

Supplementary Data

Decreased glutathione reductase2 leads to early leaf senescence in *Arabidopsis*

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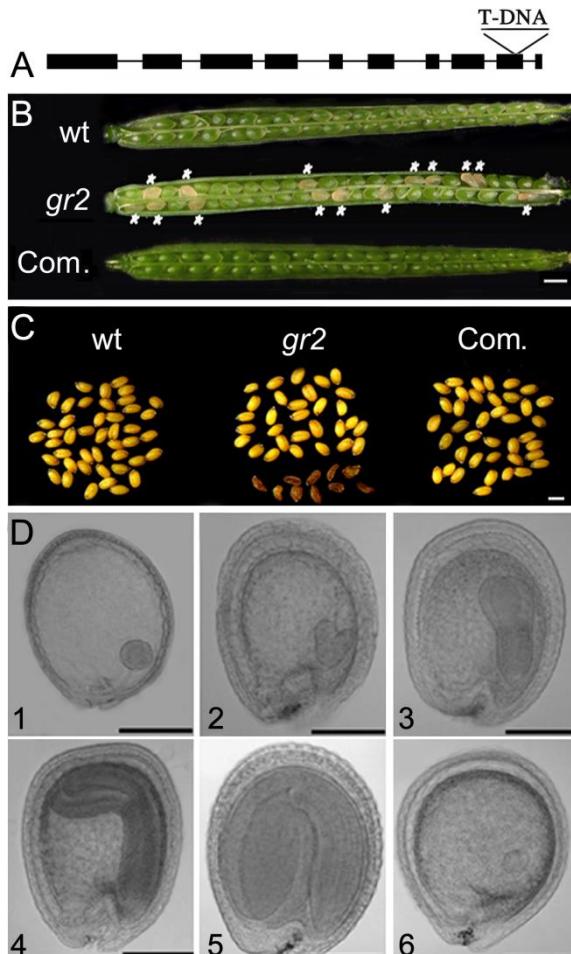


Figure S1. Gene structure of At3g54660 and microscopy analysis of developing embryos in the siliques of wild-type and heterozygous *gr2* plants. (A) Schematic diagram of the gene structure of At3g54660 and the insertion positions of T-DNA in At3g54660. The exons are shown as black boxes, and introns are shown as black lines. (B) Opened developing siliques of wild type plants (wt), heterozygous *gr2* plants (*gr2*), and the complemented plant (Comp.). Seeds in the developing siliques of wt are all green, whereas the siliques of heterozygous *gr2* mutant alleles have white (indicated by the asterisks) and green seeds. Bars = 1 mm. (C) Mature seeds from one silique of wt, heterozygous *gr2* plants, and the complemented plants. In the mature siliques of heterozygous *gr2* mutant, homozygous mutant seeds are recognizable as smaller, wrinkled and puce seeds. Bars = 1 mm. (D) Nomarski bright-field microscopy of cleared seeds of the heterozygous *gr2* mutant siliques. Embryo development of wt seeds at the globular (1), heart (2), torpedo (3), walking-stick (4) and cotyledon (5) stages and homozygous *gr2* at the globular (6) stage. Bars = 100 μ m.

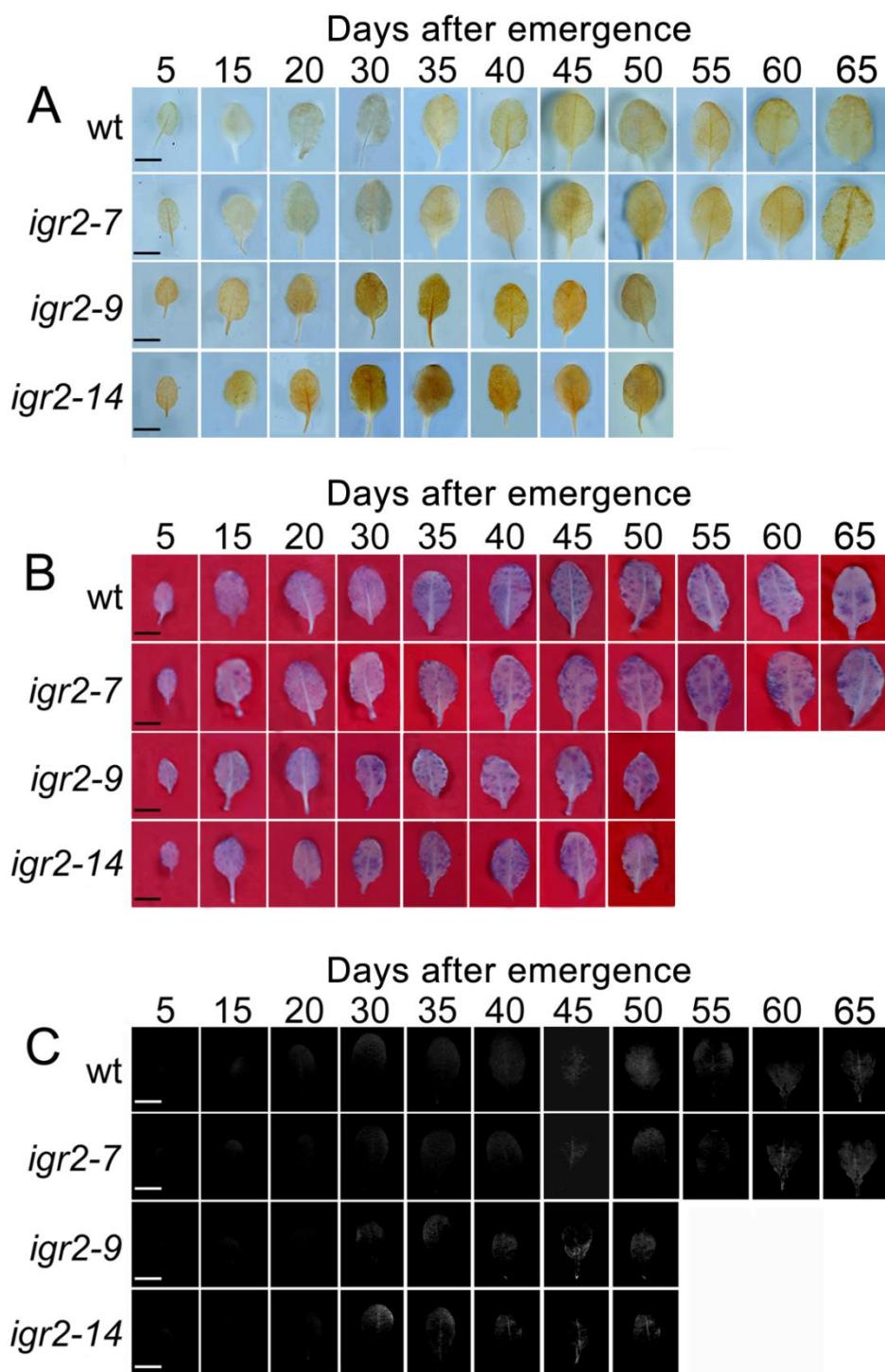


Figure S2. ROS levels in wild-type (wt) and *GR2* RNAi (*igr2-7*, *igr2-9*, and *igr2-14*) plants during leaf development. (A) H_2O_2 levels detected by DAB staining. (B) O_2^- levels detected by NBT staining. (C) $^1\text{O}_2$ levels detected by SOSG fluorescence imaging. The fourth rosette leaves from wt and transgenic plants grown in soil were harvested at the indicated time points for the experiments, and representative leaves were photographed. Bars = 5 mm.

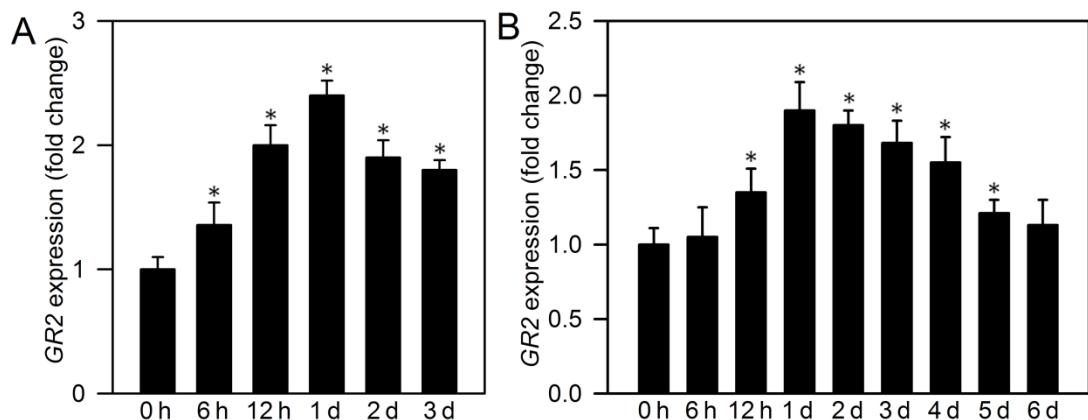
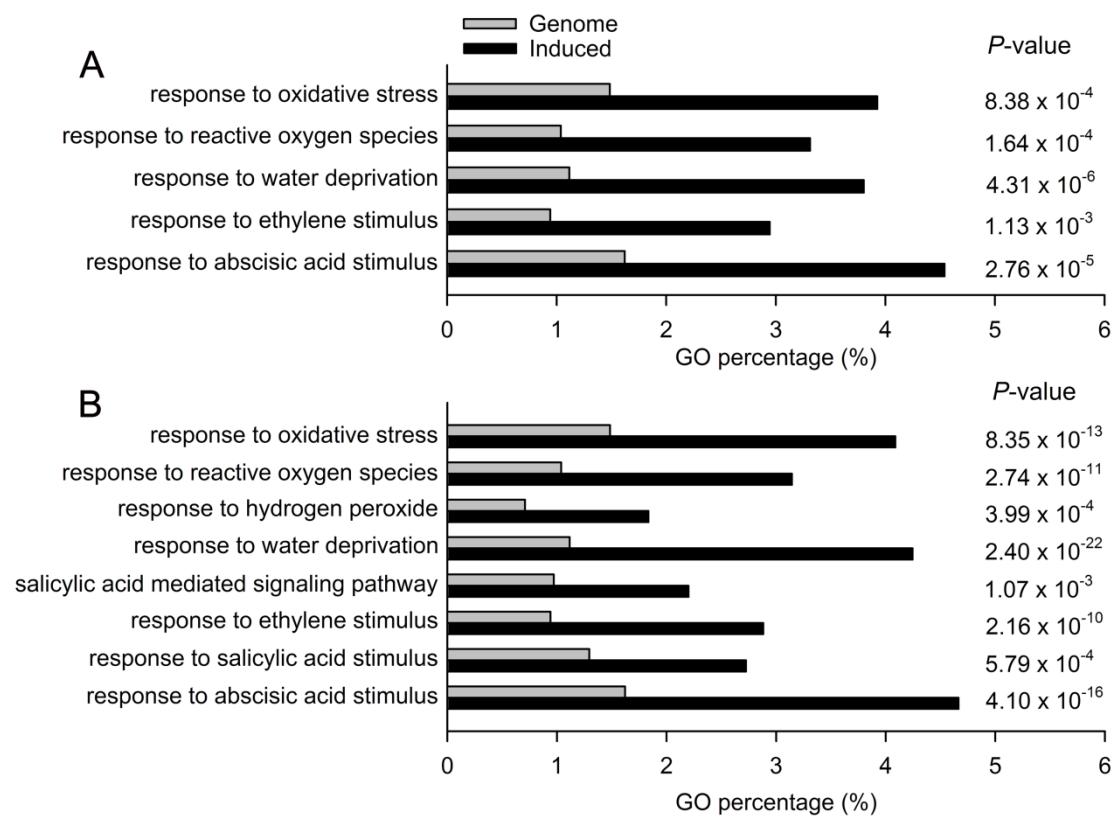
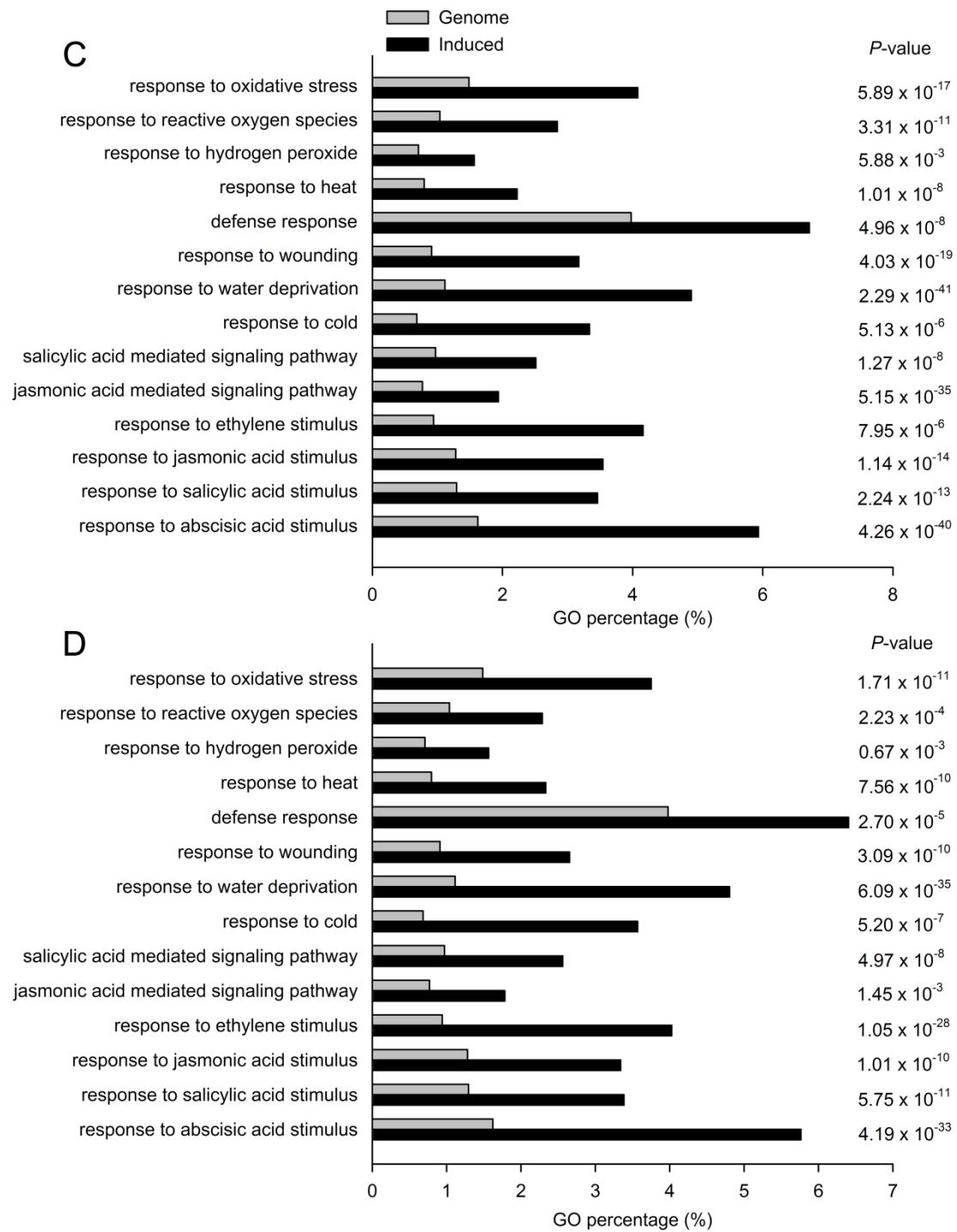


