

Supplementary Materials: Effects of Endobacterium (*Stenotrophomonas maltophilia*) on Pathogenesis-Related Gene Expression of Pine Wood Nematode (*Bursaphelenchus xylophilus*) and Pine Wilt Disease

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Table S1. The results of sequences of differently treated *B. xylophilus* mapped to the reference genome.

Map to Genome (Genome/Gene)	<i>B. xylophilus</i> with Different Treatment		
	Bx_a	Bx_b	Bx_Fungus
Total reads	47,931,208	48,015,322	48,031,606
Total basepairs	4,313,808,720	4,321,378,980	4,322,844,540
Total mapped reads (percentage)	75.43%/71.58%	75.06%/72.66%	75.04%/71.98%
Perfect match (percentage)	54.33%/52.65%	54.2%/53.78%	54.48%/53.51%
Mismatch \leq 5 bp (percentage)	21.11%/18.93%	20.86%/18.88%	20.56%/18.47%
Unique match (percentage)	74.02%/70.78%	73.78%/71.88%	73.79%/71.26%
Multi-position match (percentage)	1.41%/0.8%	1.27%/1/0.78%	1.25%/0.72%
Total unmapped reads (percentage)	24.57%/28.42%	24.94%/27.34%	24.96%/28.02%

Table S2. Primer sequences of differentially expressed genes in *B. xylophilus* for qRT-PCR analysis.

Gene ID	Gene Name	Function	Primer Sequence (5' to 3')
BUX.s01109.547	<i>Cbr-mit-7</i>	Thyroid peroxidase	F: AACAAATGAATCCCTCCTG R: GTGACCGAAACGATAGGC
BUX.s01661.75	<i>Bxpe1</i>	Pectate lyase	F: AAGAGCGGGCAGACCTAC R: GGATTTCACAGACAACAT
BUX.s00364.216	<i>Cre-col-97</i>	Collagen protein	F: AAACAACACTACCCACCATCCTT R: TTCCTTGGCGTCCATCTT
BUX.s00055.267	<i>Bx-col-2</i>	CBN-col-68 protein	F: TTCTGCGTTCACAGATCCAA R: CGGCGTCATCTCCGTAAGT
BUX.s00713.1002	<i>gut esterase1</i>	Carboxylesterase	F: CTCAAATGGGTCTATGACA R: GGCTTAGAGTAGGGAGAAA
BUX.s00813.53	<i>cath1</i>	Cathepsin F	F: GTAATCATCGCTGTAATCTGT R: ATTCGTTCAAGGGTTTCT
BUX.s00813.52	<i>Cathespin L</i>	Cathespin L	F: ATGTAATGGCGGATGGTC R: TGGATTTGCAGCTAGGAA
BUX.s01254.165	<i>ZDHHC20</i>	ZDHHC20 Protein	F: GAATAGTCCGAGACTCAAAT R: TCGTATCTTCCTCGTCA
BUX.s00116.359	<i>Protein K07E3</i>	Catalytic activity	F: GGACCGACCTTTGGGATT R: CGGCAGCGAGGAGATTGT
BUX.s00532.5	<i>Bx-col-3</i>	Juvenile development	F: ATTACGAGAACCGCATCAAAGC R: TGGGCAGCGTGAAGCAGA
BUX.s00116.877	<i>Bx-col-4</i>	Juvenile development	F: CACTCGGTTCTCGGCAAAT R: ACGGGCGGTTCTGTTGGA
BUX.s01518.49	<i>Cbr-sqt-3</i>	Embryo development	F: AGTCCGATGGCCGTATGAA R: TGACCTGGCTGACGTAGTTGTA
BUX.s01254.333	<i>GST-6</i>	Glutathione S-transferase activity	F: CCCATCTACAACAACCTCC R: CAAGTATTCGCTGACCACA
BUX.s00579.85	<i>Bx-vap1</i>	Venom allergen-like protein VAP1	F: GCCCATAACAACCTTCGG R: CATTCGTCGGCTTTGGAT
BUX.s00397.15	<i>Bx-C12</i>	Beta-1,4-endoglucanase activity	F: ACGGATTTGCTGCTGTGA R: CAGGTAGCCGACTCCACA
BUX.s00713.800	<i>Cbr-fmo-4</i>	Monoxygenase activity	F: GACTACAACAACGGATGG R: TTGGCTTCAAACGACTCTAC

F, forward primer; R, reverse primer.

