

Table S1 Summary of samples and pyrosequencing data analysis.

Sample	Barcode sequence	Number of high quality reads ^a	Number of reads after denoising	Number of reads after filter ^b
Substrate	TGCTCGCTAC	1207	1086	1080
	ACGTGCAGCG	579	463	463
	ACTCACAGAG	1170	1053	1033
	AGACTCAGCG	2189	1602	1502
	AGAGAGTGTG	776	641	541
Rhizosphere	AGCTATCGCG	1640	1558	1467
	AGTCTGACTG	1342	1168	1160
	AGTGAGCTCG	384	354	244
	ATAGCTCTCG	679	624	504
	ATCACGTGCG	2263	2215	2196
Roots	CTATAGCGTA	3690	3321	112
	TATGCTAGTA	2702	2162	88
	TGAGTCAGTA	477	334	102
	ACAGTCGTGC	3166	2533	84
	ACTCGCGCAC	3330	3164	107
Stem	CCTACGCTCTA	5232	4552	172
	TCACGCGAGA	4747	4272	166
	TGTAGTGTGA	2157	1726	157
	ACATGACGAC	2170	1953	106
	AGAGCGTCAC	3031	2122	131
Leaves	TACGTCATCA	2327	1862	111
	TCACGCGAGA	2746	2581	101
	TGTAGTGTGA	2725	2453	122
	ACATGACGAC	3503	2802	103
	AGAGCGTCAC	2836	1985	130
Spathe	TAGTCGCATA	3180	2544	128
	TCGCTGCGTA	964	916	105
	TGTCGTCGCA	1515	1318	98
	ACGTCTCATC	3643	3279	115
	AGTAGTGATC	2256	1805	132
Spadix	TATATATACA	5029	4526	109
	TCTGACGTCA	4498	3149	122
	ACACATACGC	2770	2216	120
	ACTCATCTAC	5097	4842	99
	AGTGACACAC	1321	1149	150
Total count		87341	74100	13160

^a Reads at high quality i.e. >200 bp in length, > 25 phred quality threshold and containing any unresolved nucleotides. ^b Datasets without sequences belonged to 16S rRNA of the chloroplast from the plant

Table S2 Relative abundance of bacterial genus found in the substrate, and associated with the rhizosphere and endosphere of healthy *Anthurium andraeanum* L. plants.

Taxon	Relative abundance (%)		
	Substrate	Rhizosphere	Endosphere
Firmicutes; Bacilli; Lactobacillales; Aerococcaceae; <i>Alkalibacterium</i>	0	0	1.156
Firmicutes; Clostridia; Clostridiales; Clostridiaceae; <i>Alkaliphilus</i>	0	0	0.420
Firmicutes; Clostridia; Clostridiales; Veillonellaceae; <i>Pelosinus</i>	0	0	2.313
Firmicutes; Bacilli; Haloplasmatales; Haloplasmataceae	0	0	1.197
Proteobacteria; Gammaproteobacteria; Xanthomonadales; Xanthomonadaceae; <i>Xanthomonas</i>	0	0	0.420
Tenericutes; Mollicutes; Anaeroplasmatales; Anaeroplasmataceae; <i>Asteroleplasma</i>	0	0	1.892
Actinobacteria; Actinobacteria; Actinomycetales; Propionibacteriaceae; <i>Propionibacterium</i>	0	0.031	0.525
Firmicutes; Clostridia; Clostridiales; Peptostreptococcaceae; <i>Clostridium</i>	0	0.015	3.259
Proteobacteria; Betaproteobacteria; Burkholderiales; Alcaligenaceae; <i>Achromobacter</i>	0	0.031	3.785
Proteobacteria; Gammaproteobacteria; Xanthomonadales; Xanthomonadaceae; <i>Stenotrophomonas</i>	0	0.031	0.630
Actinobacteria; Actinobacteria; Actinomycetales; Cellulomonadaceae; <i>Demequina</i>	0	0.031	0
Actinobacteria; Actinobacteria; Actinomycetales; Nocardiopsaceae; <i>Thermobifida</i>	0	0.047	0
Bacteroidetes; [Saprospirae]; [Saprospirales]; Chitinophagaceae; <i>Flavisolibacter</i>	0	0.031	0
Chloroflexi; Anaerolineae; Caldilineales; Caldilineaceae; <i>Caldilinea</i>	0	0.047	0
Firmicutes; Bacilli; Bacillales; Paenibacillaceae; <i>Thermobacillus</i>	0	0.063	0
Firmicutes; Bacilli; Bacillales; Thermoactinomycetaceae; <i>Laceyella</i>	0	0.031	0
Firmicutes; Clostridia; Clostridiales; Clostridiaceae; <i>Oxobacter</i>	0	0.079	0
GN02; GKS2-174	0	0.031	0
Planctomycetes; Planctomycetia; Planctomycetales; Planctomycetaceae; <i>Planctomyces</i>	0	0.127	0
Proteobacteria; Alphaproteobacteria; Caulobacterales; Caulobacteraceae; <i>Asticcacaulis</i>	0	0.047	0
Proteobacteria; Alphaproteobacteria; Rhizobiales; Methylocystaceae; <i>Pleomorphomonas</i>	0	0.047	0
Proteobacteria; Alphaproteobacteria; Sphingomonadales; Sphingomonadaceae; <i>Novosphingobium</i>	0	0.079	0
Proteobacteria; Deltaproteobacteria; Bdellovibrionales; Bdellovibrionaceae; <i>Bdellovibrio</i>	0	0.031	0
Proteobacteria; Deltaproteobacteria; Myxococcales; Nannocystaceae; <i>Plesiocystis</i>	0	0.111	0
Verrucomicrobia; [Spartobacteria]; [Chthoniobacteriales]; [Chthoniobacteraceae]; DA101	0	0.063	0
WS3; PRR-12; Sediment-1; CV106;	0	0.031	0
Proteobacteria; Alphaproteobacteria; Rhizobiales; Rhizobiaceae; <i>Rhizobium</i>	0.016	0	0.315
Acidobacteria; Solibacteres; Solibacterales; Solibacteraceae; <i>Candidatus Solibacter</i>	0.033	0	0
Armatimonadetes; 0319-6E2	0.033	0	0
Bacteroidetes; Sphingobacteriia; Sphingobacteriales; Sphingobacteriaceae; <i>Solitalea</i>	0.050	0	0
BRC1; PRR-11	0.033	0	0
Firmicutes; Bacilli; Bacillales; Bacillaceae; <i>Ornithinibacillus</i>	0.033	0	0
Firmicutes; Bacilli; Bacillales; Planococcaceae; <i>Ureibacillus</i>	0.084	0	0
Firmicutes; Bacilli; Bacillales; Thermoactinomycetaceae; <i>Thermoactinomyces</i>	0.033	0	0
GOUTA4	0.067	0	0
OD1	0.033	0	0
OP11; WCHB1-64	0.033	0	0
Planctomycetes; Planctomycetia; Pirellulales; Pirellulaceae; A17	0.033	0	0
Proteobacteria; Alphaproteobacteria; Sphingomonadales; Erythrobacteraceae; <i>Altererythrobacter</i>	0.033	0	0
Proteobacteria; Betaproteobacteria; Burkholderiales; Comamonadaceae; <i>Curvibacter</i>	0.067	0	0
Proteobacteria; Gammaproteobacteria; [Marinicellales]; [Marinicellaceae]	0.084	0	0
Verrucomicrobia; [Spartobacteria]; [Chthoniobacteriales]; [Chthoniobacteraceae]	0.033	0	0
Actinobacteria; Actinobacteria; Actinomycetales; Microbacteriaceae; <i>Microbacterium</i>	0.067	0.063	0.736
Actinobacteria; Actinobacteria; Actinomycetales; Streptomycetaceae; <i>Streptomyces</i>	0.050	0.222	1.366
Armatimonadetes; [Fimbriimonadia]; [Fimbriimonadales]; [Fimbriimonadaceae]; <i>Fimbriimonas</i>	0.777	0.413	0.630
Bacteroidetes; Flavobacteriia; Flavobacteriales; Flavobacteriaceae; <i>Flavobacterium</i>	0.473	0.524	1.261
Firmicutes; Bacilli; Bacillales; Alicyclobacillaceae; <i>Alicyclobacillus</i>	0.050	0.015	0.210
Firmicutes; Bacilli; Bacillales; Paenibacillaceae; <i>Brevibacillus</i>	0.067	0.095	6.203
Firmicutes; Bacilli; Bacillales; Paenibacillaceae; <i>Paenibacillus</i>	0.067	0.031	0.630
Firmicutes; Clostridia; Clostridiales; Clostridiaceae; <i>Clostridium</i>	0.033	0.015	1.997
Firmicutes; Clostridia; Clostridiales; Peptostreptococcaceae; [<i>Clostridium</i>]	0.033	0.095	2.103
Proteobacteria; Alphaproteobacteria; Rhizobiales; Bradyrhizobiaceae; <i>Bradyrhizobium</i>	0.355	0.142	0.210
Proteobacteria; Alphaproteobacteria; Rhizobiales; Hyphomicrobiaceae; <i>Devosia</i>	0.811	1.191	0.315
Proteobacteria; Alphaproteobacteria; Rhizobiales; Rhizobiaceae; <i>Sinorhizobium</i>	0.016	0.524	0.315
Proteobacteria; Betaproteobacteria; Burkholderiales; Comamonadaceae; <i>Acidovorax</i>	0.016	0.031	0.210
Proteobacteria; Betaproteobacteria; Burkholderiales; Comamonadaceae; <i>Ramlibacter</i>	0.067	0.047	0.105
Proteobacteria; Betaproteobacteria; Burkholderiales; Comamonadaceae; <i>Variovorax</i>	0.084	0.047	0.841
Proteobacteria; Betaproteobacteria; Rhodocyclales; Rhodocyclaceae; <i>Azoarcus</i>	0.084	0.031	0.105
Proteobacteria; Gammaproteobacteria; Oceanospirillales; Halomonadaceae; <i>Halomonas</i>	0.388	0.413	0.630
Proteobacteria; Gammaproteobacteria; Pseudomonadales; Moraxellaceae; <i>Acinetobacter</i>	0.338	0.063	5.047
Proteobacteria; Gammaproteobacteria; Pseudomonadales; Pseudomonadaceae; <i>Pseudomonas</i>	0.490	0.571	27.339
Actinobacteria; Actinobacteria; Actinomycetales; Microbacteriaceae; <i>Agromyces</i>	0.169	0.063	0
Actinobacteria; Actinobacteria; Actinomycetales; Microbacteriaceae; <i>Cryocolla</i>	0.067	0.015	0
Actinobacteria; Actinobacteria; Actinomycetales; Mycobacteriaceae; <i>Mycobacterium</i>	0.371	0.301	0
Actinobacteria; Actinobacteria; Actinomycetales; Nocardioidaceae; <i>Nocardioides</i>	0.236	0.158	0
Actinobacteria; Actinobacteria; Actinomycetales; Promicromonosporaceae; <i>Xylanimicrobium</i>	0.016	0.015	0

