

Lignin plays obvious role in the cotton defence response to *Verticillium dahliae* through RNA-Seq dependent transcriptional analysis and histochemical test. *L Xu, L Zhu, L Tu, L Liu, D Yuan, L Jin, L Long, and X Zhang.*

SUPPLEMENTARY DATA

Table S1 List of primers used for qPCR.

Gene ID	Forward primer	Reverse primer	Result (Failed)
CL5659Contig1	GAAATAGTGGCGTGGGA GTTAGGAT	ACCATGAGAGACTGAGTT GTGTGAGG	F
CL5961Contig1	CTCGGCTACAATCCCTC GACCTCTC	GGACCAACCCGAGTTAAG AGCAAGG	F
CL6579Contig1	GAGAACACCAACATTTC GGGTCAAC	ATCTAACCTCTCTGTGTCC TGTATGTCG	
CL6774Contig1	CGATGTGGGAGTCGTGC ATGAAAGG	GGGAGTGCCTTCCAGAGC AGGTATG	
CL7826Contig1	ACTAGGCAAGACACTGT TGGGGTTA	AGCGAATGTTTGCTACTAC CCTGTC	
CL10864Contig1	TCAAAGGGACTCAAAGC CTCACAAC	GGGTTGATGGCAGCTTTCT GAATAT	
CL11195Contig1	ATTCGTGGATGCCTTGGT GTCTCAT	AGCTAGTGCTACAAGCCC AACATCTG	
CL1Contig2953	AGTGGCTTCTAACCTCCT TTTCTCG	TAATTCCATGAGAGACGG GCAAATG	
CL14866Contig1	TTGGAGATGAAGGTCTG TGCGAGAT	TCAACGCAGTCAGATTAG GGCAGTT	
CL21478Contig1	GAGGCTTGGGTCAGTCA AAGTGTAG	TAGTGCTTTTAGGCGAAAT GTGGAG	
gil164313245 gb ES 846884.1 ES846884	CAAGAAATGGAGGATGA AGAAGGTG	GGTGATGTCAGATACATAA ACAGCCAAG	
gil164244139 gb ES 830058.1 ES830058	CTCTGCCAATCTGCCATA GAGGAGC	GTAAACGGTTCCCTTGCTT GACTGG	
CL500Contig5	CAAGCAGCACCGCTCGT TCAACATC	GAAGTCCGTTACTACTTG CCAACCTCC	
CL957Contig7	AAGACTTGTGGCAAGGT CGCCTAAC	GACCCAATACCCAAGTCC ACCAGTT	
CL1Contig585	AACCAGTGTTGGATTGG AGCACAAG	AACCACTGCCTCGCAATAA TCATCC	F
CL3903Contig1	ATTGGAAGTGGTGGCTC TGGGAAAG	ACTATGTTGGAATGGCGAA TGTTGC	
CL5325Contig1	GTGATTTGGGCTTGTC AAGGTCAG	AACTCCCACATAACAATGC CGAAAG	
CL5588Contig1	ATGCAGGCTGATGACGA TAGAGGAC	TTCAACCATCGGAATGAA AGTTGTG	
CL2337Contig1	GAGCTTTAACTCCCTGG CATACTTG	GGAAGTCCACGAAGTTCA TTGAAGT	

CL4605Contig1	TCCGTCTTGATCTTCACC AGAACAG	CCCTAAACGAGAAAGGGC ACCTAAT	
CL6449Contig1	GGGCAGCTCTATAAAGG TTGGCTTG	CCCAGAACGCTAACCCAA TGACGAT	
CL7785Contig1	AGCAACATAAGATTGTG CGAGAACG	CCTGGAAATTATCAGTCAT CGCCTC	
CL10161Contig1	AGAAGCGACCGTCTATG TTGGATGT	CAATGACTTGCCTGAATAT AAAGGAACC	
CL11029Contig1	AGAAGCGACCGTCTATG TTGGATGT	TGACGAAACATATACTTCA TTGCTAGTGC	
CL15247Contig1	GACGCTTATTTGGACATA GGCTGACTT	CGTGCAAGTACAATAAGC CCCTAGC	
CL24027Contig1	GCCTTCAATGGGAGAGG TCCTATGG	TGAATTGCCGACTCGTTTC TGAGGTAC	
CL988Contig2	CTCAGACTCAGACCAGC ACTCCACC	ACAAGAGGCTAGCTGCAA GAACCAC	
CL1840Contig4	TAGGGTCATCGTCCAGT CCCAATAG	TCCCAGTCAATAACTCCAA AAGCAAC	
CL3694Contig1	GCCACAAGCCGTATGCA CCCGTTAT	GCATGTCCCTTACCCAACA TCCAGTCC	
CL5860Contig2	ATGTCCCGTGTTCGTTGGT ATGCTTG	GGATGTTTGCATTTCATCC ATAAAGGT	
CL6016Contig1	GGAAATCTCCAATACAT GCCACCAG	TCAAACACTTCAGCGGTC CACTCTT	
CL7067Contig1	CCAGGTCCCTCTGTTTAC GCCACTT	TGAGTGTAACATTGGCAG GGCTATTTCG	F
CL2460Contig2	TGATATTGGCAGTCAACC GAAGGAC	TGATACCACTTTCGTACCA CGCAAC	F
CL4400Contig1	ACCTTGTTGGCTTGGATT TGTATGG	GCAGTAAGCTCCCTTGG ATGGATC	
CL4928Contig1	CCACGGGTTCCCTTCTCTA AGTTTTC	CCTGTATCATATCTCACAA ATCCCATCAG	
CL5025Contig2	CACGGGAAAGCACGTTT AGTATCAT	AACCGTTCCGAATTGTTTA ATGTGG	
CL5079Contig1	GTCCAGGCAACAGGGA ACTTCAGTG	GTTTCAAGGGTCTTCACCT CAGCATG	
CL5905Contig1	CGATGCGGAGGTACAGA CACTGAGC	GCAATCTCGTACCTTGAT CCCAATCG	
CL6551Contig1	CGATGCGGAGGTACAGA CACTGAGC	CTCGTATGCAACCGATCCC ACAAGC	
CL6623Contig2	GGCTTGGCTTACCTTCAC CATGATC	TGAATCTTTCCTCCTCTG GCTTGT	
CL8229Contig1	GCTTTAGGTGCCTGGTG ATTGTTAC	GCGATTTCATACAAGTGTG GAACAG	
CL8764Contig1	ACAGTCACAAGCAACAG GGATGGTT	GAAGACTCGTTACTGGAG GATTGGATTT	

CL9160Contig1	ACAGTCACAAGCAACAG GGATGGTT	TAAGACTCGTTACTGGAG GATTGGATT	
CL11186Contig1	GAGGCACTATGGGGTAT GAGGGAAT	CTGATGAGGACAAGGATG AAAATGG	F
CL13137Contig1	CGAACCCAGAAGATAGA CCCAGCAT	TCTGTTTTTCAGCTTGGACT ACTCAATCG	
CL13232Contig1	AGATTGCTTAAACGGCT TGGTTGTG	TAAAGAGTGGGCAGAAAT GGATGGT	
CL14110Contig1	GAAAATCGCCGACTTGG GTTGTGCT	TCCGGTGCCATGTAAAGA GGCGTAC	
CL14564Contig1	CAAGGTACTCTAGCAGG CCATCACA	TGGGCAACATCTTCTCAGA ATCAGT	
CL15517Contig1	TTCTCCCGTTGCCAGTCC TACATTC	ATAGCACAGCCATCGAATA TCAAGC	
CL22563Contig1	GAAGTTGGTCTCGGACC CTCTATCC	TGTTTGCATCCCTGTCTCG TTGAAT	F
gil109871381 gb D W500357.1 DW500 357	GGGTGATACCTTGCAGA TTCTTCCT	AACAGACTTTTGTCCCTGGT GGTGAG	
gil13247730 gb BF2 71971.2 BF271971	TGCTGCTAACGGATCTA GTCAAGTTG	CAAACGTGGATTCTTCAG CTTAGTGT	
CL19658Contig1	AATCAAGTGCAGTTTC CGGTAATG	AACCACCAATTCAGATTCT TAACCTTC	
CL4331Contig2	ATGCCATATCCCGATCTC AGCTTCT	TATCGCCTCAATCATCGAC ACCACT	
CL6058Contig1	TGTAGAGCCTCATGGCG AGGAATAC	ATGCGCTCACTTTATCCGA ATCAGT	F
CL6943Contig1	CCTGTTATTCCCAAAGA CTGTCCAC	AATTGCTCCAACACCTTCA CTATCTG	
CL9500Contig1	CTGTCGGAACCTCGTGTT GGGATAGG	ATTGGGATGTCGAAGTCG GCTAAGA	
CL15603Contig1	GCTGCTTGTGAAGGTCA TGTTGAGG	TGACTGCCATTGGTGTCTT CCTGAT	
CL23435Contig1	GAGATGCTGGGTAGCCA CTCCTGAC	CCATTCAGTGTCTGCGG TTTCCT	F
CL491Contig5	GGCTTTGACCACCAACT CTGGACTC	TAGATTGCACCTGCACGA GACGAAC	
CL2312Contig1	GAAAGAGAGGTTAGCAG CGAGGAAT	TTGCTTAGGATTGAGAGTG CTATGCT	F
CL2312Contig2	CAAGAACTCAAGGCACT GAAACTGG	AAATGAGGCTTTGAAGGC AATACTG	
CL4258Contig1	GGGAGTGAGGAACAGTA AAGGAGGA	AGGAGAAGCAGGAAACTG ATAAAGTGATT	F
CL7303Contig1	GTCTAAGGTTGTGCCAG TGGTGTCT	GAAGACGCATGAAGGAAG ATGTAAGAG	
CL10177Contig1	ATGAAAGAGCTGGAAGA	CCTTGTTGTGGTGCAACTT	F

