

Hidden Tenants: Microbiota of the Rhizosphere and Phyllosphere of *Cordia dodecandra* Trees in Mayan Forests and Homegardens

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Supplementary material Table S1. Taxonomic classification assigned to 618 bacteria OTUs from phyllosphere (phy) and rhizosphere (rhi) *Cordia dodecandra* microbiota in Yucatán's forest (for) and homegarden (hom) populations of the Northeast (NE) and Southwest (SW) region. The last 8 columns present the percent (relative frequency) per sample coded by region, population, and compartment.

Class	Order	Family	Genus	Species	SW hom phy	NE hom phy	SW for phy	NE for phy	SW hom rhi	NE hom rhi	SW for rhi	NE for rhi
Acidobacteriota												
Acidobacteriae	Acidobacteriae	Acidobacteriae	<i>Paludibaculum</i>	metagenome								0.031
Acidobacteriae	Acidobacteriales	Acidobacteriaceae (Subgroup_1)	<i>Edaphobacter</i>	unidentified					0.035			
Acidobacteriae	Acidobacteriales	Koribacteraceae	<i>Candidatus_Koribacter</i>	unidentified								0.157
Acidobacteriae	Acidobacteriales	uncultured	uncultured	unidentified					0.165			
Acidobacteriae	Bryobacterales	Bryobacteraceae	<i>Bryobacter</i>	uncultured <i>Acidobacteriaceae</i>					0.045			
Acidobacteriae	Bryobacterales	Bryobacteraceae	<i>Bryobacter</i>	unidentified					0.229	0.148	0.276	0.159
Acidobacteriae	PAUC26f	PAUC26f	PAUC26f	uncultured_ <i>Solibacteraceae</i>							0.023	
Acidobacteriae	Solibacterales	Solibacteraceae	<i>Candidatus_Solibacter</i>	uncultured_ <i>Acidobacteriales</i>							0.032	
Acidobacteriae	Solibacterales	Solibacteraceae	<i>Candidatus_Solibacter</i>	unidentified								0.128
Acidobacteriae	Subgroup_2	Subgroup_2	Subgroup_2	unidentified					0.045			
Acidobacteriae	unidentified	unidentified	unidentified	unidentified					0.055		0.051	

Subgroup_18	Subgroup_18	Subgroup_18	Subgroup_18	uncultured_bacterium					0.115		0.336	0.66
Subgroup_22	Subgroup_22	Subgroup_22	Subgroup_22	uncultured_proteobacterium								0.042
Subgroup_22	Subgroup_22	Subgroup_22	Subgroup_22	unidentified							0.074	0.064
Subgroup_25	Subgroup_25	Subgroup_25	Subgroup_25	uncultured_bacterium					0.035		0.041	0.384
Subgroup_25	Subgroup_25	Subgroup_25	Subgroup_25	uncultured_soil					0.105		0.065	2.622
Subgroup_25	Subgroup_25	Subgroup_25	Subgroup_25	unidentified								0.097
Subgroup_5	Subgroup_5	Subgroup_5	Subgroup_5	uncultured_Acidobacteria							0.083	
Subgroup_5	Subgroup_5	Subgroup_5	Subgroup_5	uncultured_bacterium					0.229	0.148	0.765	0.057
Subgroup_5	Subgroup_5	Subgroup_5	Subgroup_5	unidentified							0.088	
Thermoanaerobaculia	Thermoanaerobaculales	Thermoanaerobaculaceae	Subgroup_10	Acidobacteria_bacterium					0.115			
Thermoanaerobaculia	Thermoanaerobaculales	Thermoanaerobaculaceae	Subgroup_10	uncultured_Alphaproteobacteria					0.15			
Thermoanaerobaculia	Thermoanaerobaculales	Thermoanaerobaculaceae	Subgroup_10	uncultured_Bacteroidetes								0.035
Thermoanaerobaculia	Thermoanaerobaculales	Thermoanaerobaculaceae	Subgroup_10	uncultured_Holophaga								0.075
Thermoanaerobaculia	Thermoanaerobaculales	Thermoanaerobaculaceae	Subgroup_10	unidentified							0.083	0.34
unidentified	unidentified	unidentified	unidentified	unidentified								1.772
Vicinamibacteria	Subgroup_17	Subgroup_17	Subgroup_17	uncultured_bacterium								0.06
Vicinamibacteria	Subgroup_17	Subgroup_17	Subgroup_17	unidentified							0.166	0.287
Vicinamibacteria	Vicinamibacteriales	uncultured	uncultured	uncultured_Acidobacteriales								0.7
Vicinamibacteria	Vicinamibacteriales	uncultured	uncultured	unidentified					0.254		0.926	3.416
Vicinamibacteria	Vicinamibacteriales	unidentified	unidentified	unidentified					0.668		1.078	3.467

Acidimicrobiia	Microtrichales	Microtrichaceae	uncultured	uncultured_ <i>Actinomycetales</i>								0.046
Acidimicrobiia	Microtrichales	uncultured	uncultured	uncultured_ <i>Acidimicrobiia</i>								0.068
Acidimicrobiia	Microtrichales	uncultured	uncultured	uncultured_bacterium					0.518	0.698	0.327	0.382
Acidimicrobiia	Microtrichales	uncultured	uncultured	unidentified							1.313	0.216
Acidimicrobiia	Microtrichales	unidentified	unidentified	unidentified								0.071
Acidimicrobiia	uncultured	uncultured	uncultured	unidentified								0.132
Acidimicrobiia	unidentified	unidentified	unidentified	unidentified					0.115	0.193	0.276	0.492
Actinobacteria	0319-7L14	0319-7L14	0319-7L14	uncultured_actinobacterium							0.018	0.06
Actinobacteria	0319-7L14	0319-7L14	0319-7L14	uncultured_bacterium								0.022
Actinobacteria	0319-7L14	0319-7L14	0319-7L14	unidentified								0.015
Actinobacteria	Actinomycetales	Actinomycetaceae	<i>Actinomyces</i>	<i>Actinomyces dentalis</i>								0.031
Actinobacteria	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium</i>	<i>Corynebacterium durum</i>								0.095
Actinobacteria	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium</i>	<i>Corynebacterium kroppenstedtii</i>								0.102
Actinobacteria	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium</i>	<i>Corynebacterium tuberculostearicum</i>								0.183
Actinobacteria	Corynebacteriales	Corynebacteriaceae	<i>Corynebacterium</i>	unidentified								0.095
Actinobacteria	Corynebacteriales	Mycobacteriaceae	<i>Mycobacterium</i>	unidentified	1.342	1.852	0.615		1.301	3.206	1.143	0.393
Actinobacteria	Corynebacteriales	Nocardiaceae	<i>Rhodococcus</i>	unidentified							0.06	
Actinobacteria	Euzebyales	Euzebyaceae	uncultured	uncultured_bacterium								0.068
Actinobacteria	Frankiales	Geodermatophilaceae	<i>Blastococcus</i>	unidentified							0.286	0.06
Actinobacteria	Frankiales	Geodermatophilaceae	<i>Geodermatophilaceae</i>	<i>Blastococcus</i> sp.					0.254			

Actinobacteria	Frankiales	Geodermatophilac eae	<i>Geodermatophilus</i>	unidentified								0.079
Actinobacteria	Frankiales	Geodermatophilac eae	<i>Klenkia</i>	<i>Klenkia brasiliensis</i>		0.182	0.36					
Actinobacteria	Frankiales	Geodermatophilac eae	<i>Klenkia</i>	unidentified		0.364						
Actinobacteria	Frankiales	Geodermatophilac eae	unidentified	unidentified					0.279			
Actinobacteria	Frankiales	Sporichthyaceae	uncultured	uncultured_bacteriu m								0.024
Actinobacteria	Kineosporiales	Kineosporiaceae	<i>Pseudokineococcus</i>	<i>Ornithinimicrobium</i> sp.			0.276					
Actinobacteria	Kineosporiales	Kineosporiaceae	<i>Pseudokineococcus</i>	<i>Pseudokineococcus</i> <i>lusitanus</i>		0.281						
Actinobacteria	Kineosporiales	Kineosporiaceae	<i>Quadrisphaera</i>	<i>Kineosporiaceae</i> <i>bacterium</i>			0.085					
Actinobacteria	Kineosporiales	Kineosporiaceae	<i>Quadrisphaera</i>	<i>Quadrisphaera</i> <i>granulorum</i>		0.562	0.657	0.688				
Actinobacteria	Kineosporiales	Kineosporiaceae	<i>Quadrisphaera</i>	uncultured_ <i>Kineoco</i> <i>ccus</i>		0.165						
Actinobacteria	Kineosporiales	Kineosporiaceae	uncultured	uncultured_bacteriu m							0.065	
Actinobacteria	Kineosporiales	Kineosporiaceae	unidentified	unidentified								0.088
Actinobacteria	Micrococcales	Brevibacteriaceae	<i>Brevibacterium</i>	<i>Brevibacterium</i> <i>paucivorans</i>								0.042
Actinobacteria	Micrococcales	Intrasporangiaceae	<i>Lapillicoccus</i>	unidentified					0.06			
Actinobacteria	Micrococcales	Microbacteriaceae	<i>Agrococcus</i>	<i>Agrococcus terreus</i>							0.051	
Actinobacteria	Micrococcales	Microbacteriaceae	<i>Agromyces</i>	unidentified						0.134	0.203	
Actinobacteria	Micrococcales	Microbacteriaceae	<i>Curtobacterium</i>	unidentified		0.132						
Actinobacteria	Micrococcales	Microbacteriaceae	<i>Microbacterium</i>	unidentified		0.876						0.232
Actinobacteria	Micrococcales	Micrococcaceae	<i>Pseudarthrobacter</i>	unidentified					0.209			
Actinobacteria	Micrococcales	Micrococcaceae	<i>Sinomonas</i>	uncultured_bacteriu m							0.051	
Actinobacteria	Micrococcales	Micrococcaceae	unidentified	unidentified					1.226		0.189	