Table S2 (continued)

Taxon	Substrate	Rhizosphere	Endosphere
Actinobacteria; Actinobacteria; Actinomycetales; Pseudonocardiaceae; <i>Saccharomonospora</i>	0.016	0.031	0
Actinobacteria; Actinobacteria; Actinomycetales; Williamsiaceae; <i>Williamsia</i>	0.033	0.031	0
Actinobacteria; Thermoleophilia; Solirubrobacterales; Conexibacteraceae; <i>Conexibacter</i>	0.135	0.063	0
Bacteroidetes; [Saprosirae]; [Saprosirales]; Chitinophagaceae; <i>Flaviumibacter</i>	0.033	0.031	0
Bacteroidetes; Cytophagia; Cytophagales; Cytophagaceae; <i>Adhaeribacter</i>	0.050	0.047	0
Firmicutes; Bacilli; Bacillales; Bacillaceae; <i>Bacillus</i>	1.690	1.064	0
Firmicutes; Bacilli; Bacillales; Planococcaceae; <i>Lysinibacillus</i>	0.033	0.047	0
Firmicutes; Bacilli; Bacillales; Planococcaceae; <i>Solibacillus</i>	0.118	0.158	0
Firmicutes; Bacilli; Bacillales; Thermoactinomycetaceae; <i>Planifilum</i>	0.439	0.222	0
Nitrospirae; Nitrospira; Nitrospirales; Nitrospiraceae; <i>Nitrospira</i>	1.183	0.841	0
Proteobacteria; Alphaproteobacteria; Caulobacterales; Caulobacteraceae; <i>Phenylobacterium</i>	0.304	0.428	0
Proteobacteria; Alphaproteobacteria; Rhizobiales; Bradyrhizobiaceae; <i>Balneimona</i>	0.067	0.142	0
Proteobacteria; Alphaproteobacteria; Rhizobiales; Hyphomicrobiaceae; <i>Hyphomicrobium</i>	0.422	0.683	0
Proteobacteria; Alphaproteobacteria; Rhizobiales; Hyphomicrobiaceae; <i>Pedomicrobium</i>	0.405	0.333	0
Proteobacteria; Alphaproteobacteria; Rhizobiales; Hyphomicrobiaceae; <i>Rhodoplanes</i>	6.729	6.973	0
Proteobacteria; Alphaproteobacteria; Rhizobiales; Methylobacteriaceae; <i>Methylobacterium</i>	0.185	0.158	0
Proteobacteria; Alphaproteobacteria; Rhizobiales; Phyllobacteriaceae; <i>Mesorhizobium</i>	0.490	0.317	0
Proteobacteria; Alphaproteobacteria; Rhizobiales; Rhizobiaceae; <i>Agrobacterium</i>	0.050	0.095	0
Proteobacteria; Alphaproteobacteria; Rhizobiales; Rhodobiaceae; <i>Ajifella</i>	0.067	0.031	0
Proteobacteria; Alphaproteobacteria; Rhizobiales; Xanthobacteraceae; <i>Labrys</i>	0.033	0.015	0
Proteobacteria; Alphaproteobacteria; Rhodobacterales; Rhodobacteraceae; <i>Amaricoccus</i>	0.050	0.095	0
Proteobacteria; Alphaproteobacteria; Sphingomonadales; Sphingomonadaceae; <i>Sphingobium</i>	0.101	0.158	0
Proteobacteria; Alphaproteobacteria; Sphingomonadales; Sphingomonadaceae; <i>Sphingopyxis</i>	0.033	0.047	0
Proteobacteria; Betaproteobacteria; Burkholderiales; Burkholderiaceae; <i>Burkholderia</i>	0.050	0.063	0
Proteobacteria; Betaproteobacteria; Burkholderiales; Comamonadaceae; <i>Methylibium</i>	0.050	0.047	0
Proteobacteria; Betaproteobacteria; Burkholderiales; Comamonadaceae; <i>Rubrivivax</i>	0.422	0.365	0
Proteobacteria; Betaproteobacteria; Burkholderiales; Oxalobacteraceae; <i>Cupriavidus</i>	0.118	0.047	0
Proteobacteria; Betaproteobacteria; Burkholderiales; Oxalobacteraceae; <i>Ralstonia</i>	0.033	0.079	0
Proteobacteria; Gammaproteobacteria; Legionellales; Coxiellaceae; <i>Aquicella</i>	0.185	0.238	0
Proteobacteria; Gammaproteobacteria; Legionellales; Legionellaceae; <i>Legionella</i>	0.016	0.111	0
Proteobacteria; Gammaproteobacteria; Xanthomonadales; Sinobacteraceae; <i>Alkanibacter</i>	0.304	0.142	0
Proteobacteria; Gammaproteobacteria; Xanthomonadales; Sinobacteraceae; <i>Steroidobacter</i>	0.135	0.190	0
Proteobacteria; Gammaproteobacteria; Xanthomonadales; Xanthomonadaceae; <i>Dokdonella</i>	0.033	0.047	0
Proteobacteria; Gammaproteobacteria; Xanthomonadales; Xanthomonadaceae; <i>Lysobacter</i>	0.270	0.222	0
Proteobacteria; Gammaproteobacteria; Xanthomonadales; Xanthomonadaceae; <i>Rhodanobacter</i>	0.879	0.301	0
Proteobacteria; Gammaproteobacteria; Xanthomonadales; Xanthomonadaceae; <i>Thermomonas</i>	0.169	0.349	0
Verrucomicrobia; Opitutae; Opitutales; Opitutaceae; <i>Opitutus</i>	0.033	0.111	0
Verrucomicrobia; Verrucomicrobiae; Verrucomicrobiales; Verrucomicrobiaceae; <i>Luteolibacter</i>	0.101	0.047	0

