

**1 SUPPLEMENTARY FIGURE LEGENDS**

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3 **Supplementary Figure S1.** Map of sampling sites and photo of one of the Kentland  
4 Farm rain sampling sites in Blacksburg, VA, USA.

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6 **Supplementary Figure S2.** Rarefaction curve plotting the cumulative species richness  
7 against the cumulative number of sequences obtained in precipitation samples collected  
8 in Virginia, USA. The species richness was obtained by affiliating each 16S rDNA  
9 sequence to an operational taxonomic unit (OTU) using the open-source bioinformatics  
10 pipeline for performing microbiome analysis QIIME (Caporaso *et al* 2010). The curve  
11 was obtained plotting the cumulative number of OTUs against the cumulative number of  
12 sequences.

13

14 **Supplementary Figure S3.** Evolutionary relationships between the culturable strains  
15 isolated from precipitation and other members of the *Pseudomonadaceae* family based  
16 on the alignment of partial 16S rDNA sequences. A maximum likelihood tree was built  
17 from the 931pb-long sequences of 229 strains isolated in this study (labelled VT#;  
18 strains that were confirmed to be Ice<sup>+</sup> in repeated tests are labelled in bold), 150 type  
19 strains downloaded from the Ribosomal Database Project (RDP) (Cole *et al* 2014) and 19  
20 strains from NCBI, using the GTR model and 100 bootstrap replicates. Gaps were  
21 considered as missing data and were partially deleted with a site coverage cut-off of  
22 95%. The strain *Xanthomonas axonopodis* LMG 538<sup>T</sup> was used as a root. Only bootstrap  
23 values over 50% were included and are symbolized by black dots. Clades and leaves  
24 associated with strains that were Ice<sup>+</sup> in standardized re-tests at -8°C are labelled in bold  
25 and are underlined, those active at -10°C or -12°C are labelled in bold only. RDP names

26 are composed of the species name, the strain code and the accession number in the  
27 public database NCBI. Each collapsed clade is represented by a type strain.

28

29 **Supplementary Figure S4.** Evolutionary relationships between the culturable strains  
30 isolated from precipitation and other members of the *Enterobacteriaceae* family based  
31 on the alignment of partial 16S rDNA sequences. The phylogenetic tree was built from  
32 212 strains isolated in this study (labelled VT#; strains that were confirmed to be Ice<sup>+</sup> in  
33 repeated tests are labelled in bold) and 241 type strains downloaded from the  
34 Ribosomal Database Project (RDP) (Cole et al 2014). The strain *Pseudomonas aeruginosa*  
35 DSM 50071 was used as a root. See Supplementary Figure S3 for details about tree  
36 construction and labels.

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38 **Supplementary Figure S5.** Evolutionary relationships between the culturable strains  
39 isolated from precipitation and other members of the *Xanthomonadaceae* family based  
40 on the alignment of partial 16S rDNA sequences. The phylogenetic tree was built from  
41 30 strains isolated in this study (labelled VT#, strains that were confirmed to be Ice<sup>+</sup> in  
42 repeated tests are labelled in bold) and 132 type strains downloaded from the  
43 Ribosomal Database Project (RDP) (Cole et al 2014). The strain *Ralstonia solanacearum*  
44 LMG 2299 was used as a root. See Supplementary Figure S3 for details about tree  
45 construction and labels.

46

47 **Supplementary Figure S6.** Evolutionary relationships between the culturable INA  
48 strains *Lysinibacillus* sp. VT1065 and VT1066 isolated from precipitation and other  
49 members of the Bacillaceae family based on the alignment of 16S rDNA partial  
50 sequences. The phylogenetic tree was built from 47 strains isolated in this study

51 (labelled VT#; strains that were confirmed to be Ice<sup>+</sup> in repeated tests are labelled in  
52 bold) and 353 type strains downloaded from the Ribosomal Database Project (RDP)  
53 (Cole et al 2014). The strain *Lactobacillus acidophilus* BCRC10695 was used as a root.  
54 See Supplementary Figure S3 for details about tree construction and labels.