Actinobacteria	Micromonosporales	Micromonosporaceae	<i>Actinoplanes</i>	unidentified		0.347						0.077
Actinobacteria	Micromonosporales	Micromonosporaceae	<i>Catenuloplanes</i>	unidentified								0.068
Actinobacteria	Micromonosporales	Micromonosporaceae	<i>Dactylosporangium</i>	unidentified					0.145			
Actinobacteria	Micromonosporales	Micromonosporaceae	<i>Micromonospora</i>	unidentified					0.1			0.102
Actinobacteria	Micromonosporales	Micromonosporaceae	<i>Rhizocola</i>	unidentified								0.066
Actinobacteria	Micromonosporales	Micromonosporaceae	unidentified	unidentified		0.513			0.553	0.49	0.604	0.572
Actinobacteria	Micromonosporales	Micromonosporaceae	<i>Virgisporangium</i>	unidentified								0.214
Actinobacteria	Propionibacteriales	Nocardioidaceae	<i>Actinopolymorpha</i>	uncultured_bacterium						0.163		
Actinobacteria	Propionibacteriales	Nocardioidaceae	<i>Kribbella</i>	unidentified					0.125	0.742	0.152	0.077
Actinobacteria	Propionibacteriales	Nocardioidaceae	<i>Marmoricola</i>	unidentified		0.099						0.04
Actinobacteria	Propionibacteriales	Nocardioidaceae	<i>Nocardioides</i>	<i>Nocardioides kandeliae</i>					0.11		0.092	
Actinobacteria	Propionibacteriales	Nocardioidaceae	<i>Nocardioides</i>	<i>Nocardioides marinquinlinus</i>		0.265						
Actinobacteria	Propionibacteriales	Nocardioidaceae	<i>Nocardioides</i>	unidentified		1.918	1.06		0.12		0.152	0.587
Actinobacteria	Propionibacteriales	Nocardioidaceae	unidentified	unidentified						0.327	0.442	0.031
Actinobacteria	Propionibacteriales	Propionibacteriaceae	<i>Cutibacterium</i>	unidentified								0.911
Actinobacteria	Propionibacteriales	Propionibacteriaceae	<i>Friedmanniella</i>	unidentified				0.129				
Actinobacteria	Propionibacteriales	Propionibacteriaceae	<i>Microlunatus</i>	uncultured_actinobacterium					1.506		4.041	0.675
Actinobacteria	Propionibacteriales	Propionibacteriaceae	<i>Microlunatus</i>	unidentified					1.341	0.193	1.77	0.313

Actinobacteria	Pseudonocardiales	Pseudonocardiales	<i>Actinomycetospora</i>	uncultured_bacterium	6.711	3.043	4.388					
Actinobacteria	Pseudonocardiales	Pseudonocardiales	<i>Actinomycetospora</i>	unidentified	13.231	4.829	12.317	7.134				
Actinobacteria	Pseudonocardiales	Pseudonocardiales	<i>Actinophytocola</i>	unidentified						0.371	0.175	
Actinobacteria	Pseudonocardiales	Pseudonocardiales	<i>Amycolatopsis</i>	unidentified								0.046
Actinobacteria	Pseudonocardiales	Pseudonocardiales	<i>Crossiella</i>	unidentified					0.194	0.653		0.154
Actinobacteria	Pseudonocardiales	Pseudonocardiales	<i>Kibdelosporangium</i>	<i>Kibdelosporangium</i> sp.					0.145			
Actinobacteria	Pseudonocardiales	Pseudonocardiales	<i>Kibdelosporangium</i>	unidentified							0.194	
Actinobacteria	Pseudonocardiales	Pseudonocardiales	<i>Lechevalieria</i>	unidentified								0.068
Actinobacteria	Pseudonocardiales	Pseudonocardiales	<i>Pseudonocardia</i>	unidentified		2.001	2.65	1.418	0.005		0.544	0.166
Actinobacteria	Pseudonocardiales	Pseudonocardiales	<i>Saccharopolyspora</i>	<i>Saccharopolyspora cebuensis</i>								0.06
Actinobacteria	Pseudonocardiales	Pseudonocardiales	unidentified	unidentified					0.244			0.06
Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces</i>	<i>Streptomyces fractus</i>						0.401		
Actinobacteria	Streptomycetales	Streptomycetaceae	<i>Streptomyces</i>	unidentified					0.528	4.141	0.378	0.563
Actinobacteria	Streptosporangiales	Streptosporangiaceae	<i>Nonomuraea</i>	unidentified					0.11			
Actinobacteria	Streptosporangiales	Streptosporangiaceae	unidentified	unidentified							0.074	
Actinobacteria	Streptosporangiales	Thermomonosporaceae	<i>Actinoallomurus</i>	unidentified								0.024
Actinobacteria	Streptosporangiales	unidentified	unidentified	unidentified								0.046
Actinobacteria	unidentified	unidentified	unidentified	unidentified					0.259	0.163	1.295	0.474
MB-A2-108	MB-A2-108	MB-A2-108	MB-A2-108	uncultured_bacterium						0.015	0.419	0.15

MB-A2-108	MB-A2-108	MB-A2-108	MB-A2-108	unidentified					0.723	0.237	1.369	0.331
Rubrobacteria	Rubrobacterales	Rubrobacteriaceae	<i>Rubrobacter</i>	metagenome					0.957	0.312	2.493	0.64
Rubrobacteria	Rubrobacterales	Rubrobacteriaceae	<i>Rubrobacter</i>	uncultured_actinobacterium								0.044
Rubrobacteria	Rubrobacterales	Rubrobacteriaceae	<i>Rubrobacter</i>	uncultured_Actinomycetales					0.917		0.641	0.327
Rubrobacteria	Rubrobacterales	Rubrobacteriaceae	<i>Rubrobacter</i>	uncultured_Rubrobacter					0.289			
Rubrobacteria	Rubrobacterales	Rubrobacteriaceae	<i>Rubrobacter</i>	unidentified					1.391		1.29	0.291
Thermoleophilina	Gaiellales	Gaiellaceae	<i>Gaiella</i>	uncultured_Acidimicrobiia					0.16		0.078	0.04
Thermoleophilina	Gaiellales	Gaiellaceae	<i>Gaiella</i>	uncultured_bacterium					0.508		0.3	0.777
Thermoleophilina	Gaiellales	Gaiellaceae	<i>Gaiella</i>	uncultured_organism							0.032	0.121
Thermoleophilina	Gaiellales	Gaiellaceae	<i>Gaiella</i>	uncultured_Rubrobacteria					0.209			0.084
Thermoleophilina	Gaiellales	Gaiellaceae	<i>Gaiella</i>	unidentified							0.493	1.479
Thermoleophilina	Gaiellales	uncultured	uncultured	uncultured_actinobacterium					0.08		0.336	1.675
Thermoleophilina	Gaiellales	uncultured	uncultured	uncultured_bacterium							0.336	0.342
Thermoleophilina	Gaiellales	uncultured	uncultured	uncultured_organism							0.041	
Thermoleophilina	Gaiellales	uncultured	uncultured	uncultured_Rubrobacterales					0.264	0.178		0.031
Thermoleophilina	Gaiellales	uncultured	uncultured	unidentified					1.535		2.355	6.298
Thermoleophilina	Gaiellales	unidentified	unidentified	unidentified					0.339		0.438	2.377
Thermoleophilina	Solirubrobacterales	67-14	67-14	uncultured_bacterium					0.065			1.461
Thermoleophilina	Solirubrobacterales	67-14	67-14	uncultured_Conexibacteraceae								0.026