	TCCAATGG	GAGTGT	
CL13397Contig1	GCGAAGCTGAACGGAG AAAGCGTAG	GGAAAAGGATGGCGTCAG CCACTCT	F
CL17875Contig1	TGGTCTTGACATGCTCG AAACAACC	TACGAAACATGTCGTCCTCA TTGTTCG	
CL963Contig2	AAGGCTCTGGAAATGGG TGCTGTAG	CAGCCTCCTGCTCCTTATT CAGGTG	
CL1335Contig1	TCAAAGACATAAAGCGG TACACTGGAG	GCCAGTAGAGCCAGAGGA TTGTCAT	
CL1763Contig2	TCAGTGAAATGCTGCTG AGGTGTTA	AAATTCCTATGGGATGGAG GTTGTC	
CL1796Contig1	CATAAAATGGAGCAGAT TCAGTTCG	CCTTTGTCTGGACTCCTCTA TAATGC	F
CL3224Contig1	AGAGCGATTTCAGATTCC TCGTCCCTC	CTCAGCAGGCAACTGATT AAGATCAAAT	F
CL3667Contig2	TAAGCGACGAGCAGAGG CATTACAG	GCTTCAATGGCGGTATCAA AGGTTC	
CL6560Contig1	TTCCGATGAGGAAAGGA AGAGGAGC	CTTTGACCGATCCGTTGGC TTCTAC	
CL10178Contig1	GAGACCGGCTCAACTAC CGCCACAG	CGAATCGCAGTCGCTGTG ACAATCC	F
CL10243Contig1	GCACCTCCTTGAGACT TCCCTTCG	GATTCGGCAATTCGGGTCA GATACG	F
CL14369Contig1	CGAGCCCAAAGATGAAT CAGCAGAG	CCTTTGCCTAACTCCACGG TAATGTCT	
CL15501Contig1	CGACAACACCTTCTCGG TGACTTTG	GATTTTCAGGGAGTTGATGG CTTTGG	
gil193218961 gb EY 197233.1 EY197233	GCAGCGTCCGGTTTACT TCTTCGAT	CAAACACTCTACGCCGCA CTCCTCC	F
CL1Contig3306	TTGGGCACCGTCCGATA ACTCTAAG	ACGCCTCTGTAATGCTTCC CTTTGG	F
CL322Contig3	CTCGCTTACGACGGAGC AGCTAGGT	AACGGTGATGGTGATGAG GTGAAGC	
CL5067Contig1	CCCTCAACATAGTCGGT CGTAAGTT	CACGGACCAAGTCAGAAA CTACCAT	
CL6871Contig2	GCTCTTCGTCGTCAAAG CAATGGAT	CAGCTTCCAATCGACCACA TTTATGC	
CL10876Contig1	TCGGACCTGGTGGTAAT GACAACCT	CAATGATGTTGGGCTGTTG CTGTTC	
CL16071Contig1	CGTTCAACATTCATCCTC CACATTT	ATGATGCTGCACCATTTGT AAACAC	
CL20845Contig1	AAGGAGGAAGAGCAGC GGATTTTCG	TCTTCGGTAGCAAAAAGTG CCCAGGT	
CL514Contig1	AGTCCGAGAAGGTAAGA TCCGACAA	CCTGAGGAAAAGACAGTG AAGGTGG	
CL514Contig4	TAGGGGTGTGAGACAGA	GTGCCAAGCCAAAGTCGT	

	GGCATTGG	GTTCG	
CL824Contig1	AAGTGAAAGCAAGTCCG TTGAGGTT	CAAGCAAAGACCCTAAGC CTAAGGT	
CL1335Contig1	TCAAAGACATAAAGCGG TACTGAG	GCCAGTAGAGCCAGAGGA TTGTCAT	F
CL1539Contig2	TGATAAAGGTGAAGATA CAGCCGAACC	CGAGGAGAATACAGCGAA AGTGGAG	
CL1763Contig2	TCAGTGAAATGCTGCTG AGGTGTTA	AAATTCCTATGGGATGGAG GTTGTC	F
CL1796Contig1	AATCTCGTTGCCGCATAA AATGGAG	GCCTTTGTTCGGACTCCTCT ATAATGC	
CL2539Contig1	GTGGGATTGTGGAGCTT TTCAAATG	AGTTGAAGAAATCATCTTC GTCAAGGC	
CL2870Contig1	ATCAAGTCCAGCAAGCG GAGAGAAG	CCTCATCCTTATCCCTCTG AATGGTTT	
CL3224Contig1	TGTTTTTCGTTGATGTCT TTGCTTC	TCTCAGCAGGCAACTGATT AAGATC	
CL3667Contig2	GCAGAGGCATTACAGGG GTGTTAGG	CTTCAATGGCGGTATCAAA GGTTCC	F
CL5722Contig1	CGTGTACGGCTTTGGTTA GGCACCTATG	GCAGCGAAGAACGGAAGT CGGTGAG	
CL1Contig2018	AAGAACAAATCTGGAGC CTGGAATC	CGCCGTTGCTTATACTGAG TTACGA	
CL6085Contig1	GGTTGGAACGATCTTGG TGGTTTCG	CGTGTGTTCTTCGGGTTT CACTGG	
CL6525Contig1	CGATCTGGTGGTTTCGC AACTGAC	CGTGTGTTCTTCGGGTTT CACTGG	
CL6560Contig1	TAACTCCGATTATTTCC GATGAGG	ACCTTAGTTCTTTGACCGA TCCGTT	F
CL8001Contig2	GCAGGAGGTTGCTTCCA AGTCTACG	GTTCGGTTCTTGGGGAGTC TGATTT	
CL8846Contig2	TGCTAATCTTTGTTCGCA ATTTGTC	CCCTGTATCTCCTCCTTGG TTCTTC	
CL10178Contig1	CGGCTCAACTACCGCCA CAGAAGTC	CGAATCGCAGTCGCTGTG ACAATCC	
CL10243Contig1	GCACCTCCTTGGAGACT TCCCTTCG	GATTCGGCAATTCGGGTCA GATACG	
CL10357Contig1	CCTACCTCCATCCCGAC GCCAAAC	CGCTCCTGCTTCGTATTCC CCGATAACT	
CL10885Contig1	TGCCGTTTCCTTTCTCAT CTTGAT	TTGAACCTTTGACTATTG CACGAC	
CL11822Contig1	AAAACCTGTTGTTGAGTG CTCCTTGC	AGAACCCAGCTCCTCATT CTTACA	
CL11847Contig1	ATCAAAGGAAATACAAG GGAGTGCG	TTGAATACGAGCCTAACCA AAGACG	
CL14369Contig1	CGAGCCCAAAGATGAAT	CCTTTGCCTAACTCCACGG	F

