	Depth (m)	Preculture	Class	Genus	Size (µm)	Mixed	Hetero-trophic	Step 1	Step 2	Step 3	Sorting target	Step 1 medium
940		EGY2	146	5	122 B	Prymnesiophyceae	<i>Phaeocystis</i>	5			Filtration < 0.6 µm	Sorting		Big eukaryotes	K/100
868		EGY2	146	5	122 C	Prymnesiophyceae	<i>Emiliana</i>	4			Filtration < 0.6 µm	Sorting		Big eukaryotes	K/100
1051		EGY2	146	5	123 A	Unknown	Unknown	3			Filtration < 0.6 µm	Sorting		Small eukaryotes	Pro2/100
939		EGY2	146	5	123 B	Pelagophyceae	<i>Pelagomonas</i>	3			Filtration < 0.6 µm	Sorting		Big eukaryotes	Pro2/100
1072		EGY2	146	5	125	Bicosoecid	<i>Caecitellus</i>	3.5		+	Filtration < 0.6 µm				Rice/100
1078		EGY2	146	5	126	Bicosoecid	<i>Caecitellus</i>	3.5		+	Filtration < 0.6 µm				Rice/100
1052		EGY2	146	5	129 A1 545	Unknown	Unknown	2.5			Sorting	Dilution		Very small eukaryotes	K; K/100
1053		EGY2	146	5	129 A2	Unknown	Unknown	2.5			Sorting	Dilution		Very small eukaryotes	K; K/100
864		EGY2	146	5	129 A3	Unknown	Unknown	2			Sorting	Dilution		Very small eukaryotes	K; K/100
860		EGY2	146	5	129 B1	Pelagophyceae	<i>Pelagomonas</i>	2			Sorting	Dilution		Very small eukaryotes	K; K/100
1035		EGY2	146	5	129 B2	Unknown	Unknown	2.5			Sorting	Dilution		Very small eukaryotes	K; K/100
1036		EGY2	146	5	129 B3 661	Unknown	Unknown	3	+		Sorting	Dilution		Very small eukaryotes	K; K/100
861		EGY2	146	5	129 C1 552	Prymnesiophyceae	<i>Phaeocystis</i>	3			Sorting	Dilution		Small eukaryotes	K; K/100
1037		EGY2	146	5	129 C1 662	Unknown	Unknown	2.5			Sorting	Dilution		Small eukaryotes	K; K/100
865		EGY2	146	5	129 C2B	Pelagophyceae	<i>Pelagomonas</i>	3			Sorting	Sorting		Eukaryotes	K; K/100
867		EGY2	146	5	130 A1	Prymnesiophyceae	<i>Emiliana</i>	5			Sorting	Dilution		Eukaryotes	K; K/100
874		EGY2	146	5	130 A1BC	Unknown	Unknown	4			Sorting	Sorting		Eukaryotes	K; K/100
875		EGY2	146	5	130 A1E	Pelagophyceae	<i>Pelagomonas</i>	3			Sorting	Sorting		Eukaryotes	K; K/100
1071		EGY2	146	80	118	Bicosoecid	<i>Cafeteria</i>	3		+	Filtration < 0.6 µm				Rice/100
976		EGY3	154	80	131 A1	Pelagophyceae	<i>Pelagomonas</i>	2.5			Sorting	Dilution		Small eukaryotes	K; K/100
979		EGY3	154	80	131 A3	Pelagophyceae	<i>Pelagomonas</i>	2			Sorting	Dilution		Small eukaryotes	K; K/100
977		EGY3	154	80	131 B1	Pelagophyceae	<i>Pelagomonas</i>	2.5			Sorting	Dilution		Big eukaryotes	K; K/100



RCC	Lost	Station	CTD	Depth (m)	Preculture	Class	Genus	Size (µm)	Mixed	Hetero-trophic	Step 1	Step 2	Step 3	Sorting target	Step 1 medium
873		EGY4	162	40	140 A	Unknown	Unknown	2			Filtration < 0.6 µm	Sorting		Small eukaryotes	K/100
951		EGY4	162	40	140 B	Prymnesiophyceae	<i>Emiliana</i>	3.5			Filtration < 0.6 µm	Sorting		Eukaryotes	K/100
871		EGY4	162	40	140 C	Pelagophyceae	<i>Pelagomonas</i>	2.5			Filtration < 0.6 µm	Sorting		Big eukaryotes	K/100