Thermoleophila	Solirubrobacterales	67-14	67-14	uncultured_Rubrobacteraceae					0.12	0.505		
Thermoleophila	Solirubrobacterales	67-14	67-14	uncultured_Rubrobacteria							0.069	
Thermoleophila	Solirubrobacterales	67-14	67-14	unidentified					2.014	0.119	1.76	2.357
Thermoleophila	Solirubrobacterales	Solirubrobacteraceae	Conexibacter	unidentified								0.064
Thermoleophila	Solirubrobacterales	Solirubrobacteraceae	Solirubrobacter	uncultured_bacterium					0.409	0.401	0.272	0.265
Thermoleophila	Solirubrobacterales	Solirubrobacteraceae	Solirubrobacter	unidentified					0.309		0.332	0.093
Thermoleophila	Solirubrobacterales	Solirubrobacteraceae	unidentified	unidentified		0.628	0.466	1.031			0.249	
Thermoleophila	Solirubrobacterales	unidentified	unidentified	unidentified					0.773	1.187	0.581	0.225
Thermoleophila	uncultured	uncultured	uncultured	uncultured_bacterium								0.075
Thermoleophila	unidentified	unidentified	unidentified	unidentified					0.005		0.065	0.09
unidentified	unidentified	unidentified	unidentified	unidentified					0.633		0.124	0.088
Armatimonadota												
Armatimonadida	Armatimonadales	Armatimonadales	Armatimonadales	unidentified		0.033						
Bacteroidota												
Bacteroidia	Bacteroidales	Bacteroidaceae	Bacteroides	unidentified								0.02
Bacteroidia	Bacteroidales	Bacteroidetes_vadinHA17	Bacteroidetes_vadinHA17	unidentified								0.024
Bacteroidia	Chitinophagales	Chitinophagaceae	Aurantisolimonas	uncultured_bacterium		0.165						
Bacteroidia	Chitinophagales	Chitinophagaceae	Chitinophaga	Chitinophaga filiformis							0.083	
Bacteroidia	Chitinophagales	Chitinophagaceae	Chitinophaga	Chitinophaga ginsengihumi							0.078	

Bacteroidia	Chitinophagales	Chitinophagaceae	<i>Cnuella</i>	uncultured_bacterium								0.035
Bacteroidia	Chitinophagales	Chitinophagaceae	<i>Dinghuibacter</i>	uncultured_bacterium							0.032	
Bacteroidia	Chitinophagales	Chitinophagaceae	<i>Edaphobaculum</i>	uncultured_bacterium		0.099						
Bacteroidia	Chitinophagales	Chitinophagaceae	<i>Edaphobaculum</i>	uncultured_ <i>Chitinophaga</i>		0.116	0.085					
Bacteroidia	Chitinophagales	Chitinophagaceae	<i>Edaphobaculum</i>	unidentified								0.024
Bacteroidia	Chitinophagales	Chitinophagaceae	<i>Flavisolibacter</i>	<i>Flavisolibacter swuensis</i>								0.042
Bacteroidia	Chitinophagales	Chitinophagaceae	<i>Flavisolibacter</i>	<i>Flavisolibacter tropicus</i>					0.06			
Bacteroidia	Chitinophagales	Chitinophagaceae	<i>Flavisolibacter</i>	unidentified		0.232	0.254					0.232
Bacteroidia	Chitinophagales	Chitinophagaceae	<i>Niastella</i>	uncultured_soil							0.083	
Bacteroidia	Chitinophagales	Chitinophagaceae	<i>Niastella</i>	unidentified					0.184		0.249	
Bacteroidia	Chitinophagales	Chitinophagaceae	<i>Puia</i>	unidentified							0.065	
Bacteroidia	Chitinophagales	Chitinophagaceae	<i>Terrimonas</i>	unidentified					0.13		0.175	
Bacteroidia	Chitinophagales	Chitinophagaceae	uncultured	<i>Panacibacter ginsenosidivorans</i>					0.035			
Bacteroidia	Chitinophagales	Chitinophagaceae	uncultured	uncultured_ <i>Flavisolibacter</i>					0.05			
Bacteroidia	Chitinophagales	Chitinophagaceae	uncultured	uncultured_ <i>Niastella</i>								0.068
Bacteroidia	Chitinophagales	Chitinophagaceae	uncultured	unidentified					0.045		0.198	0.042
Bacteroidia	Chitinophagales	Chitinophagaceae	unidentified	unidentified							0.014	0.099
Bacteroidia	Chitinophagales	Saprospiraceae	uncultured	unidentified					0.015			
Bacteroidia	Chitinophagales	unidentified	unidentified	unidentified								0.024
Bacteroidia	Cytophagales	Cyclobacteriaceae	uncultured	unidentified								0.035
Bacteroidia	Cytophagales	Hymenobacteraceae	<i>Hymenobacter</i>	unidentified		0.083	0.106					0.132
Bacteroidia	Cytophagales	Microscillaceae	<i>Chryseolinea</i>	uncultured_bacterium							0.06	

Bacteroidia	Cytophagales	Microscillaceae	<i>Chryseolinea</i>	unidentified							0.078	
Bacteroidia	Cytophagales	Microscillaceae	<i>Flexibacter</i>	unidentified							0.023	
Bacteroidia	Cytophagales	Microscillaceae	<i>Ohtaekwangia</i>	unidentified								0.022
Bacteroidia	Cytophagales	Microscillaceae	uncultured	uncultured_soil								0.108
Bacteroidia	Cytophagales	Microscillaceae	uncultured	unidentified							0.134	
Bacteroidia	Cytophagales	Microscillaceae	unidentified	unidentified							0.06	
Bacteroidia	Cytophagales	Spirosomaceae	<i>Dyadobacter</i>	unidentified		0.248					0.078	
Bacteroidia	Cytophagales	Spirosomaceae	<i>Larkinella</i>	<i>Larkinella harenae</i>		0.298	0.254					
Bacteroidia	Cytophagales	Spirosomaceae	<i>Larkinella</i>	<i>Larkinella insperata</i>			0.148					
Bacteroidia	Cytophagales	Spirosomaceae	<i>Larkinella</i>	<i>Larkinella ripae</i>		0.083	0.106				0.014	
Bacteroidia	Cytophagales	Spirosomaceae	<i>Rudanella</i>	uncultured_bacterium		0.165		0.387				
Bacteroidia	Cytophagales	Spirosomaceae	<i>Spirosoma</i>	<i>Spirosoma oryzae</i>		0.48		0.43				
Bacteroidia	Cytophagales	Spirosomaceae	<i>Spirosoma</i>	unidentified		0.232	0.466					
Bacteroidia	Flavobacteriales	Flavobacteriaceae	<i>Flavobacterium</i>	unidentified							0.041	
Bacteroidia	Flavobacteriales	NS9_marine_group	NS9_marine_group	metagenome					0.015			
Bacteroidia	Flavobacteriales	unidentified	unidentified	unidentified								0.066
Bacteroidia	Flavobacteriales	Weeksellaceae	<i>Chryseobacterium</i>	unidentified		0.099						
Bacteroidia	Sphingobacteriales	AKYH767	AKYH767	uncultured_bacterium							0.014	
Bacteroidia	Sphingobacteriales	env.OPS_17	env.OPS_17	unidentified					0.035			0.057
Bacteroidia	Sphingobacteriales	Sphingobacteriaceae	<i>Mucilaginibacter</i>	unidentified							0.032	
Bacteroidia	Sphingobacteriales	unidentified	unidentified	unidentified								0.009
Kapabacteria	Kapabacteriales	Kapabacteriales	<i>Kapabacteriales</i>	unidentified							0.028	
SJA-28	SJA-28	SJA-28	SJA-28	metagenome					0.02			
SJA-28	SJA-28	SJA-28	SJA-28	uncultured_bacterium								0.093

