```
k_Bacteria;p_Acidobacteria;c_Acidobacteriia;o_Acidobacteriales;f_Acidobacteriaceae
     k_Bacteria;p_Acidobacteria;c_[Chloracidobacteria];o_RB41;f_Ellin6075
k_Bacteria;p_Actinobacteria;c_Acidimicrobiia;o_Acidimicrobiales;f_
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;Other
     k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_
     k\_Bacteria; p\_Actinobacteria; c\_Actinobacteria; o\_Actinomycetales; f\_Actinomycetaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Beutenbergiaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Bogoriellaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Brevibacteriaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Cellulomonadaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Corynebacteriaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dermabacteraceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Dietziaceae
     \label{lem:k_Bacteria} $$k\_Bacteria; p\_Actinobacteria; c\_Actinobacteria; o\_Actinomycetales; f\_Geodermatophilaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Gordoniaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Intrasporangiaceae
     k\_Bacteria; p\_Actinobacteria; c\_Actinobacteria; o\_Actinomycetales; f\_Kineosporiaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Microbacteriaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Micrococcaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Mycobacteriaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardiaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Nocardioidaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Promicromonosporaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Pseudonocardiaceae
k_Bacteria;p_Actinobacteria;c_Actinobacteria;o_Actinomycetales;f_Sanguibacteraceae
k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Gaiellales;f_Gaiellaceae
k_Bacteria;p_Actinobacteria;c_Thermoleophilia;o_Solirubrobacterales;f_
k_Bacteria;p_Armatimonadetes;c_Armatimonadia;o_Armatimonadales;f_Armatimonadaceae
   ■ k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Porphyromonadaceae
k_Bacteria;p_Bacteroidetes;c_Bacteroidia;o_Bacteroidales;f_Prevotellaceae
     k\_Bacteria; p\_Bacteroidetes; c\_Bacteroidia; o\_Bacteroidales; f\_[Paraprevotellaceae]
k_Bacteria;p_Bacteroidetes;c_Cytophagia;o_Cytophagales;f_Cytophagaceae
k_Bacteria;p_Bacteroidetes;c_Flavobacteriia;o_Flavobacteriales;f_Flavobacteriaceae
     k\_Bacteria; p\_Bacteroidetes; c\_Flavobacteriia; o\_Flavobacteriales; f\_[Weeksellaceae]
     k\_Bacteria; p\_Bacteroidetes; c\_Sphingobacteria; o\_Sphingobacteriales; f\_Sphingobacteriaceae
k_Bacteria;p_Bacteroidetes;c_[Saprospirae];o_[Saprospirales];f_Chitinophagaceae
k_Bacteria;p_Chloroflexi;c_Anaerolineae;o_SBR1031;f_A4b
k_Bacteria;p_Chloroflexi;c_Chloroflexi;o_Herpetosiphonales;f_
k_Bacteria;p_Cyanobacteria;c_Chloroplast;o_Streptophyta;f_
k_Bacteria;p_Firmicutes;c_Bacilli;Other;Other
k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;Other
k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_
     k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Alicyclobacillaceae
k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Bacillaceae
k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Paenibacillaceae
     k\_Bacteria; p\_Firmicutes; c\_Bacilli; o\_Bacillales; f\_Planococcaceae
k_Bacteria;p_Firmicutes;c_Bacilli;o_Bacillales;f_Staphylococcaceae
k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;Other
k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_
k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Aerococcaceae
k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Enterococcaceae
k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Lactobacillaceae
k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Leuconostocaceae
   k_Bacteria;p_Firmicutes;c_Bacilli;o_Lactobacillales;f_Streptococcaceae
k_Bacteria;p_Firmicutes;c_Bacilli;o_Turicibacterales;f_Turicibacteraceae
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;Other
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Christensenellaceae
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Clostridiaceae
     k\_Bacteria; p\_Firmicutes; c\_Clostridia; o\_Clostridiales; f\_Lachnospiraceae
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Peptostreptococcaceae
k_Bacteria;p_Firmicutes;c_Clostridia;o_Clostridiales;f_Ruminococcaceae
     k\_Bacteria; p\_Firmicutes; c\_Clostridia; o\_Clostridiales; f\_Veillonellaceae