Figure S3. Expression of *GR2* is induced by elevated H₂O₂ levels and continuous darkness. Expression levels of *GR2* induced by 10 mM H₂O₂ (A) and darkness (B) were quantified by real-time PCR in detached leaves from 3-week-old seedlings of wild type plants. Samples of total RNA were prepared from leaves collected at the indicated time. Data were normalized to the expression of *ACTIN2* (At3g46520). Fold change at 0 h was set as 1. *P<0.01 versus wild type plants at 0 h. Data represent means ± SD (n=4).





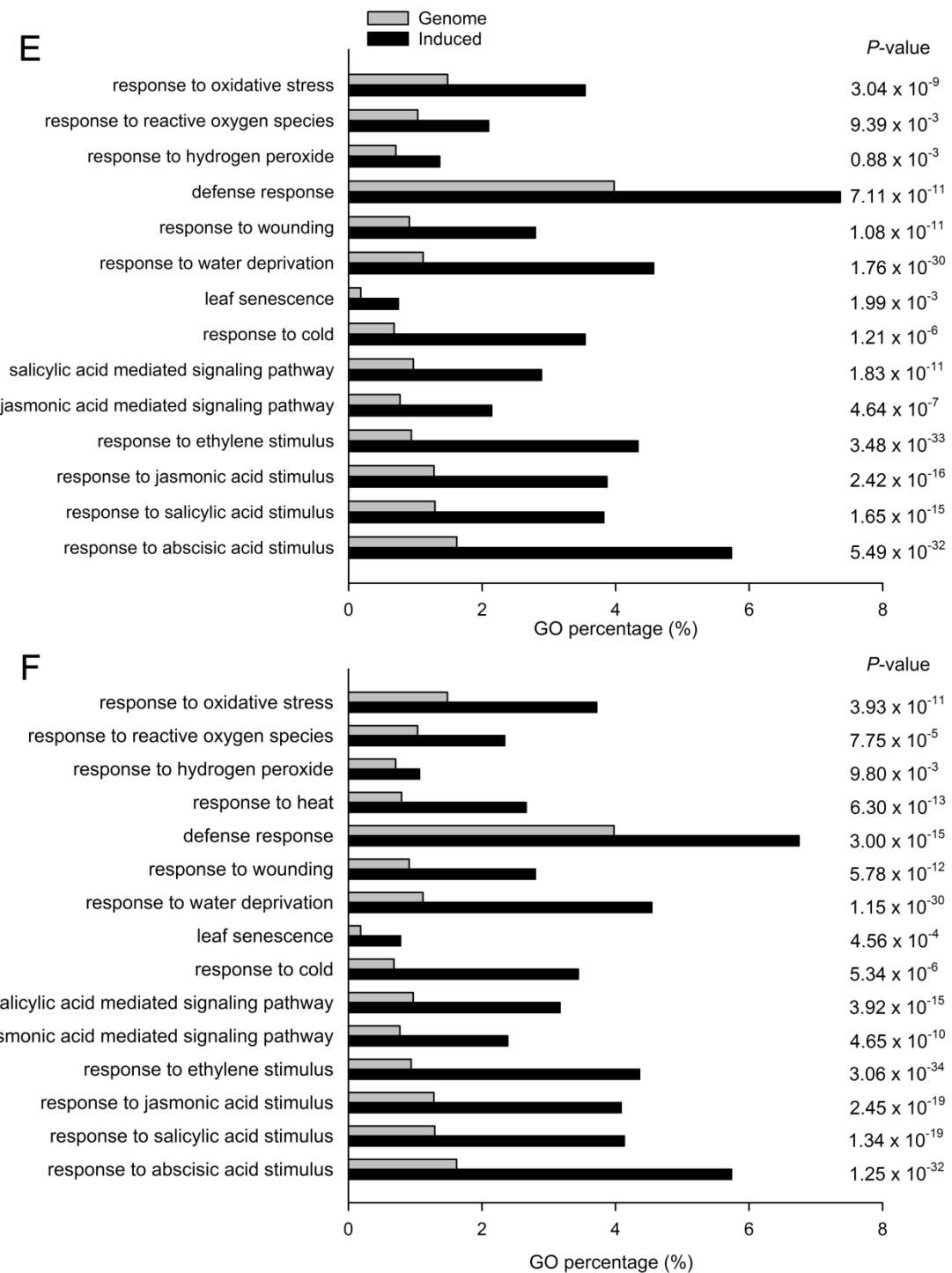


Figure S4. Analysis of genes up-regulated during the early stages of leaf development in *Arabidopsis* by specific GO terms. A, B, C, D, E, and F represent the leaf at 19, 21, 23, 25, 27, and 29 days after sowing. P-values in A-F were calculated by Fisher's test to compare the percentage distribution of GO annotation from genes induced during early stages of leaf development and the whole genome. Microarray data were from Breeze et al. (2011).

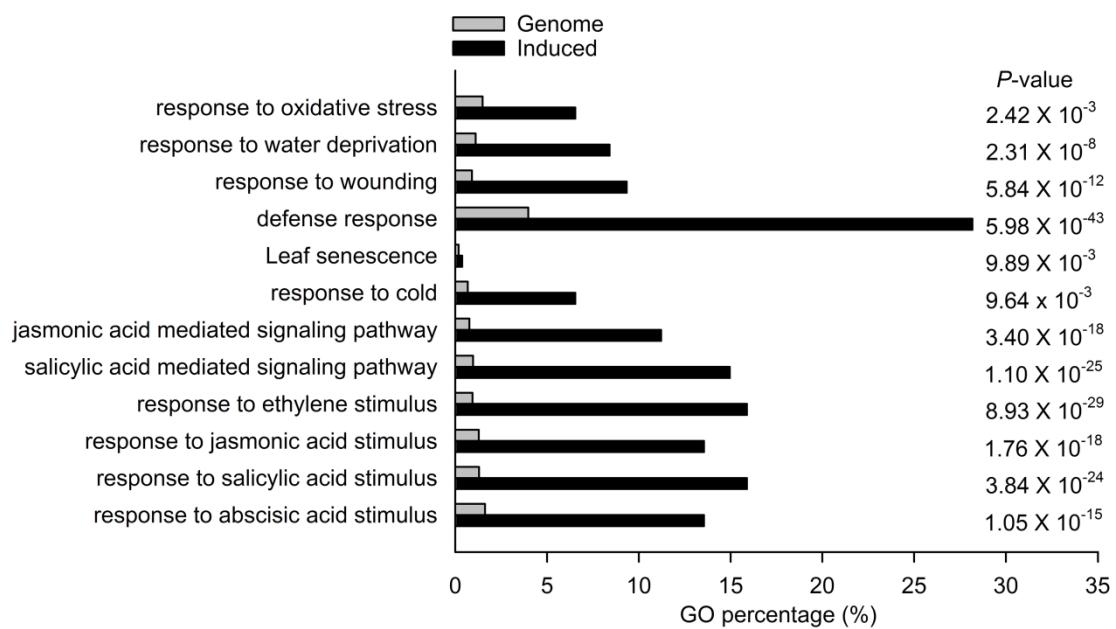


Figure S5. Analysis of genes specifically up-regulated after 8 h of H₂O₂ production in leaf chloroplasts in *Arabidopsis* overexpressing glycolate oxidase in the chloroplast under a 16 h light/8 h dark regime (Fahnenschich et al., 2008). *P*-values were calculated by Fisher's test to compare the percentage distribution of GO annotation from genes induced in *Arabidopsis* overexpressing glycolate oxidase in the chloroplast and the whole genome. Microarray data were from Sewelam et al. (2014).

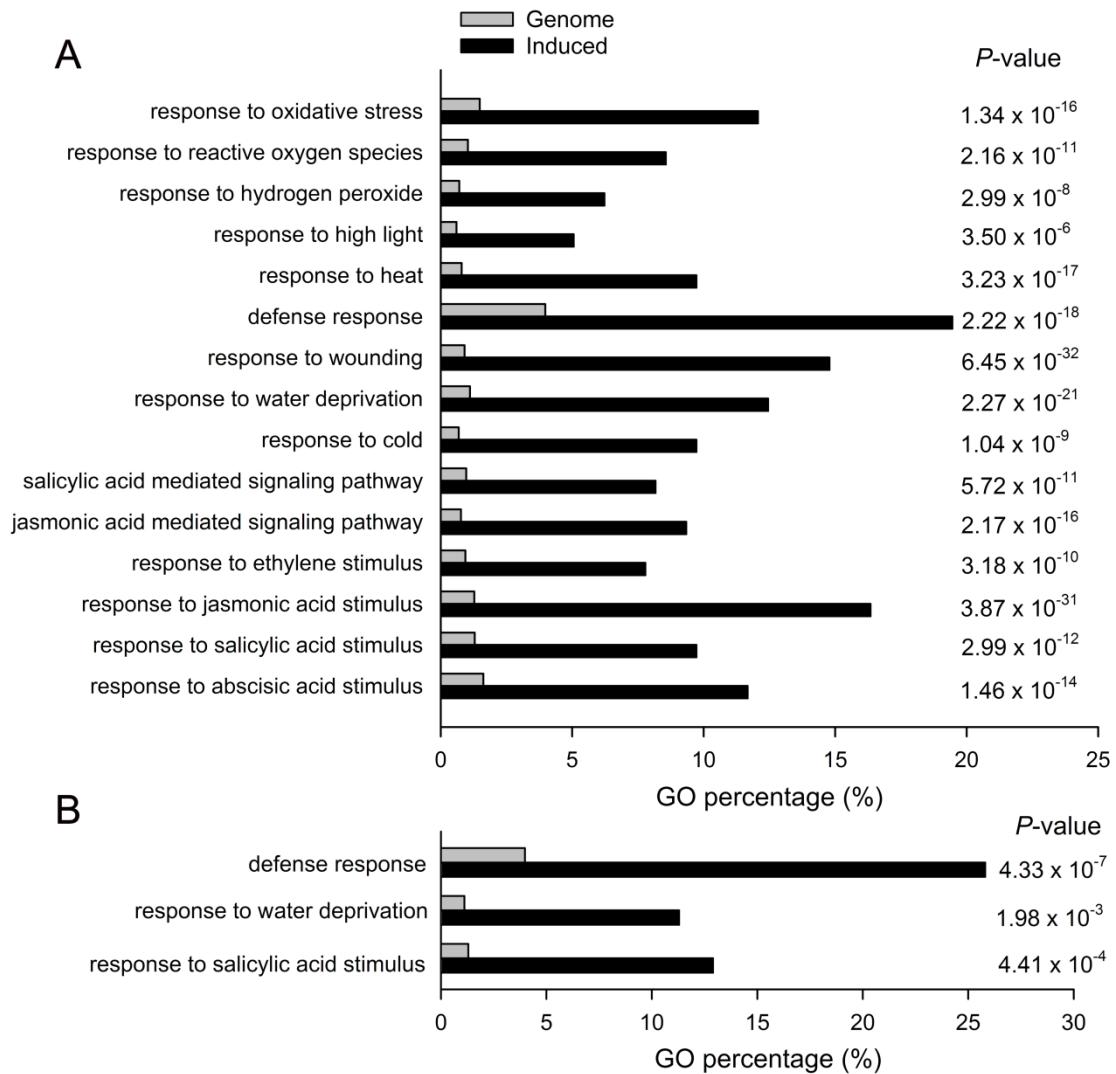


Figure S6. Analysis of genes up-regulated in *cat2* following induction of glutathione oxidation after transfer from high CO₂ to ambient air in 8 h (short days, A) and 16 h (long days, B). *P*-values were calculated by Fisher's test to compare the percentage distribution of GO annotation from genes in *cat2* induced after transfer from high CO₂ to air and the whole genome. Microarray data were from Mhamdi et al. (2010).