Bdellovibrionota												
Bdellovibrionia	Bdellovibrionales	Bdellovibrionaceae	<i>Bdellovibrio</i>	uncultured_bacterium								0.051
Bdellovibrionia	Bdellovibrionales	Bdellovibrionaceae	OM27_clade	uncultured_Myxococcales							0.092	
Bdellovibrionia	Bdellovibrionales	Bdellovibrionaceae	OM27_clade	unidentified								0.11
Oligoflexia	Oligoflexales	uncultured	uncultured	unidentified								0.04
Chloroflexi												
Anaerolineae	Anaerolineales	Anaerolineaceae	uncultured	unidentified					0.035			0.042
Anaerolineae	Anaerolineales	Anaerolineaceae	UTCFX1	uncultured_bacterium								0.042
Anaerolineae	Ardenticatenales	Ardenticatenaceae	uncultured	unidentified						0.148		
Anaerolineae	Ardenticatenales	uncultured	uncultured	uncultured_bacterium					0.02		0.051	
Anaerolineae	Ardenticatenales	uncultured	uncultured	uncultured_Litorilinea							0.069	
Anaerolineae	Ardenticatenales	uncultured	uncultured	unidentified							0.014	
Anaerolineae	Caldilineales	Caldilineaceae	<i>Litorilinea</i>	uncultured_bacterium								0.057
Anaerolineae	Caldilineales	Caldilineaceae	uncultured	uncultured_bacterium								0.071
Anaerolineae	Caldilineales	Caldilineaceae	uncultured	uncultured_soil					0.05			
Anaerolineae	Caldilineales	Caldilineaceae	uncultured	unidentified							0.032	
Anaerolineae	RBG-13-54-9	RBG-13-54-9	RBG-13-54-9	unidentified							0.014	
Anaerolineae	SBR1031	A4b	A4b	uncultured_bacterium					0.055		0.253	0.426
Anaerolineae	SBR1031	A4b	A4b	uncultured_Caldilineales								0.095
Anaerolineae	SBR1031	A4b	A4b	uncultured_soil							0.046	
Anaerolineae	SBR1031	A4b	A4b	unidentified					0.065	0.134	0.028	0.247
Anaerolineae	SBR1031	SBR1031	SBR1031	uncultured_bacterium								0.055

Anaerolineae	SBR1031	SBR1031	SBR1031	uncultured_ <i>Caldilineaceae</i>							0.014	
Anaerolineae	SBR1031	SBR1031	SBR1031	uncultured_soil								0.082
Anaerolineae	SBR1031	SBR1031	SBR1031	unidentified								0.106
Anaerolineae	SBR1031	unidentified	unidentified	unidentified							0.051	0.174
Chloroflexia	Chloroflexales	Roseiflexaceae	uncultured	uncultured_bacterium	0.288	0.281	0.996	0.43	0.314		0.152	0.185
Chloroflexia	Chloroflexales	Roseiflexaceae	uncultured	uncultured_ <i>Chloroflexi</i>							0.129	
Chloroflexia	Thermomicrobiales	JG30-KF-CM45	JG30-KF-CM45	uncultured_bacterium	0.959	1.472	1.208	0.258	0.025			0.177
Chloroflexia	Thermomicrobiales	JG30-KF-CM45	JG30-KF-CM45	unidentified								0.073
Chloroflexia	Thermomicrobiales	Thermomicrobiaceae	<i>Nitrolancea</i>	<i>Nitrolancea hollandica</i>								0.053
Dehalococcoidia	S085	S085	S085	metagenome								0.038
Dehalococcoidia	S085	S085	S085	uncultured_bacterium					0.055		0.392	0.108
Dehalococcoidia	S085	S085	S085	uncultured_ <i>Chloroflexi</i>								0.053
Dehalococcoidia	S085	S085	S085	unidentified							0.069	0.373
Dehalococcoidia	SAR202_clade	SAR202_clade	SAR202_clade	uncultured_soil							0.023	
Gitt-GS-136	Gitt-GS-136	Gitt-GS-136	Gitt-GS-136	uncultured_bacterium					0.065		0.484	0.135
Gitt-GS-136	Gitt-GS-136	Gitt-GS-136	Gitt-GS-136	unidentified							0.17	
JG30-KF-CM66	JG30-KF-CM66	JG30-KF-CM66	JG30-KF-CM66	uncultured_bacterium								0.06
KD4-96	KD4-96	KD4-96	KD4-96	metagenome						0.341		0.104
KD4-96	KD4-96	KD4-96	KD4-96	uncultured_bacterium							0.465	0.113
KD4-96	KD4-96	KD4-96	KD4-96	uncultured_ <i>Chloroflexi</i>						0.579	0.06	

KD4-96	KD4-96	KD4-96	KD4-96	uncultured_ <i>Levilina</i>								0.108
KD4-96	KD4-96	KD4-96	KD4-96	unidentified					0.454	0.267	0.576	0.185
Ktedonobacteria	C0119	C0119	C0119	uncultured_bacterium							0.023	
Ktedonobacteria	Ktedonobacteriales	Ktedonobacteraceae	uncultured	unidentified							0.037	
OLB14	OLB14	OLB14	OLB14	uncultured_bacterium							0.051	
P2-11E	P2-11E	P2-11E	P2-11E	uncultured_bacterium							0.152	0.018
TK10	TK10	TK10	TK10	bacterium_Ellin						0.208		
TK10	TK10	TK10	TK10	uncultured_bacterium					0.13		0.097	0.117
TK10	TK10	TK10	TK10	uncultured_ <i>Chloroflexi</i>					0.065			0.035
TK10	TK10	TK10	TK10	uncultured <i>Firmicutes</i>					0.14			
TK10	TK10	TK10	TK10	unidentified					0.135		0.244	0.161
Cyanobacteria												
Cyanobacteriia	Cyanobacteriales	Chroococcidiopsaceae	unidentified	unidentified								0.227
Cyanobacteriia	Cyanobacteriales	Nostocaceae	<i>Scytonema_VB-61278</i>	unidentified	1.726		0.339					
Cyanobacteriia	Cyanobacteriales	unidentified	unidentified	unidentified								0.141
Sericytochromatia	Sericytochromatia	Sericytochromatia	<i>Sericytochromatia</i>	uncultured bacterium								0.009
Vampirivibrionia	Obscuribacteriales	Obscuribacteraceae	<i>Obscuribacteraceae</i>	bioreactor metagenome							0.032	
Vampirivibrionia	Obscuribacteriales	Obscuribacteraceae	<i>Obscuribacteraceae</i>	uncultured_bacterium								0.238
Vampirivibrionia	Vampirovibrionales	Vampirovibrionales	<i>Vampirovibrionales</i>	uncultured_bacterium								0.093
Deinococcota												

Deinococci	Deinococcales	Deinococcaceae	<i>Deinococcus</i>	<i>Deinococcus cellulosilyticus</i>								0.053
Deinococci	Deinococcales	Deinococcaceae	<i>Deinococcus</i>	unidentified								0.115
Deinococci	Deinococcales	Trueperaceae	<i>Truepera</i>	uncultured_ <i>Deinococcus</i>			0.276					
Deinococci	Deinococcales	Trueperaceae	<i>Truepera</i>	unidentified		0.281	0.339					
Dependentiae												
Babeliae	Babeliales	unidentified	unidentified	unidentified								0.068
Babeliae	Babeliales	Vermiphilaceae	<i>Vermiphilaceae</i>	uncultured_bacterium								0.053
Babeliae	Babeliales	Vermiphilaceae	<i>Vermiphilaceae</i>	unidentified								0.024
Desulfobacterota												
Desulfuromonadia	Geobacterales	Geobacteraceae	<i>Citri fermentans</i>	unidentified								0.046
Desulfuromonadia	Geobacterales	Geobacteraceae	<i>Geobacter</i>	unidentified								0.013
Desulfuromonadia	Geobacterales	Geobacteraceae	unidentified	unidentified								0.084
Syntrophobacteria	Syntrophobacterales	Syntrophobacteraceae	<i>Syntrophobacter</i>	unidentified								0.031
uncultured	uncultured	uncultured	uncultured	uncultured_ <i>Dongia</i>								0.051
uncultured	uncultured	uncultured	uncultured	unidentified					0.12		0.152	0.159
Elusimicrobiota												
Elusimicrobia	MVP-88	MVP-88	MVP-88	uncultured_bacterium								0.11
Lineage_IIb	Lineage_IIb	Lineage_IIb	<i>Lineage_IIb</i>	uncultured bacterium					0.015			
Entotheonellaeota												
Entotheonellia	Entotheonellales	Entotheonellaceae	<i>Entotheonellaceae</i>	uncultured bacterium					0.065		0.221	0.132
Entotheonellia	Entotheonellales	Entotheonellaceae	<i>Entotheonellaceae</i>	unidentified					0.753			0.055