1050		EGY4	162	40	141 A	Unknown	Unknown	2.5			Filtration < 0.6 µm	Sorting		Small eukaryotes	K/100
937		EGY4	162	40	141 B	Pelagophyceae	<i>Pelagomonas</i>	3			Filtration < 0.6 µm	Sorting		Big eukaryotes	K/100
1029		EGY4	162	40	141 D	Cyanophyceae	<i>Synechococcus</i>	1			Filtration < 0.6 µm	Sorting		<i>Synechococcus</i>	K/100
1069		EGY4	162	40	145	Bicosoecid	Unknown	5		+	Filtration < 0.6 µm				Rice/100
1054		EGY4	162	40	148 A1C1-1	Unknown	Unknown	5			Sorting	Dilution	Plating	Small eukaryotes	K; K/100
1055		EGY4	162	40	148 A1C1-2	Unknown	Unknown	7			Sorting	Dilution	Plating	Small eukaryotes	K; K/100
878		EGY4	162	40	148 B1 602	Unknown	Unknown	3	+		Sorting	Dilution		Big eukaryotes	K; K/100
876		EGY4	162	40	148 B2 600	Unknown	Unknown	4			Sorting	Dilution		Big eukaryotes	K; K/100
877		EGY4	162	40	148 B2E	Unknown	Unknown	3	+		Sorting	Sorting		Big eukaryotes	K; K/100
1028		EGY4	162	40	148 D3	Cyanophyceae	<i>Synechococcus</i>	1			Sorting	Dilution		<i>Synechococcus</i>	Pro2; Pro2/100 Rice/100
1070		EGY4	162	80	136	Unknown	Unknown	4	+		Filtration < 0.6 µm				
1081	+	EGY4	162	80	137	Unknown	Unknown				Filtration < 0.6 µm				Rice/100
1038		STB17	178	20	150	Unknown	Unknown	3		+	Sorting			Very small eukaryotes	K/10
1039		STB17	178	20	153	Unknown	Unknown	3		+	Sorting			Big eukaryotes	K/10
848		STB17	178	20	158	Dinophyceae	<i>Prorocentrum</i>	15			Sorting			High red & green fluorescencing	K/10
1040		STB20	190	5	184	Unknown	Unknown	3		+	Sorting			Very small eukaryotes	K/10
1041	+	STB20	190	5	185	Unknown	Unknown				Sorting			Small eukaryotes	K/10
909		STB20	191	5	179_FL1-2	Unknown	Unknown	4	+		Filtration < 0.6 µm	Serial dilution			Pro2/100

RCC	Lost	Station	CTD	Depth (m)	Preculture	Class	Genus	Size (µm)	Mixed	Hetero-trophic	Step 1	Step 2	Step 3	Sorting target	Step 1 medium
919		STB20	191	5	179_FL1-3	Unknown	Unknown	6			Filtration < 0.6 µm	Serial dilution			Pro2/100
918		STB20	191	5	179_FL2-1	Unknown	Unknown	3.5	+		Filtration < 0.6 µm	Serial dilution			Pro2/100
1064		STB20	191	5	181	Bicosoecid	<i>Caecitellus</i>	2		+	Filtration < 0.6 µm				Rice/100
922		STB20	191	5	182_FL1-1	Dinophyceae	<i>Prorocentrum</i>	14			Filtration < 0.6 µm	Serial dilution			Add Fe and P
917		STB20	191	5	182_FL1-3	Prasinophyceae	Unknown	1.5	+		Filtration < 0.6 µm	Serial dilution			Add Fe and P
928		STB20	191	40	169_FL2-2	Unknown	Unknown	3			Filtration < 0.6 µm	Serial dilution			K/100
941		STB20	191	40	169_FL2-4	Prasinophyceae	<i>cf. Prasinoderma</i>	3.5			Filtration < 0.6 µm	Serial dilution			K/100
1075	+	STB20	191	40	173	Unknown	Unknown			+	Filtration < 0.6 µm				Rice/100
948		STB20	191	40	175_FL2-4	Prymnesiophyceae	<i>Emiliana</i>	3.5			Filtration < 0.6 µm	Serial dilution			Add Fe and P