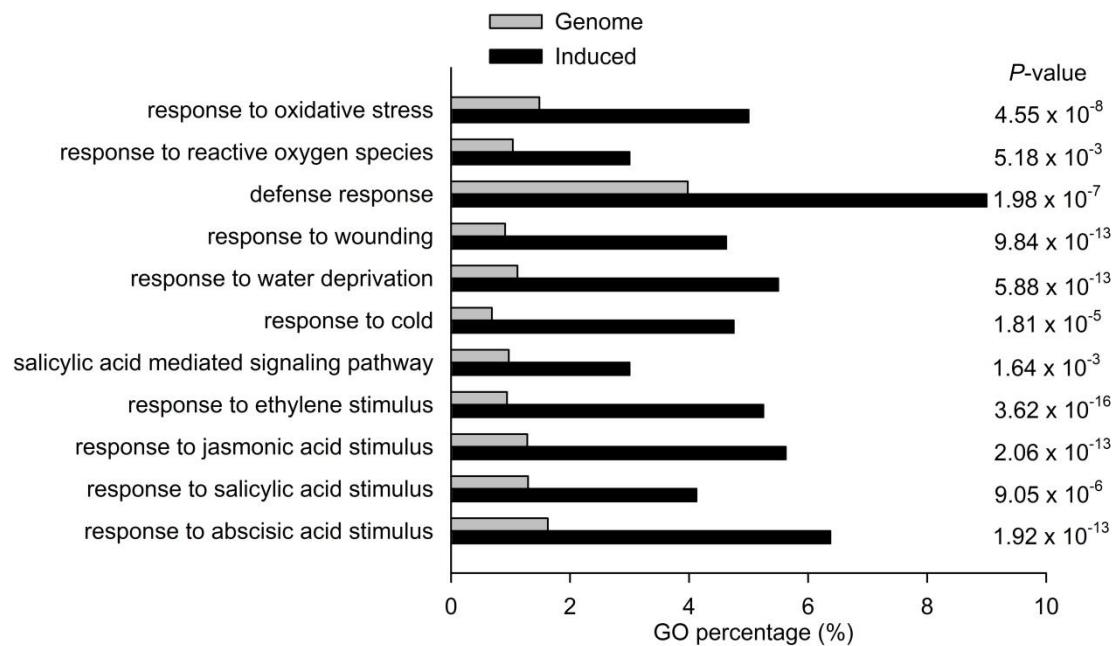


Figure S7. Analysis of genes up-regulated in shoots of the 7-day-old *rootmeristemless1-1* (*rml1-1*) mutant. *P*-values were calculated by Fisher's test to compare the percentage distribution of GO annotation from genes in *rml1-1* and the whole genome. Microarray data were from Schnaubelt et al. (2014).

Table S1. List of primers used in this study.

Primer name	Primer sequence from 5' to 3'
atgr2 primers- forward	ATACCATGGTCGTGGAGATGGCTTCGAC
atgr2 primers- reverse	AGAGGTCACCGCAACCTTCTACACCC
igr2 sense primers- forward	GCTTCTAGACATCTACCATCATCTTCTCCTCT
igr2 sense primers- reverse	AGTAAGCTCTGGAATGTCAGGAATGAAAGGAC
igr2 antisense primers- forward	GCTCTCGAGCATCTACCATCATCTTCTCCTCT
igr2 antisense primers- reverse	AGTGAATTCTGGAATGTCAGGAATGAAAGGAC
GR2LP	TGACCGAATCAATTGACTCC
GR2RP	TCAAACACCGTTATGGAGGAG
GR2pro1	GAATTGATGGATTTGTAGTATGTTGT
GR2pro2	GGATCC GAGGAATTGAAGAGATGGAGAAGATG
antiGR2- forward	TCGAAGCTTGCATTCTACCATCATC
antiGR2- reverse	ACACTCGAGATCGTAGTGGCGGTCTGATT
SAG12- forward	TATTACAGGTTATGAGGATGTC
SAG12- reverse	ACCACATAGTCCTGTTATCC
SAG13- forward	GAACCTCAAGATGGAGTCTGG
SAG13- reverse	ATTGTTGACGAGGATGTTGAG
ACT2- forward	TTGGGATGAACCAGAAGG
ACT2- reverse	AACCCTCGTAGATTGGCA
AT1G02930- forward	CAACCTTCTCTCAACTGGCA
AT1G02930- reverse	AGCAACCCAAGCACTCACA
AT1G03850- forward	AAACGGCTGCTACTGACAC
AT1G03850- reverse	GACTGAGAACGACGACCAT
AT1G76080- forward	TATGGTGGAACTGAGCAGG
AT1G76080- reverse	GCAGAGTGGTTGTCTCCGTA
AT2G03760- forward	CCGACATTATCCTCGTCAC
AT2G03760- reverse	GAGAAGGCCAACTGGAGAAA
AT2G14610- forward	CGCAGAACAACTAACAGAGGC
AT2G14610- reverse	CACATCCGAGTCTCACTGAC
AT3G09640- forward	TGATGTGAAGACGAAGACAGG
AT3G09640- reverse	TGAAATGGAATCTCTGGTCC
AT3G10500- forward	GTGTTCACCAAGATGCGTT
AT3G10500- reverse	CAAAGTAGCCACCAGAGTCC
AT3G23240- forward	AGTCCACGCAACAAACCT
AT3G23240- reverse	GGAGAACAAACCATCCTCGT
AT3G26830- forward	CGGAAACTTACACCAACGC
AT3G26830- reverse	ATCAGACTCCACTCGTCACC
AT4G12470- forward	TCAGTCCCAGTCCTAATCC
AT4G12470- reverse	CATAGACAAATCGCAGCG
AT4G23810- forward	CTTCTGCTAAACTGGTCATCC
AT4G23810- reverse	CTCTCTGGGCTTATTCTCA

AT4G35770- forward	GAGGAAAGCAACGACAACAA
AT4G35770- reverse	ACCGCTCTCACAAACCGATT
AT5G39610- forward	AAGATTGAGCCTGGGACT
AT5G39610- reverse	GCTGGTTCATTGGTTA
AT5G39580- forward	TGGTGTGTCCTCCCAA
AT5G39580- reverse	ATCGTGTGTCCTCCCAA
AT5G44420- forward	AAGTTGTGCGAGAACCCA
AT5G44420- reverse	GTGTGCTGGAAAGACATAGTT
AT5G46050- forward	GGATGGCTTATTACGGGAT
AT5G46050- reverse	TGGAACATTCTGGTGGCT
AT5G64930- forward	GTTCTTGCGACCAACT
AT5G64930- reverse	GTTGCTCGTGTGCTCT
AT3G57240- forward	GCAGTTGGACAAATCGGA
AT3G57240- reverse	CAGAGATGTAGCGAAATGTGAC
AT4G11890- forward	TCATTAGCAGAAGGAAGGCT
AT4G11890- reverse	GACCAGGAGATAAAGATGGC
AT2G13810- forward	TTGATAAGCCTGGGACTG
AT2G13810- reverse	CGTTGGAGCCTAACAGAGTAGC
AT2G44840- forward	ACTCTCCGTGATGCCGTTAG
AT2G44840- reverse	TCGTAAGTCCCAGGCCAAA
AT2G19190- forward	GCTGTTACGATGTTCCGAC
AT2G19190- reverse	GGAGTTCCCTGCGTTCTTATC
AT2G35980- forward	TCCCTTATTGTCATCCTCG
AT2G35980- reverse	GTGTGAGAACGGTTGTGTTT
AT5G26170- forward	GTGATGTTGCTGGTGCTTT
AT5G26170- reverse	CCATACTTCTCCACTGAACC
AT4G27410- forward	GGTAAGGCTTGTTGGAGA
AT4G27410- reverse	ACCCATTCTGCTATGCT
AT4G17490- forward	GTTGTCAGCAGAGGAGAAG
AT4G17490- reverse	TCTATGCCGTAAACCT
AT2G32020- forward	TCCAATCGGCTACATCTG
AT2G32020- reverse	CTTCCTCATCACACCTCTCA
AT3G63060- forward	CAGATTCTCCAAGACATCCG
AT3G63060- reverse	ACCTAACCTCTCCAGC
AT3G10320- forward	TCAGAACACACTCTCCTTCCT
AT3G10320- reverse	CAGCAATCACAAAGACAACC
AT5G12030- forward	CCCTGAAGAACAAACCGA
AT5G12030- reverse	GTCATTACAAGCCGAGAG
AT5G62480- forward	ACGGTAAACCCATCTCTGAG
AT5G62480- reverse	GGTCTCGTTCGTACAGTT
AT1G17170- forward	GCGAGTATGTTGGGATGA
AT1G17170- reverse	TTCTTGCTCCTCACCTTG

Table S2. Genes found to be significantly ($P<0.01$) up-regulated (≥ 2 , A) or down-regulated (≤ 2 , B) in *igr2-9* in a microarray analysis. Data were mean from three biological replicates.

A	Probe Name	Fold change	TAIR Locus	Description
1	A_84_P220938	2.33	AT1G02470	SRPBCC ligand-binding domain-containing protein
2	A_84_P812454	2.00	AT1G02930	glutathione transferase
3	A_84_P17031	2.72	AT1G03850	glutaredoxin (GRXS13)
4	A_84_P22747	3.32	AT1G04150	C2 domain-containing protein
5	A_84_P836118	4.63	AT1G04310	ethylene response sensor 2(ERS2)
6	A_84_P590571	2.16	AT1G04500	CCT motif-containing protein
7	A_84_P15370	2.74	AT1G04980	disulfide isomerase-like protein (PDI10)
8	A_84_P12333	3.59	AT1G05330	hypothetical protein
9	A_84_P19923	2.63	AT1G05680	UDP-glucosyltransferase (UGT74E2)
10	A_84_P829388	2.19	AT1G07150	mitogen-activated protein kinase kinase kinase 13 (MAPKKK13)
11	A_84_P15750	2.91	AT1G08100	nitrate transporter 2.2 (NRT2.2)
12	A_84_P264050	2.30	AT1G08310	esterase/lipase/thioesterase-like protein
13	A_84_P143569	2.09	AT1G08320	bZIP transcription factor-like protein
14	A_84_P19883	2.11	AT1G08650	phosphoenolpyruvate carboxylase kinase 1 (PPCK1)
15	A_84_P754066	3.85	AT1G09026	hypothetical protein
16	A_84_P593284	2.73	AT1G10455	B3 domain-containing protein
17	A_84_P541716	3.76	AT1G11690	hypothetical protein
18	A_84_P602209	7.63	AT1G12330	hypothetical protein
19	A_84_P12457	3.19	AT1G13420	sulfotransferase 4B (ST4B)
20	A_84_P788748	2.67	AT1G13470	hypothetical protein
21	A_84_P23721	3.33	AT1G14200	RING/U-box superfamily protein

21	A_84_P16226	2.00	AT1G14540	peroxidase superfamily protein
22	A_84_P814710	2.18	AT1G14870	cadmium resistance protein 2 (PCR2)
23	A_84_P145049	3.10	AT1G14880	cadmium resistance protein 1 (PCR1)
24	A_84_P12394	3.47	AT1G14960	major latex-related protein
25	A_84_P18989	2.43	AT1G16420	cysteine-type endopeptidase (MC8)
26	A_84_P612892	3.91	AT1G17665	hypothetical protein
27	A_84_P21746	3.19	AT1G17710	pyridoxal phosphate phosphatase-related protein
28	A_84_P811026	2.86	AT1G17860	Kunitz family trypsin and protease inhibitor protein
29	A_84_P20019	3.42	AT1G17960	threonyl-tRNA synthetase
30	A_84_P841708	3.37	AT1G18120	putative myrosinase-associated protein
31	A_84_P21916	2.56	AT1G19250	putative flavin-containing monooxygenase 1 (FMO1)
32	A_84_P13909	2.01	AT1G19320	pathogenesis-related thaumatin-like protein
33	A_84_P15258	2.10	AT1G20120	GDSL esterase/lipase
34	A_84_P16204	2.92	AT1G20150	subtilisin-like serine endopeptidase-like protein
35	A_84_P13406	2.39	AT1G20350	translocase inner membrane subunit 17-1 (TIM17-1)
36	A_84_P149248	2.13	AT1G21120	O-methyltransferase family protein
37	A_84_P240035	2.83	AT1G21230	wall-associated receptor kinase 5 (WAK5)
38	A_84_P751391	3.72	AT1G21525	unknown protein
39	A_84_P12797	4.14	AT1G21528	hypothetical protein
40	A_84_P788693	2.94	AT1G22090	hypothetical protein (emb2204)
41	A_84_P19085	3.35	AT1G22290	14-3-3 family protein
42	A_84_P750934	4.03	AT1G22580	similar to putative AP endonuclease/reverse transcriptase
43	A_84_P11369	4.02	AT1G23110	hypothetical protein
44	A_84_P10408	3.02	AT1G23520	hypothetical protein
45	A_84_P16078	3.47	AT1G23660	hypothetical protein