	CAGCAGAG	TAATGTCT	
CL15501Contig1	CGAGCCCAAAGATGAAT	CCTTTGCCTAACTCCACGG	F
	CAGCAGAG	TAATGTCT	
CL19861Contig1	GAAATGGGTGGCTGAAA	GAAATGGGTGGCTGAAAT	
	TAAGGGAA	AAGGGAA	
gil193218961 gb EY197233.1 EY197233	TTCTCCGCCGCCACTTG	CAAACACTCTACGCCGCA	
	ACCTTACT	CTCCTCC	
gil59800344 gb AY781119.1 	CACCACCTTATCCTATGG	ATGATTCCAGGCTCCAGAT	
	GTCTTGG	TTGTTC	
CL1Contig3306	TTGGGCACCGTCCGATA	ACGCCTCTGTAATGCTTCC	
	ACTCTAAG	CTTTGG	
CL1Contig3370	GATTCCAAGGCTCCAGA	AGCTCTTACTCTGCTTCT	
	TTTGTCT	CCTGCT	
CL29Contig2	CATTTGCTTATGTGGACA	TCCCTGGTCTGAGCCGAA	
	CTGTTCCCTG	ATACAAG	
CL29Contig4	AATGTTATGCCTGCCGAA	CAATAGTGGCGTCCCAGTT	
	GACAACTC	TCCTTC	
CL29Contig8	TCCGACTATGGCTGGGG	CAAAGCCAACAGCTCGTC	
	AGAACAGG	CGACAAG	
CL29Contig9	AGGTGAACTTCCCTGAT	CTCTTCAACGAAACCCAC	
	GAGATGCC	GGTATCA	
CL322Contig3	TCGCTTACGACGGAGCA	AAACGGTGATGGTGATGA	F
	GCTAGGTC	GGTGAAGC	
CL1714Contig2	GGGTGTACGCAGAAAAT	CCTCTGACAATGAGCAGT	
	GGTAGTCA	CCTCTTG	
CL1Contig339	AAATCCTCAGGGTTCAG	TCAGATCATCGTCATCGGC	
	CTCAAAGC	AAGTAA	
CL13083Contig1	CTGTTGCTCTCTCATG	TCATGGTTCATTACAGCAA	
	CGGCTAT	GGAAATC	
CL5641Contig1	AAGGTGGGACGGATAAA	AAAAGGAGGATTGAGGGC	
	GGGATAGC	GAGAGAT	
CL6228Contig1	CAAGGACGGTCAATGGT	CCTTGTTTCTCAGCCATTA	
	TTAGAATC	CACGAT	
CL6228Contig2	AAAGACGGTCAATGGT	TCCCTTGTTTCTCAGCCA	
	TAGAATCC	TTACAC	
CL14700Contig1	GAAGTGGGGATTCTTTG	GATTCAGGGAGATGGCGT	
	AGCTGCTG	AAGAAGA	
CL26Contig1	AGGAGTTGTTGGATTTG	GGGGTCGGACATGGTGGA	
	TTTTGTGAGAAT	TAGTTG	
CL26Contig11	CGTAAACAGCCTCACTC	TTCAACACCTCAAAGAAG	
	TGAGAGTTCTT	CCCCAAT	
CL26Contig14	ACAGGAGTGTGGAGCAC	CATTCCTTCTTCTTCTGCT	
	CGTGTGAT	TTCATTCT	
gil164255880 gb ES843034.1 ES843034	GGCTTTAATGAAATGTTT	GGGAACATTACTGGGACC	F
	GGGCTGTCCG	CCAACCG	
CL9140Contig1	CCTGGTTGGTTTAGGGTT	AAGGCTGCTTCGTCTGCAT	

	TGTTTTG	AACTTG	
CL9140Contig2	CGGTTTGGTTTGCTAATA TGGAGGA	AAAGGGAACGGGATAAGC TGAGTTT	
CL9160Contig1	ACAGTCACAAGCAACAG GGATGGTT	GTAAGACTCGTTACTGGA GGATTGGATTT	
CL5Contig1	GATGCTGATGGAAATGG GACCATTG	CATGGCGAAGCTCAGCAG CAGATAT	
CL5Contig3	AGGAGTTGGGAACTGTG ATGCGATC	CTTGTCAAACACCCCTGAAT GCCTCTT	
CL5Contig9	TCATCAGTTTCCTTCCGC TACCTTC	CATCACAGTTCCCAACTCC TTGGTAGT	
CL5Contig15	TGTTTCAGTAGTCCGGGT TGTCAGTG	CGATTCTTGGAATTGTTC GAGGTT	
CL19667Contig1	CATGGGAGAGTTGGCAG CAGTGATC	TGAAATCGATGGTCGTCCC ATTCC	
CL9646Contig1	TCATCTTCAGGTTTCCAG GATTTCT	TCTTCAAGCTGTCGAAAGT AATGACC	
CL5513Contig1	GCAGGAAACTGATGCAG AAGAGGAG	CTTCATAGTTGACTTGACC ATCACCGT	
CL9160Contig1	ACAGTCACAAGCAACAG GGATGGTT	GTAAGACTCGTTACTGGA GGATTGGATTT	F
CL3197Contig2	ATCATCTATTTGCTGCCT TCTCCTACTT	TAATCAATGCGTCCGTCAT TATCCT	F
CL3711Contig1	TTCTTAATGCTATGGGAT TGCTTGC	ATTGAAATTACTCGATTGC CCTCCT	F
CL4384Contig2	AGGCTGGTACGGATTGG AGAAAAGC	TGTTGGGTCATCTGGGCTC ATTGTT	
CL10447Contig1	GCGTGGGCTGTAGGAGT TACCTTGT	TGAGTTTATGTCGTTCCGGC AGGATT	
CL11186Contig1	CTTTTGGAGGCACTATG GGGTATGA	TCTGATGAGGACAAGGAT GAAAATGG	F
CL11333Contig2	CTGCCATCATGCACGATG TAGACAC	TATAGGATTATCGGGCGAC AGCAAT	
CL22563Contig1	GAACTTGGTCTCGGACC CTCTATCC	GTTTGCATCCCTGTCTCGT TGAATC	
CL1Contig3979	GTTTGCGAAGATACGGC TCTACCTT	TGGTCCCACTATTATCGAC ATCAGC	
CL5311Contig1	GAAACGACACCGCATGA TAAAGCAC	AAGGGAGAAGGGCTCTAA GCCTGTT	
CL7787Contig1	ACAAGCAGCAGCTTCCA TACAACAG	ACAGGCACTAAACATAGC CCACGAC	
CL18916Contig1	GACCCAGCAGAAGGAC CTAAACAAGAT	GTCCAGAAATCCACAGGC GACTCAT	
CL2138Contig2	GTGAAACAGGGGAGTG GGACTION	CGGCTTTGGTACTGGTAT TGGTTA	
CL2410Contig1	ATGCCATTACCTATATCA	TTTGCCCATTTTATCATC	

	CCGACCT	TCCTT	
CL4555Contig1	GGCATAGCCAATACCAC	TGCTCTGTAAATCATCCTC	
	TTCTCAAC	CCAAAT	
gil11203333 gb BF2 72338.1 BF272338	TCTGCTCGTGCTGCTTAC	GCTCCTCTTCATGGCAATC	
	TCACCGT	CATCCT	
CL2771Contig1	TTTACCTCGTGCGATTCC	TGATGTATTGTATCTTGAG	
	TGCCACT	GGCGAACGG	
CL6159Contig2	TCACAACAAAACAATCA	AAGGTTATGTGAGGACAT	
	AACGAAACAG	GCTGTGG	
CL1497Contig2	CGGCAACTCCCATTCTC	AATCCGGCGATGTAACATT	
	CTATCTCC	CGTGTC	
CL2985Contig2	TAAAACCGCAAGATTTCG	AACCACTGAAGGAAATCC	
	GCTGTTAG	CGACAGT	
CL3429Contig3	ATCAAGTTCACAACCCA	CGTCGTACCCGCTTATGTC	
	ACGCTTCG	TTCCAC	
CL3611Contig2	TGGTAGTTGAGGCAGAT	TGCAGTAAATACCATTGGC	
	TCTGTATGTTG	ATGTGAT	
CL2629Contig2	GAGTCGTGGGGAAGTAC	CATGATCGGAGGAAGGAG	
	AGTGTGTG	TTGTAGC	
CL1672Contig2	TCCTCCGAGCAGCGTGT	GAATCACTTTGTGCCCTG	
	CAACCTAC	AAGAATGG	
CL5620Contig1	TGGATTCAATCCAAGTC	ATAAATTGCTGTCACCGTC	
	CCTGAGCT	ACCCAC	
CL6391Contig1	CATTGAGGAAGGTTGTA	CAACTGTGCAAAGCCTTA	
	CCCGACAC	ACCAGAC	
CL8210Contig1	AGGCCAAGCCACCATAT	TTCCCTCCAACCTCCATA	
	TTGTGAAG	CTCTTCTTC	
CL1784Contig2	TGCTGGTAGTCTCCTTCC	TGTTAGGCAACTCAGGGA	
	ATCTGTT	CACTGTT	
CL6198Contig1	CTCAACTCTATCATCAAA	GGTTTCACTTGACCCTCGG	
	CGAAGCATTAG	TATCCT	
gil164326605 gb ES 818723.1 ES818723	TCGCTCATGGCGTGTTTG	TGCTGCGGTAAGACCCGT	
	AGTGTTG	AGTTGCT	
CL1875Contig2	TTGAGGACAACGATGTA	TCCGACCAACTCCGATACC	
	CGCTAAGC	CAC	
CL243Contig3	GTTCGGGAGATTTGGATT	ATAAAGGCGGTGAATCGG	
	ACGTTGG	AAGGTG	
CL11215Contig1	TTCTAGCGATGGTCTTGG	TCAGGTTGCTGGTTCTGTG	
	GTGGAGC	GGTGCT	
CL2312Contig1	GAAAGAGAGGTTAGCAG	TTTCTCCTTGCAATTAACA	
	CGAGGAAT	CCGTCT	
CL4258Contig1	GGGAGTGAGGAACAGTA	GATTGAATCTCATGCAGGA	
	AAGGAGGA	CGAAAC	
CL10177Contig1	ATGAAAGAGCTGGAAGA	CCTTGTTGTGGTGCAACTT	F
	TCCAATGG	GAGTGT	
CL13397Contig1	CGAAGCTGAACGGAGA	TGGCTCGGATGAAGTGGT	F

