Bacterial community of the blue crab (*Callinectes sapidus*) during storage

16S rRNA gene metabarcoding (NGS): relative abundance data

1. Dataset description

The bacterial community of blue crabs (*Callinectes sapidus*) stored at different temperatures was analysed by next-generation sequencing (NGS) of the 16S rRNA gene. Batches of four crabs were analysed at the start of storage (on ice) and after storage at 5 °C and at 10 °C. Sequences were clustered into operational taxonomic units (OTUs) and assigned taxonomically with the SILVA database. Relative abundances are expressed as the percentage of reads assigned to each taxon out of the total reads of each sample.

Matrix	Blue crab (*Callinectes sapidus*), storage on ice, at 5 °C and at 10 °C
Samples	3 (one pooled batch of 4 crabs per storage condition)
Marker	16S rRNA gene (bacteria)
Taxonomy	SILVA reference database
Sequencing data	324,871 reads; 3,535 OTUs

Table 1. Samples

Sample	Description
Day 0, ice	Batch of 4 blue crabs stored on ice (start of storage)
5 °C	Batch of 4 blue crabs stored at 5 °C
10 °C	Batch of 4 blue crabs stored at 10 °C

2. Sequencing summary and alpha diversity

Table 2. Sequencing statistics and alpha diversity of the bacterial community

Parameter	Day 0, ice	5 °C	10 °C
Number of reads	89,506	121,784	113,581
Observed OTUs (non-rarefied)	1,603	1,777	1,691
Observed OTUs*	1,603	1,658	1,615
Chao1*	1,665	1,927	1,801
Shannon index (H')*	3.92	2.80	3.51
Simpson index (1 − D)*	0.917	0.740	0.914
Good's coverage*	0.998	0.995	0.996

** Calculated after rarefaction to 89,506 reads per sample (mean of 20 iterations).*

3. Taxonomic composition

Table 3. Relative abundance (%) of reads by domain

Domain	Day 0, ice (%)	5 °C (%)	10 °C (%)
Bacteria	99.68	99.88	99.79
Unassigned	0.32	0.12	0.21
Archaea	0	<0.01	0

Table 4. Relative abundance (%) of bacterial phyla

Phylum	Day 0, ice (%)	5 °C (%)	10 °C (%)
Proteobacteria	42.92	68.74	77.89
Actinobacteria	6.37	22.15	16.19
Tenericutes	37.00	0.99	1.61
Firmicutes	8.70	5.14	0.92
Bacteroidetes	1.98	1.20	1.50
Planctomycetes	1.10	0.19	0.96
Fusobacteria	<0.01	1.20	<0.01
Chloroflexi	0.43	0.05	0.20
Unassigned	0.32	0.12	0.21
Verrucomicrobia	0.47	0.07	0.09
Saccharibacteria	0.39	0.05	0.18
Cyanobacteria	0.11	0.05	0.13
SBR1093	0.02	0	0.05
Parcubacteria	0.04	0.01	<0.01
Acidobacteria	0.02	<0.01	0.03
Gemmatimonadetes	0.04	0	0.01
Chlamydiae	0.02	<0.01	<0.01
Gracilibacteria	0.02	<0.01	<0.01
SR1 (Absconditabacteria)	0.02	0	0
Nitrospinae	0.01	0	<0.01
Others (<0.01% in every sample; n = 8)	0.03	<0.01	<0.01

Table 5. Relative abundance (%) of bacterial families (≥ 0.5% in at least one sample)

Family	Day 0, ice (%)	5 °C (%)	10 °C (%)
Rhodobacteraceae	3.21	52.99	0.40
Vibrionaceae	0.08	5.53	43.00
Mycoplasmataceae	37.00	0.99	1.61
Mycobacteriaceae	0.02	17.90	0.01
Phyllobacteriaceae	10.28	0.77	6.36
Pseudoalteromonadaceae	0.10	0.66	14.96
Unclassified *Gaiellales*	3.13	0.15	12.06
Moraxellaceae	1.45	4.16	5.48
Hyphomicrobiaceae	2.34	0.19	4.04
Pseudomonadaceae	4.35	1.02	0.23
Staphylococcaceae	3.61	1.43	0.02
Unclassified *Acidimicrobiales*	0.90	0.53	3.55

Family	Day 0, ice (%)	5 °C (%)	10 °C (%)
Comamonadaceae	3.48	0.55	0.32
Enterobacteriaceae	3.81	0.04	0.03
Planococcaceae	2.39	0.43	0.20
Hyphomonadaceae	2.80	<0.01	<0.01
Flavobacteriaceae	1.40	0.63	0.51
Xanthomonadaceae	1.50	1.00	<0.01
Planctomycetaceae	0.97	0.18	0.93
Shewanellaceae	0.90	0.31	0.79
Listeriaceae	0.37	1.55	<0.01
Micrococcaceae	0.29	1.21	0.03
Saprospiraceae	0.33	0.28	0.71
Fusobacteriaceae	<0.01	1.20	<0.01
Family XI	1.02	0	<0.01
Unclassified *Gammaproteobacteria*	0.91	0.01	0.10
Geodermatophilaceae	0.83	0.09	0.09
Promicromonosporaceae	0	0.90	0
Aeromonadaceae	0.61	0.15	0.08
Bacillaceae	0.10	0.67	0.05
Arenicellaceae	0.76	0	0
Microbacteriaceae	0.01	0.68	0.01
Ectothiorhodospiraceae	0.64	<0.01	0.02
Others (<0.5% in every sample; n = 216)	10.42	3.75	4.39

Appendix A. Bacterial genera: complete abundance data

Relative abundance (%) and number of reads per genus. "Unclassified" denotes OTUs not assigned at genus level; the lowest assigned rank is given. "Unassigned" denotes OTUs not assigned to any domain.