46	A_84_P12298	2.39	AT1G23760	putative polygalacturonase non-catalytic subunit (JP630)
47	A_84_P13739	2.31	AT1G24090	putative thiol-disulfide oxidoreductase (DCC)
48	A_84_P14205	2.47	AT1G24260	developmental protein SEPALLATA 3
49	A_84_P751750	2.97	AT1G24380	hypothetical protein
50	A_84_P561285	2.97	AT1G26140	hypothetical protein
51	A_84_P21874	2.32	AT1G27730	cys2/His2-type zinc-finger protein
52	A_84_P21874	3.55	AT1G27730	salt tolerance zinc finger (ZAT10)
53	A_84_P23823	2.76	AT1G28360	ERF domain protein 12 (ERF12)
54	A_84_P23740	3.38	AT1G28450	agamous-like 58 (AGL58)
55	A_84_P869545	2.91	AT1G29060	transport protein SFT1
56	A_84_P10688	2.53	AT1G30070	SGS domain-containing protein
57	A_84_P18030	2.39	AT1G30720	FAD-binding and BBE domain-containing protein
58	A_84_P14191	3.07	AT1G30920	F-box domain-containing protein
59	A_84_P753082	3.81	AT1G30972	plant thionin family protein
60	A_84_P583566	2.62	AT1G31600	RNA recognition motif-containing protein
61	A_84_P545286	3.42	AT1G33530	F-box protein
62	A_84_P525852	3.09	AT1G34910	unknown protein
63	A_84_P10558	2.91	AT1G36180	acetyl-CoA carboxylase 2 (ACC2)
64	A_84_P83359	2.68	AT1G36580	hypothetical protein
65	A_84_P737368	2.59	AT1G36622	hypothetical protein
66	A_84_P843338	4.41	AT1G36800	gypsy-like retrotransposon family protein
67	A_84_P20196	2.34	AT1G36950	RING/U-box domain-containing protein
68	A_84_P751597	5.36	AT1G40083	hypothetical protein
69	A_84_P604064	3.29	AT1G43630	hypothetical protein
70	A_84_P751942	4.20	AT1G43725	copia-like retrotransposon family protein

71	A_84_P552447	2.11	AT1G44414	unknown protein
72	A_84_P17122	3.30	AT1G44970	peroxidase 9
73	A_84_P797614	4.89	AT1G47565	retrotransposon gag protein
74	A_84_P20699	3.52	AT1G47730	putative F-box protein
75	A_84_P11283	3.50	AT1G47980	hypothetical protein
76	A_84_P16733	4.81	AT1G48130	1-Cys peroxiredoxin PER1 (PER1)
77	A_84_P752079	3.74	AT1G48700	oxidoreductase
78	A_84_P533868	2.27	AT1G49000	hypothetical protein
79	A_84_P584493	3.91	AT1G49770	transcription factor bHLH95 (RGE1)
80	A_84_P14059	2.77	AT1G50400	mitochondrial import receptor subunit TOM40
81	A_84_P16080	3.70	AT1G51290	putative F-box only protein 10
82	A_84_P22854	3.42	AT1G51790	leucine-rich repeat protein kinase-like protein
83	A_84_P10528	2.69	AT1G51800	putative leucine-rich repeat protein kinase
84	A_84_P21942	3.65	AT1G51850	leucine-rich repeat protein kinase family protein
85	A_84_P541841	2.32	AT1G51920	hypothetical protein
86	A_84_P575563	3.62	AT1G51970	hypothetical protein
87	A_84_P152118	3.74	AT1G52200	PLAC8 family protein
88	A_84_P115542	2.58	AT1G52940	purple acid phosphatase 5 (PAP5)
89	A_84_P11501	2.13	AT1G53680	glutathione transferase
90	A_84_P13294	2.94	AT1G54840	HSP20-like chaperones superfamily protein
91	A_84_P753944	3.71	AT1G55045	hypothetical protein
92	A_84_P13412	2.69	AT1G55410	CHP-rich zinc finger protein
93	A_84_P21748	2.65	AT1G55720	cation exchanger 6 (CAX6)
94	A_84_P750600	3.70	AT1G56480	pectinesterase
95	A_84_P544532	2.11	AT1G58225	hypothetical protein

96	A_84_P16267	2.72	AT1G58430	GDSL esterase/lipase (RXF26)
97	A_84_P148918	2.78	AT1G60830	RNA recognition motif-containing protein
98	A_84_P22723	3.57	AT1G61320	FBD-associated F-box protein
99	A_84_P754772	2.34	AT1G61415	hypothetical protein
100	A_84_P20982	2.84	AT1G61950	calcium-dependent protein kinase 19 (CPK19)
101	A_84_P22871	3.79	AT1G62170	putative non-inhibitory serpin-Z5
102	A_84_P844414	3.06	AT1G62340	PA-domain containing subtilase-like protein (ALE1)
103	A_84_P24111	2.97	AT1G62940	4-coumarate--CoA ligase-like 1 (ACOS5)
104	A_84_P196104	4.54	AT1G64560	pseudogene of S-adenosylmethionine-dependent methyltransferase
105	A_84_P11420	2.94	AT1G64920	UDP-glycosyltransferase-like protein
106	A_84_P610339	2.23	AT1G65040	homologs of the yeast/human Hrd1 protein (HRD1B)
107	A_84_P169033	2.30	AT1G65970	peroxiredoxin-2C (TPX2)
108	A_84_P16867	4.26	AT1G66210	subtilisin-like serine endopeptidase family protein
109	A_84_P16122	2.00	AT1G66290	putative F-box/FBD/LRR-repeat protein
110	A_84_P163133	2.15	AT1G67600	acid phosphatase/vanadium-dependent haloperoxidase-related protein
111	A_84_P17165	3.19	AT1G67990	putative caffeoyl-CoA O-methyltransferase (TSM1)
112	A_84_P22829	2.76	AT1G68290	endonuclease 2 (ENDO 2)
113	A_84_P14181	2.37	AT1G69120	floral homeotic protein APETALA 1 (AP1)
114	A_84_P11456	2.08	AT1G69710	regulator of chromosome condensation and FYVE zinc finger domain-containing protein
115	A_84_P577399	4.06	AT1G69940	pectinesterase PPME1 (PPME1)
116	A_84_P539253	2.88	AT1G70440	SRO3-like protein (SRO3)
117	A_84_P752131	2.76	AT1G71280	DEAD-box ATP-dependent RNA helicase 55
118	A_84_P11333	3.59	AT1G71530	protein kinase domain-containing protein
119	A_84_P843906	2.63	AT1G72060	serine-type endopeptidase inhibitor
120	A_84_P10509	2.17	AT1G72330	alanine aminotransferase 2 (ALAAT2)

121	A_84_P20004	2.14	AT1G72660	P-loop containing nucleoside triphosphate hydrolases superfamily protein
122	A_84_P869312	2.70	AT1G73010	phosphate starvation-induced protein 2 (PS2)
123	A_84_P22839	2.12	AT1G73260	trypsin inhibitor
124	A_84_P10231	2.34	AT1G73560	bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein
125	A_84_P19071	2.79	AT1G75290	a protein similar to an isoflavone reductase
126	A_84_P20902	3.64	AT1G76080	thioredoxin (CDSP32)
127	A_84_P752743	3.61	AT1G77093	defensin-like protein 281
128	A_84_P242975	2.22	AT1G78410	VQ motif-containing protein
129	A_84_P576539	2.58	AT1G80540	hypothetical protein
130	A_84_P854475	2.09	AT2G01010	18SrRNA
131	A_84_P757455	2.24	AT2G01905	cyclin J18 (CYCJ18)
132	A_84_P774108	2.70	AT2G02270	F-box protein
133	A_84_P15330	3.47	AT2G03130	large subunit ribosomal protein L7/L12
134	A_84_P858027	2.63	AT2G03760	flavonol sulfotransferase-like protein (SOT12)
135	A_84_P600633	2.68	AT2G04050	MATE efflux family protein
136	A_84_P756195	3.55	AT2G04070	MATE efflux family protein
137	A_84_P840778	2.75	AT2G05950	unknown protein
138	A_84_P837285	3.85	AT2G06190	gypsy-like retrotransposon family protein
139	A_84_P756144	3.48	AT2G06296	hypothetical protein
140	A_84_P756260	2.85	AT2G06570	hypothetical protein
141	A_84_P155875	4.10	AT2G10965	hypothetical protein
142	A_84_P13475	3.86	AT2G11810	monogalactosyldiacylglycerol synthase 3 (MGDC)
143	A_84_P754947	2.72	AT2G12730	mutator-like transposase family protein
144	A_84_P15434	5.15	AT2G13620	cation/H(+) antiporter 15 (CHX15)
145	A_84_P23968	2.66	AT2G13810	AGD2-like defense response protein 1 (ALD1)

146	A_84_P755036	2.73	AT2G13890	zinc knuckle (CCHC type) protein family
147	A_84_P518024	2.81	AT2G14000	retrotransposon ORF-1 protein
148	A_84_P17268	2.97	AT2G14610	pathogenesis-related protein 1 (PR1)
149	A_84_P755577	3.98	AT2G15460	glycoside hydrolase family 28 protein / polygalacturonase (pectinase) family protein
150	A_84_P755542	2.30	AT2G15470	polygalacturonase-like protein
151	A_84_P538425	2.84	AT2G15710	TRAF-like family protein
152	A_84_P116392	3.91	AT2G15910	CSL zinc finger domain-containing protein
153	A_84_P788534	3.36	AT2G16210	B3 domain-containing protein
154	A_84_P511815	5.28	AT2G18193	P-loop containing nucleoside triphosphate hydrolase-like protein
155	A_84_P23905	2.75	AT2G19070	spermidine hydroxycinnamoyl transferase (SHT)
156	A_84_P14446	2.72	AT2G19190	senescence-induced receptor-like serine/threonine-protein kinase (FRK1)
157	A_84_P794967	2.54	AT2G19590	aminocyclopropanecarboxylate oxidase (ACO1)
158	A_84_P12526	4.79	AT2G20510	translocase inner membrane subunit 44-1 (TIM44-1)
159	A_84_P13464	4.73	AT2G20800	NAD(P)H dehydrogenase B4 (NDB4)
160	A_84_P10627	3.04	AT2G20880	ethylene-responsive transcription factor ERF053
161	A_84_P295894	3.75	AT2G20940	unknown function
162	A_84_P788434	3.35	AT2G21640	hypothetical protein
163	A_84_P832975	4.66	AT2G23880	non-LTR retrotransposon family protein
164	A_84_P793391	4.28	AT2G24420	ATPase-related DNA repair protein
165	A_84_P862159	2.90	AT2G24850	tyrosine aminotransferase 3 (TAT3)
166	A_84_P18293	2.74	AT2G25470	receptor like protein 21 (RLP21)
167	A_84_P611946	2.27	AT2G26160	putative F-box protein
168	A_84_P503876	2.10	AT2G27660	cysteine/histidine-rich C1 domain-containing protein
169	A_84_P503880	3.99	AT2G28820	plant U-box 24 protein (PUB12)
170	A_84_P796854	2.91	AT2G29950	protein ELF4-like 1 (ELF4-L1)

171	A_84_P822530	2.15	AT2G30360	CBL-interacting serine/threonine-protein kinase 11 (SIP4)
172	A_84_P788262	2.12	AT2G30480	unknown protein
173	A_84_P600694	2.65	AT2G30900	trichome birefringence-like 43 protein (TBL43)
174	A_84_P99106	2.25	AT2G31081	protein CLAVATA3/ESR-related 4 (CLE4)
175	A_84_P790237	2.62	AT2G31083	protein CLAVATA3/ESR-related 5 (CLE5)
176	A_84_P21126	3.53	AT2G32020	GCN5-related N-acetyltransferase-like protein
177	A_84_P20115	3.38	AT2G32780	ubiquitin carboxyl-terminal hydrolase 1 (UBP1)
178	A_84_P573078	3.04	AT2G32890	protein ralf-like 17 (RALFL17)
179	A_84_P17235	2.46	AT2G34080	cysteine proteinase-like protein
180	A_84_P23919	2.32	AT2G35980	late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)
181	A_84_P757419	4.75	AT2G36255	putative defensin-like protein 203
182	A_84_P793801	2.41	AT2G36390	1,4-alpha-glucan branching enzyme (SBE2.1)
183	A_84_P539391	3.73	AT2G37370	hypothetical protein
184	A_84_P14480	2.35	AT2G38250	DNA-binding protein
185	A_84_P10708	4.23	AT2G38340	dehydration-responsive element-binding protein 2E
186	A_84_P606057	2.48	AT2G38350	hypothetical protein
187	A_84_P836887	2.82	AT2G39200	MLO-like protein 12 (MLO12)
188	A_84_P868076	2.36	AT2G39518	UPF0497 membrane protein
189	A_84_P19148	4.28	AT2G40210	protein agamous-like 48 (AGL48)
190	A_84_P174151	2.19	AT2G40330	abscisic acid receptor PYL6 (PYL6)
191	A_84_P179004	3.71	AT2G40470	LOB domain-containing protein 15 (LBD15)
192	A_84_P816205	4.34	AT2G40940	ethylene response sensor 1 (ERS1)
193	A_84_P21103	2.43	AT2G41480	peroxidase superfamily protein
194	A_84_P154655	3.51	AT2G41730	hypothetical protein
195	A_84_P525206	4.77	AT2G42820	HVA22-like protein f (HVA22F)