Table S3 Relative abundance of bacterial families found in the substrate, and associated with the rhizosphere, roots, stem, leaves, spathe and spadix tissues of healthy *Anthurium andraeanum* L. plants.

Taxon	Substrate	Rhizosphere	Root	Stem	Leaf	Spathe	Spadix
	Relative abundance (%)						
Other Bacteria	11.01 (0.62) ^a	11.10 (1.26)	11.93 (4.33)	15.69 (6.79)	27.74 (12.80)	16.49 (4.58)	23.52 (9.93)
Acidobacteria							
Acidobacteria	0.07 (0.07)	0	0	0	0	0	0
Acidobacteria-5	0.25 (0.11)	0.07 (0.03)	0	0	0	0	0
Acidobacteria-6	0.13 (0.13)	0	0	0	0	0	0
Acidobacteria-6; BPC015	0.16 (0.09)	0.35 (0.27)	0	0	0	0	0
Acidobacteria-6; CCU21	0.35 (0.07)	0.18 (0.09)	0	0	0	0	0
Acidobacteria-6; iii1-15	0.03 (0.02)	0.02 (0.01)	0	0	0	0	0
Acidobacteria-6; iii1-15	4.83 (1.01)	3.20 (0.41)	0	0	0	0	0
Acidobacteria-6; iii1-15; RB40	0.89 (0.30)	0.04 (0.40)	0	0	0	0	0
Acidobacteria-6; iii1-15; mb2424	0.59 (0.12)	0.40 (0.18)	0	0	0	0	0
Acidobacteriia; Acidobacteriales	0.05 (0.03)	0.01 (0.01)	0	0	0	0	0
Acidobacteriia; Acidobacteriales; Acidobacteriaceae	4.10 (2.02)	4.37 (1.58)	0.22 (0.12)	0	0	0	0
Acidobacteriia; Acidobacteriales; Koribacteraceae	0.29 (0.10)	0.22 (0.13)	0	0	0	0	0
BPC102; MVS-40	0.03 (0.03)	0.02 (0.02)	0	0	0	0	0
DA052; Ellin6513	0.02 (0.02)	0.07 (0.03)	0	0	0	0	0
EC1113	0	0.12 (0.06)	0	0	0	0	0
PAUC37f	0.03 (0.03)	0.02 (0.02)	0	0	0	0	0
RB25	0.11 (0.08)	0.03 (0.03)	0	0	0	0	0
S035	0.03 (0.03)	0.02 (0.02)	0	0	0	0	0
Solibacteres; Solibacterales	0.11 (0.03)	0.20 (0.07)	0	0	0	0	0
Solibacteres; Solibacterales; PAUC26f	0.03 (0.03)	0.05 (0.05)	0	0	0	0	0
Solibacteres; Solibacterales; Solibacteraceae	0.03 (0.02)	0.03 (0.03)	0	0	0	0	0
Sva0725; Sva0725	0.10 (0.07)	0.20 (0.08)	0	0	0	0	0
[Chloracidobacteria]; RB41	0.13 (0.04)	0.06 (0.03)	0	0	0	0	0
[Chloracidobacteria]; RB41; Ellin6075	2.05 (0.45)	2.23 (0.91)	0	0	0	0	0
iii1-8; 32-20	0.05 (0.03)	0	0	0	0	0	0
iii1-8; DS-18	0	0.12 (0.12)	0	0	0	0	0
Actinobacteria							
Acidimicrobiia; Acidimicrobiales	0.89 (0.47)	1.50 (0.89)	0	0	0	0	0
Acidimicrobiia; Acidimicrobiales; C111	0.16 (0.11)	0.08 (0.05)	0	0	0	0	0
Acidimicrobiia; Acidimicrobiales; EB1017	0.34 (0.12)	0.31 (0.11)	0	0	0	0	0
Acidimicrobiia; Acidimicrobiales; koll13	0.03 (0.03)	0.01 (0.01)	0	0	0	0	0
Actinobacteria; Actinomycetales	0.68 (0.19)	0.42 (0.07)	0.52 (0.42)	0	0	0	0
Actinobacteria; Actinomycetales; Cellulomonadaceae	0	0.02 (0.02)	0	0	0	0	0
Actinobacteria; Actinomycetales; Microbacteriaceae	0.54 (0.06)	0.49 (0.10)	1.82 (1.51)	0	0	0	0
Actinobacteria; Actinomycetales; Micromonosporaceae	0.08 (0.04)	0.18 (0.09)	0.77 (0.65)	0	0	0	0
Actinobacteria; Actinomycetales; Mycobacteriaceae	0.43 (0.14)	0.30 (0.12)	0	0	0	0	0
Actinobacteria; Actinomycetales; Nakamurellaceae	0.06 (0.04)	0	0	0	0	0	0
Actinobacteria; Actinomycetales; Nocardiodaceae	0.38 (0.25)	0.27 (0.11)	0	0	0	0	0
Actinobacteria; Actinomycetales; Nocardiosporaceae	0	0.02 (0.02)	0	0	0	0	0
Actinobacteria; Actinomycetales; Promicromonosporaceae	0.03 (0.03)	0.01 (0.01)	0	0	0	0	0
Actinobacteria; Actinomycetales; Propionibacteriaceae	0.02 (0.02)	0.15 (0.14)	0.65 (0.45)	1.05 (0.65)	0	0.48 (0.28)	0
Actinobacteria; Actinomycetales; Pseudonocardiaceae	0.07 (0.06)	0.02 (0.02)	0	0	0	0	0
Actinobacteria; Actinomycetales; Streptomyces	0.07 (0.06)	0.28 (0.19)	3.22 (2.20)	0	0	0	0
Actinobacteria; Actinomycetales; Williamsiaceae	0.02 (0.02)	0.02 (0.02)	0	0	0	0	0
MB-A2-108	0	0.02 (0.02)	0	0	0	0	0
MB-A2-108; 0319-7L14;	0.04 (0.03)	0.11 (0.07)	0	0	0	0	0
Thermoleophilia; Gaiellales; Gaiellaceae	1.33 (0.62)	1.65 (0.67)	0	0	0	0	0
Thermoleophilia; Solirubrobacterales	0.30 (0.11)	0.27 (0.11)	0	0	0	0	0
Thermoleophilia; Solirubrobacterales; Conexibacteraceae	0.13 (0.06)	0.12 (0.07)	0	0	0	0	0
Thermoleophilia; Solirubrobacterales; Patulibacteraceae	0.04 (0.03)	0.02 (0.02)	0	0	0	0	0
Thermoleophilia; Solirubrobacterales; Solirubrobacteraceae	0	0.04 (0.03)	0	0	0	0	0
Bacteroidetes							
Cytophagia; Cytophagales; Cytophagaceae	0.93 (0.38)	1.26 (0.14)	3.10 (1.90)	0	0	0	0
Flavobacteriia; Flavobacteriales	0.02 (0.02)	0	0	0	0	0	0
Flavobacteriia; Flavobacteriales; Cryomorphaeae	0.04 (0.03)	0.01 (0.01)	0	0	0	0	0
Flavobacteriia; Flavobacteriales; Flavobacteriaceae	0.39 (0.15)	0.36 (0.18)	4.36 (2.84)	0	0	0	0
Sphingobacteriia; Sphingobacteriales;	0.25 (0.15)	0.03 (0.03)	0	0	0	0	0

