

Table 1: OTUs enriched in PyOM amended soil relative to control
BLAST against Living Tree Project

OTU ID	Day of Response ^a	Top BLAST hits	BLAST %ID
OTU.3	82	<i>Arthrobacter spp.</i>	100.0
OTU.33	82	<i>Roseomonas aquatica</i>	98.13
OTU.39	82	<i>Thermomonas dokdonensis</i>	99.47
OTU.78	12, 82	<i>Oxalicibacterium flavum</i>	98.92
OTU.97	12	<i>Beijerinckia derxii</i> subsp. <i>venezuelae</i> , <i>Beijerinckia derxii</i> subsp. <i>derxii</i> , <i>Beijerinckia indica</i> subsp. <i>indica</i> ATCC 9039, <i>Beijerinckia indica</i> subsp. <i>lacticogenes</i>	98.12
OTU.118	82	<i>Flavobacterium beibuense</i> , <i>Flavobacterium sp. FCS-5</i>	98.11
OTU.141	82	<i>Achromobacter spanius</i> , <i>Achromobacter insolitus</i>	100.0
OTU.154	82	<i>Comamonas thiooxydans</i> , <i>Comamonas testosteroni</i>	99.73
OTU.166	82	<i>Niastella sp. JCN-23</i>	96.49
OTU.170	82	<i>Niastella sp. JCN-23</i>	99.73
OTU.184	82	<i>Adhaeribacter terreus</i>	98.11
OTU.271	82	<i>Bosea sp. R-46060</i>	100.0
OTU.287	12, 82	<i>Flavisolibacter ginsengisoli</i>	95.14
OTU.316	82	<i>Caulobacter henricii</i>	99.46
OTU.339	82	<i>Brevundimonas halotolerans</i>	99.73
OTU.357	82	<i>Ochrobactrum pseudogrignonense</i>	100.0
OTU.391	12, 82	<i>Flavisolibacter ginsengisoli</i>	95.68
OTU.402	82	<i>Brevundimonas vesicularis</i> , <i>Brevundimonas nasdae</i>	100.0
OTU.417	82	No hits of at least 90% identity	80.16
OTU.442	12, 82	<i>Rhodococcus wratislaviensis</i>	100.0
OTU.444	82	No hits of at least 90% identity	84.95
OTU.448	82	<i>Brevundimonas alba</i>	99.19
OTU.454	82	<i>Nocardioides hwasunensis</i>	100.0
OTU.455	82	<i>Methylobacterium rhodesianum</i> , <i>Methylobacterium populi</i> , <i>Methylobacterium zatmanii</i>	100.0
OTU.456	82	<i>Prostheco bacter fluviatilis</i>	90.64
OTU.527	82	No hits of at least 90% identity	80.8
OTU.534	82	<i>Methylobacterium aquaticum</i>	100.0

