						grazed august_2016 june_2016	august_2015 august_20	
Opitutales Clostridiales Methylococcales Clostridiales Solirubrobacterales C_Azambacteria_X	Opitutaceae Gracilibacteraceae Methylococcaceae Clostridiaceae_1 Gsoil-1167 C_Azambacteria_XX	Opitutus Lutispora Methylobacter Clostridium_sensu_stricto_12 Gsoil-1167_X C_Azambacteria_XXX	Opitutus_X Lutispora_X Methylobacter_X Clostridium_sensu_stricto_12_X Gsoil-1167_XX C_Azambacteria_XXXX	>HE861315.1.937 >AM991201.1.1439 >HQ534083.1.871 >HQ622753.1.1475 >KJ173737.1.715 >EF072692.1.875	99.3 X7 98.77 X53 100 X49 100 X78 99.53 X98 94.83 X154	sv1 sv2 sv1 sv2	sv1 sv2 sv1 s	v2 sv1 sv2 sv1 sv.
Rhizobiales Clostridiales Micrococcales KD4-96_X Chthoniobacterales 43F-1404R	Bradyrhizobiaceae Eubacteriaceae Intrasporangiaceae KD4-96_XX DA101_soil_group 43F-1404R_X	Rhodoblastus Acetobacterium Oryzihumus KD4-96_XXX DA101_soil_group_X 43F-1404R_XX	Rhodoblastus_X Acetobacterium_X Oryzihumus_X KD4-96_XXXX DA101_soil_group_XX 43F-1404R_XXX	>HG324431.1.823 >FJ592917.1.1367 >EF034868.1.824 >KC663943.1.799 >EU861845.1.1526 >AB657299.1.898	100 X103 100 X20 99.52 X32 99.5 X125 98.36 X62 100 X232			
Rhizobiales Ignavibacteriales Solirubrobacterales Clostridiales Frankiales Rhizobiales Methylococcales	Rhodobiaceae BSV26 Solirubrobacteraceae Clostridiaceae_1 Nakamurellaceae MNG7 Crenotrichaceae	Rhodobiaceae_X BSV26_X Solirubrobacter Clostridium_sensu_stricto_13 Nakamurella MNG7_X Crenothrix	Rhodobiaceae_XX BSV26_XX Solirubrobacter_X Clostridium_spC5S18 Nakamurella_X MNG7_XX Crenothrix X	>AB806462.1.1413 >GQ421108.1.1056 >FN567276.1.854 >AB539901.1.1369 >FJ661758.1.817 >AB630410.1.1412 >AB753932.1.1453	100 X107 99.76 X156 100 X147 100 X2 99.75 X1 100 X3 97.42 X6			
Methylococcales Acidimicrobiales Anaerolineales KD4-96_X Rhizobiales KD4-96_X Rhizobiales	Crenotrichaceae Acidimicrobiaceae Anaerolineaceae KD4-96_XX Rhizobiales_Incertae_Sedis KD4-96_XX Bradyrhizobiaceae	Crenothrix CL500-29_marine_group Anaerolineaceae_X KD4-96_XXX Bauldia KD4-96_XXX Bradyrhizobium	Crenothrix_X CL500-29_marine_group_X Anaerolineaceae_XX KD4-96_XXXX Bauldia_X KD4-96_XXXX Bradyrhizobium_X	>AB753932.1.1453 >EF019527.1.1372 >EF589981.1.1374 >EF019369.1.1353 >FJ568560.1.651 >GQ420996.1.1029 >AB035490.1.1413	97.42 X6 100 X5 97.02 X4 99.75 X10 100 X8 100 X11 100 X29			
Corynebacteriales Gaiellales Nitrospirales Rhizobiales Rhizobiales Nitrosomonadales	Mycobacteriaceae Gaiellaceae Nitrospiraceae Xanthobacteraceae Hyphomicrobiaceae Nitrosomonadaceae	Mycobacterium Gaiella Nitrospira Pseudolabrys Hyphomicrobium Nitrosomonadaceae_X	Mycobacterium_X Gaiella_X Nitrospira_X Pseudolabrys_X Hyphomicrobium_X Nitrosomonadaceae_XX	>EF187357.1.1401 >JQ253435.1.801 >GQ397034.1.1506 >FJ592559.1.1346 >GQ263780.1.1426 >AB656545.1.851	99.75 X9 98.59 X12 100 X25 99.75 X15 100 X14 100 X24			
Blastocatellales Cytophagales Acidimicrobiales Acidimicrobiales ARKICE-90_X Anaerolineales	Blastocatellaceae_(Subgroup_4) Cytophagaceae Acidimicrobiaceae Acidimicrobiales_X ARKICE-90_XX Anaerolineaceae	RB41 Chryseolinea CL500-29_marine_group Acidimicrobiales_XX ARKICE-90_XXX Anaerolineaceae_X	RB41_X Chryseolinea_X CL500-29_marine_group_X Acidimicrobiales_XXX ARKICE-90_XXXX Anaerolineaceae_XX	>HQ598379.1.1515 >HQ911211.1.870 >EF019440.1.1370 >EU514548.1.844 >AM935045.1.1376 >FQ658747.1.1316	99.76 X19 99.76 X18 100 X17 100 X31 100 X16 98.51 X34			
Chthoniobacterales Desulfobacterales TRA3-20 Bacteroidetes_vadinHA17_X Methylococcales Myxococcales	DA101_soil_group Desulfobulbaceae TRA3-20_X Bacteroidetes_vadinHA17_XX Methylococcaceae BIrii41	DA101_soil_group_X [Desulfobacterium]_catecholicum_group TRA3-20_XX Bacteroidetes_vadinHA17_XXX Methylobacter BIrii41_X	DA101_soil_group_XX [Desulfobacterium]_catecholicum_group_X TRA3-20_XXX Bacteroidetes_vadinHA17_XXXX Methylobacter_X BIrii41_XX	>EF018302.1.1408 >KF424855.1.853 >AB658352.1.889 >JX981697.1.1043 >EU124849.1.925 >JN038942.1.1513	99.77 X50 99.3 X23 100 X38 99.53 X21 100 X28 98.83 X35			
Anaerolineales Acidimicrobiales Micrococcales Clostridiales Micrococcales Micrococcales	Anaerolineaceae Acidimicrobiales_X Intrasporangiaceae Gracilibacteraceae Intrasporangiaceae Intrasporangiaceae	Anaerolineaceae_X Acidimicrobiales_XX Oryzihumus Lutispora Intrasporangiaceae_X Oryzihumus	Anaerolineaceae_XX Acidimicrobiales_XXX Oryzihumus_X Lutispora_X Intrasporangiaceae_XX Oryzihumus_X	>KC607214.1.764 >KJ849553.1.600 >AM940531.1.819 >HM481373.1.1391 >CU919398.1.1343 >EF019959.1.1369	98.01 X76 99.75 X70 99.75 X42 98.77 X27 99.02 X41 100 X54			
Frankiales Kineosporiales Rhizobiales Solibacterales Chthoniobacterales Methylococcales	Nakamurellaceae Kineosporiaceae JG34-KF-361 Solibacteraceae_(Subgroup_3) DA101_soil_group Methylococcaceae	Nakamurella Kineosporia JG34-KF-361_X C_Solibacter DA101_soil_group_X Methylobacter	Nakamurella_X Kineosporia_rhamnosa_JCM_9954 JG34-KF-361_XX C_Solibacter_X DA101_soil_group_XX Methylobacter_X	>AM697044.1.1472 >BBID01001182.73.1567 >JQ384506.1.744 >EF664878.1.795 >HE861232.1.925 >EU124850.1.925	100 X67 100 X96 100 X36 100 X30 99.77 X93 99.53 X44			
Bacteroidetes_vadinHA17_X Rhizobiales SB-5_X Rhizobiales Solibacterales Rhizobiales	Bacteroidetes_vadinHA17_XX Rhizobiales_Incertae_Sedis SB-5_XX Hyphomicrobiaceae Solibacteraceae_(Subgroup_3) Xanthobacteraceae	Bacteroidetes_vadinHA17_XXX Rhizomicrobium SB-5_XXX Rhodoplanes C_Solibacter Pseudolabrys	Bacteroidetes_vadinHA17_XXXX Rhizomicrobium_X SB-5_XXXX Rhodoplanes_X C_Solibacter_X Pseudolabrys_X	>EU644258.1.1482 >AF498717.1.1397 >AB630505.1.1452 >EF516342.1.1408 >KF973879.1.667 >EF665573.1.807	99.76 X37 100 X128 100 X22 100 X75 100 X26 100 X39			