Table S3 (continued)

Taxon	Substrate	Rhizosphere	Root	Stem	Leave	Spathe	Spadix
Sphingobacteriia; Sphingobacteriales; Sphingobacteriaceae	0.05 (0.05)	0	0	0	0	0	0
[Saprospirae]; [Saprospirales]; Chitinophagaceae	1.59 (0.33)	1.46 (0.44)	0	0	0	0	0
[Saprospirae]; [Saprospirales]; Saprospiraceae	0.05 (0.03)	0.04 (0.04)	0	0	0	0	0
Chloroflexi							
Chloroflexi	0.02 (0.02)	0.14 (0.07)	0	0	0	0	0
Anaerolineae; A31; S47	0.04 (0.03)	0.05 (0.04)	0	0	0	0	0
Anaerolineae; CFB-26	0.04 (0.03)	0	0	0	0	0	0
Anaerolineae; Caldilineales; Caldilineaceae	0.15 (0.15)	0.11 (0.11)	0	0	0	0	0
Anaerolineae; DRC31	0.01 (0.01)	0.29 (0.18)	0	0	0	0	0
Anaerolineae; GCA004	0.03 (0.03)	0.14 (0.08)	0	0	0	0	0
Anaerolineae; H39	0.08 (0.05)	0	0	0	0	0	0
Anaerolineae; S0208	0.20 (0.14)	0.10 (0.04)	0	0	0	0	0
Anaerolineae; SBR1031; A4b	0.26 (0.09)	0.17 (0.08)	0	0	0	0	0
Anaerolineae; envOPS12	0.04 (0.03)	0.09 (0.03)	0	0	0	0	0
Chloroflexi; [Roseiflexales]	0.01 (0.01)	0.06 (0.04)	0	0	0	0	0
Ellin6529	0.85 (0.40)	1.41 (0.35)	0	0	0	0	0
Gitt-GS-136	0.55 (0.24)	0.36 (0.14)	0	0	0	0	0
Ktedonobacteria	0	0.06 (0.06)	0	0	0	0	0
Ktedonobacteria; JG30-KF-AS9	0.03 (0.03)	0.06 (0.06)	0	0	0	0	0
S085	1.51 (0.31)	1.33 (0.42)	0	0	0	0	0
SAR202	0	0.10 (0.10)	0	0	0	0	0
TK10	0	0.05 (0.03)	0	0	0	0	0
TK10; AKYG885; 5B-12	0.09 (0.06)	0.07 (0.07)	0	0	0	0	0
TK10; B07_WMSP1	0.03 (0.03)	0.02 (0.01)	0	0	0	0	0
TK10; B07_WMSP1	0.05 (0.03)	0.06 (0.06)	0	0	0	0	0
TK17	0.41 (0.17)	0.22 (0.00)	0	0	0	0	0
TK17; mle1-48	0.54 (0.19)	0.85 (0.30)	0	0	0	0	0
Thermomicrobia; AKYG1722	0.06 (0.06)	0.03 (0.02)	0	0	0	0	0
Firmicutes							
Bacilli; Bacillales	0.11 (0.06)	0.28 (0.03)	0	0	0	0	0
Bacilli; Bacillales; Alicyclobacillaceae	0.09 (0.09)	0.01 (0.01)	0	0	0	0	0.77 (0.57)
Bacilli; Bacillales; Bacillaceae	1.36 (0.75)	1.07 (0.42)	0	0	0	0	0
Bacilli; Bacillales; Paenibacillaceae	0.20 (0.10)	0.15 (0.06)	2.77 (0.91)	2.05 (1.26)	6.25 (4.84)	10.17 (3.90)	11.73 (3.66)
Bacilli; Bacillales; Planococcaceae	0.26 (0.15)	0.21 (0.10)	0	0	0	0	0
Bacilli; Bacillales; Thermoactinomycetaceae	0.51 (0.25)	0.27 (0.12)	0	0	0	0	0
Bacilli; Haloplasmatales; Haloplasmataceae	0	0	0	0	0	1.90 (1.90)	0
Bacilli; Lactobacillales; Aerococcaceae	0	0	0.23 (0.23)	0	5.00 (3.00)	1.68 (1.18)	2.93 (1.59)
Clostridia	0.02 (0.02)	0	0	0	0	0	0
Clostridia; Clostridiales	0	0	0	0	0	0	0.83 (0.36)
Clostridia; Clostridiales; Clostridiaceae	0.23 (0.14)	0.07 (0.07)	0.77 (0.57)	4.72 (2.64)	5.80 (4.40)	1.69 (1.25)	3.16 (1.64)
Clostridia; Clostridiales; Lachnospiraceae	0	0	4.51 (2.03)	6.13 (3.67)	2.78 (1.87)	17.12 (5.23)	8.62 (3.16)
Clostridia; Clostridiales; Peptostreptococcaceae	0.02 (0.02)	0.16 (0.11)	3.90 (3.02)	10.00 (3.10)	0	0.48 (0.28)	9.37 (5.67)
Clostridia; Clostridiales; Veillonellaceae	0	0	1.20 (0.78)	4.21 (2.78)	0	4.55 (1.67)	3.62 (1.63)
Planctomycetes							
Phycisphaerae; CCM11a	0	0.06 (0.06)	0	0	0	0	0
Phycisphaerae; Cpla-3	0.42 (0.22)	0.41 (0.16)	0	0	0	0	0
Phycisphaerae; Phycisphaerales	0.20 (0.16)	0.10 (0.10)	0	0	0	0	0
Phycisphaerae; Pla1	0.08 (0.08)	0.03 (0.02)	0	0	0	0	0
Phycisphaerae; S-70	0.07 (0.07)	0.02 (0.02)	0	0	0	0	0
Phycisphaerae; WD2101	0.53 (0.16)	0.27 (0.03)	0	0	0	0	0
Planctomycetia; Gemmatales; Isosphaeraceae	0	0.10 (0.10)	0	0	0	0	0
Planctomycetia; Pirellulales; Pirellulaceae	0.29 (0.10)	0.21 (0.09)	0	0	0	0	0
Planctomycetia; Planctomycetales; Planctomycetaceae	0	0.10 (0.10)	0	0	0	0	0
vadinHA49; DH61	0.05 (0.05)	0	0	0	0	0	0
Alphaproteobacteria							
Proteobacteria	0.30 (0.19)	0.32 (0.17)	0.43 (0.43)	0	0.63 (0.31)	0.65 (0.56)	0
Proteobacteria; Alphaproteobacteria	1.92 (0.37)	2.24 (0.21)	0.47 (0.35)	0	0	0	0
BD7-3	0.03 (0.03)	0.04 (0.03)	0	0	0	0	0
Caulobacteriales; Caulobacteraceae	0.90 (0.29)	1.34 (0.46)	1.18 (1.18)	0	0	0.95 (0.48)	0
Ellin329	0.11 (0.03)	0.13 (0.08)	0	0	0	0	0
Kiloniellales	0.02 (0.02)	0.02 (0.02)	0	0	0	0	0

Table S3 (continued)

