

Supplementary Table 1. Characteristics of 16S amplicon data sets. Ex indicates the ex-plant lungs while PM indicates the post-mortem lungs.

Section	#Sequences	#Phyla	Chao1
Ex RUL	33,509	7	111
Ex RML	24,302	11	242
Ex RLL	25,386	14	250
Ex LUL	21,686	9	217
Ex Ling	15,535	10	210
Ex LLLA	25,650	13	217
Ex LLLP	20,291	11	241
PM RUL	15,524	4	33
PM RML	22,564	5	46
PM RLL	24,359	5	26
PM LUL	10,640	5	40
PM Ling	6,291	4	28
PM LLL	21,752	5	31
PM Trachea	132,364	4	30

Supplementary Table 2. Complete listing of all OTUs identified by 16S rDNA sequences in the lung and tracheal samples. Ex indicates the ex-plant lungs while PM indicates the post-mortem lungs.

Consensus Lineage	Ex RUL	Ex RML	Ex RLL	Ex LUL	Ex Ling	Ex LLLA	Ex LLLP	PM RUL	PM RML	PM RLL	PM LUL	PM Ling
k__Bacteria;p__Acidobacteria;c__o__f__g__s__	0	0	0	0	0	0	11	0	12	19	0	0
k__Bacteria;p__Acidobacteria;c__BPC102;o__f__g__s__	0	0	0	0	0	0	4	0	0	0	0	0
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Acidimicrobiales;f__CL500-29;g__s__	0	0	0	0	0	0	0	0	8	10	0	0
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Acidimicrobiales;f__CL500-29;g__s__	0	0	0	0	0	0	0	0	0	0	0	7
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;f__Actinomycetaceae;g__Actinomyces;s__	0	0	0	0	0	0	0	0	0	6	0	0
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;f__Actinomycetaceae;g__Actinomyces;s__	0	0	0	0	0	0	0	0	0	0	5	0
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;f__Actinomycetaceae;g__Actinomyces;s__Actinomycesoris5	0	0	6	0	0	0	0	0	0	0	0	1
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;f__Actinomycetaceae;g__Actinomyces;s__Actinomycesoris0	0	0	0	0	0	1	0	0	24	0	0	0
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;f__Brevibacteriaceae;g__Brevibacterium;s__Brevibacteriumsauguinis	3	0	7	5	4	7	0	0	0	0	0	0
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;f__Corynebacteriaceae;g__Corynebacterium;s__	0	1	1	7	0	0	7	0	0	1	1	2
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;f__Corynebacteriaceae;g__Corynebacterium;s__	0	0	0	0	0	0	0	0	0	0	14	0
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;f__Corynebacteriaceae;g__Corynebacterium;s__Corynebacteriumaurimucosum	0	0	0	0	0	0	0	0	0	0	0	0
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;f__Corynebacteriaceae;g__Corynebacterium;s__Corynebacteriumtuberculoostearicum	3	14	6	8	6	9	8	7	0	0	0	0
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;f__Dietziaceae;g__Dietzia;s__Dietziamaris	3	0	11	3	0	0	0	0	0	0	6	12
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;f__Microbacteriaceae;g__Microbacterium;s__	0	4	7	0	0	0	0	0	0	0	0	0
k__Bacteria;p__Actinobacteria;c__Actinobacteria;o__Actinomycetales;f__Microbacteriaceae;g__Microbacterium;s__	0	0	0	0	0	0	0	0	6	0	0	3

