

Supplemental Table S1: The abundance of the RG-II dimer and monomer in the material released by EPG- treatment of the AIR and by EPG treatment of the ammonium oxalate soluble pectin.

Plant	Released by EPG treatment of AIR		EPG-treated oxalate fraction	
	Dimer	monomer	Dimer	monomer
	% of total RG-II ^a			
Empty vector	97	3	77	23
hpGGLT1 #1	88	12	48	52
hpGGLT1 #3	89	11	49	51
mur1-1	70	30	6	94

^athe abundance of the dimer and monomer was determined by SEC with RI detection.

Supplemental Table S2: Sequences of the oligonucleotide primers used in this manuscript. 5'-3'. GFT1 primers were previously described in (Rautengarten *et al.*, 2016).

AGI	Gene name	Forward primer (5'-3')	Reverse primer (5'-3')
At1g76340	GGLT1	GGAAACGCTTTTCTTGCAT C	ACGCAAGAGCCCAGC TATAA
At5g19980	GFT1	GCGTCAACTCCTCATCTTC C	TAAGCATGCCACTCCTGTTG
At1g13320	PPA2	TAACGTGGCCAAAATGATG C	GTTCTCCACAACCGCTTGGT
At2g28390	SAND	AACTCTATGCAGCATTGA TCCACT	TGATTGCATATCTTTATCGCC ATC
GGLT RNAi	GGLT1	GGGGACAAGTTTGTACAAA AAAGCAGGCTGTTCCAGAA CCAAGCCCAGAG	GGGGACCACTTTGTACAAGA AAGCTGGGTGCGTTTCCCAA TGGCAACG