Firmicutes												
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus acidicele</i>					1.092	1.633		
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus arbutinivorans</i>					1.396	5.387		
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus asahii</i>					0.045	1.306		0.071
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus fastidiosus</i>							0.023	
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus fengquensis</i>					0.508		0.723	0.104
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus funiculus</i>					2.258		0.309	
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus idriensis</i>						0.89		
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus korlensis</i>					0.08			
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus malikii</i>					0.309			
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus nealsonii</i>					0.623	1.469		
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	<i>Bacillus niacini</i>					1.226			
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	uncultured_organism							0.065	0.104
Bacilli	Bacillales	Bacillaceae	<i>Bacillus</i>	unidentified					24.892	28.317	2.696	0.653
Bacilli	Bacillales	Bacillaceae	<i>Fictibacillus</i>	unidentified						1.232		
Bacilli	Bacillales	Bacillaceae	unidentified	unidentified								0.055
Bacilli	Bacillales	Bacillaceae	<i>Virgibacillus</i>	uncultured_bacterium								0.04
Bacilli	Bacillales	Planococcaceae	<i>Chungangia</i>	unidentified					0.015			
Bacilli	Bacillales	Planococcaceae	<i>Domibacillus</i>	uncultured_Bacillus					1.665	1.187		
Bacilli	Bacillales	Planococcaceae	<i>Domibacillus</i>	uncultured_bacterium					0.055			
Bacilli	Bacillales	Planococcaceae	<i>Domibacillus</i>	unidentified					0.862	0.505	0.032	
Bacilli	Bacillales	Planococcaceae	<i>Lysinibacillus</i>	<i>Lysinibacillus composti</i>					0.075			
Bacilli	Bacillales	Planococcaceae	<i>Lysinibacillus</i>	uncultured_bacterium							0.037	
Bacilli	Bacillales	unidentified	unidentified	unidentified					0.165	0.564		0.119

Bacilli	Brevibacillales	Brevibacillaceae	<i>Brevibacillus</i>	unidentified					0.045			0.115
Bacilli	Lactobacillales	Streptococcaceae	<i>Streptococcus</i>	<i>Streptococcus agalactiae</i>								1.079
Bacilli	Lactobacillales	Streptococcaceae	<i>Streptococcus</i>	uncultured_organism								0.108
Bacilli	Paenibacillales	Paenibacillaceae	<i>Ammoniphilus</i>	unidentified					0.803		0.166	
Bacilli	Paenibacillales	Paenibacillaceae	<i>Paenibacillus</i>	<i>Paenibacillus cellulosilyticus</i>								0.071
Bacilli	Paenibacillales	Paenibacillaceae	<i>Paenibacillus</i>	<i>Paenibacillus pocheonensis</i>					0.095			
Bacilli	Paenibacillales	Paenibacillaceae	<i>Paenibacillus</i>	<i>Paenibacillus zeae</i>								0.062
Bacilli	Paenibacillales	Paenibacillaceae	<i>Paenibacillus</i>	unidentified					0.319	0.519		0.031
Bacilli	Staphylococcales	Staphylococcaceae	<i>Staphylococcus</i>	unidentified								0.647
Clostridia	Peptostreptococcales-Tissierellales	Peptostreptococcales-Tissierellales	<i>Finegoldia</i>	<i>Finegoldia magna</i>								0.075
GAL15												
GAL15	GAL15	GAL15	GAL15	uncultured_bacterium					0.025			
Gemmatimonadota												
AKAU4049	AKAU4049	AKAU4049	AKAU4049	uncultured_bacterium							0.041	
AKAU4049	AKAU4049	AKAU4049	AKAU4049	uncultured_soil							0.065	0.026
BD2-11_terrestrial_group	BD2-11_terrestrial_group	BD2-11_terrestrial_group	BD2-11_terrestrial_group	metagenome							0.088	
BD2-11_terrestrial_group	BD2-11_terrestrial_group	BD2-11_terrestrial_group	BD2-11_terrestrial_group	uncultured_soil								0.15
Gemmatimonadetes	Gemmatimonadales	Gemmatimonadaceae	<i>Gemmatimonas</i>	unidentified					0.065			0.238
Gemmatimonadetes	Gemmatimonadales	Gemmatimonadaceae	<i>Roseisolibacter</i>	uncultured_bacterium								0.084

Gemmatimonadetes	Gemmatimonadales	Gemmatimonadaceae	<i>Roseisolibacter</i>	unidentified					0.075			
Gemmatimonadetes	Gemmatimonadales	Gemmatimonadaceae	uncultured	uncultured_proteobacterium					0.234			0.066
Gemmatimonadetes	Gemmatimonadales	Gemmatimonadaceae	uncultured	unidentified					0.269		1.106	0.863
Gemmatimonadetes	Gemmatimonadales	Gemmatimonadaceae	unidentified	unidentified					0.494		0.65	0.353
Longimicrobia	Longimicrobiales	Longimicrobiaceae	<i>Longimicrobiaceae</i>	uncultured_bacterium								0.13
Longimicrobia	Longimicrobiales	Longimicrobiaceae	<i>Longimicrobiaceae</i>	uncultured_soil								0.055
Longimicrobia	Longimicrobiales	Longimicrobiaceae	<i>Longimicrobium</i>	uncultured_bacterium			0.064					
Longimicrobia	Longimicrobiales	Longimicrobiaceae	YC-ZSS-LKJ147	uncultured_bacterium								0.026
Longimicrobia	Longimicrobiales	Longimicrobiaceae	YC-ZSS-LKJ147	unidentified								0.02
S0134_terrestrial_group	S0134_terrestrial_group	S0134_terrestrial_group	S0134_terrestrial_group	uncultured_bacterium					0.025		0.005	0.064
S0134_terrestrial_group	S0134_terrestrial_group	S0134_terrestrial_group	S0134_terrestrial_group	uncultured <i>Gemma timonadales</i>					0.055			0.053
S0134_terrestrial_group	S0134_terrestrial_group	S0134_terrestrial_group	S0134_terrestrial_group	uncultured <i>Gemma timonadetes</i>							0.134	0.062
S0134_terrestrial_group	S0134_terrestrial_group	S0134_terrestrial_group	S0134_terrestrial_group	unidentified					0.095		0.092	0.04
Latescibacterota												
Latescibacteria	Latescibacterales	Latescibacteraceae	<i>Latescibacteraceae</i>	uncultured_bacterium							0.046	
Latescibacterota	Latescibacterota	Latescibacterota	<i>Latescibacterota</i>	uncultured_bacterium							0.134	
Latescibacterota	Latescibacterota	Latescibacterota	<i>Latescibacterota</i>	uncultured_soil							0.138	
Latescibacterota	Latescibacterota	Latescibacterota	<i>Latescibacterota</i>	unidentified						0.119	0.207	0.117

MBNT15												
MBNT15	MBNT15	MBNT15	MBNT15	uncultured_bacterium							0.12	
MBNT15	MBNT15	MBNT15	MBNT15	uncultured_Myxococcales					0.045			
MBNT15	MBNT15	MBNT15	MBNT15	unidentified								0.051
Methyloirabiolota												
Methyloirabiolota	Rokubacteriales	Rokubacteriales	Rokubacteriales	metagenome					0.155			0.013
Methyloirabiolota	Rokubacteriales	Rokubacteriales	Rokubacteriales	uncultured_bacterium					0.698		1.364	0.814
Methyloirabiolota	Rokubacteriales	WX65	WX65	uncultured_bacterium								0.117
Myxococcota												
bacteriap25	bacteriap25	bacteriap25	bacteriap25	uncultured_Syntrophobacterales							0.078	
bacteriap25	bacteriap25	bacteriap25	bacteriap25	unidentified					0.972	0.208	0.977	0.333
bacteriap25	bacteriap25	bacteriap25	bacteriap25	unidentified								0.046
Myxococcia	Myxococcales	Anaeromyxobacteraceae	Anaeromyxobacter	uncultured_Anaeromyxobacter								0.022
Myxococcia	Myxococcales	Anaeromyxobacteraceae	Anaeromyxobacter	unidentified								0.026
Myxococcia	Myxococcales	Myxococcaceae	Cystobacter	unidentified		0.943	0.827	1.504				
Myxococcia	Myxococcales	Myxococcaceae	P3OB-42	uncultured_Cystobacterineae							0.041	
Myxococcia	Myxococcales	Myxococcaceae	uncultured	uncultured_bacterium								0.06
Myxococcia	Myxococcales	Myxococcaceae	unidentified	unidentified		0.38	0.17		0.354		0.539	0.097
Polyangia	Haliangiales	Haliangiaceae	Haliangium	uncultured_Myxococcales							0.055	
Polyangia	Haliangiales	Haliangiaceae	Haliangium	uncultured_proteobacterium					0.055			
Polyangia	Haliangiales	Haliangiaceae	Haliangium	unidentified						0.134	0.286	0.166

