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 |