

**Supplemental Table S2.** Sequences of the primer pairs used for the Q-RT-PCR experiments.

Gene Locus	Description	Forward primer (5'-3')	Reverse primer (5'-3')	Reference
<b>GABA metabolism</b>				
At3g22200	$\gamma$ -aminobutyric acid transaminase (GABA-TP)	CAGGTGATGGCATTGATG	ACTTCTTGCTGAGCCTTGA	Miyashita and Good, 2008
At1g65960	glutamate decarboxylase 2 ( <i>AtGAD2</i> )	CCATCAGAATCTCCTTCTCCA	ACACTCGCGGAGAGACTTGT	Miyashita and Good, 2008
At2g02010	glutamate decarboxylase 4 ( <i>AtGAD4</i> )	GTTCACGCCAAGATGGCTAA	GCAAATTGTGTTCTTGTGGTC	Miyashita and Good, 2008
<b>E-2-hexenal-specific early (1h) target genes</b>				
At1g07410	rab GTP-ase ( <i>AtRABA2b</i> )	GGCTGGAACAAATCAGACC	CGAGAAACGACAAACCTTCC	this paper
At1g63750	TIR-NBS-LRR disease resistance protein	ACGATCATCGGATTCTACCG	TTACCACCAATGGGAGAAG	this paper
At2g44490	$\beta$ -glucosidase ( <i>PEN2</i> )	TAACATGCTTCTAGCGCACGCAG	CATCTGGATCACTCGGATCATATG	Hiruma et al., 2011
At3g16720	zinc finger, RING-H2 ubiquitin ligase, putative ( <i>ATL2</i> )	GTGACTTGTCACGTGTTGG	CCTGGAAGCTCAGTTTACG	this paper
At3g23230	ethylene response factor ( <i>ERF98</i> )	GGAGCAGCAACAACCAATCACAAG	TTCTTGAACCTCCCGGAACGA	Czechowski et al., 2004
At4g11100	ankyrin repeat family protein	CTCAACGGATTTGCCTTCG	CACAGAGGAAGGTGAGCAC	this paper
At5g06320	non-race specific disease resistance gene (NDR1-like3)	ACAGATGGCGGACTTAAACG	ACCTAAACAACCGCATCCAC	this paper
At5g22690	TIR-NBS-LRR disease resistance protein	TGTGGATGCCCTGAGACTGAAC	TGAGCGGTCCTTAAGGTTATCCG	this paper
At5g27420	zinc finger, RING-H2 ubiquitin ligase, putative ( <i>ATL31</i> )	CAGAGACATGACCCGTATGC	GCGCCAGTACAGTGACGTAT	Xin et al., 2009
At5g46910	jumonji transcription factor ( <i>JMJ TF</i> )	TGCTGGTTTCAGCCACGGTTTTAA	CCAATCACCCATCGCAAAGTTCAC	Libault et al., 2007
At5g61600	ethylene response factor ( <i>ERF104</i> )	TAACCAGCGTAAACCGCCCTTACC	TCCCCTGTAGTGCTCTCTTCTTC	Czechowski et al., 2004
At5g64660	cys, met, pro, and gly protein 2 ( <i>AtCMPG2</i> )/ U-box E3 ubiquitin ligase, putative ( <i>PUB27</i> )	CGTTTTGGTGTGCTGTAAGCCGAAAG	AATTGCTCTCCCGCCGTTAGAC	Libault et al., 2007
<b>E-2-hexenal mid (1h and 3h) target genes</b>				
At4g02380	senescence associated gene 21 ( <i>SAG21</i> )	TTGTCAAGGTCTTTAAGAGGA	AACTCTATCATAACATCCAACG	this paper
At4g23190	cystein-rich receptor-like protein kinase ( <i>CRK11</i> )	TGCAGGAAACTTGGTCACATTATGC	TCCACCAGCTCTAATGGTGACTTG	this paper
At4g37370	cytochrome P450 family protein ( <i>CYP81D8</i> )	CCAACCGGATTACTTCACGGATCG	TCGGTCCCTGCTAGTATCAAAGCG	this paper
<b>WRKY Transcription Factors</b>				
AT1G62300	<i>AtWRKY6</i>	GGAAGCTCCGATGATAAGCGATGG	ATCGTGCAGCGGTAATATGCC	Czechowski et al., 2004
AT1G80840	<i>AtWRKY40</i>	TGCGAGTTGAAGAAGATCCACCGA	TCCGAGAGCTTCTTGTCTCAGCA	Czechowski et al., 2004
AT4G23810	<i>AtWRKY53</i>	TTTGCCGATGGAGGAGTTCTAGC	GCCTCTCTCTGGGCTTATTCTCAC	Czechowski et al., 2004
<b>Other</b>				
At2g28390	<i>SAND</i>	AACTCTATGCAGCATTTGATCCACT	TGATTGCATATCTTTATCGCCATC	Czechowski et al., 2005
At5g55170	<i>AtSUMO3</i>	TCAAGAGCCAGGATGGAGACGAAGT	CATCTCCATCTTCCATATCAAGCTC ATCTG	van den Burg et al., 2010
At5g13220	<i>JAZ10</i>	AAGGAGAGGTAATGATTCTTCAACAAT	AGTAGGTAACGTAATCTCC	Glauer et al., 2009
At3g23240	<i>AtERF1</i>	GCGGAGAGAGTTCAAGAGTCGCT	TCACCAAGTCCCCTATTTTCAGA	Li et al., 2006
At5g52300	<i>RD29B</i>	ATGGAGTCACAGTTGACACGTCC	GAGATAGTCATCTTACCACCAGG	Saez et al., 2006