



Figure S1. Heatmap of the 40 most down-regulated genes after 20 min and 40 min of sucrose treatment (sorted for t20) across biological replications. Shown are the relative numbers of normalized reads in FPKM for the three biological replications each of t0(control), t20 and t40.

Table S1. Ten most highly upregulated class III peroxidases (log2FC >1.5, pvalue <0.5, indicated in bold) after 40 min of sucrose treatment. Data of t20 are also shown, though not significant.

Annotation	<i>G. max</i> ID (if available)	t20		t40	
		log2FC	pvalue	log2FC	pvalue
peroxidase 5	GLYMA.13G106400	3.6	0.273	3.6	0.013
cationic peroxidase 1	GLYMA.02G233900	2.3	0.108	3.5	0.035
peroxidase 5	GLYMA.20G001400	1.9	0.251	3.3	0.006
peroxidase 1	GLYMA.20G241800	3.1	0.245	3.3	0.012
cationic peroxidase 2	GLYMA.09G284700	1.9	0.249	2.8	0.047
peroxidase 5	GLYMA.09G277800	-0.2	0.680	2.7	0.019
peroxidase 4-like	GLYMA.08G179700	1.3	0.022	2.7	0.005
peroxidase 52-like	GLYMA.10G191700	0.2	0.411	2.3	0.022
peroxidase 5	GLYMA.14G201700	1.5	0.121	2.2	0.026
peroxidase 5	GLYMA.06G145300	1.4	0.232	1.9	0.005

Table S2. Ten most highly upregulated genes involved in calcium signaling (log2FC >1.5, pvalue <0.5, indicated in bold) after 40 min of sucrose treatment. Data of t20 are also shown, and where statistically significant are shown in bold.

Annotation	<i>G. max</i> ID (if available)	t20		t40	
		log2FC	pvalue	log2FC	pvalue
calcium-binding protein CML19	GLYMA.17G128900	2.5	0.07	4.2	0.019
calcium-binding protein	GLYMA.04G136200	2.5	0.05	4.1	0.023
calcium-binding protein CAST	GLYMA.09G270900	1.8	0.09	4.0	0.003
calcium-transporting ATPase 2, plasma membrane-type	GLYMA.11G048300	1.3	0.17	3.8	0.009
calmodulin-like protein	GLYMA.10G002200	2.0	0.122	3.8	0.0086
calcium-binding protein PBP1-like	GLYMA.13G283600	3.7	0.08	3.6	0.008
calcium-binding protein CML46	GLYMA.18G260700	1.7	0.02	3.4	0.023
calmodulin calcium-dependent NAD kinase	GLYMA.10G185200	1.1	0.14	3.4	0.003
calcium-dependent protein kinase 28	GLYMA.01G166100	1.4	0.09	3.0	0.00004
calmodulin-binding receptor-like cytoplasmic kinase 2	GLYMA.11G178300	2.1	0.041	3.0	0.0009