Table S3. The high differently expressed genes in *B. xylophilus* treated with endobacterium and wild-type *B. xylophilus*. Bx_b: *B. xylophilus* treated with endobacterium, Bx_w: fungus *B. xylophilus*. ‘-’ represent down-regulated.

Gene ID	Annotation	Change Fold in Bx_b (Fold)	Change Fold in Bx_Fungus (Fold)
BUX.s01147.112		-10.47	-4.08
BUX.s00240.28		-9.02	-2.01
BUX.s00364.216	Hypothetical protein CRE_26523	-8.84	-3.04
BUX.s00240.41		-7.31	-6.41
BUX.s00116.877		-6.50	-3.71
BUX.s00116.209		-6.07	-3.57
BUX.s01143.351	<i>C. briggsae</i> CBR-GRL-9 protein	-5.98	-2.69
BUX.s00351.83		-5.75	-4.93
BUX.s00055.267	CBN-COL-68 protein	-5.71	-2.70
BUX.s01145.106	<i>C. briggsae</i> CBR-COL-156 protein	-5.58	-3.13
BUX.s01518.47	Hypothetical protein CRE_05777	-5.49	-2.57
BUX.s00813.30	Hypothetical protein WUBG_07659	-5.36	-2.31
BUX.s00358.44		-5.34	-4.23
BUX.s01661.24	I-Branching enzyme family protein	-5.33	-3.66
BUX.s01518.49	Hypothetical protein CAEBREN_32352	-5.26	-4.43
BUX.s01254.267	Protein COL-65	-5.24	-8.82
BUX.s01147.16		-5.21	-3.00
BUX.s01653.305	Nematode cuticle collagen N-terminal domain containing protein	-5.16	-4.15
BUX.s01109.625	Hypothetical protein CAEBREN_25275	-5.14	-3.96
BUX.s01653.308	<i>C. briggsae</i> CBR-COL-156 protein	-5.09	-3.49
BUX.s01259.16	Hypothetical protein CRE_11135	-5.00	-2.31
BUX.s01513.216	Hypothetical protein CBG20858	-5.00	-2.30
BUX.s00351.199	Protein H10E21.4	-4.96	-3.26
BUX.s01254.196	Hypothetical protein CRE_01635	-4.95	-3.27
BUX.s00116.244		-4.94	-2.51
BUX.s01142.4	CRE-COL-130 protein	-4.93	-5.65
BUX.s00713.745		-4.93	-4.21
BUX.s00100.1		-4.81	-2.54
BUX.s00422.105	Hypothetical protein CAEBREN_15197	-4.77	-2.06
BUX.s00609.14	<i>C. briggsae</i> CBR-COL-123 protein	-4.71	-3.14
BUX.s01063.14		-4.67	-3.25
BUX.s01653.307	<i>C. briggsae</i> CBR-COL-65 protein	-4.59	-3.47
BUX.s00252.138	Hypothetical protein LOAG_00897	-4.53	-5.00
BUX.s00298.1		-4.52	-5.44
BUX.s00747.2	Hypothetical protein Bm1_36710	-4.47	-4.32
BUX.s01109.128	Cuticle collagen 13	-4.45	-2.91
BUX.s00532.5	Cuticle preprocollagen	-4.45	-6.86
BUX.s01518.48	Hypothetical protein CAEBREN_32352	-4.26	-5.37
BUX.s00713.945	Cuticular collagen	-4.25	-2.91
BUX.s00298.56	Hypothetical protein CAEBREN_10142	-4.21	-2.81
BUX.s00460.301	Cuticle collagen 13 precursor	-4.21	-5.41
BUX.s00119.27	<i>C. briggsae</i> CBR-NHX-3 protein	-4.20	-2.72
BUX.s00713.946	Collagen protein	-4.17	-2.52
BUX.s00713.944	Col-180-1	-4.16	-3.63
BUX.s01144.229		-4.14	-5.73
BUX.s01092.240		-4.13	-3.54
BUX.s00579.123		-4.12	-3.00
BUX.s00358.45		-4.11	-3.89
BUX.s00252.94	Hypothetical protein LOAG_17054	-4.10	-3.72
BUX.s00647.64		-4.08	-3.66
BUX.s01429.2		-3.98	-3.91
BUX.s00460.148	DB module family protein	-3.98	-2.40
BUX.s01254.268	CRE-ROL-8 protein	-3.95	-2.78
BUX.s00713.1056		-3.93	-5.58
BUX.s01092.72	Cathepsin B-like cysteine protease 2	-3.93	-3.41
BUX.s00116.36	Hypothetical protein CBG09274	-3.93	-2.74
BUX.s01144.113	Hypothetical protein LOAG_18235	-3.88	-3.29

Table S3. Cont.

