Supplemental Table 1. Classification of sequence library clones according to the Ribosomal Database Project’s Classifier tool (accessed 24 May 2010). The RDP Classifier does not assign identities beyond the genus level. CT = conventional tillage, NT = no-till, CW = continuous wheat, RW = sorghum-wheat-soybean rotation.

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | | | Classification | | | | | | | | | | |
| Phylum | Class | | Order | | Family | | | | Genus | |
| CG21 A01 | | CT-CW | TM7 | | |  | |  | |  | | | | TM7 *genera incertae sedis* | |
| CG21 A02 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp17 | |  | |  | | | | Gp17 | |
| CG21 A03 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp4 | |  | |  | | | | Gp4 | |
| CG21 A04 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp6 | |  | |  | | | | Gp6 | |
| CG21 A05 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp6 | |  | |  | | | | Gp6 | |
| CG21 A06 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp4 | |  | |  | | | | Gp4 | |
| CG21 A07 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp4 | |  | |  | | | | Gp4 | |
| CG21 A08 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp4 | |  | |  | | | | Gp4 | |
| CG21 A09 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp7 | |  | |  | | | | Gp7 | |
| CG21 A10 | | CT-CW | *Proteobacteria* | | | γ-*Proteobacteria* | | *Xanthomonadales* | | *Xanthomonadaceae* | | | | *Luteimonas* | |
| CG21 A11 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp4 | |  | |  | | | | Gp4 | |
| CG21 A12 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp4 | |  | |  | | | | Gp4 | |
| CG21 B02 | | CT-CW | *Proteobacteria* | | | α-*Proteobacteria* | | *Rhizobiales* | | *Bradyrhizobiaceae* | | | | *Bosea* | |
| CG21 B03 | | CT-CW | *Proteobacteria* | | | β-*Proteobacteria* | | *Burkholderiales* | | *Burkholderiales incertae sedis* | | | | I*nhella* | |
| CG21 B04 | | CT-CW | Unclassified bacteria | | | --- | | --- | | --- | | | | --- | |
| CG21 B05 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp6 | |  | |  | | | | Gp6 | |
| CG21 B06 | | CT-CW | *Actinobacteria* | | | *Actinobacteria* | | *Actinomycetales* | | *Propionibacteriaceae* | | | | *Microlunatus* | |
| CG21 B07 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp7 | |  | |  | | | | Gp7 | |
| CG21 B08 | | CT-CW | *Proteobacteria* | | | β-*Proteobacteria* | | *Burkholderiales* | | *Burkholderiales incertae sedis* | | | | *Methylibium* | |
| CG21 B09 | | CT-CW | *Planctomycetes* | | | *Planctomycetacia* | | *Planctomycetales* | | *Planctomycetaceae* | | | | *Gemmata* | |
| CG21 B10 | | CT-CW | *Cyanobacteria* | | | *Cyanobacteria* | | Family IV | |  | | | | GpIV | |
| CG21 B11 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp4 | |  | |  | | | | Gp4 | |
| CG21 B12 | | CT-CW | *Acidobacteria* | | | *Acidobacteria* Gp3 | |  | |  | | | | Gp3 | |
| CG21 C01 | | CT-CW | *Proteobacteria* | | | α-*Proteobacteria* | | α-*Proteobacteria incertae sedis* | | | |  | | *Elioraea* | |
| CG21 C02 | | CT-CW | Unclassified bacteria | | | --- | | --- | | --- | | | | --- | |
| CG21 C03 | | CT-CW | *Bacteroidetes* | | | *Sphingobacteria* | | *Sphingobacteria*les | | | *Chitinophagaceae* | | | *Flavisolibacter* | |
| CG21 C04 | | CT-CW | *Firmicutes* | | | *Bacilli* | | *Bacillales* | | | *Bacillaceae* | | | *Bacillus* | |
| CG21 C05 | | CT-CW | *Proteobacteria* | | | α-*Proteobacteria* | | *Sphingomonadales* | | | *Erythrobacteraceae* | | | *Porphyrobacter* | |
| CG21 C06 | | CT-CW | *Bacteroidetes* | | | *Sphingobacteria* | | *Sphingobacteria*les | | | *Chitinophagaceae* | | | *Terrimonas* | |
| CG21 C08 | | CT-CW | *Proteobacteria* | | | δ-*Proteobacteria* | | *Myxococcales* | | | *Polyangiaceae* | | | *Sorangium* | |
| CG21 C09 | | CT-CW | *Gemmatimonadetes* | | | *Gemmatimonadetes* | | *Gemmatimonadales* | | | *Gemmatimonadaceae* | | | *Gemmatimonas* | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | | |
| Phylum | Class | Order | Family | | | | Genus |
| CG21 C10 | CT-CW | WS3 |  |  |  | | WS3 *genera incertae sedis* | | |
| CG21 C11 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | | | Gp3 |
| CG21 C12 | CT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | | *Zavarzinella* |
| CG21 D01 | CT-CW | *Verrucomicrobia* | Subdivision 3 |  |  | Subdivision 3 *genera incertae sedis* | | | |
| CG21 D02 | CT-CW | *Actinobacteria* | *Actinobacteria* | *Acidimicrobiales* | *Iamiaceae* | | | | *Iamia* |
| CG21 D03 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 |
| CG21 D04 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 |
| CG21 D06 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 |
| CG21 D07 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | | Gp7 |
| CG21 D08 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 |
| CG21 D09 | CT-CW | OP10 |  |  |  | | | OP10 *genera incertae sedis* | |
| CG21 D10 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 |
| CG21 D11 | CT-CW | *Cyanobacteria* | *Cyanobacteria* | Family I |  | | | | GpI |
| CG21 D12 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 |
| CG21 E01 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | | | | *Schlegelella* |
| CG21 E02 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | | Gp7 |
| CG21 E04 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 |
| CG21 E05 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 |
| CG21 E06 | CT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Enterobacteriales* | *Enterobacteriaceae* | | | | *Enterobacter* |
| CG21 E07 | CT-CW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | | | | *Bacillus* |
| CG21 E08 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | | *Methylibium* |
| CG21 E10 | CT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | | *Zavarzinella* |
| CG21 E11 | CT-CW | *Cyanobacteria* | *Cyanobacteria* | FamilyXIII |  | | | | GpXIII |
| CG21 E12 | CT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | | *Filimonas* |
| CG21 F01 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 |
| CG21 F03 | CT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Thiotrichales* | *Thiotrichaceae* | | | | *Beggiatoa* |
| CG21 F04 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | | Gp7 |
| CG21 F05 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | | Gp7 |
| CG21 F06 | CT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Bradyrhizobiaceae* | | | | *Bosea* |
| CG21 F07 | CT-CW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | | | | *Bacillus* |
| CG21 F08 | CT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | | *Flavisolibacter* |
| CG21 F09 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 |
| CG21 F10 | CT-CW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Conexibacteraceae* | | | | *Conexibacter* |
| CG21 F11 | CT-CW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | | | | *Bacillus* |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | |
| Phylum | Class | Order | Family | Genus |
| CG21 F12 | CT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Phaselicystidaceae* | *Phaselicystis* |
| CG21 G01 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 |
| CG21 G02 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 |
| CG21 G03 | CT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhodospirillales* | *Acetobacteraceae* | *Granulibacter* |
| CG21 G04 | CT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | *Planctomyces* |
| CG21 G05 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 |
| CG21 G06 | CT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhodospirillales* | *Acetobacteraceae* | *Acidisphaera* |
| CG21 G07 | CT-CW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | *Gemmatimonas* |
| CG21 G09 | CT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteriales* | *Chitinophagaceae* | *Flavisolibacter* |
| CG21 G10 | CT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | *Gemmata* |
| CG21 G11 | CT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteriales* | *Saprospiraceae* | *Haliscomenobacter* |
| CG21 G12 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 |
| CG21 H01 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 |
| CG21 H02 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | Gp3 |
| CG21 H03 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 |
| CG21 H04 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | Gp3 |
| CG21 H05 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | *Schlegelella* |
| CG21 H06 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | *Gp4* |
| CG21 H07 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Alcaligenaceae* | *Derxia* |
| CG21 H08 | CT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteriales* | *Chitinophagaceae* | *Flavisolibacter* |
| CG21 H10 | CT-CW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | *Sphingomonas* |
| CG22 A02 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Oxalobacteraceae* | *Massilia* |
| CG22 A04 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | Gp3 |
| CG22 A05 | CT-CW | *Bacteroidetes* | *Bacteroidetes incertae sedis* |  |  | *Fulvivirga* |
| CG22 A06 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 |
| CG22 A07 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | Gp3 |
| CG22 A08 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 |
| CG22 A09 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 |
| CG22 A10 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 |
| CG22 B01 | CT-CW | *Actinobacteria* | *Actinobacteria* | *Nitriliruptorales* | *Nitriliruptoraceae* | *Nitriliruptor* |
| CG22 B02 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Rhodocyclales* | *Rhodocyclaceae* | *Rhodocyclaceae* |
| CG22 B03 | CT-CW | *Actinobacteria* | *Actinobacteria* | *Nitriliruptorales* | *Nitriliruptoraceae* | *Nitriliruptoraceae* |
| CG22 B04 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 |
| CG22 B05 | CT-CW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Conexibacteraceae* | *Conexibacteraceae* |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | |
| Phylum | Class | Order | Family | | | Genus |
| CG22 B06 | CT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteriales* | *Chitinophagaceae* | | | *Flavisolibacter* |
| CG22 B07 | CT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | | | *Thermomonas* |