k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae;g_Microbacterium;s_	0	2	1	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	5	0	0	0	0	0	0
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae;g_Microbacterium;s_Microbacteriumginsengisoli	10	1	0	0	9	0	0	0	0	0	0	0	0
	0												
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae;g_Salinibacterium;s_	0	15	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	8	0
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae;g_Arthrobacter;s_	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	12	1	0
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae;g_Arthrobacter;s_Arthrobactersulfureus	3	0	21	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	3	8
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae;g_Kocuria;s_Kocuriapalustris	0	0	8	6	0	0	0	0	0	0	0	0	0
	0	1	10	8	0	0	0	0	0	0	0	15	0
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae;g_Micrococcus;s_	0	0	0	0	0	0	0	0	0	0	0	0	10
	0	0	0	0	0	0	0	0	15	0	0	0	0
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae;g_Nesterenkonia;s_	0	0	0	0	0	0	0	0	0	0	0	0	0
	8	7	0	0	0	0	0	0	0	0	0	0	2
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Mycobacteriaceae;g_Mycobacterium;s_	3	0	0	2	0	0	0	0	0	0	0	1	10
	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardioidaceae;g_Nocardioides;s_	0	0	0	0	0	0	0	0	0	0	0	10	0
	206	220	324	241	119	238	236	103	0	68	55	74	22
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Propionibacteriaceae;g_Propionibacterium;s_Propionibacteriummacnes	13												
	0	0	2	0	0	3	9	0	0	0	0	0	0
	0												
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Pseudonocardiaceae;g_Actinomycetospora;s_	0	0	0	0	0	0	0	0	0	0	2	0	0
	0	0	0	0	0	0	0	1	9	0	5	7	0
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_koll13;f_g_s_	0	0	0	0	0	0	0	0	0	6	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_koll13;f_g_s_	0	0	0	0	0	0	0	4	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_koll13;f_g_s_	0	0	0	26	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	0	0	0	0	1	0	1
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Solirubrobacterales;f_g_s_	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	3	0	0	0	0	0	0	0
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Solirubrobacterales;f_Solirubrobacteraceae;g_Solirubrobacter;s_	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	4	6	4	0	0	0
k_Bacteria;p_Bacteroidetes;c_o_f_g_s_	0	0	0	0	0	0	0	0	0	5	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_o_f_g_s_	0	0	0	0	0	0	0	2	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_g_s_	0	0	0	0	0	0	0	4	0	0	1	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_g_s_	0	0	0	0	0	0	0	7	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae;g_Prevotella;s_	0	0	0	0	0	0	0	0	0	0	2	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae;g_Prevotella;s_	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	8	0	0	98	0	0
k_Bacteria;p_Bacteroidetes;c_Flavobacteria;o_f_g_s_	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	2	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Flavobacteria;o_f_g_s_	0	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	6	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Flavobacteria;o_f_g_s_	0	0	0	0	0	0	0	0	0	0	6	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Flavobacteria;o_f_g_s_	0	0	0	0	0	0	8	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Flavobacteria;o_Flavobacteriales;f_Cryomorphaceae;g_s_	0	0	0	0	0	0	0	5	0	0	0	2	0

