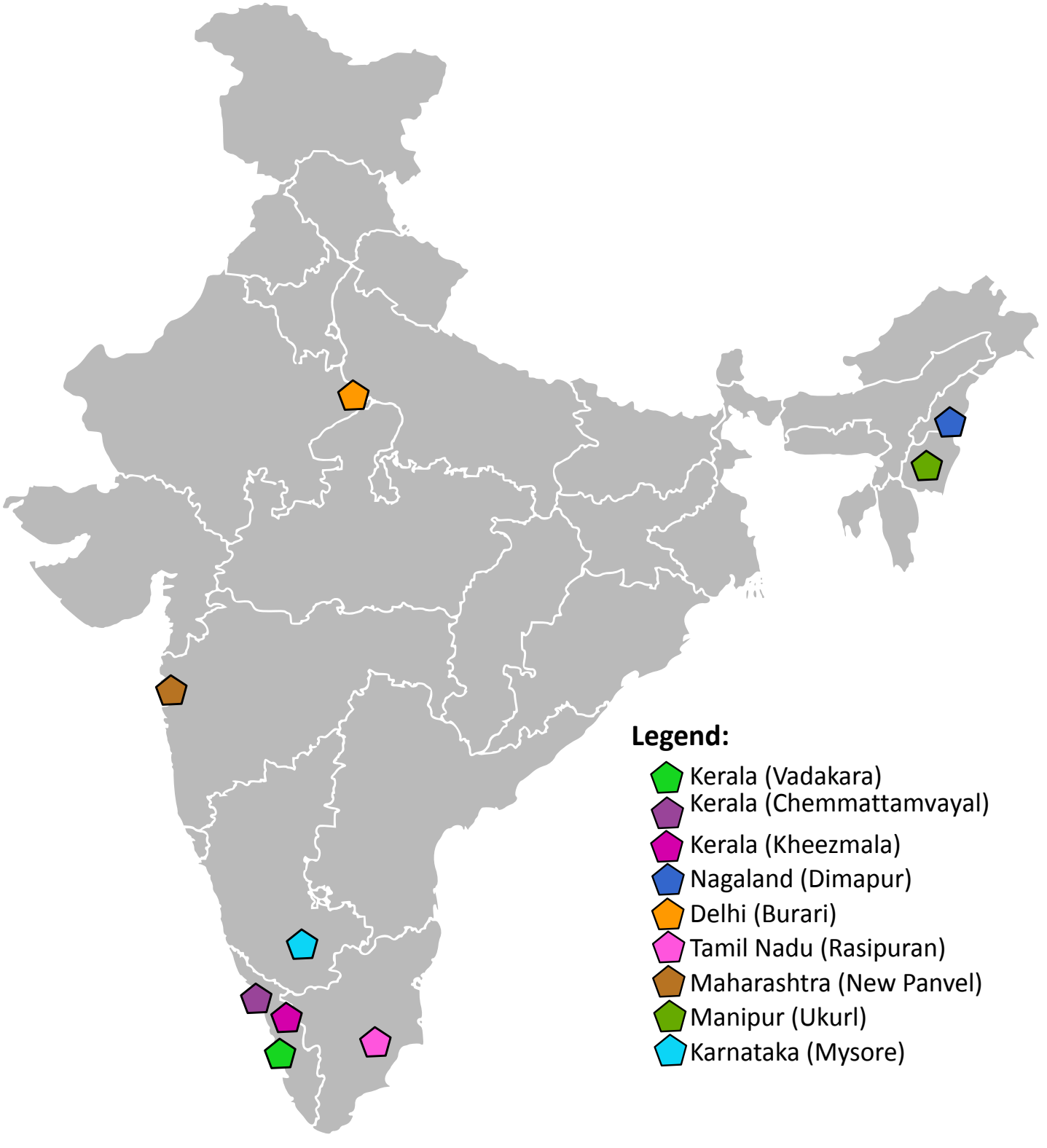
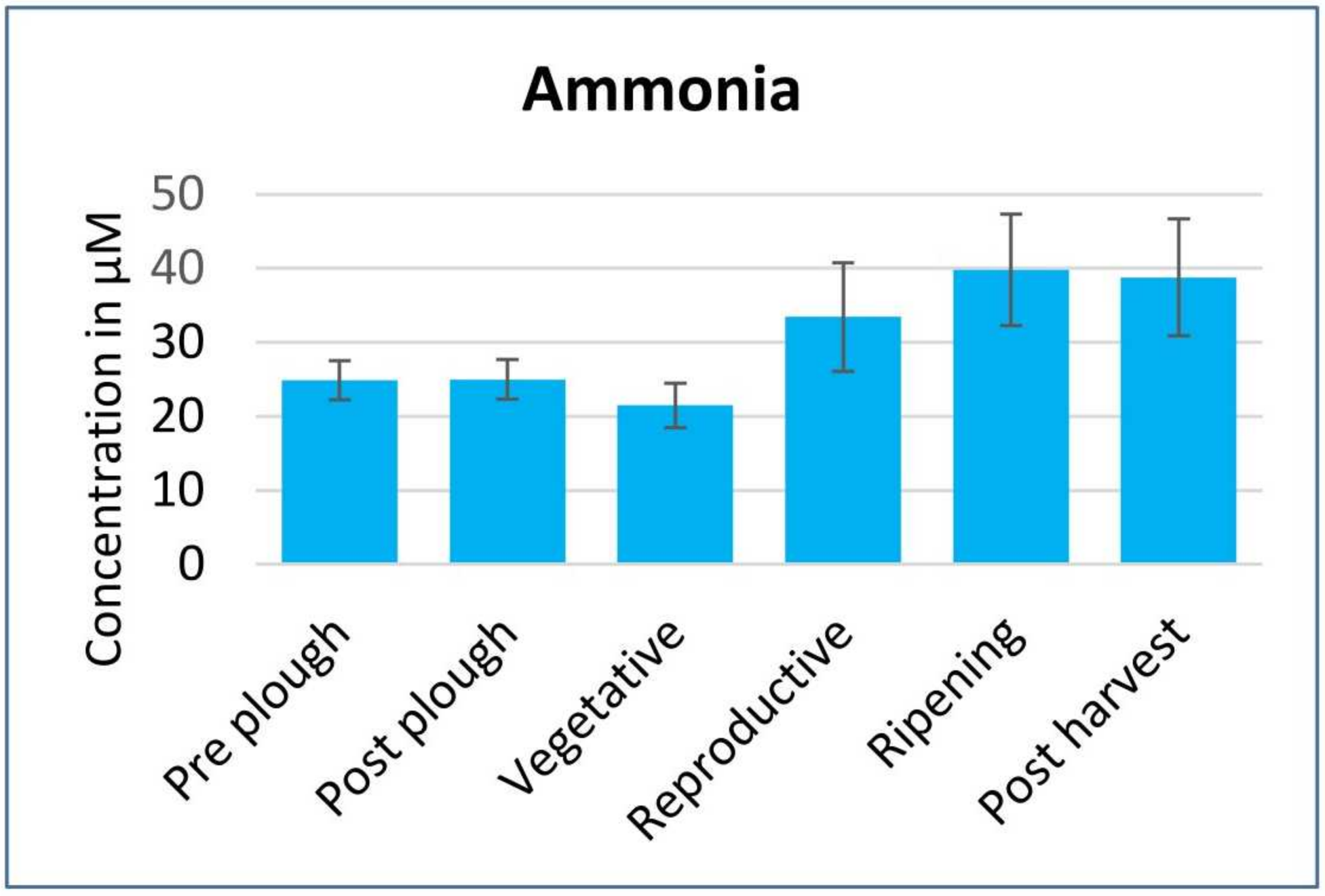



Figure S1: Graphical representation of sampling location within the study.



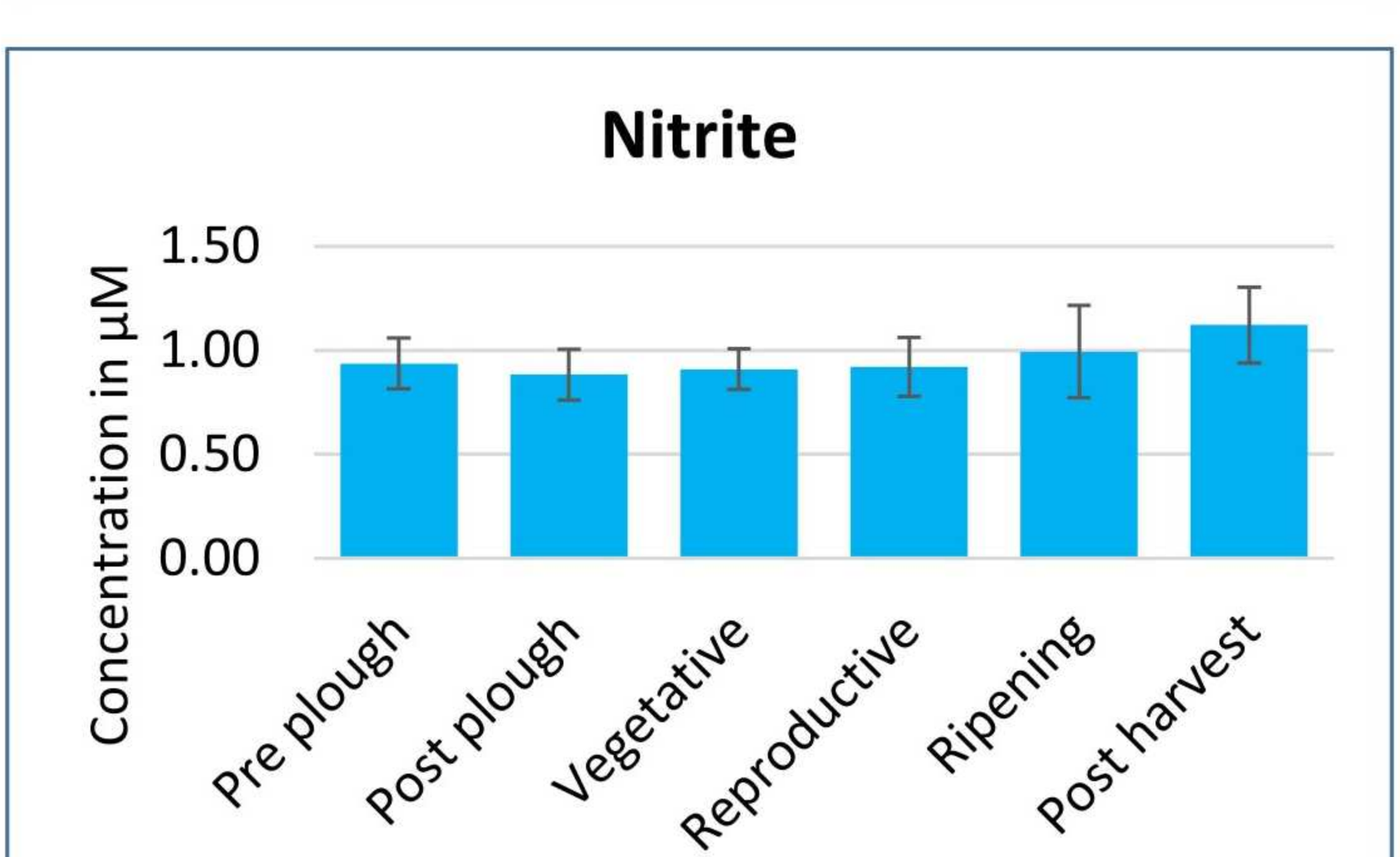




Figure S2: Ammonia and nitrite concentration (µM): The concentration of ammonia had a sharp rise during the cropped stages. Nitrite concentration also rose during cropped stages, however, to a much lesser extent as compared to ammonia.