Gene ID	Annotation	Change Fold in Bx_b (Fold)	Change Fold in Bx_Fungus (Fold)
BUX.s01187.19	Hypothetical protein Bm1_50485	-3.87	-2.19
BUX.s01142.58		-3.85	-4.47
BUX.s00333.136	C. briggsae CBR-LON-3 protein	-3.80	-3.65
BUX.s00240.3	Protein LON-3	-3.79	-3.82
BUX.s01254.121	Nematode cuticle collagen N-terminal domain containing protein	-3.78	-4.98
BUX.s01143.148	Hypothetical protein CBG23119	-3.78	-3.25
BUX.s00110.82	Hypothetical protein CBG14246	-3.78	-2.52
BUX.s00055.304	Hypothetical protein LOAG_01570	-3.77	-2.85
BUX.s00532.4	Putative COLLAGEN	-3.74	-6.05
BUX.s00713.39	Protein C25E10.12	-3.73	-3.77
BUX.s00139.133	C. briggsae CBR-COL-40 protein	-3.71	-3.22
BUX.s01142.5	collagen protein	-3.69	-5.10
BUX.s00036.123	Hypothetical protein Bm1_38265	-3.67	-6.00
BUX.s00713.1009	Hypothetical protein KGM_03271	-3.60	-2.66
BUX.s00116.149	Ground-like domain containing protein	-3.60	-3.55
BUX.s00364.224	COL5A1 protein	-3.59	-6.91
BUX.s00600.66	Hypothetical protein LOAG_08929	-3.58	-3.92
BUX.s01653.296	C. briggsae CBR-COL-107 protein	-3.57	-6.55
BUX.s01109.130	Protein COL-160	-3.56	-5.32
BUX.s00351.445	Protein ELO-4	-3.48	-2.85
BUX.s00647.95	Hypothetical protein CRE_17077	-3.48	-5.15
BUX.s01109.332	Hypothetical protein LOAG_04512	-3.47	-4.08
BUX.s01063.43	CRE-TAG-297 protein	-3.47	-2.34
BUX.s01038.94	Hypothetical protein CAEBREN_16721	-3.43	-2.14
BUX.s00460.489	Hypothetical protein CRE_20821	-3.43	-3.90
BUX.s00713.1051		-3.41	-2.29
BUX.s01438.96		-3.41	-2.16
BUX.s01143.316		-3.40	-2.32
BUX.c00697.1		-3.39	-3.29
BUX.s01145.76	Hypothetical protein CAEBREN_06992	-3.39	-3.75
BUX.s01063.44	C. briggsae CBR-TAG-297 protein	-3.39	-3.46
BUX.s00579.3		-3.39	-2.20
BUX.s00036.151	CRE-COL-45 protein	-3.39	-3.12
BUX.s01142.59		-3.36	-5.00
BUX.s00713.40	Protein WRT-8	-3.35	-2.22
BUX.s01109.547	Protein MLT-7	-3.34	-2.44
BUX.s00119.37	Hypothetical protein LOAG_04049	-3.34	-2.39
BUX.s00964.26	Hypothetical protein LOAG_05885	-3.34	-2.52
BUX.s00961.57		-3.31	-2.93
BUX.s01109.563	Nematode cuticle collagen N-terminal domain containing protein	-3.28	-3.21
BUX.s01092.247		-3.27	-2.78
BUX.s01109.45	Cuticlin 1	-3.27	-2.45
BUX.s01187.11	Hypothetical protein CAEBREN_00254	-3.26	-2.34
BUX.s00351.186	Hypothetical protein LOAG_06354	-3.25	-3.50
BUX.s00725.36	Hypothetical protein WUBG_10966	-3.25	-3.94
BUX.s01144.96	Nematode cuticle collagen N-terminal domain containing protein	-3.24	-3.55
BUX.s00713.1123	Hypothetical protein CAEBREN_14564	-3.24	-2.58
BUX.s00351.158	C. briggsae CBR-PQN-46 protein	-3.21	-2.24
BUX.s00055.287	PAN domain-containing protein	-3.20	-4.07
BUX.s00119.8	CBN-CUT-1 protein	-3.20	-2.30
BUX.s00713.838	Hypothetical protein DAPPUDRAFT_302039	-3.19	-2.72
BUX.s00813.67	Protein BUS-12, isoform a	-3.17	-4.35
BUX.s01178.2	CRE-ELO-4 protein	-3.17	-2.70
BUX.s00649.21	Hypothetical protein Bm1_38120	-3.15	-4.32
BUX.s00422.286	Lipase family protein	-3.15	-2.74
BUX.s00422.163	Hypothetical protein LOAG_05181	-3.14	-2.94

