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     REPORT OF SEQUENCED PCR AMPLICONS (NANOPORE) ***
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Analysis of barcoded sample (BC30):
Date of report: Fri Aug 2 18:10:51 2019
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Total number of reads in the input fasta file: *392*
The reference database *My16SDB* contains *55807* sequences
Total: 392 reads aligned to references, 100.0% (392 reads) were kept after applying
 >100 cutoff reads mapping per taxonomic level
== B) Selection of taxonomic groups based on mapped reads =========
 -(296,75.5%) Corynebacterium_tuberculostearicum
== C) STATISTICS ABOUT CONSENSUS SEQUENCES ==================
Len N - Taxonomic levels
 448 0 4 Corynebacterium_tuberculostearicum
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[Len]: length (bp) of the consensus sequences; [N] number of unknown bases, i.e. not unique A/T/G/C; [-]: number of bases present in the reference sequence
but absent in the consensus sequence (deletions).
NOTE: if too many Ns are present (e.g. >3-5),
the respective consensus sequence is not of good quality.
== Reference group: Corynebacterium_tuberculostearicum
{\tt GCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGAAAGGCCCTGCTTGCAGGGTACTCG}
AGTGGCGAACGGGTGAGTAACACGTGGGTGATCTGCCCTGCACTTCGGGATAAGCCTGGG
AAACTGGGTCTAATACCGGATAGGAGCCATTTTAGTGTGATGGTTGGAAAGTTTTTCGGT
GTAGGATGAGCTCGCGGCCTATCAGCTTGTTGGTGGGGTAATGGCCTACCAAGGCGGCGA
CGGGTAGCCGGCCTGAGAGGGTGGACGGCCACATTGGGACTGAGATACGGCCCAGACTCC
TACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCGACGCCG
CGTGGGGATGACGGCCTTCGGGTTGTAAACTCCTTTCGCTAGGGACGAAGCTTTTGTGAC
GGTACCTAGATAAGAAGCACCGGCTAAC
== E) Checking the taxonomic classification of the obtained consensus sequences
(using Blastn on My16SDB database)
# Query: BC30_using_Corynebacterium_tuberculostearicum_consensus_448bp_N0_D4_Aug_02_201
 id/Nber identical/alignment length/Nber mismatches/Nber gaps subject_id
99.115/448/452/0/4 Corynebacterium_tuberculostearicum~v~TT~URS00000BD4B...
98.894/447/452/1/4 Corynebacterium_tuberculostearicum~v~N~URS00009EE730...
98.894/447/452/1/4 Corynebacterium_tuberculostearicum~v~N~URS00005E4DF7... 98.451/445/452/3/4 Corynebacterium_tuberculostearicum~v~N~URS0000055677...
98.230/444/452/4/4 Corynebacterium_accolens~v~N~URS000031F940.
98.013/444/453/4/5 Corynebacterium_segmentosum~v~N~URS0000886D72...
98.009/443/452/5/4 Corynebacterium_accolens~v~N~URS00000ABEEE...
98.009/443/452/5/4 Corynebacterium_accolens~v~N~URS00002AB58B...
98.004/442/451/6/3 Corynebacterium_macginleyi~v~N~URS000048F30F...
97.792/443/453/5/5 Corynebacterium_fastidiosum~v~N~URS000020110B...