196	A_84_P819816	2.35	AT2G43018	hypothetical protein (CPuORF17)
197	A_84_P15331	3.13	AT2G43620	chitinase-like protein
198	A_84_P796962	2.99	AT2G44000	late embryogenesis abundant hydroxyproline-rich glycoprotein
199	A_84_P824802	3.66	AT2G44370	cysteine/histidine-rich C1 domain-containing protein
200	A_84_P832916	2.57	AT2G44380	cysteine/histidine-rich C1 domain-containing protein
201	A_84_P112142	2.06	AT2G44420	protein N-terminal asparagine amidohydrolase family protein
202	A_84_P17343	2.21	AT2G44840	ethylene-responsive transcription factor 13 (ERF13)
203	A_84_P557122	3.47	AT2G45130	SPX domain-containing protein 3 (SPX3)
204	A_84_P550912	3.58	AT2G45135	RING/U-box superfamily protein
205	A_84_P830119	2.12	AT2G46240	Bcl-2-associated athanogene protein (BAG6)
206	A_84_P602531	4.53	AT2G46880	purple acid phosphatase 14 (PAP14)
207	A_84_P17348	3.25	AT2G47000	ABC transporter B family member 4 (ABCB4)
208	A_84_P23846	2.70	AT2G47180	galactinol synthase (GOLS1)
209	A_84_P23870	2.39	AT2G47520	ethylene-responsive transcription factor ERF071 (HRE2)
210	A_84_P19142	4.04	AT2G47750	putative indole-3-acetic acid-amido synthetase GH3.9 (GH3.9)
211	A_84_P796180	2.91	AT2G48010	putative LRR receptor-like serine/threonine-protein kinase RKF3 (RKF3)
212	A_84_P601268	3.58	AT3G01600	NAC domain containing protein 44 (NAC044)
213	A_84_P610533	2.34	AT3G02030	transferase
214	A_84_P856982	2.64	AT3G02040	senescence-related protein (SRG3)
215	A_84_P598098	2.80	AT3G03270	adenine nucleotide alpha hydrolases-like protein
216	A_84_P820770	2.90	AT3G03990	alpha/beta-hydrolase domain-containing protein
217	A_84_P809277	2.54	AT3G04120	cytosolic GADPH C subunit (GAPC1)
218	A_84_P608372	3.75	AT3G04410	no apical meristem-domain containing transcriptional regulator
219	A_84_P18331	3.32	AT3G04530	phosphoenolpyruvate carboxylase kinase 2 (PPCK2)
220	A_84_P19266	3.56	AT3G04690	receptor-like protein kinase ANXUR1 (ANX1)

221	A_84_P23982	3.49	AT3G04800	translocase inner membrane subunit 23-3 (TIM23-3)
222	A_84_P20190	2.00	AT3G05180	GDSL esterase/lipase
223	A_84_P832164	2.19	AT3G05750	hypothetical protein
224	A_84_P22108	2.34	AT3G05790	lon protease 4 (LON4)
225	A_84_P188714	4.01	AT3G06390	hypothetical protein
226	A_84_P793078	2.94	AT3G06455	ubiquitin family protein
227	A_84_P21146	3.30	AT3G07450	protease inhibitor/seed storage/lipid transfer protein (LTP) family protein
228	A_84_P17379	2.98	AT3G09640	L-ascorbate peroxidase (APX2)
229	A_84_P587419	4.28	AT3G09922	induced by phosphate starvation1 (IPS1)
230	A_84_P280890	2.20	AT3G10320	glycosyltransferase family 61 protein
231	A_84_P297294	2.52	AT3G10500	NAC domain containing protein 53 (NAC053)
232	A_84_P12726	2.94	AT3G11020	dehydration-responsive element-binding protein 2B (DREB2B)
233	A_84_P74014	4.89	AT3G11340	UDP-glycosyltransferase-like protein
234	A_84_P547432	2.95	AT3G11920	glutaredoxin-related protein
235	A_84_P849770	2.59	AT3G13110	serine acetyltransferase 3 (SERAT2)
236	A_84_P793924	3.81	AT3G14310	pectinesterase 3 (PME3)
237	A_84_P515522	4.92	AT3G14395	hypothetical protein
238	A_84_P18370	3.17	AT3G14490	terpene cyclase, C1 domain-containing protein
239	A_84_P11721	2.00	AT3G15500	NAC domain-containing protein 55 (NAC3)
240	A_84_P762419	2.84	AT3G15518	hypothetical protein
241	A_84_P571397	2.27	AT3G15930	pentatricopeptide repeat-containing protein
242	A_84_P18342	2.83	AT3G16050	pyridocine biosynthesis 1.2 (PDX1.2)
243	A_84_P21184	2.43	AT3G17790	expression is upregulated in the shoot of cax1/cax3 mutant (PAP17)
244	A_84_P855891	3.31	AT3G18240	ribosomal protein S24/S35
245	A_84_P183584	3.27	AT3G18740	60S ribosomal protein L30-3

246	A_84_P17407	2.93	AT3G19430	late embryogenesis abundant protein-like protein
247	A_84_P11767	3.22	AT3G21050	copia-like retrotransposon family protein
248	A_84_P758751	3.11	AT3G22000	cysteine-rich repeat secretory protein 30
249	A_84_P580314	2.97	AT3G22235	hypothetical protein
250	A_84_P17416	2.03	AT3G23010	receptor like protein 36 (RLP36)
251	A_84_P761143	3.5	AT3G23165	putative defensin-like protein 187 (LCR42)
252	A_84_P21194	3.77	AT3G23240	ethylene response factor 1 (ERF1)
253	A_84_P762442	2.97	AT3G23326	unknown protein
254	A_84_P508448	2.38	AT3G23870	hypothetical protein
255	A_84_P13631	3.42	AT3G25190	nodulin-like protein 21
256	A_84_P17413	2.28	AT3G25230	FK506 binding protein (FKBP62)
257	A_84_P791120	4.01	AT3G25240	hypothetical protein
258	A_84_P18359	2.31	AT3G25250	serine/threonine-protein kinase OXI1 (AGC2-1)
259	A_84_P15531	2.16	AT3G26500	plant intracellular ras group-related LRR 2 (PIRL2)
260	A_84_P851910	3.12	AT3G26510	octicosapeptide/Phox/Bem1p domain-containing protein
261	A_84_P13615	3.07	AT3G26820	esterase/lipase/thioesterase family protein
262	A_84_P14560	2.25	AT3G26830	cytochrome P450 71B15 (PAD3)
263	A_84_P604401	2.21	AT3G27630	hypothetical protein
264	A_84_P22181	2.01	AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)
265	A_84_P12725	4.39	AT3G28510	AAA-type ATPase family protein
266	A_84_P582125	2.52	AT3G28570	AAA-type ATPase family protein
267	A_84_P84999	3.02	AT3G28580	AAA-type ATPase family protein
268	A_84_P22146	4.14	AT3G29250	rosmann-fold NAD(P)-binding domain-containing protein
269	A_84_P506690	2.66	AT3G29265	similar to zinc knuckle (CCHC-type) family protein
270	A_84_P574116	3.04	AT3G29610	unknown protein

271	A_84_P842786	3.04	AT3G29634	unknown protein
272	A_84_P759506	4.01	AT3G30746	CACTA-like transposase family protein
273	A_84_P758996	3.05	AT3G32360	non-LTR retrotransposon family protein
274	A_84_P762591	2.81	AT3G42047	unknown protein
275	A_84_P760582	2.87	AT3G42220	CACTA-like transposase family protein
276	A_84_P759333	2.95	AT3G42320	unknown protein
277	A_84_P573240	3.12	AT3G43110	hypothetical protein
278	A_84_P761085	3.86	AT3G43833	hypothetical protein
279	A_84_P790714	2.90	AT3G44510	alpha/beta-hydrolases family protein
280	A_84_P16522	3.12	AT3G45640	mitogen-activated protein kinase 3 (MPK3)
281	A_84_P840283	2.17	AT3G46250	similar to leaf senescence-associated receptor-like protein kinase
282	A_84_P11802	2.47	AT3G46690	UDP-glycosyltransferase-like protein
283	A_84_P810552	3.70	AT3G48360	BTB and TAZ domain protein 2 (BT2)
284	A_84_P569671	2.00	AT3G48640	hypothetical protein
285	A_84_P15590	3.28	AT3G48850	phosphate transporter 3;2 (PHT3;2)
286	A_84_P533343	2.68	AT3G49307	hypothetical protein
287	A_84_P20325	4.53	AT3G50060	MYB domain protein 77 (MYB77)
288	A_84_P591083	4.67	AT3G51410	hypothetical protein
289	A_84_P10877	5.01	AT3G51590	non-specific lipid-transfer protein 12 (LTP12)
290	A_84_P23171	2.12	AT3G51910	heat stress transcription factor
291	A_84_P24129	3.32	AT3G54340	floral homeotic protein APETALA 3 (AP3)
292	A_84_P717824	2.43	AT3G54925	self-incompatibility S1 family protein
293	A_84_P760665	2.42	AT3G55310	rosmann-fold NAD(P)-binding domain-containing protein
294	A_84_P760391	2.24	AT3G55650	pyruvate kinase
295	A_84_P797685	2.05	AT3G55950	putative serine/threonine-protein kinase-like protein CCR3 (CCR3)

296	A_84_P19408	4.96	AT3G56280	kinase family protein
297	A_84_P13736	2.72	AT3G56540	putative serine carboxypeptidase-like 53
298	A_84_P15628	4.58	AT3G57240	beta-1,3-glucanase 3 (BG3)
299	A_84_P608003	4.74	AT3G58150	optic atrophy 3 protein (OPA3)
300	A_84_P832328	3.03	AT3G58590	pentatricopeptide repeat-containing protein
301	A_84_P760632	2.81	AT3G59930	defensin-like protein 206
302	A_84_P761115	5.19	AT3G60966	protein binding / zinc ion binding protein
303	A_84_P557300	3.63	AT3G62380	hypothetical protein
304	A_84_P778821	3.85	AT3G62770	protein required for autophagosome formation during nutrient deprivation and senescence
305	A_84_P786422	2.03	AT3G63060	F-box protein (EDL3)
306	A_84_P787728	4.13	AT4G01350	cysteine/histidine-rich C1 domain-containing protein
307	A_84_P13773	2.65	AT4G01830	ABC transporter B family member 5 (PGP5)
308	A_84_P868011	2.23	AT4G02380	late embryogenesis abundant like protein (SAG21)
309	A_84_P24179	2.29	AT4G02390	poly [ADP-ribose] polymerase 2 (PP)
310	A_84_P16615	2.25	AT4G03320	translocon at the inner envelope membrane of chloroplasts 20-IV (Tic20-IV)
311	A_84_P506777	3.69	AT4G03360	ubiquitin family protein
312	A_84_P529840	4.07	AT4G04480	hypothetical protein
313	A_84_P10002	2.13	AT4G04810	methionine sulfoxide reductase B 4 (MSRB4)
314	A_84_P16622	5.08	AT4G05380	AAA-type ATPase family protein
315	A_84_P763795	2.13	AT4G05616	unknown protein
316	A_84_P764232	2.86	AT4G08136	similar to purple acid phosphatase
317	A_84_P598283	4.53	AT4G08730	RNA-binding protein
318	A_84_P15681	3.65	AT4G08970	mutator-like transposase family protein
319	A_84_P12851	2.12	AT4G10500	oxidoreductase, 2OG-Fe(II) oxygenase family protein
320	A_84_P55910	3.26	AT4G11070	putative WRKY transcription factor 41 (WRKY41)

321	A_84_P15691	2.11	AT4G11460	putative cysteine-rich receptor-like protein kinase 30 (CRK30)
322	A_84_P827314	2.07	AT4G11890	protein kinase family protein
323	A_84_P20423	2.04	AT4G12090	cornichon family protein
324	A_84_P784501	3.08	AT4G12350	myb domain protein 42 (MYB42)
325	A_84_P826776	3.32	AT4G12400	carboxylate clamp-tetratricopeptide repeat proteins
326	A_84_P18533	2.62	AT4G12470	azelaic acid induced 1 (AZI1)
327	A_84_P505907	4.35	AT4G12735	hypothetical protein
328	A_84_P19482	4.93	AT4G13300	terpenoid synthase 13 (TPS13)
329	A_84_P16645	3.23	AT4G13480	myb domain protein 79 (MYB79)
330	A_84_P595614	2.40	AT4G14390	ankyrin repeat-containing protein
331	A_84_P243495	4.21	AT4G15660	monothiol glutaredoxin-S8
332	A_84_P53340	3.80	AT4G15670	monothiol glutaredoxin-S7
333	A_84_P127561	3.28	AT4G15680	monothiol glutaredoxin-S4
334	A_84_P178304	3.27	AT4G15690	monothiol glutaredoxin-S5
335	A_84_P278800	2.94	AT4G15700	monothiol glutaredoxin-S3
336	A_84_P791730	4.19	AT4G16230	carboxylesterase/ hydrolase
337	A_84_P18639	2.84	AT4G16270	peroxidase 40
338	A_84_P290684	2.54	AT4G17490	ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF6)
339	A_84_P763867	3.00	AT4G17587	hAT-like transposase family protein
340	A_84_P14860	3.49	AT4G17690	peroxidase 41
341	A_84_P572459	2.71	AT4G18335	hypothetical protein
342	A_84_P22325	2.08	AT4G18450	ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF)
343	A_84_P587613	3.28	AT4G18540	hypothetical protein
344	A_84_P226889	4.39	AT4G20000	VQ motif-containing protein
345	A_84_P529887	3.64	AT4G20190	hypothetical protein