Acidimicrobiales Acidimicrobiales Chthoniobacterales Methanobacteriales Micrococcales Micrococcales	Acidimicrobiaceae Acidimicrobiales_X DA101_soil_group Methanobacteriaceae Intrasporangiaceae Intrasporangiaceae	CL500-29_marine_group Acidimicrobiales_XX DA101_soil_group_X Methanobrevibacter Oryzihumus Oryzihumus	CL500-29_marine_group_X Acidimicrobiales_XXX DA101_soil_group_XX Methanobrevibacter_X Oryzihumus_X Oryzihumus_X	>AB127668.1.529 >EU644173.1.1418 >HE861214.1.932 >JN098606.1.1027 >JX098605.1.1344 >EU978745.1.1103	100 X40 100 X33 99.3 X43 92.23 X52 99.51 X45 99.52 X63			
Holophagales Anaerolineales Clostridiales Gemmatimonadales Myxococcales C_Azambacteria_X	Holophagaceae Anaerolineaceae Family_XIII Gemmatimonadaceae BIrii41 C_Azambacteria_XX	Geothrix Anaerolinea Anaerovorax Gemmatimonadaceae_X BIrii41_X C_Azambacteria_XXX	Geothrix_X Anaerolinea_X Anaerovorax_X Gemmatimonadaceae_XX BIrii41_XX C_Azambacteria_XXXX	>FR732316.1.868 >GQ182779.1.1356 >EF034739.1.837 >AB657184.1.856 >AM991157.1.897 >KC922849.1.716	99.3 X72 93.05 X46 100 X60 99.5 X56 99.3 X159 99.26 X144			
Planctomycetales Opitutales Blastocatellales Saccharibacteria_XX Chloroplast_X Nitrosomonadales	Planctomycetaceae Opitutaceae Blastocatellaceae_(Subgroup_4) Saccharibacteria_XXX Chloroplast_XX Nitrosomonadaceae	Planctomycetaceae_X Opitutus RB41 Saccharibacteria_XXXX Chloroplast_XXX Nitrosomonadaceae_X	Planctomycetaceae_XX Opitutus_X RB41_X Saccharibacteria_XXXXX Chloroplast_XXXX Nitrosomonadaceae_XX	>AB657271.1.872 >AM158357.1.935 >FJ849538.1.1484 >FJ823169.1.982 >AB657488.1.850 >DQ884928.1.813	100 X57 99.77 X202 100 X138 98.01 X64 100 X90 99.3 X69			
Rhizobiales SC-I-84 SC-I-84 Sphingobacteriales Ignavibacteriales Nitrosomonadales	Rhizobiales_Incertae_Sedis SC-I-84_X SC-I-84_X Saprospiraceae BSV26 Nitrosomonadaceae	Bauldia SC-I-84_XX SC-I-84_XX Saprospiraceae_X BSV26_X Nitrosomonadaceae_X	Bauldia_X SC-I-84_XXX SC-I-84_XXX Saprospiraceae_XX BSV26_XX Nitrosomonadaceae_XX	>FJ592570.1.1136 >AB659315.1.876 >GQ287539.1.1059 >EU297642.1.825 >KC922989.1.740 >EF019847.1.1382	100 X48 100 X61 96.25 X108 100 X94 99.29 X51 98.83 X68			
Climacium_dendroides Gaiellales C_Nomurabacteria_X Acidimicrobiales Sphingomonadales Acidimicrobiales	Climacium_dendroides_X Gaiellales_X C_Nomurabacteria_XX Acidimicrobiales_X JG34-KF-161 Acidimicrobiales_X	Climacium_dendroides_XX Gaiellales_XX C_Nomurabacteria_XXX Acidimicrobiales_XX Sphingomonas_sp52NP12 Acidimicrobiales_XX	Climacium_dendroides_XXX Gaiellales_XXX C_Nomurabacteria_XXXX Acidimicrobiales_XXX Sphingomonas_sp52NP12_X Acidimicrobiales_XXX	>AF393588.1.1468 >FJ568791.1.670 >KC192541.1.799 >EF018450.1.1368 >AB242798.1.763 >FN548025.1.637	100 X80 99.77 X133 98.03 X55 100 X110 100 X189 100 X58			
Solibacterales KD4-96_X KD4-96_X Anaerolineales KD4-96_X Propionibacteriales	Solibacteraceae_(Subgroup_3) KD4-96_XX KD4-96_XX Anaerolineaceae KD4-96_XX Propionibacteriaceae	Bryobacter KD4-96_XXX KD4-96_XXX Anaerolineaceae_X KD4-96_XXX Propionibacteriaceae_X	Bryobacter_X KD4-96_XXXX KD4-96_XXXX Anaerolineaceae_XX KD4-96_XXXX Propionibacteriaceae_XX	>FJ166450.1.762 >FQ659713.1.1311 >JX859931.1.1101 >EF589981.1.1374 >EU644259.1.1454 >CU917889.1.1341	100 X89 100 X84 99.75 X66 96.77 X79 99.75 X65 97.79 X155			
Anaerolineales Desulfobacterales Acidimicrobiales unidentified Micrococcales Solirubrobacterales	Anaerolineaceae Desulfobulbaceae Acidimicrobiaceae unidentified Intrasporangiaceae Solirubrobacteraceae	Anaerolineaceae_X Desulfobulbaceae_X Acidimicrobiaceae_X unidentified Oryzihumus Solirubrobacter	Anaerolineaceae_XX Desulfobulbaceae_XX Acidimicrobiaceae_XX unidentified Oryzihumus_X Solirubrobacter_X	>FQ658747.1.1316 >EF034474.1.839 >EU715952.1.834 >JN098606.1.1027 >HE861242.1.925 >AM940921.1.992	89.55 X101 98.36 X47 99.5 X210 77.14 X73 99.75 X102 100 X59			
Acidimicrobiales Desulfobacterales Solirubrobacterales Chthoniobacterales Bacteroidetes_vadinHA17_X Methylococcales	Acidimicrobiaceae Desulfobacteraceae Elev-16S-1332 DA101_soil_group Bacteroidetes_vadinHA17_XX Crenotrichaceae	CL500–29_marine_group Desulfatirhabdium Elev–16S–1332_X DA101_soil_group_X Bacteroidetes_vadinHA17_XXX Crenothrix	CL500-29_marine_group_X Desulfatirhabdium_X Elev-16S-1332_XX DA101_soil_group_XX Bacteroidetes_vadinHA17_XXXX Crenothrix_X	>AB544029.1.552 >GU556333.1.591 >HQ119382.1.1516 >JQ368120.1.810 >AB630798.1.1448 >KC606445.1.790	100 X169 99.77 X130 100 X323 100 X124 100 X131 100 X180			
Propionibacteriales Caldisericales KD4–96_X Bacteroidetes_vadinHA17_X Subgroup_22_X Nitrosomonadales	Nocardioidaceae Caldisericaceae KD4-96_XX Bacteroidetes_vadinHA17_XX Subgroup_22_XX Nitrosomonadaceae	Nocardioides Caldisericum KD4-96_XXX Bacteroidetes_vadinHA17_XXX Subgroup_22_XXX Nitrosomonadaceae_X	Nocardioides_X Caldisericum_X KD4-96_XXXX Bacteroidetes_vadinHA17_XXXX Subgroup_22_XXXX Nitrosomonadaceae_XX	>HM340619.1.1346 >AB999433.1.889 >KF712627.1.1476 >AB660781.1.885 >AM909943.1.923 >EF073875.1.782	100 X91 98.36 X106 99 X71 100 X92 99.77 X85 99.53 X193			