Table A1. Bacterial genera

Genus	Day 0, ice (%)	5 °C (%)	10 °C (%)	Day 0, ice (reads)	5 °C (reads)	10 °C (reads)
Unclassified *Rhodobacteraceae*	1.92	52.19	0.20	1,721	63,561	231
Vibrio	0.04	4.68	40.16	36	5,704	45,618
Candidatus Bacilloplasma	37.00	0.99	1.25	33,114	1,211	1,421
Mycobacterium	0.02	17.90	0.01	17	21,797	12
Pseudahrensia	10.07	0.68	6.23	9,009	833	7,081
Pseudoalteromonas	0.10	0.65	14.96	89	797	16,991
Unclassified *Gaiellales*	3.13	0.15	12.06	2,800	188	13,699
Psychrobacter	0.23	2.29	5.34	209	2,789	6,068
Filomicrobium	2.21	0.16	3.43	1,976	195	3,891
Pseudomonas	4.35	1.02	0.23	3,896	1,243	258
Unclassified *Acidimicrobiales*	0.78	0.53	3.50	698	647	3,971
Photobacterium	0.04	0.83	2.83	32	1,005	3,213
Enterobacter	3.63	<0.01	<0.01	3,253	7	6
Staphylococcus	3.44	0.06	<0.01	3,080	69	6
Acinetobacter	1.16	1.86	0.14	1,038	2,270	154
Stenotrophomonas	1.43	0.98	<0.01	1,282	1,193	4
Comamonas	1.92	0.25	0.16	1,717	301	179
Robiginitomaculum	2.27	<0.01	<0.01	2,036	7	9
Shewanella	0.90	0.31	0.79	803	383	899
Lysinibacillus	1.74	0.07	<0.01	1,561	83	1
Delftia	1.26	0.24	0.10	1,131	296	118
Brochothrix	0	1.55	<0.01	0	1,884	1
Jeotgalicoccus	<0.01	1.35	<0.01	7	1,640	9
Unclassified *Saprospiraceae*	0.32	0.28	0.71	288	341	805
Psychrilyobacter	0	1.20	<0.01	0	1,465	4
Unclassified *Gammaproteobacteria*	0.91	0.01	0.10	818	16	110
Blastococcus	0.74	0.08	0.08	660	103	92
Cellulosimicrobium	0	0.89	0	0	1,081	0
Bacillus	0.08	0.67	0.04	69	811	49
Aeromonas	0.61	0.10	0.08	547	119	86
Arenicella	0.75	0	0	670	0	0
Blastopirellula	0.38	0.05	0.29	337	65	326
Unclassified *Hyphomicrobiaceae*	0.11	0.02	0.58	95	24	656
Methyloceanibacter	0.40	0.05	0.24	356	55	276
Bdellovibrio	0.36	0.01	0.29	324	16	325
Sporosarcina	0.59	0.05	0.02	526	58	25
Unassigned	0.32	0.12	0.21	283	143	240
Thiogranum	0.62	<0.01	0.02	557	2	19
Anaerococcus	0.63	0	<0.01	567	0	2
Unclassified *Saccharibacteria*	0.39	0.05	0.18	350	55	205
Unclassified *Flavobacteriaceae*	0.40	0.07	0.13	358	80	145
Arthrobacter	0.02	0.55	<0.01	15	675	1
Planctomyces	0.24	0.06	0.26	217	75	300
Leucobacter	<0.01	0.54	<0.01	4	655	8
Glutamicibacter	0	0.50	0.02	0	607	26
Unclassified *Hyphomonadaceae*	0.49	0	<0.01	439	0	2
Planomicrobium	0.05	0.27	0.16	43	330	184

