

**Table S5.** Number of SNPs belonging to genes encoding enzymes for lignin and cellulose biosynthesis pathways (referred in Wegrzyn et al. 2010), identified in the present study in association with wood chemical components. All associations were significant at  $p < 0.0001$ .

Gene product	Gene	Gene model	Chr.	C6	Lignin	S:G
4-Coumarate:CoA ligase	<i>4CL1</i>	Potri.006G169600	6			
	<i>4CL3</i>	Potri.001G036900	1			
	<i>4CL5</i>	Potri.003G188500	3			
Coumarate 3-hydroxylase	<i>C3H3</i>	Potri.006G033300	6			
Cinnamate 4-hydroxylase	<i>C4H1</i>	Potri.019G130700	19			
	<i>C4H2</i>	Potri.013G157900	13			
Cinnamyl alcohol dehydrogenase	<i>CAD</i>	Potri.009G095800	9			
Cinnamoyl-CoA reductase	<i>CCR</i>	Potri.003G181400	3			
Cellulose synthase	<i>CesA1A</i>	Potri.011G069600	11	1		
	<i>CesA1B</i>	Potri.004G059600	4			
	<i>CesA2A</i>	Potri.018G103900	18			
	<i>CesA2B</i>	Potri.006G181900	6			
	<i>CesA3A</i>	Potri.002G257900	2			
Hydroxycinnamoyl-CoA transferase	<i>HCT1</i>	Potri.003G183900	3			
	<i>HCT6</i>	Potri.001G042900	1			
Cellulase	<i>KOR1</i>	Potri.001G078900	1			
Laccase	<i>LAC1A</i>	Potri.016G112000	16			1
	<i>LAC2</i>	Potri.008G064000	8			
	<i>LAC90A</i>	Potri.008G073700	8			
Phenylalanine ammonia-lyase	<i>PAL2</i>	Potri.008G038200	8			
	<i>PAL4</i>	Potri.010G224100	10			
	<i>PAL5</i>	Potri.010G224200	10			1
S-Adenosylmethionine synthetase	<i>SAM1</i>	Potri.008G099300	8			
Serine hydroxymethyl transferase	<i>SHMT1</i>	Potri.001G320400	1			
	<i>SHMT3</i>	Potri.002G109200	2			
	<i>SHMT6</i>	Potri.017G059300	17		1	
Sucrose synthase	<i>SUSY1</i>	Potri.018G063500	18			
$\alpha$ -Tubulin	<i>TUA1</i>	Potri.002G111900	2			
	<i>TUA5</i>	Potri.009G085100	9	1		
$\beta$ -Tubulin	<i>TUB15</i>	Potri.001G272800	1			
	<i>TUB16</i>	Potri.009G067100	9			
	<i>TUB9</i>	Potri.001G104600	1			
Caffeoyl CoA O-methyltransferase	<i>CoAOMT1</i>	Potri.009G099800	9			
	<i>CoAOMT2</i>	Potri.001G304800	1			
Caffeate O-methyltransferase	<i>COMT1</i>	Potri.015G003100	15			
	<i>COMT2</i>	Potri.012G006400	12			

Ferulate 5-hydroxylase	<i>F5H1</i>	Potri.005G117500	5		
	<i>F5H2</i>	Potri.007G016400	7		
Glycine decarboxylase complex, H	<i>gdcH1</i>	Potri.012G123700	12		
Glycine decarboxylase complex, T	<i>gdcT2</i>	Potri.004G009600	4		
			<b>Total</b>	<b>2</b>	<b>1 2</b>