| CG22 B08 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG22 B09 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp5 |  |  | | | Gp5 |
| CG22 B10 | CT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Phaselicystidaceae* | | | *Phaselicystis* |
| CG22 B11 | CT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Bradyrhizobiaceae* | | | *Balneimonas* |
| CG22 B12 | CT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | | | *Thermomonas* |
| CG22 C01 | CT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Polyangiaceae* | | | *Byssovorax* |
| CG22 C03 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Neisseriales* | *Neisseriaceae* | | | *Uruburuella* |
| CG22 C04 | CT-CW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | | | *Gemmatimonas* |
| CG22 C05 | CT-CW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | | | *Sphingomonas* |
| CG22 C06 | CT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | *Gemmata* |
| CG22 C07 | CT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Hyphomicrobiaceae* | | | *Devosia* |
| CG22 C08 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG22 C09 | CT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Desulfobacterales* | *Desulfobacteraceae* | | | *Desulfoluna* |
| CG22 C10 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | *Thiobacter* |
| CG22 C11 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG22 C12 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | *Thiobacter* |
| CG22 D01 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | *Thiobacter* |
| CG22 D02 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |
| CG22 D03 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | | Gp3 |
| CG22 D04 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG22 D05 | CT-CW | OP10 |  |  |  | | OP10 *genera incertae sedis* | |
| CG22 D06 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |
| CG22 D07 | CT-CW | *Verrucomicrobia* | Subdivision3 |  |  | Subdivision3 *genera incertae sedis* | | |
| CG22 D08 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |
| CG22 D09 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG22 D10 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG22 D11 | CT-CW | *Cyanobacteria* | *Cyanobacteria* | Family I |  | | | GpI |
| CG22 D12 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG22 E01 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG22 E02 | CT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | *Flavisolibacter* |
| CG22 E03 | CT-CW | *Cyanobacteria* | *Cyanobacteria* | Family IX |  | | | GpIX |
| CG22 E04 | CT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | | | *Thermomonas* |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | | Classification | | | | | | |
| Phylum | Class | Order | Family | | | Genus |
| CG22 E06 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG22 E08 | | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | *Thiobacter* |
| CG22 E09 | | CT-CW | *Actinobacteria* | *Actinobacteria* | *Nitriliruptorales* | *Nitriliruptoraceae* | | | *Nitriliruptor* |
| CG22 E10 | | CT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | *Gemmata* |
| CG22 E11 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |
| CG22 E12 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |
| CG22 F02 | | CT-CW | Unclassified *Bacteria* | --- | --- | --- | | | --- |
| CG22 F03 | | CT-CW | *Actinobacteria* | *Actinobacteria* | *Acidimicrobidae incertae sedis* | |  | | *Ilumatobacter* |
| CG22 F04 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |
| CG22 F05 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG22 F06 | | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Rhodocyclales* | *Rhodocyclaceae* | | | *Azospira* |
| CG22 F07 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | | Gp3 |
| CG22 F08 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG22 F09 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | | Gp3 |
| CG22 F10 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG22 F11 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |
| CG22 F12 | | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | *Thiobacter* |
| CG22 G02 | | CT-CW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | | | *Bacillus* |
| CG22 G03 | | CT-CW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | | | *Gemmatimonas* |
| CG22 G07 | | CT-CW | *Verrucomicrobia* | Spartobacteria |  |  | | *Spartobacteria genera incertae sedis* | |
| CG22 G08 | | CT-CW | *Actinobacteria* | *Actinobacteria* | *Actinomycetales* | *Nocardioidaceae* | | | *Nocardioides* |
| CG22 G09 | | CT-CW | *Cyanobacteria* | *Cyanobacteria* | *Chloroplast* |  | | | *Bacillariophyta* |
| CG22 G11 | | CT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteriales* | *Chitinophagaceae* | | | *Terrimonas* |
| CG22 G12 | | CT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Polyangiaceae* | | | *Sorangium* |
| CG23 A01 | | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | *Methylibium* |
| CG23 A02 | | CT-CW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | | | *Gemmatimonas* |
| CG23 A03 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG23 A04 | | CT-CW | *Actinobacteria* | *Actinobacteria* | *Nitriliruptorales* | *Nitriliruptoraceae* | | | *Nitriliruptor* |
| CG23 A05 | | CT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteriales* | *Chitinophagaceae* | | | *Terrimonas* |
| CG23 A06 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |
| CG23 A07 | | CT-CW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | | | *Tumebacillus* |
| CG23 A08 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |
| CG23 A09 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG23 A10 | | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | | |
| Phylum | Class | Order | Family | | | Genus | |
| CG23 A11 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | | | *Schlegelella* | |
| CG23 A12 | CT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | *Gemmata* | |
| CG23 B01 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp17 |  |  | | | Gp17 | |
| CG23 B02 | CT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Sinobacteraceae* | | | *Steroidobacter* | |
| CG23 B03 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | | Gp3 | |
| CG23 B04 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG23 B05 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG23 B06 | CT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Polyangiaceae* | | | *Sorangium* | |
| CG23 B07 | CT-CW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | | *Jeotgalibacillus* | | |
| CG23 B09 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | Gp7 | |
| CG23 B10 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG23 B11 | CT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Polyangiaceae* | | | *Byssovorax* | |
| CG23 B12 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG23 C01 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Neisseriales* | *Neisseriaceae* | | | *Uruburuella* | |
| CG23 C02 | CT-CW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | | | *Rubrobacter* | |
| CG23 C03 | CT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Hyphomicrobiaceae* | *Hyphomicrobium* | | | |
| CG23 C04 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp5 |  |  | | | Gp5 | |
| CG23 C05 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 | |
| CG23 C06 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG23 C07 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 |
| CG23 C08 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 | |
| CG23 C09 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG23 C10 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG23 C11 | CT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Methylococcales* | *Methylococcaceae* | | | *Methylococcus* | |
| CG23 C12 | CT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | *Gemmata* | |
| CG23 D01 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG23 D03 | CT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | | | *Silanimonas* | |
| CG23 D04 | CT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | *Gemmata* | |
| CG23 D05 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG23 D06 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 | |
| CG23 D07 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp25 |  |  | | | Gp25 | |
| CG23 D08 | CT-CW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | | | *Gemmatimonas* | |
| CG23 D09 | CT-CW | Unclassified *Bacteria* | --- | --- | --- | | | --- | |
| CG23 D10 | CT-CW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | | | *Tumebacillus* | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | | | | | |
| Phylum | Class | Order | Family | | | | | Genus | | |
| CG23 D12 | CT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | | | | | *Silanimonas* | | |
| CG23 E01 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | | Gp4 | | |
| CG23 E02 | CT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Sphingobacteria*ceae | | | *Mucilaginibacter* | | | |
| CG23 E03 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Alcaligenaceae* | | | | *Pigmentiphaga* | | | |
| CG23 E04 | CT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Phyllobacteriaceae* | | | | *Mesorhizobium* | | | |
| CG23 E05 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | | | |
| CG23 E06 | CT-CW | Unclassified *Bacteria* | --- | --- | --- | | | | --- | | | |
| CG23 E07 | CT-CW | *Actinobacteria* | *Actinobacteria* | *Actinomycetales* | *Microbacteriaceae* | | | | *Microbacterium* | | | |
| CG23 E08 | CT-CW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | | | | | | *Bacillus* | |
| CG23 E09 | CT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | | | | *Niastella* | |
| CG23 E10 | CT-CW | *Proteobacteria* | β-*Proteobacteria* | *Neisseriales* | *Neisseriaceae* | | | | | | *Uruburuella* | |
| CG23 E11 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | | | Gp4 | |
| CG23 E12 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp10 |  |  | | | | | | Gp10 | |
| CG23 F01 | CT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Kofleriaceae* | | | | | | *Kofleria* | |
| CG23 F03 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | | | | Gp7 | |
| CG23 F04 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | | | | | Gp3 | |
| CG23 F05 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | | Gp4 | | |