Table S3. Cont.

Gene ID	Annotation	Change Fold in Bx_b (Fold)	Change Fold in Bx_Fungus (Fold)
BUX.s00460.502	CBN-WRT-4 protein	-3.13	-3.61
BUX.s00364.94	Protein DPY-2	-3.13	-5.12
BUX.s01254.333	Protein GST-6	-3.13	-3.34
BUX.s00139.89	Hypothetical protein BRAFLDRAFT_59053	-3.11	-11.95
BUX.s00713.779	CRE-MLT-11 protein	-3.10	-2.62
BUX.s00351.118	CBR-CBN-1 protein	-3.07	-3.76
BUX.s00713.209	Collagen col-34	-3.06	-2.50
BUX.s01281.492		-3.06	-2.48
BUX.s00351.297	Hypothetical protein LOAG_04701	-3.06	-2.34
BUX.s00333.141	Cuticlin 1, partial	-3.05	-2.58
BUX.s00543.37	<i>C. briggsae</i> CBR-DPY-8 protein	-3.05	-2.85
BUX.s00351.228	Protein LET-805, isoform b	-3.04	-2.99
BUX.s00649.20	Protein LPR-6, isoform a	-3.01	-2.91
BUX.s01063.215	Protein PTR-18	-3.01	-2.60
BUX.s01662.136	CRE-SQT-2 protein	-3.00	-4.13
BUX.s00351.227	Hypothetical protein H19M22.2— <i>Caenorhabditis elegans</i>	-2.99	-2.46
BUX.s01494.1	Protein B0365.9	-2.98	-5.63
BUX.s00460.374	WRT-10 protein	-2.98	-5.78
BUX.c00436.1		-2.97	-3.96
BUX.s01661.37	Protein COL-46	-2.97	-3.95
BUX.s01147.26		-2.95	-2.95
BUX.s00813.116	LPR-4 protein	-2.95	-3.87
BUX.s00364.221	Collagen protein	-2.95	-5.45
BUX.s00055.338	Hypothetical protein Bm1_38110	-2.94	-3.25
BUX.s01144.205		-2.94	-3.63
BUX.s00364.218	COL5A1 protein	-2.93	-2.14
BUX.s00298.242	Hypothetical protein CAEBREN_13878	-2.93	-2.48
BUX.s00116.855		-2.89	-3.49
BUX.s01109.545	Hypothetical protein CAEBREN_06068	-2.88	-2.80
BUX.s01109.461		-2.88	-2.16
BUX.s00983.1	Hypothetical protein LOAG_17799	-2.86	-4.11
BUX.s01653.440		-2.85	-2.66
BUX.s00713.673		-2.85	-2.38
BUX.s00116.713	CRE-PTR-4 protein	-2.83	-2.64
BUX.s01281.367	Period, partial	-2.82	-3.26
BUX.s00364.92	Hypothetical protein LOAG_01555	-2.82	-3.42
BUX.s01254.264	Cuticular collagen	-2.80	-2.68
BUX.s01187.18	Hypothetical protein WUBG_01354	-2.79	-2.04
BUX.s00460.143	Hypothetical protein CRE_22550	-2.79	-2.20
BUX.s01226.79	Hypothetical protein LOAG_17054	-2.79	-3.67
BUX.s01653.325	Hypothetical protein WUBG_06137	-2.78	-2.25
BUX.s00116.812	Hypothetical protein Bm1_28255	-2.77	-3.35
BUX.s00351.374	Hypothetical protein LOAG_02391	-2.76	-3.80
BUX.s01653.301	Hypothetical protein CAEBREN_14780	-2.75	-2.89
BUX.s00713.6	2.96412e-66/Protein R57.2	-2.74	-2.22
BUX.s00110.32	3-oxoacyl-[acyl-carrier-protein] reductase	-2.74	-7.96
BUX.s01150.21	CBN-DAO-2 protein	-2.74	-2.77
BUX.s01143.56	Hypothetical protein CAEBREN_30296	-2.74	-2.67
BUX.s00961.65	Protein F29G6.1	-2.73	-2.39
BUX.s00351.368	Hypothetical protein Bm1_05905	-2.72	-4.25
BUX.s00422.593	Protein LIT-1, isoform d	-2.72	-2.74
BUX.s00119.69		-2.72	-4.33
BUX.s00422.548	Angiotensin-converting enzyme family protein	-2.72	-2.74
BUX.s00579.202	3-oxoacyl-[acyl-carrier-protein] reductase	-2.72	-7.73
BUX.s01109.245	Hint module family protein	-2.70	-2.48
BUX.s01259.35	Macrophage migration inhibitory factor	-2.70	-6.86
BUX.s00713.800	<i>C. briggsae</i> CBR-FMO-4 protein	-2.69	-6.36