	AAGCGTAGG	CAAAGAAG	
gil109877738 gb DW506711.1 DW506711	CCCAAACCTCCGAACTGC CATCAAGG	CTACCTCGGCCTCGACTTC GTCCAT	
gil31406542 gb CD485577.1 CD485577	CCATTACCAGGCTCAAA GCATCCAC	TGTCCTCGTTAGTGCCAGC ATTCC	
CL2572Contig1	ACTTCCCACCATTCTATC CATTTTCA	CTGCTGTTGGCTTCACCAC TTCA	
CL872Contig2	AGGGACTGGGTCTCGTT CTTCTGAT	CCACTTGAGTCGGTGTTCG GGTAG	
CL8924Contig1	AAACAGGCGAAACAGC TTAAATGCG	TGCGTAGGTAGTGTTGGT GGAGGAG	
gil164284962 gb ES796995.1 ES796995	CGAGGCTGATAGTAGCA GAGTTGTGG	ATCTTTGATACGTTAGGAA CTACGGCAC	
CL1Contig3361	ACGGAACCTCATCACGCA AAGCTCAG	TCGACTCCAGCATGTGGGT CACTAAT	
CL2920Contig2	TCTTCTGGGGGATGCTAT TTCGTAT	TAGTAATTTGTGGGACGAG GTGAGG	
CL4565Contig2	TGATGAGGTTGCCCGTA AGATTGAG	GAACAGGAAAGGTGCGGA AAGACAC	
CL8126Contig1	GCCGTCTTGCGTACATTA TTTATTCC	AATGGGTCTCTAAGAAGC AACGAATG	
CL9160Contig1	ATTGGTGGTTATCAGTCG TTGGAGC	AACCGATTTGTGCTAACTG GCAGAG	F
CL2460Contig2	CGGATAAACTGTCTTGCT TGGTCTC	TAGATGCAGGCTTGCAAC CTCATA	
CL10138Contig1	AAGCTCCTTGAAATCCA ATCTGACG	TCTACAATTCCAGCCAAGA ATAGAGAGTT	
CL8872Contig1	AACCGTACATCTACCGG CTCCCTCT	TCACACAATGCTCGGATTC CTCAAC	
CL10924Contig2	ATAAACCGAGCGAACAA TCGAATGG	GCTCATTTGACCCACTTTC AGGACC	
CL14352Contig1	CAGAAGAGACAGAGAG AACCGAGATTC	TGGTGGTGCAACGATAATA ACTCCT	
CL15725Contig1	CATTAGGGTTTATGGAGT TGTTGGG	AGGAAGAGTAAGGTGTAG CAGGCAG	
CL20464Contig1	TTACTCGGTGATATTGTG CCTCCTG	GGCTGCCCTTATGTTTATA CCCATC	
CL23838Contig1	TCTGCTTCTTTGCCTTAT GGTGTTG	AGCTTTGGCCCGACTGTAT TTTAAC	
CL11304Contig1	AGAGGATCAATGAACGG CATTATCA	CGGGGTGTTCTTATTATCTT CTCGG	
CL10036Contig1	AATATGGGTTACCGTGA AGGGATGG	TTAGGAGGAAGGACTTTA ACTGAGATTGG	
CL13863Contig1	AAAATCAGAGCGTCAAG GCATAAACT	AACAGGCACTTTCTATCTC ATTGAACC	

CL21776Contig1	CAAAGATTAGTGGCATT GGCTGAGG	GTGGGGTGATTTTGGACTA AATCCTGT	
CL3321Contig1	TCTACAGAGGAACCGTT TGGGACAC	TCGTTTCATCCACCATA ATGCTCT	
CL667Contig1	GCTCATAACAATACCAAG CTGACACGT	CAGGAAACTGAGAAGTGC GAAATAAAC	
CL8429Contig1	AGACCTTCTTCAAATGC CCTACTGG	TCACGCCATCTGTAAACTT ACGCTT	
CL10780Contig1	CCAACAACCCTTCAGCC GCAACAGT	GCCGGGCGTAAACTCCGA CAGACAT	
CL14766Contig1	AACTGCAAGACACCGCA ATCTTCCT	GTTCACGTTTCCAATACGC TCACCC	
CL1Contig3332	TGTTTCTAGTCACGGTGT CTCCATTT	GAGTCTCCCTCTACCATAA CAACTGCT	F
CL2517Contig1	TCAACCTACCGACCCGA ACAACGAC	CCCATAAAGAACAAAGCG GAAATCAAGAC	
CL306Contig2	GCCAATGCCGGAAGAGT ACCATAAC	CCACTCTAAGCCACTTCAG CCTCGT	
CL5553Contig2	CTGTGGGTAAATGGGAT GAGATACG	GCTCAGTAAGGCAAATAA CGCAGTC	
CL5919Contig2	TGCTGCATCCTTTACTAG GTCTCAAT	CTAATCTGTTCCCTCGCACT TCTTTGA	
CL7354Contig2	TTCCGCTCATCTTTTCTA CTCATTGCTC	TTGGTTTGA CTCTATGTGC CGCCTT	
CL9420Contig1	GTTAGGACTCGGAGGTC AAACAGTAGTT	AACAGGAGCATTCAAATC GTTAGGTAT	F
CL224Contig8	TGCTGTCGGATTCTGAG AACTATGC	TGCAGCTGAAACCGATAA CTTGATCT	
CL2240Contig3	GAGGGAGTCTTCTCCTG GTTTTGAT	TCATTGACATTCCTTCCCT CATGTC	
CL1347Contig1	TTTTTGTGGGATCCATAG GTACCCT	AGAGGATTAGCTTTGGCGA TTTGTT	
CL6697Contig1	AGCATCGTTTCGAGGTG GAGATTAC	AGTCCTTTTCGCTGCATTT GTTAGG	F
CL745Contig2	GTCGTCCGATAGCCTGA CCGATAAG	AAACTGATATGGACACCG AGACTCCG	F
CL23796Contig1	GTATGGGTGTTGATTGTG GGATTTG	GCCTTATGAGGGCATTGAT AGCATT	
CL2655Contig2	GTGTGGGAGAAAGTGAT AGGGATGC	GAATGGGAAGATGATGGC TAAGAACC	
CL10685Contig1	CACCCTTATATGGGCGTG ATACTGT	GGAAACCTATTAGAATCCG CAAAGC	
CL1354Contig1	CATCAGGGCAGGCTAAG GTAATAGG	ACAAGGAAAGGACCCAGG AAGAAGT	
CL4345Contig2	GGCTCTGCGCTTGAAAG GACCTGTT	TCATTGCCACATTAGCCA TCTCTTCTT	