| CG23 F06 | CT-CW | *Cyanobacteria* | *Cyanobacteria* | Family IX |  | | | | | GpIX | | |
| CG23 F07 | CT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhodobacterales* | *Rhodobacteraceae* | | *Rubellimicrobium* | | | | |
| CG23 F08 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | | | | | Gp3 | |
| CG23 F09 | CT-CW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Conexibacteraceae* | | | | | *Conexibacter* | | |
| CG23 F11 | CT-CW | *Verrucomicrobia* | Subdivision3 |  |  | Subdivision3 *genera incertae sedis* | | | | | |
| CG23 F12 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | | |
| CG23 G01 | CT-CW | Unclassified *Bacteria* | --- | --- | --- | | | | | --- | | |
| CG23 G03 | CT-CW | *Nitrospira* | *Nitrospira* | *Nitrospira*les | *Nitrospira*ceae | | | | | *Nitrospira* | | |
| CG23 G04 | CT-CW | *Actinobacteria* | *Actinobacteria* | *Acidimicrobiales* | *Acidimicrobiaceae* | | | | | *Ferrithrix* | | |
| CG23 G06 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | | |
| CG23 G07 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | | |
| CG23 G08 | CT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | | | *Flavisolibacter* | | |
| CG23 G09 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | | |
| CG23 G10 | CT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | | |
| CG23 G11 | CT-CW | Unclassified *Bacteria* | --- | --- | --- | | | | | --- | | |
| CG41 A01 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | | |
| CG41 A03 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | |
| Phylum | Class | Order | Family | Genus | |
| CG41 A04 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhodospirillales* | *Acetobacteraceae* | *Roseomonas* | |
| CG41 A05 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG41 A06 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Bradyrhizobiaceae* | *Balneimonas* | |
| CG41 A07 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | *Sphingomonas* | |
| CG41 A08 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG41 A09 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Bradyrhizobiaceae* | *Balneimonas* | |
| CG41 A10 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG41 A11 | CT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteriales* | *Chitinophagaceae* | *Niastella* | |
| CG41 B02 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | Gp7 | |
| CG41 B03 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp10 |  |  | Gp10 | |
| CG41 B04 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG41 B05 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG41 B06 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | *Roseateles* | |
| CG41 B07 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Oxalobacteraceae* | *Massilia* | |
| CG41 B08 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG41 B09 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | Gp3 |
| CG41 B10 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG41 B12 | CT-RW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | *Bacillus* | |
| CG41 C03 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | *Sphingomonas* | |
| CG41 C04 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | Gp7 |
| CG41 C05 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG41 C06 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG41 C07 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG41 C08 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG41 C09 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | Gp3 | |
| CG41 C10 | CT-RW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | *Gemmatimonas* | |
| CG41 C12 | CT-RW | Unclassified *Bacteria* | --- | --- | --- | --- | |
| CG41 D01 | CT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Cytophagaceae* | *Larkinella* | |
| CG41 D03 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG41 D04 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG41 D05 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Conexibacteraceae* | *Conexibacter* | |
| CG41 D06 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG41 D07 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Bradyrhizobiaceae* | *Afipia* | |
| CG41 D08 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | | | | |
| Phylum | Class | Order | Family | | | | Genus | | |
| CG41 D10 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Polyangiaceae* | | | | *Sorangium* | | |
| CG41 D11 | CT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | | *Flavisolibacter* | | |
| CG41 D12 | CT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | | *Flavisolibacter* | | |
| CG41 E01 | CT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | | *Chitinophaga* | | |
| CG41 E03 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | | |
| CG41 E04 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | | |
| CG41 E05 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | | | | *Sphingomonas* | | |
| CG41 E06 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp17 |  |  | | | | Gp17 | | |
| CG41 E07 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Actinomycetales* | *Propionibacteriaceae* | | | | *Microlunatus* | | |
| CG41 E08 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Actinomycetales* | *Propionibacteriaceae* | | | | *Microlunatus* | | |
| CG41 E11 | CT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | | *Flavisolibacter* | | |
| CG41 E12 | CT-RW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | | | | *Thermomonas* | | |
| CG41 F01 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | | |
| CG41 F03 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | | | | *Sphingomonas* | | |
| CG41 F04 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Actinomycetales* | *Acidothermaceae* | | | | *Acidothermus* | | |
| CG41 F05 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | |
| CG41 F06 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Acidimicrobiales* | *Iamiaceae* | | | | *Iamia* | | |
| CG41 F07 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | | | | *Roseateles* | | |
| CG41 F08 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | | |
| CG41 F09 | CT-RW | *Proteobacteria* | γ -*Proteobacteria* | *Enterobacteriales* | *Enterobacteriaceae* | | | | | *Erwinia* | |
| CG41 F10 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | | |
| CG41 F11 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | | |
| CG41 F12 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | | |
| CG41 G01 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | | |
| CG41 G03 | CT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | | *Terrimonas* | | |
| CG41 G04 | CT-RW | *Verrucomicrobia* | *Verrucomicrobia*e | *Verrucomicrobia*les | *Verrucomicrobia*ceae | *Verrucomicrobium* | | | | |
| CG41 G05 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | | |
| CG41 G06 | CT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | | *Flavisolibacter* | | |
| CG41 G07 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Kofleriaceae* | | | | *Kofleria* | | |
| CG41 G08 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Nitriliruptorales* | *Nitriliruptoraceae* | | | | *Nitriliruptor* | | |
| CG41 G09 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Acidimicrobidae incertae sedis* |  | | | | *Ilumatobacter* | | |
| CG41 G10 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Desulfuromonadales* | *Geobacteraceae* | | *Geothermobacter* | | | | |
| CG41 G11 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Solirubrobacteraceae* | | | *Solirubrobacter* | | | |
| CG41 G12 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 | | | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | | | | |
| Phylum | Class | Order | Family | | | | | Genus | |
| CG41 H01 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Bradyrhizobiaceae* | | | | *Bradyrhizobium* | | |
| CG41 H07 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | |
| CG41 H08 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | |
| CG41 H09 | CT-RW | OP11 |  |  |  | | OP11 *genera incertae sedis* | | | | |
| CG41 H11 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | | Gp4 | |
| CG42 A01 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | |
| CG42 A02 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | | | *Methylibium* | |
| CG42 A03 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Hyphomicrobiaceae* | | | | | *Blastochloris* | |
| CG42 A04 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | | Gp4 | |
| CG42 A05 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | | | | | *Sphingomonas* | |
| CG42 A06 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | Polyangiaceae | | | | | *Byssovorax* | |
| CG42 A07 | CT-RW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | | | | | *Bacillus* | |
| CG42 A08 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Syntrophobacterales* | *Syntrophaceae* | | | | | *Smithella* | |
| CG42 A09 | CT-RW | *Verrucomicrobia* | Subdivision 3 |  |  | Subdivision 3 *genera incertae sedis* | | | | | |
| CG42 A10 | CT-RW | Unclassified *Bacteria* | --- | --- | --- | | | | | --- | |
| CG42 A11 | CT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | | | | *Flavisolibacter* |
| CG42 A12 | CT-RW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | | | | | *Bacillus* | |
| CG42 B01 | CT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | | | *Gemmata* | |
| CG42 B02 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Alcaligenaceae* | | | | | *Derxia* | |
| CG42 B03 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | | | Gp4 |
| CG42 B04 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | | | Gp7 | |
| CG42 B05 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | | | *Ideonella* | |
| CG42 B07 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhodobacterales* | *Rhodobacteraceae* | | | | | *Yangia* | |
| CG42 B09 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Solirubrobacteraceae* | | | | *Solirubrobacter* | | |
| CG42 B10 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | | Gp4 | |
| CG42 B11 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | | Gp4 | |
| CG42 B12 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | |
| CG42 C01 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Phyllobacteriaceae* | | | *Phyllobacterium* | | | |