1	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Flavobacteria;o_Flavobacteriales;f_Flavobacteriaceae;g_Maribacter;s_	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Flavobacteria;o_Flavobacteriales;f_Flavobacteriaceae;g_Psychroserpens;s_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
k_Bacteria;p_Bacteroidetes;c_Sphingobacteria;o_Sphingobacteriales;f_g_s_	2	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	9
k_Bacteria;p_Bacteroidetes;c_Sphingobacteria;o_Sphingobacteriales;f_g_s_	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Sphingobacteria;o_Sphingobacteriales;f_g_s_	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Sphingobacteria;o_Sphingobacteriales;f_Flammeovirgaceae;g_s_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
k_Bacteria;p_Bacteroidetes;c_Sphingobacteria;o_Sphingobacteriales;f_Flammeovirgaceae;g_Fulvivirga;s_	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
k_Bacteria;p_Bacteroidetes;c_Sphingobacteria;o_Sphingobacteriales;f_Flexibacteraceae;g_s_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
k_Bacteria;p_Bacteroidetes;c_Sphingobacteria;o_Sphingobacteriales;f_Saprospiraceae;g_s_	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
k_Bacteria;p_Bacteroidetes;c_Sphingobacteria;o_Sphingobacteriales;f_Saprospiraceae;g_s_	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Bacteroidetes;c_Sphingobacteria;o_Sphingobacteriales;f_Saprospiraceae;g_Lewinella;s_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	16
k_Bacteria;p_Bacteroidetes;c_Sphingobacteria;o_Sphingobacteriales;f_Sphingobacteriaceae;g_Pedobacter;s_	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	1
k_Bacteria;p_Chlorobi;c_Chlorobia;o_Chlorobiales;f_Chlorobiaceae;g_Prosthecochloris;s_	3	15	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	13
k_Bacteria;p_Chloroflexi;c_Anaerolineae;o_A4b;f_g_s_	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Chloroflexi;c_Anaerolineae;o_A4b;f_g_s_	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Chloroflexi;c_Anaerolineae;o_Anaerolineales;f_Anaerolinaceae;g_WCHB1-05;s_	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Chloroflexi;c_Anaerolineae;o_Caldilineales;f_Caldilineaceae;g_Caldilinea;s_	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Chloroflexi;c_Anaerolineae;o_DRC31;f_g_s_	0	0	0	0	0	0	0	0	0	0	0	2	4	0	0	0	0	0	0	0	3	7
k_Bacteria;p_Chloroflexi;c_Anaerolineae;o_DRC31;f_g_s_	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Chloroflexi;c_Anaerolineae;o_GCA004;f_g_s_	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Chloroflexi;c_Anaerolineae;o_S0208;f_g_s_	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Chloroflexi;c_Chloroflexi;o_Roseiflexales;f_g_s_	0	0	0	0	0	0	0	0	0	0	35	81	65	11	13	45	0	0	0	0	0	0
k_Bacteria;p_Chloroflexi;c_Dehalococcoidetes;o_NT-B4;f_g_s_	0	0	0	0	0	0	0	0	0	0	2	0	5	0	0	0	0	0	0	0	0	2
k_Bacteria;p_Chloroflexi;c_SOGA31;o_f_g_s_	0	0	0	0	0	0	0	0	0	0	4	0	2	0	0	0	0	0	0	0	2	0
k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_mle1-12;f_g_s_	6	0	0	0	0	0	0	0	0	0	5	0	4	3	11	0	0	0	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_4C0d-2;o_mle1-12;f_g_s_	0	0	0	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_f_g_s_	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_f_g_UA01;s_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_f_g_UA01;s_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Cercoszia;f_Chlorarachniophyceae;g_s_	17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Chlorophyta;f_Mamiellaceae;g_s_	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Chlorophyta;f_Trebouxiophyceae;g_s_	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Chlorophyta;f_Ulvophyceae;g_s_	0	0	0	0	0	0	0	0	0	0	0	0	0	5	4	0	0	0	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Chlorophyta;f_Ulvophyceae;g_s_	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f_g_s_	0	0	0	0	0	0	0	0	0	0	24	23	117	52	55	69	65	0	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f_g_s_	0	0	0	0	0	0	0	0	0	0	0	18	8	2	13	12	0	0	0	0	0	0

k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f__;g__;s__	0	0	0	0	0	0	0	0	0	4	0	0	0	12	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f__;g__;s__	0	0	0	0	0	0	0	0	0	2	5	12	0	11	3
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f__;g__;s__	0	0	0	0	0	0	0	0	0	18	0	5	8	11	4
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f__;g__;s__	0	0	0	0	0	0	0	0	0	5	14	19	0	10	18
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	0	0	3	3
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	10	11	0	0	2
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f__;g__;s__	0	0	0	0	0	0	0	0	0	1	0	3	0	0	4
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f__;g__;s__	0	0	0	0	0	0	0	0	0	3	7	0	0	0	2
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Rhodophyta;f__;g__;s__	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	16	0	0	0	0	0	0	0	0	3	36	19	34	1	25
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	55	0	0	0	0	0	0	0	2	8
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	2	4	0	7
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	0	1	0	5
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	7	0	12	0	2	5
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	5	0	0	0	0	0	0	0	0	0	6	4	3	1	4
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	0	18	0	3
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	4	0	0	0	0	0	0	0	0	5	2	0	1	2	2
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	3	0	0	0	2
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	11	5	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	2	5	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	3	0	0	0	0	0	0	0	0	0	1	4	0	12	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	3	1	2	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	10	0	0	0	0	0	0	0	0	0	0	0	0	2	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	3	0	0	0	0	0	0	0	0	0	11	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	7	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Stramenopiles;f__;g__;s__	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f__;g__;s__	0	0	0	0	0	7836	0	0	0	137	88	50	51	80	122
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f__;g__;s__	10	0	0	0	0	0	0	0	0	16	30	17	13	3	4