Taxon	Substrate	Rhizosphere	Root	Stem	Leave	Spathe	Spadix
Rhizobiales	3.19 (0.48)	2.92 (0.55)	0	0	0	0	0
Rhizobiales; Beijerinckiaceae	0.07 (0.07)	0.07 (0.05)	0	0	0	0	0
Rhizobiales; Bradyrhizobiaceae	1.06 (0.22)	0.52 (0.07)	0.49 (0.30)	0	0	0	0
Rhizobiales; Hyphomicrobiaceae	10.38 (2.08)	12.32 (2.39)	1.68 (0.75)	0	0	0	0
Rhizobiales; Methylobacteriaceae	0.21 (0.04)	0.16 (0.06)	0	0	0	0	0
Rhizobiales; Methylocystaceae	0.19 (0.09)	0.07 (0.03)	0	0	0	0	0
Rhizobiales; Phyllobacteriaceae	0.57 (0.17)	0.55 (0.14)	0	0	0	0	0
Rhizobiales; Rhizobiaceae	0.06 (0.03)	0.49 (0.12)	0.88 (0.39)	0	0	2.61 (1.43)	0
Rhizobiales; Rhodobiaceae	0.08 (0.05)	0.04 (0.03)	0	0	0	0	0
Rhizobiales; Xanthobacteraceae	0.07 (0.07)	0.07 (0.07)	0	0	0	0	0
Rhodobacterales; Hyphomonadaceae	0.19 (0.07)	0.24 (0.17)	0	0	0	0	0
Rhodobacterales; Rhodobacteraceae	0.05 (0.03)	0.23 (0.20)	0	0	0	0	0
Rhodospirillales	0.10 (0.07)	0.04 (0.02)	0	0	0	0	0
Rhodospirillales; Acetobacteraceae	0.46 (0.20)	0.57 (0.30)	0	0.48 (0.48)	0	0	0
Rhodospirillales; Rhodospirillaceae	7.31 (1.38)	6.36 (0.85)	0.95 (0.59)	0	0	0	0
Sphingomonadales	0.39 (0.11)	0.16 (0.08)	0	0	0	0	0
Sphingomonadales; Erythrobacteraceae	0.47 (0.11)	0.52 (0.26)	0	0	0	0	0
Sphingomonadales; Sphingomonadaceae	0.49 (0.25)	0.51 (0.11)	0	0	0	0	0
Betaproteobacteria							
Proteobacteria; Betaproteobacteria	1.41 (0.31)	1.24 (0.42)	0	0	0	0	0
Burkholderiales	0.03 (0.03)	0.14 (0.10)	0	0	0	0	0
Burkholderiales; Alcaligenaceae	0.15 (0.07)	0.15 (0.13)	9.15 (6.67)	2.92 (1.26)	0	0.40 (0.20)	1.96 (1.49)
Burkholderiales; Burkholderiaceae	0.66 (0.21)	1.10 (0.32)	0	0	0	0	0
Burkholderiales; Comamonadaceae	0.94 (0.47)	0.81 (0.23)	0.39 (0.17)	3.81 (1.82)	0.63 (0.33)	0	0.42 (0.22)
Burkholderiales; Oxalobacteraceae	0.15 (0.07)	0.15 (0.09)	0.52 (0.21)	2.38 (1.82)	0	0	0
Ellin6067	0.11 (0.04)	0.03 (0.02)	0	0	0	0	0
IS-44	0.07 (0.07)	0.03 (0.03)	0	0	0	0	0
MND1	0.44 (0.17)	0.44 (0.20)	0	0	0	0	0
Nitrosomonadales; Nitrosomonadaceae	0.10 (0.04)	0.07 (0.06)	0	0	0	0	0
Rhodocyclales; Rhodocyclaceae	0.08 (0.08)	0.02 (0.02)	0.65 (0.45)	0	0	0.40 (0.20)	0
SC-I-84	0.47 (0.12)	0.56 (0.25)	0	0	0	0	0
Deltaproteobacteria							
Proteobacteria; Deltaproteobacteria	0.01 (0.01)	0.16 (0.08)	0	0	0	0	0
Bdellovibrionales; Bdellovibrionaceae	0	0.02 (0.02)	0	0	0	0	0
DTB120	0.03 (0.03)	0	0	0	0	0	0
MIZ46	0.09 (0.05)	0.08 (0.04)	0	0	0	0	0
Myxococcales	0.16 (0.04)	0.27 (0.15)	0	0	0	0	0
Myxococcales; Haliangiaceae	0.10 (0.05)	0.04 (0.02)	0	0	0	0	0
Myxococcales; Nannocystaceae	0	0.15 (0.10)	0	0	0	0	0
Myxococcales; OM27	0.17 (0.09)	0.05 (0.03)	0	0	0	0	0
Myxococcales; Polyangiaceae	0.05 (0.05)	0.02 (0.02)	0	0	0	0	0
NB1-j; MND4	0.09 (0.03)	0.08 (0.03)	0	0	0	0	0
NB1-j; NB1-i	0.03 (0.03)	0.02 (0.02)	0	0	0	0	0
Spirobacillales	0	0.02 (0.02)	0	0	0	0	0
Syntrophobacterales; Syntrophobacteraceae	1.12 (0.32)	1.91 (0.32)	0	0	0	0	0
Gammaproteobacteria							
Proteobacteria; Gammaproteobacteria	0.51 (0.18)	0.38 (0.16)	0	0	0	0	0
Aeromonadales; Aeromonadaceae	0.09 (0.09)	0.01 (0.01)	0	0	0	0	0
Alteromonadales	0.35 (0.20)	0.23 (0.10)	0	0	0	0	0
Alteromonadales; 125ds10	0.13 (0.10)	0.11 (0.11)	0	0	0	0	0
Alteromonadales; OM60	0.33 (0.24)	0.30 (0.10)	0	0	0	0	0
Chromatiales	0.01 (0.01)	0.01 (0.01)	0	0	0	0	0
Enterobacteriales; Enterobacteriaceae	0.03 (0.02)	0.01 (0.01)	5.71 (2.91)	0	0	0	0.42 (0.22)
HTCC2188; HTCC2089	0.10 (0.05)	0.35 (0.08)	0	0	0	0	0
Legionellales	0.11 (0.03)	0.22 (0.06)	0	0	0	0	0
Legionellales; Coxiellaceae	0.36 (0.12)	0.28 (0.06)	0	0	0	0	0
Legionellales; Legionellaceae	0.03 (0.03)	0.08 (0.07)	0	0	0	0	0
Oceanospirillales; Halomonadaceae	0.39 (0.09)	0.41 (0.15)	0.68 (0.36)	0	0.63 (0.43)	1.12 (0.70)	0
Pseudomonadales; Moraxellaceae	0.50 (0.37)	0.04 (0.04)	9.05 (4.79)	0.48 (0.48)	7.50 (3.11)	4.45 (3.70)	0
Pseudomonadales; Pseudomonadaceae	0.50 (0.03)	0.40 (0.21)	15.70 (6.42)	44.01 (9.37)	40.33 (10.76)	30.56 (5.35)	31.85 (4.94)
Thiotrichales; Piscirickettsiaceae	0.47 (0.07)	0.39 (0.22)	0	0	0	0	0
Xanthomonadales; Sinobacteraceae	2.21 (0.53)	1.91 (0.34)	0.77 (0.57)	0	0	0	0
Xanthomonadales; Xanthomonadaceae	4.43 (1.95)	3.64 (1.15)	4.76 (2.21)	2.07 (0.97)	2.73 (1.68)	0	0.80 (0.49)
[Marinicellales]; [Marinicellaceae]	0.08 (0.08)	0	0	0	0	0	0

Table S3 (continued)