     k\_Bacteria; p\_Firmicutes; c\_Erysipelotrichi; o\_Erysipelotrichales; f\_Erysipelotrichaceae
k_Bacteria;p_Fusobacteria;c_Fusobacteriia;o_Fusobacteriales;f_Leptotrichiaceae
k_Bacteria;p_Gemmatimonadetes;c_Gemm-3;o_;f_
k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Gemmataceae
k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Gemmatales;f_Isosphaeraceae
k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Pirellulales;f_Pirellulaceae
k_Bacteria;p_Planctomycetes;c_Planctomycetia;o_Planctomycetales;f_Planctomycetaceae
k_Bacteria;p_Proteobacteria;Other;Other;Other
     k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;Other;Other
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_;
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_BD7-3;f_
     k\_Bacteria; p\_Proteobacteria; c\_Alphaproteobacteria; o\_Caulobacterales; f\_Caulobacteraceae
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;Other
   k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Aurantimonadaceae
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Bradyrhizobiaceae
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Brucellaceae
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Hyphomicrobiaceae
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylobacteriaceae
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Methylocystaceae
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Phyllobacteriaceae
  k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Rhizobiaceae
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhizobiales;f_Xanthobacteraceae
  k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodobacterales;f_Rhodobacteraceae
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodospirillales;f_Acetobacteraceae
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rhodospirillales;f_Rhodospirillaceae
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Rickettsiales;f_mitochondria
     k\_Bacteria; p\_Proteobacteria; c\_Alphaproteobacteria; o\_Sphingomonadales; Other and the substitution of t
     k\_Bacteria; p\_Proteobacteria; c\_Alphaproteobacteria; o\_Sphingomonadales; f\_Erythrobacteraceae
k_Bacteria;p_Proteobacteria;c_Alphaproteobacteria;o_Sphingomonadales;f_Sphingomonadaceae
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;Other
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Alcaligenaceae
   ■ k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Burkholderiaceae
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Comamonadaceae
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Burkholderiales;f_Oxalobacteraceae
     \label{lem:k_Bacteria} $$k\_Bacteria;p\_Proteobacteria;c\_Betaproteobacteria;o\_Neisseriales;f\_Neisseriaceae
k_Bacteria;p_Proteobacteria;c_Betaproteobacteria;o_Rhodocyclales;f_Rhodocyclaceae
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Bdellovibrionales;f_Bacteriovoracaceae
     \verb|k_Bacteria|; p_Proteobacteria|; c_Deltaproteobacteria|; o_Bdellovibrionales|; f_Bdellovibrionaceae|
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;Other
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_0319-6G20
k_Bacteria;p_Proteobacteria;c_Deltaproteobacteria;o_Myxococcales;f_Cystobacteraceae
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;Other;Other
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o__;f__
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Aeromonadales;f_Aeromonadaceae
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Alteromonadales;f_Alteromonadaceae
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Alteromonadales;f_[Chromatiaceae]
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Enterobacteriales;f_Enterobacteriaceae
   k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Oceanospirillales;f_Halomonadaceae
   ■ k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Moraxellaceae
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Pseudomonadales;f_Pseudomonadaceae
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Thiotrichales;f_Piscirickettsiaceae
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Sinobacteraceae
k_Bacteria;p_Proteobacteria;c_Gammaproteobacteria;o_Xanthomonadales;f_Xanthomonadaceae
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k\_Bacteria;p\_Tenericutes;c\_Mollicutes;o\_RF39;f\_

k\_Bacteria;p\_Verrucomicrobia;c\_Verrucomicrobiae;o\_Verrucomicrobiales;f\_Verrucomicrobiaceae
k\_Bacteria;p\_Verrucomicrobia;c\_[Spartobacteria];o\_[Chthoniobacterales];f\_[Chthoniobacteraceae]

Unassigned;Other;Other;Other;Other