______
Query= BC30_using_Corynebacterium_tuberculostearicum_consensus_448bp_N0_D4_
Aug_02_2019
Length=448
                                                                Score
                                                                            Ε
Sequences producing significant alignments:
                                                                (Bits)
                                                                         Value
                                                                           0.0
Corynebacterium_tuberculostearicum~v~TT~URS000000BD4B
                                                                809
Corynebacterium_tuberculostearicum~v~N~URS00009EE730
                                                                806
                                                                           0.0
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| Coryneba<br>Coryneba<br>Coryneba<br>Coryneba<br>Coryneba<br>Coryneba                           | cteri<br>cteri<br>cteri<br>cteri<br>cteri<br>cteri                 | um_tuberculostearicum~v~N~URS00005E4DF7       804         um_tuberculostearicum~v~N~URS0000055677       793         um_accolens~v~N~URS000031F940       787         um_segmentosum~v~N~URS0000886D72       782         um_accolens~v~N~URS00000ABEEE       782         um_accolens~v~N~URS00002AB58B       782         um_macginleyi~v~N~URS000048F30F       780         um_fastidiosum~v~N~URS000020110B       776 |  |
|--|--|---|--|
| Query_1<br>2458<br>38252<br>26347<br>35057<br>43180<br>39634<br>32858<br>4024<br>30589<br>3404 | 1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1<br>1                     | GCTGGCGGCGTGCTTAACACATGCAAGTCGAACGGAAAGGCCCTGCTTGCAGGGTACTCG  | 60<br>60<br>60<br>60<br>60<br>60<br>60<br>60                       |
| Query_1<br>2458<br>38252<br>26347<br>35057<br>43180<br>39634<br>32858<br>4024<br>30589<br>3404 | 61<br>61<br>61<br>61<br>61<br>61<br>61<br>61                       | AGTGGCGAACGGGTGAGTAACACGTGGGTGATCTGCCCTGCACTTCGGGATAAGCCTGGG  TC.T  T.  T.  T.  T.  T.  T.  T.  T.  | 120<br>120<br>120<br>120<br>120<br>120<br>120<br>120<br>120        |
| Query_1<br>2458<br>38252<br>26347<br>35057<br>43180<br>39634<br>32858<br>4024<br>30589<br>3404 | 121<br>121<br>121<br>121<br>121<br>121<br>121<br>121<br>121<br>121 | AAACTGGGTCTAATACCGGATAGGAGCCA-T-TTTAGTGTGATGGTTGGAAAG-TTTTTC  | 177<br>179<br>179<br>179<br>179<br>179<br>179<br>179<br>179        |
| Query_1<br>2458<br>38252<br>26347<br>35057<br>43180<br>39634<br>32858<br>4024<br>30589<br>3404 | 178<br>180<br>180<br>180<br>180<br>180<br>180<br>180<br>180        | GGTGTAGGATGAGCTCGCGGCCTATCAGCTTGTTGGTGGGGTAATGGCCTACCAAGGCGG  | 237<br>239<br>239<br>239<br>239<br>239<br>239<br>239<br>239<br>239 |
| Query_1<br>2458<br>38252<br>26347<br>35057<br>43180<br>39634<br>32858                          | 238<br>240<br>240<br>240<br>240<br>240<br>240<br>240               | CGACGGGTAGCCGGCCTGAGAGGGTGGACGGCCACATTGGGACTGAGATACGGCCCAGAC  | 297<br>299<br>299<br>299<br>299<br>299<br>299                      |

0.0 0.0 0.0 0.0 0.0 0.0

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4024
     240
                                             299
        240
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30589
        .....T.....T......
3404
     240
        299
     298
        {\tt TCCTACGGGAGGCAGCAGTGGGGAATATTGCACAATGGGCGCAAGCCTGATGCAGCGACG}
                                             357
Query_1
2458
     300
                                             359
38252
     300
                                             359
26347
     300
                                             359
        35057
     300
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43180
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39634
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32858
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4024
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30589
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3404
     300
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Query_1
     358
        CCGCGT-GGGGATGACGGCCTTCGGGTTGTAAACTCCTTTCGCTAGGGACGAAGC--TTT
                                             414
     360
2458
        418
38252
     360
        418
26347
     360
        418
35057
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     360
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43180
        39634
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                                             417
        32858
     360
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4024
     360
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     360
30589
        417
3404
     360
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     415
        -T-GTGACGGTACCTAGATAAGAAGCACCGGCTAAC
                              448
Query_l
2458
     419
                              452
38252
     419
        -.-...N.....
                              452
26347
     419
        -.-........
35057
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        -.-........
                              452
     419
        -.-........
43180
39634
     418
        G.G.......
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32858
        -.-........
                              452
4024
     419
                              452
30589
     418
                              451
        -.-........
3404
     420
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MAXIMUM LIKELIHOOD TREE
Log-likelihood of the tree: -697.9932 (s.e. 22.8522)
Unconstrained log-likelihood (without tree): -682.0918
Number of free parameters (#branches + #model parameters): 23
Akaike information criterion (AIC) score: 1441.9864
Corrected Akaike information criterion (AICc) score: 1444.5902
Bayesian information criterion (BIC) score: 1536.3966
Total tree length (sum of branch lengths): 0.0296
Sum of internal branch lengths: 0.0136 (46.0851% of tree length)
WARNING: 2 near-zero internal branches (<0.0022) should be treated with caution
     Such branches are denoted by '**' in the figure below
NOTE: Tree is UNROOTED although outgroup taxon 'Corynebacterium_fastidiosum~v~N~URS0000
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Numbers in parentheses are ultrafast bootstrap support (%)