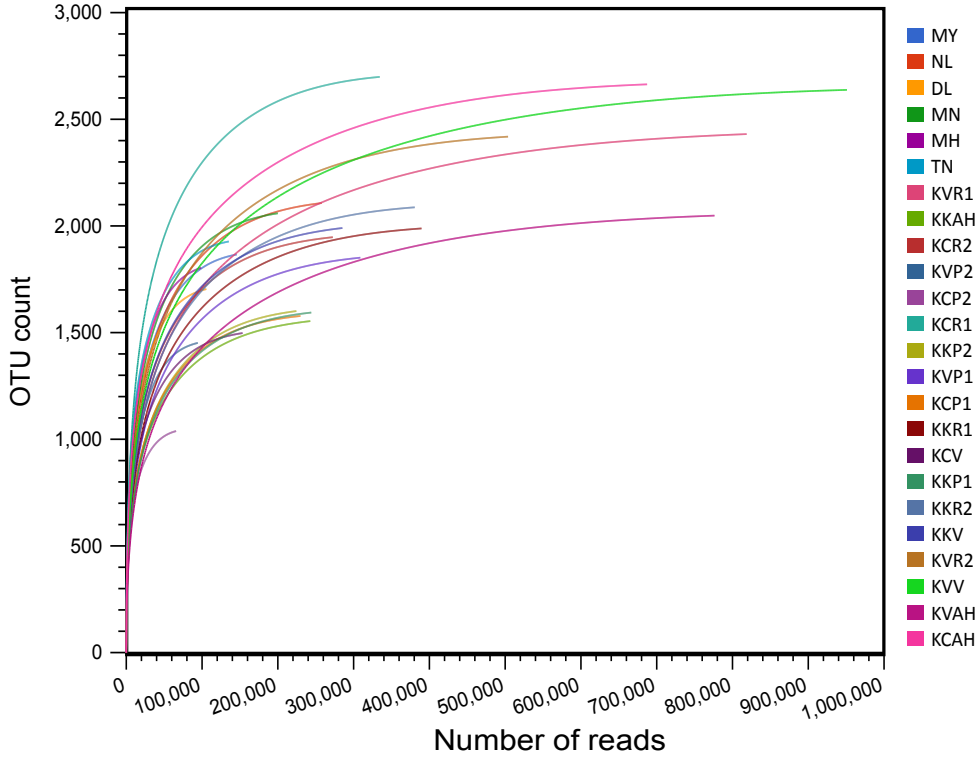



Figure S3: Rarefaction curve of the samples show plateau formation indicating sufficient sequencing depth.

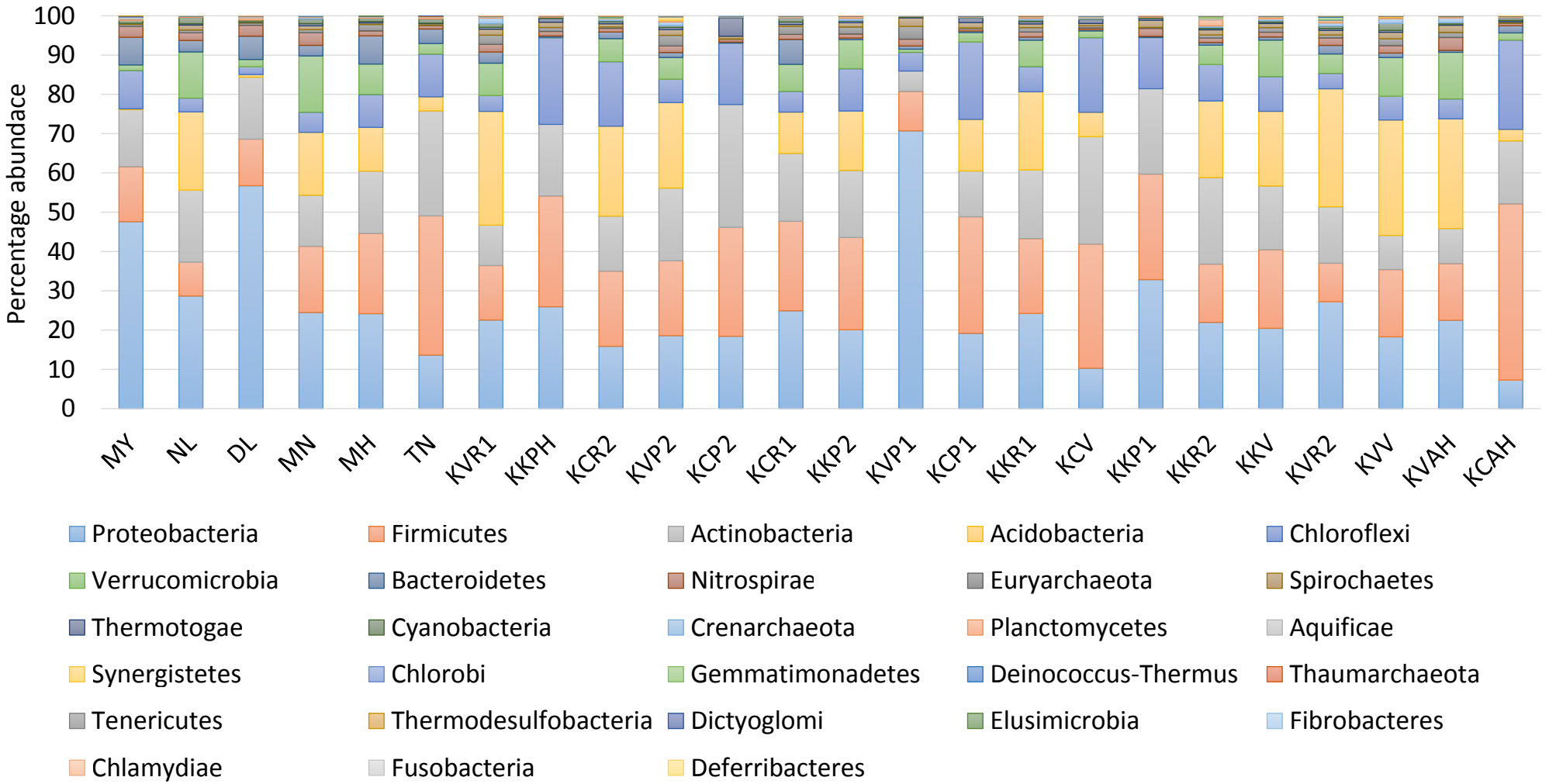



Figure S4: Archeal (Crenarchaeota, Euryarchaeota, and, Thaumarchaeota) and bacterial phyla stack bar chart

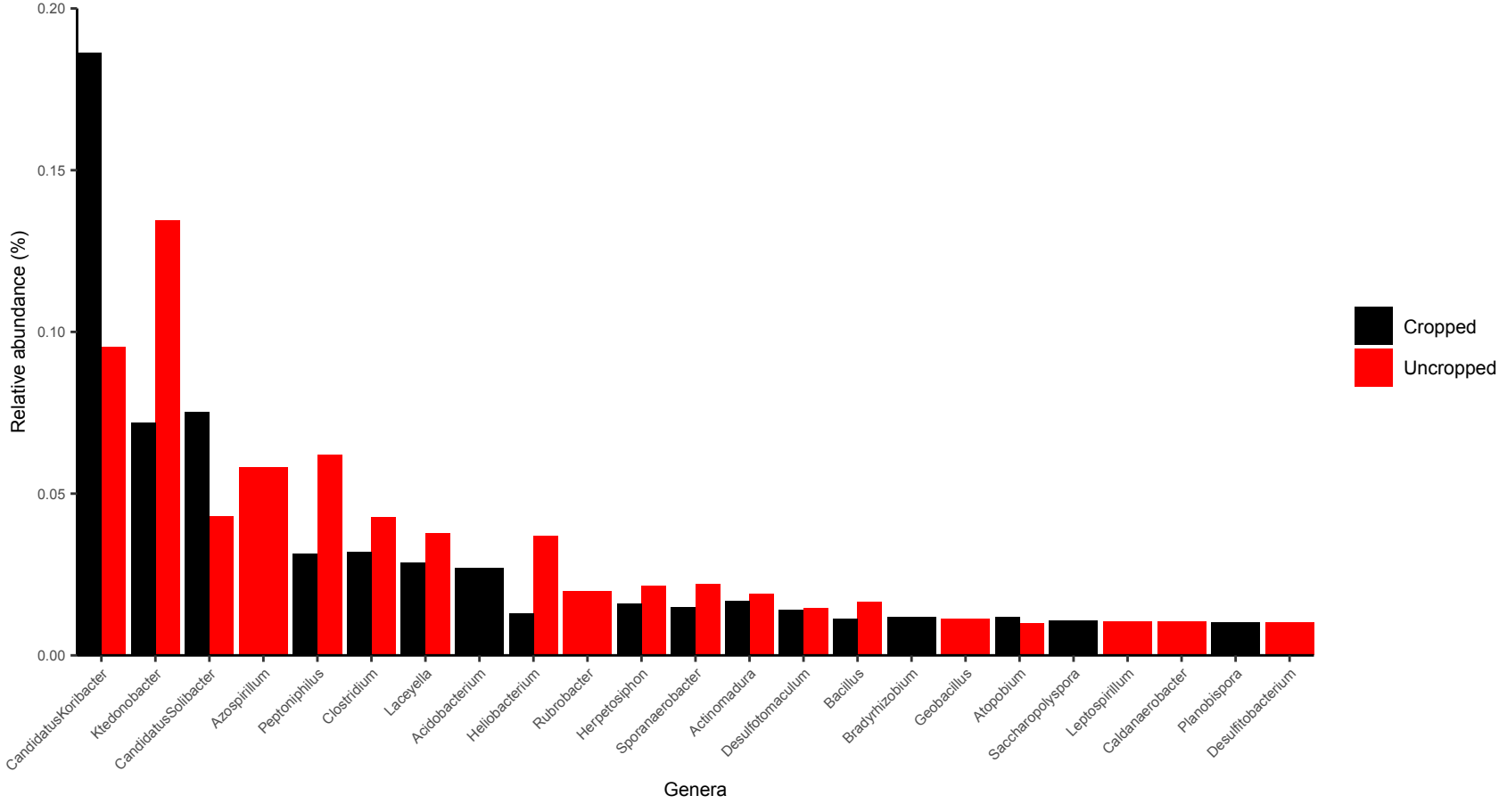



Figure S5: Twenty -three genera were found to have a relative abundance of above 1% in any sample