gil109835989	CATCAACATCGGAAATA CTGAACCC	TTCACTTGGAATATGGCA ATACACC	
CL6569Contig1	AGTCAAGAACAAGAGA GAAACGATGG	GCCTCATAATCCAAACCC TAACTT	
CL1Contig486	GCTCCGTGTTCTCCTTCT GGGTCTA	ATCCAAAGCACTCATCACA ATCCAATC	
CL76Contig5	TCACAACCACCCACCC TTGTCCAC	CTGGATTGAACACGCTCCT CCACACGT	
CL217Contig3	TGAGAGTAGAAGGGACG GGAGTTTG	TTAATCTTCCCCTCGCCG CTAAAT	
CL15247Contig1	GGTCATCGAATCTCCTTT GGCTCTA	CAGCCTATGTCCAAATAAG CGTCAG	F
CL1Contig585	GTGTTGGATTGGAGCAC AAGGAAGA	AACCACTGCCTCGCAATAA TCATCC	F
CL2857Contig3	TGGTCCATCAGTGCTCC TGTCACC	GGAACGATCTGACGACCA GGGCTAG	
CL8458Contig1	GATGACCTGTCAAAGCC CCAAGACC	TCAGCAGTGAATTTATGCT CCTCAAACC	
CL7067Contig1	TAGGTTGGGTTATACCAC CAGGTCC	GTGTAACATTGGCAGGGCT ATTCGT	
CL19000Contig1	ATCGCCACTGCAATTCC GACTCTAG	CATGCTTGAAGGAGTTCTT CCGTGC	
CL8228Contig1	TTCCCTCATTGCTCAGAA GTGCTCG	AAACTCGGCCTTGTCCCTC TTAAATGC	
CL9665Contig1	AGTTCTTCACATAGCTGC AATGCGA	TTATTCGTTTCCTTCCCTTG CTCTG	
CL10612Contig1	TATGAAGGCTTTGGACTT GGAGATG	TTTCTCCCCAATCCATAA CTATCG	
CL12916Contig1	CCTCACAACCAAACAAG AACCGAAT	CTCACACATTTCTGGCTGA ATCGTT	
CL23499Contig1	GATACTTGAAATGATGGC TGATGGGT	GTTGAACATTAGGGCATGG TGGGTA	
gil164327463 gb ES 826231.1 ES826231	CGTTTCTCCGTTGTATGA AGGCTTT	CCATAACTATCAATTAGCA TTAACCAGAT	F
gil45774313 gb AY5 60549.1 AY560549	TCTCCTTCTTCTTTTGC TTTGTGG	ACCTTCAACTGGAATGGC GAATGCT	
gil21092682 gb BQ4 04995.1 BQ404995	CTTGAATGGAACGAGCA GTAATGTG	TGTCATCACCTGTAAGGAA TCACCA	
gil21101348 gb BQ4 13661.1 BQ413661	AAAAGAGTATTGGTCTG GTGGGACTG	GAATGGAACGAGCCAGTA ATGTGAT	
CL28Contig11	CGGAGTCAATGTGCTTT GCTGGGTC	TTTCTCTAGCAGCCTTCGC CATTC	
CL28Contig12	TTCCAGTCATTCAATTCC GTTTCATC	CAATGGGACCTCAACCAG TTCTTTC	
CL138Contig2	AATAAAGGCTATCCCAA CTCACCAT	TAATTTGTCTTTGCCATCA CTACCTCTT	

CL4890Contig2	TCGTTACTGCTTTCGTAC TCAACCC	TGCCTTTGGATAAAGACAA TTCCTG	
CL702Contig2	CCAGTGATGGTCTATGG GATGTAATG	TCTGGAGTCAGTGTAGCA CCGTTCT	
CL1264Contig2	TGGAGAGCATGGGATTA GGGTGAAC	GACGCAAGAAACACCACA GCATCAG	F
CL1467Contig2	GAGTTTGGTTCCGATAA GAAGGCAG	CACAGCCTGAAGAAGTTG TCCATCT	
CL2477Contig1	ATTGGAGCCTGAAGATT TTGCACAT	ACCCTCCATCCAGTGGTAA GTTGAC	
CL1Contig1080	ATTGGAGCCTGAAGATT TTGCACAT	CAAAGAGTGAAGCAGAGG ACTTGGTG	
CL6421Contig2	CTCAAGTCCGGCTTTG GGAGTAAG	TCTATGAATTTGGAGCAAC TGGTATTCG	
CL9584Contig1	TGAAAGGCATAGTGAA TGGACCGT	AGGATGTTCTGGTTGGAGT TGGAGG	
CL10060Contig1	TTGGTGAGGAGACGGTG AGGTTATT	CTAACCTTGTCTAGGCCGA TGGATG	
CL1Contig2783	TGGATGGCAAGGTGGCA CTGATAAC	GCAAACAGAGTCGCCCAA TTCGTCT	
gil31073227 gb CA9 93506.1 CA993506	GGGACGTAATAAGCAAC GAGGAAGC	CACCCCTTTGTGCAGGTAA TTGATC	
CL8845Contig2	AAAGGGTAGAGATGTTT GAGATTGAGC	TGTAAAGCATGGATTCTTG GATTGC	
CL15011Contig1	ACAAGGCGGAAAGCATC TTCAAAC	CCATTACGAGCTTCGAGG AGGTTTT	
gil109841587 gb D W240147.1 DW240 147	GCCTCAAAAAGGAAGA CCTCAAAC	GCGAAAGGATAGGATCAC CGCAAAA	
CL3422Contig1	ACCCTTCGACAACCTGG TTCTCTG	ATCCGATCCAGCCAATGAA ACACTC	
CL3601Contig2	AGCAGCAATAAATCCAA GTCCAGTG	CTCATCTGACGCATAGTTC TCACCG	
CL7Contig20	AGCTAGAGCCGAGCACA TTAAGCAG	CTATTACCACAGTTGGCAG ACTACACCC	
CL850Contig5	TCCATCACCGCATCCACC ACAATG	TTCTTCCCTCCGCAACCG TTCAGC	
CL8888Contig1	GAGAAACCAACTCCGTG TCCCAAAC	CGACTGCTGCACAGACTC CACTT	
CL12490Contig1	AAGGTTGCTTCGGATTC ATCGGCTC	CCCATCGGATTTCTCATCG TCTTCG	
CL272Contig1	GAAGGCTGCTAAGGCTG TAAAATCG	AAGTCCTTGGCCGATGAA AGGTAAC	
CL335Contig1	GTTTCGGATTACTTGTTA CAGGAGACC	ATTCCATTCATTTCTGTTCAT GGCTC	
CL6627Contig2	GGTTTCAACATGGGCTT	CAGCCATTAGATTCTTTGA	

	GTTTGTAG	GGGTTG	
CL8648Contig1	CAACCCTTCCTATCATCG TTTACCAG	GACTGTCCTTTACCACCAT CATCACC	
CL9351Contig1	GCTGAGGAGGCATTACA GAAGTTGA	CAAAGCATAGCCGTAACCA TCGTAG	F
CL1Contig474	GCACGAGAAAACACAA ACGTAGAAC	ACCGAACTTATCGAGTCCT GTCTTG	F
CL18473Contig1	CGTTGCTTTCGCCTGGCT CTAT	TGTCCTTACATTTGAAACG CCCAGT	
CL1288Contig1	GAAGATGTGGACATGGC TATTCGTG	CTTCAAAGCGCACTGCATT ATTCAC	
CL1014Contig3	ATCATTTAACCCCTCCGAA GACCTGTACT	GGAGCTTGATTACTACCAG CCTGAGC	
CL18395Contig1	TGAGTCGGATCATATAACC AGTCCACAC	TCTAAGGTCGTCCAAATTG TCAACG	
CL2983Contig1	GCAACATGATAGGTGAG CGAGGCAG	GCCATGTGTCCTCTTCCAC CACAGT	
CL5234Contig1	AATGCCCTTCAAGTTC AGAACCAG	TGAACCGAGCATGACCAG TTCTAGG	
CL7303Contig1	GAGTCTAAGGTTGTGCC AGTGGTGTCT	CCCTTGCTCAAGTTGTCTT CCTCATC	F
CL9861Contig1	AAGTTGTTGGAGGAAGT GTTGTCCG	GGCAGTCTTTCATAAGTTG CGTTGG	
gil84156557	CGTTGGTGTATTACCGTG GAAGTGC	TCAGCATCTTGTGCAGTCA ATGTGG	F
CL11984Contig1	GACGGTGTCAGGGTATT GGAAGGCT	CCCTTTGGTGGCTTGCCCT TGT	
CL1234Contig1	GTGGGATTTGCCTCATTT GTCTGCT	AATAACCCGCCTCGGTAGC CCTATT	
CL14720Contig1	CGTTGGTGTATTACCGTG GAAGTGC	CTTCAGCATCTTGTGCAGT CAATGTG	
CL1544Contig2	TTGTTCCAAATCACCTG GCAAGTCC	CCTGGGTTCCGCTTCCATC CTAC	
CL1776Contig2	TATGTCAGCACAATGCC GCCTACAC	TTATCAGCTCGCTGAGTTC TGAGTCCA	F
CL19642Contig1	CAGAGTTCGGTGAAAAT GAATGGTAT	TTTATCCGTACCAGTAGCC TTCCAG	F
CL1Contig3933	CAAAGCGAGCCGCAATG GAAGGACT	GGGCAGGAAACCCGTTAT CAACAGTGG	
CL23294Contig1	AATAATGACACGGATGA CCACGAAG	GCTCCATGTCCCCTTTTT AACCTC	
CL362Contig5	GGGAATTTAGATTGGGC GAGTCTTGC	GGTTAGCGTAGGCGGCATC GTG	
CL4334Contig2	AAACAATGGGGCTAAGC AAGACAAG	CAGAAGCAGGACCCGTAG GTATGATT	
CL5075Contig1	CCGATAGAAGACCGTAA	TGATTTGGTTGGTGGTGTA	