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OTU ID	Day of Response ^b	Top BLAST hits	BLAST %ID
OTU.535	12, 82	<i>Cupriavidus necator</i> , <i>Wautersia numazuensis</i> , <i>Cupriavidus basilensis</i>	100.0
OTU.542	82	<i>Gemmatimonas aurantiaca</i>	96.26
OTU.635	12, 82	<i>Sphingomonadaceae bacterium KMM 6042</i>	99.2
OTU.640	12, 82	<i>Rhodococcus jostii</i>	99.73
OTU.678	82	<i>Shinella granuli</i> , <i>Shinella zoogloeoides</i>	100.0
OTU.720	82	<i>Luteolibacter sp. CCTCC AB 2010415</i>	99.2
OTU.767	82	No hits of at least 90% identity	89.57
OTU.800	12	<i>Sediminibacterium salmoneum</i>	95.96
OTU.820	82	<i>Pedobacter sp. N7d-4</i>	100.0
OTU.873	12, 82	<i>Hymenobacter algoricola</i>	100.0
OTU.878	82	<i>Dongia mobilis</i>	93.33
OTU.888	82	No hits of at least 90% identity	87.67
OTU.893	12	<i>Flavisolibacter ginsengisoli</i> , <i>Sediminibacterium salmoneum</i> , <i>Niastella yeongjuensis</i>	93.53
OTU.909	82	No hits of at least 90% identity	89.25
OTU.924	82	No hits of at least 90% identity	88.56
OTU.932	82	<i>Georgfuchsia toluolica</i>	98.13
OTU.939	82	<i>Dyadobacter beijingensis</i>	97.57
OTU.1003	82	<i>Pedobacter glucosidilyticus DSM 23534</i>	98.65
OTU.1018	82	No hits of at least 90% identity	88.53
OTU.1045	82	<i>Rhodanobacter sp. DCY45</i> , <i>Rhodanobacter fulvus</i>	100.0
OTU.1062	12	<i>Ohtaekwangia koreensis</i>	93.51
OTU.1077	82	<i>Azospirillum rugosum</i> , <i>Skermanella xinjiangensis</i>	91.67
OTU.1090	82	<i>Ohtaekwangia koreensis</i>	94.61
OTU.1107	82	<i>Lysobacter sp. DCY21T</i>	99.2
OTU.1119	82	<i>Devosia crocina</i> , <i>Devosia riboflavina</i>	98.66
OTU.1133	82	<i>Pedobacter insulae</i>	98.11
OTU.1187	82	<i>Chitinophaga niabensis</i>	90.54
OTU.1191	82	No hits of at least 90% identity	89.63
OTU.1192	82	<i>Rhodococcus triatomae</i>	97.87
OTU.1195	82	<i>Segetibacter koreensis</i>	97.3
OTU.1208	82	<i>Bacteriovorax stolpii</i>	98.93
OTU.1226	12, 82	<i>Nocardiosis alba</i>	100.0

Table 1 – continued from previous page

OTU ID	Day of Response ^b	Top BLAST hits	BLAST %ID
OTU.1253	82	No hits of at least 90% identity	84.8
OTU.1295	82	<i>Leifsonia poae</i>	99.2
OTU.1301	82	<i>Burkholderia</i> sp. ATSB16	94.39
OTU.1324	82	<i>Sphingomonas japonica</i>	98.37
OTU.1344	82	<i>Hymenobacter ocellatus</i>	97.3
OTU.1373	82	<i>Dyella marenensis</i> , <i>Dyella terrae</i> , <i>Fulvimonas soli</i> , <i>Dokdonella</i> sp. LM 2-5	95.45
OTU.1374	82	No hits of at least 90% identity	89.01
OTU.1384	12	<i>Sphingomonas trueperi</i> , <i>Sphingomonas pituitosa</i>	96.78
OTU.1385	82	<i>Sphingopyxis panaciterrae</i> , <i>Sphingopyxis chilensis</i>	100.0
OTU.1389	82	<i>Arthrobacter crystallopoietes</i>	98.13
OTU.1425	82	No hits of at least 90% identity	89.54
OTU.1441	82	<i>Chitinophaga niabensis</i>	92.43
OTU.1442	82	<i>Gemmatimonas aurantiaca</i>	91.98
OTU.1448	82	No hits of at least 90% identity	87.97
OTU.1450	12	<i>Rhodococcus yunnanensis</i> , <i>Rhodococcus fascians</i> , <i>Rhodococcus kyotonensis</i> , <i>Rhodococcus cercidiphylli</i> , <i>Rhodococcus</i> sp. C5(2010)	100.0
OTU.1477	82	<i>Dyella koreensis</i> , <i>Dyella soli</i>	96.52
OTU.1485	82	No hits of at least 90% identity	89.01
OTU.1505	82	<i>Lacibacter cauensis</i>	98.92
OTU.1543	82	<i>Bryobacter aggregatus</i>	90.05
OTU.1544	82	<i>Armatimonas rosea</i>	92.0
OTU.1550	12, 82	<i>Roseomonas ludipueritiae</i>	98.39
OTU.1566	82	<i>Panacagrimonas perspica</i>	98.12
OTU.1576	82	<i>Delftia tsuruhatensis</i> , <i>Delftia lacustris</i>	98.66
OTU.1587	82	No hits of at least 90% identity	85.68
OTU.1616	82	No hits of at least 90% identity	84.8
OTU.1655	82	No hits of at least 90% identity	89.22
OTU.1667	82	No hits of at least 90% identity	84.17
OTU.1680	82	<i>Pseudomonas alcaligenes</i>	98.1
OTU.1698	82	<i>Hymenobacter gelipurpurascens</i>	100.0
OTU.1721	82	<i>Gemmatimonas aurantiaca</i>	93.3
OTU.1722	82	No hits of at least 90% identity	84.83