| CG42 C02 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Cystobacteraceae* | | | | | *Cystobacter* | |
| CG42 C03 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | | Gp4 | |
| CG42 C04 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | | Gp4 | |
| CG42 C05 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | | | | | *Sphingomonas* | |
| CG42 C06 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 | |
| CG42 C07 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | | | | Gp3 | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | |
| Phylum | Class | Order | Family | Genus | |
| CG42 C08 | CT-RW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | *Thermomonas* | |
| CG42 C09 | CT-RW | Unclassified *Bacteria* | --- | --- | --- | --- | |
| CG42 C10 | CT-RW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | *Bacillus* | |
| CG42 C11 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG42 C12 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | *Ramlibacter* | |
| CG42 D01 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp10 |  |  | Gp10 | |
| CG42 D02 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | *Roseateles* | |
| CG42 D03 | CT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | *Gemmata* | |
| CG42 D05 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | Gp7 | |
| CG42 D06 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | Gp7 | |
| CG42 D07 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG42 D08 | CT-RW | Unclassified *Bacteria* | --- | --- | --- | --- | |
| CG42 D09 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Methylobacteriaceae* | *Microvirga* | |
| CG42 D10 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Nannocystaceae* | *Enhygromyxa* | |
| CG42 D11 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | *Rubrobacter* | |
| CG42 D12 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 |
| CG42 E01 | CT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | *Gemmata* | |
| CG42 E02 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp22 |  |  | Gp22 | |
| CG42 E03 | CT-RW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | *Gemmatimonas* | |
| CG42 E04 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | Gp3 |
| CG42 E05 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Actinomycetales* | *Sporichthyaceae* | *Sporichthya* | |
| CG42 E06 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | Gp7 | |
| CG42 E07 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Nitriliruptorales* | *Nitriliruptoraceae* | *Nitriliruptor* | |
| CG42 E08 | CT-RW | Unclassified *Bacteria* | --- | --- | --- | --- | |
| CG42 E09 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG42 E11 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG42 E12 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG42 F01 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | *Rubrobacter* | |
| CG42 F02 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Actinomycetales* | *Pseudonocardiaceae* | *Allokutzneria* | |
| CG42 F03 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG42 F04 | CT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | *Flavisolibacter* | |
| CG42 F05 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Phaselicystidaceae* | *Phaselicystis* | |
| CG42 F06 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG42 F07 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Phaselicystidaceae* | *Phaselicystis* | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | | | |
| Phylum | Class | Order | Family | | | Genus | | |
| CG42 F08 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 | | |
| CG42 F09 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | | | *Rubrobacter* | | |
| CG42 F10 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 | | |
| CG42 F11 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | *Thiobacter* | | |
| CG42 F12 | CT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | *Gemmata* | | |
| CG42 G01 | CT-RW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Sinobacteraceae* | | | *Steroidobacter* | | |
| CG42 G02 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 | | |
| CG42 G03 | CT-RW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | | | *Bacillus* | | |
| CG42 G04 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Bradyrhizobiaceae* | *Rhodopseudomonas* | | | | |
| CG42 G05 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Oxalobacteraceae* | | | *Massilia* | | |
| CG42 G06 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | *Methylibium* | | |
| CG42 G07 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | | Gp3 | | |
| CG42 G08 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | | | *Rubrobacter* | | |
| CG42 G09 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | | | *Sphingomonas* | | |
| CG42 G10 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | | |
| CG42 G11 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG42 G12 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | | Gp3 | |
| CG43 A02 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | | | *Rubrobacter* | |
| CG43 A03 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Erythrobacteraceae* | | *Porphyrobacter* | | |
| CG43 A04 | CT-RW | *Cyanobacteria* | *Cyanobacteria* | FamilyXIII |  | | | GpXIII |
| CG43 A05 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | | | *Schlegelella* | |
| CG43 A06 | CT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | *Gemmata* | |
| CG43 A07 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Polyangiaceae* | | | *Sorangium* | |
| CG43 A08 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | | | *Sphingomonas* | |
| CG43 A09 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | | | *Sphingomonas* | |
| CG43 A10 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Oxalobacteraceae* | | | *Massilia* | |
| CG43 A11 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG43 A12 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG43 B01 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | Gp7 | |
| CG43 B02 | CT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | *Gemmata* | |
| CG43 B03 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Erythrobacteraceae* | | *Porphyrobacter* | | |
| CG43 B04 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Cystobacteraceae* | | | *Cystobacter* | |
| CG43 B05 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG43 B06 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | | | |
| Phylum | Class | Order | Family | | | | Genus | |
| CG43 B07 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG43 B09 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | |
| CG43 B10 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | | | | *Rubrobacter* | |
| CG43 B11 | CT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | | *Gemmata* | |
| CG43 B12 | CT-RW | *Verrucomicrobia* | Spartobacteria |  |  | *Spartobacteria* *genera incertae sedis* | | | | |
| CG43 C01 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | | *Methylibium* | |
| CG43 C02 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | |
| CG43 C03 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Haliangiaceae* | | | | *Haliangium* | |
| CG43 C04 | CT-RW | *Bacteroidetes* | Flavobacteria | *Flavobacteriales* | *Flavobacteriaceae* | | | | *Zhouia* | |
| CG43 C05 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG43 C06 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Rhodocyclales* | *Rhodocyclaceae* | | *Methyloversatilis* | | | |
| CG43 C07 | CT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteriales* | *Chitinophagaceae* | | | | *Flavisolibacter* | |
| CG43 C08 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Neisseriales* | *Neisseriaceae* | | | | *Leeia* | |
| CG43 C09 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | |
| CG43 C10 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | |
| CG43 C11 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | | | *Methylibium* |
| CG43 C12 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Solirubrobacteraceae* | | | *Solirubrobacter* | | |
| CG43 D01 | CT-RW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | | | | *Gemmatimonas* | |
| CG43 D02 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG43 D04 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 |
| CG43 D05 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Desulfuromonadales* | *Geobacteraceae* | | *Geothermobacter* | | | |
| CG43 D06 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG43 D07 | CT-RW | Unclassified *Bacteria* | --- | --- | --- | | | | --- | |
| CG43 D08 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG43 D09 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | | | | *Sphingomonas* | |
| CG43 D10 | CT-RW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Sinobacteraceae* | | | | *Steroidobacter* | |
| CG43 D12 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG43 E01 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | | | Gp3 | |
| CG43 E02 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG43 E03 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | |
| CG43 E04 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | | Gp7 | |
| CG43 E06 | CT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Phaselicystidaceae* | | | | *Phaselicystis* | |
| CG43 E07 | CT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteriales* | *Chitinophagaceae* | | | | *Flavisolibacter* | |
| CG43 E08 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Aurantimonadaceae* | | | | *Aurantimonas* | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | |
| Phylum | Class | Order | Family | | Genus | |
| CG43 E09 | CT-RW | Unclassified *Bacteria* | --- | --- | --- | | --- | |
| CG43 E10 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | Gp7 | |
| CG43 E11 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | | *Rubrobacter* | |
| CG43 E12 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG43 F01 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | Gp3 | |
| CG43 F02 | CT-RW | Unclassified *Bacteria* | --- | *---* | *---* | | --- | |
| CG43 F03 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | | *Rubrobacter* | |
| CG43 F04 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG43 F05 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG43 F06 | CT-RW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Sinobacteraceae* | | *Steroidobacter* | |