Rhizobiales Micrococcales Acidimicrobiales Acidimicrobiales Gaiellales Desulfobacterales	JG34-KF-361 Microbacteriaceae Acidimicrobiaceae Acidimicrobiales_X Gaiellales_X Desulfobulbaceae	JG34-KF-361_X Lysinimonas CL500-29_marine_group Acidimicrobiales_XX Gaiellales_XX [Desulfobacterium]_catecholicum_group	JG34-KF-361_XX Lysinimonas_X CL500-29_marine_group_X Acidimicrobiales_XXX Gaiellales_XXX [Desulfobacterium]_catecholicum_group_X	>HE861245.1.923 >FJ568349.1.591 >EF019527.1.1372 >EF019692.1.1362 >JX171822.1.731 >KF424855.1.853	100 X165 100 X123 99.26 X105 100 X81 100 X185 99.53 X87			
Anaerolineales Rhizobiales Rhizobiales Micrococcales Cytophagales KD4-96_X	Anaerolineaceae Rhizobiales_Incertae_Sedis Xanthobacteraceae Intrasporangiaceae Cytophagaceae KD4-96_XX	Anaerolineaceae_X Bauldia Pseudolabrys Oryzihumus Cytophagaceae_X KD4-96_XXX	Anaerolineaceae_XX Bauldia_X Pseudolabrys_X Oryzihumus_X Cytophagaceae_XX KD4-96_XXXX	>JQ376947.1.778 >EF019286.1.1337 >HQ844552.1.1457 >EF034374.1.820 >JN868123.1.876 >JX967597.1.890	95.04 X229 100 X77 99.75 X122 99.76 X206 98.34 X117 100 X157			
Acidimicrobiales Desulfobacterales SBR2076_X Acidimicrobiales Anaerolineales Acidimicrobiales	lamiaceae Desulfobacteraceae SBR2076_XX Acidimicrobiales_X Anaerolineaceae Acidimicrobiaceae	lamia Desulfatirhabdium SBR2076_XXX Acidimicrobiales_XX Anaerolineaceae_X CL500-29_marine_group	lamia_X Desulfatirhabdium_X SBR2076_XXXX Acidimicrobiales_XXX Anaerolineaceae_XX CL500-29_marine_group_X	>KM841222.1.807	99.75 X262 100 X100 100 X120 100 X208 92.04 X115 100 X95			
Caulobacterales Rhizobiales Coriobacteriales Holophagales Rhizobiales Chthoniobacterales	Hyphomonadaceae Hyphomicrobiaceae Coriobacteriaceae Holophagaceae Bradyrhizobiaceae DA101_soil_group	Woodsholea Hyphomicrobiaceae_X Coriobacteriaceae_X Holophagaceae_X Bradyrhizobium DA101_soil_group_X	Woodsholea_X Hyphomicrobiaceae_XX Coriobacteriaceae_XX Holophagaceae_XX Bradyrhizobium_X DA101_soil_group_XX	>LN570440.1.1296 >HE860805.1.936 >FR732325.1.658 >FR732181.1.581 >EF613950.1.867 >HE861319.1.933	99.25 X86 100 X171 99 X204 99.53 X113 100 X99 97.18 X88			
Rhizobiales Rhizobiales Rhizobiales Rhizobiales Methylococcales SC-I-84 Ignavibacteriales	Hyphomicrobiaceae Rhizobiales_Incertae_Sedis Xanthobacteraceae Crenotrichaceae SC-I-84_X BSV26	Devosia Bauldia Pseudolabrys Crenothrix SC-I-84_XX BSV26_X	Devosia_X Bauldia_X Pseudolabrys_X Crenothrix_X SC-I-84_XXX BSV26_XX	>DQ648956.1.1282 >HQ462526.1.1224 >EF664828.1.832 >ABSP01000657.1821.3334 >EU869802.1.1030 >EU644265.1.1458	100 X230 100 X136 100 X74 98.12 X153 99.3 X142 100 X104			
Anaerolineales Coriobacteriales Planctomycetales Rhizobiales Sphingobacteriales Saccharibacteria_XX	Anaerolineaceae Coriobacteriaceae Planctomycetaceae Rhizobiales_Incertae_Sedis Chitinophagaceae Saccharibacteria_XXX	Anaerolineaceae_X Coriobacteriaceae_X Pir4_lineage Nordella Ferruginibacter Saccharibacteria_XXXX	Anaerolineaceae_XX Coriobacteriaceae_XX Pir4_lineage_X Nordella_X Ferruginibacter_X Saccharibacteria_XXXXX	>FQ658747.1.1316 >KJ955690.1.1475 >HM253616.1.1351 >GQ264032.1.1439 >FJ849217.1.1453 >JN833504.1.800	96.77 X226 99.25 X129 97.6 X191 100 X119 100 X121 100 X118			
Chloroplast_X KD4-96_X Burkholderiales OPB35_soil_group_X Corynebacteriales Sphingobacteriales	Chloroplast_XX KD4-96_XX Comamonadaceae OPB35_soil_group_XX Mycobacteriaceae Lentimicrobiaceae	Chloroplast_XXX KD4-96_XXX Comamonadaceae_X OPB35_soil_group_XXX Mycobacterium Lentimicrobiaceae_X	Chloroplast_XXXX KD4-96_XXXX Comamonadaceae_XX OPB35_soil_group_XXXX Mycobacterium_X Lentimicrobiaceae_XX	>JQ383731.1.746 >JX859930.1.1080 >KF071137.1.1352 >LC017385.1.591 >JF089640.1.1338 >AB659778.1.879	100 X109 100 X148 99.77 X252 96.24 X205 100 X158 100 X173			
Chthoniobacterales Clostridiales Xanthomonadales Planctomycetales Chthoniobacterales Parcubacteria_XX	DA101_soil_group Christensenellaceae Xanthomonadales_Incertae_Sedis Planctomycetaceae DA101_soil_group Parcubacteria_XXX	DA101_soil_group_X Christensenellaceae_R-7_group Xanthomonadales_Incertae_Sedis_X Pir4_lineage DA101_soil_group_X Parcubacteria_XXXX	DA101_soil_group_XX Christensenellaceae_R-7_group_X Xanthomonadales_Incertae_Sedis_XX Pir4_lineage_X DA101_soil_group_XX Parcubacteria_XXXXX	>JQ368584.1.808 >EF034664.1.835 >AJ532712.1.1305 >FN594626.1.859 >JQ368582.1.808 >FJ902567.1.983	99.53 X253 100 X375 99.77 X134 100 X172 99.77 X228 96.77 X132			
Acidimicrobiales Micrococcales Acidimicrobiales Opitutales Caulobacterales Rhizobiales	Acidimicrobiaceae Microbacteriaceae Acidimicrobiaceae Opitutaceae Hyphomonadaceae Hyphomicrobiaceae	CL500-29_marine_group Lysinimonas Acidimicrobiaceae_X Opitutus Woodsholea Hyphomicrobiaceae_X	CL500-29_marine_group_X Lysinimonas_X Acidimicrobiaceae_XX Opitutus_X Woodsholea_X Hyphomicrobiaceae_XX	>FN824835.1.1286 >AB116404.1.1151 >JF179403.1.1342 >FQ659926.1.1379 >KF275539.1.796 >GQ397031.1.1447	99.5 X194 100 X276 100 X127 100 X183 100 X111 100 X168			
Solirubrobacterales KD4-96_X Anaerolineales Planctomycetales Acidimicrobiales Opitutales	Conexibacteraceae KD4-96_XX Anaerolineaceae Planctomycetaceae Acidimicrobiales_X Opitutaceae	Conexibacter KD4-96_XXX Anaerolinea Pir4_lineage Acidimicrobiales_XX Opitutus	Conexibacter_X KD4-96_XXXX Anaerolinea_X Pir4_lineage_X Acidimicrobiales_XXX Opitutus_X	>EU223949.1.1514 >AB280370.1.890 >GQ183421.1.737 >FN659215.1.876 >KJ849553.1.600 >KF275247.1.812	99.06 X170 99.75 X140 95.04 X97 98.57 X126 99.26 X83 99.53 X160			