55

56 **References**

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59 QIIME allows analysis of high-throughput community sequencing data. *Nat Methods* **7**:

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62 Cole JR, Wang Q, Fish JA, Chai B, McGarell DM, Sun Y *et al* (2014). Ribosomal Database

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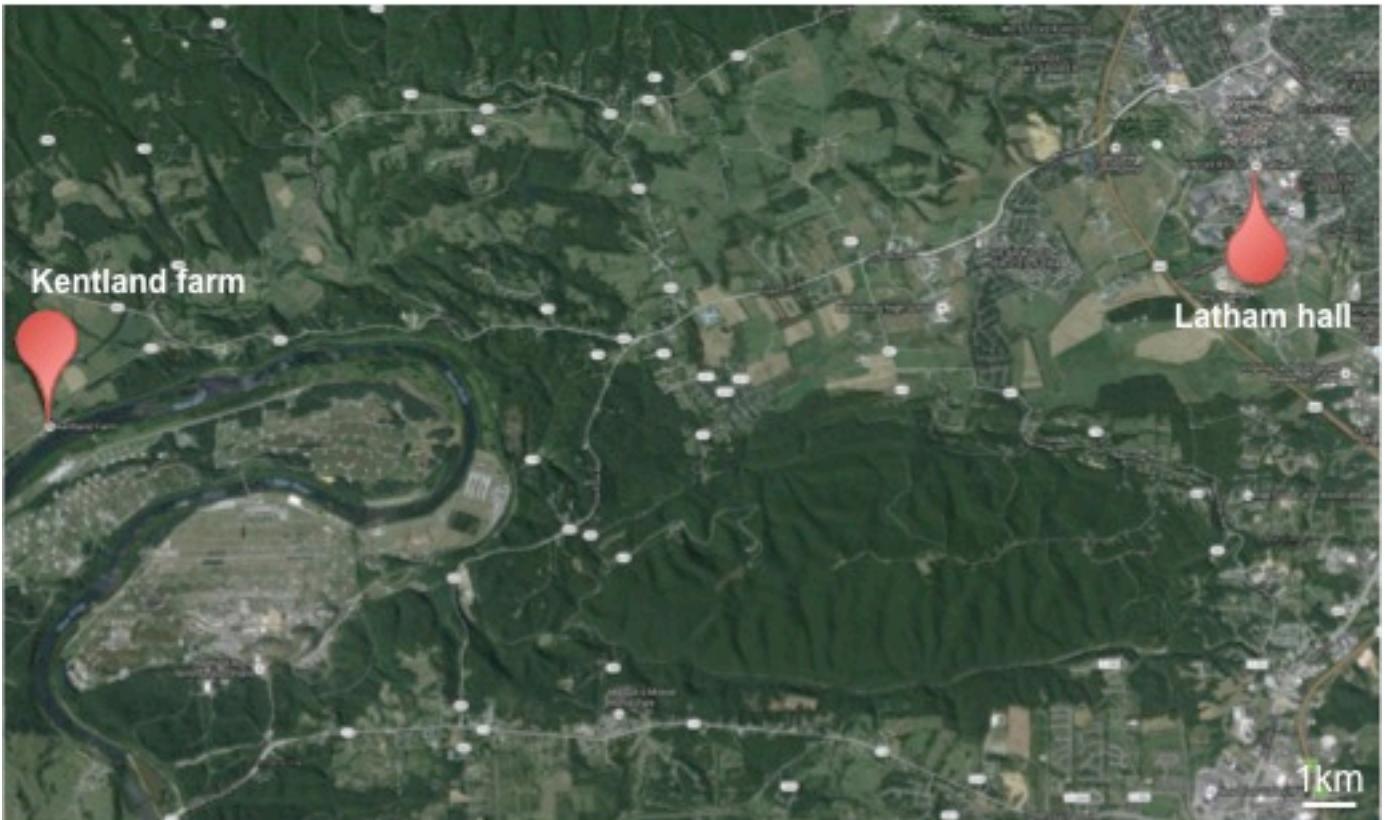