Taxon	Substrate	Rhizosphere	Root	Stem	Leave	Spathe	Spadix
Other Phyla							
Armatimonadetes; 0319-6E2	0.02 (0.02)	0	0	0	0	0	0
Armatimonadetes; [Fimbriimonadia]; [Fimbriimonadales]	0.01 (0.01)	0.01 (0.01)	0	0	0	0	0
Armatimonadetes; [Fimbriimonadia]; [Fimbriimonadales]	0	0.19 (0.07)	0	0	0	0	0
Armatimonadetes; [Fimbriimonadia]; [Fimbriimonadales]; [Fimbriimonadaceae]	0.85 (0.22)	0.75 (0.35)	0	0	0	2.40 (1.40)	0
BRC1; NPL-UPA2	0.02 (0.02)	0.02 (0.02)	0	0	0	0	0
BRC1; PRR-11	0.03 (0.03)	0	0	0	0	0	0
Chlorobi	0.04 (0.03)	0.07 (0.07)	0	0	0	0	0
Chlorobi; Ignavibacteria; Ignavibacteriales; Ignavibacteriaceae	0.19 (0.09)	0.29 (0.15)	0	0	0	0	0
Chlorobi; OPB56	0.01 (0.01)	0.08 (0.07)	0	0	0	0	0
Chlorobi; SJA-28	0.12 (0.04)	0.17 (0.11)	0	0	0	0	0
Cyanobacteria	0	0	0	0	0	1.90 (1.00)	0
Cyanobacteria; 4C0d-2; MLE1-12	0.04 (0.04)	0.06 (0.06)	0	0	0	0	0
Cyanobacteria; 4C0d-2; SM1D11	0	0.08 (0.06)	0	0	0	0	0
Elusimicrobia; Elusimicrobia; IIb	0	0.03 (0.03)	0	0	0	0	0
GN02; GKS2-174	0	0.02 (0.02)	0	0	0	0	0
GN04; GN15	0.04 (0.04)	0.05 (0.03)	0	0	0	0	0
GOUTA4	0.05 (0.03)	0	0	0	0	0	0
Gemmatimonadetes; Gemm-1	0.83 (0.28)	1.20 (0.35)	0	0	0	0	0
Gemmatimonadetes; Gemm-2	0.01 (0.01)	0.03 (0.02)	0	0	0	0	0
Gemmatimonadetes; Gemm-3	0	0.05 (0.03)	0	0	0	0	0
Gemmatimonadetes; Gemm-5	0.11 (0.07)	0.03 (0.02)	0	0	0	0	0
Gemmatimonadetes; Gemmatimonadetes	0.55 (0.19)	0.25 (0.14)	0	0	0	0	0
Gemmatimonadetes; Gemmatimonadetes; Ellin5290	0.03 (0.02)	0.07 (0.07)	0	0	0	0	0
Gemmatimonadetes; Gemmatimonadetes; N1423WL	0.10 (0.07)	0.13 (0.07)	0	0	0	0	0
Kazan-3B-28	0.03 (0.03)	0	0	0	0	0	0
MVP-21	0.14 (0.06)	0.24 (0.12)	0	0	0	0	0
NKB19	0.03 (0.03)	0.18 (0.13)	0	0	0	0	0
Nitrospirae; Nitrospira; Nitrospirales; 0319-6A21	0.11 (0.08)	0.05 (0.05)	0	0	0	0	0
Nitrospirae; Nitrospira; Nitrospirales; Nitrospiraceae	1.34 (0.44)	0.96 (0.25)	0	0	0	0	0
OD1	0.03 (0.03)	0	0	0	0	0	0
OD1; ABY1	0.27 (0.20)	0.06 (0.06)	0	0	0	0	0
OD1; SM2F11	0.10 (0.05)	0.14 (0.06)	0	0	0	0	0
OD1; ZB2	0.07 (0.05)	0.04 (0.03)	0	0	0	0	0
OP11	0.24 (0.07)	0.15 (0.10)	0	0	0	0	0
OP11; OP11-4	0.03 (0.03)	0.04 (0.03)	0	0	0	0	0
OP11; WCHB1-64	0.02 (0.02)	0	0	0	0	0	0
SBR1093; VHS-B5-50	0.21 (0.09)	0.04 (0.03)	0	0	0	0	0
TM6; SJA-4	0.34 (0.11)	0.24 (0.07)	0	0	0	0	0
TM6; SJA-4; YJF2-48	0.02 (0.02)	0.04 (0.04)	0	0	0	0	0
TM7	0.26 (0.20)	0.34 (0.34)	0	0	0	0	0
TM7; TM7-1	3.34 (0.76)	3.52 (0.62)	0	0	0	0	0
TM7; TM7-3	0.03 (0.03)	0.07 (0.07)	0	0	0	0	0
TM7; TM7-3	0	0	1.04 (0.56)	0	0	0	0
Tenericutes; Mollicutes; Anaeroplasmatales; Anaeroplasmataceae	0	0	4.13 (3.15)	0	0	0	0
Verrucomicrobia; Opiritae; Opiritales; Opiritaceae	0.03 (0.02)	0.12 (0.06)	0	0	0	0	0
Verrucomicrobia; Verrucomicrobiae; Verrucomicrobiales; Verrucomicrobiaceae	0.09 (0.09)	0.12 (0.05)	0	0	0	0	0
Verrucomicrobia; [Pedosphaerae]; [Pedosphaerales]	0.03 (0.02)	0.08 (0.06)	0	0	0	0	0
Verrucomicrobia; [Pedosphaerae]; [Pedosphaerales]; auto67_4W	0.17 (0.12)	0.04 (0.03)	0	0	0	0	0
Verrucomicrobia; [Spartobacteria]; [Chthoniobacteriales]; [Chthoniobacteraceae]	0.03 (0.03)	0.06 (0.06)	0	0	0	0	0
WPS-2	0.17 (0.08)	0.11 (0.06)	0	0	0	0	0
WS2; SHA-109	0.04 (0.03)	0.05 (0.03)	0	0	0	0	0
WS3; PRR-12; GN03; KSB4	0.03 (0.03)	0.01 (0.01)	0	0	0	0	0
WS3; PRR-12; LD1-PA13	0.06 (0.04)	0.22 (0.10)	0	0	0	0	0
WS3; PRR-12; Sediment-1	0.11 (0.08)	0.40 (0.17)	0	0	0	0	0
WS3; PRR-12; Sediment-1; CV106	0	0.02 (0.02)	0	0	0	0	0

^a Numbers in parenthesis are the standard errors ($n = 5$)

Table S4 Relative abundance of bacterial genera found in the substrate, and associated with the rhizosphere, roots, stem, leaves, spathe and spadix tissues of healthy *Anthurium andraeanum* L. plants.

