

Table 1: ¹³C-xylose responders BLAST against Living Tree Project

| OTU ID | Fold change | Top BLAST hits | BLAST %ID | Phylum;Class;Order |
|----------|-------------|---|-----------|---|
| OTU.4446 | 3.49 | <i>Catenuloplanes niger</i> , <i>Catenuloplanes castaneus</i> , <i>Catenuloplanes atrovinosus</i> , <i>Catenuloplanes crispus</i> , <i>Catenuloplanes nepalensis</i> , <i>Catenuloplanes japonicus</i> | 97.72 | Actinobacteria Frankiales Nakamurellaceae |
| OTU.62 | 2.57 | <i>Nakamurella flavida</i> | 100.0 | Actinobacteria Frankiales Nakamurellaceae |
| OTU.24 | 2.81 | <i>Cellulomonas aerilata</i> , <i>Cellulomonas humilata</i> , <i>Cellulomonas terrae</i> , <i>Cellulomonas soli</i> , <i>Cellulomonas xylanilytica</i> | 100.0 | Actinobacteria Micrococcales Cellulomonadaceae |
| OTU.4 | 2.84 | <i>Agromyces ramosus</i> | 100.0 | Actinobacteria Micrococcales Microbacteriaceae |
| OTU.37 | 2.68 | <i>Phycicola gilvus</i> , <i>Microterricola viridarii</i> , <i>Frigoribacterium faeni</i> , <i>Frondihabitans sp. RS-15</i> , <i>Frondihabitans australicus</i> | 100.0 | Actinobacteria Micrococcales Microbacteriaceae |
| OTU.5284 | 3.56 | <i>Isoptericola nanjingensis</i> , <i>Isoptericola hypogeus</i> , <i>Isoptericola variabilis</i> | 98.63 | Actinobacteria Micrococcales Promicromonosporaceae |
| OTU.252 | 3.34 | <i>Promicromonospora thailandica</i> | 100.0 | Actinobacteria Micrococcales Promicromonosporaceae |
| OTU.244 | 3.08 | <i>Cellulosimicrobium funkei</i> , <i>Cellulosimicrobium terreum</i> | 100.0 | Actinobacteria Micrococcales Promicromonosporaceae |
| OTU.760 | 2.89 | <i>Dyadobacter hamtensis</i> | 98.63 | Bacteroidetes Cytophagia Cytophagales |
| OTU.14 | 3.92 | <i>Flavobacterium oncorhynchi</i> , <i>Flavobacterium glycines</i> , <i>Flavobacterium succinicans</i> | 99.09 | Bacteroidetes Flavobacteria Flavobacteriales |
| OTU.6203 | 3.32 | <i>Flavobacterium granuli</i> , <i>Flavobacterium glaciei</i> | 100.0 | Bacteroidetes Flavobacteria Flavobacteriales |
| OTU.159 | 3.16 | <i>Flavobacterium hibernum</i> | 98.17 | Bacteroidetes Flavobacteria Flavobacteriales |
| OTU.2379 | 3.1 | <i>Flavobacterium pectinovorum</i> , <i>Flavobacterium sp. CS100</i> | 97.72 | Bacteroidetes Flavobacteria Flavobacteriales |
| OTU.131 | 3.07 | <i>Flavobacterium fluvii</i> , <i>Flavobacteria bacterium HMD1033</i> , <i>Flavobacterium sp. HMD1001</i> | 100.0 | Bacteroidetes Flavobacteria Flavobacteriales |
| OTU.3540 | 2.52 | <i>Flavobacterium terrigena</i> | 99.54 | Bacteroidetes Flavobacteria Flavobacteriales |
| OTU.107 | 2.25 | <i>Flavobacterium sp. 15C3</i> , <i>Flavobacterium banpakuense</i> | 99.54 | Bacteroidetes Flavobacteria Flavobacteriales |
| OTU.277 | 3.52 | <i>Solibius ginsengiterrae</i> | 95.43 | Bacteroidetes Sphingobacteriia Sphingobacteriales |
| OTU.183 | 3.31 | No hits of at least 90% identity | 89.5 | Bacteroidetes Sphingobacteriia Sphingobacteriales |
| OTU.5906 | 3.16 | <i>Terrimonas sp. M-8</i> | 96.8 | Bacteroidetes Sphingobacteriia Sphingobacteriales |
| OTU.360 | 2.98 | <i>Flavisolibacter ginsengisoli</i> | 95.0 | Bacteroidetes Sphingobacteriia Sphingobacteriales |