Figure S1

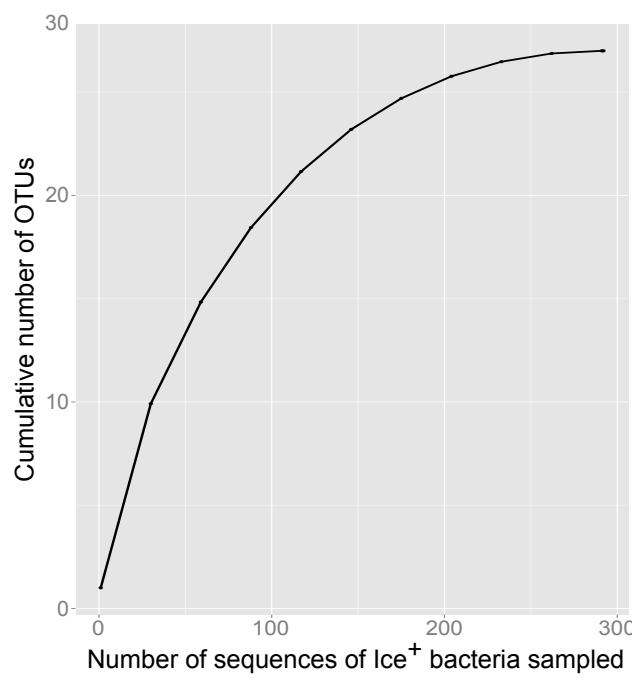


Figure S2