Anaerolineales Coriobacteriales Rhizobiales Solibacterales Nitrosomonadales Methylococcales	Anaerolineaceae Coriobacteriaceae A0839 Solibacteraceae_(Subgroup_3) Nitrosomonadaceae Methylococcaceae	Anaerolinea Coriobacteriaceae_X A0839_X C_Solibacter Nitrosomonadaceae_X Methylobacter	Anaerolinea_X Coriobacteriaceae_XX A0839_XX C_Solibacter_X Nitrosomonadaceae_XX Methylobacter_X	>JQ379870.1.762 >EF034953.1.762 >FJ568509.1.652 >EF074171.1.831 >EF665688.1.829 >HQ534094.1.871	98.76 X116 99.75 X114 100 X137 100 X269 100 X187 99.77 X199			
Micrococcales Sphingobacteriales Solirubrobacterales Planctomycetales Gitt-GS-136_X C_Nomurabacteria_X	Intrasporangiaceae Lentimicrobiaceae TM146 Planctomycetaceae Gitt-GS-136_XX C_Nomurabacteria_XX	Oryzihumus Lentimicrobiaceae_X TM146_X Planctomyces Gitt-GS-136_XXX C_Nomurabacteria_XXX	Oryzihumus_X Lentimicrobiaceae_XX TM146_XX Planctomyces_X Gitt-GS-136_XXXX C_Nomurabacteria_XXXX	>GQ396976.1.1501 >FJ644322.1.579 >JF177027.1.1366 >FJ437952.1.1478 >FR734356.1.888 >FR871629.1.928	100 X573 98.35 X267 100 X513 100 X174 99.75 X162 95.82 X197			
Chlorobiales Rhizobiales Nitrosomonadales C_Nomurabacteria_X Halanaerobiales Xanthomonadales	SJA-28 Rhizobiales_Incertae_Sedis Nitrosomonadaceae C_Nomurabacteria_XX ODP1230B8.23 Xanthomonadaceae	SJA-28_X Bauldia Nitrosomonadaceae_X C_Nomurabacteria_XXX ODP1230B8.23_X Rhodanobacter	SJA-28_XX Bauldia_X Nitrosomonadaceae_XX C_Nomurabacteria_XXXX ODP1230B8.23_XX Rhodanobacter_X	>GQ264497.1.1457 >JQ386800.1.741 >EF073875.1.782 >JX564295.1.905 >AB464941.1.1424 >AY044039.1.535	100 X355 99.25 X82 99.53 X203 95.58 X151 97.76 X112 100 X382			
Methylococcales Solirubrobacterales OPB35_soil_group_X Myxococcales Opitutales Clostridiales	Methylococcaceae Elev-16S-1332 OPB35_soil_group_XX BIrii41 Opitutaceae Eubacteriaceae	Methylococcaceae_X Elev-16S-1332_X OPB35_soil_group_XXX BIrii41_X Opitutus Acetobacterium	Methylococcaceae_XX Elev-16S-1332_XX OPB35_soil_group_XXXX BIrii41_XX Opitutus_X Acetobacterium_X	>HM216849.1.910 >GQ420860.1.1077 >JQ366889.1.815 >GQ096763.1.1363 >AB661129.1.881 >HE860825.1.932	100 X399 100 X146 98.83 X247 99.77 X518 100 X222 99.75 X150			
C_Azambacteria_X Desulfuromonadales Anaerolineales Solirubrobacterales C_Magasanikbacteria_X Gaiellales	C_Azambacteria_XX Geobacteraceae Anaerolineaceae TM146 C_Magasanikbacteria_XX Gaiellales_X	C_Azambacteria_XXX Geobacter Anaerolineaceae_X TM146_X C_Magasanikbacteria_XXX Gaiellales_XX	C_Azambacteria_XXXX Geobacter_X Anaerolineaceae_XX TM146_XX C_Magasanikbacteria_XXXX Gaiellales_XXX	>KP686645.1.1427 >HQ290498.1.832 >AY917513.1.780 >AB630587.1.1461 >JF420809.1.1071 >JQ369231.1.803	93.1 X475 100 X161 92.31 X325 100 X163 99.75 X261 100 X188			
Syntrophobacterales Anaerolineales Opitutales Micrococcales Bacteroidetes_vadinHA17_X Holophagales	Syntrophaceae Anaerolineaceae Opitutaceae Cellulomonadaceae Bacteroidetes_vadinHA17_XX Holophagaceae	Smithella Anaerolineaceae_X Opitutus Actinotalea Bacteroidetes_vadinHA17_XXX Geothrix	Smithella_X Anaerolineaceae_XX Opitutus_X Actinotalea_X Bacteroidetes_vadinHA17_XXXX Geothrix_X	>LN715709.1.897 >FJ568594.1.655 >JF208044.1.1377 >EF034399.1.801 >GQ183147.1.792 >GQ339218.1.917	99.77 X251 100 X195 98.83 X177 100 X141 100 X166 100 X258			
Micrococcales Sphingobacteriales Anaerolineales C_Nomurabacteria_X Desulfobacterales Xanthomonadales	Intrasporangiaceae Chitinophagaceae Anaerolineaceae C_Nomurabacteria_XX Desulfobacteraceae Xanthomonadales_Incertae_Sedis	Oryzihumus Terrimonas Anaerolineaceae_X C_Nomurabacteria_XXX Desulfatirhabdium Acidibacter	Oryzihumus_X Terrimonas_X Anaerolineaceae_XX C_Nomurabacteria_XXXX Desulfatirhabdium_X Acidibacter_X	>EU978745.1.1103 >AM940533.1.800 >EF589981.1.1374 >KF875608.1.862 >GU556333.1.591 >GQ457052.1.626	99.76 X215 99.76 X499 98.26 X200 97.3 X217 99.77 X164 100 X300			
SB-5_X Blastocatellales Rhizobiales Myxococcales Methylococcales Cytophagales	SB-5_XX Blastocatellaceae_(Subgroup_4) Rhizobiales_Incertae_Sedis BIrii41 Methylococcaceae Cytophagaceae	SB-5_XXX Aridibacter Bauldia BIrii41_X Methylobacter Cytophagaceae_X	SB-5_XXXX Aridibacter_X Bauldia_X BIrii41_XX Methylobacter_X Cytophagaceae_XX		99.29 X271 100 X279 98.76 X176 98.36 X266 99.77 X384 98.34 X326			
MB-A2-108_X Rhodocyclales Frankiales Opitutales Rhizobiales Anaerolineales	MB-A2-108_XX Rhodocyclaceae Nakamurellaceae Opitutaceae Bradyrhizobiaceae Anaerolineaceae	MB-A2-108_XXX C_Accumulibacter Nakamurella Opitutus Rhodopseudomonas Anaerolineaceae_X	MB-A2-108_XXXX C_Accumulibacter_X Nakamurella_X Opitutus_X Rhodopseudomonas_X Anaerolineaceae_XX	>GU202377.1.572 >HQ910626.1.883 >EF018802.1.1366 >AM945502.1.895 >HM312932.1.1308 >JN868224.1.867	100 X201 100 X580 99.75 X184 98.83 X381 99.75 X722 89.58 X393			
Propionibacteriales Cytophagales Gaiellales Rhizobiales Anaerolineales Subgroup_17_X	Nocardioidaceae Cytophagaceae Gaiellaceae A0839 Anaerolineaceae Subgroup_17_XX	Marmoricola Cytophagaceae_X Gaiella A0839_X Anaerolineaceae_X Subgroup_17_XXX	Marmoricola_spMIM116 Cytophagaceae_XX Gaiella_X A0839_XX Anaerolineaceae_XX Subgroup_17_XXXX	>AB686494.1.1250 >JN855503.1.1003 >AB659067.1.836 >AB196032.1.561 >EF589981.1.1374 >JF432892.1.1034	100 X181 100 X244 100 X167 100 X233 96.53 X213 100 X361			
Clostridiales Opitutales Solibacterales Parcubacteria_XX Chthoniobacterales Sphingobacteriales KD4-96_X	Family_XII Opitutaceae Solibacteraceae_(Subgroup_3) Parcubacteria_XXX DA101_soil_group Lentimicrobiaceae KD4-96_XX	Guggenheimella Opitutus C_Solibacter Parcubacteria_XXXX DA101_soil_group_X Lentimicrobiaceae_X KD4-96_XXX	Guggenheimella_X Opitutus_X Acidobacteria_bacterium_SCGC_AAA204-D14 Parcubacteria_XXXXX DA101_soil_group_XX Lentimicrobiaceae_XX KD4-96_XXXX	>KC606680.1.787 >LK024952.1.667 >JF488162.1.740 >LK025639.1.623 >EF019076.1.1385 >JF733664.1.870	99.75 X329 99.06 X698 99.5 X311 99.76 X280 98.12 X487 99.53 X219			