346	A_84_P11935	4.90	AT4G21490	NADH dehydrogenase (NDB3)
347	A_84_P12882	2.27	AT4G22020	hypothetical protein
348	A_84_P15720	2.14	AT4G22620	SAUR-like auxin-responsive protein
349	A_84_P764039	2.57	AT4G22960	hypothetical protein
350	A_84_P188254	2.13	AT4G23140	cysteine-rich receptor-like protein kinase 6 (CRK6)
351	A_84_P13831	2.08	AT4G23150	cysteine-rich receptor-like protein kinase 7 (CRK7)
352	A_84_P556490	2.00	AT4G23493	unknown protein
353	A_84_P763290	2.27	AT4G23810	putative WRKY transcription factor 53 (WRKY53)
354	A_84_P10055	2.71	AT4G24240	Ca-dependent calmodulin binding protein (WRKY7)
355	A_84_P513046	2.22	AT4G25110	metacaspase 2 (MC2)
356	A_84_P13841	2.43	AT4G25380	stress-associated protein 10 (SAP10)
357	A_84_P263290	4.14	AT4G25400	transcription factor bHLH118
358	A_84_P575144	2.37	AT4G25510	hypothetical protein
359	A_84_P15733	3.96	AT4G25590	actin depolymerizing factor 7 (ADF7)
360	A_84_P510398	2.91	AT4G25930	hypothetical protein
361	A_84_P860589	2.34	AT4G26700	fimbrin 1 (FIM1)
362	A_84_P11959	2.68	AT4G26930	myb domain protein 97 (MYB97)
363	A_84_P11961	2.33	AT4G27410	NAC domain-containing protein 72 (RD26)
364	A_84_P860489	3.11	AT4G27440	protochlorophyllide oxidoreductase B (PORB)
365	A_84_P599242	2.61	AT4G28395	bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein (A7)
366	A_84_P837229	2.21	AT4G28790	transcription factor bHLH23
367	A_84_P135955	4.14	AT4G29980	hypothetical protein
368	A_84_P12918	3.16	AT4G30120	cadmium/zinc-transporting ATPase 4 (HMA3)
369	A_84_P11034	3.08	AT4G31370	FASCICLIN-like arabinogalactan protein 5 precursor (FLA5)
370	A_84_P55550	2.61	AT4G32280	auxin-responsive protein IAA29 (IAA29)

371	A_84_P11987	3.21	AT4G33420	peroxidase superfamily protein
372	A_84_P11046	3.11	AT4G34410	redox responsive transcription factor 1 (RRTF1)
373	A_84_P826278	2.55	AT4G34520	3-ketoacyl-CoA synthase 18 (KCS18)
374	A_84_P13883	2.71	AT4G34850	chalcone and stilbene synthase family protein (LAP5)
375	A_84_P12940	2.71	AT4G35180	LYS/HIS transporter 7 (LHT7)
376	A_84_P613474	2.92	AT4G35210	hypothetical protein
377	A_84_P612444	2.12	AT4G35770	senescence 1 (SEN1)
378	A_84_P14864	3.67	AT4G37260	MYB domain protein 73 (MYB73)
379	A_84_P12956	2.90	AT4G39830	putative L-ascorbate oxidase
380	A_84_P13921	2.56	AT5G01330	pyruvate decarboxylase-3 (PDC3)
381	A_84_P22436	2.45	AT5G01900	putative WRKY transcription factor 62 (WRKY62)
382	A_84_P793290	2.61	AT5G02540	rossmann-fold NAD(P)-binding domain-containing protein
383	A_84_P21717	2.54	AT5G04210	CCCH-type zinc fingerfamily protein with RNA-binding domain
384	A_84_P14878	3.22	AT5G04950	nicotianamine synthase 1 (NAS1)
385	A_84_P16771	2.06	AT5G05290	expansin A2 (EXPA2)
386	A_84_P822865	2.65	AT5G05410	dehydration-responsive element-binding protein 2A (DREB2A)
387	A_84_P194044	2.38	AT5G07330	unknown protein
388	A_84_P232289	3.94	AT5G09570	Cox19-like CHCH family protein
389	A_84_P769325	4.70	AT5G11412	RNA-binding (RRM/RBD/RNP motifs) family protein
390	A_84_P227239	2.33	AT5G13210	hypothetical protein
391	A_84_P17744	4.42	AT5G13380	auxin-responsive GH3 family protein
392	A_84_P264370	2.86	AT5G14000	NAC domain containing protein 84 (NAC084)
393	A_84_P11129	2.63	AT5G14180	triacylglycerol lipase 2 (MPL1)
394	A_84_P174131	2.47	AT5G14730	hypothetical protein
395	A_84_P818199	4.08	AT5G15800	developmental protein SEPALLATA 1

396	A_84_P18704	4.40	AT5G18990	putative pectinesterase 55
397	A_84_P785492	2.13	AT5G20230	blue copper binding protein (SAG14)
398	A_84_P767270	3.85	AT5G20240	floral homeotic protein PISTILLATA (PI)
399	A_84_P130356	3.02	AT5G20790	hypothetical protein
400	A_84_P262640	4.78	AT5G22430	pollen Ole e 1 allergen and extensin family protein
401	A_84_P845967	4.32	AT5G22570	putative WRKY transcription factor 38 (WRKY38)
402	A_84_P600237	3.11	AT5G23700	hypothetical protein
403	A_84_P769153	3.33	AT5G23908	hypothetical protein
404	A_84_P76184	3.48	AT5G24110	WRKY DNA-binding protein 30 (WRKY30)
405	A_84_P592228	2.22	AT5G24280	gamma-irradiation and mitomycin c induced 1 (GMI1)
406	A_84_P181424	4.32	AT5G24640	hypothetical protein
407	A_84_P14930	2.15	AT5G24820	aspartyl protease family protein
408	A_84_P13041	3.15	AT5G24960	cytochrome P450 71A14 (CYP71A14)
409	A_84_P766473	2.63	AT5G25260	flotillin-like protein 2
410	A_84_P826815	3.03	AT5G25390	a member of the ERF subfamily B-6 of ERF/AP2 transcription factor family (SHN3)
411	A_84_P17772	3.67	AT5G25810	a member of the DREB subfamily A-4 of ERF/AP2 transcription factor family (TINY)
412	A_84_P787266	3.62	AT5G26170	putative WRKY transcription factor 50 (WRKY50)
413	A_84_P577950	2.86	AT5G26640	hypothetical protein
414	A_84_P515865	2.08	AT5G26690	heavy-metal-associated domain-containing protein
415	A_84_P121472	4.08	AT5G26700	putative germin-like protein subfamily 2 member 5
416	A_84_P196974	3.01	AT5G26730	fasciclin-like arabinogalactan family protein
417	A_84_P768264	3.98	AT5G27495	defensin-like protein 113
418	A_84_P517787	2.62	AT5G28590	DNA-binding family protein
419	A_84_P580626	3.38	AT5G28720	hypothetical protein
420	A_84_P569042	2.66	AT5G28810	hypothetical protein

421	A_84_P767369	2.17	AT5G33355	defensin-like protein 207
422	A_84_P154985	3.21	AT5G34358	hypothetical protein
423	A_84_P283810	3.12	AT5G34560	similar to uridine kinase/uracil phosphoribosyl transferas
424	A_84_P141219	2.73	AT5G35320	unknown protein
425	A_84_P766066	4.46	AT5G36275	gypsy-like retrotransposon family protein
426	A_84_P834366	2.47	AT5G37415	protein agamous-like 105 (AGL105)
427	A_84_P17787	2.01	AT5G37670	HSP20-like chaperones superfamily protein
428	A_84_P610036	4.97	AT5G38310	hypothetical protein
429	A_84_P842018	3.49	AT5G38870	hypothetical protein
430	A_84_P569955	4.15	AT5G39560	F-box/kelch-repeat protein
431	A_84_P16848	2.97	AT5G39580	peroxidase 62
432	A_84_P17794	2.17	AT5G39610	NAC-domain transcription factor (NAC2)
433	A_84_P841049	4.00	AT5G40050	putative F-box protein
434	A_84_P14962	2.87	AT5G40890	chloride channel protein CLC-a (CLC-A)
435	A_84_P547046	2.45	AT5G41315	transcription factor GLABRA 3 (GL3)
436	A_84_P268790	2.42	AT5G43350	inorganic phosphate transporter 1-1 (PHT1;1)
437	A_84_P248373	3.34	AT5G44420	plant defensin 1.2 (PDF1.2)
438	A_84_P22542	4.56	AT5G44540	tapetum specific protein TAP35/TAP44
439	A_84_P830096	2.87	AT5G44575	hypothetical protein
440	A_84_P769565	3.39	AT5G44585	hypothetical protein
441	A_84_P767595	3.07	AT5G44690	hypothetical protein
442	A_84_P769053	4.29	AT5G44894	hypothetical protein
443	A_84_P20656	2.27	AT5G46050	peptide transporter PTR3-A (PTR3)
444	A_84_P23495	3.93	AT5G46360	putative calcium-activated outward-rectifying potassium channel 3 (KCO3)
445	A_84_P810056	2.27	AT5G46730	glycine-rich protein

446	A_84_P523886	2.23	AT5G46960	plant invertase/pectin methylesterase inhibitor domain-containing protein
447	A_84_P14045	2.25	AT5G48430	aspartyl protease family protein
448	A_84_P241903	2.04	AT5G50200	nitrate transmembrane transporter (WR3)
449	A_84_P15944	2.39	AT5G50790	nodulin MtN3-like protein
450	A_84_P567322	3.66	AT5G50880	hypothetical protein
451	A_84_P607405	2.16	AT5G51090	hypothetical protein
452	A_84_P296724	2.67	AT5G51190	ethylene response factor 105 (ERF105)
453	A_84_P15946	2.02	AT5G51440	HSP20-like chaperones superfamily protein
454	A_84_P525660	3.78	AT5G52940	hypothetical protein
455	A_84_P769609	2.70	AT5G53048	hypothetical protein
456	A_84_P521243	5.98	AT5G53230	hypothetical protein
457	A_84_P159285	4.67	AT5G53240	hypothetical protein
458	A_84_P832719	3.75	AT5G53950	protein CUP-SHAPED COTYLEDON 2 (CUC2)
459	A_84_P12174	4.43	AT5G54010	glycosyltransferase domain-containing protein
460	A_84_P14064	2.59	AT5G54030	cysteine/histidine-rich C1 domain-containing protein
461	A_84_P834298	3.23	AT5G54190	protochlorophyllide reductase A (PORA)
462	A_84_P165123	2.87	AT5G54420	hypothetical protein
463	A_84_P561123	3.48	AT5G54450	hypothetical protein
464	A_84_P548728	4.42	AT5G54550	hypothetical protein
465	A_84_P505286	3.47	AT5G55110	stigma-specific Stig1 family protein
466	A_84_P75404	4.76	AT5G55150	hypothetical protein
467	A_84_P606546	3.98	AT5G55270	hypothetical protein
468	A_84_P540757	4.22	AT5G55490	gamete expressed protein 1 (GEX1)
469	A_84_P830570	4.89	AT5G56370	FBD-associated F-box protein
470	A_84_P16913	2.27	AT5G57550	xyloglucan:xyloglucosyl transferase (XTH25)

471	A_84_P557599	3.32	AT5G57640	GCK domain-containing protein
472	A_84_P766510	2.98	AT5G57770	hypothetical protein
473	A_84_P10297	3.19	AT5G57980	RNA polymerase II fifth largest subunit, C (RPB5C)
474	A_84_P503599	2.10	AT5G58610	putative PHD finger transcription factor
475	A_84_P132675	2.77	AT5G58780	dehydrodolichyl diphosphate synthase 3
476	A_84_P10303	2.78	AT5G59390	XH/XS domain-containing protein
477	A_84_P10306	4.79	AT5G59930	cysteine/histidine-rich C1 domain-containing protein
478	A_84_P19762	2.74	AT5G60080	protein kinase family protein
479	A_84_P582506	2.78	AT5G60480	homeobox protein 26 (HB26)
480	A_84_P580715	2.71	AT5G61490	hypothetical protein
481	A_84_P11260	2.26	AT5G61610	oleosin-like protein
482	A_84_P842395	4.35	AT5G62080	protease inhibitor/seed storage/lipid transfer protein (LTP) family protein
483	A_84_P11264	4.25	AT5G62480	glutathione S-transferase tau 9 (GSTU9)
484	A_84_P228049	2.32	AT5G63160	BTB and TAZ domain protein.
485	A_84_P13160	2.78	AT5G64060	NAC domain containing protein 103 (NAC103)
486	A_84_P15050	3.45	AT5G64100	peroxidase 69
487	A_84_P16942	2.63	AT5G64120	peroxidase 71
488	A_84_P577170	2.19	AT5G64190	hypothetical protein
489	A_84_P784671	2.70	AT5G64370	beta-ureidopropionase (BETA-UP)
490	A_84_P541664	3.02	AT5G64905	elicitor peptide 3 (PROPEP3)
491	A_84_P541669	2.66	AT5G64930	regulator of pathogenesis-related (PR) genes (HYS1)
492	A_84_P11274	4.46	AT5G65080	K-box region and MADS-box transcription factor family protein (MAF5)
493	A_84_P768988	3.89	AT5G65533	hypothetical protein
494	A_84_P21685	2.43	AT5G67450	zinc-finger protein 1 (ZF1)