Taxon	Substrate	Rhizosphere	Root	Stem	Leaves	Spathe	Spadix	Relative abundance (%)	
Acidobacteria									
Solibacteres; Solibacterales; Solibacteraceae; Candidatus <i>Solibacter</i>	0.02 (0.02) ^a	0	0	0	0	0	0	0	0
Actinobacteria									
Actinomycetales; Cellulomonadaceae; <i>Demequina</i>	0	0.02 (0.02)	0	0	0	0	0	0	0
Actinomycetales; Microbacteriaceae; <i>Agromyces</i>	0.11 (0.08)	0.04 (0.02)	0	0	0	0	0	0	0
Actinomycetales; Microbacteriaceae; <i>Cryocolla</i>	0.08 (0.04)	0.01 (0.01)	0	0	0	0	0	0	0
Actinomycetales; Microbacteriaceae; <i>Microbacterium</i>	0.06 (0.03)	0.09 (0.07)	1.82 (1.51)	0	0	0	0	0	0
Actinomycetales; Mycobacteriaceae; <i>Mycobacterium</i>	0.43 (0.14)	0.30 (0.12)	0	0	0	0	0	0	0
Actinomycetales; Nocardioideae; <i>Nocardioides</i>	0.33 (0.22)	0.25 (0.11)	0	0	0	0	0	0	0
Actinomycetales; Nocardiosporaceae; <i>Thermobifida</i>	0	0.02 (0.02)	0	0	0	0	0	0	0
Actinomycetales; Promicromonosporaceae; <i>Xylanimicrobium</i>	0.03 (0.03)	0.01 (0.01)	0	0	0	0	0	0	0
Actinomycetales; Propionibacteriaceae; <i>Propionibacterium</i>	0	0.14 (0.14)	0.65 (0.45)	1.05 (0.65)	0	0	0.48 (0.28)	0	0
Actinomycetales; Pseudonocardiaceae; <i>Saccharomonospora</i>	0.01 (0.01)	0.02 (0.02)	0	0	0	0	0	0	0
Actinomycetales; Streptomycetaceae; <i>Streptomyces</i>	0	0.28 (0.19)	3.22 (2.20)	0	0	0	0	0	0
Actinomycetales; Williamsiaceae; <i>Williamsia</i>	0.02 (0.02)	0.02 (0.02)	0	0	0	0	0	0	0
Thermoleophilia; Solirubrobacterales; Conexibacteraceae; <i>Conexibacter</i>	0.13 (0.06)	0.12 (0.07)	0	0	0	0	0	0	0
Bacteroidetes									
Cytophagia; Cytophagales; Cytophagaceae; <i>Adhaeribacter</i>	0.08 (0.07)	0.18 (0.14)	0	0	0	0	0	0	0
Flavobacteriia; Flavobacteriales; Flavobacteriaceae; <i>Flavobacterium</i>	0.39 (0.15)	0.36 (0.18)	4.36 (2.84)	0	0	0	0	0	0
Sphingobacteriia; Sphingobacteriales; Sphingobacteriaceae; <i>Solitalea</i>	0.05 (0.05)	0	0	0	0	0	0	0	0
[Saprosirae]; [Saprosirales]; Chitinophagaceae; <i>Flaviumibacter</i>	0.03 (0.03)	0.02 (0.02)	0	0	0	0	0	0	0
[Saprosirae]; [Saprosirales]; Chitinophagaceae; <i>Flavisolibacter</i>	0	0.02 (0.02)	0	0	0	0	0	0	0
Chloroflexi									
Anaerolineae; Caldilineales; Caldilineaceae; <i>Caldilinea</i>	0	0.02 (0.02)	0	0	0	0	0	0	0
Firmicutes									
Bacilli; Bacillales; Alicyclobacillaceae; <i>Alicyclobacillus</i>	0.09 (0.09)	0.01 (0.01)	0	0	0	0	0	0.77 (0.57)	0
Bacilli; Bacillales; Bacillaceae; <i>Bacillus</i>	1.11 (0.61)	0.78 (0.29)	0	0	0	0	0	0	0
Bacilli; Bacillales; Bacillaceae; <i>Ornithinibacillus</i>	0.02 (0.02)	0	0	0	0	0	0	0	0
Bacilli; Bacillales; Paenibacillaceae; <i>Brevibacillus</i>	0.07 (0.07)	0.06 (0.04)	2.77 (0.91)	2.05 (1.26)	6.25 (4.84)	10.17 (3.90)	11.73 (3.66)	0	0
Bacilli; Bacillales; Paenibacillaceae; <i>Paenibacillus</i>	0.06 (0.05)	0.03 (0.03)	0	0	0	0	0	0	0
Bacilli; Bacillales; Paenibacillaceae; <i>Thermobacillus</i>	0	0.05 (0.05)	0	0	0	0	0	0	0
Bacilli; Bacillales; Planococcaceae; <i>Lysinibacillus</i>	0.03 (0.02)	0.02 (0.02)	0	0	0	0	0	0	0
Bacilli; Bacillales; Planococcaceae; <i>Solibacillus</i>	0.10 (0.06)	0.12 (0.06)	0	0	0	0	0	0	0
Bacilli; Bacillales; Planococcaceae; <i>Ureibacillus</i>	0.11 (0.09)	0	0	0	0	0	0	0	0
Bacilli; Bacillales; Thermoactinomycetaceae; <i>Laceyella</i>	0.09 (0.06)	0	0	0	0	0	0	0	0
Bacilli; Bacillales; Thermoactinomycetaceae; <i>Planifilum</i>	0	0.02 (0.02)	0	0	0	0	0	0	0
Bacilli; Bacillales; Thermoactinomycetaceae; <i>Thermoactinomyces</i>	0.41 (0.20)	0.25 (0.13)	0	0	0	0	0	0	0
Bacilli; Bacillales; Thermoactinomycetaceae; <i>Thermoactinomyces</i>	0.02 (0.02)	0	0	0	0	0	0	0	0
Bacilli; Lactobacillales; Aerococcaceae; <i>Alkalibacterium</i>	0	0	0.23 (0.23)	0	5.00 (3.00)	1.68 (1.18)	2.93 (1.59)	0	0
Clostridia; Clostridiales; Clostridiaceae; <i>Alkaliphilus</i>	0	0	0	0.69 (0.69)	0.63 (0.63)	0.65 (0.65)	0.42 (0.42)	0	0
Clostridia; Clostridiales; Clostridiaceae; <i>Clostridium</i>	0.04 (0.03)	0.01 (0.01)	0.77 (0.57)	2.86 (1.66)	4.26 (3.53)	1.05 (0.67)	2.75 (1.34)	0	0
Clostridia; Clostridiales; Clostridiaceae; <i>Oxobacter</i>	0	0.04 (0.04)	0	0	0	0	0	0	0
Clostridia; Clostridiales; Peptostreptococcaceae; <i>Clostridium</i>	0	0.03 (0.03)	3.90 (3.02)	6.00 (2.08)	0	0.48 (0.28)	1.37 (0.86)	0	0
Clostridia; Clostridiales; Peptostreptococcaceae; [<i>Clostridium</i>]	0.02 (0.02)	0.08 (0.05)	0	4.00 (1.02)	0	0	8.00 (8.00)	0	0
Clostridia; Clostridiales; Veillonellaceae; <i>Pelosinus</i>	0	0	1.20 (0.78)	4.21 (2.78)	0	4.55 (1.67)	3.62 (1.63)	0	0
Planctomycetes									
Planctomycetia; Planctomycetales; Planctomycetaceae; <i>Planctomyces</i>	0	0.10 (0.10)	0	0	0	0	0	0	0
Alphaproteobacteria									
Caulobacterales; Caulobacteraceae; <i>Asticcacaulis</i>	0	0.02 (0.02)	0	0	0	0	0	0	0
Caulobacterales; Caulobacteraceae; <i>Phenylobacterium</i>	0.41 (0.21)	0.59 (0.34)	0	0	0	0	0	0	0
Rhizobiales; Bradyrhizobiaceae; <i>Balneimonas</i>	0.09 (0.06)	0.18 (0.07)	0	0	0	0	0	0	0
Rhizobiales; Bradyrhizobiaceae; <i>Bradyrhizobium</i>	0.34 (0.10)	0.13 (0.03)	0.49 (0.30)	0	0	0	0	0	0
Rhizobiales; Hyphomicrobiaceae; <i>Devosia</i>	0.94 (0.32)	1.64 (0.48)	0.91 (0.57)	0	0	0	0	0	0

Table S4 (continued)