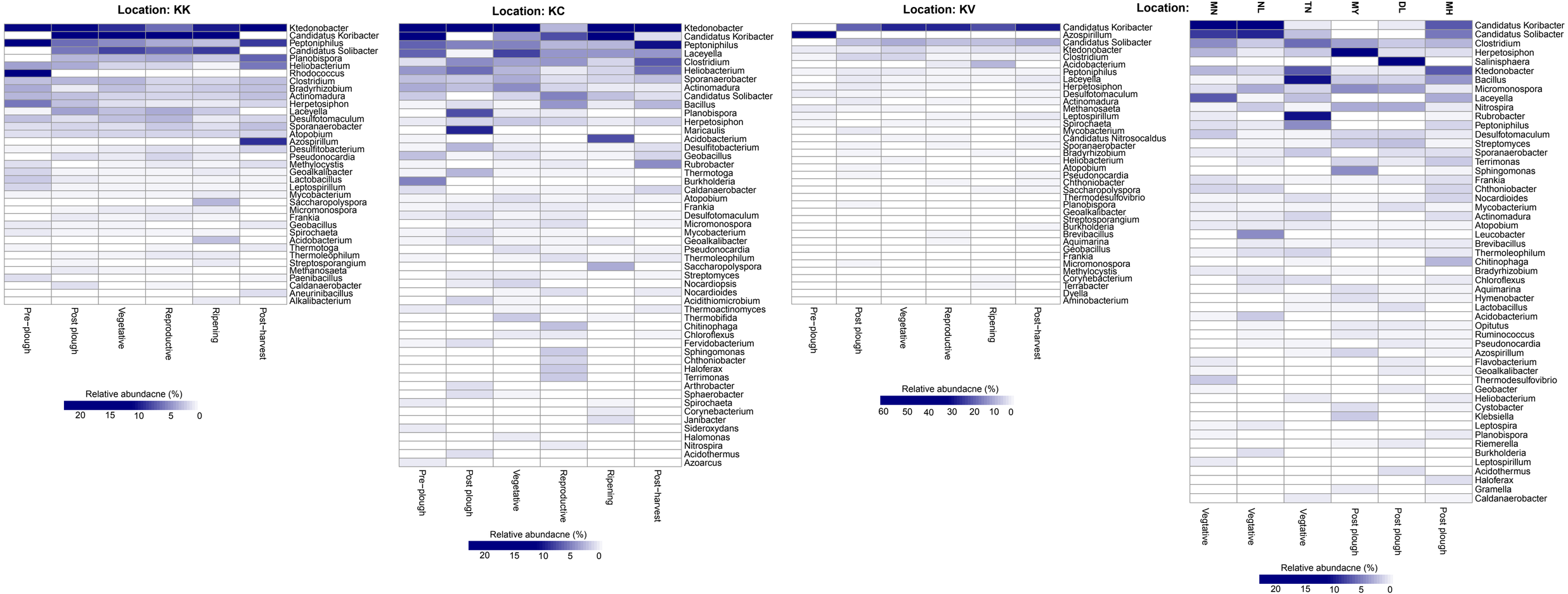



Figure S6: Heatmap representation of dominant (>11% relative abundance) genus at various cultivation stage in different locations.

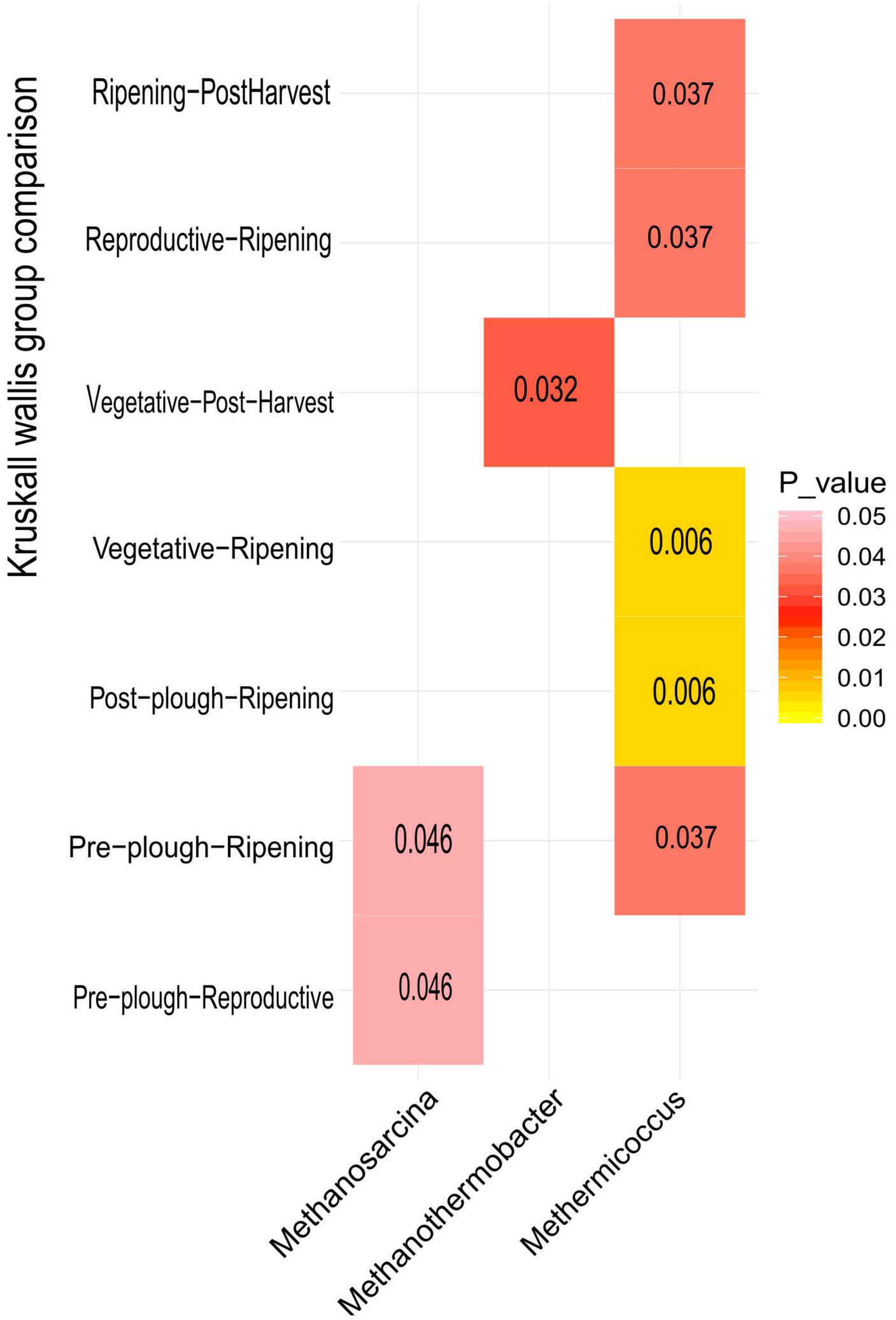



Figure S7: Significant changes of OTU proportion among the groups. Kruskall Wallis comparison. P-value <0.05.