B	Probe Name	Fold change	TAIR Locus	Description
1	A_84_P299940	-2.18	AT1G01355	putative endonuclease or glycosyl hydrolase
2	A_84_P12740	-2.89	AT1G02630	nucleoside transporter-like protein
3	A_84_P24081	-2.38	AT1G02800	endoglucanase 1 (CEL2)
4	A_84_P535484	-2.62	AT1G03010	phototropic-responsive NPH3 family protein
5	A_84_P20780	-3.45	AT1G03495	HXXXD-type acyl-transferase-like protein
6	A_84_P21760	-3.69	AT1G03940	HXXXD-type acyl-transferase family protein
7	A_84_P23653	-2.49	AT1G03990	long-chain fatty alcohol dehydrogenase-like protein
8	A_84_P16627	-2.10	AT1G06090	delta-9 desaturase-like 1 protein
9	A_84_P11901	-5.75	AT1G06100	delta-9 desaturase-like 2 protein
10	A_84_P540848	-2.33	AT1G06350	delta-9 desaturase-like 4 protein
11	A_84_P832057	-2.24	AT1G06420	hypothetical protein
12	A_84_P754636	-2.06	AT1G07175	hypothetical protein
13	A_84_P14491	-4.31	AT1G07460	putative concanavalin A-like lectin
14	A_84_P13512	-2.29	AT1G07650	putative LRR receptor-like serine/threonine-protein kinase
15	A_84_P16132	-2.30	AT1G08430	aluminum-activated malate transporter 1 (ALMT1)
16	A_84_P22749	-3.80	AT1G09260	chaperone DnaJ-domain-containing protein
17	A_84_P838625	-2.10	AT1G10410	hypothetical protein
18	A_84_P12357	-3.80	AT1G10480	zinc finger protein 5 (ZFP5)
19	A_84_P16179	-3.29	AT1G10980	lung seven transmembrane receptor-containing protein
20	A_84_P15234	-3.97	AT1G11080	carboxypeptidase C
21	A_84_P555923	-2.17	AT1G11120	hypothetical protein
21	A_84_P529333	-2.41	AT1G11420	agenet domain-containing protein (DUF2)
22	A_84_P18040	-2.98	AT1G11600	cytochrome P450, family 77, subfamily B, polypeptide (CYP77B1)

23	A_84_P829384	-2.21	AT1G11765	self-incompatibility protein S1 family
24	A_84_P19444	-2.30	AT1G12160	flavin-binding monooxygenase family protein
25	A_84_P754046	-2.37	AT1G12451	hypothetical protein
26	A_84_P562094	-2.45	AT1G13200	putative F-box/kelch-repeat protein
27	A_84_P23806	-2.81	AT1G13600	basic leucine-zipper 58 (bZIP58)
28	A_84_P15293	-5.59	AT1G13710	cytochrome P450, family 78, subfamily A, polypeptide 5 (CYP78A5)
29	A_84_P23635	-2.82	AT1G14070	fucosyltransferase 7 (FUT7)
30	A_84_P18992	-2.07	AT1G15210	ABC transporter G family member 35 (PDR7)
31	A_84_P837201	-2.33	AT1G16530	LOB domain-containing protein 3 (ASL9)
32	A_84_P585313	-2.77	AT1G16705	p300/CBP acetyltransferase-related protein
33	A_84_P21833	-2.52	AT1G17020	protein SRG1
34	A_84_P18126	-2.00	AT1G18250	thaumatin-like protein (ATLP-1)
35	A_84_P795916	-2.14	AT1G18835	mini zinc finger (MIF3)
36	A_84_P20976	-3.65	AT1G19210	ethylene-responsive transcription factor ERF017
37	A_84_P845705	-2.69	AT1G19630	cytochrome P450, family 722, subfamily A, polypeptide (CYP722A1)
38	A_84_P12569	-2.81	AT1G19830	SAUR-like auxin-responsive protein
39	A_84_P750377	-3.31	AT1G21220	copia-like retrotransposon family protein
40	A_84_P16206	-3.90	AT1G21340	dof zinc finger protein DOF1.2
41	A_84_P14793	-2.83	AT1G21890	nodulin MtN21 /EamA-like transporter-like protein
42	A_84_P14346	-2.49	AT1G22150	sulfate transporter 1.3 (SULTR1;3)
43	A_84_P590665	-2.59	AT1G22220	F-box protein
44	A_84_P18059	-3.02	AT1G22480	plastocyanin-like domain-containing protein
45	A_84_P21770	-2.85	AT1G23060	hypothetical protein
46	A_84_P22490	-3.39	AT1G23380	homeobox protein knotted-1-like 6 (KNAT6)
47	A_84_P830332	-3.91	AT1G23520	hypothetical protein

48	A_84_P14672	-2.21	AT1G23850	hypothetical protein
49	A_84_P17520	-2.03	AT1G24070	putative mannan synthase 10 (CSLA10)
50	A_84_P23663	-2.94	AT1G24220	paired amphipathic helix repeat-containing protein
51	A_84_P13408	-2.80	AT1G25460	rossmann-fold NAD(P)-binding domain-containing protein
52	A_84_P19081	-2.55	AT1G25530	lysine histidine transporter-like 6
53	A_84_P22656	-3.21	AT1G28290	arabinogalactan protein 31 (AGP31)
54	A_84_P852475	-2.56	AT1G28390	serine/threonine-protein kinase-like protein
55	A_84_P12872	-4.78	AT1G29270	hypothetical protein
56	A_84_P752986	-2.69	AT1G30040	gibberellin 2-beta-dioxygenase 2 (GA2OX2)
57	A_84_P588887	-2.07	AT1G30140	hypothetical protein
58	A_84_P14247	-4.53	AT1G30650	putative WRKY transcription factor 14 (WRKY14)
59	A_84_P22675	-4.88	AT1G30760	FAD-binding and BBE domain-containing protein
60	A_84_P21757	-2.70	AT1G31040	PLATZ transcription factor family protein
61	A_84_P11538	-4.53	AT1G31490	HXXXD-type acyl-transferase-like protein
62	A_84_P14372	-3.74	AT1G31710	putative copper amine oxidase
63	A_84_P159635	-2.97	AT1G31840	tetratricopeptide repeat (TPR)-like superfamily protein
64	A_84_P752958	-4.92	AT1G32337	hypothetical protein
65	A_84_P751199	-2.33	AT1G33740	similar to chaperonin 60 beta precursor
66	A_84_P16068	-2.18	AT1G33790	jacalin lectin family protein
67	A_84_P13351	-4.93	AT1G33910	putative avirulence-responsive protein
68	A_84_P10523	-3.17	AT1G34040	pyridoxal phosphate -dependent transferase-like protein
69	A_84_P750745	-4.05	AT1G34095	hypothetical protein
70	A_84_P837120	-3.5	AT1G34650	homeobox-leucine zipper protein (HDG10)
71	A_84_P842584	-2.72	AT1G35030	hypothetical protein
72	A_84_P821712	-2.14	AT1G35140	phosphate-responsive 1-like protein (PHI-1)

73	A_84_P752095	-2.03	AT1G35270	hypothetical protein
74	A_84_P835109	-2.13	AT1G35625	RING/U-box domain-containing protein
75	A_84_P753580	-3.05	AT1G36078	hypothetical protein
76	A_84_P304940	-3.38	AT1G43330	myb family protein-like protein
77	A_84_P804310	-2.22	AT1G43800	stearoyl-acyl-carrier protein desaturase-like protein
78	A_84_P13367	-2.00	AT1G48660	auxin-responsive GH3-like protein
79	A_84_P22781	-2.96	AT1G49390	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase-like protein
80	A_84_P752771	-3.56	AT1G49715	defensin-like protein 175
81	A_84_P23487	-3.08	AT1G49860	glutathione S-transferase (class phi) 14 (GSTF14)
82	A_84_P838510	-2.26	AT1G50140	P-loop containing NTPase domain-containing protein
83	A_84_P753871	-2.51	AT1G50325	plant invertase/pectin methylesterase inhibitor domain-containing protein
84	A_84_P150938	-2.15	AT1G51055	FBD-like domain family protein
85	A_84_P18915	-2.48	AT1G51460	ABC transporter G family member 13
86	A_84_P787018	-2.89	AT1G51670	hypothetical protein
87	A_84_P10415	-2.58	AT1G52030	myrosinase-binding protein 2 (MBP2)
88	A_84_P11360	-2.48	AT1G52040	myrosinase-binding protein 1 (MBP1)
89	A_84_P868891	-3.38	AT1G52400	beta glucosidase 18 (BGLU18)
90	A_84_P24006	-2.50	AT1G53010	putative RING-H2 finger protein ATL19
91	A_84_P22112	-2.74	AT1G53070	legume lectin-like protein
92	A_84_P208818	-2.13	AT1G53180	hypothetical protein
93	A_84_P519677	-2.48	AT1G53860	remorin-like protein
94	A_84_P223359	-4.73	AT1G54000	GDSL esterase/lipase
95	A_84_P15194	-2.47	AT1G54020	GDSL esterase/lipase
96	A_84_P563999	-2.29	AT1G54930	GRF zinc finger / Zinc knuckle protein
97	A_84_P16982	-3.54	AT1G55010	defensin-like protein 18 (PDF1.5)

98	A_84_P19680	-2.54	AT1G55940	cytochrome P450, family 708, subfamily A, polypeptide 1 (CYP708A1)
99	A_84_P20991	-2.05	AT1G57650	ATP binding protein
100	A_84_P235603	-2.57	AT1G58190	receptor like protein 9 (RLP9)
101	A_84_P17213	-2.54	AT1G58410	putative disease resistance protein RXW24L
102	A_84_P23712	-2.30	AT1G59860	HSP20-like chaperone
103	A_84_P206348	-2.67	AT1G60060	serine/threonine-protein kinase WNK (With No lysine)-related protein
104	A_84_P753079	-2.52	AT1G60815	RALF-like 7 protein (RALFL7)
105	A_84_P555153	-4.06	AT1G60985	defensin-like protein 247 (SCRL6)
106	A_84_P595204	-2.32	AT1G61090	hypothetical protein
107	A_84_P551607	-3.86	AT1G61810	beta-glucosidase 45 (BGLU45)
108	A_84_P853675	-2.15	AT1G61820	beta glucosidase 46 (BGLU46)
109	A_84_P19094	-5.71	AT1G62360	homeobox protein SHOOT MERISTEMLESS (STM)
110	A_84_P11357	-3.00	AT1G62500	bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein
111	A_84_P596994	-2.92	AT1G62610	rossmann-fold NAD(P)-binding domain-containing protein
112	A_84_P14874	-2.27	AT1G62770	plant invertase/pectin methylesterase inhibitor domain-containing protein
113	A_84_P21276	-4.07	AT1G62980	expansin A18 (EXPA18)
114	A_84_P525908	-2.52	AT1G63055	hypothetical protein
115	A_84_P588958	-2.62	AT1G63630	pentatricopeptide (PPR) repeat-containing protein
116	A_84_P218238	-2.94	AT1G65450	HXXXD-type acyl-transferase-like protein
117	A_84_P827875	-3.02	AT1G65880	benzoyloxyglucosinolate 1 (BZO1)
118	A_84_P10495	-2.59	AT1G65890	acyl activating enzyme 12 (AAE12)
119	A_84_P96746	-2.23	AT1G66045	hypothetical protein
120	A_84_P15425	-2.09	AT1G67750	putative pectate lyase 5
121	A_84_P17020	-2.69	AT1G67760	TCP-1/cpn60 chaperonin family protein
122	A_84_P274410	-3.00	AT1G68330	hypothetical protein