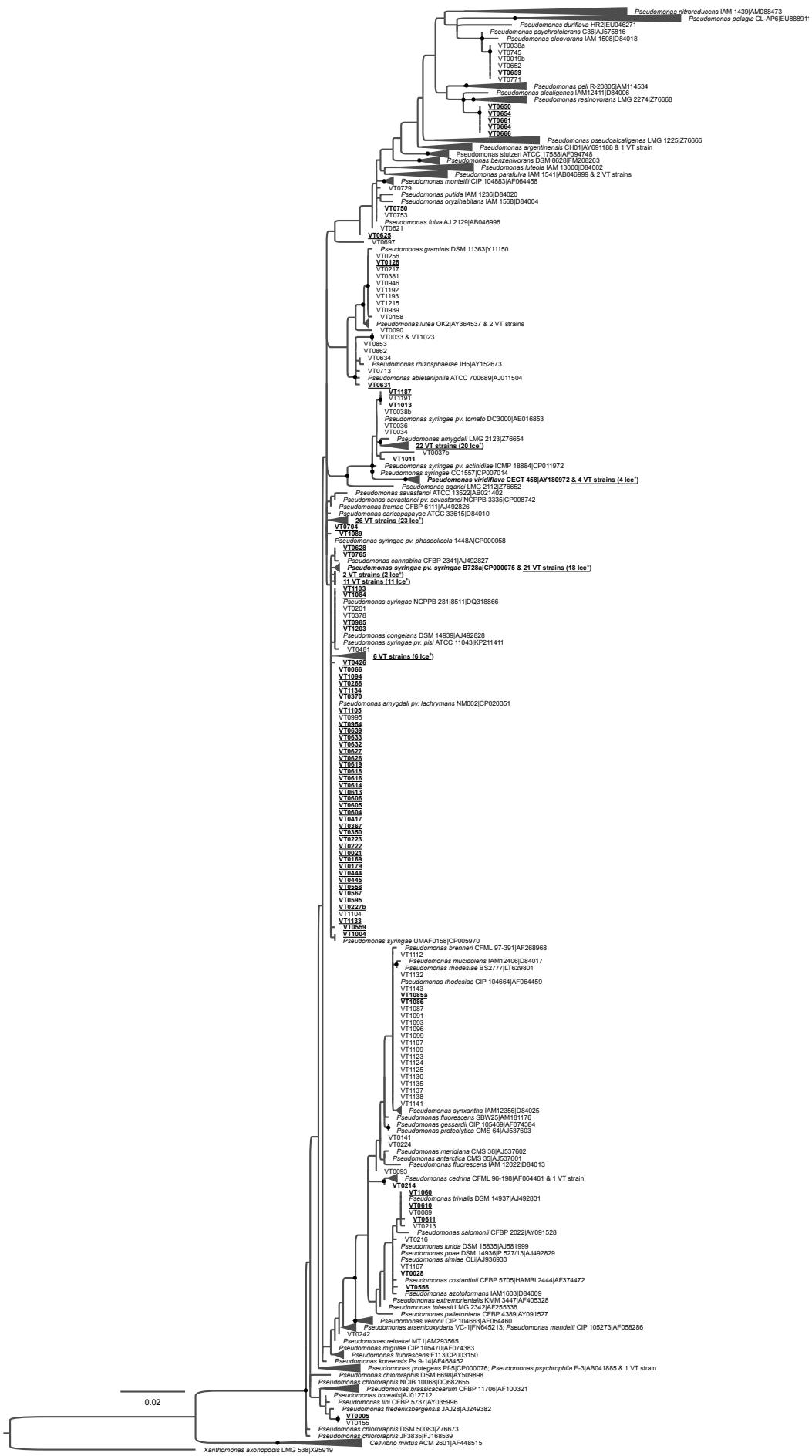


Figure S3