Table 1 – continued from previous page

OTU ID	Day of Response ^b	Top BLAST hits	BLAST %ID
OTU.1737	82	<i>Ferrimicrobium acidiphilum</i>	91.76
OTU.1753	82	<i>Wenxinia marina</i>	96.77
OTU.1773	82	No hits of at least 90% identity	87.84
OTU.1786	82	No hits of at least 90% identity	84.57
OTU.1789	82	No hits of at least 90% identity	82.43
OTU.1796	82	<i>Bdellovibrio bacteriovorus</i>	93.32
OTU.1809	82	<i>Anaeromyxobacter dehalogenans</i>	90.11
OTU.1824	82	<i>Solibius ginsengiterrae</i>	91.85
OTU.1835	82	No hits of at least 90% identity	88.38
OTU.1840	82	No hits of at least 90% identity	88.68
OTU.1869	82	No hits of at least 90% identity	79.6
OTU.1873	82	No hits of at least 90% identity	80.06
OTU.1892	82	<i>Halioglobus pacificus</i>	91.2
OTU.1897	82	<i>Fluviicola taffensis</i>	93.82
OTU.1909	82	<i>Conexibacter arvalis</i>	91.71
OTU.1919	82	No hits of at least 90% identity	89.13
OTU.1926	82	No hits of at least 90% identity	80.7
OTU.1928	82	No hits of at least 90% identity	88.77
OTU.1951	82	<i>Prosthecobacter dejongeii</i> , <i>Prosthecobacter debontii</i>	96.52
OTU.1960	82	<i>Bryobacter aggregatus</i>	91.13
OTU.1981	12, 82	<i>Undibacterium pigrum</i> , <i>Rugamonas rubra</i>	97.31
OTU.1985	82	<i>Magnetospira thiophila</i>	92.18
OTU.1999	82	<i>Aurantimonas</i> sp. <i>L9-753</i>	99.2
OTU.2003	82	<i>Aquicella siphonis</i>	95.16
OTU.2073	82	No hits of at least 90% identity	86.52
OTU.2091	82	<i>Fimbriimonas ginsengisoli</i> <i>Gsoil 348</i>	90.98
OTU.2094	82	No hits of at least 90% identity	88.86
OTU.2106	82	<i>Ferruginibacter alkalilentus</i>	94.86
OTU.2131	82	No hits of at least 90% identity	86.68
OTU.2148	82	<i>Solibius ginsengiterrae</i>	91.6
OTU.2153	82	No hits of at least 90% identity	77.21
OTU.2156	82	No hits of at least 90% identity	82.62
OTU.2159	82	No hits of at least 90% identity	86.58
OTU.2167	82	No hits of at least 90% identity	80.8
OTU.2182	82	<i>Flavobacterium beibuense</i>	97.03