k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae;g_Streptococcus;s_Streptococcusanguinis	7	0	0	2	1	0	0	0	0	0	0	0	0	16	0	
k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae;g_Streptococcus;s_Streptococcusuis	0	0	5	2	0	0	0	0	0	0	0	0	0	0	0	
k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae;g_Streptococcus;s_Streptococcusthermophilus	0	0	16	9	4	0	0	0	0	0	0	0	0	12	4	
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae;g__;s__	1	0	0	0	0	0	0	0	0	0	0	5	23	0	6	
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae;g__;s__	4	0	0	0	12	0	0	0	0	11	7	7	5	0	0	
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae;g__;s__	0	0	0	0	0	0	0	0	0	4	0	4	0	0	0	
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae;g__;s__	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae;g__;s__	1	0	0	0	0	0	0	0	0	5	0	0	0	0	0	
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae;g_Clostridium;s__	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae;g_Clostridium;s__	0	3	0	0	0	0	0	0	0	0	8	1	0	0	2	
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae;g_Clostridium;s_Clostridiumbutyricum	1	0	0	3	0	0	0	0	0	0	0	0	0	0	1	7
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_ClostridialesFamilyXI.IncertaeSedis;g_Anaerococcus;s__	0	2	0	7	0	0	0	0	0	0	0	0	0	0	0	3
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_ClostridialesFamilyXI.IncertaeSedis;g_Peptoniphilus;s_Peptoniphilusasaccharolyticus	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_ClostridialesFamilyXIII.IncertaeSedis;g_Mogibacterium;s__	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Lachnospiraceae;g_Clostridium;s__	0	4	5	0	0	0	0	0	0	0	0	0	0	4	0	
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Veillonellaceae;g_Selenomonas;s__	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Veillonellaceae;g_Veillonella;s_Veillonellaparvula	0	4	0	2	0	0	0	6	0	0	0	0	0	4	6	
k_Bacteria;p_Firmicutes;c_Clostridia;o_OPB54;f__;g__;s__	0	0	0	0	0	0	5	0	0	4	0	0	0	0	0	
k_Bacteria;p_Fusobacteria;c_Fusobacteria;o_Fusobacteriales;f_Fusobacteriaceae;g_Leptotrichia;s__	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0	
k_Bacteria;p_Gemmatimonadetes;c_Gemmatimonadetes;o__;f__;g__;s__	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	
k_Bacteria;p_Gemmatimonadetes;c_Gemmatimonadetes;o__;f__;g__;s__	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	
k_Bacteria;p_OP8;c_OP8_1;o_HMMVPog-54;f__;g__;s__	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	
k_Bacteria;p_Planctomycetes;c_Phycisphaerae;o_Phycisphaerales;f_Phycisphaeraeae;g__;s__	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__;g__;s__	10	0	0	0	0	0	0	0	0	0	8	0	0	0	14	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__;g__;s__	1	0	0	0	0	0	0	0	0	0	0	2	0	0	12	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	0	1	0	0	3	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__;g__;s__	0	0	0	0	0	0	0	0	0	0	3	0	0	0	0	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__;g__;s__	0	0	0	0	0	0	0	0	0	10	0	0	0	0	0	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__Rhodopirellula;s__	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__Rhodopirellula;s__	5	0	0	0	0	0	0	0	0	0	2	0	0	0	0	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__Rhodopirellula;s__	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__Rhodopirellula;s__	0	3	0	0	0	0	0	0	0	0	3	0	0	0	0	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__Rhodopirellula;s__	0	3	0	0	0	0	0	0	0	0	3	0	0	0	0	
k_Bacteria;p_Planctomycetes;c_Planctomycea;o_Pirellulales;f__Rhodopirellula;s__	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	