| CG43 F07 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG43 F08 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG43 F09 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG43 F10 | CT-RW | Unclassified *Bacteria* | --- | *---* | *---* | | --- | |
| CG43 F11 | CT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | *Pirellula* | |
| CG43 F12 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG43 G01 | CT-RW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Solirubrobacteraceae* | *Solirubrobacter* | | |
| CG43 G02 | CT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | *Gemmata* | |
| CG43 G04 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG43 G05 | CT-RW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | | | *Thermomonas* |
| CG43 G06 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG43 G07 | CT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhodospirillales* | *Rhodospirillaceae* | | *Azospirillum* | |
| CG43 G08 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG43 G09 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | | *Ramlibacter* | |
| CG43 G10 | CT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | *Methylibium* | |
| CG43 G11 | CT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | *Zavarzinella* | |
| CG43 G12 | CT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG11 A01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG11 A02 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | | *Ramlibacter* | |
| CG11 A03 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Conexibacteraceae* | | *Conexibacter* | |
| CG11 A04 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | *Pirellula* | |
| CG11 A05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 A06 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 A07 | NT-CW | Unclassified *Bacteria* | --- | --- | --- | | --- | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | |
| Phylum | Class | Order | Family | | Genus | |
| CG11 A08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 A09 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Actinomycetales* | *Kineosporiaceae* | | *Quadrisphaera* | |
| CG11 A10 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Chromatiales* | *Ectothiorhodospiraceae* | | *Thiorhodospira* | |
| CG11 A11 | NT-CW | *Verrucomicrobia* | *Spartobacteria* |  |  | *Spartobacteria genera incertae sedis* | | |
| CG11 A12 | NT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteriales* | *Flammeovirgaceae* | | *Fabibacter* | |
| CG11 B01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | Gp7 | |
| CG11 B03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | Gp7 | |
| CG11 B04 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Sinobacteraceae* | | *Steroidobacter* | |
| CG11 B05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG11 B06 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | *Ideonella* | |
| CG11 B07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 B08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 B09 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | *Pirellula* | |
| CG11 B11 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiaceae* | | *Thermothrix* | |
| CG11 B12 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 C02 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |
| CG11 C03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | Gp3 | |
| CG11 C04 | NT-CW | Unclassified *Bacteria* | --- | *---* | *---* | | --- | |
| CG11 C05 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Rhodocyclales* | *Rhodocyclaceae* | | *Azospira* | |
| CG11 C06 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Thiotrichales* | *Thiotrichaceae* | | | *Beggiatoa* |
| CG11 C07 | NT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Phaselicystidaceae* | | *Phaselicystis* | |
| CG11 C08 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | *Thiobacter* | |
| CG11 C09 | NT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Polyangiaceae* | | *Sorangium* | |
| CG11 C10 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | *Thiobacter* | |
| CG11 C11 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Oxalobacteraceae* | | *Massilia* | |
| CG11 D01 | NT-CW | *Cyanobacteria* | *Cyanobacteria* | Family IV |  | | GpIV | |
| CG11 D02 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG11 D03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 D04 | NT-CW | Unclassified *Bacteria* | --- | --- | --- | | --- | |
| CG11 D05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 D06 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 D07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | Gp3 | |
| CG11 D08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG11 D09 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | Gp7 | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | |
| Phylum | Class | Order | Family | | Genus | |
| CG11 D10 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 D11 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG11 D12 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | | *Curvibacter* | |
| CG11 E01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG11 E02 | NT-CW | *Firmicutes* | *Bacilli* | *Bacillales* | *Paenibacillaceae* | | *Paenibacillus* | |
| CG11 E03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp10 |  |  | | Gp10 | |
| CG11 E05 | NT-CW | *Cyanobacteria* | *Cyanobacteria* | FamilyXIII |  | | GpXIII | |
| CG11 E06 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 E07 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Acidimicrobiales* | *Iamiaceae* | | *Iamia* | |
| CG11 E09 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG11 E10 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp5 |  |  | | Gp5 | |
| CG11 E11 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 E12 | NT-CW | Unclassified *Bacteria* | --- | --- | --- | | --- | |
| CG11 F01 | NT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Phaselicystidaceae* | | *Phaselicystis* | |
| CG11 F02 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Oxalobacteraceae* | | *Massilia* | |
| CG11 F03 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | | | *Thermomonas* |
| CG11 F04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp10 |  |  | | Gp10 | |
| CG11 F05 | NT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | *Terrimonas* | |
| CG11 F06 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | | *Lysobacter* | |
| CG11 F07 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | *Zavarzinella* |
| CG11 F08 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | γ -*Proteobacteria incertae sedis* | |  | *Thiohalomonas* | |
| CG11 F09 | NT-CW | Unclassified *Bacteria* | --- | --- | --- | | --- | |
| CG11 F10 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Neisseriales* | *Neisseriaceae* | | *Leeia* | |
| CG11 F11 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG11 F12 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | *Methylibium* | |
| CG11 G03 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | *Methylibium* | |
| CG11 G04 | NT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Myxococcaceae* | | *Corallococcus* | |
| CG11 G05 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhodospirillales* | *Acetobacteraceae* | | *Granulibacter* | |
| CG11 G06 | NT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Haliangiaceae* | | *Haliangium* | |
| CG11 G07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 G08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG11 G09 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Neisseriales* | *Neisseriaceae* | | *Leeia* | |
| CG11 G10 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | Gp3 | |
| CG11 G11 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | |
| Phylum | Class | Order | Family | Genus | |
| CG11 G12 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG11 H01 | NT-CW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | *Gemmatimonas* | |
| CG11 H02 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhodospirillales* | *Acetobacteraceae* | *Granulibacter* | |
| CG11 H03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG11 H04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG11 H05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG11 H06 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG11 H07 | NT-CW | *Cyanobacteria* | *Cyanobacteria* | FamilyXIII |  | GpXIII | |
| CG12 A01 | NT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Polyangiaceae* | *Sorangium* | |
| CG12 A04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG12 A05 | NT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | *Terrimonas* | |
| CG12 A07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG12 A11 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | *Ramlibacter* | |
| CG12 B01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG12 B02 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Chromatiales* | *Ectothiorhodospiraceae* | *Natronocella* | |
| CG12 B03 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | *Gemmata* |
| CG12 B05 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Hyphomicrobiaceae* | *Rhodoplanes* | |
| CG12 B06 | NT-CW | Unclassified *Bacteria* | --- | --- | *---* | --- | |
| CG12 B07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG12 B08 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | | *Sphingomonas* |
| CG12 B09 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | *Lysobacter* | |
| CG12 B10 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhodospirillales* | *Acetobacteraceae* | *Stella* | |
| CG12 B11 | NT-CW | *Cyanobacteria* | *Cyanobacteria* | FamilyXIII |  | GpXIII | |
| CG12 C01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | Gp7 | |
| CG12 C02 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhodospirillales* | *Acetobacteraceae* | *Granulibacter* | |
| CG12 C03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG12 C05 | NT-CW | Unclassified *Bacteria* | --- | --- | *---* | --- | |
| CG12 C06 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Rhodocyclales* | *Rhodocyclaceae* | *Azospira* | |
| CG12 C07 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Hyphomicrobiaceae* | *Blastochloris* | |