Taxon	Substrate	Rhizosphere	Root	Stem	Leaves	Spathe	Spadix
Rhizobiales; Hyphomicrobiaceae; <i>Hyphomicrobium</i>	0.44 (0.12)	1.13 (0.61)	0	0	0	0	0
Rhizobiales; Hyphomicrobiaceae; <i>Pedomicrobium</i>	0.58 (0.22)	0.41 (0.15)	0	0	0	0	0
Rhizobiales; Hyphomicrobiaceae; <i>Rhodoplanes</i>	8.05 (1.79)	8.43 (1.44)	0	0	0	0	0
Rhizobiales; Methylobacteriaceae; <i>Methylobacterium</i>	0.21 (0.04)	0.16 (0.06)	0	0	0	0	0
Rhizobiales; Methylocystaceae; <i>Pleomorphomonas</i>	0	0.02 (0.02)	0	0	0	0	0
Rhizobiales; Phyllobacteriaceae; <i>Mesorhizobium</i>	0.41 (0.12)	0.34 (0.06)	0	0	0	0	0
Rhizobiales; Rhizobiaceae; <i>Agrobacterium</i>	0.03 (0.02)	0.05 (0.04)	0	0	0	0	0
Rhizobiales; Rhizobiaceae; <i>Rhizobium</i>	0.01 (0.01)	0	0	0	0	2.61 (1.43)	0
Rhizobiales; Rhizobiaceae; <i>Sinorhizobium</i>	0.02 (0.02)	0.43 (0.09)	0.88 (0.39)	0	0	0	0
Rhizobiales; Rhodobiaceae; <i>Ajifella</i>	0.08 (0.05)	0.04 (0.03)	0	0	0	0	0
Rhizobiales; Xanthobacteraceae; <i>Labrys</i>	0.07 (0.07)	0.07 (0.07)	0	0	0	0	0
Rhodobacterales; Rhodobacteraceae; <i>Amaricoccus</i>	0.05 (0.03)	0.13 (0.10)	0	0	0	0	0
Sphingomonadales; Erythrobacteraceae; <i>Altererythrobacter</i>	0.02 (0.02)	0	0	0	0	0	0
Sphingomonadales; Sphingomonadaceae; <i>Novosphingobium</i>	0	0.04 (0.04)	0	0	0	0	0
Sphingomonadales; Sphingomonadaceae; <i>Sphingobium</i>	0.10 (0.05)	0.18 (0.07)	0	0	0	0	0
Sphingomonadales; Sphingomonadaceae; <i>Sphingopyxis</i>	0.03 (0.02)	0.04 (0.03)	0	0	0	0	0
Betaproteobacteria							
Burkholderiales; Alcaligenaceae; <i>Achromobacter</i>	0	0.02 (0.02)	6.06 (4.29)	2.92 (1.26)	0	0.40 (0.20)	1.96 (1.49)
Burkholderiales; Burkholderiaceae; <i>Burkholderia</i>	0.04 (0.03)	0.04 (0.02)	0	0	0	0	0
Burkholderiales; Comamonadaceae; <i>Acidovorax</i>	0.01 (0.01)	0.02 (0.02)	0.39 (0.17)	0	0	0	0.42 (0.22)
Burkholderiales; Comamonadaceae; <i>Curvibacter</i>	0.07 (0.07)	0	0	0	0	0	0
Burkholderiales; Comamonadaceae; <i>Methylibium</i>	0.04 (0.03)	0.04 (0.02)	0	0	0	0	0
Burkholderiales; Comamonadaceae; <i>Ramlibacter</i>	0.07 (0.07)	0.03 (0.02)	0	0	0.63 (0.33)	0	0
Burkholderiales; Comamonadaceae; <i>Rubrivivax</i>	0.42 (0.21)	0.33 (0.11)	0	0	0	0	0
Burkholderiales; Comamonadaceae; <i>Variovorax</i>	0.08 (0.08)	0.06 (0.03)	0	3.81 (1.82)	0	0	0
Burkholderiales; Oxalobacteraceae; <i>Cupriavidus</i>	0.12 (0.08)	0.04 (0.04)	0	0	0	0	0
Burkholderiales; Oxalobacteraceae; <i>Ralstonia</i>	0.03 (0.02)	0.04 (0.03)	0	0	0	0	0
Rhodocyclales; Rhodocyclaceae; <i>Azoarcus</i>	0.08 (0.08)	0.02 (0.02)	0	0	0	0.40 (0.20)	0
Deltaproteobacteria							
Bdellovibrionales; Bdellovibrionaceae; <i>Bdellovibrio</i>	0	0.02 (0.02)	0	0	0	0	0
Myxococcales; Nannocystaceae; <i>Plesiocystis</i>	0	0.15 (0.10)	0	0	0	0	0
Gammaproteobacteria							
Legionellales; Coxiellaceae; <i>Aquicella</i>	0.19 (0.08)	0.16 (0.08)	0	0	0	0	0
Legionellales; Legionellaceae; <i>Legionella</i>	0.03 (0.03)	0.08 (0.07)	0	0	0	0	0
Oceanospirillales; Halomonadaceae; <i>Halomonas</i>	0.39 (0.09)	0.41 (0.15)	0.68 (0.36)	0	0.63 (0.43)	1.12 (0.70)	0
Pseudomonadales; Moraxellaceae; <i>Acinetobacter</i>	0.50 (0.37)	0.04 (0.04)	9.05 (4.79)	0.48 (0.48)	7.50 (3.11)	4.45 (3.70)	0
Pseudomonadales; Pseudomonadaceae; <i>Pseudomonas</i>	0.49 (0.03)	0.36 (0.18)	15.25 (6.37)	42.83 (9.16)	38.10 (9.61)	26.00 (4.82)	30.19 (3.26)
Xanthomonadales; Sinobacteraceae; <i>Alkanibacter</i>	0.22 (0.11)	0.12 (0.07)	0	0	0	0	0
Xanthomonadales; Sinobacteraceae; <i>Steroidobacter</i>	0.14 (0.06)	0.13 (0.06)	0	0	0	0	0
Xanthomonadales; Xanthomonadaceae; <i>Dokdonella</i>	0.03 (0.02)	0.02 (0.02)	0	0	0	0	0
Xanthomonadales; Xanthomonadaceae; <i>Lysobacter</i>	0.26 (0.09)	0.16 (0.07)	0	0	0	0	0
Xanthomonadales; Xanthomonadaceae; <i>Rhodanobacter</i>	0.73 (0.49)	0.21 (0.11)	0	0	0	0	0
Xanthomonadales; Xanthomonadaceae; <i>Stenotrophomonas</i>	0	0.02 (0.02)	0	1.38 (0.83)	1.48 (1.48)	0	0.80 (0.49)
Xanthomonadales; Xanthomonadaceae; <i>Thermomonas</i>	0.15 (0.06)	0.38 (0.22)	0	0	0	0	0
Xanthomonadales; Xanthomonadaceae; <i>Xanthomonas</i>	0	0	0.61 (0.40)	0	1.25 (0.75)	0	0
Verrucomicrobia							
Opitutae; Opitutales; Opitutaceae; <i>Opitutus</i>	0.03 (0.02)	0.12 (0.06)	0	0	0	0	0
Verrucomicrobiae; Verrucomicrobiales; Verrucomicrobiaceae; <i>Luteolibacter</i>	0.05 (0.05)	0.03 (0.02)	0	0	0	0	0
Other phyla							
Armatimonadetes; [Fimbriimonadia]; [Fimbriimonadales]; [Fimbriimonadaceae]; <i>Fimbriimonas</i>	0.85 (0.22)	0.75 (0.35)	0	0	0	2.40 (1.40)	0
Gemmatimonadetes; Gemmatimonadetes; Ellin5290	0.03 (0.02)	0.07 (0.07)	0	0	0	0	0
Gemmatimonadetes; Gemmatimonadetes; N1423WL	0.10 (0.07)	0.13 (0.07)	0	0	0	0	0
Nitrospirae; Nitrospira; Nitrospirales; 0319-6A21	0.11 (0.08)	0.05 (0.05)	0	0	0	0	0
Nitrospirae; Nitrospira; Nitrospirales; Nitrospiraceae; <i>Nitrospira</i>	1.21 (0.49)	0.94 (0.27)	0	0	0	0	0
Mollicutes; Anaeroplasmatales; Anaeroplasmataceae; <i>Asteroleplasma</i>	0	0	4.13 (3.15)	0	0	0	0

^a Numbers in parenthesis are the standard errors ($n = 5$)