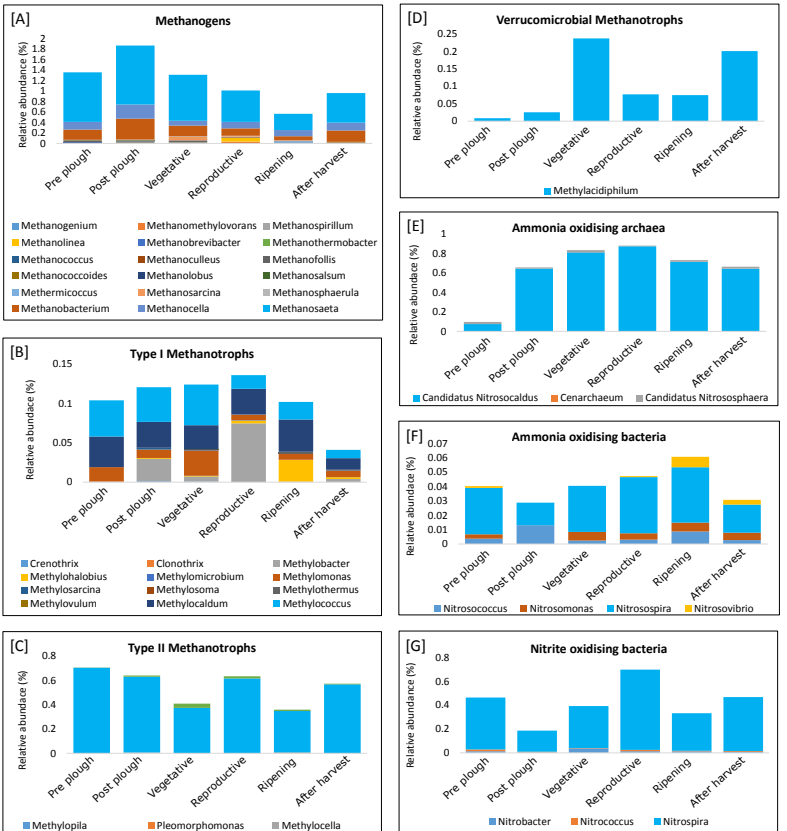
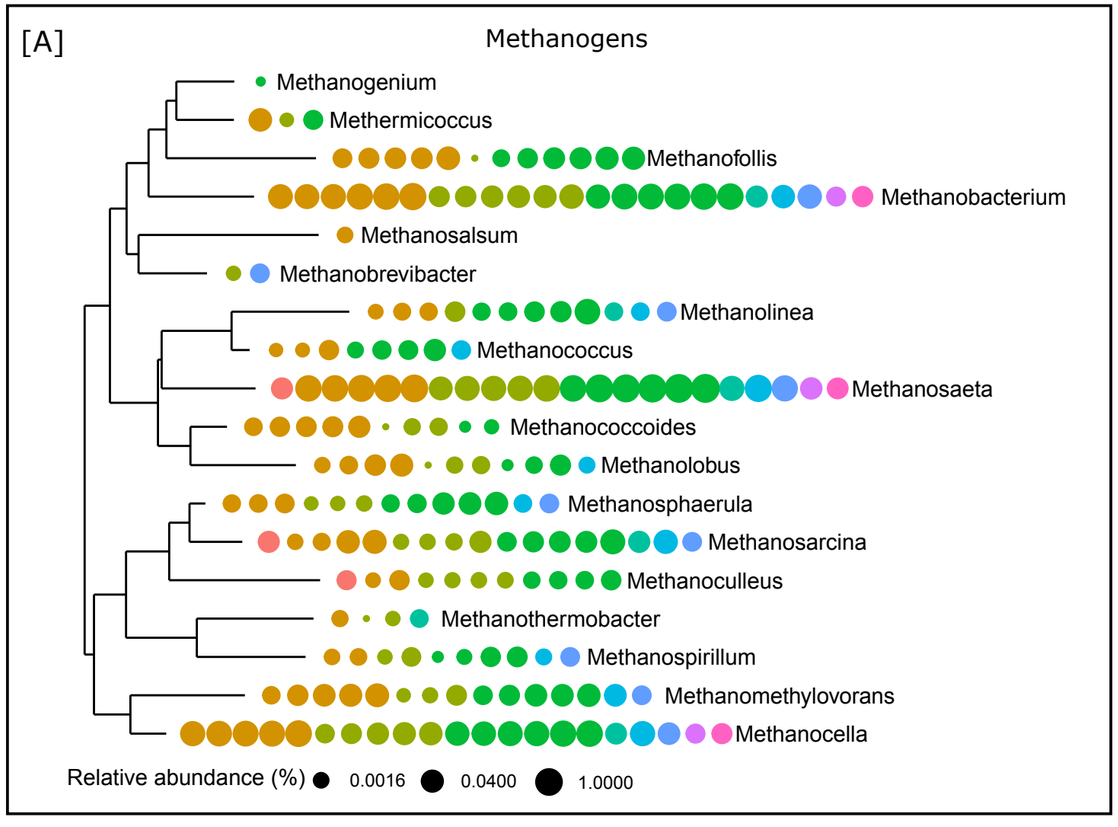
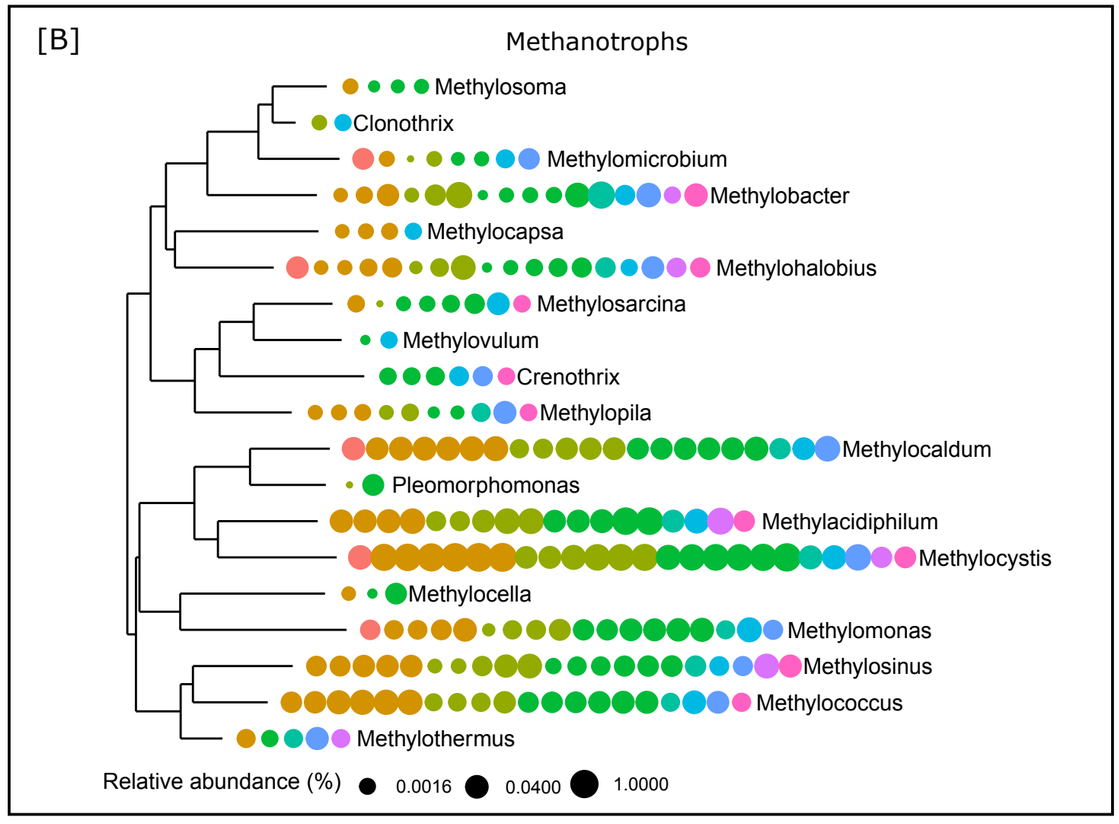
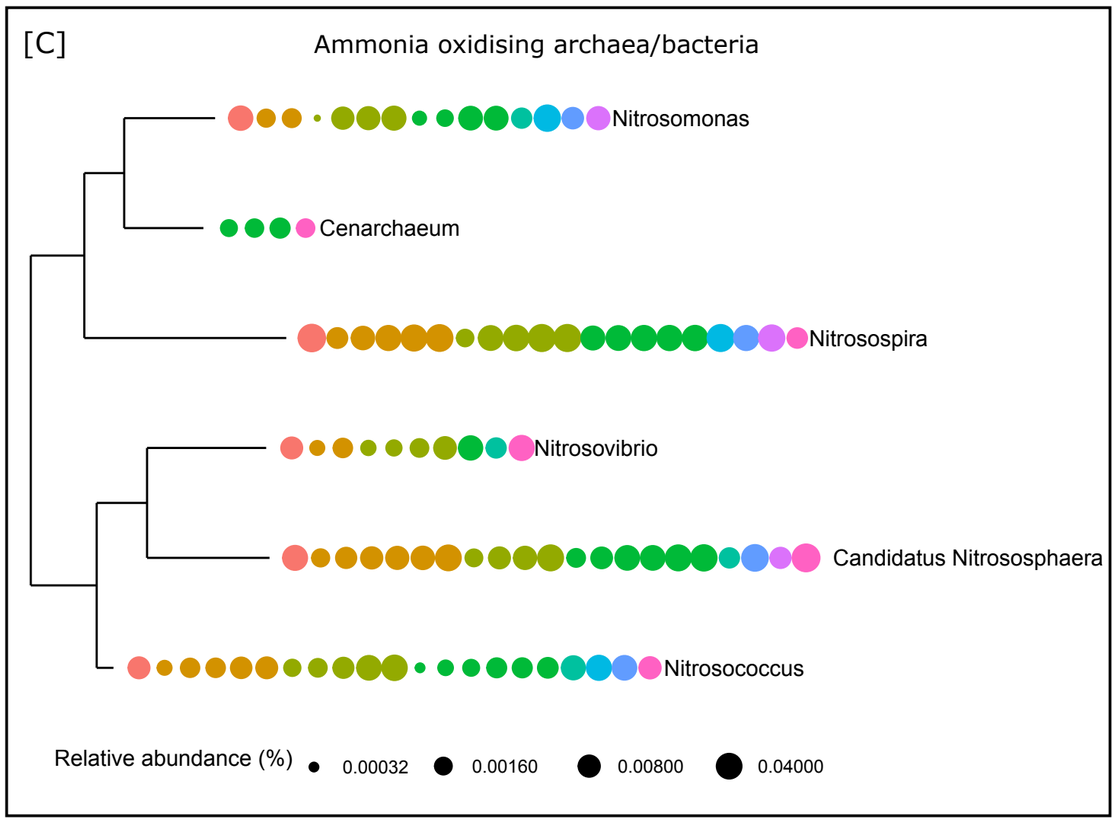
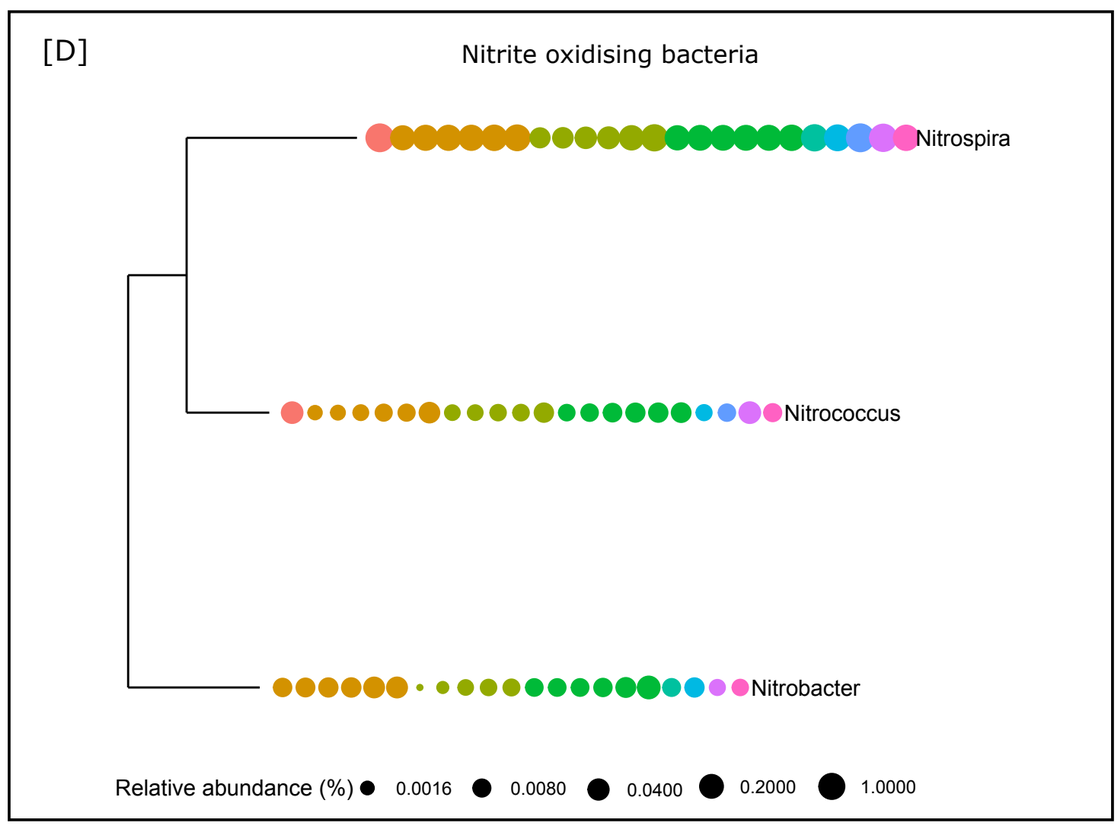



Figure S8: Relative abundance bar chart of [A] methanogens, [B] methanotrophs, [C] ammonia oxidizers and [D] nitrite oxidizers.



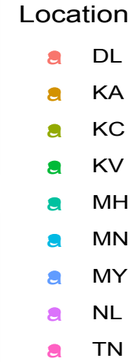




Figure S9: Phylogenetic tree representation of [A] methanogens, [B] methanotrophs, [C] ammonia oxidizers and [D] nitrite oxidizers.

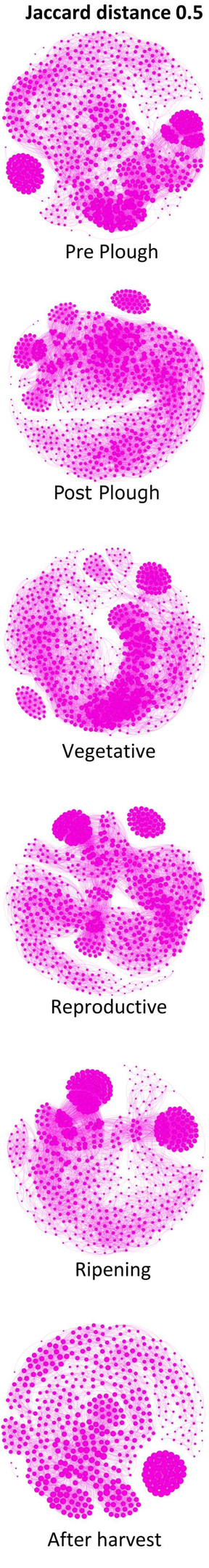



Figure S10:Network complexity map for 0.5 jaccard distance.