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OTU ID	Day of Response ^b	Top BLAST hits	BLAST %ID
OTU.2236	82	<i>Amaricoccus macauensis</i>	91.2
OTU.2275	82	No hits of at least 90% identity	87.17
OTU.2278	82	<i>Catellibacterium nectarophilum</i>	98.39
OTU.2279	82	No hits of at least 90% identity	79.2
OTU.2293	82	<i>Adhaeribacter aquaticus</i>	95.16
OTU.2301	82	<i>Pseudoxanthomonas mexicana</i>	100.0
OTU.2310	82	<i>Niastella yeongjuensis</i>	93.19
OTU.2334	82	No hits of at least 90% identity	85.64
OTU.2352	82	<i>Byssovorax cruenta</i>	90.3
OTU.2391	82	<i>Luteolibacter sp. E100</i>	97.59
OTU.2410	82	<i>Solibius ginsengiterrae</i>	95.14
OTU.2442	82	<i>Thiopropfundum hispidum</i>	95.21
OTU.2446	82	No hits of at least 90% identity	85.95
OTU.2463	82	<i>Roseomonas sp. enrichment culture clone 03SU100-51</i> <i>Roseomonas stagni</i>	96.51
OTU.2478	82	<i>Prostheobacter fluviatilis</i>	99.47
OTU.2481	82	No hits of at least 90% identity	86.97
OTU.2489	82	No hits of at least 90% identity	85.07
OTU.2522	82	No hits of at least 90% identity	87.2
OTU.2554	82	<i>Solitalea canadensis</i>	91.87
OTU.2576	82	No hits of at least 90% identity	88.27
OTU.2601	82	No hits of at least 90% identity	86.1
OTU.2617	82	No hits of at least 90% identity	81.96
OTU.2621	12, 82	<i>Hoeflea phototrophica</i> DFL-43, <i>Hoeflea alexandrii</i>	96.77
OTU.2622	82	No hits of at least 90% identity	79.51
OTU.2634	82	<i>Gemmatimonas aurantiaca</i>	92.8
OTU.2640	82	No hits of at least 90% identity	86.38
OTU.2656	82	No hits of at least 90% identity	89.04
OTU.2660	82	No hits of at least 90% identity	89.59
OTU.2661	82	No hits of at least 90% identity	88.17
OTU.2667	82	No hits of at least 90% identity	88.47
OTU.2676	82	No hits of at least 90% identity	83.07
OTU.2706	82	<i>Chitinophaga ginsengisegetis</i> , <i>Niastella koreensis</i>	92.92
OTU.2708	12	No hits of at least 90% identity	87.8
OTU.2734	82	<i>Prostheobacter fluviatilis</i>	95.99

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OTU ID	Day of Response ^b	Top BLAST hits	BLAST %ID
OTU.2769	82	No hits of at least 90% identity	84.88
OTU.2778	82	No hits of at least 90% identity	88.8
OTU.2847	82	No hits of at least 90% identity	87.73
OTU.2885	82	<i>Chitinophaga sancti</i>	94.28
OTU.2895	82	<i>Verrucomicrobiaceae bacterium DC2a-G7</i>	99.46
OTU.2932	82	<i>Sediminibacterium salmoneum</i>	91.6
OTU.2943	82	<i>Afipia massiliensis</i>	97.58
OTU.2948	82	<i>Variovorax paradoxus</i> , <i>Xenophilus aerolatus</i>	98.92
OTU.2955	82	<i>Gemmatimonas aurantiaca</i>	92.53
OTU.2969	82	No hits of at least 90% identity	79.89
OTU.2971	82	No hits of at least 90% identity	89.04
OTU.2985	82	No hits of at least 90% identity	86.36
OTU.2995	82	No hits of at least 90% identity	81.84
OTU.2996	82	<i>Luteolibacter sp. CCTCC AB 2010415</i>	97.06
OTU.3007	82	No hits of at least 90% identity	87.33
OTU.3061	82	<i>Pigmentiphaga litoralis</i>	100.0
OTU.3088	82	<i>Belnapia moabensis</i>	96.51
OTU.3097	82	<i>Nocardioides plantarum</i>	99.73
OTU.3116	82	<i>Chelatococcus daeguensis</i> , <i>Rhizobium sp. HT4</i>	94.35
OTU.3160	82	No hits of at least 90% identity	89.87
OTU.3201	82	No hits of at least 90% identity	89.95
OTU.3240	82	No hits of at least 90% identity	82.89
OTU.3274	82	No hits of at least 90% identity	81.12
OTU.3300	82	<i>Pirellula staleyi DSM 6068</i>	92.03
OTU.3373	82	<i>Skermanella aerolata</i>	99.2
OTU.3481	82	<i>Frankia sp. S9-650</i>	95.2
OTU.3523	82	No hits of at least 90% identity	78.44
OTU.3543	82	No hits of at least 90% identity	78.76
OTU.3564	82	<i>Roseomonas sp. enrichment culture clone 03SU106.27</i> <i>Roseomonas stagni</i>	96.27
OTU.3565	82	<i>Rubellimicrobium mesophilum DSM 19309</i>	99.2
OTU.3666	82	<i>Legionella cincinnatiensis</i> , <i>Legionella longbeachae</i>	96.52
OTU.3771	82	No hits of at least 90% identity	81.5
OTU.3779	82	<i>Cystobacter badius</i> , <i>Cystobacter velatus</i> , <i>Cystobacter miniatus</i>	90.37

