Table S1. List of classified halophilic bacteria upto genus level based on 16S rRNA gene sequence analysis using MinION sequencing.from Marakkanam saltpan

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Phylum** | **Class** | **Order** | **Family** | **Genus** | **No. of sequences** |
| Proteobacteria | Alphaproteobacteria | Rhizobiales | Rhizobiaceae | *Rhizobium* | 20 |
|  |  | Rhizobiales | Phyllobacteriaceae | *Mesorhizobium* | 6 |
|  |  | Sphingomonadales | Sphingomonadaceae | *Novosphingobium* | 2 |
|  |  | Sphingomonadales | Sphingomonadaceae | *Sphingomonas* | 2 |
|  |  | Rhizobiales | Bradyrhizobiaceae | *Bosea* | 1 |
|  |  | Caulobacterales | Caulobacteraceae | *Brevundimonas* | 1 |
|  |  | Caulobacterales | Caulobacteraceae | *Caulobacter* | 1 |
|  | Betaproteobacteria | Burkholderiales | Burkholderiaceae | *Paraburkholderia* | 75 |
|  |  | Burkholderiales | Burkholderiaceae | *Pandoraea* | 20 |
|  |  | Burkholderiales | Burkholderiaceae | *Ralstonia* | 14 |
|  |  | Burkholderiales | Burkholderiaceae | *Burkholderia* | 9 |
|  |  | Burkholderiales | Oxalobacteraceae | *Massilia* | 9 |
|  |  | Burkholderiales | Burkholderiaceae | *Cupriavidus* | 2 |
|  |  | Burkholderiales | Sutterellaceae | *Sutterella* | 1 |
|  |  | Neisseriales | Neisseriaceae | *Snodgrassella* | 1 |
|  | Gammaproteobacteria | Xanthomonadales | Xanthomonadaceae | *Stenotrophomonas* | 7 |
|  |  | Oceanospirillales | Halomonadaceae | *Halomonas* | 3 |
|  |  | Xanthomonadales | Xanthomonadaceae | *Xanthomonas* | 3 |
|  |  | Xanthomonadales | Rhodanobacteraceae | *Dyella* | 3 |
|  |  | Pseudomonadales | Pseudomonadaceae | *Pseudomonas* | 3 |
|  |  | Oceanospirillales | Halomonadaceae | *Chromohalobacter* | 2 |
|  |  | Pasteurellales | Pasteurellaceae | *Haemophilus* | 2 |
|  |  | Xanthomonadales | Xanthomonadaceae | *Lysobacter* | 1 |
|  |  | Alteromonadales | Alteromonadaceae | *Marinobacter* | 1 |
|  |  | Alteromonadales | Idiomarinaceae | *Idiomarina* | 1 |
|  |  | Enterobacterales | Enterobacteriaceae | *Klebsiella* | 1 |
|  |  | Enterobacterales | Yersiniaceae | *Serratia* | 1 |
|  |  | Nevskiales | Sinobacteraceae | *Solimonas* | 1 |
|  |  | Vibrionales | Vibrionaceae | *Vibrio* | 1 |
| Firmicutes | Clostridia | Clostridiales | Clostridiaceae | *Clostridium* | 2 |
|  |  | Clostridiales | Ruminococcaceae | *Ruminococcus* | 2 |
|  |  | Clostridiales | Christensenellaceae | *Christensenella* | 1 |
|  |  | Clostridiales | Gracilibacteraceae | *Gracilibacter* | 1 |
|  |  | Clostridiales | Oscillospiraceae | *Oscillibacter* | 1 |
|  |  | Clostridiales | Peptostreptococcaceae | *Paeniclostridium* | 1 |
|  |  | Clostridiales | Peptostreptococcaceae | *Romboutsia* | 1 |
|  |  | Clostridiales | Hungateiclostridiaceae | *Ruminiclostridium* | 1 |
|  | Bacilli | Lactobacillales | Lactobacillaceae | *Lactobacillus* | 15 |
|  |  | Lactobacillales | Streptococcaceae | *Streptococcus* | 14 |
|  |  | Bacillales | Bacillaceae | *Bacillus* | 6 |
|  |  | Bacillales | Paenibacillaceae | *Paenibacillus* | 1 |
|  |  | Lactobacillales | Leuconostocaceae | *Weissella* | 1 |
|  | Negativicutes | Veillonellales | Veillonellaceae | *Dialister* | 5 |
|  |  | Veillonellales | Veillonellaceae | *Veillonella* | 3 |
|  |  | Selenomonadales | Selenomonadaceae | *Megamonas* | 2 |
|  |  | Veillonellales | Veillonellaceae | *Megasphaera* | 2 |
| Bacteroidetes/Chlorobi group | Bacteroidetes | Bacteroidia | Bacteroidales | *Prevotella* | 44 |
|  |  | Bacteroidia | Bacteroidales | *Bacteroides* | 19 |
|  |  | Bacteroidia | Bacteroidales | *Alistipes* | 2 |
|  |  | Sphingobacteriia | Sphingobacteriales | *Pedobacter* | 1 |
| Acidobacteria | Acidobacteriia | Acidobacteriales | Acidobacteriaceae | *Granulicella* | 1 |
| Actinobacteria | Actinobacteria | Corynebacteriales | Mycobacteriaceae | *Mycobacterium* | 1 |
| Spirochaetes | Spirochaetia | Spirochaetales | Spirochaetaceae | *Sphaerochaeta* | 2 |
|  |  | Spirochaetales | Spirochaetaceae | *Treponema* | 1 |
| Fusobacteria | Fusobacteriia | Fusobacteriales | Fusobacteriaceae | *Fusobacterium* | 1 |