Table S1: Summary of descriptive statistics: The raw 16S rRNA gene amplicon samples after quality control had over 2.7 x$10^8$ bp covering over 0.8 million sequences. The mean GC content had little change after quality control (57.33 ± 0.55).

| | | Pre Quality Control | | | | Post Quality Control | | | |
|---|---|---|---|---|---|---|---|---|---|
| Samples | **MG-RAST id** | **bp Count** | **Sequences** | **Mean** | **Mean GC** | **bp Count** | **Sequences** | **Mean** | **Mean GC** |
| NL | mgm4758101.3 | 85713814 | 249777 | 343 | 57 | 7594091 | 34842 | 218 | 57 |
| DL | mgm4758122.3 | 35772800 | 102324 | 350 | 57 | 4358290 | 18533 | 235 | 57 |
| MN | mgm4758113.3 | 68682636 | 193710 | 355 | 57 | 6881801 | 29227 | 235 | 57 |
| MH | mgm4758109.3 | 33666969 | 95650 | 352 | 57 | 4358289 | 18500 | 236 | 57 |
| KVR1 | mgm4758110.3 | 282936617 | 792550 | 357 | 57 | 15508019 | 68501 | 226 | 57 |
| KKPH | mgm4758107.3 | 82996827 | 235076 | 353 | 58 | 6250112 | 27676 | 226 | 58 |
| KCR2 | mgm4758115.3 | 90237018 | 263850 | 342 | 58 | 7169520 | 33025 | 217 | 57 |
| KVP2 | mgm4758116.3 | 33406435 | 91513 | 365 | 58 | 4278381 | 16700 | 256 | 57 |
| KCP2 | mgm4758111.3 | 22895936 | 63718 | 359 | 59 | 2844779 | 11301 | 252 | 58 |
| KCR1 | mgm4758106.3 | 114542703 | 323871 | 354 | 57 | 9781609 | 41968 | 233 | 57 |
| KKP2 | mgm4758114.3 | 79046941 | 217389 | 364 | 58 | 6337258 | 26191 | 242 | 57 |
| KVP1 | mgm4758117.3 | 103002592 | 298914 | 345 | 57 | 9094676 | 41268 | 220 | 57 |
| KCP1 | mgm4758118.3 | 77119738 | 222450 | 347 | 59 | 6115019 | 27275 | 224 | 58 |
| KKR1 | mgm4758121.3 | 136837318 | 377230 | 363 | 58 | 8987558 | 37321 | 241 | 57 |
| TN | mgm4758112.3 | 45085761 | 131121 | 344 | 58 | 5555129 | 22831 | 243 | 58 |
| KCV | mgm4758108.3 | 52168250 | 148732 | 351 | 59 | 5198619 | 21896 | 237 | 58 |
| KKP1 | mgm4758105.3 | 85352169 | 236272 | 361 | 58 | 6954858 | 29304 | 237 | 57 |
| KKR2 | mgm4758119.3 | 130963548 | 368574 | 355 | 58 | 8995413 | 39428 | 228 | 57 |
| KKV | mgm4758120.3 | 99396412 | 276090 | 360 | 58 | 7792282 | 32063 | 243 | 57 |
| KVR2 | mgm4758103.3 | 175731859 | 487824 | 360 | 57 | 11446769 | 48880 | 234 | 57 |
| KVV | mgm4758102.3 | 329568367 | 920823 | 358 | 57 | 23601732 | 87006 | 271 | 58 |
| KVAH | mgm4758099.3 | 269158188 | 751122 | 358 | 58 | 14694503 | 65122 | 226 | 57 |
| KCAH | mgm4758100.3 | 224806236 | 665378 | 338 | 59 | 18986392 | 71005 | 267 | 59 |
| MY | mgm4758104.3 | 49246146 | 141163 | 349 | 57 | 5040095 | 21995 | 229 | 57 |
| | Total | **2708335280** | **7655121** | **353.45± 7.33** | **57.75± 0.72** | **207825194** | **871858** | **236.5± 13.7** | **57.33± 0.55** |

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Table S2: Tabulated chart of uncultured/unclassified taxa relative abundance in each cultivation stage in different locations.

