

Supplementary Materials list:

Supplemental data containing further experimental explanation, controls and validation and supplementary figures S1 to S4.

Table S1. Calculation of polysaccharide composition based on linkage analysis, related to Figure 2.

Table S2. Transcript data for GT family genes arranged by polysaccharide, related to Figure 3.

Table S3. *In situ* hybridizations showing mRNA for SAM-expressed GTs grouped according to their expression patterns.

Table S4. List of probes and primers.