

Supplementary Fig. 1. Multiple sequence alignment of the LELCC (*Letinula edodes* laccase) gene sequences (2,249 bp) of 89 shiitake lines, illustrating locations of the single nucleotide polymorphisms identified. R = A or G, Y = C or T, K = G or T, M = A or C, S = G or C, and W = A or T.

TCTGGCGGCTGAGCTAGTCTGCCTCGTGTACGGAGCCGAAGTCATCCGCGATACTACAACCTATGGTCAGAC
CGTGAGCGAGAATTTATTCATCGTCAACAAGCAACTCGCCCCAGATGGGTTTCAACGCTCGTAAGTTTACATT
CGCATCTCCATR_SNP1_TCTGTACATTTACATTTTGCAGAACCCTACTCGCTGGGCTCACYCCCTCTACTGGA
TCTTTTCCGGGYCCAYTAATCTCRGGRAATAAGGTCTGCTTTATCCTTATCAGAATAGTTACAATTTCTTTGACC
CTACTGCAAACAGGG_S_SNP2_GTCAGATTCAACCTCAACGTCACGGACCAACTTACGGATCCAAGTATGGTT
AGAAGCACCACCGTTGTGGGTATATCCATGTTTAAATGAAGAATATCAGTCTAATATAACCTTGTTCTGTCAY_SNP
3_TATCAGCACTGGCATGGCCTCTCCAGAAAACGACCAACTATGCAGAY_SNP4_GGTGTAGCATTGTTTCT
CAATGCCCCATTGCCGCCAACCATTCTGTTCTCTACGACTTTCAAGTTCCAGATCAAGCRGGCGTACGATATC
TAGTCATTTCTTTGAGCAWTTTGTGATTGACAACGCGATTTATAGACCTTCTGGTATCATTACACATATCG
GTACAAGTGAGCTTGACGGTYCTACGATATGACGTTGCTTTGAYCCCCCGATTGTATAGTATTGCGATGG
GCTTCGAGGGCCTCTTGAATTTATGACCTCAAGATCCGCGAGGCCTATCTGTACGACGTCGATGACGGTAAG
TCGCGCGTGSAGRKCTTTTTTCACTTTTTGATAYTCATTGGCTCCGS_TTTTTCATTWAGAACTACCGTGCTTA
CTATTGCCGACTGGTAAGTCCCCGGAAGTCTCTRCTYGRACGGTGCTCWCTAAGASTCAACAGGTTTCAC
AACACCAGCACCAGCTKATCGCAGCCGCGGTTGCTCCCCCTGCCGATGCTACTTTGATTAATGGAAAAGGG
CGCTATCTTGGTGGGTACGTTTCAACAGGATGAGATTGTTGRCATGCTTTCTAAGATGTTCCCGYTGCATAG
CCCGCTGTTCTCTCGCGTCATCAATGTACAACAAGGAAAGCGCTATCGTTCCGGATGATTTCAATAGCTT
GTGATGCCW_SNP5_ATCACAATTTTCCATCGACGGTCATAGATTAAACAGTCATAGAAGTTGACGGAGAGAAT
CAYGAACCTGCCACAGTCGATAAYATTAGATCTTCCCTGGCCAGCGCTATTCTTTCTGTTYGRMTGCAACCC
AGCCTGTGGATAACTATTGGGTTCTGTCATTGTCTAGTAGTGGCGTTGGTTTTTCCGGATTTACAGGCGGTCT
CAATTCTGGAATCCTGCGATACCAAGGAGCTCCAGATGCTGATCCGACYACAATAATTGACTGGCGTGGTR
_SNP6_TTGACGGAATCGATGCTGCAACCCTTTGAAAATCCGGGAGCACCTGGACTTCCCTTCCCCGGAGGT
GCTGACGAAGTGCTCAATY_SNP7_TGACGCTCGGTTTCAATCTTCCCGCCACATTCTTTCATGAACGACACCC
AATACATACCTCCGACTGTTCCAGTYCTTCTACAGATTTTGGAGGAGCACAGTCRCCTCAAGATTTGTTGCC
GCCAGGCAAGTATATACCTTGCCGATAAATAAGACTATYAGATAAACTTYTTCGGAAACGCTACGCCAGGAG
GTCCTCATCCATTCCATCTGCATGGCGTAAGAS_SNP8_TCATTAGTCCCTCATATTGAACTCATATCTGATTGTA
CCTGTAGCACTCATTGATGTCGTTCCGGAGCGCAGATAACACCACTTACAATTATRAGAATCCCGTAAGTTGTA
CCTATGTTGCCAY_SNP9_CCAAAGCAGTGTGCTGACTTACAAAATTGAGTCCGTCGAGATGTGACTTCT
GTAGCTATTGGAAACCAGACAACCATTGATTTGTACCGATAATCCTGGCCCTTGGTTTTTGCATTGGTGAG|
CCTGTTTGCTATTTGTGGTATTTTATTGATGCTGAAAAGTTTCTTCTCW_SNP10_AGCCATATCGACCTTCAT
TTGGAATTGTGAAATCTTSTACTACTTTACTTTGAAAATAATTTGYTGACCCRCTTTTTCTAGCGGACTTGCCG
TCGTAATGGCTGAAGCTCCCTCTCTRGTCAAAGCAACTGACGTKACCACTCGTATGTCCAAAGTTCTAGTCT
TTTCCCGTACTGACTGAGTCATATGATGATCCTTTTTCAGCTGCTTGGGACGAACTGTCCCATTACGACAG
CTAG