	AGCAGTGG	GGAAGC	
CL7259Contig1	AAGATATGCACCTTGTTA TCCCAGTCC	TAAAGTAAAACCATGCTC CACGTCTC	
CL8550Contig2	ATGATGAGAAAGAAGGA TTGGCTGTT	TTGAATTACCGGAACTCGA AGAAGAT	
CL921Contig2	ACCAACTGGATTATGCA CGAGTATCG	CGACATAACACCCAATCAT CAAGCC	
CL21669Contig1	ATCTCCTCTTCGCCGTTT CTCCTCC	TCGGAACCGATTGACCAA ACTCCTG	
CL3434Contig1	AGAGCTTTGGCTGTAGC GGCTAAAG	CTCCTTCCTAAACTTCAGC TTAACACGG	
CL8229Contig1	GCTTTAGGTGCCTGGTG ATTGTTAC	GCGATTCCATACAAGTGTTG GAACAG	F
CL8292Contig1	AGAGGGCAGAACAAGC ACGGACAGT	CATTTGGGAACCATCCTCT TCTAATCTTTG	
CL247Contig6	ATGAACCATTGAATGAA GATGACGAT	CATCGGCTCTTTGTACGTG TTACCT	
CL14551Contig1	CGTCGTTTTCGTGCTTCT AACTTTC	AACTGAATTTGATTCCAAC CCTCATC	
CL10910Contig1	CAAAGACATAAGGCGTT ATTACTGCG	CGTCCGTATGATGAGTGAG AATGTG	
CL1Contig2526	TGTGATCTCTAATATTCC CCGTGTCTG	CTTAAGACATAAAGGTCTCG TGAGCTGC	
CL265Contig2	TCAAACTAAAAGCTGG CCGAAGT	GCGTACCCTCTTGGGACAT TTCTCT	
CL265Contig9	GGTTGAGCAACTAGACC CTGAGAACTC	TCCTCTCTTTCACAGTCC GACGAT	
CL6137Contig1	CCTGCTGAGGATTGGAC TAGGACAT	TTCTAAGCGTACCCTCTTG GGACCT	
CL318Contig1	TGCACTACTCAGCTCAG AAGAGGAGG	AAACCGCTACCAGAGGAT TTCAGAGT	
CL3537Contig1	AGGTTCCCTCCCTTATGTG TCACTACTGT	TCGGGTAAGAGTGACATG CGGATT	
CL2712Contig1	ATCGGATGCGCGTTGTTT ACAGTCT	CCATACCAGAATCGAACG GTCACAC	
CL4089Contig1	GAAAAAAGCGGTATGAA GGTTGGAT	CGTAGCTGGTGTGCTTGA AGAGTT	F
gil164246440 gb ES851920.1 ES851920	CTGGGTTATCTTTGTTTT CAGGAAATG	CTATTTTGCCAATTTGTCTT TTCACC	
gil164247134 gb ES810196.1 ES810196	TGGATGAGATGAGGAAG AAATCAAG	AAAGAAGAAGATAAAACT GCAAGCC	
CL1Contig1522	ATTGGAACCTCCCTTTTTT GGATTGC	CTTGTGGCTCGTAGCTTCT CTGGCT	
CL19841Contig1	GATTTTCATTGGTAGGCAG AACCGCT	TCACACGATGGTACTCCAG ATATGC	
CL16532Contig1	TAGTTCTCTTTGGTACGA	GTTTTTCTCCTTTGCTGGA	

	AATTGGC	TTTGTC
CL14456Contig1	AGAAGAATTTGCAGCTT CTTCCGGT	CGAACTCGAAGAAGTGTT GCCGAA
CL1Contig1522	ATTGGAACCTCCCTTTTTT GGATTGC	CTTGTGGCTCGTAGCTTCT CTGGCT
CL714Contig5	CGGGTTTGGGAGATCTA GGAAAAAG	CGCCGCGATGACAACTAC AAGAG
CL4420Contig1	AAAAACCGAAATTTTAC CAAACACC	CCAAGAATCAAACCACAA GCAGCAG
CL2463Contig3	AACCATGTGCAAAGTGC TGAACAAC	AGGCAACCCAAGAAAAGT GAAAGAC
CL1Contig2677	CCGTGGACCATGAATAT GTTTTCTC	TTTGGAAAGATTGAAGTGCT AGCGTT
CL1Contig4241	GGAGCACAGTGAAGAA CACCGTGAG	CAGCTTTTGCATCAACGGG TAGGTA
CL18193Contig1	GAGCATGGATGAGGTTT ATGGATTG	CAGAGGAGGCTTCTTAGG TGTGGAG
CL9434Contig1	TAAACTAAATGATACGCC CCGGCT	AACATTATTCAAGTTTCTT CTCCCCTT
CL4874Contig2	TCTCTCTTTCCTCCATCA ACCTGGG	CCTCCATTCTTGGTTCCCC AAAAGT
CL932Contig2	CGATTGCTCCGATTGTGC CGCCTAT	TCATCCCGTACCCCTGCC GAAGT
CL932Contig1	CAAACCTCGGGCAGGGGT ACGGTAT	GGGAAGAACCAGTGTCCG GATCAAC
CL23Contig4	GGCCATCCCTCTACTAGT CCCACAC	CCTTCGATTCCCTCCTCGAA AAACCT
CL23Contig5	GCGTTGTGTGTGTTGTG TTGTGTGT	AAGAGTGGAAATGGAGTGG TGGAGTC
CL1Contig4168	CGGAGCTGGTGAACCAC CCTGAAAT	GCCTGAAGGTAGGGGAGT TTGTGGG
CL1Contig487	CACTTGGATGATCTCTGC ATGTCTC	GGGTATTTTTCTCTTAGCAT TTTGGC
CL1Contig951	CTTAAGCCTGGGCAACG TCTACAGC	TCAGCAAACCCGATAAAC AAAACCG
CL4592Contig1	TGAGGGTACCATAATCA AGACACCC	GAGAGCAGCAAAGTCATA GAGCAGC
gil164263375 gb ES818411.1 ES818411	GGTCAAAGAGGAGATCC TGGAGAAG	GTTCCCTATTTGCAGAAGGG AGAGTG
gil84155298 gb DN804653.1 DN804653	TGGGATGTTGACAAATG GATACAAG	CTAATAGAATGCGTCTATT GTCGCTC
CL12975Contig1	GCTTCTACATGACTCGG AGCAAACC	CAGGATTGCACTGGTAATG AACTTGG
CL1Contig3117	CAAAGCATCCACAGATT AGGGGCAT	TCAAGCATCTATCATCGCC CCAATC
CL9890Contig2	TACGAACAAAGGCAAAG	TGACAGATTGAACAGCAT

	AAAGGACC	GAATGGG
CL3178Contig2	AAAAGAGAGGCGGGAA GAAGAATGG	ATGCTCTCAGGGGTAAAC CTCAATG
gil164343485 gb ES810478.1 ES810478	TAAGAGGTTCTTGCCGT CGGAGTTT	AATGATCCAAGGGTGGAA TGACCTC
CL1Contig4329	TTCTTCTACATTGTTCG AGCCAGG	GAGTCTTGTTGCTGTCT GGGGTC
CL178Contig3	GAGGTTTGTACCGTCGG AATTTGGT	CAAGGGGTGGTAGAACAT CTGCTGG
CL1Contig29	ATTGCTGGTTGTGACCTT GTCTTCC	CTCGTTTAACTGTTTTTGC TTTGGC
gil164269430 gb ES833056.1 ES833056	AAGTCCCTACCGATTTTG GAGATT	CCCTTAGACCTCAAATATT CCACGG
gil164322571 gb EX172320.1 EX172320	GCTGCTCAAGTGAAGCG CTCTGAC	AAATGCATGCTTCATTGAA GGACAT
CL13889Contig1	GGTCCGAAGTCTCAAC TCCCTCTC	ACCGAAGAACCTGGTACT CACATCG
CL12709Contig1	GAAGTTAAACAAGAATA CGCCAACG	TCCTCAAATGAACAGGCA AATAATG
CL8953Contig1	AAATGGGTTCTTATCAAT CCCCTTC	CTTTGTTGTTACCACAGC TCTGTG
CL22885Contig1	AGTCATATCGTCCTTGAG TTGTGCG	CTGTTGTTGTTGGGTTCTT CTTCGT
CL1Contig2504	GGGAGCCTGAACCCATG AAAGAGCT	GCCGTGGCTAAAAGAGAG TAGCCAG
gil84151785 gb DN801140.1 DN801140	TAAGCCCACTCAAAGGG AACAAAGC	TGCGCAACTGATCCATAACC ATAACG
CL546Contig1	ACAACCTCCAATCGCTT GCTTCCG	GCTAACGCCCATGCTGTCT TCTCTG
CL823Contig4	ATCTCTATTGGCATCCAT TTGGAGG	CAGGGCAGACAGTAACCA GGTTTAC
CL732Contig2	TCCAGTCATGTGGTGCTT GTATGG	GTAGTTTGAAGGGTTCGG AGGGTTC
CL1935Contig2	GGAGAAAATGGTGAACG ATGTGATG	CCAAATTGTTAGAAGAAG ACCCACC
CL1Contig603	TGCTAAACGACCGCAAC AAGCCAAT	TTTTCTCCGATCTCCACCG ACAAC
CL6372Contig1	ACCTGCCCACTTTTCTTC GGTTTCC	CACGCCTTTTGCTTCCTTT CCTTCC
CL11902Contig1	AGCAAGGAGTGGTGAA GGGATAAGC	GGAGTTGGAGAGGAAGAC AGTGGTA
CL17341Contig1	AAGGGGTTGCTTGAAAC TGGGGGTC	TGGGGGGGAAAAAATTG CACTTGT
CL1278Contig1	GACAGGCCAATTGAGCT TCCTTCTT	GCTTGGTTGATTTTATCTG GCTTGA
CL1102Contig1	TTGTCTCTCCTCAAGTCT	TTCATTGGCGTATTGGATA