Genus	Day 0, ice (%)	5 °C (%)	10 °C (%)	Day 0, ice (reads)	5 °C (reads)	10 °C (reads)
Unclassified *JTB255 marine benthic group*	0.33	<0.01	0.15	292	9	166
Brevundimonas	0.29	0.18	<0.01	258	223	9
Tenacibaculum	0.47	<0.01	0	418	9	0
Achromobacter	0	0.47	<0.01	0	571	1
Sphingomonas	0.37	0.04	0.06	332	45	70
Rubritalea	0.34	0.06	0.04	306	76	41
Ruegeria	0.36	0.02	0.06	326	22	63
Lactococcus	0.10	0.10	0.24	91	121	267
Unclassified *Caldilineaceae*	0.29	0.01	0.11	264	17	130
Dietzia	0.14	0.27	<0.01	126	325	3
Peptoniphilus	0.39	0	0	346	0	0
Unclassified *Phyllobacteriaceae*	0.19	0.07	0.11	171	80	128
Listeria	0.37	0	0	328	0	0
Carnobacterium	0.04	0.29	0.04	32	352	42
Unclassified *OM1 clade*	0.15	0.06	0.15	131	70	173
Unclassified *Mycoplasmataceae*	0	0	0.35	0	0	403
Lactobacillus	0.34	<0.01	<0.01	303	4	4
Bizionia	0	0.28	0.06	0	341	70
Vagococcus	0	0.25	0.08	0	310	87
Rhodopirellula	0.09	0.02	0.20	85	24	231
Paracoccus	0.07	0.23	<0.01	65	276	7
Nesterenkonia	0.27	0.03	<0.01	242	34	2
Rhizobium	0.25	0.01	0.02	222	18	20
Thiothrix	0.26	0.01	<0.01	233	17	4
Acidovorax	0.19	0.03	0.03	172	40	38
Actibacter	0.14	<0.01	0.11	122	3	127
Sulfitobacter	<0.01	0.24	<0.01	6	287	3
Microbulbifer	0.23	<0.01	0.01	207	1	14
Ilumatobacter	0.12	0.04	0.07	106	53	80
Sulfurovum	0.14	<0.01	0.08	128	8	91
Massilia	0.17	0.03	0.03	153	38	31
Arcobacter	0	<0.01	0.20	0	12	232
Unclassified *Cryomorphaceae*	0.02	0	0.19	21	0	213
Brachybacterium	0.01	0.19	<0.01	10	232	3
Haliea	0.17	<0.01	0.03	150	3	33
Enterococcus	0.14	0.05	<0.01	129	61	3
Unclassified *Sphingobacteriales*	0.13	0.06	<0.01	113	76	2
Thalassobius	0.09	0.09	0.01	82	104	12
Corynebacterium 1	0.16	0.03	0	142	32	0
Unclassified *Xanthomonadales*	0.14	<0.01	0.03	129	10	32
Pseudoroseovarius	0.17	<0.01	<0.01	156	4	3
Candidatus Microthrix	0.12	<0.01	0.05	106	3	59
Roseovarius	0.15	<0.01	0.01	136	9	15
Unclassified *KD4-96*	0.08	0.03	0.06	72	33	65
Brumimicrobium	0	0.14	0.03	0	166	31
Unclassified *Chloroplast*	0.02	0.02	0.12	22	20	138
Guggenheimella	0.15	0.01	0	134	15	0
Unclassified *OM190*	0.12	<0.01	0.03	110	11	31
Salinicoccus	0.12	0.03	<0.01	107	38	8
OM60(NOR5) clade	0.15	0	<0.01	133	0	10
Leuconostoc	<0.01	0.05	0.11	1	59	121
Azospirillum	0.13	0.01	0.01	114	16	14
Noviherbaspirillum	0.13	0.03	<0.01	112	32	1

Genus	Day 0, ice (%)	5 °C (%)	10 °C (%)	Day 0, ice (reads)	5 °C (reads)	10 °C (reads)
Unclassified *Desulfobulbaceae*	0.13	<0.01	0.01	120	4	12
Unclassified *DEV007*	0.09	0.01	0.04	85	13	45
Rubellimicrobium	0.11	0.01	0.02	101	15	21
Unclassified *Halieaceae*	0.13	<0.01	0.02	112	1	20
Aquibacter	0.13	<0.01	<0.01	115	3	5
Colwellia	<0.01	0.05	0.08	6	56	88
Pir4 lineage	0.08	0.01	0.04	69	15	46
Pleomorphomonas	0.08	0.04	0.01	68	44	14
Cellulophaga	0	0.12	<0.01	0	148	1
Marinomonas	0	0.05	0.07	0	59	83
Phenylobacterium	0.11	0.01	<0.01	95	15	2
Unclassified *Erysipelotrichaceae*	0.01	0.10	<0.01	11	123	6
Rubripirellula	0.07	0.01	0.03	62	17	39
Unclassified *Rhodobiaceae*	0.01	<0.01	0.10	13	3	114
Unclassified *Planctomycetaceae*	0.04	0.02	0.05	38	24	59
Weissella	0.11	0	0	102	0	0
Escherichia-Shigella	0.08	0.02	<0.01	71	29	6
Anderseniella	0.04	<0.01	0.07	36	1	76
Citricoccus	<0.01	0.10	<0.01	2	126	2
Methylobacterium	0.09	0.01	<0.01	79	13	3
Unclassified *Milano-WF1B-44*	0.08	<0.01	0.01	73	8	15
Pseudoruegeria	0.08	<0.01	0.02	68	6	22
Robiginitalea	0.03	0	0.07	24	0	82
Arenibacter	0	0.07	0.03	0	88	30
Unclassified *Sva0071*	0.05	0	0.04	48	0	50
Unclassified *Sva0996 marine group*	0.06	0.01	0.02	55	18	23
Propionibacterium	0.09	<0.01	0	81	5	0
Nocardioides	0.07	<0.01	0.01	67	8	14
Lysobacter	0.07	0.02	<0.01	62	19	6
Nitrosomonas	0.08	0	<0.01	71	0	9
Erythrobacter	0.07	<0.01	<0.01	60	8	10
Unclassified *Propionibacteriaceae*	0.06	<0.01	0.01	57	6	14
Unclassified *Aurantimonadaceae*	0.06	<0.01	0.01	52	12	14
Clostridium sensu stricto 1	0	0.05	0.03	0	59	34
Streptococcus	0.08	0	<0.01	68	0	2
Unclassified *SBR1093*	0.02	0	0.05	22	0	60
Microbacterium	0	0.07	0	0	91	0
Pirellula	0.05	0	0.03	43	0	30
Serratia	0.06	<0.01	<0.01	52	11	8
Tepidimonas	0.04	0.02	0.01	40	21	13
Geodermatophilus	0.06	<0.01	<0.01	57	3	8
Mesonia	0	<0.01	0.07	0	2	81
Trichococcus	0.03	0.03	0.01	24	36	15
Flavobacterium	0.03	0.03	0.01	24	35	15
endosymbionts	0.07	<0.01	<0.01	59	1	1
Cobetia	0.02	0.03	0.02	21	33	19
Euzebyella	0.07	0	0	59	0	0
Peptoclostridium	<0.01	0.03	0.02	7	41	27
Unclassified *FamilyI*	0.05	<0.01	<0.01	46	11	5
Unclassified *Methylobacteriaceae*	0.06	<0.01	<0.01	50	6	4
Pelagibius	0.06	0	<0.01	55	0	1
Unclassified *Aerococcaceae*	<0.01	<0.01	0.05	6	5	56
Marivita	0.04	<0.01	0.01	36	11	12