Anaerolineales Methylococcales Frankiales Acidimicrobiales Propionibacteriales Solirubrobacterales	Anaerolineaceae Crenotrichaceae Nakamurellaceae Acidimicrobiales_X Nocardioidaceae Elev-16S-1332	Anaerolineaceae_X Crenothrix Nakamurella Acidimicrobiales_XX Nocardioides Elev-16S-1332_X	Anaerolineaceae_XX Crenothrix_X Nakamurella_X Acidimicrobiales_XXX Nocardioides_X Elev-16S-1332_XX	>AB660450.1.836 >KC606918.1.776 >EU124843.1.925 >HQ899507.1.952 >FN548071.1.637 >AB206015.1.568 >GQ425912.1.1047	99 X354 98.76 X175 100 X524 99.51 X281 100 X196 100 X335 98.59 X264			
Opitutales KD4-96_X Parcubacteria_XX Sphingobacteriales Rhizobiales Subgroup_6_X	Opitutaceae KD4-96_XX Parcubacteria_XXX Chitinophagaceae Rhizobiales_Incertae_Sedis Subgroup_6_XX	Opitutus KD4-96_XXX Parcubacteria_XXXX Ferruginibacter Bauldia Subgroup_6_XXX	Opitutus_X KD4-96_XXXX Parcubacteria_XXXXX Ferruginibacter_X Bauldia_X Subgroup_6_XXXX	>FM956597.1.932 >AY922044.1.1353 >AB672277.1.1429 >EU499702.1.1409 >LN570377.1.1323 >GQ366413.1.1064	98.59 X314 100 X517 98.26 X403 100 X558 99.75 X486 99.77 X417			
Clostridiales Rhizobiales Anaerolineales Micromonosporales C_Nomurabacteria_X Planctomycetales	Clostridiaceae_1 Rhizobiales_Incertae_Sedis Anaerolineaceae Micromonosporaceae C_Nomurabacteria_XX Planctomycetaceae	Clostridium_sensu_stricto_12 Bauldia Anaerolineaceae_X Actinoplanes C_Nomurabacteria_XXX Planctomycetaceae_X	Clostridium_sensu_stricto_12_X Bauldia_X Anaerolineaceae_XX Actinoplanes_X C_Nomurabacteria_XXXX Planctomycetaceae_XX	>HG324550.1.850 >AY102320.1.1308 >AY917513.1.780 >AM158398.1.893 >FQ659552.1.1416	99.75 X182 100 X319 96.03 X220 100 X275 98.03 X483 97.14 X284			
Holophagales Myxococcales C_Nomurabacteria_X OPB41_X Rhizobiales Solibacterales	Holophagaceae BIrii41 C_Nomurabacteria_XX OPB41_XX Xanthobacteraceae Solibacteraceae_(Subgroup_3)	Geothrix BIrii41_X C_Nomurabacteria_XXX OPB41_XXX Pseudolabrys Paludibaculum	Geothrix_X BIrii41_XX C_Nomurabacteria_XXXX OPB41_XXXX Pseudolabrys_X Paludibaculum_X	>GQ390237.1.1464 >EF465081.1.850 >JX564295.1.905 >AM746257.1.829 >AB630411.1.1412 >AY647413.1.726	99.77 X308 99.53 X389 97.54 X509 99.77 X529 100 X152 100 X397			
Tepidisphaerales Acidimicrobiales Anaerolineales Myxococcales Rhizobiales Burkholderiales	Tepidisphaeraceae Acidimicrobiales_X Anaerolineaceae BIrii41 Rhizobiales_Incertae_Sedis Alcaligenaceae	Tepidisphaeraceae_X Acidimicrobiales_XX Anaerolineaceae_X BIrii41_X Bauldia Alcaligenaceae_X	Tepidisphaeraceae_XX Acidimicrobiales_XXX Anaerolineaceae_XX BIrii41_XX Bauldia_X Alcaligenaceae_XX	>JN795620.1.762 >GQ487882.1.849 >KC606918.1.776 >HQ664226.1.750 >AB630437.1.1406 >AJ863276.1.1047	97.76 X256 100 X278 99.26 X404 99.53 X983 100 X297 100 X223			
Cytophagales Cytophagales Methylococcales KD4–96_X Cytophagales Nitrosomonadales	Cytophagaceae Cytophagaceae Methylococcales_X KD4-96_XX Cytophagaceae Nitrosomonadaceae	Cytophagaceae_X Cytophagaceae_X Methylococcales_XX KD4-96_XXX Chryseolinea Nitrosomonadaceae_X	Cytophagaceae_XX Cytophagaceae_XX Methylococcales_XXX KD4-96_XXXX Chryseolinea_X Nitrosomonadaceae_XX	>FJ946608.1.1290 >JF703332.1.1426 >AM409902.1.902 >FR732107.1.852 >JF703557.1.1428 >GQ421097.1.1066	99.05 X366 100 X463 97.89 X485 99.25 X139 100 X388 99.06 X145			
Blastocatellales Syntrophobacterales Anaerolineales KD4-96_X Rhizobiales Oligoflexales	Blastocatellaceae_(Subgroup_4) Syntrophaceae Anaerolineaceae KD4-96_XX Xanthobacteraceae 0319-6G20	RB41 Syntrophaceae_X Anaerolineaceae_X KD4-96_XXX Pseudolabrys 0319-6G20_X	RB41_X Syntrophaceae_XX Anaerolineaceae_XX KD4-96_XXXX Pseudolabrys_X 0319-6G20_XX		99.53 X821 99.53 X402 98.51 X368 99.5 X238 99.5 X214 96.73 X1207			
Burkholderiales Bacteroidetes_vadinHA17_X TK10_X Bacteroidales C_Nomurabacteria_X MB-A2-108_X	Comamonadaceae Bacteroidetes_vadinHA17_XX TK10_XX Porphyromonadaceae C_Nomurabacteria_XX MB-A2-108_XX	Comamonadaceae_X Bacteroidetes_vadinHA17_XXX TK10_XXX Paludibacter C_Nomurabacteria_XXX MB-A2-108_XXX	Comamonadaceae_XX Bacteroidetes_vadinHA17_XXXX TK10_XXXX Paludibacter_X C_Nomurabacteria_XXXX MB-A2-108_XXXX	>AB660787.1.880 >AB205862.1.564 >GU471806.1.578 >JX564295.1.905 >EF220535.1.846	99.53 X571 100 X459 98.51 X207 99.29 X658 98.03 X316 100 X243			
Coriobacteriales Burkholderiales Ignavibacteriales Myxococcales S-BQ2-57_soil_group_X KD4-96_X	Coriobacteriaceae Comamonadaceae PHOS-HE36 Haliangiaceae S-BQ2-57_soil_group_XX KD4-96_XX	Coriobacteriaceae_X Variovorax PHOS-HE36_X Haliangium S-BQ2-57_soil_group_XXX KD4-96_XXX	Coriobacteriaceae_XX Variovorax_spSRS16 PHOS-HE36_XX Haliangium_X S-BQ2-57_soil_group_XXXX KD4-96_XXXX	>JN672055.1.1305 >HM269966.1.1321	98.76 X358 100 X334 99.53 X839 99.77 X391 100 X237 100 X650			
Ignavibacteriales Anaerolineales Subgroup_7 Xanthomonadales Thiotrichales Gaiellales	BSV26 Anaerolineaceae Subgroup_7_X Xanthomonadales_Incertae_Sedis Thiotrichaceae Gaiellales_X	BSV26_X Leptolinea Subgroup_7_XX Xanthomonadales_Incertae_Sedis_X Thiotrichaceae_X Gaiellales_XX	BSV26_XX Leptolinea_X Subgroup_7_XXX Xanthomonadales_Incertae_Sedis_XX Thiotrichaceae_XX Gaiellales_XXX	>KC922471.1.775 >EF460002.1.891 >EF663641.1.877 >LN571359.1.1369 >JQ793333.1.681 >AB656990.1.902	98.33 X324 93.8 X245 100 X198 98.13 X383 99.53 X405 98.83 X241			