	GCTGGTG	GGGATT	
CL451Contig3	CCCCTCTTCAGTTTGTTT	ATCGTTCTTCTCCAGCCTC	
	CCCCTAT	TCCATT	
DQ116441	GTCAACTCTCCACCTCG	CTGGGGGGATGCCTTCCTT	
	TCTCCGT	GTCTT	
CL5659Contig1	GAAATAGTGGCGTGGA	ACCATGAGAGACTGAGTT	F
	GTTAGGAT	GTGTGAGG	

Table S2 List of primers used for RT-PCR.

	Gene ID	Forward primer	Reverse primer
CHS-1	gil164247134 gbl ES810196.1 ES81 0196	TGAGATGAGGAAGAAAT CAAGGGAA	ACTCCTTTCTTATAGGGGC GGAAGT
CHS-4	CL1Contig1522	AAGGTGCTCGTGTACTTG TTGTGTG	CGTAGCTTCTCTGGCTTC AGTGCTA
CHS-5	CL14456Contig1	GTGTGCCTGAAGCAATG CATTACCT	GTCATTTGCCCCACAATG TGTCCTA
CHS-6	CL16532Contig1	AGGAGAACCTTCAGTTC CAGCGTAG	TTGTTAGAGAGCAGTATT GCAGCCC
PAL-2	CL2463Contig3	CAAAAGAGGGTTTGGCT ATGGTTAA	CAATCAAGGGATTGTCGT TCACTGA
PAL-3	CL1Contig2677	TATGTCCTCCACATACTT GGTGGCG	GCATTCCGTGATCTTGTTT GGGATT
PAL-1	CL1Contig4241	CAATGGACAATGCTCGTT TGGCTAT	CACGGTGTCTTCACTGT GCTCCTC
4CL-1	CL18193Contig1	CGTAAATACCTGGAGCAT AGGGAGA	CGGAAAGTTGAATTCTAT CAGAGGA
4CL-2	CL9434Contig1	CAGTGCTGCTTTACTCTT CGGGGAC	CACTCCTCCATCAACTCTT TTCCCA
4CL-3	CL4874Contig2	GAGAGGTTCCAGTTGCT TTCGTTGT	TGGTTTTTTTTTCGAGTT TGTTTAC
4CL-4	CL932Contig2	ACGGCTGCCAATCCTTTT TTCACT	TTCAGGGCGTAAATATGG AACATGG
4CL-5	CL932Contig1	AATTGTTGATCCCGACAC TGGTTCT	ATTATTTCAAACCTCCAGG GCAGGC
C4H-1	CL23Contig4	ATCCAGAGATCCAGCAG AAACTCCG	GACAGCTCCTCCTCCAA CACCAAA
C4H-2	CL23Contig5	GGGTTGTGTGGCTGTATT GTTGTGG	GGCTAAGTCTGTGAGGTT GCGGTGG
C4H-3	CL1Contig4168	TGGATGCTCAACAGAAG GGGGAA	GCAACTTCTTCTCCCCAC GCCA
CCoAOMT-1	CL1Contig2504	TAGTGGCAAATGGCAAC CAACAAAA	ATCTTCCCATCATCGGGG ACAGC
CCoAOMT-2	gil84151785 gblD N801140.1 DN80 1140	GGGAACAAAGCTGGAGC TCCACCGC	CATGATAGCACCTCATTAT TAAACA
CCR-1	CL546Contig1	GAGCAGCACATAATGTG GTAGAGGC	CGGAGAATAAGGTGTAAG CAAACGG
CCR-2	CL823Contig4	TTGGATGAAAGCAAAGG AGCTAAAA	TTTCAAGTTTTACAAGGC AAGCGTT
CAD-1	CL1278Contig1	GTAACCGTCATCAGCACT TCTCCGT	TTTCTTGCGTCTCTTTCAT ACCCCC
CAD-2	CL1102Contig1	CGCTATAACATGAACCAA CCTGGCA	GGGAACCCAACGAGGGC ATAAACAC

CAD-3	CL451Contig3	CGATGTTTCGATACAGATT CGTCGTG	GTGGTTTTTCCAAAAGGGG GAGATAT
ubiquitin	DQ116441	ACCAAAATCCAAGATAA GGAAGGCAT	ACGCAAACGAAGGACAA GGTGGAG



Fig. S1. The representative symptoms of diseased cotton seedlings in the field (A) and anatomy analysis of the diseased cotton stem (B).

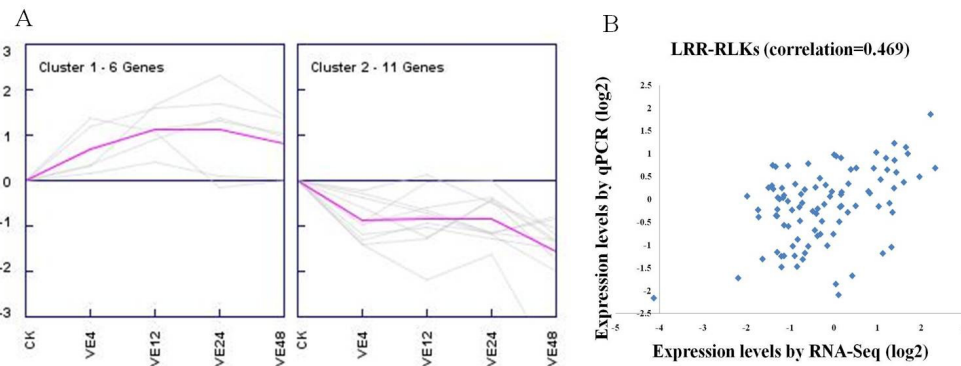


Fig. S2. Expression of LRR-RLKs identified by RNA-Seq (A) and validation by qPCR (B). CK refers to the mock control and VE4, VE12, VE24, and VE48 refer to 4, 12, 24, and 48 h after inoculation with *V. dahliae*.

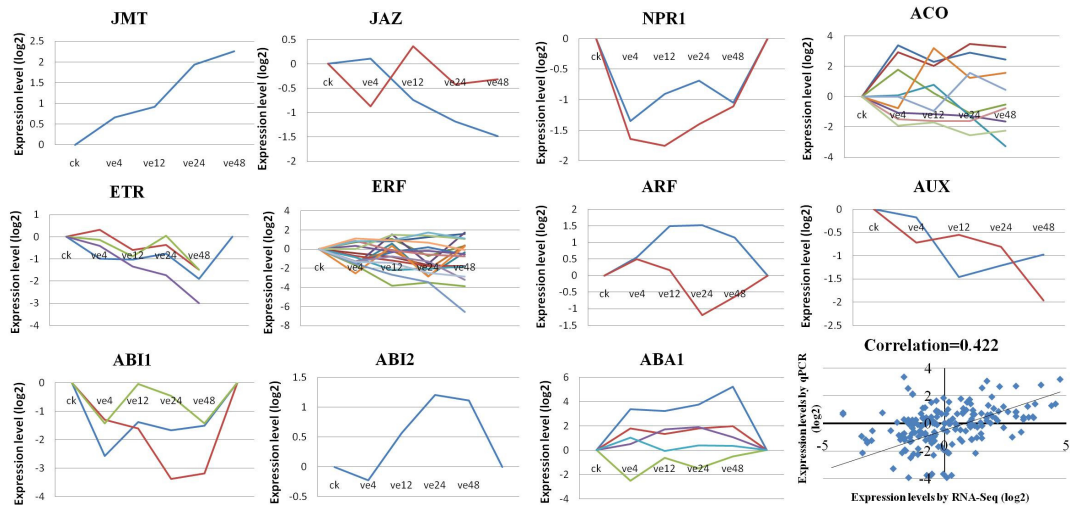


Fig. S3. Detailed expression patterns of defense-responsive genes identified in different phytohormone signaling pathways and data validation by qPCR. CK refers to the mock control and VE4, VE12, VE24, and VE48 refer to 4, 12, 24, and 48 h after *V. dahliae* inoculation. JAZ, jasmonate ZIM-domain; NPR1, non-expressor of pathogenesis-related protein 1; ACO, 1-aminocyclopropane-1-carboxylate oxidase; ETR, ethylene receptor; ERF, ethylene response factor; ARF, auxin response factor; ABA, ABA-deficient gene; ABI, ABA-insensitive gene.