k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodospirillales;f_Rhodospirillaceae;g_s	0	0	0	0	0	0	0	0	0	8	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodospirillales;f_Rhodospirillaceae;g_s	0	0	0	0	0	0	0	0	0	2	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodospirillales;f_Rhodospirillaceae;g_s	0	0	0	0	0	0	0	0	0	11	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodospirillales;f_Rhodospirillaceae;g_s	0	0	0	0	0	0	0	0	0	6	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodospirillales;f_Rhodospirillaceae;g_Magnetospirillum;s_Magnetospirillumsp.	0	0	5	0	2	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_Rickettsiaceae;g_s	0	3	0	0	0	0	35	0	0	0	0	5
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_Rickettsiaceae;g_s	0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_g_s	25	22	0	0	0	0	0	0	0	19	13	6
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_g_s	2	1	0	0	0	0	0	0	0	8	1	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_g_s	0	0	4	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Erythrobacteraceae;g_s	4	0	0	4	0	0	0	0	0	0	0	14
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Erythrobacteraceae;g_s	1	0	0	7	0	0	0	0	0	6	2	17
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_s	2	2	4	3	0	0	0	0	0	0	4	10
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_s	0	3	0	4	0	0	0	0	0	0	5	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Novosphingobium;s	843	711	406	965	697	71	30	0	40	0	16	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Novosphingobium;s	14	2	11	13	13	0	0	0	0	0	0	13
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Novosphingobium;s	32	8	3	12	14	0	0	0	0	0	0	11
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Novosphingobium;s	3	1	4	4	5	0	0	0	0	0	0	3
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Novosphingobium;s	1	1	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Novosphingobium;s	8	0	0	0	7	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Sphingobium;s	15	58	22	62	25	0	0	0	0	0	0	37
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Sphingobium;s	2	2	4	10	5	23	0	3	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Sphingobium;s	21	29	0	4	16	0	0	0	0	39	0	5
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Sphingomonas;s	5	0	1	3	0	0	0	0	0	0	0	7
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Sphingomonas;s	0	1	0	0	6	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Sphingomonas;s	2	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Sphingomonas;s	1	0	0	0	4	0	0	0	0	0	0	2
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Sphingomonas;s	0	0	0	0	0	5	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Sphingomonas;s	0	0	0	0	0	0	0	0	0	237	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Sphingomonas;s_Caulobacterleidyia	3	43	76	22	20	50	57	0	0	0	0	4
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Sphingomonas;s_Sphingomonasazotifigens	2	0	3	3	5	19	9	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae;g_Sphingopyxis;s	0	0	1	0	4	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_f_g_s	0	0	0	0	0	0	3	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_g_s	0	0	0	0	0	0	0	0	5	0	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_g_Aquabacterium;s	73	134	98	2	12	17	14	9	9	188	130	199
										24		122

k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_g_Aquabacterium;s	1	21	13	12
0 17 23 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_g_Aquabacterium;s	0	5	3	2
3 4 7 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_g_Aquabacterium;s	8	1	4	1
0 4 2 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_g_Aquabacterium;s	0	0	0	0
0 4 1 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_g_Aquabacterium;s	1	3	6	0
1 0 5 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_g_Aquabacterium;s	0	0	0	0
0 0 0 0 0 0 0 0 0 1				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_g_Methylibium;s	0	0	0	0
0 0 0 5 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_g_Paucibacter;s	13	14	1	2
0 1 0 0 0 0 13 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_g_Tepidimonas;s	0	0	1	1
0 0 0 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae;g_s	0	0	0	0
0 0 0 0 1 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae;g_Achromobacter;s	Bordetellahinzii			0
1 1 3 5 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae;g_Burkholderia;s	0	2	0	0
2 0 1 1 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae;g_Burkholderia;s	Burkholderiamultivorans	0	0	0
0 2 2 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae;g_Cupriavidus;s	0	0	0	0
0 0 0 0 0 0 22 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae;g_Cupriavidus;s	Cupriavidustaiwanensis	111		
28 40 22 10 27 29 113 135 0 6		26	75	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae;g_Lautropia;s	8	0	0	0
0 3 0 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae;g_Ralstonia;s	42	44	61	
22 6 43 44 172 0 23 27 82 126		47		
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_s	20980	15057	15019	13540
9491 15781 12282 268 67 168 514 110 453 231				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_s	5	102	100	24
44 63 102 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_s	1	15	10	6
8 11 16 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_s	1	7	10	0
4 4 8 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_s	0	2	0	3
0 1 1 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_s	0	7	6	2
0 1 2 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_s	0	1	3	0
4 1 2 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_s	2	0	1	0
0 0 0 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_s	0	0	0	0
3 0 0 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Acidovorax;s	0	0	3	
0 0 1 2 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Comamonas;s	0	0	3	
0 0 0 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Comamonas;s	Comamonasaquatica	68		
18 26 32 15 55 26 0 0 0 0		0	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Comamonas;s	Comamonasaquatica	0		
0 2 0 0 0 0 0 0 0 0		0	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Delftia;s	49	130	140	
114 69 184 118 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Diaphorobacter;s	1121	1120	1319	
986 573 1059 930 29 22 11 41 8 83 21				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Diaphorobacter;s	0	20	7	
2 6 9 11 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Diaphorobacter;s	0	2	3	
0 1 0 1 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Giesbergeria;s	4	0	2	
1 0 0 0 0 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Hylemonella;s	0	12	4	
0 2 8 5 4 0 0 0 0 0				
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Rhodiferax;s	65	213	210	