Genus	Day 0, ice (%)	5 °C (%)	10 °C (%)	Day 0, ice (reads)	5 °C (reads)	10 °C (reads)
Enhydrobacter	0.05	<0.01	<0.01	45	5	6
Frigoribacterium	0	0.06	0	0	72	0
Roseobacter	0.05	<0.01	<0.01	47	5	1
Moritella	0	0.03	0.03	0	33	34
Unclassified *TM146*	0.02	<0.01	0.03	20	5	34
Aeromicrobium	0	0	0.06	0	0	63
Defluviicoccus	0.05	0	<0.01	42	0	9
Oceanisphaera	0	0.05	<0.01	0	61	5
Microvirga	0.03	<0.01	0.02	24	12	18
Unclassified *Flammeovirgaceae*	0.03	<0.01	0.02	28	1	23
Unclassified *HOC36*	0.03	0	0.02	28	0	23
Unclassified *SS1-B-06-26*	0.05	0	<0.01	41	0	6
Pseudohongiella	0.05	0	0	45	0	0
Unclassified *Lachnospiraceae*	0.03	<0.01	0.02	26	3	21
Unclassified *Alphaproteobacteria*	0.03	<0.01	0.01	27	7	16
Oceaniovalibus	<0.01	0.05	0	1	59	0
Hyphomicrobium	0.01	<0.01	0.03	10	3	39
Turicibacter	0.01	0.03	<0.01	12	37	3
Planococcus	<0.01	0.04	<0.01	1	44	9
Unclassified *PAUC43f marine benthic group*	0.03	0	0.01	28	0	15
Tropicimonas	0.04	<0.01	<0.01	35	1	4
Unclassified *Candidatus Moranbacteria*	0.03	<0.01	<0.01	27	7	8
Shimia	<0.01	0.04	<0.01	3	45	3
Winogradskyella	0.02	0.01	<0.01	19	16	7
Neptuniibacter	0.04	0	0	36	0	0
Brevibacterium	0.03	<0.01	0	28	10	0
Desulforhopalus	0.04	0	0	35	0	0
Albimonas	0	0.04	0	0	47	0
Sandaracinus	0.04	0	0	34	0	0
Alcanivorax	0	0	0.04	0	0	43
Paenirhodobacter	0.03	<0.01	<0.01	31	2	1
Unclassified *Rhizobiales*	0.03	<0.01	<0.01	24	7	5
Aliicoccus	0.04	0	0	33	0	0
Paucimonas	0.03	<0.01	<0.01	28	2	4
Unclassified *Gracilibacteria*	0.02	<0.01	<0.01	19	6	9
Unclassified *EC3*	0.02	<0.01	<0.01	22	4	7
Reinekea	0	0.03	0	0	41	0
Maritimimonas	0.03	0	0	30	0	0
Psychromonas	0	<0.01	0.03	0	1	37
Bythopirellula	0.02	<0.01	0.01	17	1	15
Rhodobacter	0	<0.01	0.03	0	6	31
Iamia	0.02	<0.01	0.01	17	3	12
Lutimonas	0.02	<0.01	0.01	16	3	13
Unclassified *Rhodospirillaceae*	0.01	0.02	<0.01	9	21	5
Unclassified *PeM15*	0.02	<0.01	<0.01	22	1	6
Candidatus Thiobios	0.02	0	<0.01	21	0	8
Cyclobacterium	0	0.03	0	0	37	0
Unclassified *Frankiales*	0.03	0	<0.01	24	0	4
Desulfobulbus	0.03	0	<0.01	26	0	1
OM27 clade	0.03	0	<0.01	25	0	2
Sva0081 sediment group	0.02	<0.01	<0.01	20	3	5
Loktanella	0.02	<0.01	<0.01	20	5	2
Modestobacter	0.03	0	0	25	0	0