1042		STB21	194	5	189	Unknown	Unknown	3			Sorting			Big eukaryotes	K/10
1056		STB21	194	5	190 C2-1	Unknown	Unknown	3	+		Sorting	Plating		Green, yellow and red fluorescing	K/10
1057		STB21	194	5	190 C2-2	Unknown	Unknown	4	+		Sorting	Plating		Green, yellow and red fluorescing	K/10
910		STB21	194	5	190_FL2-4	Prasinophyceae	<i>Cf. Prasinoderma</i>	4			Sorting	Serial dilution		Green, yellow and red fluorescing	K/10
849		UPW1	198	5	193	Prymnesiophyceae	<i>Phaeocystis</i>	3	+		Sorting			Eukaryotes	K/10
1025		UPW1	198	5	194	Bacillariophyceae	<i>Chaetoceros</i>	15			Sorting			<i>Synechococcus</i>	Pro2/10
1026		UPW1	198	5	199	Cyanophyceae	<i>Synechococcus</i>	1			Sorting			<i>Synechococcus</i>	Pro2/10
851		UPW1	198	5	202	Prymnesiophyceae	<i>Phaeocystis</i>	4			Sorting			Very big eukaryotes	K/10
924		UPW3	210	5	221_FL1-1	Unknown	Unknown	2	+		Filtration < 0.6 µm	Serial dilution			K/100

RCC	Lost	Station	CTD	Depth (m)	Preculture	Class	Genus	Size (µm)	Mixed	Hetero-trophic	Step 1	Step 2	Step 3	Sorting target	Step 1 medium
915		UPW3	210	5	223_FL2-3	Pelagophyceae	<i>Pelagomonas</i>	4			Filtration < 0.6 µm	Serial dilution			Pro2/100
925		UPW3	210	5	224_FL2-3	Prymnesiophyceae	<i>Phaeocystis</i>	5			Filtration < 0.6 µm	Serial dilution			Rice/100
908		UPW3	210	5	226_FL2-3	Prymnesiophyceae	<i>Phaeocystis</i>	5	+		Filtration < 0.6 µm	Serial dilution			Add Fe and P
1058		UPW3	210	30	206	Prasinophyceae	<i>Pycnococcus</i>	2.5			Sorting			Very small eukaryotes	K/10
931		UPW3	210	30	206_FL1-1	Prasinophyceae	<i>Pycnococcus</i>	1.7			Sorting	Serial dilution		Very small eukaryotes	K/10
882		UPW3	210	30	208	Prymnesiophyceae	<i>Phaeocystis</i>	5			Sorting			Big eukaryotes	K/10
1033		UPW3	210	30	208_FL2-6	Prymnesiophyceae	<i>Phaeocystis</i>	10			Sorting	Serial dilution		Big eukaryotes	K/10
1059		UPW3	210	30	209	Prasinophyceae	<i>Pycnococcus</i>	2			Sorting			Orange fluorescing	K/10
1015		UPW3	210	30	211	Cyanophyceae	<i>Synechococcus</i>	1			Sorting			Big cyanobacteria	Pro2/10
932		UPW3	210	30	212_FL1-2	Prasinophyceae	<i>Pycnococcus</i>	4	+		Filtration < 0.6 µm	Serial dilution			K/100
930		UPW3	210	30	212_FLA2	Prasinophyceae	<i>cf. Prasinoderma</i>	3			Filtration < 0.6 µm	Micropipette			K/100
936		UPW3	210	30	212_FLA5	Prasinophyceae	<i>cf. Prasinoderma</i>	2.2			Filtration < 0.6 µm	Micropipette			K/100
934		UPW3	210	30	214_FLB3	Prasinophyceae	<i>cf. Prasinoderma</i>	2.5			Filtration < 0.6 µm	Micropipette			Pro2/100
933		UPW3	210	30	214_FLB6	Prasinophyceae	<i>cf. Prasinoderma</i>	2.5			Filtration < 0.6 µm	Micropipette			Pro2/100
1080		UPW3	210	30	216	Unknown	Unknown	3.5		+	Filtration < 0.6 µm				Rice/100