k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Rhodofera;s_	210	54	133	141	0	0	0	0	0	0	0	2	7
	1	1	2	8	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Simplicispira;s_	7	0	3	15	0	0	0	0	0	0	0	3	6
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae;g_Variovorax;s_Variovoraxparadoxus	0	0	0	0	0	0	0	48	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae;g_;	0	4	1	0	0	0	0	34	0	0	13	1	11
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae;g_Herbaspirillum;s_	0	0	0	0	0	0	0	31	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae;g_Massilia;s_Massiliatimonae	0	15	0	8	4	0	0	12	1	0	0	0	8
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae;g_Massilia;s_Massiliatimonae	0	5	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae;g_Massilia;s_Massiliatimonae	0	3	0	0	0	0	0	0	0	0	0	0	3
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae;g_Massilia;s_Massiliatimonae	0	3	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae;g_Massilia;s_Massiliatimonae	0	3	0	0	1	0	0	0	0	0	0	0	5
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae;g_Massilia;s_Massiliatimonae	4	0	1	0	1	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Hydrogenophilales;f_Hydrogenophilaceae;g_Hydrogenophilus;s_Hydrogenophilusthermolut	3	2	3	0	5	0	0	0	0	0	0	0	0
olus	0												
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Methylophilales;f_Methylophilaceae;g_Methylobacillus;s_Methylobacillusflagellatus	5	3	12	4	6	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Neisseriales;f_Neisseriaceae;g_;	2	0	0	0	0	0	0	0	0	1	0	2	3
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Neisseriales;f_Neisseriaceae;g_Neisseria;s_	3	0	2	18	0	0	0	0	0	2	0	6	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_;	0	0	0	0	0	0	0	0	0	0	0	0	7
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_;	88	170	111	0	0	0	11	14	0	195	158	209	180
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_;	15	10	10	0	0	0	0	0	0	23	25	35	20
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_;	0	4	4	0	0	0	0	0	0	0	3	2	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_;	1	3	2	0	0	0	0	0	0	0	1	5	1
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_;	0	0	0	0	0	0	0	0	0	5	3	0	7
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_;	0	0	0	0	0	0	0	0	0	0	0	4	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_Azospira;s_	4	0	7	0	0	0	0	0	0	0	2	0	5
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_Methyloversatilis;s_Methyloversatilisuniversalis	2	18	21	16	5	22	29	0	0	0	43	0	0
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_Zoogloea;s_	41	14	32	16	0	0	0	7	0	40	48	75	
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_Zoogloea;s_Zoogloeamigera	0	2	1	1	4	0	0	50	0	0	0	0	9
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae;g_Zoogloea;s_Zoogloeaesiniphila	1	3	1	7	0	0	0	0	0	0	0	0	4
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_;	0	0	0	0	0	0	0	4	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfobacterales;f_Desulfobulbaceae;g_;	0	0	0	0	0	0	19	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Desulfobacterales;f_Desulfobulbaceae;g_Desulforhopalus;s_	3	0	0	0	0	0	0	0	0	0	0	0	5
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_MIZ46;f_;	0	0	14	0	0	0	0	6	2	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_;	84	0	0	0	0	0	0	0	61	86	134	209	27
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_;	10	0	0	0	0	0	0	0	0	0	0	1	0
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_;	0	0	0	0	0	0	0	0	0	1	0	4	0
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_;	0	0	0	0	0	0	0	0	0	0	4	0	0
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_;	0	0	0	0	0	0	0	0	0	0	5	0	0