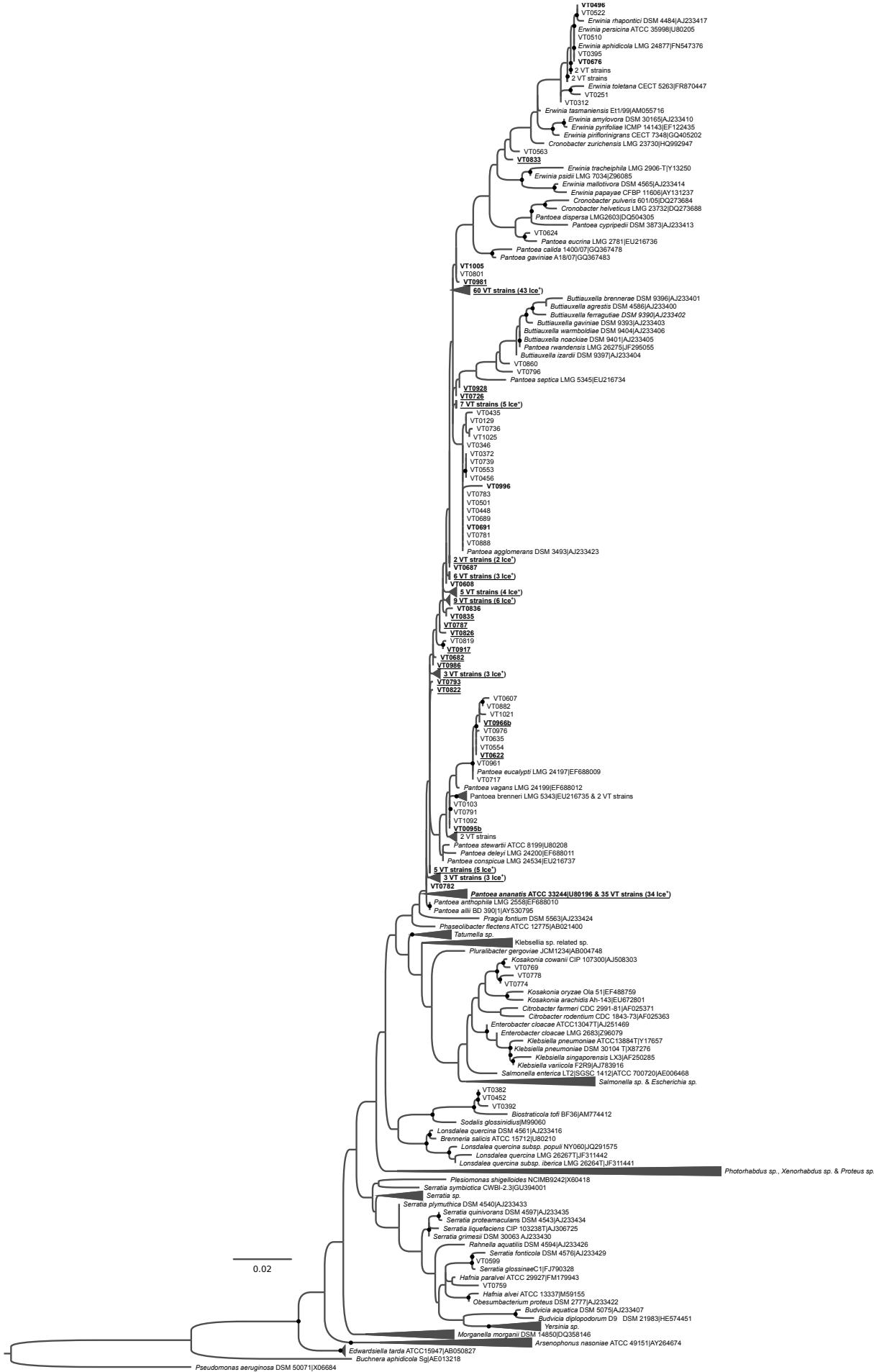
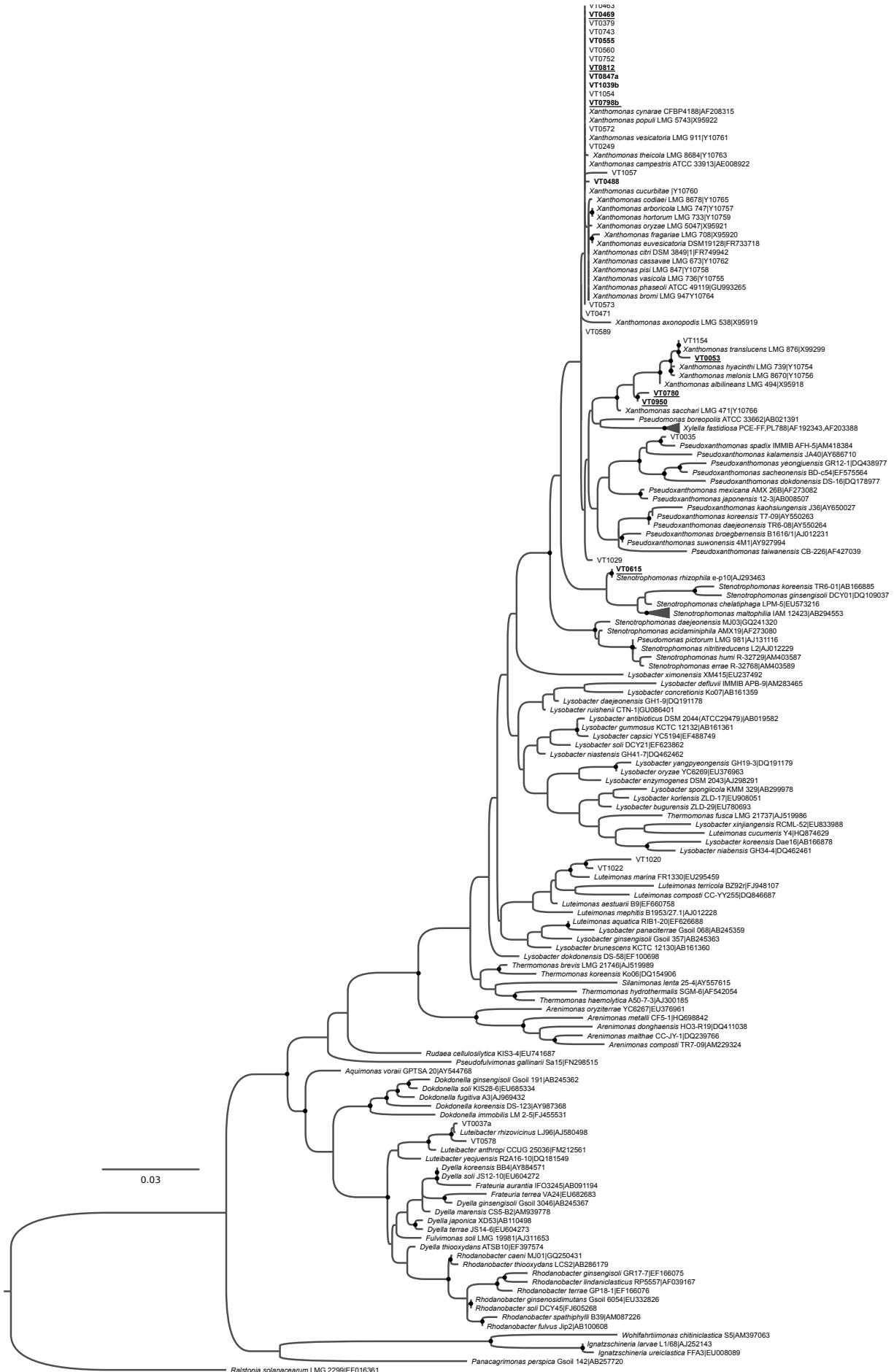