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OTU ID	Day of Response ^b	Top BLAST hits	BLAST %ID
OTU.3783	82	No hits of at least 90% identity	87.57
OTU.3823	82	<i>Hymenobacter ocellatus</i>	97.03
OTU.3865	82	No hits of at least 90% identity	85.09
OTU.3917	82	No hits of at least 90% identity	84.8
OTU.3920	82	No hits of at least 90% identity	85.52
OTU.3954	82	<i>Paucimonas lemoignei</i>	97.58
OTU.4092	82	No hits of at least 90% identity	82.66
OTU.4127	82	<i>Devosia subaequoris</i>	97.31
OTU.4225	82	<i>Flavisolibacter ginsengisoli</i>	95.42
OTU.4247	82	No hits of at least 90% identity	88.74
OTU.4271	82	<i>Afpia felis</i> (cat scratch disease bacillus), <i>Oligotropha carboxidovorans</i>	97.33
OTU.4279	82	No hits of at least 90% identity	88.2
OTU.4312	82	No hits of at least 90% identity	85.68
OTU.4339	82	<i>Bdellovibrio bacteriovorus</i>	94.39
OTU.4418	82	No hits of at least 90% identity	83.91
OTU.4435	82	<i>Sphingomonas jaspis</i> , <i>Kaistobacter terrae</i>	96.0
OTU.4597	82	No hits of at least 90% identity	85.94
OTU.4769	82	No hits of at least 90% identity	89.04
OTU.4808	12	<i>Amycolatopsis pigmentata</i>	99.73
OTU.4905	82	<i>Ohtaekwangia kribbensis</i>	94.07
OTU.5548	82	No hits of at least 90% identity	84.8
OTU.5667	82	<i>Skermanella xinjiangensis</i>	92.74
OTU.5678	82	<i>Segetibacter koreensis</i>	96.22
OTU.5685	82	No hits of at least 90% identity	88.68
OTU.5798	82	<i>Sphingomonas</i> sp. YC6722	99.73
OTU.6008	82	<i>Delftia tsuruhatensis</i> , <i>Delftia lacustris</i>	98.12
OTU.6190	12, 82	<i>Oxalicibacterium horti</i>	99.18
OTU.6205	82	No hits of at least 90% identity	82.21
OTU.6256	82	<i>Gemmatimonas aurantiaca</i>	93.55
OTU.6285	82	<i>Gemmatimonas aurantiaca</i>	92.25
OTU.6290	82	<i>Desulfomonile tiedjei</i>	90.03
OTU.6391	82	No hits of at least 90% identity	88.95
OTU.6407	82	No hits of at least 90% identity	86.29
OTU.6446	82	<i>Diaphorobacter nitroreducens</i> , <i>Comamonas terrigena</i> , <i>Acidovorax caeni</i>	97.58