Polyangia	mle1-27	mle1-27	mle1-27	unidentified								0.077
Polyangia	Polyangiales	BIrii41	BIrii41	uncultured_bacterium						0.119	0.065	0.013
Polyangia	Polyangiales	BIrii41	BIrii41	unidentified								0.097
Polyangia	Polyangiales	Eel-36e1D6	Eel-36e1D6	uncultured_bacterium								0.031
Polyangia	Polyangiales	Phaselicystidaceae	<i>Phaselicystis</i>	uncultured_bacterium								0.026
Polyangia	Polyangiales	Phaselicystidaceae	<i>Phaselicystis</i>	uncultured_ <i>Byssovora</i>							0.097	
Polyangia	Polyangiales	Polyangiaceae	<i>Minicystis</i>	uncultured_bacterium								0.042
Polyangia	Polyangiales	Polyangiaceae	<i>Pajaroellobacter</i>	unidentified								0.073
Polyangia	Polyangiales	Polyangiaceae	<i>Polyangiaceae</i>	uncultured_bacterium								0.062
Polyangia	Polyangiales	Sandaracinaceae	uncultured	uncultured_bacterium							0.041	
Polyangia	Polyangiales	Sandaracinaceae	uncultured	unidentified					0.135		0.244	0.104
Polyangia	Polyangiales	unidentified	unidentified	unidentified								0.018
unidentified	unidentified	unidentified	unidentified	unidentified							0.028	
NB1-j												
NB1-j	NB1-j	NB1-j	NB1-j	uncultured_ <i>Desulfo glaeba</i>							0.074	0.073
NB1-j	NB1-j	NB1-j	NB1-j	uncultured_ <i>Myxococcales</i>							0.065	
NB1-j	NB1-j	NB1-j	NB1-j	unidentified					0.135		0.313	0.093
Nitrospirota												
Nitrospira	Nitrospirales	Nitrospiraceae	<i>Nitrospira</i>	<i>Nitrospira japonica</i>					0.259	0.163	0.295	0.104
Nitrospira	Nitrospirales	Nitrospiraceae	<i>Nitrospira</i>	uncultured_ <i>Nitrospiraceae</i>					0.035			
Nitrospira	Nitrospirales	Nitrospiraceae	<i>Nitrospira</i>	uncultured_soil							0.217	
Nitrospira	Nitrospirales	Nitrospiraceae	<i>Nitrospira</i>	unidentified					0.055		0.083	

Patescibacteria												
Parcubacteria	Candidatus_Kaiserbacteria	Candidatus_Kaiserbacteria	<i>Candidatus_Kaiserbacteria</i>	uncultured_bacterium							0.111	
Parcubacteria	Parcubacteria	Parcubacteria	<i>Parcubacteria</i>	uncultured_bacterium							0.051	0.049
Saccharimonadia	Saccharimonadales	LWQ8	LWQ8	uncultured_bacterium					0.169			
Saccharimonadia	Saccharimonadales	LWQ8	LWQ8	unidentified						0.163	0.129	
Saccharimonadia	Saccharimonadales	S32	TM7	unidentified								0.073
Saccharimonadia	Saccharimonadales	Saccharimonadales	TM7a	uncultured_bacterium		0.149						
Saccharimonadia	Saccharimonadales	Saccharimonadales	<i>Saccharimonadales</i>	unidentified					0.095		0.346	0.09
Saccharimonadia	Saccharimonadales	unidentified	unidentified	unidentified		0.182	0.064		0.045		0.24	0.15
Saccharimonadia	Saccharimonadales	WWH38	WWH38	uncultured_bacterium							0.032	
Planctomycetota												
OM190	OM190	OM190	OM190	uncultured_bacterium								0.026
Phycisphaerae	Phycisphaerales	Phycisphaerales	AKYG587	uncultured_bacterium					0.095		0.032	0.022
Phycisphaerae	Phycisphaerales	Phycisphaerales	CL500-3	uncultured_bacterium							0.046	
Phycisphaerae	Phycisphaerales	Phycisphaerales	SM1A02	unidentified								0.011
Phycisphaerae	Tepidisphaerales	WD2101_soil_group	WD2101_soil_group	uncultured_bacterium					0.02			
Phycisphaerae	Tepidisphaerales	WD2101_soil_group	WD2101_soil_group	uncultured_planctomycete								0.018
Phycisphaerae	Tepidisphaerales	WD2101_soil_group	WD2101_soil_group	unidentified		0.066			0.075		0.111	0.044
Planctomycetes	Gemmatales	Gemmatales	uncultured	uncultured_bacterium								0.035

Planctomycetes	Gemmatales	Gemmataceae	uncultured	unidentified								0.024
unidentified	unidentified	unidentified	unidentified	unidentified							0.018	
Proteobacteria												
Alphaproteobacteria	Acetobacterales	Acetobacteraceae	<i>Acidicaldus</i>	uncultured_ <i>Acidishaera</i>						0.193		0.049
Alphaproteobacteria	Acetobacterales	Acetobacteraceae	<i>Belnapia</i>	uncultured_bacterium	1.151	0.248						
Alphaproteobacteria	Acetobacterales	Acetobacteraceae	<i>Roseomonas</i>	unidentified		1.174	0.89	1.59		0.134	0.06	
Alphaproteobacteria	Acetobacterales	Acetobacteraceae	uncultured	uncultured_ <i>Paracraurococcus</i>					0.05			
Alphaproteobacteria	Acetobacterales	Acetobacteraceae	unidentified	unidentified	1.63	1.918	0.551					0.022
Alphaproteobacteria	Azospirillales	Azospirillaceae	uncultured	uncultured_bacterium					0.04		0.028	
Alphaproteobacteria	Azospirillales	Inquilinaceae	<i>Inquilinus</i>	<i>Inquilinus</i> sp.						0.267	0.083	
Alphaproteobacteria	Azospirillales	uncultured	uncultured	unidentified					0.11		0.097	0.022
Alphaproteobacteria	Caulobacterales	Caulobacteraceae	<i>Brevundimonas</i>	drinking_water		0.248	0.148					
Alphaproteobacteria	Caulobacterales	Caulobacteraceae	<i>Brevundimonas</i>	unidentified		2.233	0.933				0.124	
Alphaproteobacteria	Caulobacterales	Caulobacteraceae	<i>Caulobacter</i>	unidentified							0.433	
Alphaproteobacteria	Caulobacterales	Caulobacteraceae	<i>Phenylobacterium</i>	uncultured_soil						0.163	0.152	
Alphaproteobacteria	Caulobacterales	Caulobacteraceae	<i>Phenylobacterium</i>	unidentified					0.165		0.23	0.154
Alphaproteobacteria	Caulobacterales	Caulobacteraceae	uncultured	unidentified								0.102
Alphaproteobacteria	Caulobacterales	Hyphomonadaceae	<i>Hirschia</i>	unidentified					0.13		0.014	
Alphaproteobacteria	Caulobacterales	Hyphomonadaceae	SWB02	uncultured_soil							0.037	

Alphaproteobacteria	Caulobacterales	Hyphomonadaceae	SWB02	unidentified							0.152	0.029
Alphaproteobacteria	Caulobacterales	Parvularculaceae	<i>Amphiplicatus</i>	uncultured_bacterium						0.134		
Alphaproteobacteria	Defluviicoccales	Defluviicoccaceae	<i>Defluviicoccus</i>	unidentified								0.307
Alphaproteobacteria	Dongiales	Dongiaceae	<i>Dongia</i>	metagenome					0.174	0.327		0.051
Alphaproteobacteria	Dongiales	Dongiaceae	<i>Dongia</i>	unidentified					1.276	1.929	4.069	0.607
Alphaproteobacteria	Elsterales	uncultured	uncultured	unidentified							0.101	
Alphaproteobacteria	Holosporales	Holosporaceae	uncultured	uncultured_bacterium								0.819
Alphaproteobacteria	Micropepsales	Micropepsaceae	uncultured	unidentified					0.03			
Alphaproteobacteria	Parvibaculales	Parvibaculaceae	uncultured	uncultured_bacterium							0.055	
Alphaproteobacteria	Puniceispirillales	Puniceispirillales_Incertae Sedis	<i>Constrictibacter</i>	uncultured_soil		0.198	0.148					
Alphaproteobacteria	Reyranellales	Reyranellaceae	<i>Reyranella</i>	unidentified					0.563	2.196	1.682	2.006
Alphaproteobacteria	Reyranellales	Reyranellaceae	uncultured	uncultured_bacterium					0.13	0.193		0.086
Alphaproteobacteria	Reyranellales	Reyranellaceae	uncultured	uncultured_Rhodospirillales							0.088	
Alphaproteobacteria	Reyranellales	Reyranellaceae	uncultured	unidentified							0.212	
Alphaproteobacteria	Rhizobiales	A0839	A0839	uncultured_Phyllobacteriaceae					0.075	0.252	0.106	0.06
Alphaproteobacteria	Rhizobiales	A0839	A0839	uncultured_sludge						0.223	0.115	
Alphaproteobacteria	Rhizobiales	Beijerinckiaceae	1174-901-12	unidentified		0.496		0.859				
Alphaproteobacteria	Rhizobiales	Beijerinckiaceae	FFCH5858	unidentified								0.218