| species | KVP1 | KVP2 | KVV | KVR1 | KVR2 | KVPH | KCP1 | KCP2 | KCV | KCR1 | KCR2 | KCPH | KKP1 | KKP2 | KKV | KKR1 | KKR2 | KKPH | MYS_R | NLVS_R | DLS_R | MNS_R | MHS_R | TNS_R |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| uncultured Achromobacter sp. | 0.000683 | 0 | 0.000291 | 0.002614 | 0.007563 | 0 | 0 | 0 | 0 | 0 | 0 | 0.013788 | 0 | 0 | 0.001518 | 0.011222 | 0.000689 | 0 | 0.002884 | 0 | 0 | 0 | 0.001406 | 0 |
| uncultured Acidovorax sp. | 0 | 0 | 0.01061 | 0.000327 | 0.001621 | 0 | 0 | 0 | 0 | 0.000958 | 0 | 0.000492 | 0.001295 | 0.001735 | 0.000506 | 6.68E-05 | 0.000344 | 0 | 0.099502 | 0.00122 | 0 | 0.00454 | 0.002812 | 0 |
| uncultured actinobacterium | 0 | 0 | 0 | 0 | 0.00054 | 0 | 0 | 0 | 0 | 0.027301 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured Afipia sp. | 0 | 0 | 0.000291 | 0 | 0.00081 | 0 | 0 | 0 | 0 | 0.000479 | 0 | 0 | 0 | 0 | 0 | 0.000134 | 0 | 0 | 0 | 0 | 0 | 0.000757 | 0 | 0 |
| uncultured alpha proteobacterium | 0.644804 | 0.671945 | 1.077305 | 0.853144 | 1.793981 | 0.841512 | 0.159443 | 0.335322 | 0.318776 | 1.206054 | 0.943467 | 0.364406 | 0.625656 | 0.714934 | 0.738937 | 0.138143 | 0.922706 | 0.539562 | 5.475521 | 1.85549 | 3.87618 | 0.515339 | 1.275381 | 1.714279 |
| uncultured ammonia-oxidizing bacterium | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.001513 | 0 | 0.001217 |
| uncultured Antarctic sea ice bacterium | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000344 | 0 | 0.005768 | 0.00061 | 0 | 0 | 0 | 0 |
| uncultured archaeon | 0.081967 | 0.750576 | 0.452172 | 0.18396 | 0.098045 | 0.154926 | 0.074453 | 0.138074 | 0.145185 | 0.06083 | 0.377347 | 0.075343 | 0.349745 | 0.292105 | 0.302155 | 0.019907 | 0.073679 | 0.082666 | 0.044704 | 0.006712 | 0.010493 | 0.151348 | 0.029529 | 0.695931 |
| uncultured Azoarcus sp. | 0.001366 | 0 | 0.000291 | 0 | 0.00054 | 0.002389 | 0.694664 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000578 | 0.000506 | 0 | 0 | 0.004468 | 0 | 0.002441 | 0 | 0 | 0 | 0 |
| uncultured Azospira sp. | 0.00888 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.001442 | 0 | 0 | 0 | 0 | 0 |
| uncultured Azospirillum sp. | 0 | 0 | 0 | 0 | 0.00027 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured Bacillus sp. | 0 | 0 | 0.000145 | 0.00049 | 0 | 0.001536 | 0.168574 | 0.004931 | 0 | 0.000479 | 0.000396 | 0.000492 | 0.002591 | 0.001157 | 0.043526 | 0.0002 | 0.001033 | 0.001117 | 0.002884 | 0 | 0 | 0.003027 | 0 | 0.001217 |
| uncultured bacterium | 24.56541 | 29.00263 | 27.73916 | 28.69044 | 39.5027 | 27.54074 | 18.04581 | 14.8528 | 18.38592 | 34.35578 | 17.2518 | 24.95691 | 29.2452 | 25.93315 | 29.94569 | 5.976298 | 37.77931 | 28.95204 | 48.45771 | 41.40532 | 43.13746 | 32.42172 | 45.71123 | 24.97567 |
| uncultured Bartonella sp. | 0 | 0 | 0 | 0 | 0.00027 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6.68E-05 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured beta proteobacterium | 0.502729 | 0.403882 | 0.581675 | 0.454182 | 0.571254 | 0.347559 | 1.085193 | 0.054243 | 0.076801 | 1.309512 | 0.232153 | 0.328458 | 0.167101 | 0.454064 | 0.752603 | 0.162993 | 1.007058 | 0.109476 | 2.173192 | 1.069607 | 3.091291 | 1.428723 | 1.220541 | 0.413666 |
| uncultured Bradyrhizobium sp. | 0.004098 | 0.062548 | 0.008721 | 0.017971 | 0.023768 | 0.003754 | 0.001405 | 0.004931 | 0.004208 | 0.045502 | 0.000198 | 0.003447 | 0.034975 | 0.008098 | 0.013665 | 0.004876 | 0.023068 | 0.012288 | 0.001442 | 0.004271 | 0.004197 | 0.005297 | 0.084369 | 0.006083 |
| uncultured Burkholderia sp. | 0.000683 | 0 | 0.001017 | 0.006045 | 0.025929 | 0.000682 | 0.000702 | 0 | 0 | 0.001437 | 0 | 0.001477 | 0.001295 | 0 | 0.003543 | 0.001536 | 0.001377 | 0 | 0.001442 | 0.048202 | 0 | 0.003784 | 0.012655 | 0 |
| uncultured Burkholderiales bacterium | 0.008197 | 0.003574 | 0.01061 | 0.010293 | 0.018907 | 0.003924 | 0 | 0 | 0 | 0.163809 | 0.033674 | 0.003447 | 0.006477 | 0.006941 | 0.036441 | 0.002472 | 0.071957 | 0.012288 | 0.207657 | 0.34596 | 0.167891 | 0.024972 | 0.113898 | 0.046233 |
| uncultured Cellvibrio sp. | 0 | 0 | 0 | 0 | 0.00054 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured Clostridium sp. | 0.017076 | 0.051826 | 0.005523 | 0.001634 | 0.00135 | 0.004948 | 0.007024 | 0.054243 | 0.037874 | 0.022512 | 0.032684 | 0.006894 | 0.018135 | 0.013882 | 0.011135 | 0.000334 | 0.003787 | 0.00782 | 0.096618 | 0.002441 | 0.006296 | 0.017405 | 0.033748 | 0.0292 |
| uncultured Comamonadaceae bacterium | 0.004098 | 0.001787 | 0.004506 | 0.00147 | 0.02674 | 0.001365 | 0.002107 | 0 | 0.003156 | 0.169556 | 0.005744 | 0.010834 | 0.002591 | 0.001157 | 0.014678 | 0.000868 | 0.001721 | 0.001117 | 0.031725 | 0.012203 | 0.075551 | 0.060539 | 0.111086 | 0.0292 |
| uncultured Cupriavidus sp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6.68E-05 | 0 | 0 | 0 | 0.00061 | 0 | 0.001513 | 0 | 0 |
| uncultured cyanobacterium | 0.013661 | 0.001787 | 0.004796 | 0.00147 | 0.002971 | 0.000682 | 0.004214 | 0.009862 | 0 | 0.028259 | 0.027533 | 0.00197 | 0.002591 | 0.000578 | 0.005567 | 0.000334 | 0.004476 | 0.002234 | 0.044704 | 0.056135 | 0.056663 | 0.00454 | 0.012655 | 0.063266 |
| uncultured Dehalococcoides sp. | 0.168032 | 0.046464 | 0.020784 | 0.022056 | 0.009183 | 0.029177 | 0.0295 | 0.078899 | 0.049447 | 0.009579 | 0.006141 | 0.027577 | 0.046633 | 0.017353 | 0.015184 | 0.001536 | 0.005853 | 0.006703 | 0.002884 | 0.00061 | 0 | 0.015135 | 0.01828 | 0.002433 |
| uncultured delta proteobacterium | 5.700781 | 4.759011 | 3.37232 | 3.444924 | 4.512233 | 6.167504 | 4.354117 | 2.874895 | 2.510231 | 2.849411 | 1.906941 | 4.209386 | 9.164626 | 4.750033 | 4.499927 | 0.93761 | 4.932002 | 4.83707 | 1.721826 | 3.430308 | 3.278069 | 6.557898 | 2.45655 | 2.283677 |
| uncultured Desulfobacteraceae bacterium | 0 | 0 | 0.000291 | 0.001307 | 0.041325 | 0.002389 | 0.004214 | 0 | 0.001052 | 0.001916 | 0.000396 | 0.025114 | 0 | 0 | 0.001012 | 6.68E-05 | 0.003443 | 0 | 0 | 0.00061 | 0.002099 | 0.001513 | 0 | 0 |
| uncultured Desulfobacterium sp. | 0.002049 | 0.003574 | 0.001017 | 0.001797 | 0.001621 | 0.001365 | 0.004917 | 0.014794 | 0.003156 | 0.002874 | 0.009706 | 0.004924 | 0.002591 | 0.002892 | 0.003543 | 0.0002 | 0.001033 | 0.004468 | 0.00721 | 0.00122 | 0.039874 | 0.005297 | 0 | 0.00365 |
| uncultured Desulfobacula sp. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.001442 | 0.00061 | 0.002099 | 0 | 0 | 0 |
| uncultured Desulfobulbaceae bacterium | 0.000683 | 0 | 0.001163 | 0.000163 | 0 | 0.000853 | 0.002107 | 0.004931 | 0.006312 | 0.008622 | 0.008319 | 0.004924 | 0.009067 | 0.024294 | 0.013159 | 0.000134 | 0 | 0.014522 | 0.080756 | 0.00061 | 0.010493 | 0.012108 | 0.011249 | 0 |
| uncultured Desulfobulbus sp. | 0.000683 | 0 | 0.034011 | 0.00098 | 0.022688 | 0.001194 | 0 | 0 | 0.001052 | 0.006706 | 0.000198 | 0.006402 | 0 | 0 | 0.000506 | 0 | 0.004476 | 0 | 0 | 0 | 0 | 0.03027 | 0.002812 | 0 |
| uncultured Desulfovibrio sp. | 0.000683 | 0 | 0.000291 | 0 | 0.00054 | 0.000512 | 0.00281 | 0 | 0.001052 | 0.008143 | 0 | 0.000985 | 0.002591 | 0.001157 | 0.001518 | 0.000134 | 0 | 0 | 0 | 0.002441 | 0 | 0.000757 | 0 | 0.00365 |
| uncultured Desulfovibrionales bacterium | 0.013661 | 0.019658 | 0.021947 | 0.004738 | 0.008643 | 0.015527 | 0.007726 | 0.014794 | 0.012625 | 0.019638 | 0.011687 | 0.033486 | 0.014249 | 0.008676 | 0.012147 | 0.004142 | 0.055087 | 0.008937 | 0.015863 | 0.002441 | 0.023085 | 0.012108 | 0.016874 | 0.013383 |
| uncultured Enterobacter sp. | 0 | 0 | 0 | 0.00098 | 0.001621 | 0.000171 | 0 | 0 | 0 | 0.000958 | 0.012281 | 0 | 0 | 0 | 0 | 0 | 0.000344 | 0 | 0.002884 | 0 | 0 | 0 | 0 | 0.0292 |
| uncultured Enterobacteriaceae bacterium | 0 | 0 | 0.000436 | 0.000163 | 0.00135 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000534 | 0 | 0 | 0 | 0 | 0 | 0.005297 | 0 | 0 |
| uncultured epsilon proteobacterium | 0.099726 | 0.296656 | 0.075435 | 0.115016 | 0.095884 | 0.070297 | 0.536626 | 0.147936 | 0.046291 | 0.067056 | 0.060811 | 0.060078 | 0.031088 | 0.03297 | 0.021763 | 0.00648 | 0.038905 | 0.030162 | 0.099502 | 0.032949 | 0.054565 | 0.097619 | 0.097025 | 0.096116 |
| uncultured euryarchaeote | 0 | 0 | 0 | 0 | 0.001621 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00197 | 0 | 0 | 0 | 0 | 0.035462 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured Firmicutes bacterium | 0.005464 | 0 | 0.001163 | 0.003267 | 0.002701 | 0.001706 | 0.001405 | 0.004931 | 0 | 0.001916 | 0.000198 | 0 | 0.006477 | 0.001735 | 0.003543 | 0.000735 | 0.005164 | 0.004468 | 0.018747 | 0.003051 | 0.010493 | 0.00227 | 0.001406 | 0.001217 |
| uncultured forest soil bacterium | 0.239069 | 1.095484 | 11.55501 | 19.61071 | 0.959383 | 15.42857 | 1.002311 | 1.267321 | 0.781686 | 1.383274 | 0.184217 | 0.740139 | 1.30183 | 21.9501 | 8.648605 | 83.53196 | 1.24221 | 0.340717 | 0.149975 | 0.11715 | 0.266527 | 1.866875 | 0.240452 | 0.18615 |
| uncultured gamma proteobacterium | 1.135238 | 1.229516 | 1.040242 | 0.987275 | 1.560888 | 0.899012 | 0.742426 | 2.618472 | 1.509716 | 1.877096 | 0.443705 | 1.334023 | 1.082916 | 0.470839 | 0.586089 | 0.218037 | 0.672061 | 1.314834 | 1.821328 | 1.702341 | 1.775446 | 1.397696 | 1.366781 | 0.833414 |
| uncultured Geobacter sp. | 0.096994 | 0.032168 | 0.03372 | 0.116323 | 0.039164 | 0.088724 | 0.036524 | 0.004931 | 0.016833 | 0.047897 | 0.065763 | 0.090609 | 0.051814 | 0.006941 | 0.146775 | 0.006613 | 0.025822 | 0.005586 | 0.059125 | 0.053694 | 0.270724 | 0.091565 | 0.033748 | 0.121666 |
| uncultured Geobacteraceae bacterium | 0 | 0 | 0 | 0 | 0.010534 | 0 | 0 | 0 | 0 | 0 | 0 | 0.001477 | 0 | 0 | 0 | 0 | 0.000344 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured Helicobacter sp. | 0 | 0 | 0.000145 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000344 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured Hyphomicrobium sp. | 0.007514 | 0.028593 | 0.005523 | 0.002287 | 0.004322 | 0.002047 | 0.000702 | 0 | 0 | 0.005269 | 0.004358 | 0.000492 | 0.029793 | 0.013304 | 0.007592 | 0.001269 | 0.002066 | 0.014522 | 0.015863 | 0.007932 | 0.002099 | 0.001513 | 0.035154 | 0.01095 |