929		UPW3	210	30	219_FL1-4	Prasinophyceae	<i>cf. Prasinoderma</i>	2.5			Filtration < 0.6 µm	Serial dilution			Add Fe and P
935		UPW3	210	30	219_FL2-3	Prymnesiophyceae	<i>Phaeocystis</i>	5			Filtration < 0.6 µm	Serial dilution			Add Fe and P
947		UPW3	210	30	219_FLC3	Unknown	Unknown	4	+		Filtration < 0.6 µm	Micropipette			Add Fe and P

RCC	Lost	Station	CTD	Depth (m)	Preculture	Class	Genus	Size (µm)	Mixed	Hetero-trophic	Step 1	Step 2	Step 3	Sorting target	Step 1 medium
946		UPX	213	0	235_FL1-4	Prasinophyceae	<i>cf. Prasinoderma</i>	3			Filtration < 0.6 µm	Serial dilution			Add Fe and P
926		UPX	213	0	235_FL2-3	Pelagophyceae	<i>Pelagomonas</i>	2.5			Filtration < 0.6 µm	Serial dilution			Add Fe and P
950		UPX	213	0	237_DVA4	Bacillariophyceae	<i>Thalassiosira</i>	13			Filtration < 0.6 µm	Serial dilution			K/100
943		UPX	213	0	237_DVB3	Pelagophyceae	<i>Pelagomonas</i>	3			Filtration < 0.6 µm	Serial dilution			K/100
945		UPX	213	0	237_DVB4	Trebouxiophyceae	<i>Picochlorum</i>	2			Filtration < 0.6 µm	Serial dilution			K/100
944		UPX	213	0	237_DVC4	Trebouxiophyceae	<i>Picochlorum</i>	1.5			Filtration < 0.6 µm	Serial dilution			K/100
1034		UPX	213	0	237_DVE6	Trebouxiophyceae	<i>Picochlorum</i>	1.5			Filtration < 0.6 µm	Serial dilution			K/100
949		UPX	213	0	242_DVA9	Unknown	Unknown	2.5			Filtration < 0.6 µm	Serial dilution			Add Fe and P
927		UPX	213	0	243_FL1-4	Prasinophyceae	<i>cf. Prasinoderma</i>	3			Filtration < 0.6 µm	Serial dilution			Add Fe and P
942		UPX	213	40	231_FL1-2	Unknown	Unknown	4	+		Filtration < 0.6 µm	Serial dilution			Pro2/100
1063		UPX	213	40	232	Bicosoecid	Unknown	3.5		+	Filtration < 0.6 µm				Rice/100
1074		UPX	213	40	233	Unknown	Unknown	3		+	Filtration < 0.6 µm				Rice/100
966		UPX	213	40	234_DVD10	Prasinophyceae	<i>Micromonas</i>	1.5	+		Filtration < 0.6 µm	Serial dilution			Add Fe and P
913		UPX	213	40	234_DVD11	Prasinophyceae	<i>Micromonas</i>	2			Filtration < 0.6 µm	Serial dilution			Add Fe and P
967		UPX	213	40	234_DVH12	Bacillariophyceae	<i>Minutocellus</i>	3	+		Filtration < 0.6 µm	Serial dilution			Add Fe and P
1060		UPX	213	40	244	Prasinophyceae	<i>Pycnococcus</i>	2			Sorting			Big eukaryotes	K/10
1067		UPX	213	40	248	Unknown	Unknown	20			Sorting			<i>Synechococcus</i>	Pro2/10

Table S2. List of identified cultures ordered by phylogenetic group. The column rDNA cluster provides the RCC number of the reference culture for each cluster defined using Fast Group II ([http://biome.sdsu.edu/fastgroup/fg\\_tools.htm](http://biome.sdsu.edu/fastgroup/fg_tools.htm)) with the parameter sequence match set at 80 %. When the column is empty, no rDNA sequence is available for this culture (in this case the culture was identified based on microscopy only). Size corresponds to average cell diameter.