Genus	Day 0, ice (%)	5 °C (%)	10 °C (%)	Day 0, ice (reads)	5 °C (reads)	10 °C (reads)
Granulosicoccus	0.02	<0.01	<0.01	20	2	4
Salinarimonas	0.03	<0.01	0	23	2	0
Exiguobacterium	0.02	<0.01	<0.01	18	7	1
Unclassified *Elev-16S-1332*	0.01	<0.01	0.01	9	3	16
Unclassified *Sandaracinaceae*	<0.01	<0.01	0.02	5	2	22
Unclassified *Bacteroidetes BD2-2*	0.02	0	<0.01	22	0	2
Algoriphagus	0	0.03	0	0	32	0
Unclassified *Anaerolineaceae*	0.01	<0.01	<0.01	13	4	9
Aliivibrio	<0.01	0.02	<0.01	2	21	7
Unclassified *Sva0725*	<0.01	<0.01	0.01	8	6	13
Unclassified *NB1-j*	0.02	0	0	22	0	0
Eremococcus	0.02	0	0	22	0	0
[Desulfobacterium] catecholicum group	0.02	0	0	22	0	0
Paenibacillus	0.02	0	0	22	0	0
Ornithinimicrobium	<0.01	0.01	<0.01	3	16	9
Candidatus Alysiosphaera	0.02	<0.01	<0.01	18	4	1
Algimonas	0.02	<0.01	0	19	3	0
Unclassified *Caulobacteraceae*	0.02	<0.01	<0.01	17	4	1
Unclassified *7B-8*	0.02	<0.01	0	17	5	0
Halomonas	<0.01	0.02	0	3	24	0
Unclassified *Oligoflexaceae*	0.01	0	0.01	11	0	12
Flavirhabdus	0.02	0	<0.01	16	0	5
Corynebacterium	0.02	0	<0.01	19	0	1
Unclassified *JG30-KF-CM45*	<0.01	<0.01	0.01	5	6	13
Klebsiella	0.02	0	0	19	0	0
Flaviflexus	0.02	0	0	19	0	0
Rubrobacter	0.02	<0.01	<0.01	15	3	2
Salimicrobium	0.02	<0.01	0	17	2	0
Legionella	0.01	<0.01	<0.01	11	5	4
Aquabacterium	<0.01	<0.01	<0.01	8	9	4
Octadecabacter	0	0.02	0	0	24	0
Unclassified *Clostridiaceae 1*	0.01	<0.01	<0.01	13	3	3
Unclassified *OCS116 clade*	0.02	0	<0.01	15	0	3
Synechococcus	<0.01	0.01	<0.01	3	14	5
Unclassified *Legionellaceae*	0.01	0	<0.01	10	0	9
SEEP-SRB1	0.02	0	0	17	0	0
Unclassified *SR1 (Absconditabacteria)*	0.02	0	0	17	0	0
Crocinitomix	<0.01	<0.01	0.02	2	1	18
Aquipuribacter	0.02	<0.01	0	16	1	0
Maribacter	0.01	<0.01	0	10	9	0
Ahrensia	<0.01	<0.01	<0.01	6	8	6
Unclassified *Solirubrobacterales*	0	<0.01	0.02	0	2	19
Maritimibacter	<0.01	<0.01	<0.01	4	7	9
Unclassified *Nannocystaceae*	0.02	<0.01	0	14	3	0
Dinoroseobacter	0.02	0	<0.01	14	0	2
Serinicoccus	0.02	0	0	15	0	0
Candidatus Symbiobacter	0.02	0	0	15	0	0
Phaseolus acutifolius (tepary bean)	0.02	0	0	15	0	0
Gordonia	0.01	<0.01	<0.01	12	3	1
Isoptericola	0	0.02	0	0	20	0
Diaphorobacter	0.01	0	<0.01	13	0	2
Oleibacter	<0.01	<0.01	0.01	2	3	13
Pseudoxanthobacter	0	0	0.02	0	0	18

Genus	Day 0, ice (%)	5 °C (%)	10 °C (%)	Day 0, ice (reads)	5 °C (reads)	10 °C (reads)
Unclassified *Comamonadaceae*	<0.01	<0.01	<0.01	5	8	4
Unclassified *Ktedonobacteraceae*	0.02	0	0	14	0	0
Unclassified *E01-9C-26 marine group*	0.01	0	<0.01	10	0	5
Unclassified *Ectothiorhodospiraceae*	0.01	0	<0.01	13	0	1
Tessaracoccus	0.01	<0.01	0	10	5	0
Clostridiisalibacter	0	<0.01	0.01	0	1	16
Chryseomicrobium	0.01	<0.01	0	11	3	0
Persicirhabdus	<0.01	<0.01	0.01	3	1	12
Unclassified *X35*	0.01	0	<0.01	10	0	4
Woodsholea	0.01	0	0	13	0	0
Pedobacter	0.01	0	0	13	0	0
Peredibacter	0.01	0	0	13	0	0
Actinomyces	0.01	0	0	13	0	0
Negativicoccus	0.01	0	0	13	0	0
Unclassified *KI89A clade*	0.01	0	0	13	0	0
Haloferula	0.01	0	0	13	0	0
Agrococcus	<0.01	<0.01	<0.01	6	8	1
Alloiococcus	0.01	0	<0.01	11	0	2
Aquicella	0.01	0	<0.01	11	0	2
Mobilicoccus	0.01	<0.01	0	11	2	0
Amnibacterium	<0.01	<0.01	<0.01	3	6	6
Unclassified *Arenicellaceae*	0.01	0	0	12	0	0
Reyranella	0	<0.01	0.01	0	1	14
Unclassified *Erythrobacteraceae*	0.01	<0.01	0	11	1	0
Bradyrhizobium	0	<0.01	0.01	0	2	13
Alkalibacterium	0	<0.01	<0.01	0	6	9
Limnohabitans	0.01	0	<0.01	9	0	3
Rheinheimera	<0.01	<0.01	0	4	10	0
Maritalea	<0.01	0	<0.01	8	0	4
Lentibacter	0	0.01	0	0	15	0
Defluviimonas	0.01	0	0	11	0	0
Sphingobacterium	0.01	0	0	11	0	0
Candidatus Tenderia	<0.01	0	<0.01	7	0	5
Unclassified *Sphingomonadaceae*	0.01	0	<0.01	10	0	1
Natranaerovirga	<0.01	0	<0.01	6	0	6
Gemmata	0	0	0.01	0	0	13
Streptomyces	<0.01	<0.01	<0.01	4	2	6
Polaribacter 2	<0.01	<0.01	0	5	7	0
Unclassified *R76-B128*	0.01	0	0	10	0	0
Parahaliea	0.01	0	0	10	0	0
Novispirillum	<0.01	<0.01	<0.01	7	3	1
Unclassified *Enterobacteriaceae*	<0.01	0	<0.01	6	0	5
Unclassified *Candidatus Campbellbacteria*	0.01	<0.01	0	9	1	0
Unclassified *Ellin6055*	0.01	<0.01	0	9	1	0
Roseibacillus	<0.01	0	<0.01	8	0	2
Oceanospirillum	0	0.01	0	0	13	0
Mesorhizobium	0	0.01	0	0	13	0
Unclassified *Subgroup 17*	<0.01	<0.01	<0.01	4	1	6
Vogesella	<0.01	0	<0.01	6	0	4
Unclassified *Thiotrichaceae*	<0.01	0	<0.01	2	0	9
Unclassified *Desulfobacteraceae*	0.01	0	0	9	0	0
Aquimarina	0.01	0	0	9	0	0
Candidatus Protochlamydia	0.01	0	0	9	0	0