| uncultured Klebsiella sp. | 0 | 0 | 0.000291 | 0.010293 | 0.00081 | 0.000171 | 0.000702 | 0 | 0 | 0.033049 | 0.026147 | 0.002955 | 0 | 0 | 0 | 0 | 0.000344 | 0 | 0.48886 | 0 | 0 | 0.022702 | 0.004218 | 0.019467 |
| uncultured Legionella sp. | 0 | 0 | 0.000291 | 0 | 0 | 0 | 0.000702 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured Magnetospirillum sp. | 0 | 0 | 0.004796 | 0.001634 | 0.002431 | 0.000171 | 0.002107 | 0 | 0 | 0.000958 | 0.000198 | 0.000492 | 0 | 0.001735 | 0 | 0.000267 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.001217 |
| uncultured marine bacterium | 0.188523 | 0.037529 | 0.038517 | 0.121224 | 0.071035 | 0.03003 | 0.052679 | 0.03945 | 0.02525 | 0.204043 | 0.068933 | 0.019698 | 0.151556 | 0.052637 | 0.033404 | 0.006613 | 0.040627 | 0.168683 | 0.282645 | 0.129353 | 0.119622 | 0.083998 | 0.077338 | 0.328499 |
| uncultured marine microorganism | 0 | 0 | 0 | 0.002451 | 0 | 0 | 0 | 0 | 0.001052 | 0.000479 | 0.001387 | 0.001477 | 0 | 0 | 0 | 0.000134 | 0.000344 | 0 | 0 | 0.00122 | 0 | 0 | 0 | 0 |
| uncultured Methanomicrobiaceae archaeon | 0.001366 | 0 | 0.000291 | 0 | 0.00027 | 0 | 0 | 0 | 0.00526 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.001117 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured Methanosarcina sp. | 0 | 0.001787 | 0.05465 | 0.004411 | 0 | 0 | 0 | 0 | 0 | 0.000958 | 0 | 0 | 0.001295 | 0 | 0.013159 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.004218 | 0 |
| uncultured Methanosarcinales archaeon | 0.004781 | 0 | 0.006105 | 0.00049 | 0.00027 | 0.000512 | 0 | 0 | 0.001052 | 0 | 0.00099 | 0 | 0.007772 | 0.001735 | 0.000506 | 0.000267 | 0 | 0 | 0 | 0 | 0 | 0.003027 | 0 | 0 |
| uncultured Methylobacter sp. | 0.000683 | 0 | 0.000145 | 0.00049 | 0 | 0.000341 | 0 | 0 | 0 | 0.101063 | 0.007923 | 0.000492 | 0 | 0 | 0.008098 | 0.000134 | 0 | 0 | 0 | 0.00061 | 0 | 0.00227 | 0.177175 | 0.023117 |
| uncultured Methylobacterium sp. | 0.000683 | 0 | 0.000145 | 0.001144 | 0.00054 | 0 | 0.000702 | 0 | 0 | 0.002874 | 0.001585 | 0.000985 | 0 | 0.000578 | 0.003543 | 6.68E-05 | 0.000689 | 0.002234 | 0.002884 | 0.00061 | 0.002099 | 0 | 0.002812 | 0.01095 |
| uncultured Methylocystaceae bacterium | 0.008197 | 0.001787 | 0.000872 | 0.005065 | 0.002971 | 0.000512 | 0.003512 | 0.009862 | 0.016833 | 0.007185 | 0.001387 | 0.00197 | 0.037565 | 0.004049 | 0.028849 | 0.00147 | 0.025133 | 0.006703 | 0 | 0.00061 | 0 | 0.000757 | 0.004218 | 0 |
| uncultured microorganism | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.00061 | 0 | 0 | 0 | 0 |
| uncultured Nitrosomonadaceae bacterium | 0.124999 | 0.003574 | 0.04215 | 0.037086 | 0.043756 | 0.001877 | 0.008429 | 0 | 0.00526 | 0.04215 | 0.001783 | 0.04038 | 0.031088 | 0.012147 | 0.037453 | 0.013293 | 0.08022 | 0.026811 | 0.001442 | 0.049423 | 0.004197 | 0.043891 | 0.023905 | 0.002433 |
| uncultured Nitrosomonadales bacterium | 0.043716 | 0.010723 | 0.022674 | 0.016337 | 0.036193 | 0.018086 | 0.03512 | 0.128211 | 0.084165 | 0.096753 | 0.004952 | 0.095041 | 0.018135 | 0.145185 | 0.009616 | 0.003607 | 0.00482 | 0.048036 | 0.111039 | 0.177556 | 0.293809 | 0.014378 | 0.032342 | 0.015817 |
| uncultured Nitrosomonas sp. | 0 | 0 | 0.000145 | 0 | 0 | 0.005289 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured Ochrobactrum sp. | 0.025273 | 0 | 0.002035 | 0.000653 | 0.002431 | 0.000853 | 0.000702 | 0 | 0 | 0.000958 | 0.00099 | 0.001477 | 0.005181 | 0.000578 | 0.002531 | 0.000134 | 0.001033 | 0.00782 | 0 | 0.00183 | 0.006296 | 0 | 0.001406 | 0.002433 |
| uncultured organism | 0.59904 | 0.521829 | 0.559873 | 0.911796 | 0.591241 | 0.566297 | 0.09693 | 0.143005 | 0.088374 | 0.261519 | 0.134894 | 0.210272 | 0.255185 | 0.237733 | 0.293044 | 0.090247 | 0.475469 | 0.803199 | 0.873891 | 0.384399 | 0.237146 | 0.20659 | 0.250295 | 0.225083 |
| uncultured prokaryote | 0 | 0 | 0.000145 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000792 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.001442 | 0 | 0 | 0 | 0 | 0 |
| uncultured proteobacterium | 0.108606 | 0.109012 | 0.286768 | 0.891864 | 0.567203 | 0.282551 | 0.249349 | 0.024656 | 0.143081 | 0.521123 | 0.128159 | 0.441227 | 0.314771 | 0.380026 | 0.334546 | 0.070474 | 0.361508 | 0.045801 | 0.161511 | 0.588802 | 0.543547 | 0.550906 | 0.426064 | 0.082733 |
| uncultured Pseudomonas sp. | 0.001366 | 0 | 0.00407 | 0.001307 | 0.007293 | 0.000853 | 0.001405 | 0.009862 | 0 | 0.000958 | 0.000396 | 0.005909 | 0 | 0.004049 | 0.006073 | 0 | 0.012395 | 0 | 0.005768 | 0.010983 | 0.008395 | 0 | 0 | 0.002433 |
| uncultured Ralstonia sp. | 0.00888 | 0.01251 | 0.017732 | 0.010946 | 0.021068 | 0.000682 | 0.033715 | 0.019725 | 0.016833 | 0.021554 | 0.010102 | 0.037918 | 0.011658 | 0.006363 | 0.025812 | 0.011623 | 0.012739 | 0.010054 | 0.005768 | 0.032949 | 0.033578 | 0.006054 | 0.029529 | 0.001217 |
| uncultured Rhizobiales bacterium | 0.433057 | 0.01251 | 0.01061 | 0.006208 | 0.011344 | 0.001536 | 0.00281 | 0 | 0 | 0.148482 | 0.000792 | 0.006402 | 3.187865 | 0.004627 | 0.020751 | 0.011556 | 0.013427 | 0.021225 | 0.010094 | 0.018915 | 0.006296 | 0.008324 | 0.074526 | 0.00365 |
| uncultured Rhizobium sp. | 0 | 0 | 0 | 0 | 0 | 0.000171 | 0 | 0 | 0 | 0.000479 | 0.002971 | 0 | 0 | 0 | 0 | 6.68E-05 | 0.000344 | 0 | 0 | 0 | 0 | 0 | 0.002812 | 0 |
| uncultured Rhodobacteraceae bacterium | 0.001366 | 0.003574 | 0.00407 | 0.000653 | 0.002431 | 0.014332 | 0.004917 | 0 | 0 | 0.008143 | 0.00416 | 0 | 0.001295 | 0 | 0.004555 | 0.0002 | 0.001721 | 0 | 0.001442 | 0 | 0.023085 | 0.016648 | 0.001406 | 0.01095 |
| uncultured Rhodobacterales bacterium | 0.003415 | 0.003574 | 0.006977 | 0.00098 | 0.00054 | 0.001024 | 0 | 0 | 0 | 0.000479 | 0.000792 | 0 | 0.002591 | 0.000578 | 0 | 0.000134 | 0.002066 | 0.002234 | 0.005768 | 0.00183 | 0 | 0 | 0.004218 | 0.001217 |
| uncultured Rhodocyclaceae bacterium | 0.00888 | 0.073271 | 0.087644 | 0.147854 | 0.313312 | 0.204236 | 0.037929 | 0 | 0 | 0.119743 | 0.007725 | 0.028069 | 0.024612 | 0.107009 | 0.220163 | 0.015498 | 0.138062 | 0 | 0.030283 | 0.439924 | 0.365163 | 0.133186 | 0.178581 | 0.024333 |
| uncultured Rhodospirillaceae bacterium | 0.020492 | 0.234108 | 0.303337 | 0.229052 | 0.387318 | 0.121142 | 0.266206 | 0.004931 | 0.12204 | 0.104895 | 0.053878 | 0.105875 | 0.081607 | 0.111636 | 0.178661 | 0.035404 | 0.144947 | 0.065909 | 0.122576 | 0.029288 | 0.018888 | 0.074917 | 0.067495 | 0.042583 |
| uncultured Rickettsia sp. | 0 | 0.001787 | 0 | 0 | 0.00027 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.002234 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured Roseobacter sp. | 0 | 0 | 0 | 0 | 0 | 0.000171 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000344 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured rumen bacterium | 0.000683 | 0 | 0.001889 | 0.001307 | 0.001621 | 0.000682 | 0 | 0 | 0.004208 | 0.004311 | 0.00099 | 0.00197 | 0 | 0 | 0 | 6.68E-05 | 0.001033 | 0 | 0 | 0.002441 | 0 | 0 | 0 | 0 |
| uncultured Serratia sp. | 0 | 0 | 0 | 0.004248 | 0.004862 | 0 | 0 | 0 | 0 | 0 | 0.000198 | 0.002462 | 0.007772 | 0 | 0 | 0.000601 | 0.023756 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured Sinorhizobium sp. | 0 | 0 | 0 | 0 | 0.00027 | 0 | 0 | 0 | 0 | 0.000958 | 0.000198 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.059058 | 0 |
| uncultured soil bacterium | 0.381145 | 1.876441 | 0.48066 | 0.359098 | 0.781389 | 0.465971 | 0.089204 | 0.231767 | 0.426087 | 0.938787 | 0.380319 | 0.428424 | 0.29275 | 0.247566 | 0.384652 | 0.148096 | 0.456877 | 0.217836 | 1.02675 | 0.901813 | 1.441763 | 0.279237 | 0.496372 | 1.105947 |
| uncultured Streptococcus sp. | 0 | 0.001787 | 0.000145 | 0.000163 | 0 | 0 | 0 | 0 | 0 | 0.000479 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000344 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| uncultured Streptomyces sp. | 0 | 0.001787 | 0.00436 | 0.01307 | 0.003511 | 0.003754 | 0.003512 | 0 | 0.037874 | 0.002874 | 0.010696 | 0 | 0 | 0.003471 | 0.002024 | 0.000468 | 0.010329 | 0 | 0 | 0.006102 | 0 | 0.006054 | 0 | 0.009733 |
| uncultured SUP05 cluster bacterium | 0.001366 | 0 | 0.008139 | 0.000163 | 0 | 0 | 0.000702 | 0 | 0 | 0 | 0.000198 | 0.000492 | 0 | 0.000578 | 0.001012 | 0 | 0.000344 | 0.001117 | 0 | 0 | 0 | 0.001513 | 0 | 0.001217 |
| uncultured Thiobacillus sp. | 0.133879 | 0.003574 | 0.000872 | 0.002941 | 0.002161 | 0.006825 | 0.005619 | 0 | 0 | 0 | 0 | 0.003447 | 0 | 0 | 0 | 0 | 0.000344 | 0 | 0 | 0 | 0 | 0.011351 | 0 | 0 |
| uncultured Verminephrobacter sp. | 0 | 0 | 0.000727 | 0.000327 | 0 | 0 | 0 | 0 | 0 | 0.000958 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.003661 | 0 | 0.040107 | 0 | 0 |
| uncultured Verrucomicrobia bacterium | 0 | 0 | 0.021366 | 0.001307 | 0.00027 | 0 | 0 | 0 | 0.003156 | 0.003353 | 0.011885 | 0 | 0 | 0.001735 | 0.007592 | 0.000601 | 0.001377 | 0 | 0 | 0.013423 | 0 | 0.003784 | 0.001406 | 0.012167 |
| unidentified | 0.129097 | 0.105438 | 0.068313 | 0.069271 | 0.046997 | 0.052381 | 0.008429 | 0.014794 | 0.011573 | 0.148482 | 0.068735 | 0.006894 | 0.093265 | 0.031813 | 0.032898 | 0.00648 | 0.032019 | 0.089368 | 0.902733 | 0.260537 | 0.283316 | 0.049188 | 0.147646 | 0.220216 |
| unidentified cyanobacterium CLg1 | 0.000683 | 0 | 0 | 0 | 0.00027 | 0 | 0 | 0 | 0.001052 | 0 | 0 | 0.000492 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| unidentified marine eubacterium | 0.001366 | 0.005361 | 0.006395 | 0.001307 | 0.00108 | 0.001024 | 0 | 0 | 0.002104 | 0.017722 | 0.000594 | 0.002955 | 0.001295 | 0.002314 | 0.00658 | 0.000534 | 0.002066 | 0 | 0.017305 | 0.022576 | 0.050367 | 0.021189 | 0.019686 | 0.002433 |
| unidentified microorganism | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.000198 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.001217 |
| unidentified proteobacterium | 0 | 0 | 0.009593 | 0.00049 | 0.002161 | 0 | 0.000702 | 0 | 0 | 0.019159 | 0.001387 | 0.007879 | 0 | 0.014461 | 0.001012 | 0.000534 | 0.001721 | 0 | 0 | 0.009152 | 0 | 0.00227 | 0.007031 | 0 |
| unidentified sulfate-reducing bacterium | 0.002049 | 0.005361 | 0.011192 | 0.014214 | 0.009994 | 0.017915 | 0.015453 | 0.024656 | 0.032614 | 0.017722 | 0.004754 | 0.034963 | 0.005181 | 0.005784 | 0.013665 | 0.001336 | 0.008952 | 0.001117 | 0.001442 | 0.013423 | 0.012592 | 0.047675 | 0.014062 | 0.027983 |

