

**Additional file 3. Validation of microarrays results by quantitative real-time PCR (qRT-PCR)**

**S2.A:** Validation of microarrays results by quantitative real-time PCR (qRT-PCR) for selected genes for 2 pairs of genotypes at two time points. Reported ratios were calculated on the basis of normalized data for microarray analyses (log<sub>2</sub> ratio) and as normalized expression for qPCR (Ct ratio). H: harvest, DAH: days after harvest.

stage	Couple	MDP number	Gene annotation	qRT-PCR (Ct Ratio)	Microarray (log <sub>2</sub> ratio)
H	M74 / M20	MDP0000222620	AtPME2	-2.12	-1.9
H	M74 / M20	MDP0000322658	UDP-glucuronosyl	-6.17	-2.58
H	M74 / M20	MDP0000393227	FQR1	-3.82	-2.45
H	M74 / M20	MDP0000671440	GDH1	-1.8	-1.07
H	M74 / M20	MDP0000303194	CRK10	8.16	3.17
60 DAH	M74 / M20	MDP0000222620	AtPME2	-2.67	-1.62
60 DAH	M74 / M20	MDP0000393227	FQR1	-0.3	0.06
60 DAH	M74 / M20	MDP0000671440	GDH1	-2.49	-0.85
60 DAH	M74 / M20	MDP0000303194	CRK10	7.24	2.06
60 DAH	M74 / M20	MDP0000322658	UDP-glucuronosyl	-11.03	-2.48
H	M40 / M49	MDP0000322658	UDP-glucuronosyl	-9.37	-2.6
H	M40 / M49	MDP0000393227	FQR1	-3.56	-2.68
H	M40 / M49	MDP0000303194	CRK10	4.12	3.22
60 DAH	M40 / M49	MDP0000222620	AtPME2	-3.34	-3.92
60 DAH	M40 / M49	MDP0000393227	FQR1	-3.73	-2.52
60 DAH	M40 / M49	MDP0000322658	UDP-glucuronosyl	-5.99	-3.26

**S2.B:** Correlation between qRT-PCR ratios and microarray log<sub>2</sub> ratios is shown for the same genes, along with Pearson correlation coefficient.