Genus	Day 0, ice (%)	5 °C (%)	10 °C (%)	Day 0, ice (reads)	5 °C (reads)	10 °C (reads)
Unclassified *Belgica2005-10-ZG-3*	0.01	0	0	9	0	0
Nonomuraea	0.01	0	0	9	0	0
Pelolinea	0.01	0	0	9	0	0
Unclassified *Sva1033*	<0.01	0	<0.01	5	0	5
Kocuria	0	<0.01	<0.01	0	10	2
Kytococcus	<0.01	<0.01	0	6	3	0
Sediminibacterium	0	<0.01	0	0	11	0
Muricauda	<0.01	0	0	8	0	0
Brucella	<0.01	0	0	8	0	0
Alkanindiges	<0.01	0	0	8	0	0
Unclassified *Syntrophaceae*	<0.01	0	0	8	0	0
Blastomonas	0	0	<0.01	0	0	10
Unclassified *Candidatus Pacebacteria*	<0.01	<0.01	<0.01	4	3	2
Unclassified *0319-6A21*	<0.01	<0.01	0	7	1	0
Unclassified *ML635J-21*	<0.01	<0.01	0	4	5	0
Polaribacter 4	<0.01	<0.01	0	3	6	0
Pacificibacter	0	<0.01	0	0	10	0
Novosphingobium	<0.01	<0.01	0	5	3	0
Unclassified *TK85*	<0.01	<0.01	<0.01	1	2	6
Pseudarthrobacter	<0.01	<0.01	0	2	7	0
Rubricoccus	0	0	<0.01	0	0	9
Candidatus Fritschea	<0.01	0	0	7	0	0
Methylotenera	<0.01	0	0	7	0	0
Salmonella	<0.01	0	0	7	0	0
Chryseobacterium	<0.01	0	0	7	0	0
Unclassified *Coriobacteriaceae*	<0.01	0	0	7	0	0
Parasphingopyxis	0	<0.01	<0.01	0	2	7
Aerococcus	<0.01	<0.01	<0.01	1	7	1
Unclassified *Xanthobacteraceae*	0	<0.01	0	0	9	0
Unclassified *NS9 marine group*	<0.01	0	<0.01	5	0	2
Planktomarina	<0.01	<0.01	0	2	6	0
Desulfatiglans	0	0	<0.01	0	0	8
Portibacter	0	<0.01	<0.01	0	4	4
Rhodocista	<0.01	<0.01	<0.01	3	2	2
Coxiella	<0.01	<0.01	<0.01	3	2	2
Aestuariibacter	<0.01	0	0	6	0	0
Blastocatella	<0.01	0	0	6	0	0
Anaerobacterium	<0.01	0	0	6	0	0
Unclassified *Kazan-2B-17*	<0.01	0	0	6	0	0
Chlamydiae bacterium Ga0074140	<0.01	0	0	6	0	0
Fusibacter	<0.01	0	0	6	0	0
Cloacibacterium	<0.01	0	0	6	0	0
Unclassified *BD2-11 terrestrial group*	<0.01	0	0	6	0	0
Ruminococcaceae UCG-012	<0.01	0	0	6	0	0
Psychrosphaera	0	<0.01	0	0	8	0
Devosia	<0.01	<0.01	<0.01	2	3	2
Tateyamaria	<0.01	<0.01	<0.01	2	3	2
Cnuella	<0.01	0	<0.01	4	0	2
Unclassified *Subgroup 26*	0	0	<0.01	0	0	7
Ferrimonas	<0.01	0	<0.01	3	0	3
Unclassified *EV818SWSAP88*	0	<0.01	<0.01	0	3	4
Ensifer	0	<0.01	<0.01	0	3	4
Aurantimonas	0	<0.01	0	0	7	0