| CG12 C08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG12 C10 | NT-CW | Unclassified *Bacteria* | --- | --- | *---* | --- | |
| CG12 C11 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG12 C12 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Conexibacteraceae* | *Conexibacter* | |
| CG12 D01 | NT-CW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | *Gemmatimonas* | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | |
| Phylum | Class | Order | Family | | Genus | |
| CG12 D02 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Rhodocyclales* | *Rhodocyclaceae* | | *Azovibrio* | |
| CG12 D03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG12 D04 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Hyphomicrobiaceae* | | *Rhodoplanes* | |
| CG12 D05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG12 D06 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | Gp7 | |
| CG12 D07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG12 D08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp22 |  |  | | Gp22 | |
| CG12 D09 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG12 D10 | NT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Kofleriaceae* | | *Kofleria* | |
| CG12 D11 | NT-CW | *Cyanobacteria* | *Cyanobacteria* | FamilyXIII |  | | GpXIII | |
| CG12 D12 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG12 E01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG12 E02 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG12 E03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG12 E07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG12 E09 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG12 E10 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Beijerinckiaceae* | | *Beijerinckia* | |
| CG12 E11 | NT-CW | *Cyanobacteria* | *Cyanobacteria* | Family I |  | | GpI | |
| CG12 E12 | NT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | *Terrimonas* | |
| CG12 F01 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | *Thiobacter* |
| CG12 F02 | NT-CW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | | *Tumebacillus* | |
| CG12 F03 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhodospirillales* | *Rhodospirillaceae* | | *Oceanibaculum* | |
| CG12 F04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG12 F05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | Gp7 | |
| CG12 F06 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG12 F08 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Solirubrobacteraceae* | *Solirubrobacter* | | |
| CG12 F09 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG12 F10 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG12 G04 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Acidimicrobidae incertae sedis* |  | | *Ilumatobacter* | |
| CG12 G05 | NT-CW | *Cyanobacteria* | *Cyanobacteria* |  |  | | *Bacillariophyta* | |
| CG12 G06 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG12 G07 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Chromatiales* | *Ectothiorhodospiraceae* | | *Natronocella* | |
| CG12 G08 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Solirubrobacteraceae* | *Solirubrobacter* | | |
| CG12 G09 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | |
| Phylum | Class | Order | Family | | Genus | |
| CG12 G10 | NT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Kofleriaceae* | | *Kofleria* | |
| CG12 G11 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG12 G12 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 A01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 A02 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 A03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 A04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 A05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 A06 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Rhodocyclales* | *Rhodocyclaceae* | | *Azospira* | |
| CG13 A07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp5 |  |  | | Gp5 | |
| CG13 A08 | NT-CW | Unclassified *Bacteria* | --- | --- | *---* | | --- | |
| CG13 A09 | NT-CW | Unclassified *Bacteria* | --- | --- | *---* | | --- | |
| CG13 A10 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | *Gemmata* | |
| CG13 A11 | NT-CW | *Verrucomicrobia* | *Spartobacteria* |  |  | *Spartobacteria genera incertae sedis* | | |
| CG13 A12 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG13 B01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 |
| CG13 B02 | NT-CW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | | *Gemmatimonas* | |
| CG13 B03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 B04 | NT-CW | Unclassified *Bacteria* | --- | --- | *---* | | --- | |
| CG13 B05 | NT-CW | Unclassified *Bacteria* | --- | --- | *---* | | | --- |
| CG13 B06 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 B07 | NT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Cytophagaceae* | | *Adhaeribacter* | |
| CG13 B08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 B09 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | Gp7 | |
| CG13 B10 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG13 B11 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | *Gemmata* | |
| CG13 B12 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | *Schlesneria* | |
| CG13 C01 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Alcaligenaceae* | | *Derxia* | |
| CG13 C02 | NT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | *Terrimonas* | |
| CG13 C03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 C04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG13 C06 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 C07 | NT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | *Flavisolibacter* | |
| CG13 C08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | |
| Phylum | Class | Order | Family | | Genus | |
| CG13 C09 | NT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | Phaselicystidaceae | | Phaselicystis | |
| CG13 C10 | NT-CW | *Verrucomicrobia* | Subdivision 3 |  |  | Subdivision 3 *genera incertae sedis* | | |
| CG13 C11 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | *Methylibium* | |
| CG13 D01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp5 |  |  | | Gp5 | |
| CG13 D02 | NT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Sphingobacteria*ceae | | *Solitalea* | |
| CG13 D03 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | *Zavarzinella* | |
| CG13 D04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp22 |  |  | | Gp22 | |
| CG13 D06 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | Gp7 | |
| CG13 D07 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Oxalobacteraceae* | | *Massilia* | |
| CG13 D08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 D09 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | *Thiobacter* | |
| CG13 D10 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp25 |  |  | | Gp25 | |
| CG13 D11 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 D12 | NT-CW | Unclassified *Bacteria* | --- | --- | *---* | | --- | |
| CG13 E01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 E02 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |
| CG13 E03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 E04 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | *Methylibium* | |
| CG13 E05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 E06 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Oxalobacteraceae* | | | *Massilia* |
| CG13 E07 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Thiotrichales* | *Thiotrichaceae* | | *Beggiatoa* | |
| CG13 E08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG13 E09 | NT-CW | Unclassified *Bacteria* | --- | --- | *---* | | --- | |
| CG13 E10 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 E11 | NT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | *Niastella* | |
| CG13 E12 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG13 F01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG13 F03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG13 F04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp17 |  |  | | Gp17 | |
| CG13 F05 | NT-CW | Unclassified *Bacteria* | --- | --- | --- | | --- | |
| CG13 F06 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 F07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 F08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG13 F09 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhodospirillales* | *Acetobacteraceae* | | *Stella* | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | |
| Phylum | Class | Order | Family | Genus | |
| CG13 F10 | NT-CW | *Cyanobacteria* | *Cyanobacteria* | Family I |  | GpI | |
| CG13 F11 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | *Zavarzinella* | |
| CG13 F12 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Conexibacteraceae* | *Conexibacter* | |
| CG13 G01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG13 G02 | NT-CW | *Cyanobacteria* | *Cyanobacteria* | FamilyXIII |  | GpXIII | |
| CG13 G03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG13 G04 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | *Zavarzinella* | |
| CG13 G05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG13 G06 | NT-CW | *Cyanobacteria* | *Cyanobacteria* | FamilyXIII |  | GpXIII | |
| CG13 G07 | NT-CW | Unclassified *Bacteria* | --- | --- | *---* | --- | |
| CG13 G09 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG13 G10 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | *Sphingomonas* | |
| CG13 G11 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG13 G12 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | *Planctomyces* | |
| CG31 A02 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG31 A03 | NT-RW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | | *Luteimonas* |
| CG31 A04 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG31 A05 | NT-RW | *Actinobacteria* | *Actinobacteria* | *Acidimicrobiales* | *Iamiaceae* | *Iamia* | |
| CG31 A06 | NT-RW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | *Rubrobacter* | |
| CG31 A07 | NT-RW | *Proteobacteria* | β-*Proteobacteria* | *Rhodocyclales* | *Rhodocyclaceae* | | *Azospira* |
| CG31 A08 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG31 A09 | NT-RW | Unclassified *Bacteria* | --- | --- | *---* | --- | |