Table 1 – continued from previous page

| OTU ID | Fold change | Top BLAST hits | BLAST %ID | Phylum;Class;Order |
|----------|-------------|--|-----------|---|
| OTU.369 | 5.05 | <i>Paenibacillus sp. D75</i> , <i>Paenibacillus glycanilyticus</i> | 100.0 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.267 | 4.97 | <i>Paenibacillus pabuli</i> , <i>Paenibacillus tundrae</i> , <i>Paenibacillus taichungensis</i> , <i>Paenibacillus xylanexedens</i> , <i>Paenibacillus xylanilyticus</i> | 100.0 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.1040 | 4.78 | <i>Paenibacillus daejeonensis</i> | 100.0 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.57 | 4.39 | <i>Paenibacillus castaneae</i> | 98.62 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.394 | 4.06 | <i>Paenibacillus pocheonensis</i> | 100.0 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.319 | 3.98 | <i>Paenibacillus xinjiangensis</i> | 97.25 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.5603 | 3.96 | <i>Paenibacillus uliginis</i> | 100.0 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.1069 | 3.85 | <i>Paenibacillus terrigena</i> | 100.0 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.843 | 3.62 | <i>Paenibacillus agarexedens</i> | 100.0 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.2040 | 2.91 | <i>Paenibacillus pectinilyticus</i> | 100.0 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.3 | 2.61 | [<i>Brevibacterium</i>] <i>frigoritolerans</i> , <i>Bacillus sp. LMG 20238</i> , <i>Bacillus coahuilensis m4-4</i> , <i>Bacillus simplex</i> | 100.0 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.335 | 2.53 | <i>Paenibacillus thailandensis</i> | 98.17 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.3507 | 2.36 | <i>Bacillus spp.</i> | 98.63 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.8 | 2.26 | <i>Bacillus niacini</i> | 100.0 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.4743 | 2.24 | <i>Lysinibacillus fusiformis</i> , <i>Lysinibacillus sphaericus</i> | 99.09 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.9 | 2.04 | <i>Bacillus megaterium</i> , <i>Bacillus flexus</i> | 100.0 | <i>Firmicutes Bacilli Bacillales</i> |
| OTU.22 | 2.8 | <i>Paracoccus sp. NB88</i> | 99.09 | <i>Proteobacteria Alphaproteobacteria Rhodobacterales</i> |
| OTU.346 | 3.44 | <i>Pseudoduganella violaceinigra</i> | 99.54 | <i>Proteobacteria Betaproteobacteria Burkholderiales</i> |
| OTU.68 | 3.74 | <i>Shigella flexneri</i> , <i>Escherichia fergusonii</i> , <i>Escherichia coli</i> , <i>Shigella sonnei</i> | 100.0 | <i>Proteobacteria Gammaproteobacteria Enterobacteriales</i> |
| OTU.290 | 3.59 | <i>Pantoea spp.</i> , <i>Kluyvera spp.</i> , <i>Klebsiella spp.</i> , <i>Erwinia spp.</i> , <i>Enterobacter spp.</i> , <i>Buttiauxella spp.</i> | 100.0 | <i>Proteobacteria Gammaproteobacteria Enterobacteriales</i> |
| OTU.48 | 2.99 | <i>Aeromonas spp.</i> | 100.0 | <i>Proteobacteria Gammaproteobacteria aaa34a10</i> |