Genus	Day 0, ice (%)	5 °C (%)	10 °C (%)	Day 0, ice (reads)	5 °C (reads)	10 °C (reads)
Unclassified *Candidatus Falkowbacteria*	0	<0.01	0	0	7	0
Unclassified *TM6 (Dependentiae)*	<0.01	0	0	5	0	0
Unclassified *1959-1*	<0.01	0	0	5	0	0
SEEP-SRB4	<0.01	0	0	5	0	0
Elstera	<0.01	0	0	5	0	0
Solirubrobacter	0	0	<0.01	0	0	6
Tumebacillus	0	<0.01	<0.01	0	1	5
Marinobacterium	0	<0.01	<0.01	0	2	4
Paeniclostridium	0	<0.01	<0.01	0	2	4
Roseomonas	<0.01	0	<0.01	3	0	2
Aquamicrobium	<0.01	<0.01	<0.01	3	1	1
Cohaesibacter	<0.01	<0.01	<0.01	3	1	1
Oleispira	0	<0.01	0	0	6	0
Owenweeksia	0	<0.01	0	0	6	0
Clostridium sensu stricto 18	0	<0.01	0	0	6	0
Orenia	0	<0.01	0	0	6	0
Formosa	0	<0.01	0	0	6	0
Roseivirga	0	<0.01	0	0	6	0
Unclassified *Proteobacteria*	<0.01	<0.01	0	2	3	0
Lutibacter	<0.01	<0.01	0	2	3	0
Actinopolymorpha	<0.01	0	0	4	0	0
Salinispira	<0.01	0	0	4	0	0
Burkholderia-Paraburkholderia	<0.01	0	0	4	0	0
Chroococcidiopsis	<0.01	0	0	4	0	0
Unclassified *Parvularculaceae*	0	0	<0.01	0	0	5
Flexithrix	0	0	<0.01	0	0	5
Thalassospira	0	0	<0.01	0	0	5
Unclassified *Chlamydiaceae*	0	0	<0.01	0	0	5
Variibacter	0	0	<0.01	0	0	5
Marinifilum	0	<0.01	0	0	5	0
Unclassified *Obscuribacterales*	0	<0.01	0	0	5	0
Gaiella	0	<0.01	0	0	5	0
Unclassified *Pseudomonadaceae*	0	<0.01	0	0	5	0
Hoeflea	0	<0.01	0	0	5	0
Aminobacter	<0.01	0	<0.01	2	0	2
Pseudorhodoferax	<0.01	0	<0.01	2	0	2
Pannonibacter	<0.01	<0.01	0	2	2	0
Alteromonas	<0.01	<0.01	0	2	2	0
Rothia	<0.01	<0.01	0	1	3	0
Unclassified *AKYH478*	0	0	<0.01	0	0	4
Jeotgalibacillus	0	0	<0.01	0	0	4
Sphingopyxis	0	0	<0.01	0	0	4
Unclassified *1-20*	0	0	<0.01	0	0	4
Raoultella	0	0	<0.01	0	0	4
Muricoccus	0	0	<0.01	0	0	4
Rhodovulum	0	<0.01	<0.01	0	1	3
Marinobacter	0	<0.01	<0.01	0	2	2
Unclassified *MNG7*	0	<0.01	<0.01	0	2	2
Unclassified *Gastranaerophilales*	0	<0.01	<0.01	0	2	2
Unclassified *E6aD10*	<0.01	0	0	3	0	0
Unclassified *Omnitrophica*	<0.01	0	0	3	0	0
Unclassified *UASB-TL25*	<0.01	0	0	3	0	0
Fusobacterium	<0.01	0	0	3	0	0

Genus	Day 0, ice (%)	5 °C (%)	10 °C (%)	Day 0, ice (reads)	5 °C (reads)	10 °C (reads)
Phyllobacterium	<0.01	0	0	3	0	0
Lewinella	<0.01	0	0	3	0	0
Unclassified *Desulfuromonadaceae*	<0.01	0	0	3	0	0
Ruminiclostridium 1	<0.01	0	0	3	0	0
Unclassified *CS-B046*	<0.01	0	0	3	0	0
Salegentibacter	0	<0.01	0	0	4	0
Amaricoccus	0	<0.01	0	0	4	0
Amphritea	0	<0.01	0	0	4	0
Parachlamydia	0	<0.01	0	0	4	0
Unclassified *Ruminococcaceae*	0	<0.01	0	0	4	0
Arenimonas	0	<0.01	0	0	4	0
Unclassified *Micrococcaceae*	0	<0.01	0	0	4	0
Unclassified *Planococcaceae*	0	<0.01	0	0	4	0
Unclassified *Syntrophobacteraceae*	<0.01	0	<0.01	2	0	1
Sorangium	<0.01	<0.01	0	2	1	0
Sphingobium	<0.01	<0.01	0	2	1	0
Oryzihumus	<0.01	<0.01	0	2	1	0
Unclassified *Geodermatophilaceae*	<0.01	0	<0.01	1	0	2
Unclassified *OPB35 soil group*	0	0	<0.01	0	0	3
Neochlamydia	0	0	<0.01	0	0	3
Unclassified *HTA4*	0	0	<0.01	0	0	3
Unclassified *Ardenticatenales*	0	0	<0.01	0	0	3
Intestinibacter	0	0	<0.01	0	0	3
Unclassified *Oceanospirillales*	0	0	<0.01	0	0	3
Porphyrobacter	0	0	<0.01	0	0	3
Fictibacillus	0	<0.01	<0.01	0	2	1
Lachnoclostridium 5	0	<0.01	<0.01	0	2	1
Unclassified *Methylococcales*	0	<0.01	0	0	3	0
Unclassified *Peregrinibacteria*	0	<0.01	0	0	3	0
Aureimonas	0	<0.01	0	0	3	0
Gelidibacter	0	<0.01	0	0	3	0
Fluviicola	0	<0.01	0	0	3	0
Leptolyngbya	0	<0.01	0	0	3	0
Sanguibacter	0	<0.01	0	0	3	0
Paraglaciecola	0	<0.01	0	0	3	0
Methanobrevibacter	0	<0.01	0	0	3	0
Aequorivita	0	<0.01	0	0	3	0
Unclassified *SAR324 clade(Marine group B)*	0	<0.01	0	0	3	0
Clostridium sensu stricto 8	0	<0.01	0	0	3	0
Unclassified *Alteromonadaceae*	<0.01	0	0	2	0	0
Sphingomicrobium	<0.01	0	0	2	0	0
Pontibacter	<0.01	0	0	2	0	0
Unclassified *C86*	<0.01	0	0	2	0	0
Finegoldia	<0.01	0	0	2	0	0
Unclassified *MSB-1E8*	<0.01	0	0	2	0	0
Arachis hypogaea (peanut)	<0.01	0	0	2	0	0
Unclassified *Family XI*	<0.01	0	0	2	0	0
NS5 marine group	<0.01	0	0	2	0	0
Unclassified *Clostridiales vadinBB60 group*	<0.01	0	0	2	0	0
Oceanivirga	<0.01	0	0	2	0	0
Limnobacter	<0.01	0	0	2	0	0
Cellulosilyticum	<0.01	0	0	2	0	0
Caldithrix	<0.01	0	0	2	0	0