Division	Class	Order	Genus	RCC	rDNA cluster	Preculture	Station	Depth (m)	Size (µm)	Cell shape	Assemblage	Hetero-trophic	Lost
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1031		48 B6Y	HLN3	30	1.0	cylindrical			
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1030		48 A2Y	HLN3	30	1.0	cylindrical			
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1027		48 B3Y	HLN3	30	1.0	cylindrical	chains		
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1017		45 B5 463	HLN3	100	1.0	cylindrical	chains		
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1018		45 B6 465	HLN3	100	1.0	cylindrical	chains		
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1020		45 C4Y	HLN3	100	1.0	cylindrical	chains		
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1016		45 B4 461	HLN3	100	1.0	elongated	chains		
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1022		109 C2	STB14	150	1.0	cylindrical			
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1023		112 B6	STB15	100	1.0	cylindrical			
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1028		148 D3	EGY4	40	1.0	cylindrical			
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1029		141 D	EGY4	40	1.0	spherical			
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1026		199	UPW1	5	1.0	cylindrical	chains		
Cyanophyta	Cyanophyceae		<i>Synechococcus</i>	1015		211	UPW3	30	1.0	cylindrical			
Chlorophyta	Prasinophyceae	Prasinococcales	<i>Prasinoderma</i>	907	916	271_FL1-4	MAR3	60	3.5	spherical			
Chlorophyta	Prasinophyceae	Prasinococcales	<i>Prasinoderma</i>	916	916	34B2_FL2-5	MAR4	10	5.0	spherical			
Chlorophyta	Prasinophyceae	Prasinococcales	<i>cf. Prasinoderma</i>	941	927	169_FL2-4	STB20	40	3.5	spherical			
Chlorophyta	Prasinophyceae	Prasinococcales	<i>cf. Prasinoderma</i>	910	927	190_FL2-4	STB21	5	4.0	spherical			
Chlorophyta	Prasinophyceae	Prasinococcales	<i>cf. Prasinoderma</i>	936	927	212_FLA5	UPW3	30	2.2	spherical			
Chlorophyta	Prasinophyceae	Prasinococcales	<i>cf. Prasinoderma</i>	934	927	214_FLB3	UPW3	30	2.5	spherical			
Chlorophyta	Prasinophyceae	Prasinococcales	<i>cf. Prasinoderma</i>	933	927	214_FLB6	UPW3	30	2.5	spherical			
Chlorophyta	Prasinophyceae	Prasinococcales	<i>cf. Prasinoderma</i>	929	927	219_FL1-4	UPW3	30	2.5	oval			
Chlorophyta	Prasinophyceae	Prasinococcales	<i>cf. Prasinoderma</i>	930	927	212_FLA2	UPW3	30	3.0	spherical			
Chlorophyta	Prasinophyceae	Prasinococcales	<i>cf. Prasinoderma</i>	946	927	235_FL1-4	UPX	0	3.0	flagellated			
Chlorophyta	Prasinophyceae	Prasinococcales	<i>cf. Prasinoderma</i>	927	927	243_FL1-4	UPX	0	3.0	spherical			
Chlorophyta	Prasinophyceae	Prasinococcales	<i>Prasinococcus</i>	859	859	74 A5	GYR2	180	4.0	spherical surrounded by matrix			

Division	Class	Order	Genus	RCC	rRNA cluster	Preculture	Station	Depth (m)	Size (µm)	Cell shape	Assemblage	Hetero-trophic	Lost
Chlorophyta	Prasinophyceae	Pseudoscurfieldiales	<i>Pycnococcus</i>	931	932	206_FL1-1	UPW3	30	1.7	spherical			
Chlorophyta	Prasinophyceae	Pseudoscurfieldiales	<i>Pycnococcus</i>	1059	932	209	UPW3	30	2.0	spherical	clumps		
Chlorophyta	Prasinophyceae	Pseudoscurfieldiales	<i>Pycnococcus</i>	1058	932	206	UPW3	30	2.5	spherical			