Anaerolineales Dehalococcoidales Acidimicrobiales Desulfobacterales Myxococcales Planctomycetales	Anaerolineaceae Dehalococcoidaceae Acidimicrobiales_X Desulfobulbaceae Haliangiaceae Planctomycetaceae	Anaerolineaceae_X Dehalogenimonas Acidimicrobiales_XX Desulfobulbaceae_X Haliangium Pirellula	Anaerolineaceae_XX Dehalogenimonas_X Acidimicrobiales_XXX Desulfobulbaceae_XX Haliangium_X Pirellula_X	>EF662754.1.818 >JX948506.1.844	100 X315 100 X221 100 X135 99.53 X527 98.6 X468 100 X273			
Nitrosomonadales Chlamydiales Gaiellales Anaerolineales Campylobacterales Opitutales Planctomycetales	Nitrosomonadaceae Parachlamydiaceae Gaiellales_X Anaerolineaceae Helicobacteraceae Opitutaceae Planctomycetaceae	Nitrosomonadaceae_X C_Protochlamydia Gaiellales_XX Anaerolineaceae_X Sulfuricurvum Opitutus Pir4_lineage	Nitrosomonadaceae_XX C_Protochlamydia_X Gaiellales_XXX Anaerolineaceae_XX Sulfuricurvum_X Opitutus_X Pir4_lineage_X	>EF073875.1.782 >AB518086.1.587 >GQ425880.1.1043 >KC606888.1.778 >AM181817.1.894 >HM069087.1.1508 >FN594691.1.1482	99.53 X212 92.72 X301 99.53 X242 99.26 X380 100 X741 99.77 X313 99.76 X379			
Planctomycetales Rhodospirillales Nitrosomonadales Chthoniobacterales Rhizobiales Cytophagales Saccharibacteria_XX	Planctomycetaceae Rhodospirillaceae Nitrosomonadaceae DA101_soil_group Hyphomicrobiaceae Cytophagaceae Saccharibacteria_XXX	Pir4_lineage Rhodospirillaceae_X Nitrosomonadaceae_X DA101_soil_group_X Hyphomicrobium Cytophagaceae_X Saccharibacteria_XXXX	Pir4_lineage_X Rhodospirillaceae_XX Nitrosomonadaceae_XX DA101_soil_group_XX Hyphomicrobium_X Cytophagaceae_XX Saccharibacteria_XXXXX	>FN594691.1.1482 >KM139685.1.562 >KC922842.1.728 >EU861862.1.1524 >HM921151.1.1276 >JQ373576.1.792 >AF145815.1.1484	99.76 X379 94.03 X522 99.53 X274 100 X216 100 X656 100 X596 94.04 X254			
Opitutales Anaerolineales Myxococcales Cytophagales Solirubrobacterales Rhizobiales	Opitutaceae Anaerolineaceae Haliangiaceae Cytophagaceae TM146 Xanthobacteraceae	Alterococcus Leptolinea Haliangium Chryseolinea TM146_X Pseudolabrys	Alterococcus_X Leptolinea_X Haliangium_X Chryseolinea_X TM146_XX Pseudolabrys_X	>FJ801187.1.1525 >KC607104.1.769 >EF664306.1.824 >FJ568533.1.604 >KC605643.1.796 >FJ807446.1.839	97.89 X488 92.06 X236 99.77 X733 99.29 X303 100 X149 100 X343			
Rhizobiales Nitrosomonadales Corynebacteriales Opitutales Sphingobacteriales KD4–96_X Planctomycetales	Xanthobacteraceae Nitrosomonadaceae Nocardiaceae Opitutaceae Chitinophagaceae KD4-96_XX Planctomycetaceae	Pseudolabrys Nitrosomonadaceae_X Rhodococcus Opitutus Terrimonas KD4-96_XXX Planctomycetaceae_X	Pseudolabrys_X Nitrosomonadaceae_XX Rhodococcus_sp2216.25.15 Opitutus_X Terrimonas_X KD4-96_XXXX Planctomycetaceae_XX	>EF664309.1.832 >AB094463.1.1434 >GU127816.1.1486	100 X343 100 X510 99.75 X386 99.3 X356 99.05 X432 99.75 X289 99.76 X294			
Micromonosporales Myxococcales Bacteroidetes_vadinHA17_X Corynebacteriales Flavobacteriales Saccharibacteria_XX	Micromonosporaceae Haliangiaceae Bacteroidetes_vadinHA17_XX Mycobacteriaceae Flavobacteriaceae Saccharibacteria_XXX	Dactylosporangium Haliangium Bacteroidetes_vadinHA17_XXX Mycobacterium Flavobacterium Saccharibacteria_XXXX	Dactylosporangium_maewongense Haliangium_X Bacteroidetes_vadinHA17_XXXX Mycobacterium_X Flavobacterium_saccharophilum Saccharibacteria_XXXXX	>AB495209.1.1468 >EF664306.1.824 >EF460089.1.912 >EF516107.1.1437 >AB473208.1.1439 >FJ568620.1.654	100 X292 99.77 X299 98.58 X797 100 X282 100 X430 99 X607			
Saccharibacteria_XX Parcubacteria_XX Myxococcales OPB35_soil_group_X SBR2076_X MSBL3_X	Saccharibacteria_XXX Parcubacteria_XXX Haliangiaceae OPB35_soil_group_XX SBR2076_XX MSBL3_XX	Saccharibacteria_XXXX Parcubacteria_XXXX Haliangium OPB35_soil_group_XXX SBR2076_XXX MSBL3_XXX	Saccharibacteria_XXXXX Parcubacteria_XXXXX Haliangium_X OPB35_soil_group_XXXX SBR2076_XXXX MSBL3_XXXX	>JN634215.1.910 >KC607326.1.746 >AB658953.1.905 >JX981686.1.1060 >JX079283.1.801 >JN447786.1.1465	96.77 X1454 99.27 X1028 99.07 X484 99.77 X413 94.29 X225 92.97 X746			
Sphingobacteriales Burkholderiales Rickettsiales Rhodobacterales Myxococcales Clostridiales	Chitinophagaceae Comamonadaceae Mitochondria Rhodobacteraceae Haliangiaceae Christensenellaceae	Chitinophagaceae_X Ramlibacter Anomodon_rugelii Rhodobacteraceae_X Haliangium Christensenellaceae_R-7_group	Chitinophagaceae_XX Ramlibacter_X Anomodon_rugelii_X Rhodobacteraceae_XX Haliangium_X Christensenellaceae_R-7_group_X	>EF020181.1.1389 >AB487384.1.1371 >JF973314.31281.33002 >AB529676.1.709 >EF515931.1.1464 >KF803011.1.800	99.29 X569 100 X317 100 X489 100 X505 99.06 X773 100 X304			
Cytophagales Anaerolineales Micrococcales Micrococcales Gaiellales Rhizobiales Clostridiales	Cytophagaceae Anaerolineaceae Demequinaceae Intrasporangiaceae Gaiellales_X Rhizobiales_Incertae_Sedis Caldicoprobacteraceae	Cytophagaceae_X Anaerolineaceae_X Demequina Oryzihumus Gaiellales_XX Bauldia Caldicoprobacter	Cytophagaceae_XX Anaerolineaceae_XX Demequina_X Oryzihumus_X Gaiellales_XXX Bauldia_X Caldicoprobacter_X	>KF973876.1.592 >KC607214.1.764 >EF034863.1.828 >EF034317.1.810 >AB659064.1.899 >GU983338.1.1354 >EF034782.1.825	100 X555 98.26 X1077 99.75 X235 100 X611 100 X143 99.75 X364 100 X550			