Alphaproteobacteria	Rhizobiales	Beijerinckiaceae	<i>Methylobacterium-Methylobacterium</i>	<i>Methylobacterium aquaticum</i>				1.59				
Alphaproteobacteria	Rhizobiales	Beijerinckiaceae	<i>Methylobacterium-Methylobacterium</i>	<i>Methylobacterium brachiatum</i>				1.504				
Alphaproteobacteria	Rhizobiales	Beijerinckiaceae	<i>Methylobacterium-Methylobacterium</i>	<i>Methylobacterium hispanicum</i>		1.108	6.169	2.578				
Alphaproteobacteria	Rhizobiales	Beijerinckiaceae	<i>Methylobacterium-Methylobacterium</i>	<i>Methylobacterium komagatae</i>	3.547	2.911	1.95	2.192				
Alphaproteobacteria	Rhizobiales	Beijerinckiaceae	<i>Methylobacterium-Methylobacterium</i>	<i>Methylobacterium podarium</i>		0.711						
Alphaproteobacteria	Rhizobiales	Beijerinckiaceae	<i>Methylobacterium-Methylobacterium</i>	unidentified	19.847	15.396	16.154	24.065				
Alphaproteobacteria	Rhizobiales	Beijerinckiaceae	<i>Microvirga</i>	unidentified		0.281	0.657		1.346	0.445	0.525	0.135
Alphaproteobacteria	Rhizobiales	Beijerinckiaceae	unidentified	unidentified		0.992	0.996		0.145			0.086
Alphaproteobacteria	Rhizobiales	D05-2	D05-2	uncultured_bacterium					0.04		0.106	
Alphaproteobacteria	Rhizobiales	Devosiaceae	<i>Devosia</i>	unidentified		1.637	0.254				0.161	
Alphaproteobacteria	Rhizobiales	Devosiaceae	uncultured	unidentified							0.253	
Alphaproteobacteria	Rhizobiales	Devosiaceae	unidentified	unidentified			0.424					
Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	<i>Hyphomicrobium</i>	uncultured_Hyphomicrobium						0.416		0.011
Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	<i>Hyphomicrobium</i>	unidentified					0.224	0.282	0.41	
Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	<i>Pedomicrobium</i>	uncultured_bacterium					0.135	0.237	0.161	
Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	<i>Pedomicrobium</i>	uncultured_Hyphomicrobiaceae					0.354		0.553	0.252
Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	<i>Pedomicrobium</i>	unidentified					0.334	3.413	0.991	0.11
Alphaproteobacteria	Rhizobiales	Hyphomicrobiaceae	unidentified	unidentified							0.028	

Alphaproteobacteria	Rhizobiales	KF-JG30-B3	KF-JG30-B3	uncultured_bacterium					0.264		0.24	
Alphaproteobacteria	Rhizobiales	KF-JG30-B3	KF-JG30-B3	unidentified							0.327	0.17
Alphaproteobacteria	Rhizobiales	Labraceae	<i>Labrys</i>	unidentified							0.028	
Alphaproteobacteria	Rhizobiales	Methylogigellaceae	<i>Methylogigellaceae</i>	uncultured_bacterium					0.578	0.49	1.055	
Alphaproteobacteria	Rhizobiales	Methylogigellaceae	unidentified	unidentified								0.073
Alphaproteobacteria	Rhizobiales	Methylophilaceae	unidentified	unidentified		0.347						
Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>Allorhizobium-Neorhizobium-Pararhizobium-Rhizobium</i>	unidentified	5.944	4.581	1.42	4.168	0.354	1.647	1.276	0.23
Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>Aureimonas</i>	<i>Aurantimonas</i> sp.		1.306	0.996					
Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>Aureimonas</i>	<i>Aureimonas jatrophae</i>	11.218	4.994	5.109	21.917				
Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>Aureimonas</i>	<i>Aureimonas phyllosphaerae</i>		0.827	0.827	0.473				
Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>Aureimonas</i>	<i>Aureimonas rubiginis</i>		0.413		2.192				
Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>Aureimonas</i>	uncultured_bacterium			0.127					
Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>Aureimonas</i>	unidentified	9.684	7.557	6.084	7.263				
Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>Ensifer</i>	unidentified					0.09	0.534	0.272	
Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>Mesorhizobium</i>	unidentified	1.63	1.439	1.399		0.678	1.558	0.461	0.245
Alphaproteobacteria	Rhizobiales	Rhizobiaceae	<i>Tianweitania</i>	uncultured_bacterium		0.695						
Alphaproteobacteria	Rhizobiales	Rhizobiaceae	unidentified	unidentified	4.219	7.64	5.109	1.633	0.04	0.579	0.825	

Alphaproteobacteria	Rhizobiales	Rhizobiales_Incertae Sedis	<i>Bauldia</i>	uncultured_bacterium							0.078	
Alphaproteobacteria	Rhizobiales	Rhizobiales_Incertae Sedis	<i>Bauldia</i>	uncultured_ <i>Phyllobacteriaceae</i>					0.03			
Alphaproteobacteria	Rhizobiales	Rhizobiales_Incertae Sedis	<i>Bauldia</i>	unidentified					0.02		0.051	
Alphaproteobacteria	Rhizobiales	Rhizobiales_Incertae Sedis	<i>Nordella</i>	uncultured_ <i>Alphaproteobacteria</i>					0.284			0.066
Alphaproteobacteria	Rhizobiales	Rhizobiales_Incertae Sedis	<i>Nordella</i>	uncultured_ <i>Phyllobacteriaceae</i>					0.145	0.401	0.078	0.044
Alphaproteobacteria	Rhizobiales	Rhizobiales_Incertae Sedis	<i>Nordella</i>	unidentified					0.09	0.95	0.728	0.121
Alphaproteobacteria	Rhizobiales	Rhizobiales_Incertae Sedis	unidentified	unidentified						0.252		
Alphaproteobacteria	Rhizobiales	Rhodomicrobiaceae	<i>Rhodomicrobium</i>	uncultured_ <i>Alphaproteobacteria</i>					0.14			
Alphaproteobacteria	Rhizobiales	Rhodomicrobiaceae	<i>Rhodomicrobium</i>	uncultured_bacterium					0.065	0.386	0.295	
Alphaproteobacteria	Rhizobiales	Rhodomicrobiaceae	<i>Rhodomicrobium</i>	unidentified						0.282	0.147	
Alphaproteobacteria	Rhizobiales	Stappiaceae	<i>Agaricicola</i>	<i>Agaricicola taiwanensis</i>		1.753	1.336					
Alphaproteobacteria	Rhizobiales	uncultured	uncultured	uncultured_ <i>Alphaproteobacteria</i>							0.143	
Alphaproteobacteria	Rhizobiales	uncultured	uncultured	unidentified					0.374	0.876	0.571	1.006
Alphaproteobacteria	Rhizobiales	unidentified	unidentified	unidentified	4.89	2.828	6.826	5.93	0.628	0.638	0.622	0.055
Alphaproteobacteria	Rhizobiales	Xanthobacteraceae	<i>Bradyrhizobium</i>	unidentified					1.62	5.239	1.737	0.781
Alphaproteobacteria	Rhizobiales	Xanthobacteraceae	<i>Pseudolabrys</i>	uncultured_ <i>Bradyrhizobiaceae</i>					0.553	0.371	0.129	
Alphaproteobacteria	Rhizobiales	Xanthobacteraceae	<i>Pseudolabrys</i>	unidentified								0.04
Alphaproteobacteria	Rhizobiales	Xanthobacteraceae	<i>Rhodoplanes</i>	uncultured_bacterium								0.099

Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	<i>Novosphingobium</i>	unidentified						0.148	0.442	
Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	<i>Porphyrobacter</i>	unidentified								0.097
Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	<i>Qipengyuania</i>	unidentified							0.046	
Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	<i>Sphingobium</i>	unidentified							0.415	0.23
Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	<i>Sphingomonas</i>	<i>Caulobacter</i> sp.						0.505		
Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	<i>Sphingomonas</i>	<i>Sphingomonas gimensis</i>		0.843	0.7	0.602				
Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	<i>Sphingomonas</i>	<i>Sphingomonas guangdongensis</i>		0.579		0.559				
Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	<i>Sphingomonas</i>	<i>Sphingomonas phyllosphaerae</i>		0.182						
Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	<i>Sphingomonas</i>	<i>Sphingomonas rhizophila</i>							0.111	
Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	<i>Sphingomonas</i>	unidentified		3.456	2.141	5.243	0.573		0.396	0.161
Alphaproteobacteria	Sphingomonadales	Sphingomonadaceae	unidentified	unidentified	6.328	5.093	9.307	2.235	0.01		0.35	0.26
Alphaproteobacteria	Tistrellales	Geminicoccaceae	uncultured	uncultured_ <i>Acetobacteraceae</i>								0.022
Alphaproteobacteria	Tistrellales	Geminicoccaceae	uncultured	uncultured_bacterium							0.083	0.075
Alphaproteobacteria	Tistrellales	Geminicoccaceae	uncultured	unidentified							0.23	0.046
Alphaproteobacteria	uncultured	uncultured	uncultured	<i>Rhodospirillaceae bacterium</i>							0.078	0.102
Alphaproteobacteria	uncultured	uncultured	uncultured	uncultured_ <i>Acetobacteraceae</i>						0.237		0.117
Alphaproteobacteria	uncultured	uncultured	uncultured	uncultured_bacterium							0.009	0.033
Alphaproteobacteria	uncultured	uncultured	uncultured	uncultured_ <i>Rhodospirillaceae</i>								0.024

Alphaproteobacteria	uncultured	uncultured	uncultured	uncultured_soil					0.189	0.297	0.484	
Alphaproteobacteria	uncultured	uncultured	uncultured	unidentified					0.09		0.783	0.17
Alphaproteobacteria	unidentified	unidentified	unidentified	unidentified			0.148		0.867	0.816	0.493	0.313
Gammaproteobacteria	Burkholderiales	A21b	A21b	unidentified					0.045			0.033
Gammaproteobacteria	Burkholderiales	B1-7BS	B1-7BS	uncultured_bacterium					0.05		0.276	0.044
Gammaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia-Caballeronia-Paraburkholderia</i>	uncultured_Burkholderiales							0.078	
Gammaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Burkholderia-Caballeronia-Paraburkholderia</i>	unidentified		0.265						
Gammaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Cupriavidus</i>	unidentified					0.125	0.341	0.184	
Gammaproteobacteria	Burkholderiales	Burkholderiaceae	<i>Ralstonia</i>	unidentified								0.238
Gammaproteobacteria	Burkholderiales	Comamonadaceae	<i>Azohydromonas</i>	uncultured_bacterium								0.02
Gammaproteobacteria	Burkholderiales	Comamonadaceae	<i>Ramlibacter</i>	unidentified					0.688		0.276	
Gammaproteobacteria	Burkholderiales	Comamonadaceae	<i>Rivibacter</i>	uncultured_bacterium					0.08		0.12	0.291
Gammaproteobacteria	Burkholderiales	Comamonadaceae	<i>Roseateles</i>	unidentified							0.101	
Gammaproteobacteria	Burkholderiales	Comamonadaceae	unidentified	unidentified		0.281			0.234		0.479	0.19
Gammaproteobacteria	Burkholderiales	Comamonadaceae	<i>Variovorax</i>	unidentified						0.163	0.124	
Gammaproteobacteria	Burkholderiales	Methylophilaceae	MM2	uncultured_bacterium							0.041	
Gammaproteobacteria	Burkholderiales	Nitrosomonadaceae	Ellin6067	uncultured_Oxalobacteraceae								0.11

Gammaproteobacteria	CCD24	CCD24	CCD24	uncultured_gamma							0.212	
Gammaproteobacteria	CCD24	CCD24	CCD24	unidentified					0.179	0.312	0.548	
Gammaproteobacteria	Diplorickettsiales	Diplorickettsiaceae	<i>Aquicella</i>	uncultured_ <i>Aquicella</i>								0.029
Gammaproteobacteria	Diplorickettsiales	Diplorickettsiaceae	<i>Aquicella</i>	uncultured_bacterium								1.953
Gammaproteobacteria	Diplorickettsiales	Diplorickettsiaceae	<i>Aquicella</i>	unidentified								0.839
Gammaproteobacteria	Diplorickettsiales	Diplorickettsiaceae	uncultured	agricultural_soil								0.024
Gammaproteobacteria	Diplorickettsiales	Diplorickettsiaceae	uncultured	unidentified								0.373
Gammaproteobacteria	Diplorickettsiales	Diplorickettsiaceae	unidentified	unidentified								0.071
Gammaproteobacteria	Enterobacterales	Erwiniaceae	<i>Pantoea</i>	unidentified		0.182			0.055			
Gammaproteobacteria	EV818SWSAP88	EV818SWSAP88	EV818SWSAP88	uncultured_bacterium								0.088
Gammaproteobacteria	Gammaproteobacteria_Incertae_Sedis	Unknown_Family	<i>Acidibacter</i>	metagenome					0.09			
Gammaproteobacteria	Gammaproteobacteria_Incertae_Sedis	Unknown_Family	<i>Acidibacter</i>	uncultured_bacterium							0.078	
Gammaproteobacteria	Gammaproteobacteria_Incertae_Sedis	Unknown_Family	<i>Acidibacter</i>	unidentified					0.862	1.217	1.668	0.256
Gammaproteobacteria	Gammaproteobacteria_Incertae_Sedis	Unknown_Family	unidentified	unidentified								0.018
Gammaproteobacteria	JG36-GS-52	JG36-GS-52	JG36-GS-52	uncultured_bacterium								0.062
Gammaproteobacteria	Legionellales	Legionellaceae	<i>Legionella</i>	<i>Legionella adelaidensis</i>								0.146

Gammaproteobacteria	Legionellales	Legionellaceae	<i>Legionella</i>	uncultured_bacterium								0.038
Gammaproteobacteria	Legionellales	Legionellaceae	<i>Legionella</i>	unidentified								3.699
Gammaproteobacteria	PLTA13	PLTA13	PLTA13	uncultured_bacterium								0.038
Gammaproteobacteria	PLTA13	PLTA13	PLTA13	uncultured_gamma					0.085	0.297	0.276	0.062
Gammaproteobacteria	PLTA13	PLTA13	PLTA13	unidentified								0.057
Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	<i>Pseudomonas</i>	<i>Pseudomonas psychrotolerans</i>	0.767							
Gammaproteobacteria	Pseudomonadales	Pseudomonadaceae	<i>Pseudomonas</i>	unidentified					0.055			
Gammaproteobacteria	Salinisphaerales	Solimonadaceae	<i>Polycyclovorans</i>	uncultured_bacterium								0.02
Gammaproteobacteria	Steroidobacteriales	Steroidobacteraceae	<i>Steroidobacter</i>	uncultured_Xanthomonadaceae								0.035
Gammaproteobacteria	Steroidobacteriales	Steroidobacteraceae	<i>Steroidobacter</i>	unidentified					1.122	0.905	1.373	0.23
Gammaproteobacteria	Steroidobacteriales	Steroidobacteraceae	uncultured	unidentified					0.095			0.04
Gammaproteobacteria	Steroidobacteriales	Steroidobacteraceae	unidentified	unidentified					0.08		0.263	
Gammaproteobacteria	unidentified	unidentified	unidentified	unidentified					0.09		0.083	0.179
Gammaproteobacteria	Xanthomonadales	Rhodanobacteraceae	<i>Luteibacter</i>	<i>Luteibacter yejuensis</i>		0.149						
Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	<i>Arenimonas</i>	unidentified								0.057
Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	<i>Lysobacter</i>	<i>Lysobacter bugurensis</i>								0.035
Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	<i>Lysobacter</i>	<i>Lysobacter dokdonensis</i>					0.219			
Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	<i>Lysobacter</i>	unidentified					0.05	0.178	0.475	

Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	<i>Stenotrophomonas</i>	unidentified	3.356	0.099						0.064
Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	unidentified	unidentified		0.198					0.217	
Gammaproteobacteria	Xanthomonadales	Xanthomonadaceae	<i>Xanthomonas</i>	unidentified	1.534		0.276					
unidentified	unidentified	unidentified	unidentified	unidentified			0.339				0.304	0.062
SAR324_clade_(Marine_group_B)												
SAR324_clade (Marine_group_B)	SAR324_clade (Marine_group_B)	SAR324_clade (Marine_group_B)	SAR324_clade (Marine_group_B)	uncultured_bacterium								0.018
Verrucomicrobiota												
Omnitrophia	Omnitrophales	Omnitrophaceae	<i>Candidatus_Omnitrophus</i>	unidentified								0.02
WPS-2												
WPS-2	WPS-2	WPS-2	WPS-2	metagenome								0.108