Chlorophyta	Prasinophyceae	Pseudoscurfieldiales	<i>Pycnococcus</i>	932	932	212_FL1-2	UPW3	30	4.0	spherical	clumps		
Chlorophyta	Prasinophyceae	Pseudoscurfieldiales	<i>Pycnococcus</i>	1060	932	244	UPX	40	2.0	spherical	clumps		
Chlorophyta	Prasinophyceae	clade VII	Unknown	857	917	40 A2	MAR4	10	2.5	spherical			
Chlorophyta	Prasinophyceae	clade VII	Unknown	856	917	42 A2	MAR4	10	2.0	spherical			
Chlorophyta	Prasinophyceae	clade VII	Unknown	996	917	46 B4S	HLN3	100	3.0	spherical			
Chlorophyta	Prasinophyceae	clade VII	Unknown	997	997	46 B5S	HLN3	100	2.0	spherical			
Chlorophyta	Prasinophyceae	clade VII	Unknown	1021	917	46 B6	HLN3	100	4.0	spherical			
Chlorophyta	Prasinophyceae	clade VII	Unknown	1032	917	46 B7	HLN3	100	4.0	spherical			
Chlorophyta	Prasinophyceae	clade VII	Unknown	998	998	46 C3S	HLN3	100	2.5	spherical			
Chlorophyta	Prasinophyceae	clade VII	Unknown	917	917	182_FL1-3	STB20	5	1.5	spherical			
Chlorophyta	Prasinophyceae	Mamiellales	<i>Micromonas</i>	966	913	234_DVD10	UPX	40	1.5	flagellated			
Chlorophyta	Prasinophyceae	Mamiellales	<i>Micromonas</i>	913	913	234_DVD11	UPX	40	2.0	flagellated			
Chlorophyta	Trebouxiophyceae		<i>Picochlorum</i>	944	945	237_DVC4	UPX	0	1.5	oval			
Chlorophyta	Trebouxiophyceae		<i>Picochlorum</i>	1034	945	237_DVE6	UPX	0	1.5	elongated			
Chlorophyta	Trebouxiophyceae		<i>Picochlorum</i>	945	945	237_DVB4	UPX	0	2.0	oval			
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	1000	940	30 A	MAR4	10	3.5	flagellated			
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	1006	940	34 A	MAR4	10	3.5	flagellated			
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	993	940	19 B	MAR4	60	3.0	flagellated			
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	992	940	18 B	MAR4	60	3.5	flagellated			
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	870	940	121 B	EGY2	5	5.0	spherical	colonies		+
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	940	940	122 B	EGY2	5	5.0	spherical			
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	851	940	202	UPW1	5	4.0	spherical	colonies		
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	882	940	208	UPW3	30	5.0	spherical			
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	1033	940	208_FL2-6	UPW3	30	10.0	spherical			
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	861	940	129 C1 552	EGY2	5	3.0	flagellated			
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	849		193	UPW1	5	3.0	flagellated	colonies		
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	908	940	226_FL2-3	UPW3	5	5.0	elongated			
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	925	940	224_FL2-3	UPW3	5	5.0	spherical			
Haptophyta	Prymnesiophyceae		<i>Phaeocystis</i>	935	912	219_FL2-3	UPW3	30	5.0	flagellated			
Haptophyta	Prymnesiophyceae	Isochrysidales	<i>Emiliana</i>	914	912	34B_HO5	MAR4	10	3.0	spherical			
Haptophyta	Prymnesiophyceae	Isochrysidales	<i>Emiliana</i>	921	912	32B_HO8	MAR4	10	3.0	spherical			
Haptophyta	Prymnesiophyceae	Isochrysidales	<i>Emiliana</i>	962	912	32B_FL1-3	MAR4	10	3.5	spherical			

Division	Class	Order	Genus	RCC	rRNA cluster	Preculture	Station	Depth (m)	Size (µm)	Cell shape	Assemblage	Hetero-trophic	Lost
Haptophyta	Prymnesiophyceae	Isochrysidales	<i>Emiliana</i>	920	912	32B_HO3	MAR4	10	3.5	spherical			