| CG31 A10 | NT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Polyangiaceae* | *Sorangium* | |
| CG31 B01 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG31 B02 | NT-RW | *Proteobacteria* | β-*Proteobacteria* | *Neisseriales* | *Neisseriaceae* | *Leeia* | |
| CG31 B03 | NT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | *Flavisolibacter* | |
| CG31 B04 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG31 B05 | NT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Desulfovibrionales* | *Desulfovibrionaceae* | *Desulfocurvus* | |
| CG31 B06 | NT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | *Zavarzinella* | |
| CG31 B07 | NT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Rhizobiaceae* | *Rhizobium* | |
| CG31 B08 | NT-RW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | *Gemmatimonas* | |
| CG31 B11 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | Gp3 | |
| CG31 C01 | NT-RW | Unclassified *Bacteria* | --- | --- | --- | --- | |
| CG31 C02 | NT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | *Methylibium* | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | | | | |
| Phylum | Class | Order | | Family | | | | Genus | |
| CG31 C03 | NT-CW | Unclassified *Bacteria* | --- | --- | | --- | | | | --- | |
| CG31 C04 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Rhodocyclales* | | *Rhodocyclaceae* | | | | *Azospira* | |
| CG31 C05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  | |  | | | | Gp6 | |
| CG31 C06 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | | *Alcaligenaceae* | | | | *Derxia* | |
| CG31 C07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  | |  | | | | Gp6 | |
| CG31 C08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  | |  | | | | Gp4 | |
| CG31 C09 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | | *Rubrobacteraceae* | | | | *Rubrobacter* | |
| CG31 C10 | NT-CW | Unclassified *Bacteria* | --- | --- | | --- | | | | --- | |
| CG31 C11 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  | |  | | | | Gp4 | |
| CG31 C12 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | | *Burkholderiales incertae sedis* | | | | *Methylibium* | |
| CG31 D01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  | |  | | | | Gp4 | |
| CG31 D02 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  | |  | | | | Gp3 | |
| CG31 D03 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | | *Planctomycetaceae* | | | | *Pirellula* | |
| CG31 D04 | NT-CW | *Firmicutes* | Clostridia | *Clostridiales* | | *Clostridiaceae* | | | | *Clostridium* | |
| CG31 D05 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  | |  | | | | Gp4 | |
| CG31 D06 | NT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Syntrophobacterales* | | *Syntrophobacteraceae* | | | | | *Desulfovirga* |
| CG31 D07 | NT-RW | *Verrucomicrobia* | Subdivision 3 |  | |  | Subdivision 3 *genera incertae sedis* | | | | |
| CG31 D08 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  | |  | | | | Gp6 | |
| CG31 D09 | NT-RW | Unclassified *Bacteria* | --- | --- | | --- | | | | --- | |
| CG31 D10 | NT-RW | Unclassified *Bacteria* | --- | --- | | --- | | | | | --- |
| CG31 D11 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  | |  | | | | Gp6 | |
| CG31 D12 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  | |  | | | | Gp4 | |
| CG31 E01 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  | |  | | | | Gp3 | |
| CG31 E02 | NT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | | *Planctomycetaceae* | | | | *Zavarzinella* | |
| CG31 E03 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  | |  | | | | Gp4 | |
| CG31 E04 | NT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | | *Planctomycetaceae* | | | | *Pirellula* | |
| CG31 E05 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  | |  | | | | Gp4 | |
| CG31 E06 | NT-RW | *Proteobacteria* | β-*Proteobacteria* | *Neisseriales* | | *Neisseriaceae* | | | | *Leeia* | |
| CG31 E09 | NT-RW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | | *Planctomycetaceae* | | | | *Gemmata* | |
| CG31 E10 | NT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | | *Phyllobacteriaceae* | | | *Phyllobacterium* | | |
| CG31 E11 | NT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | | *Kofleriaceae* | | | | *Kofleria* | |
| CG31 E12 | NT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | | *Sphingomonadaceae* | | *Novosphingobium* | | | |
| CG31 F01 | NT-RW | *Verrucomicrobia* | Subdivision 3 |  | |  | Subdivision 3 *genera incertae sedis* | | | | |
| CG31 F02 | NT-RW | *Bacteroidetes* | *Bacteroidetes incertae sedis* | |  |  | | | | *Fulvivirga* | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | | | |
| Phylum | Class | Order | Family | | | | Genus | |
| CG31 F03 | NT-CW | *Gemmatimonadetes* | *Gemmatimonadetes* | *Gemmatimonadales* | *Gemmatimonadaceae* | | | | *Gemmatimonas* | |
| CG31 F04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp17 |  |  | | | | Gp17 | |
| CG31 F05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | | Gp7 | |
| CG31 F06 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | | *Pirellula* | |
| CG31 F07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG31 F08 | NT-CW | Unclassified *Bacteria* | --- | --- | --- | | | | --- | |
| CG31 F09 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG31 F10 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | | | | *Thermomonas* | |
| CG31 F11 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhodospirillales* | *Acetobacteraceae* | | | | *Roseomonas* | |
| CG31 F12 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | |
| CG31 G01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG31 G02 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG31 G03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG31 G04 | NT-CW | *Cyanobacteria* | *Cyanobacteria* |  |  | | | | *Bacillariophyta* | |
| CG31 G05 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG31 G06 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | | Gp4 |
| CG31 G07 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | |
| CG31 G09 | NT-RW | Unclassified *Bacteria* | --- | --- | --- | | | | --- | |
| CG31 G10 | NT-RW | *Verrucomicrobia* | *Verrucomicrobia*e | *Verrucomicrobia*les | *Verrucomicrobia*ceae | | | *Prosthecobacter* | | |
| CG31 G11 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | | Gp6 |
| CG31 G12 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | | Gp4 | |
| CG32 A02 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | |
| CG32 A03 | NT-RW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | | | | *Luteimonas* | |
| CG32 A04 | NT-RW | *Proteobacteria* | β-*Proteobacteria* | *Neisseriales* | *Neisseriaceae* | | | | *Leeia* | |
| CG32 A05 | NT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Saprospiraceae* | | *Haliscomenobacter* | | | |
| CG32 A06 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | |
| CG32 A08 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp11 |  |  | | | | Gp11 | |
| CG32 A09 | NT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | | *Thiobacter* | |
| CG32 A10 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | | Gp6 | |
| CG32 A11 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp17 |  |  | | | | Gp17 | |
| CG32 B01 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | | | Gp3 | |
| CG32 B02 | NT-RW | *Proteobacteria* | α-*Proteobacteria* | α-*Proteobacteria incertae sedis* | |  | | | *Geminicoccus* | |
| CG32 B03 | NT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | | *Thiobacter* | |
| CG32 B04 | NT-RW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Conexibacteraceae* | | | | *Conexibacter* | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | | |
| Phylum | Class | | Order | Family | | Genus | |
| CG32 B05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 | |  |  | | Gp4 | |
| CG32 B06 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | | *Rhodospirillales* | *Rhodospirillaceae* | | *Skermanella* | |
| CG32 B07 | NT-CW | *Actinobacteria* | *Actinobacteria* | | *Rubrobacterales* | *Rubrobacteraceae* | | *Rubrobacter* | |
| CG32 B08 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | | *Rhizobiales* | *Methylocystaceae* | | *Methylosinus* | |
| CG32 B09 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 | |  |  | | Gp6 | |
| CG32 B10 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 | |  |  | | Gp4 | |
| CG32 B11 | NT-CW | *Proteobacteria* | δ-*Proteobacteria* | | *Myxococcales* | *Phaselicystidaceae* | | *Phaselicystis* | |
| CG32 B12 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 | |  |  | | Gp4 | |
| CG32 C02 | NT-CW | *Actinobacteria* | *Actinobacteria* | | *Rubrobacterales* | *Rubrobacteraceae* | | *Rubrobacter* | |
| CG32 C03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 | |  |  | | Gp4 | |
| CG32 C04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 | |  |  | | Gp6 | |
| CG32 C06 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | | *Xanthomonadales* | *Sinobacteraceae* | | *Steroidobacter* | |
| CG32 C08 | NT-CW | *Proteobacteria* | γ -*Proteobacteria* | | *Pseudomonadales* | *Pseudomonadaceae* | | *Cellvibrio* | |
| CG32 C09 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | | *Burkholderiales* | *Burkholderiales incertae sedis* | | *Methylibium* | |
| CG32 C10 | NT-RW | *Planctomycetes* | *Planctomycetacia* | | *Planctomycetales* | *Planctomycetaceae* | | *Pirellula* | |
| CG32 C11 | NT-RW | *Deinococcus-Thermus* | | Deinococci | *Deinococcales* | *Deinococcaceae* | | | *Deinococcus* |
| CG32 C12 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 | |  |  | | Gp4 | |
| CG32 D02 | NT-RW | *Chloroflexi* | *Caldilineae* | | *Caldilineales* | *Caldilineaceae* | | *Caldilinea* | |
| CG32 D03 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 | |  |  | | Gp6 | |
| CG32 D04 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp3 | |  |  | | | Gp3 |
| CG32 D05 | NT-RW | *Planctomycetes* | *Planctomycetacia* | | *Planctomycetales* | Planctomycetaceae | | *Singulisphaera* | |
| CG32 D06 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 | |  |  | | Gp6 | |
| CG32 D07 | NT-RW | OP10 |  | |  |  | OP10 *genera incertae sedis* | | |
| CG32 D08 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp7 | |  |  | | Gp7 | |
| CG32 D09 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 | |  |  | | Gp4 | |