0	0	0	0	0	0	0	1	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae;g_Pseudomonas;s_	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1	0
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae;g_Pseudomonas;s_	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	1	0
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Salinisphaerales;f_Salinisphaeraceae;g_Salinisphaera;s_	0	0	0	0	0	0	0	10	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Vibrionales;f_Vibrionaceae;g_Vibrio;s_	4	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae;g_Pseudoxanthomonas;s_Pseudoxanthomonasm	0	0	0	2	0	0	1	0	0	0	0
exicana	0	0	0	2	0	0	1	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae;g_Stenotrophomonas;s_	0	0	0	0	0	0	0	0	0	0	3
3	3	2	17	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae;g_Stenotrophomonas;s_	0	0	0	0	0	0	0	0	0	0	0
3	2	2	3	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae;g_Stenotrophomonas;s_	0	0	0	6	0	0	0	0	0	0	0
0	0	0	0	6	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae;g_Thermomonas;s_	2	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae;g_Thermomonas;s_Thermomonasfusca	0	3	4	1	0	5	3	0	0	0	0
0	3	4	1	0	5	3	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae;g_Xanthomonas;s_	1	5	9	4	2	0	0	4	0	0	12
1	5	9	4	2	0	0	0	4	0	0	6
k_Bacteria;p_SBR1093;c_EC214;o_;f_;g_;s_	0	0	0	0	0	0	0	0	0	2	0
0	0	0	0	0	0	0	0	0	0	2	0
k_Bacteria;p_Spirochaetes;c_Spirochaetes;o_Spirochaetales;f_Spirochaetaceae;g_Spirochaeta;s_	0	0	0	0	0	0	0	0	0	3	0
0	0	0	0	0	0	0	0	0	0	3	0
k_Bacteria;p_SR1;c_;o_;f_;g_;s_	0	0	0	7	0	0	0	0	0	0	0
0	0	0	0	7	0	0	0	0	0	0	0
k_Bacteria;p_Tenericutes;c_Erysipelotrichi;o_Erysipelotrichales;f_Erysipelotrichaceae;g_PSB-M-3;s_	0	0	0	0	0	10	0	0	0	0	0
0	0	0	0	0	0	10	0	0	0	0	0
k_Bacteria;p_Thermi;c_Deinococci;o_Deinococcales;f_Deinococcaceae;g_Deinococcus;s_	0	0	0	0	0	0	0	0	0	9	0
0	0	0	0	0	0	0	0	0	0	9	0
k_Bacteria;p_Thermi;c_Deinococci;o_Thermales;f_Thermaceae;g_Meiothermus;s_	5	0	0	0	0	0	0	0	0	2	0
5	0	0	0	0	0	0	0	0	0	2	0
k_Bacteria;p_TM6;c_SJA-4;o_;f_;g_;s_	0	0	0	0	0	1	0	5	0	0	0
0	0	0	0	0	0	1	0	5	0	0	0
k_Bacteria;p_TM7;c_TM7-1;o_;f_;g_;s_	0	0	0	0	8	0	0	0	3	4	0
0	0	0	0	0	8	0	0	0	3	4	0
k_Bacteria;p_TM7;c_TM7-3;o_EW055;f_;g_;s_	15	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Verrucomicrobia;c_Opitutae;o_Puniceicoccales;f_Puniceicoccaceae;g_;s_	3	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
k_Bacteria;p_Verrucomicrobia;c_Opitutae;o_Puniceicoccales;f_Puniceicoccaceae;g_Pelagicoccus;s_	0	0	0	0	0	0	0	0	0	0	3
0	0	0	0	0	0	0	0	0	0	0	3
k_Bacteria;p_WPS-2;c_;o_;f_;g_;s_	0	0	0	0	0	0	0	4	0	0	0
0	0	0	0	0	0	0	0	4	0	0	0
k_Bacteria;p_ZB2;c_;o_;f_;g_;s_	0	0	0	0	0	0	0	2	0	0	0
0	0	0	0	0	0	0	0	2	0	0	0
No blast hit	38	44	194	9	33	132	137	0	0	0	0
0	38	44	194	9	33	132	137	0	0	0	0
No blast hit	0	1	13	0	1	2	8	0	0	0	0
0	0	1	13	0	1	2	8	0	0	0	0
No blast hit	0	0	23	0	0	0	16	0	0	0	0
0	0	0	23	0	0	0	16	0	0	0	0
No blast hit	0	0	2	0	0	0	0	0	0	0	0
0	0	0	2	0	0	0	0	0	0	0	0
No blast hit	0	0	0	0	0	0	4	0	0	0	0
0	0	0	0	0	0	0	4	0	0	0	0
No blast hit	0	0	0	0	0	0	0	0	1	0	0
1	1	1	1	1	1	1	1	1	1	1	1
No blast hit	0	0	0	0	0	0	1	2	2	1	3
8	0	0	0	0	0	0	1	2	2	1	3
No blast hit	0	0	0	0	0	0	0	0	0	0	1
0	0	0	0	0	0	0	0	0	0	0	1
No blast hit	0	0	0	0	0	0	0	1	0	0	0
1	0	0	0	0	0	0	1	0	0	0	0
No blast hit	0	0	0	0	0	0	15	0	0	0	0
0	0	0	0	0	0	0	15	0	0	0	0
No blast hit	0	0	0	0	0	0	0	1	0	0	0
0	0	0	0	0	0	0	0	1	0	0	0