Haptophyta	Prymnesiophyceae	Isochrysidales	<i>Emiliana</i>	911	912	32B_FL1-2	MAR4	10	3.5	spherical			
Haptophyta	Prymnesiophyceae	Isochrysidales	<i>Emiliana</i>	958	912	34B_HO6	MAR4	10	3.5	spherical			
Haptophyta	Prymnesiophyceae	Isochrysidales	<i>Emiliana</i>	1001	912	30 B	MAR4	10	3.5	spherical			
Haptophyta	Prymnesiophyceae	Isochrysidales	<i>Emiliana</i>	912	912	34B_HO17	MAR4	10	4.0	spherical			
Haptophyta	Prymnesiophyceae	Isochrysidales	<i>Emiliana</i>	868	912	122 C	EGY2	5	4.0	spherical			
Haptophyta	Prymnesiophyceae	Isochrysidales	<i>Emiliana</i>	867	912	130 A1	EGY2	5	5.0	spherical			
Haptophyta	Prymnesiophyceae	Isochrysidales	<i>Emiliana</i>	951	912	140 B	EGY4	40	3.5	spherical			
Haptophyta	Prymnesiophyceae	Isochrysidales	<i>Emiliana</i>	948	912	175_FL2-4	STB20	40	3.5	spherical			
Haptophyta	Prymnesiophyceae	Coccolithophorales	Unknown	1004		32 B	MAR4	10	5.0	spherical			
Haptophyta	Prymnesiophyceae	Coccolithophorales	Unknown	866		108 B1	STA14	5	4.0	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	953	926	44 A2	MAR4	10	3.0	elongated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	1010	926	43 PK	MAR4	10	3.0	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	855	926	40 B2	MAR4	10	3.5	elongated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	985	926	26 A2	MAR4	60	2.0	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	1013	926	48 C1S	HLN3	30	2.0	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	880	926	45 A2 475	HLN3	100	1.5	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	883	926	45 A5	HLN3	100	2.0	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	881	926	45 A3E	HLN3	100	2.0	bean-shaped			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	1061	926	45 B4 462	HLN3	100	2.0	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	995	926	45 A2S	HLN3	100	2.5	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	1062	926	45 B5 464	HLN3	100	2.5	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	884	926	45 B6 466	HLN3	100	2.5	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	879	926	45 B2E	HLN3	100	2.5	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	969	926	93 B	STB13	160	2.0	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	988	926	98 A	STB13	160	2.5	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	968	926	92 B	STB13	160	2.5	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	972	926	109 B1	STB14	150	2.0	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	971	926	109 A1	STB14	150	2.0	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	974	926	109 B3	STB14	150	2.5	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	973	926	109 B2	STB14	150	2.5	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	975	926	110 A1	STB14	75	2.5	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	981	926	111 C1E	STB15	100	2.0	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	980	926	111 B2	STB15	100	2.0	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	978		111 D1E	STB15	100	2.0	flagellated			

Division	Class	Order	Genus	RCC	rRNA cluster	Preculture	Station	Depth (m)	Size (µm)	Cell shape	Assemblage	Hetero-trophic	Lost