Table S3. Cont.

Gene ID	Annotation	Change Fold in Bx_b (Fold)	Change Fold in Bx_Fungus (Fold)
BUX.s00117.41		-2.68	-2.07
BUX.s01653.160	PAN domain-containing protein	-2.67	-3.78
BUX.s01226.46	Hypothetical protein CAEBREN_15384	-2.67	-9.72
BUX.s01653.324		-2.67	-5.70
BUX.s00116.625	CBN-CLEC-180 protein	-2.67	-3.17
BUX.s01438.105	Hypothetical protein CAEBREN_19046	-2.66	-2.84
BUX.s00579.725	Protein BUS-8	-2.66	-2.59
BUX.s00088.1	<i>C. briggsae</i> CBR-COL-88 protein	-2.65	-2.20
BUX.s00333.161	Hypothetical protein CRE_12182	-2.64	-3.10
BUX.s00460.415		-2.64	-2.46
BUX.s01513.177	Protein MLT-10	-2.64	-3.67
BUX.s00116.413	Protein MAM-3	-2.63	-2.11
BUX.s01187.48	Bovine pancreatic trypsin inhibitor domain protein	-2.63	-2.63
BUX.s00773.15		-2.63	-3.60
BUX.s00351.310	Hypothetical protein WUBG_04316	-2.62	-8.15
BUX.s00983.5	Cathepsin B-like cysteine proteinase	-2.61	-3.41
BUX.s01092.260	Hypothetical protein CAEBREN_32008	-2.61	-2.66
BUX.s01145.90		-2.61	-3.08
BUX.s00579.731	Flavin-binding monooxygenase-like family protein	-2.59	-2.73
BUX.s00294.36	Hypothetical protein WUBG_04670	-2.58	-3.43
BUX.s01147.22		-2.58	-3.50
BUX.s00713.915	Hypothetical protein CRE_18869	-2.57	-3.11
BUX.s00298.59		-2.56	-2.01
BUX.s00422.72	Protein K02E10.4, isoform a	-2.56	-2.61
BUX.s00116.766	Hypothetical protein CAEBREN_14873	-2.56	-2.10
BUX.s00351.311	Hypothetical protein LOAG_04534	-2.55	-2.20
BUX.s00540.1	Hypothetical protein CAEBREN_15368	-2.54	-2.42
BUX.s01281.22	Hypothetical protein WUBG_11029, partial	-2.54	-2.62
BUX.s01513.56	Hypothetical protein DAPPUDRAFT_223767	-2.53	-2.80
BUX.s01661.68	Hypothetical protein CRE_04031	-2.53	-2.84
BUX.s01254.375		-2.53	-2.61
BUX.s01175.26	Protein H03E18.1	-2.53	-2.22
BUX.s00725.3	Hypothetical protein CRE_04036	-2.51	-2.32
BUX.s01144.123	Protein K08B12.1	-2.51	-4.27
BUX.s00600.121	Hypothetical protein CAEBREN_16537	-2.51	-2.05
BUX.s01144.243	Protein F53B1.4	-2.51	-2.21
BUX.s01109.55	Hypothetical protein CRE_04039	-2.50	-2.07
BUX.s01513.308	Protein GRD-15	-2.50	-2.74
BUX.s00669.25	Protein DCT-5	-2.50	-2.09
BUX.s01038.225	<i>C. briggsae</i> CBR-COL-130 protein	-2.49	-2.19
BUX.s00139.93		-2.49	-2.73
BUX.c04026.1		-2.49	-3.39
BUX.s00422.270	Protein MUA-3, isoform a	-2.49	-2.52
BUX.s00351.229	Hypothetical protein CAEBREN_04806	-2.48	-3.18
BUX.s00983.2	Hypothetical protein LOAG_17799	-2.47	-2.47
BUX.s00520.28	Fatty aldehyde dehydrogenase	-2.46	-2.50
BUX.s00609.23	<i>C. briggsae</i> CBR-DHS-29 protein	-2.45	-2.74
BUX.s01150.18	CRE-MLT-8 protein	-2.45	-2.47
BUX.s01147.224		-2.44	-2.83
BUX.s01187.10	Protein GRD-6	-2.44	-2.52
BUX.s01656.43	Hypothetical protein CAEBREN_24487	-2.42	-2.57
BUX.s00705.56	Hypothetical protein CRE_12377	-2.42	-2.06
BUX.s00128.24	Uncharacterized protein LOC100898457	-2.42	-2.61
BUX.s01259.104		-2.41	-3.67
BUX.s01661.67	Protein NEP-17, isoform a	-2.40	-3.93
BUX.s01149.104	<i>C. briggsae</i> CBR-LET-2 protein	-2.38	-2.24
BUX.s01254.265	Hypothetical protein CRE_12586	-2.37	-3.99