No blast hit 0	0	0	0	0	0	0	0	0	0	1	0	0
No blast hit 2	0	0	0	0	0	0	0	0	2	3	0	0
No blast hit 0	0	0	0	0	0	0	0	0	3	2	0	1
No blast hit 0	1	0	0	0	0	0	0	1	0	0	0	0
No blast hit 0	0	0	0	0	0	0	0	13	0	0	0	0
No blast hit 0	0	0	0	0	0	0	0	0	0	0	0	1
No blast hit 0	0	0	0	0	0	0	0	0	1	0	0	0
No blast hit 1	0	0	0	0	0	0	0	0	0	0	0	0
No blast hit 0	0	0	0	0	0	0	0	0	1	0	0	0
No blast hit 0	0	0	0	0	0	0	0	0	1	0	0	0

Supplementary Table 3. Weighted Unifrac distances for all pairwise comparisons of lung and tracheal samples. Ex indicates the ex-plant lungs while PM indicates the post-mortem lungs.

	ExRUL	ExRML	ExRLL	ExLUL	ExLing	ExLLLA	ExLLLP	PMRUL	PMRML	PMRLL	PMLUL	PMLML	PMLLL	PMTrachea
ExRUL	0.000	0.061	0.061	0.072	0.031	0.054	0.064	0.378	0.387	0.387	0.358	0.388	0.418	0.398
ExRML	0.061	0.000	0.013	0.017	0.043	0.017	0.013	0.346	0.354	0.355	0.324	0.356	0.391	0.366
ExRLL	0.061	0.013	0.000	0.022	0.044	0.016	0.011	0.347	0.356	0.356	0.325	0.356	0.391	0.367
ExLUL	0.072	0.017	0.022	0.000	0.055	0.027	0.020	0.339	0.348	0.348	0.318	0.348	0.386	0.360
ExLing	0.031	0.043	0.044	0.055	0.000	0.038	0.046	0.364	0.373	0.373	0.343	0.374	0.400	0.386
ExLLLA	0.054	0.017	0.016	0.027	0.038	0.000	0.016	0.352	0.361	0.361	0.330	0.362	0.395	0.372
ExLLLP	0.064	0.013	0.011	0.020	0.046	0.016	0.000	0.348	0.356	0.357	0.326	0.357	0.392	0.365
PMRUL	0.378	0.346	0.347	0.339	0.364	0.352	0.348	0.000	0.033	0.033	0.040	0.062	0.147	0.056
PMRML	0.387	0.354	0.356	0.348	0.373	0.361	0.356	0.033	0.000	0.006	0.068	0.090	0.162	0.025
PMRLL	0.387	0.355	0.356	0.348	0.373	0.361	0.357	0.033	0.006	0.000	0.069	0.090	0.161	0.025
PMLUL	0.358	0.324	0.325	0.318	0.343	0.330	0.326	0.040	0.068	0.069	0.000	0.061	0.160	0.091
PMLML	0.388	0.356	0.356	0.348	0.374	0.362	0.357	0.062	0.090	0.090	0.061	0.000	0.168	0.112
PMLLL	0.418	0.391	0.391	0.386	0.400	0.395	0.392	0.147	0.162	0.161	0.160	0.168	0.000	0.184
PMTrachea	0.398	0.366	0.367	0.360	0.386	0.372	0.365	0.056	0.025	0.025	0.091	0.112	0.184	0.000

Supplementary Figure 1. Rarefaction curves for microbial communities in the ex-plant (Ex) and post-mortem (PM) lung regions and the tracheal mucus plug.