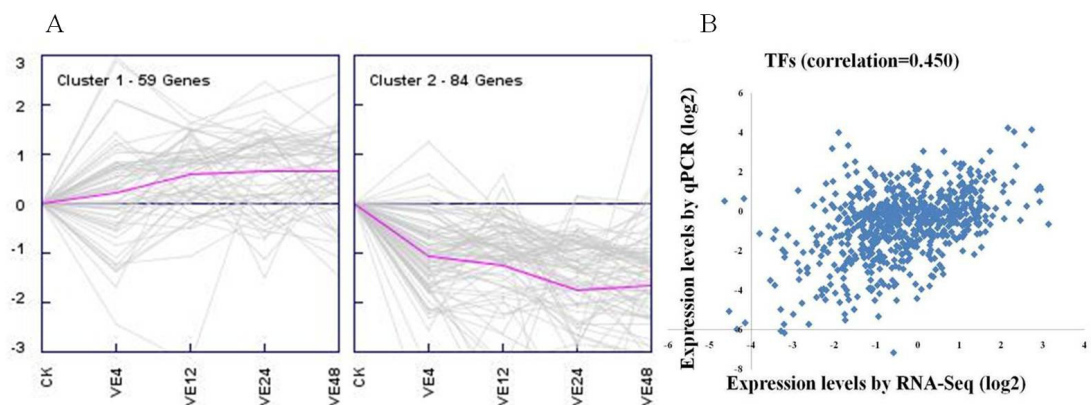


Fig. S4. Expression of TFs identified by RNA-Seq (A) and validation by qPCR (B). CK refers to the mock control and VE4, VE12, VE24, and VE48 refer to 4, 12, 24, and 48 h after inoculation with *V. dahliae*.

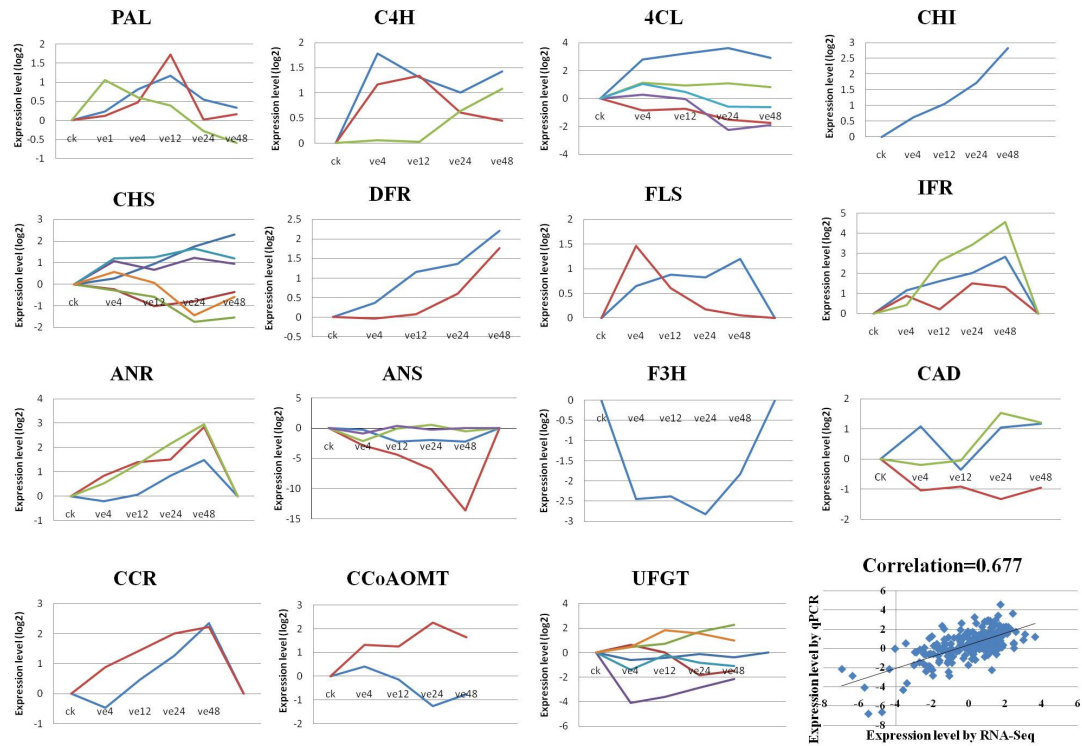


Fig. S5. Detailed expression patterns of defense-responsive genes identified in phenylpropanoid pathway and data validation by qPCR. CK refers to the mock control and VE4, VE12, VE24, and VE48 refer to 4, 12, 24, and 48 h after inoculation with *V. dahliae*. PAL, phenylalanine ammonia-lyase; C4H, cinnamate 4-hydroxylase; 4CL, 4-coumarate: CoA ligase; CHS, chalcone synthase; CHI, chalcone isomerase; IFR, isoflavone reductase; FS, flavone synthases; F3H, flavanone 3-hydroxylase; FLS, flavonol synthases; DFR, dihydroflavonol-4-reductase; ANS, anthocyanidin synthase; ANR, anthocyanidin reductase; UFGT, UDP-flavonoid glucosyltransferase; CCR, cinnamoyl CoA reductase; CCoAOMT, caffeoyl-CoA O-methyltransferase.

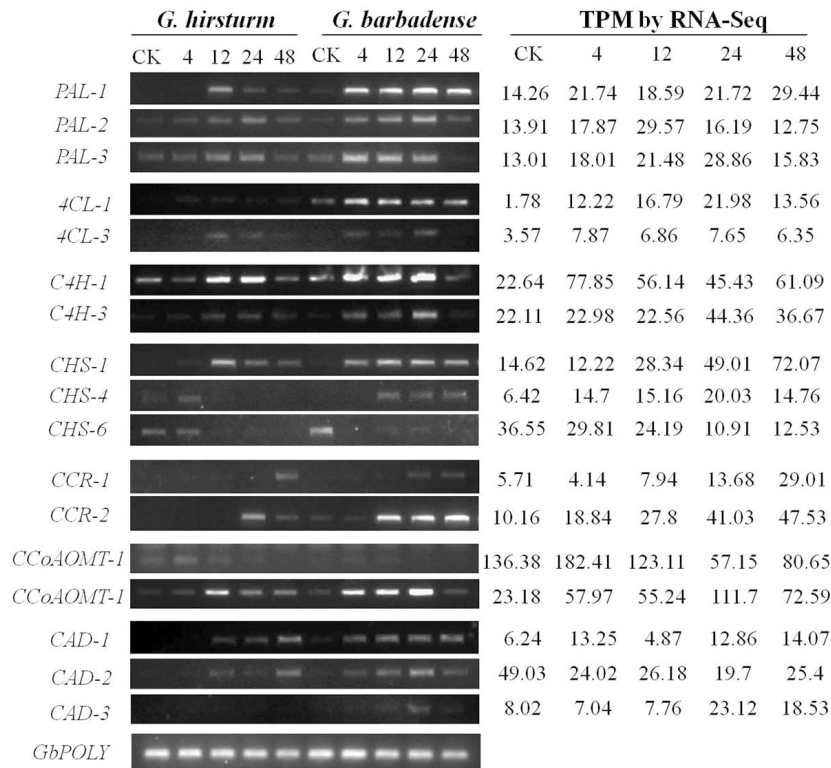


Fig. S6. Detailed expression profiles of genes in major lignin biosynthetic pathway. The absolute genes expression level were obtained by RT-PCR result and the original TPM of RNA-Seq. CK was referred to the mock control and 4, 12, 24, and 48 were referred to 4, 12, 24, and 48 h after *V. dahliae* inoculation. PAL, phenylalanine ammonia-lyase; 4CL, 4-coumarate: CoA ligase; C4H, cinnamate 4-hydroxylase; CHS, chalcone synthase; CCR, cinnamoyl CoA reductase; CCoAOMT, caffeoyl-CoA O-methyltransferase; CAD, cinnamyl alcohol dehydrogenase.