Table S3. Cont.

Gene ID	Annotation	Change Fold in Bx_b (Fold)	Change Fold in Bx_Fungus (Fold)
BUX.s01281.86		-2.37	-2.02
BUX.s00116.457	Cytosolic glutathione S-transferase 2	-2.37	-3.35
BUX.s00351.217	Hypothetical protein LOAG_17817	-2.36	-2.79
BUX.s01281.338	Hypothetical protein LOAG_07526	-2.36	-2.01
BUX.s00422.384	Collagen alpha-3(VI) chain	-2.36	-2.48
BUX.s00422.474	Hypothetical protein LOAG_01102	-2.35	-2.38
BUX.s01144.296	Hypothetical protein CAEBREN_21159	-2.35	-2.27
BUX.s00804.3	Nuclear Hormone Receptor family member	-2.35	-2.98
BUX.s01198.107		-2.35	-3.45
BUX.s00351.421	Protein T23E7.2, isoform b	-2.35	-3.36
BUX.s01167.15		-2.34	-3.93
BUX.s01066.66		-2.34	-2.13
BUX.s01109.586	Protein COL-125	-2.33	-4.52
BUX.s00298.36	Protein W01A11.1	-2.32	-2.80
BUX.s00364.188	Collagen α -1(IV) chain	-2.32	-2.40
BUX.s00116.405	Zinc finger protein, partial	-2.32	-2.99
BUX.s00139.92		-2.30	-2.52
BUX.s00579.148	Protein COL-171	-2.30	-3.85
BUX.s01198.149	CRE-TAG-163 protein	-2.29	-2.95
BUX.s00983.4	Cathepsin B-like proteinase	-2.28	-2.34
BUX.s00773.31		-2.27	-5.16
BUX.s01268.26	Hypothetical protein CAEBREN_12945	-2.25	-3.37
BUX.s01167.13	Protein NOAH-1, isoform b	-2.25	-3.34
BUX.s01144.303	<i>C. briggsae</i> CBR-DPY-6 protein	-2.24	-5.00
BUX.s00579.210	CRE-NAS-37 protein	-2.24	-4.34
BUX.s00139.110	Protein Y53F4B.25	-2.24	-2.32
BUX.s01147.18		-2.23	-3.92
BUX.s01653.425	Hypothetical protein CBG18576	-2.23	-5.27
BUX.s00252.85	Cuticle collagen dpy-7	-2.22	-4.31
BUX.s01109.553	PAN domain-containing protein, partial	-2.21	-2.24
BUX.s01268.51		-2.20	-3.22
BUX.s00036.121		-2.19	-4.02
BUX.s01167.35	Protein C49A1.10	-2.19	-3.23
BUX.s00508.22	Hypothetical protein WUBG_08140	-2.18	-2.26
BUX.s01337.71		-2.18	-2.35
BUX.s00351.300	Hypothetical protein CRE_07231	-2.18	-2.06
BUX.s01281.370	Hypothetical protein CRE_11835	-2.18	-2.27
BUX.s01143.87	CBN-BUS-19 protein	-2.18	-2.10
BUX.s01038.251	Hypothetical protein CBG01351	-2.17	-8.06
BUX.s01513.218		-2.17	-2.49
BUX.s00579.63	Hypothetical protein CAEBREN_01577	-2.16	-2.83
BUX.c03499.1		-2.16	-2.53
BUX.s00713.55	Hypothetical protein CRE_16635	-2.16	-2.22
BUX.s01147.185	Protein T10G3.3	-2.16	-3.64
BUX.s01038.7	Hypothetical protein CRE_05305	-2.14	-2.54
BUX.s01149.42	Hypothetical protein CBG15681	-2.14	-3.00
BUX.s00351.233	DnaJ domain containing protein	-2.14	-2.26
BUX.s01660.62	Hypothetical protein WUBG_04506	-2.14	-2.58
BUX.s00466.158	Hypothetical protein Cbre_JD09.001	-2.13	-2.79
BUX.s00460.124	Protein PHG-1	-2.13	-2.12
BUX.s01259.60	Hypothetical protein CRE_28748	-2.13	-2.10
BUX.s00713.352		-2.13	-2.48
BUX.s00116.743	Hypothetical protein CBG01832	-2.13	-3.70
BUX.s00460.36	Protein COL-48	-2.13	-2.51
BUX.s01038.223	Intermediate filament protein HG-IF1	-2.12	-3.19
BUX.s00579.724	Protein BUS-17	-2.12	-3.41
BUX.s01656.64	Talin 1	-2.12	-2.10