| CG32 D10 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 | |  |  | | Gp6 | |
| CG32 D11 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 | |  |  | | Gp4 | |
| CG32 D12 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 | |  |  | | Gp4 | |
| CG32 E01 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 | |  |  | | Gp6 | |
| CG32 E02 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 | |  |  | | Gp4 | |
| CG32 E03 | NT-RW | Unclassified *Bacteria* | --- | | --- | --- | | --- | |
| CG32 E04 | NT-RW | Unclassified *Bacteria* | --- | | --- | --- | | --- | |
| CG32 E05 | NT-RW | *Actinobacteria* | *Actinobacteria* | | *Solirubrobacterales* | *Conexibacteraceae* | | *Conexibacter* | |
| CG32 E06 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp7 | |  |  | | Gp7 | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | |
| Phylum | Class | Order | Family | Genus | |
| CG32 E07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG32 E08 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | *Sphingomonas* | |
| CG32 E09 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | *Gemmata* | |
| CG32 E10 | NT-CW | Unclassified *Bacteria* | --- | --- | *---* | --- | |
| CG32 E11 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | *Rubrobacter* | |
| CG32 E12 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG32 F03 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Rhizobiales* | *Methylocystaceae* | *Methylosinus* | |
| CG32 F04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | Gp3 | |
| CG32 F05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG32 F06 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Neisseriales* | *Neisseriaceae* | *Leeia* | |
| CG32 F07 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | *Rubrobacter* | |
| CG32 F08 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG32 F09 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | *Pirellula* | |
| CG32 F10 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG32 F11 | NT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Cystobacteraceae* | *Cystobacter* | |
| CG32 F12 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | Gp3 |
| CG32 G01 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG32 G02 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp5 |  |  | Gp5 | |
| CG32 G05 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG32 G06 | NT-RW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Conexibacteraceae* | | *Conexibacter* |
| CG32 G07 | NT-RW | *Actinobacteria* | *Actinobacteria* | *Acidimicrobiales* | *Iamiaceae* | *Iamia* | |
| CG32 G08 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG32 G09 | NT-RW | *Firmicutes* | *Clostridia* | *Clostridiales* | *Clostridiaceae* | *Clostridium* | |
| CG32 G10 | NT-RW | *Proteobacteria* | γ -*Proteobacteria* | *Xanthomonadales* | *Xanthomonadaceae* | *Luteimonas* | |
| CG32 G11 | NT-RW | *Firmicutes* | *Bacilli* | *Bacillales* | *Bacillaceae* | *Bacillus* | |
| CG32 G12 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG33 A02 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG33 A03 | NT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | *Sphingomonas* | |
| CG33 A04 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG33 A05 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | Gp4 | |
| CG33 A07 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | Gp6 | |
| CG33 A08 | NT-RW | *Actinobacteria* | *Actinobacteria* | *Acidimicrobiales* | *Iamiaceae* | Iamia | |
| CG33 A09 | NT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Cystobacteraceae* | Hyalangium | |
| CG33 A10 | NT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Polyangiaceae* | Byssovorax | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | | |
| Phylum | Class | Order | Family | | | Genus | |
| CG33 A11 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG33 A12 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Actinomycetales* | *Actinosynnemataceae* | | | *Lentzea* | |
| CG33 B01 | NT-CW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Phaselicystidaceae* | | | *Phaselicystis* | |
| CG33 B03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG33 B04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 | |
| CG33 B05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG33 B06 | NT-CW | Unclassified *Bacteria* | --- | --- | --- | | | --- | |
| CG33 B07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp5 |  |  | | | Gp5 | |
| CG33 B08 | NT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | | *Terrimonas* | |
| CG33 B10 | NT-CW | Unclassified *Bacteria* | --- | --- | --- | | | --- | |
| CG33 B11 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Rhodocyclales* | *Rhodocyclaceae* | | *Methyloversatilis* | | |
| CG33 B12 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | | *Pirellula* | |
| CG33 C01 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | Gp7 | |
| CG33 C03 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Nitriliruptorales* | *Nitriliruptoraceae* | | | *Nitriliruptor* | |
| CG33 C04 | NT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Polyangiaceae* | | | *Byssovorax* | |
| CG33 C05 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp5 |  |  | | | | Gp5 |
| CG33 C07 | NT-RW | *Proteobacteria* | α-*Proteobacteria* | *Caulobacterales* | *Caulobacteraceae* | | | *Brevundimonas* | |
| CG33 C08 | NT-RW | *Cyanobacteria* | *Cyanobacteria* | FamilyVIII |  | | | GpVIII | |
| CG33 C09 | NT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Comamonadaceae* | | | *Ramlibacter* | |
| CG33 C10 | NT-RW | *Verrucomicrobia* | Subdivision 3 |  |  | Subdivision 3 *genera incertae sedis* | | | |
| CG33 C11 | NT-RW | *Proteobacteria* | δ-*Proteobacteria* | *Myxococcales* | *Phaselicystidaceae* | | | *Phaselicystis* | |
| CG33 C12 | NT-RW | Unclassified *Bacteria* | --- | --- | --- | | | --- | |
| CG33 D01 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG33 D02 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | Gp7 | |
| CG33 D03 | NT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | *Ideonella* | |
| CG33 D04 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 | |
| CG33 D05 | NT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | *Thiobacter* | |
| CG33 D06 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG33 D08 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 | |
| CG33 D09 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 | |
| CG33 D10 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | | Gp4 | |
| CG33 D11 | NT-RW | Unclassified *Bacteria* | --- | --- | --- | | | --- | |
| CG33 D12 | NT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | | *Thiobacter* | |
| CG33 E01 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | | Gp7 | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | | | |
| Phylum | Class | Order | Family | | Genus | |
| CG33 E04 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG33 E05 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Rubrobacterales* | *Rubrobacteraceae* | | *Rubrobacter* | |
| CG33 E06 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG33 E07 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG33 E08 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | *Thiobacter* | |
| CG33 E09 | NT-CW | *Proteobacteria* | β-*Proteobacteria* | *Rhodocyclales* | *Rhodocyclaceae* | | *Denitratisoma* | |
| CG33 E10 | NT-CW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | | *Sphingomonas* | |
| CG33 E11 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp7 |  |  | | Gp7 | |
| CG33 E12 | NT-CW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteria*les | *Chitinophagaceae* | | *Terrimonas* | |
| CG33 F01 | NT-CW | *Actinobacteria* | *Actinobacteria* | *Acidimicrobiales* | *Iamiaceae* | | *Iamia* | |
| CG33 F02 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | Gp3 | |
| CG33 F03 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | Gp3 | |
| CG33 F04 | NT-CW | *Planctomycetes* | *Planctomycetacia* | *Planctomycetales* | *Planctomycetaceae* | | *Gemmata* | |
| CG33 F05 | NT-CW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG33 F06 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp10 |  |  | | Gp10 | |
| CG33 F07 | NT-RW | Unclassified *Bacteria* | --- | --- | *---* | | | --- |
| CG33 F08 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG33 F09 | NT-RW | Unclassified *Bacteria* | --- | --- | *---* | | --- | |
| CG33 F10 | NT-RW | *Proteobacteria* | α-*Proteobacteria* | *Rhodospirillales* | *Acetobacteraceae* | | *Granulibacter* | |
| CG33 F11 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | | Gp6 |
| CG33 F12 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | Gp3 | |
| CG33 G01 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG33 G02 | NT-RW | Unclassified *Bacteria* | --- | --- | --- | | --- | |
| CG33 G03 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG33 G05 | NT-RW | *Proteobacteria* | β-*Proteobacteria* | *Burkholderiales* | *Burkholderiales incertae sedis* | | *Thiobacter* | |
| CG33 G06 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG33 G08 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp4 |  |  | | Gp4 | |
| CG33 G10 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG33 G12 | NT-RW | *Proteobacteria* | α-*Proteobacteria* | *Sphingomonadales* | *Sphingomonadaceae* | *Novosphingobium* | | |
| CG33 H01 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp3 |  |  | | Gp3 | |
| CG33 H02 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG33 H03 | NT-RW | *Actinobacteria* | *Actinobacteria* | *Solirubrobacterales* | *Conexibacteraceae* | | *Conexibacter* | |
| CG33 H04 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |
| CG33 H05 | NT-RW | *Acidobacteria* | *Acidobacteria* Gp6 |  |  | | Gp6 | |

Supplemental Table 1 continued

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Clone ID | Treatment | Classification | | | | |
| Phylum | Class | Order | Family | Genus |
| CG33 H06 | NT-RW | *Cyanobacteria* | *Cyanobacteria* | Family IV |  | GpIV |
| CG33 H08 | NT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteriales* | *Flammeovirgaceae* | *Fabibacter* |
| CG33 H10 | NT-RW | *Bacteroidetes* | *Sphingobacteria* | *Sphingobacteriales* | *Chitinophagaceae* | *Niastella* |
| CG33 H12 | NT-RW | Unclassified *Bacteria* | --- | --- | --- | --- |