Clostridiales KD4-96_X Acidimicrobiales Propionibacteriales Chromatiales SBR2076_X Raphanus_sativus_(radish)	Caldicoprobacteraceae KD4-96_XX Acidimicrobiales_X Propionibacteriaceae Chromatiaceae SBR2076_XX Raphanus_sativus_(radish)_X	Caldicoprobacter KD4-96_XXX Acidimicrobiales_XX Propionibacteriaceae_X Thiobaca SBR2076_XXX Raphanus_sativus_(radish)_XX	Caldicoprobacter_X KD4-96_XXXX Acidimicrobiales_XXX Propionibacteriaceae_XX Thiobaca_X SBR2076_XXXX Raphanus_sativus_(radish)_XXX	>EF034782.1.825 >GQ366439.1.1029 >GU202318.1.1167 >JX405969.1.894 >HM128102.1.1453 >KJ465959.1.1356 >AC255230.106080.107549	100 X550 99.25 X211 99.75 X257 98.53 X270 96.96 X1705 90.57 X260 100 X394			
Raphanus_sativus_(radish) Fibrobacterales Anaerolineales Spirochaetales Desulfuromonadales Acidimicrobiales Anaerolineales	Raphanus_sativus_(radish)_X Fibrobacteraceae Anaerolineaceae Spirochaetaceae Geobacteraceae Acidimicrobiales_X Anaerolineaceae	Raphanus_sativus_(radish)_XX Fibrobacteraceae_X Anaerolineaceae_X Spirochaeta_2 Geobacter Acidimicrobiales_XX Anaerolineaceae_X	Raphanus_sativus_(radish)_XXX Fibrobacteraceae_XX Anaerolineaceae_XX Spirochaeta_2_X Geobacter_X Acidimicrobiales_XXX Anaerolineaceae_XX	>AC255230.106080.107549	100 X394 98.81 X1086 95.29 X464 96.02 X764 100 X639 100 X192 97.02 X369			
Anaerolineales Solibacterales Anaerolineales Solibacterales OPB35_soil_group_X Sphingobacteriales Methylococcales	Anaerolineaceae Solibacteraceae_(Subgroup_3) Anaerolineaceae Solibacteraceae_(Subgroup_3) OPB35_soil_group_XX Lentimicrobiaceae Crenotrichaceae	Anaerolineaceae_X Bryobacter Anaerolineaceae_X C_Solibacter OPB35_soil_group_XXX Lentimicrobiaceae_X Crenothrix	Anaerolineaceae_XX Bryobacter_X Anaerolineaceae_XX C_Solibacter_X OPB35_soil_group_XXXX Lentimicrobiaceae_XX Crenothrix_X	>EF589981.1.1374 >AB657937.1.853 >KC606918.1.776 >AB300097.1.1295 >JX491602.1.589 >AB240492.1.1486 >GQ421019.1.1067	97.02 X369 100 X286 100 X240 99.75 X673 99.77 X456 99.53 X623 99.53 X1069			
Rhizobiales Anaerolineales SAR11_clade WCHB1-32_X Anaerolineales Micrococcales	Rhizobiales_X Anaerolineaceae Surface_1 WCHB1-32_XX Anaerolineaceae Intrasporangiaceae	Rhizobiales_XX Anaerolineaceae_X Surface_1_X WCHB1-32_XXX Anaerolineaceae_X Oryzihumus	Rhizobiales_XXX Anaerolineaceae_XX Surface_1_XX WCHB1-32_XXXX Anaerolineaceae_XX Oryzihumus_X	>AB630426.1.1409 >KC606918.1.776 >FR684008.1.1435 >EU644161.1.1400 >FJ645708.1.1377 >JX859921.1.1080	100 X179 99.26 X295 99.75 X298 99.29 X330 92.54 X557 99.05 X287			
S-BQ2-57_soil_group_X KD4-96_X Rhizobiales Clostridiales Parcubacteria_XX Solirubrobacterales	S-BQ2-57_soil_group_XX KD4-96_XX Hyphomicrobiaceae Christensenellaceae Parcubacteria_XXX Elev-16S-1332	S-BQ2-57_soil_group_XXX KD4-96_XXX Rhodomicrobium Christensenellaceae_R-7_group Parcubacteria_XXXX Elev-16S-1332_X	S-BQ2-57_soil_group_XXXX KD4-96_XXXX Rhodomicrobium_X Christensenellaceae_R-7_group_X Parcubacteria_XXXXX Elev-16S-1332_XX	>HE861309.1.929 >GQ366439.1.1029 >AB630711.1.1406 >FJ810722.1.781 >JF301012.1.583 >GQ420860.1.1077	98.36 X283 99.25 X594 100 X348 100 X506 96.81 X1173 99.53 X259			
Xanthomonadales S-BQ2-57_soil_group_X KD4-96_X Planctomycetales Anaerolineales KD4-96_X	Xanthomonadales_Incertae_Sedis S-BQ2-57_soil_group_XX KD4-96_XX Planctomycetaceae Anaerolineaceae KD4-96_XX	Acidibacter S-BQ2-57_soil_group_XXX KD4-96_XXX Planctomycetaceae_X Anaerolinea KD4-96_XXX	Acidibacter_X S-BQ2-57_soil_group_XXXX KD4-96_XXXX Planctomycetaceae_XX Anaerolinea_X KD4-96_XXXX	>JQ371754.1.794 >JN002848.1.1027 >FQ659410.1.1319 >HE614843.1.845 >GQ182779.1.1356 >KM170044.1.600	99.77 X734 97.42 X651 99.5 X340 95.99 X544 93.05 X465 99.5 X378			
Anaerolineales Nitrosomonadales Propionibacteriales Bacteroidetes_vadinHA17_X Parcubacteria_XX Subgroup_10	Anaerolineaceae Nitrosomonadaceae Nocardioidaceae Bacteroidetes_vadinHA17_XX Parcubacteria_XXX ABS-19 Crenotrichaceae	Anaerolineaceae_X Nitrosomonadaceae_X Nocardioides Bacteroidetes_vadinHA17_XXX Parcubacteria_XXXX ABS-19_X Crenothrix	Anaerolineaceae_XX Nitrosomonadaceae_XX Nocardioides_X Bacteroidetes_vadinHA17_XXXX Parcubacteria_XXXXX ABS-19_XX Crenothrix X	>DQ110032.1.898 >AB252927.1.1503 >KM130505.1.581 >EF460089.1.912 >JQ380380.1.759 >GQ420896.1.1080	95.29 X694 100 X545 99.52 X705 98.82 X450 98.04 X1760 100 X539			
Methylococcales JG30-KF-CM45 Anaerolineales Rhizobiales Myxococcales Hydrogenophilales	Crenotrichaceae JG30-KF-CM45_X Anaerolineaceae Xanthobacteraceae BIrii41 Hydrogenophilaceae	Crenothrix JG30-KF-CM45_XX Anaerolineaceae_X Variibacter BIrii41_X Thiobacillus	Crenothrix_X JG30-KF-CM45_XXX Anaerolineaceae_XX Variibacter_X BIrii41_XX Thiobacillus_X	>JQ793373.1.628 >EF018623.1.1351 >EF507991.1.779 >AJ534617.1.1232 >EF219815.1.838 >EF667637.1.916	99.77 X736 99.75 X186 95.04 X209 99.5 X250 100 X581 95.55 X426			
Burkholderiales Cellvibrionales Gemmatimonadales Planctomycetales Cytophagales Nitrosomonadales Sphingobacteriales	Comamonadaceae Porticoccaceae Gemmatimonadaceae Planctomycetaceae Cytophagaceae Nitrosomonadaceae Sphingobacteriales_X	Rhizobacter C1-B045 Gemmatimonadaceae_X Pir4_lineage Cytophagaceae_X Nitrosomonadaceae_X Sphingobacteriales_XX	Rhizobacter_X C1-B045_X Gemmatimonadaceae_XX Pir4_lineage_X Cytophagaceae_XX Nitrosomonadaceae_XX Sphingobacteriales_XXX	>AB989863.1.1453 >JN051298.1.878 >HM445332.1.1473 >AB630875.1.1457 >FM201023.1.887 >CU921875.1.1356 >HE861044.1.948	100 X852 100 X772 99.26 X429 100 X305 100 X598 100 X443 99.05 X585			