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Table S3: Comparative analysis of the difference between cropped and uncropped stages having significance ($P < 0.05$) difference yield 143 genera.

| Sr. No | Genus | Cropped (% abundance) | Uncropped (% abundance) | Kruskal *P* value |
|---|---|---|---|---|
| 1 | *Candidatus Solibacter* | 6.777 | 3.181 | 0.037 |
| 2 | *Acidobacterium* | 2.745 | 0.185 | 0.003 |
| 3 | *Heliobacterium* | 1.554 | 3.831 | 0.047 |
| 4 | *Herpetosiphon* | 1.473 | 2.587 | 0.024 |
| 5 | *Saccharopolyspora* | 1.206 | 0.302 | 0.038 |
| 6 | *Chthoniobacter* | 0.844 | 0.314 | 0.019 |
| 7 | *Nocardioides* | 0.64 | 0.316 | 0.024 |
| 8 | *Thermobifida* | 0.527 | 0.130 | 0.031 |
| 9 | *Brevibacillus* | 0.500 | 0.110 | 0.047 |
| 10 | *Aquimarina* | 0.488 | 0.040 | 0.009 |
| 11 | *Chitinophaga* | 0.404 | 0.050 | 0.012 |
| 12 | *Terrimonas* | 0.304 | 0.032 | 0.047 |
| 13 | *Geodermatophilus* | 0.289 | 0.094 | 0.009 |
| 14 | *Halomonas* | 0.267 | 0.065 | 0.031 |
| 15 | *Dyella* | 0.230 | 0.046 | 0.031 |
| 16 | *Isosphaera* | 0.214 | 0.097 | 0.037 |
| 17 | *Actinocorallia* | 0.153 | 0.283 | 0.031 |
| 18 | *Acinetobacter* | 0.137 | 0.020 | 0.042 |
| 19 | *Hymenobacter* | 0.137 | 0.069 | 0.038 |
| 20 | *Pseudomonas* | 0.135 | 0.031 | 0.038 |
| 21 | *Selenomonas* | 0.135 | 0.317 | 0.009 |
| 22 | *Methylacidiphilum* | 0.130 | 0.078 | 0.046 |
| 23 | *Pantoea* | 0.101 | 0.007 | 0.015 |
| 24 | *Sphingobacterium* | 0.095 | 0.013 | 0.012 |
| 25 | *Ralstonia* | 0.09 | 0.043 | 0.047 |
| 26 | *Rothia* | 0.072 | 0.040 | 0.009 |
| 27 | *Flavobacterium* | 0.070 | 0.025 | 0.031 |
| 28 | *Kineococcus* | 0.070 | 0.002 | 0.003 |
| 29 | *Chromobacterium* | 0.069 | 0.003 | 0.029 |
| 30 | *Pedobacter* | 0.068 | 0.006 | 0.009 |
| 31 | *Cytophaga* | 0.067 | 0.022 | 0.009 |
| 32 | *Ectothiorhodospira* | 0.055 | 0 | 0.01 |
| 33 | *Sulfurihydrogenibium* | 0.055 | 0 | 0.031 |
| 34 | *Novosphingobium* | 0.052 | 0.001 | 0.001 |
| 35 | *Collinsella* | 0.051 | 0.134 | 0.009 |
| 36 | *Thiomonas* | 0.049 | 0.009 | 0.038 |
| 37 | *Cyanothece* | 0.048 | 0.002 | 0.011 |
| 38 | *Dehalococcoides* | 0.048 | 0.129 | 0.024 |
| 39 | *Castellaniella* | 0.046 | 0 | 0.031 |
| 40 | *Microbispora* | 0.045 | 0.019 | 0.03 |

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|---|---|---|---|---|
| 41 | *Bdellovibrio* | 0.041 | 0.009 | 0.005 |
| 42 | *Acetivibrio* | 0.04 | 0.092 | 0.047 |
| 43 | *Desulfonatronovibrio* | 0.038 | 0.004 | 0.02 |
| 44 | *Prosthecochloris* | 0.036 | 0.061 | 0.015 |
| 45 | *Desulfomonile* | 0.035 | 0.008 | 0.037 |
| 46 | *Methanosarcina* | 0.035 | 0.003 | 0.006 |
| 47 | *Microcoleus* | 0.034 | 0.001 | 0.002 |
| 48 | *Natronorubrum* | 0.034 | 0.007 | 0.046 |
| 49 | *Tetrasphaera* | 0.034 | 0.018 | 0.024 |
| 50 | *Pelomonas* | 0.033 | 0.008 | 0.014 |
| 51 | *Achromobacter* | 0.031 | 0 | 0.002 |
| 52 | *Variovorax* | 0.031 | 0.002 | 0.011 |
| 53 | *Flexibacter* | 0.03 | 0.003 | 0.024 |
| 54 | *Petrotoga* | 0.027 | 0.1 | 0.019 |
| 55 | *Carboxydothermus* | 0.025 | 0.009 | 0.03 |
| 56 | *Pimelobacter* | 0.024 | 0.004 | 0.03 |
| 57 | *Bordetella* | 0.023 | 0 | 0.002 |
| 58 | *Cupriavidus* | 0.023 | 0.004 | 0.013 |
| 59 | *Deinococcus* | 0.023 | 0.004 | 0.009 |
| 60 | *Desulfobulbus* | 0.022 | 0.003 | 0.009 |
| 61 | *Methylosinus* | 0.022 | 0.006 | 0.03 |
| 62 | *Parabacteroides* | 0.021 | 0.003 | 0.015 |
| 63 | *Eggerthella* | 0.02 | 0.005 | 0.037 |
| 64 | *Kytococcus* | 0.02 | 0 | 0.033 |
| 65 | *Desulfatibacillum* | 0.018 | 0.005 | 0.007 |
| 66 | *Gluconacetobacter* | 0.018 | 0.007 | 0.009 |
| 67 | *Herbaspirillum* | 0.017 | 0.004 | 0.012 |
| 68 | *Gardnerella* | 0.016 | 0.003 | 0.03 |
| 69 | *Nonomuraea* | 0.016 | 0.006 | 0.047 |
| 70 | *Streptomonospora* | 0.016 | 0 | 0.042 |
| 71 | *Leptothrix* | 0.015 | 0.001 | 0.03 |
| 72 | *Lysobacter* | 0.015 | 0.001 | 0.014 |
| 73 | *Melittangium* | 0.014 | 0.005 | 0.015 |
| 74 | *Desulfohalobium* | 0.013 | 0.002 | 0.039 |
| 75 | *Elusimicrobium* | 0.013 | 0.002 | 0.019 |
| 76 | *Halostagnicola* | 0.012 | 0.001 | 0.004 |
| 77 | *Spirulina* | 0.012 | 0.004 | 0.023 |
| 78 | *Desulfonatronum* | 0.011 | 0.003 | 0.008 |
| 79 | *Sinorhizobium* | 0.01 | 0 | 0.042 |
| 80 | *Acidaminococcus* | 0.009 | 0.035 | 0.024 |
| 81 | *Acidovorax* | 0.009 | 0.001 | 0.048 |
| 82 | *Pseudanabaena* | 0.009 | 0.001 | 0.015 |
| 83 | *Acaryochloris* | 0.008 | 0 | 0.005 |
| 84 | *Chlorogloeopsis* | 0.008 | 0.001 | 0.013 |

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|---|---|---|---|---|
| 85 | *Legionella* | 0.008 | 0.006 | 0.038 |
| 86 | *Phormidium* | 0.008 | 0.001 | 0.03 |
| 87 | *Pyramidobacter* | 0.008 | 0.002 | 0.038 |
| 88 | *Cronobacter* | 0.007 | 0.001 | 0.007 |
| 89 | *Dolichospermum* | 0.007 | 0.001 | 0.014 |
| 90 | *Limnothrix* | 0.007 | 0 | 0.02 |
| 91 | *Sarcina* | 0.007 | 0.003 | 0.03 |
| 92 | *Viridibacillus* | 0.007 | 0 | 0.012 |
| 93 | *Acidiphilium* | 0.006 | 0 | 0.001 |
| 94 | *Asticcacaulis* | 0.006 | 0 | 0.033 |
| 95 | *Flectobacillus* | 0.006 | 0 | 0.004 |
| 96 | *Swaminathania* | 0.006 | 0 | 0.005 |
| 97 | *Thermincola* | 0.006 | 0.003 | 0.048 |
| 98 | *Escherichia* | 0.005 | 0.001 | 0.018 |
| 99 | *Microtetraspora* | 0.005 | 0.002 | 0.046 |
| 100 | *Saccharothrix* | 0.005 | 0 | 0.033 |
| 101 | *Segniliparus* | 0.005 | 0.004 | 0.042 |
| 102 | *Xylella* | 0.005 | 0 | 0 |
| 103 | *Dermacoccus* | 0.004 | 0 | 0.021 |
| 104 | *Kozakia* | 0.004 | 0 | 0.026 |
| 105 | *Mitsuaria* | 0.004 | 0 | 0.031 |
| 106 | *Wautersiella* | 0.004 | 0 | 0.026 |
| 107 | *Actinokineospora* | 0.003 | 0 | 0.003 |
| 108 | *Afipia* | 0.003 | 0 | 0.005 |
| 109 | *Capnocytophaga* | 0.003 | 0.001 | 0.042 |
| 110 | *Coxiella* | 0.003 | 0 | 0.003 |
| 111 | *Kluyvera* | 0.003 | 0 | 0.029 |
| 112 | *Rhodovibrio* | 0.003 | 0 | 0.01 |
| 113 | *Sphaerotilus* | 0.003 | 0 | 0.029 |
| 114 | *Spirobacillus* | 0.003 | 0 | 0.01 |
| 115 | *Aeriscardovia* | 0.002 | 0 | 0.021 |
| 116 | *Allochromatium* | 0.002 | 0 | 0.012 |
| 117 | *Ancylobacter* | 0.002 | 0 | 0.013 |
| 118 | *Caedibacter* | 0.002 | 0 | 0.027 |
| 119 | *Cellvibrio* | 0.002 | 0.013 | 0.034 |
| 120 | *Duganella* | 0.002 | 0 | 0.04 |
| 121 | *Granulicatella* | 0.002 | 0.001 | 0.021 |
| 122 | *Labrenzia* | 0.002 | 0 | 0.029 |
| 123 | *Leucobacter* | 0.002 | 0 | 0.001 |
| 124 | *Roseateles* | 0.002 | 0 | 0.013 |
| 125 | *Scytonema* | 0.002 | 0 | 0.04 |
| 126 | *Sinobacter* | 0.002 | 0 | 0.012 |
| 127 | *Spirosoma* | 0.002 | 0 | 0.005 |
| 128 | *Aquaspirillum* | 0.001 | 0 | 0.031 |

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|---|---|---|---|---|
| 129 | *Bergeyella* | 0.001 | 0 | 0.029 |
| 130 | *Candidatus Midichloria* | 0.001 | 0 | 0.013 |
| 131 | *Desulfurivibrio* | 0.001 | 0 | 0.029 |
| 132 | *Methylopila* | 0.001 | 0 | 0.039 |
| 133 | *Oligella* | 0.001 | 0 | 0.029 |
| 134 | *Pseudacidovorax* | 0.001 | 0 | 0.005 |
| 135 | *Rhodobium* | 0.001 | 0 | 0.005 |
| 136 | *Rhodothalassium* | 0.001 | 0 | 0.04 |
| 137 | *Acholeplasma* | 0 | 0 | 0.029 |
| 138 | *Ensifer* | 0 | 0 | 0.029 |
| 139 | *Leuconostoc* | 0 | 0.001 | 0.031 |
| 140 | *Methylophilus* | 0 | 0 | 0.029 |
| 141 | *Neisseria* | 0 | 0 | 0.029 |
| 142 | *Photorhabdus* | 0 | 0 | 0.04 |
| 143 | *Xenophilus* | 0 | 0 | 0.029 |

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