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OTU ID	Day of Response ^b	Top BLAST hits	BLAST %ID
OTU.6487	12	<i>Glaciimonas</i> sp. A2-57, <i>Glaciimonas immobilis</i> , <i>Oxalicibacterium faecigallinarum</i> , <i>Oxalicibacterium horti</i>	97.31
OTU.6495	82	<i>Rhizobiales</i> bacterium WSM3557	98.92
OTU.6601	82	<i>Terrimonas</i> sp. M-8	97.03
OTU.6640	82	<i>Adhaeribacter terreus</i>	98.05
OTU.6735	82	<i>Brevundimonas staleyii</i>	98.12
OTU.6822	12	<i>Sphingomonas changbaiensis</i>	99.16
OTU.6848	82	<i>Rhizobium skierniewicense</i>	98.12
OTU.6868	82	<i>Caulobacter vibrioides</i> , <i>Caulobacter segnis</i>	98.66
OTU.6898	82	<i>Arenimonas malthae</i>	96.77
OTU.7041	82	<i>Altererythrobacter</i> sp. H32, <i>Altererythrobacter</i> sp. MSW-14	94.09
OTU.7071	82	<i>Rhodoplanes piscinae</i>	97.04
OTU.7083	82	No hits of at least 90% identity	87.06
OTU.7092	12	<i>Novosphingobium hassiacum</i>	97.58
OTU.7168	82	No hits of at least 90% identity	89.92
OTU.7181	82	No hits of at least 90% identity	85.91
OTU.7216	82	<i>Yonghaparkia alkaliphila</i>	100.0
OTU.7313	12, 82	<i>Rhodococcus qingshengii</i> , <i>Rhodococcus erythropolis</i> , <i>Rhodococcus</i> sp. djl-6-2, <i>Nocardia coeliaca</i>	98.38
OTU.7431	82	<i>Luteimonas marina</i> , <i>Thermomonas dokdonensis</i> , <i>Luteimonas lutimaris</i>	97.33
OTU.7454	82	<i>Pedobacter boryungensis</i>	99.19
OTU.7476	82	No hits of at least 90% identity	84.04
OTU.7616	82	<i>Sphingomonas yunnanensis</i>	97.86
OTU.7646	82	<i>Novosphingobium hassiacum</i>	97.32
OTU.7762	12, 82	<i>Filimonas lacunae</i>	94.59
OTU.7779	12, 82	<i>Luteimonas</i> sp. KMM 9005	98.07
OTU.7786	82	<i>Stenotrophomonas rhizophila</i>	98.65
OTU.7826	12	<i>Bacillus patagoniensis</i>	99.73
OTU.7995	12, 82	<i>Roseomonas aquatica</i> , <i>Belnapia moabensis</i>	96.25
OTU.8221	12	No hits of at least 90% identity	85.6
OTU.8259	82	<i>Rhodoplanes roseus</i>	96.2

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OTU ID	Day of Response ^b	Top BLAST hits	BLAST %ID
OTU.8277	82	<i>Gordonia neofelifaecis</i> NRRL B-59395, <i>Gordonia cholesterolivorans</i> , <i>Gordonia malaquae</i>	100.0
OTU.8409	82	<i>Acidovorax temperans</i>	98.91
OTU.8620	82	No hits of at least 90% identity	88.68
OTU.8700	82	No hits of at least 90% identity	86.13
OTU.8710	82	<i>Pedobacter koreensis</i>	97.3
OTU.8712	82	<i>Limnobacter thiooxidans</i>	93.58

^a \log_2 fold change greater than 1, adjusted P-value less than 0.10.