

**Additional file 9. Monosaccharide composition of non-cellulosic polymers determined by TMS (mol %) and cellulose content (%; w : w) in ball milled wood (BMW), LCC fractions and the residue in transgenic and wild type (WT) samples.**

Fraction	Line	Ara	Rha	Fuc	Xyl	Man	MeGlcA	Gal	GalA	Glc	GlcA	Updegraff Cellulose
BMW	WT	2.91 ± 0.10	0.78 ± 0.02	0.61 ± 0.00	46.5 ± 1.4	3.69 ± 0.09	4.10 ± 0.11	2.00 ± 0.07	4.20 ± 0.17	34.0 ± 1.6	1.26 ± 0.08	17.7 ± 0.61
		3.13 ± 0.11	0.74 ± 0.04	0.66 ± 0.04	44.1 ± 1.6	3.90 ± 0.10	3.95 ± 0.09	2.12 ± 0.14	4.09 ± 0.13	36.0 ± 1.5	1.35 ± 0.04	16.6 ± 1.68
	TR	1.88 ± 0.07	2.57 ± 0.05	0.8 ± 0.09	47.0 ± 1.1	10.65 ± 0.32	2.03 ± 0.09	4.42 ± 0.12	5.86 ± 0.17	23.2 ± 0.3	1.55 ± 0.15	ND
		2.08 ± 0.22	2.59 ± 0.07	0.75 ± 0.21	46.5 ± 0.8	10.47 ± 0.11	2.02 ± 0.18	4.84 ± 0.01*	6.97 ± 0.19*	22.2 ± 0.3*	1.53 ± 0.32	ND
LCC-1	WT	6.05 ± 0.35	5.72 ± 0.09	3.46 ± 0.43	13.5 ± 0.1	6.17 ± 0.18	3.69 ± 0.39	7.67 ± 0.31	42.14 ± 2.84	5.6 ± 0.3	6.00 ± 0.70	ND
		5.61 ± 0.49	5.64 ± 0.16	2.78 ± 0.63	17.7 ± 0.9**	7.01 ± 0.48	3.29 ± 0.56	7.07 ± 0.62	40.34 ± 4.64	5.7 ± 0.4	4.90 ± 1.05	ND
	TR	1.86 ± 0.18	1.88 ± 0.05	1.13 ± 0.15	59.6 ± 0.3	3.61 ± 0.03	2.95 ± 0.02	2.20 ± 0.13	5.86 ± 0.23	19.0 ± 0.2	1.93 ± 0.20	17.6 ± 0.97
		2.07 ± 0.17	2.06 ± 0.07	1.25 ± 0.17	58.9 ± 1.9	4.03 ± 0.02**	3.09 ± 0.37	2.54 ± 0.15	6.02 ± 0.17	17.9 ± 1.2	2.10 ± 0.30	17.9 ± 1.75
LCC-3	WT	2.13 ± 0.32	2.28 ± 0.13	1.22 ± 0.36	63.1 ± 2.1	10.94 ± 0.09	3.67 ± 0.15	3.48 ± 0.33	7.14 ± 0.15	3.8 ± 0.1	2.29 ± 0.57	ND
		2.12 ± 0.09	2.34 ± 0.03	1.12 ± 0.09	65.0 ± 0.3	10.25 ± 0.33*	3.78 ± 0.12	3.30 ± 0.07	6.59 ± 0.50	3.3 ± 0.1**	2.17 ± 0.13	ND
	TR	1.49 ± 0.01	1.66 ± 0.03	0.93 ± 0.00	63.4 ± 2.2	2.47 ± 0.05	2.78 ± 0.20	1.86 ± 0.12	4.2 ± 0.14	19.5 ± 1.9	1.73 ± 0.04	31.0 ± 1.01
		1.61 ± 0.08	1.66 ± 0.03	1.03 ± 0.10	60.7 ± 1.4	2.73 ± 0.06**	2.93 ± 0.11	2.02 ± 0.07	3.64 ± 0.10	21.8 ± 0.9**	1.90 ± 0.16	24.2 ± 0.15**

Mean ± SE, n = 3 technical replicates. WT is combination of 6 individual trees. TR is combination of two trees from each transgenic line (8, 4, 17). ND = not detected. Asterisks correspond to means significantly different from WT according to the ANOVA (\* P ≤ 0.1, \*\* P ≤ 0.05, \*\*\* P ≤ 0.01, \*\*\*\* P ≤ 0.001).