Genus	Day 0, ice (%)	5 °C (%)	10 °C (%)	Day 0, ice (reads)	5 °C (reads)	10 °C (reads)
Prochlorococcus	<0.01	0	0	2	0	0
Ornithinibacter	<0.01	0	0	2	0	0
Ulvibacter	<0.01	0	0	2	0	0
Cupriavidus	<0.01	0	0	2	0	0
Pseudofulvibacter	<0.01	0	0	2	0	0
Isosphaera	<0.01	0	0	2	0	0
Amylibacter	<0.01	0	0	2	0	0
Unclassified *Marinilabiaceae*	<0.01	0	<0.01	1	0	1
Mameliella	<0.01	0	<0.01	1	0	1
Enterovibrio	0	0	<0.01	0	0	2
Pseudophaeobacter	0	0	<0.01	0	0	2
Inhella	0	0	<0.01	0	0	2
SM1A02	0	0	<0.01	0	0	2
Polycyclovorans	0	0	<0.01	0	0	2
Unclassified *MD2898-B26*	0	0	<0.01	0	0	2
Unclassified *Hydrogenophilaceae*	0	0	<0.01	0	0	2
Unclassified *Holosporaceae*	0	0	<0.01	0	0	2
BD1-7 clade	0	0	<0.01	0	0	2
Unclassified *Subgroup 9*	0	0	<0.01	0	0	2
Unclassified *P0X4b2H11*	0	0	<0.01	0	0	2
Unclassified *LD29*	0	0	<0.01	0	0	2
Candidatus Captivus	0	0	<0.01	0	0	2
Palleronia	0	0	<0.01	0	0	2
Actibacterium	0	0	<0.01	0	0	2
Unclassified *H2-104-2*	0	0	<0.01	0	0	2
Sodalis	0	0	<0.01	0	0	2
Desulfococcus	0	0	<0.01	0	0	2
Parviterribacter	0	0	<0.01	0	0	2
Desulfosporosinus	0	0	<0.01	0	0	2
Unclassified *Rhodothermaceae*	0	0	<0.01	0	0	2
Lamprocystis	0	0	<0.01	0	0	2
Roseivivax	0	0	<0.01	0	0	2
Anoxybacillus	0	0	<0.01	0	0	2
Unclassified *Acetobacteraceae*	0	0	<0.01	0	0	2
Eudoraea	0	0	<0.01	0	0	2
Epulopiscium	0	0	<0.01	0	0	2
Unclassified *0319-6M6*	0	0	<0.01	0	0	2
Clostridium sensu stricto 13	0	<0.01	<0.01	0	1	1
Ureibacillus	0	<0.01	<0.01	0	1	1
Pantoea	0	<0.01	<0.01	0	1	1
Actinoplanes	0	<0.01	<0.01	0	1	1
Bhargavaea	0	<0.01	0	0	2	0
Unclassified *Parachlamydiaceae*	0	<0.01	0	0	2	0
Unclassified *Parcubacteria*	0	<0.01	0	0	2	0
Blautia	0	<0.01	0	0	2	0
Unclassified *Peptostreptococcaceae*	0	<0.01	0	0	2	0
Unclassified *Bogoriellaceae*	0	<0.01	0	0	2	0
Pleurocapsa	0	<0.01	0	0	2	0
Unclassified *Bacteroidetes VC2.1 Bac22*	0	<0.01	0	0	2	0
Thioalkalispira	0	<0.01	0	0	2	0
Janibacter	0	<0.01	0	0	2	0
Unclassified *288-2*	0	<0.01	0	0	2	0
Pseudonocardia	0	<0.01	0	0	2	0

Genus	Day 0, ice (%)	5 °C (%)	10 °C (%)	Day 0, ice (reads)	5 °C (reads)	10 °C (reads)
Salinimonas	0	<0.01	0	0	2	0
Rubidimonas	0	<0.01	0	0	2	0
Anaeromyxobacter	0	<0.01	0	0	2	0
Unclassified *Acidimicrobiaceae*	0	<0.01	0	0	2	0
Demequina	0	<0.01	0	0	2	0
Cryomorpha	0	<0.01	0	0	2	0
Clostridium sensu stricto 9	0	<0.01	0	0	2	0
Craurococcus	0	<0.01	0	0	2	0
Domibacillus	0	<0.01	0	0	2	0
Oceanobacter	0	<0.01	0	0	2	0
Pedomicrobium	0	<0.01	0	0	2	0
Paeniglutamicibacter	0	<0.01	0	0	2	0
Unclassified *Rs-D42*	0	<0.01	0	0	2	0
Unclassified *RB446*	0	<0.01	0	0	2	0
Unclassified *TakashiAC-B11*	0	<0.01	0	0	2	0
Motilibacter	0	<0.01	0	0	2	0
Altererythrobacter	0	<0.01	0	0	2	0
Unclassified *Thiotrichales*	0	<0.01	0	0	2	0
Alkaliphilus	0	<0.01	0	0	2	0
Agromyces	0	<0.01	0	0	2	0