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	938	926	122 A	EGY2	5	2.0	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	860	926	129 B1	EGY2	5	2.0	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	869	926	121 A	EGY2	5	2.5	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	939	926	123 B	EGY2	5	3.0	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	875	926	130 A1E	EGY2	5	3.0	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	865	926	129 C2B	EGY2	5	3.0	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	979	926	131 A3	EGY3	80	2.0	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	976	926	131 A1	EGY3	80	2.5	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	977	926	131 B1	EGY3	80	2.5	flagellated			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	871	926	140 C	EGY4	40	2.5	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	937	926	141 B	EGY4	40	3.0	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	915	926	223_FL2-3	UPW3	5	4.0	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	926	926	235_FL2-3	UPX	0	2.5	spherical			
Stramenopile	Pelagophyceae		<i>Pelagomonas</i>	943	926	237_DVB3	UPX	0	3.0	spherical			
Stramenopile	Pelagophyceae		Unknown	1024	926	25 B2	MAR4	60	4.0	spherical			
Stramenopile	Pelagophyceae		Unknown	986	926	27 A2	MAR4	60	2.5	spherical			
Stramenopile	Bolidophyceae		<i>Bolidomonas</i>	852	852	47 C2	HLN3	30	2.0	flagellated			
Stramenopile	Dictyochophyceae		<i>Florenciella</i>	1007	1007	40 A	MAR4	10	3.5	flagellated			
Stramenopile	Dictyochophyceae		<i>Florenciella</i>	1008	1007	40 B	MAR4	10	4.0	flagellated			
Stramenopile	Unknown		Unknown	853	853	74 B1	GYR2	180	2.5	spherical			
Stramenopile	Unknown		Unknown	862	853	90 A6	STB12	40	2.5	spherical			
Stramenopile	Bacillariophyceae		<i>Chaetoceros</i>	1025		194	UPW1	5	15.0	cylindrical	chains		
Stramenopile	Bacillariophyceae		<i>Minutocellus</i>	967	967	234_DVH12	UPX	40	3.0	cylindrical			
Stramenopile	Bacillariophyceae		<i>Thalassiosira</i>	950	950	237_DVA4	UPX	0	13.0	cylindrical			
Alveolata	Dinophyceae		<i>Prorocentrum</i>	848	848	158	STB17	20	15.0	flagellated			
Alveolata	Dinophyceae		<i>Prorocentrum</i>	922		182_FL1-1	STB20	5	14.0	flagellated			
Stramenopile	Bicosoecid		<i>Caecitellus</i>	1076	1072	37	MAR4	10	3.5	flagellated			+
Stramenopile	Bicosoecid		<i>Caecitellus</i>	1072	1072	125	EGY2	5	3.5	flagellated			+
Stramenopile	Bicosoecid		<i>Caecitellus</i>	1078	1072	126	EGY2	5	3.5	flagellated			+
Stramenopile	Bicosoecid		<i>Caecitellus</i>	1064	1072	181	STB20	5	2.0	flagellated			+
Stramenopile	Bicosoecid		<i>Cafeteria</i>	970	1077	111 B1	STB15	100	3.0	flagellated			+
Stramenopile	Bicosoecid		<i>Cafeteria</i>	1071	1077	118	EGY2	80	3.0	flagellated			+
Stramenopile	Bicosoecid		<i>Cafeteria</i>	1077	1077	97	STB13	160	3.0	flagellated			+
Stramenopile	Bicosoecid		Unknown	1079	1079	83	STB11	200	3.0	flagellated			+



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Stramenopile	Bicosoecid		Unknown	1069	1069	145	EGY4	40	5.0	flagellated		+	
Stramenopile	Bicosoecid		Unknown	1063	1063	232	UPX	40	3.5	flagellated		+	
Kinetoplastida	Bodonid		Unknown	965	965	16B_FL2-1	MAR4	60	5.0	flagellated		+	
Kinetoplastida	Bodonid		Unknown	1065	1065	71	GYR2	300	4.0	flagellated		+	