Sphingobacteriales C_Azambacteria_X Gemmatimonadales Nitrosomonadales Chthoniobacterales SJA-15_X KD4-96_X	Sphingobacteriales_X C_Azambacteria_XX Gemmatimonadaceae Nitrosomonadaceae DA101_soil_group SJA-15_XX KD4-96_XX	Sphingobacteriales_XX C_Azambacteria_XXX Gemmatimonas Nitrosomonadaceae_X DA101_soil_group_X SJA-15_XXX KD4-96_XXX	Sphingobacteriales_XXX C_Azambacteria_XXXX Gemmatimonas_X Nitrosomonadaceae_XX DA101_soil_group_XX SJA-15_XXXX KD4-96_XXXX	>HE861044.1.948 >HM486201.1.870 >JN976793.1.897 >AB657626.1.886 >JF833587.1.1463 >EF393252.1.886	99.05 X585 98.77 X3034 98.09 X480 100 X444 99.3 X884 98.26 X288			
KD4-96_X Anaerolineales Anaerolineales Rhizobiales Micrococcales Selenomonadales Rhizobiales	KD4-96_XX Anaerolineaceae Anaerolineaceae Bradyrhizobiaceae Intrasporangiaceae Veillonellaceae Rhizobiales_Incertae_Sedis	KD4-96_XXX Anaerolineaceae_X Bellilinea Bradyrhizobiaceae_X Tetrasphaera Veillonellaceae_X Rhizomicrobium	KD4-96_XXXX Anaerolineaceae_XX Bellilinea_X Bradyrhizobiaceae_XX Tetrasphaera_X Veillonellaceae_XX Rhizomicrobium_X	>KF366547.1.1037 >EF589981.1.1374 >KR476592.1.767 >HE860789.1.895 >GQ369174.1.661 >AB999362.1.881 >AY921822.1.1339	98.26 X272 97.52 X255 94.04 X341 99.75 X231 99.75 X738 99.06 X855 100 X371			
Rhizobiales Bacteroidetes_vadinHA17_X Myxococcales Micrococcales Rhizobiales Bacteroidetes_vadinHA17_X Clostridiales	Rhizobiales_Incertae_Sedis Bacteroidetes_vadinHA17_XX BIrii41 Cellulomonadaceae JG34-KF-361 Bacteroidetes_vadinHA17_XX Eubacteriaceae	Rhizomicrobium Bacteroidetes_vadinHA17_XXX BIrii41_X Actinotalea JG34-KF-361_X Bacteroidetes_vadinHA17_XXX Acetobacterium	Rhizomicrobium_X Bacteroidetes_vadinHA17_XXXX BIrii41_XX Actinotalea_X JG34-KF-361_XX Bacteroidetes_vadinHA17_XXXX Acetobacterium_X	>AY921822.1.1339	100 X371 99.29 X495 95.07 X1453 99.75 X590 100 X447 99.05 X449 99.26 X344			
Clostridiales Chromatiales Micrococcales Saccharibacteria_XX Bdellovibrionales Nitrosomonadales Cytophagales	Eubacteriaceae Chromatiaceae Intrasporangiaceae Saccharibacteria_XXX Bacteriovoracaceae Nitrosomonadaceae Cytophagaceae	Acetobacterium Chromatiaceae_X Oryzihumus Saccharibacteria_XXXX Peredibacter Nitrosomonadaceae_X Cytophagaceae_X	Acetobacterium_X Chromatiaceae_XX Oryzihumus_X Saccharibacteria_XXXXX Bdellovibrio_spSD2GS Nitrosomonadaceae_XX Cytophagaceae_XX		99.26 X344 96.49 X1424 100 X861 97.27 X637 94.16 X1052 99.77 X178 97.62 X729			
Cytophagales Solirubrobacterales Subgroup_6_X C_Azambacteria_X Methylococcales Opitutales Tepidisphaerales	Cytophagaceae Elev-16S-1332 Subgroup_6_XX C_Azambacteria_XX Methylococcaceae Opitutaceae Tepidisphaeraceae	Cytophagaceae_X Elev-16S-1332_X Subgroup_6_XXX C_Azambacteria_XXX Methylobacter Opitutus Tepidisphaeraceae_X	Elev-16S-1332_XX Subgroup_6_XXXX C_Azambacteria_XXXX Methylobacter_X Opitutus_X Tepidisphaeraceae_XX	>KP724747.1.1053 >HQ197609.1.830 >EU298888.1.834 >EF072692.1.875 >EU124841.1.928 >HG324731.1.590 >EF665263.1.813	97.62 X729 99.06 X351 99.53 X732 94.33 X661 99.77 X657 98.36 X532 99.5 X312			
Xanthomonadales Blastocatellales Clostridiales Nitrosomonadales Opitutales Cytophagales	Xanthomonadales_Incertae_Sedis Blastocatellaceae_(Subgroup_4) Peptostreptococcaceae Nitrosomonadaceae Opitutaceae Cytophagaceae	Steroidobacter RB41 Peptoclostridium Nitrosomonadaceae_X Opitutus Cytophagaceae_X	Steroidobacter_X RB41_X Peptoclostridium_X Nitrosomonadaceae_XX Opitutus_X Cytophagaceae_XX	>AM158345.1.915 >EF664930.1.821 >AB330612.1.687 >DQ450770.1.1367 >EF516172.1.1475 >KC922986.1.700	99.3 X791 99.76 X1019 100 X1013 99.77 X477 100 X1029 99.05 X415			
Sphingobacteriales C_Nomurabacteria_X Chlamydiales Micrococcales C_Nomurabacteria_X Clostridiales	Sphingobacteriales_X C_Nomurabacteria_XX Simkaniaceae Intrasporangiaceae C_Nomurabacteria_XX Caldicoprobacteraceae	Sphingobacteriales_XX C_Nomurabacteria_XXX Simkaniaceae_X Oryzihumus C_Nomurabacteria_XXX Caldicoprobacter	Sphingobacteriales_XXX C_Nomurabacteria_XXXX Simkaniaceae_XX Oryzihumus_X C_Nomurabacteria_XXXX Caldicoprobacter_X	>JF341433.1.790 >FR871629.1.928 >DQ903988.1.1373 >EU978745.1.1103 >JX564295.1.905 >EF034782.1.825	100 X600 96.56 X939 97.89 X460 99.76 X385 97.3 X744 99.51 X564			
Caldilineales MB-A2-108_X Bacteroidales Frankiales Bacillales Opitutales	Caldilineaceae MB-A2-108_XX Prolixibacteraceae Frankiales_X Planococcaceae Opitutaceae	Caldilineaceae_X MB-A2-108_XXX BSV13 Frankiales_XX Sporosarcina Opitutus	Caldilineaceae_XX MB-A2-108_XXXX BSV13_X Frankiales_XXX Sporosarcina_psychrophila Opitutus_X	>CU921400.1.1327 >HQ664389.1.752 >FQ659581.1.1347 >JX171950.1.809 >AB680853.1.1477 >EF516121.1.1449	98.26 X353 100 X452 99.53 X438 98.28 X291 100 X360 99.77 X787			
Corynebacteriales Kineosporiales Anaerolineales KD4-96_X Bacteroidetes_vadinHA17_X C_Nomurabacteria_X Coriobacteriales	Mycobacteriaceae Kineosporiaceae Anaerolineaceae KD4-96_XX Bacteroidetes_vadinHA17_XX C_Nomurabacteria_XX Coriobacteriaceae	Mycobacterium Kineosporia Leptolinea KD4-96_XXX Bacteroidetes_vadinHA17_XXX C_Nomurabacteria_XXX Coriobacteriaceae_X	Mycobacterium_X Kineosporia_X Leptolinea_X KD4-96_XXXX Bacteroidetes_vadinHA17_XXXX C_Nomurabacteria_XXXX Coriobacteriaceae_XX	>AM934740.1.1337 >FN548028.1.637 >KC607104.1.769 >JX859933.1.1080 >KF973906.1.688 >FJ482182.1.1476 >FN824875.1.1267	100 X977 99.51 X1070 93.55 X473 100 X634 99.53 X420 96.81 X938 99.5 X362			
	-	-			99.5 X362 99 X572 100 X437 100 X234	38+07 26+08		
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