Figure S4



**Figure S5**

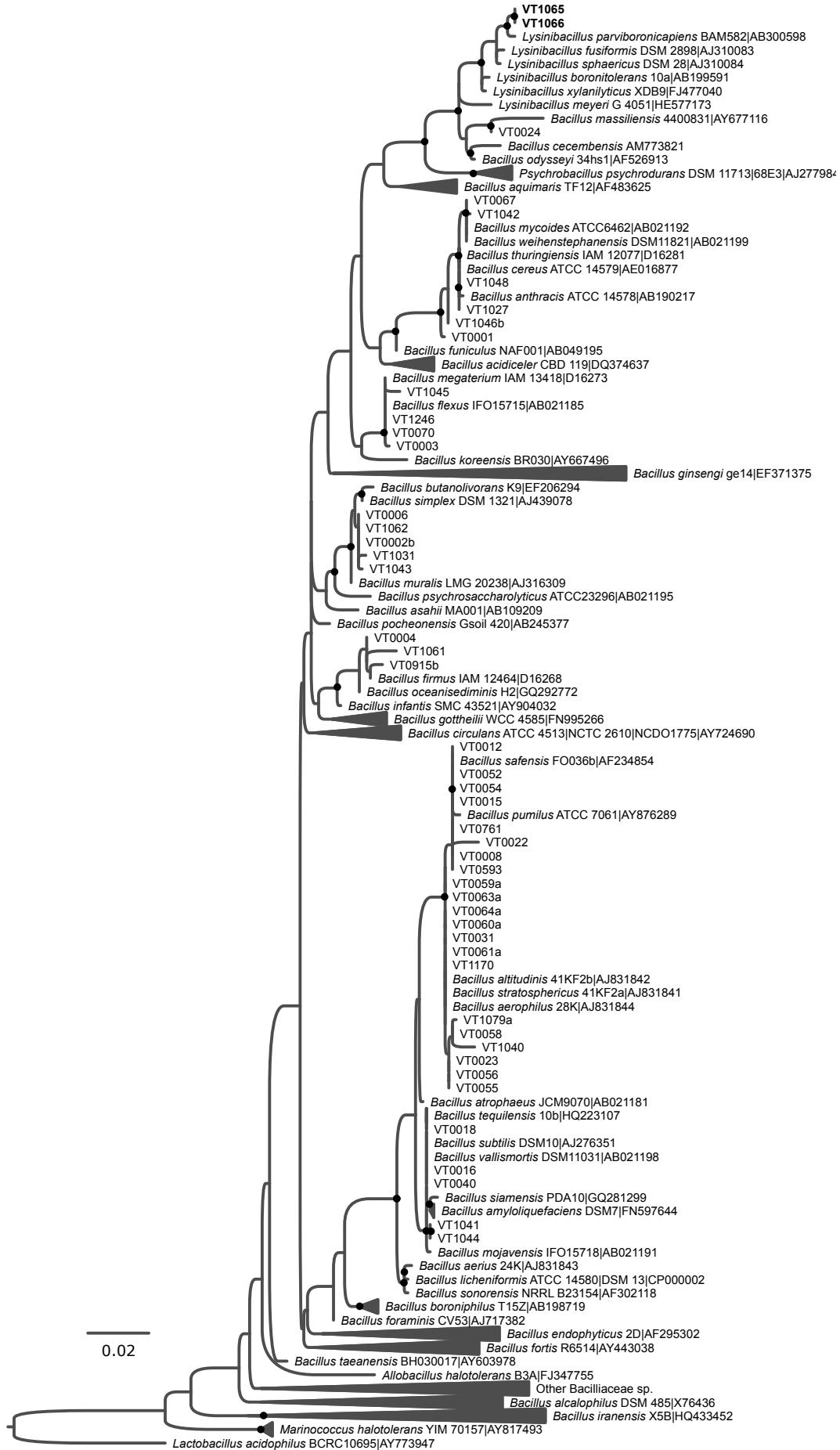


Figure S6