

Table S1 Sequence comparison of proteins encoded by common differentially expressed genes.

<i>Lentinula edodes</i>		<i>Pleurotus eryngii</i>		score	E value
Gene	Protein	Gene	Protein		
GAW10075	Hypothetical protein	KAF9501075	Cytochrome P450	646	0
GAW10075	Hypothetical protein	KAF9486951	Cytochrome P450	349	1.00e ⁻⁹⁸
GAW10075	Hypothetical protein	KAF9486888	Cytochrome P450	324	3.00e ⁻⁹¹
GAW09471	MFS general substrate transporter	KAF9497993	Hypothetical protein	202	2.00e ⁻⁵⁴
GAW09471	MFS general substrate transporter	KAF9493880	Laccase	188	3.00e ⁻⁵⁰
GAW09434	Cytochrome P450	KAF9501075	Cytochrome P450	186	9.00e ⁻⁵⁰
GAW09434	Cytochrome P450	KAF9492298	Heme peroxidase	152	2.00e ⁻³⁹
GAW09434	Cytochrome P450	KAF9499153	Hypothetical protein	143	2.00e ⁻³⁷
GAW09299	Hypothetical protein	KAF9499881	Hypothetical protein	120	8.00e ⁻³⁰
GAW09299	Hypothetical protein	KAF9499882	Copper transporter	117	5.00e ⁻²⁹
GAW09299	Hypothetical protein	KAF9490413	Hypothetical protein	114	1.00e ⁻²⁸
GAW09190	Transmembrane protein	KAF9497558	Hypothetical protein	110	4.00e ⁻²⁷
GAW08854	Rta1-like protein	KAF9494720	peptide transporter MTD1	100	8.00e ⁻²⁴
GAW08622	Glycoside hydrolase family 3 protein	KAF9500865	Hypothetical protein	95	2.00e ⁻²²
GAW08213	MFS general substrate transporter	KAF9495632	Major facilitator superfamily multidrug-resistance	87	5.00e ⁻²⁰
GAW08213	MFS general substrate transporter	KAF9496417	Oligopeptide transporter	86	1.00e ⁻¹⁹
GAW08213	MFS general substrate transporter	KAF9501075	Cytochrome P450	85	2.00e ⁻¹⁹
GAW08123	Hypothetical protein	KAF9499153	Hypothetical protein	83	1.00e ⁻¹⁸
GAW08123	Hypothetical protein	KAF9492795	Hypothetical protein	82	2.00e ⁻¹⁸
GAW08123	Hypothetical protein	KAF9487492	P-type ATPase-like protein	82	4.00e ⁻¹⁸
GAW07814	Poxa3b laccase small subunit	KAF9499519	Subtilisin-like protein	81	8.00e ⁻¹⁸
GAW07814	Poxa3b laccase small subunit	KAF9501268	Hypothetical protein	79	2.00e ⁻¹⁷

GAW07581	NAD -binding protein	KAF9492244	NAD(P)-binding protein	77	8.00e-17
GAW07581	NAD -binding protein	KAF9499237	NAD(P)-binding protein	77	1.00e-16
GAW07534	Glycoside hydrolase family 128 protein	KAF9501786	Hypothetical protein	62	9.00e-13
GAW07534	Glycoside hydrolase family 128 protein	KAF9500865	Hypothetical protein	57	2.00e-11
GAW07537	Family A1 protease	KAF9490640	Aspartic peptidase A1	58	3.00e-11
GAW07537	Family A1 protease	KAF9498916	Acid protease	57	8.00e-11

Table S2 Primers used for *Lentinula edodes* qRT-PCR.

Gene	Protein	Forward primer (5'→3')	Reverse primer (5'→3')
Actin	Actin	GCATCCTGTCCTTCTT ACCGAG	AAGAGCGAAACC CTCGTAGATG
GAV99068	Laccase lcc5	TGGTCGCACTTGTTT CGTCAG	TGGTATCGTCCGT CAACTCGTT
GAW00335	Manganese dependent peroxidase 1	TGCTGGACCTCACCT GCTACCT	TGGTGGGACTGGA GCAACAGAT
GAW03759	Laccase	CCTGCTGGTGCTGCG TTGAAT	CGGTGCGAGGTAG CTGACATTG
GAW05002	FAD-binding protein	GGGAGGAAATCGGT TCGGCATT	CGTGGCAAGGACA GCATTTGTG
GAW05592	Carbohydrate-binding module family 20 protein	GCTGCTGGCTGTGAT GCTCTT	CGTCCAGTGGCAA CACCTGAAT
GAW06442	Hypothetical protein	CGCATCAACACCAC CGATCCAT	TACGCCTGCCTCT GCCAATG
GAW07534	Endo-beta-1,3-glucanase	ACAATGGCGACGGC GAGGTT	TTGGGCAACAGGG CTGGAGT
GAW08622	Glycoside hydrolase family 3 protein	GGTGAAGAATGCCG AGCCAAGG	GCTTGATCGTCGC ACTGACTCC

Table S3 Primers used for *Pleurotus eryngii* qRT-PCR.

Gene	Protein	Forward primer (5'→3')	Reverse primer (5'→3')
Actin	Actin	CCTTGGTCTTGAAGC TGCTG	GAGCGACGATCTTGA CCTTC
BDN71DRA FT_1435398	Hypothetical protein	GTGATGCTGCTTGCG GAGAAC	CGTCGTCTTCGGCGG TATAAAC
BDN71DRA FT_106407	Acetyl xylan esterase	CCACGACACCTCCAA CCACAAC	GGCGTTGAGAGCAG TGCATGT
BDN71DRA FT_1483600	Ferroxidase	GCCGCCTCCACCTAT TGATGTC	CTGTTACGCCAACCG CACCAT
BDN71DRA FT_1055494	Laccase	AGGTGTCCTTGTTCA CGGTTGG	TGACGAAGGCGGGT CCATCA
BDN71DRA FT_1447255	Carbohydrate-binding module family 13 protein	AGCAGTGGTTCCTCA CCGACAA	TCAACGGACCCAGG CTTGTT
BDN71DRA FT_1445894	Carbohydrate-binding module family 13 protein	CGTTGACAGGTGTCC ACTTCGT	CGAATACCAAGCCG CCGATAGG
BDN71DRA FT_416606	Copper radical oxidase	GCTTCCTGCCACGGT CAACTT	CGAGTCGCTGGTCCA TGTGAAC
BDN71DRA FT_1607096	MnP-short, class II peroxidase	CGACTCCGTTGACAC CATCTTG	TGAGCAGCGACGGT ATGAGAG