Table S3. Cont.

Gene ID	Annotation	Change Fold in Bx_b (Fold)	Change Fold in Bx_Fungus (Fold)
BUX.s00116.616	Hypothetical protein CRE_10276	-2.12	-4.73
BUX.s00579.219	Hypothetical protein LOAG_05745	-2.12	-2.26
BUX.s01144.160	Nuclear Hormone Receptor family member	-2.12	-3.05
BUX.s01092.110	Hypothetical protein LOC100637862, partial	-2.12	-2.56
BUX.s00713.1153		-2.11	-3.20
BUX.s01066.173		-2.11	-3.00
BUX.s00242.1	Protein HCH-1	-2.11	-2.59
BUX.s00333.154	Hypothetical protein LOAG_12148	-2.11	-3.00
BUX.s01142.2	Collagen protein	-2.11	-3.88
BUX.s00460.53	Hypothetical protein LOAG_12928	-2.10	-4.79
BUX.s01187.44	CBN-LIPL-6 protein	-2.10	-3.15
BUX.s00351.326	Hypothetical protein LOAG_16969	-2.10	-2.51
BUX.s01109.509	Hypothetical protein CBG13113	-2.10	-2.64
BUX.s01297.1	Hypothetical protein LOAG_18663	-2.10	-2.61
BUX.s01145.15	Protein LGC-22, isoform b	-2.10	-2.34
BUX.s00116.759	<i>C. briggsae</i> CBR-PHY-2 protein	-2.10	-2.00
BUX.s01513.114	Hypothetical protein Bm1_06695	-2.09	-2.02
BUX.s01144.187	Aspartic protease 2A	-2.09	-3.84
BUX.s00579.72		-2.08	-7.59
BUX.s00713.819	2-acylglycerol O-acyltransferase 2	-2.08	-2.05
BUX.s01518.97	Protein E04D5.4, isoform a	-2.08	-3.11
BUX.s01254.23	Short-chain Dehydrogenase, partial	-2.07	-7.39
BUX.s01653.404	hypothetical protein LOAG_00505	-2.06	-2.85
BUX.s01518.84	Hypothetical protein Bm1_12890	-2.06	-2.24
BUX.s00713.927	Reductase SDR family member 1-like	-2.05	-7.17
BUX.s00116.581	Major allergen	-2.05	-5.31
BUX.s01661.59	Protein UNC-62, isoform a	-2.05	-2.25
BUX.s00579.141		-2.04	-3.83
BUX.s00578.1	Cadherin domain containing protein	-2.04	-2.15
BUX.s00813.102	Hypothetical protein CRE_00277	-2.03	-3.70
BUX.s01659.4	<i>C. briggsae</i> CBR-PCP-1.1 protein	-2.03	-2.43
BUX.c03203.1	Hypothetical protein CAEBREN_02229	-2.03	-4.29
BUX.s00128.19	Protein ASM-3, isoform a	-2.03	-2.29
BUX.s00351.416	Hypothetical protein CAEBREN_23751	-2.03	-2.33
BUX.s01143.167		-2.02	-2.93
BUX.s00333.7	Hypothetical protein CAEBREN_07108	-2.02	-2.73
BUX.s00773.30		-2.02	-3.27
BUX.s01142.36	Tetraspanin family protein	-2.01	-2.94
BUX.s00259.2	Hypothetical protein CRE_17148	-2.01	-2.51
BUX.s00460.191	Trehalose-6-phosphate hydrolase	2.00	2.28
BUX.s01147.184	Protease, serine, 22	2.02	2.05
BUX.c06670.1		2.04	2.29
BUX.s00063.1	CBN-CYP-33D1 protein	2.05	3.26
BUX.s00460.290		2.05	2.01
BUX.s01254.165		2.09	2.44
BUX.s00351.40	Thrombin inhibitor haemalin	2.11	3.29
BUX.s00302.1		2.19	2.85
BUX.s01066.133		2.22	2.22
BUX.s01089.1	CRE-STR-135 protein	2.25	3.33
BUX.s00813.54	cathepsin	2.25	2.04
BUX.s00055.336	Metallo-beta-lactamase superfamily protein	2.26	2.51
BUX.s00813.53	Cathepsin	2.30	2.20
BUX.s00647.196		2.31	2.66
BUX.s01656.34		2.39	2.25
BUX.s00036.74	Zinc metallopeptidase 2 MEP2	2.40	2.25
BUX.s01254.60	CBN-DHS-20 protein	2.46	3.85

Table S3. Cont.

Gene ID	Annotation	Change Fold in Bx_b (Fold)	Change Fold in Bx_Fungus (Fold)
BUX.s00116.221	CRE-TAG-89 protein	2.48	2.71
BUX.s00579.85	Venom allergen-like protein VAP1	2.49	2.73
BUX.s00647.87		2.54	3.89
BUX.s01143.152	Histone-lysine N-methyltransferase SETMAR	2.59	2.97
BUX.s00333.185	CRE-SRH-276 protein	2.65	2.76
BUX.s01661.72	Protein NEP-17, isoform a	2.77	2.47
BUX.s00713.60	PHD finger-like domain protein 5A	2.93	3.33
BUX.s01144.145	Protein SRH-264	3.00	3.36
BUX.s00713.1015		3.00	4.00
BUX.s00813.52	Cathepsin	3.12	2.42
BUX.s01145.123		3.21	2.63
BUX.s00364.261	Hemoglobinase-type cysteine proteinase	3.25	3.65
BUX.s01337.81		3.38	2.54
BUX.s00647.111	Glutathione S-transferase S1	3.39	2.49
BUX.s00813.51	Cathepsin	3.62	2.24
BUX.s00647.197		3.71	4.60
BUX.s01044.1		5.50	6.50
BUX.s00713.1054		6.00	5.50

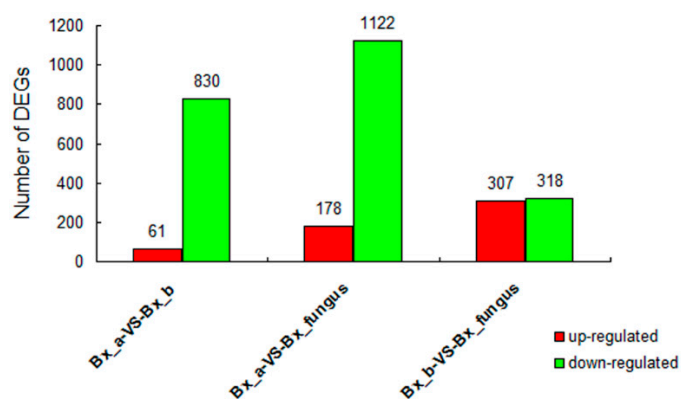


Figure S1. Genes most differentially expressed in the three different treated samples of *B. xylophilus*. Bx_a: aseptic *B. xylophilus*; Bx_b: *B. xylophilus* treated with *S. maltophilia* NSPmBx03; Bx_fungus: fungus *B. xylophilus*.