123	A_84_P17766	-3.45	AT1G68640	transcription factor perIANTHIA (PAN)
124	A_84_P11481	-3.17	AT1G68850	peroxidase 11
125	A_84_P839208	-2.24	AT1G70260	nodulin MtN21 /EamA-like transporter protein
126	A_84_P18075	-4.77	AT1G70510	homeobox protein knotted-1-like 2 (KNAT2)
127	A_84_P808187	-2.54	AT1G70850	MLP-like protein 34 (MLP34)
128	A_84_P20786	-2.75	AT1G71692	agamous-like MADS-box protein (AGL12)
129	A_84_P553411	-2.58	AT1G71870	protein novel ion carrier-2
130	A_84_P704762	-2.72	AT1G72131	pseudogene of proton-dependent oligopeptide transporter
131	A_84_P21584	-2.61	AT1G72210	transcription factor bHLH96
132	A_84_P22839	-3.07	AT1G73260	kunitz trypsin inhibitor 1 (KTI1)
133	A_84_P856876	-3.91	AT1G73330	drought-repressed 4 protein (DR4)
134	A_84_P20631	-2.31	AT1G73580	C2 domain-containing protein
135	A_84_P11463	-3.31	AT1G73620	pathogenesis-related thaumatin-like protein
136	A_84_P536610	-2.36	AT1G73850	hypothetical protein
137	A_84_P107472	-2.07	AT1G73880	UDP-glucosyl transferase 89B1 (UGT89B1)
138	A_84_P16209	-2.04	AT1G74110	cytochrome P450, family 78, subfamily A, polypeptide 10 (CYP78A10)
139	A_84_P18470	-4.06	AT1G74140	rhomboid-related intramembrane serine protease family protein
140	A_84_P12431	-2.65	AT1G74420	fucosyltransferase 3 (FUT3)
141	A_84_P15266	-2.36	AT1G74460	GDSL esterase/lipase
142	A_84_P750006	-3.45	AT1G75250	RAD-like 6 protein (RL6)
143	A_84_P10530	-2.31	AT1G75780	tubulin beta (TUB1)
144	A_84_P17176	-2.62	AT1G75920	GDSL esterase/lipase EXL5
145	A_84_P23757	-2.18	AT1G76420	protein CUP-SHAPED COTYLEDON 3 (CUC3)
146	A_84_P610382	-2.20	AT1G78430	ROP interactive partner 2 (RIP2)
147	A_84_P19093	-2.01	AT1G78490	cytochrome P450, family 708, subfamily A, polypeptide 3 (CYP708A3)

148	A_84_P532174	-3.06	AT1G78815	hypothetical protein (LSH7)
149	A_84_P18076	-2.18	AT1G80340	gibberellin 3-beta-dioxygenase 2 (GA3OX2)
150	A_84_P22056	-2.00	AT2G01770	vacuolar iron transporter 1 (VIT1)
151	A_84_P737916	-2.75	AT2G01818	PLATZ transcription factor family protein
152	A_84_P88649	-2.12	AT2G02850	plantacyanin (ARPN)
153	A_84_P756328	-4.04	AT2G03920	hypothetical protein
154	A_84_P516247	-4.14	AT2G04480	hypothetical protein
155	A_84_P611298	-2.56	AT2G04515	hypothetical protein
156	A_84_P758645	-3.15	AT2G04622	hypothetical protein
157	A_84_P75644	-6.01	AT2G05440	glycine-rich protein 9 (GRP9)
158	A_84_P843585	-2.56	AT2G06980	hypothetical protein
159	A_84_P601261	-2.37	AT2G07140	F-box and associated interaction domain-containing protein
160	A_84_P18281	-2.07	AT2G07330	mutator-like transposase family protein
161	A_84_P756180	-2.44	AT2G14890	arabinogalactan protein 9 (AGP9)
162	A_84_P755788	-2.12	AT2G15940	hAT-like transposase family protein
163	A_84_P157745	-2.55	AT2G16365	F-box protein
164	A_84_P10668	-2.11	AT2G16580	SAUR-like auxin-responsive protein
165	A_84_P755941	-2.12	AT2G16905	similar to putative MATE efflux membrane protein
166	A_84_P800917	-2.00	AT2G17230	protein exordium like 5 (EXL5)
167	A_84_P612207	-2.43	AT2G18196	heavy-metal-associated domain-containing protein
168	A_84_P235483	-3.74	AT2G18360	esterase/lipase domain-containing protein
169	A_84_P19149	-2.61	AT2G18370	non-specific lipid-transfer protein 8
170	A_84_P18265	-2.84	AT2G18480	putative polyol transporter 3
171	A_84_P269540	-3.06	AT2G18500	ovate family protein 7 (OFP7)
172	A_84_P834894	-2.59	AT2G18550	homeobox-leucine zipper protein ATHB-21 (HB21)

173	A_84_P565889	-2.94	AT2G19910	RNA-dependent RNA polymerase-like protein
174	A_84_P559688	-2.94	AT2G19920	RNA-dependent RNA polymerase family protein
175	A_84_P18172	-4.00	AT2G19970	putative pathogenesis-related protein
176	A_84_P757414	-4.14	AT2G20208	defensin-like protein 172 (LCR60)
177	A_84_P520692	-2.16	AT2G20970	putative lipid binding protein
178	A_84_P107712	-2.47	AT2G21100	disease resistance-responsive, dirigent domain-containing protein
179	A_84_P757218	-2.12	AT2G21465	defensin-like protein 291
180	A_84_P19215	-2.62	AT2G21510	DNAJ heat shock N-terminal domain-containing protein
181	A_84_P288260	-3.01	AT2G21730	cinnamyl alcohol dehydrogenase 2 (CAD2)
182	A_84_P275560	-2.34	AT2G21800	essential meiotic endonuclease 1A (EME1A)
183	A_84_P551717	-2.25	AT2G21980	hypothetical protein
184	A_84_P20138	-2.72	AT2G23060	acyl-CoA N-acyltransferases-like protein
185	A_84_P15349	-2.77	AT2G24010	carboxypeptidase D (SCPL23)
186	A_84_P188374	-2.19	AT2G24650	transcriptional factor B3 family protein
187	A_84_P560603	-2.45	AT2G24700	B3 domain-containing protein REM10
188	A_84_P596218	-2.75	AT2G25130	armadillo/beta-catenin-like repeats-containing protein
189	A_84_P600681	-4.99	AT2G27320	hypothetical protein
190	A_84_P570378	-2.50	AT2G28690	hypothetical protein
191	A_84_P297814	-3.44	AT2G28780	hypothetical protein
192	A_84_P22017	-2.88	AT2G28790	pathogenesis-related thaumatin-like protein
193	A_84_P557066	-3.10	AT2G29125	ROTUNDIFOLIA like 2 (RTFL2)
194	A_84_P21064	-2.72	AT2G29220	concanavalin A-like lectin protein kinase-like protein
195	A_84_P11606	-3.10	AT2G29480	glutathione S-transferase (GSTU2)
196	A_84_P10660	-2.26	AT2G29490	glutathione S-transferase (GSTU1)
197	A_84_P12504	-2.04	AT2G29750	UDP-glucosyl transferase 71C1 (UGT71C1)

198	A_84_P15345	-3.67	AT2G30210	laccase 3 (LAC3)
199	A_84_P312043	-2.92	AT2G31220	transcription factor bHLH10
200	A_84_P10376	-2.72	AT2G31955	molybdopterin biosynthesis protein (CNX2)
201	A_84_P824811	-2.24	AT2G32870	TRAF-like family protein
202	A_84_P21973	-3.91	AT2G33260	tryptophan/tyrosine permease
203	A_84_P526051	-2.67	AT2G33775	ralf-like 19 protein (RALFL19)
204	A_84_P565043	-2.17	AT2G33845	OB-fold nucleic acid binding domain-containing protein
205	A_84_P284670	-2.54	AT2G33850	hypothetical protein
206	A_84_P15394	-3.55	AT2G34830	putative WRKY transcription factor 35 (WRKY35)
207	A_84_P758119	-3.80	AT2G35208	hypothetical protein
208	A_84_P21018	-2.04	AT2G35580	serine protease inhibitor-like protein
209	A_84_P19195	-2.23	AT2G36570	leucine-rich repeat protein kinase-like protein
210	A_84_P515434	-3.50	AT2G36940	hypothetical protein
211	A_84_P577535	-2.43	AT2G36985	DVL family protein (ROT4)
212	A_84_P832442	-2.70	AT2G37520	acyl-CoA acyltransferase with RING/FYVE/PHD-type zinc finger domain-containing protein
213	A_84_P108532	-2.03	AT2G37880	hypothetical protein
214	A_84_P21101	-5.45	AT2G38100	proton-dependent oligopeptide transport-like protein
215	A_84_P584689	-2.14	AT2G38160	hypothetical protein
216	A_84_P22055	-5.36	AT2G38380	peroxidase 22
217	A_84_P807916	-2.69	AT2G38390	peroxidase 23
218	A_84_P21047	-2.49	AT2G38530	non-specific lipid-transfer protein 2 (LTP2)
219	A_84_P817628	-2.51	AT2G39330	myrosinase-binding protein-like protein (JAL23)
220	A_84_P14494	-2.64	AT2G39430	disease resistance-responsive (dirigent-like protein) family protein
221	A_84_P20167	-2.90	AT2G39510	nodulin MtN21-like protein
222	A_84_P10642	-2.24	AT2G39850	subtilisin-like serine protease

223	A_84_P591826	-4.45	AT2G40440	BTB/POZ domain-containing protein
224	A_84_P178774	-3.81	AT2G41240	transcription factor bHLH100 (BHLH100)
225	A_84_P160753	-4.00	AT2G41800	hypothetical protein
226	A_84_P23852	-2.11	AT2G42540	cold-regulated protein 15a (COR15A)
227	A_84_P102416	-3.10	AT2G42610	hypothetical protein (LSH10)
228	A_84_P248025	-2.46	AT2G42800	receptor like protein 29 (RLP29)
229	A_84_P843757	-3.41	AT2G43660	carbohydrate-binding X8 domain-containing protein
230	A_84_P843750	-2.25	AT2G43670	carbohydrate-binding X8 domain-containing protein
231	A_84_P10606	-2.08	AT2G43830	NPK1-related protein kinase 3
232	A_84_P22966	-2.37	AT2G44480	beta glucosidase 17 (BGLU17)
233	A_84_P175924	-2.23	AT2G44745	putative WRKY transcription factor 12
234	A_84_P17343	-2.28	AT2G44840	ethylene-responsive transcription factor 13 (ERF13)
235	A_84_P17298	-2.13	AT2G45080	cyclin-U2-1
236	A_84_P157385	-2.17	AT2G45410	LOB domain-containing protein 19 (LBD19)
237	A_84_P788026	-2.41	AT2G45480	growth-regulating factor 9 (GRF9)
238	A_84_P258460	-2.68	AT2G47560	RING-H2 finger protein ATL64
239	A_84_P551808	-6.92	AT3G01345	hypothetical protein
240	A_84_P798714	-2.27	AT3G01930	major facilitator protein
241	A_84_P540304	-4.74	AT3G02500	hypothetical protein
242	A_84_P168853	-3.53	AT3G02550	LOB domain-containing protein 41 (LBD41)
243	A_84_P14553	-2.01	AT3G02610	acyl-[acyl-carrier-protein] desaturase
244	A_84_P607864	-2.77	AT3G02885	GAST1 protein homolog 5 (GASA5)
245	A_84_P78785	-2.62	AT3G03650	exostosin-like protein (EDA5)
246	A_84_P14515	-5.00	AT3G03910	glutamate dehydrogenase (NAD(P)+) (GDH3)
247	A_84_P511053	-4.48	AT3G04510	hypothetical protein

248	A_84_P554487	-3.20	AT3G04990	hypothetical protein
249	A_84_P761298	-7.26	AT3G05727	defensin-like protein 204
250	A_84_P562958	-2.21	AT3G06220	AP2/B3 domain-containing protein
251	A_84_P596321	-2.25	AT3G06435	hypothetical protein
252	A_84_P13606	-4.36	AT3G06560	poly(A) polymerase 3 (PAPS3)
253	A_84_P14537	-2.03	AT3G07260	SMAD/FHA domain-containing protein
254	A_84_P523480	-2.12	AT3G07730	hypothetical protein
255	A_84_P571367	-2.85	AT3G08490	hypothetical protein
256	A_84_P12638	-2.08	AT3G08860	pyrimidine 4 (PYD4)
257	A_84_P13601	-2.55	AT3G09910	RAB GTPase-like protein C2B
258	A_84_P19274	-3.96	AT3G09930	GDSL esterase/lipase
259	A_84_P15477	-3.97	AT3G10000	embryo sac development arrest 31 protein (EDA31)
260	A_84_P312153	-2.37	AT3G11430	glycerol-3-phosphate acyltransferase 5 (GPAT5)
261	A_84_P505748	-2.20	AT3G11640	hypothetical protein
262	A_84_P811808	-2.03	AT3G12145	polygalacturonase inhibitory protein-like protein (FLR1)
263	A_84_P834809	-2.27	AT3G12220	serine carboxypeptidase-like 16
264	A_84_P20293	-2.23	AT3G12500	chitinase
265	A_84_P788429	-3.41	AT3G12890	protein activator of spomin::LUC2
266	A_84_P17429	-2.12	AT3G13170	meiotic recombination protein (SPO11-1)
267	A_84_P607017	-3.34	AT3G13175	hypothetical protein
268	A_84_P827406	-2.17	AT3G13227	serine-rich protein-like protein
269	A_84_P18365	-2.77	AT3G13270	unknown protein
270	A_84_P19339	-2.78	AT3G13650	disease resistance-responsive, dirigent domain-containing protein
271	A_84_P760333	-2.52	AT3G13855	LOB domain-containing protein 22 (LBD22)
272	A_84_P225239	-2.39	AT3G13960	growth-regulating factor 5 (GRF5)

273	A_84_P173081	-2.48	AT3G14510	geranylgeranyl diphosphate synthase, type II
274	A_84_P22172	-2.45	AT3G15200	pentatricopeptide repeat-containing protein
275	A_84_P15504	-2.26	AT3G15990	putative sulfate transporter 3.4
276	A_84_P520839	-2.14	AT3G16070	hypothetical protein
277	A_84_P758863	-4.24	AT3G16390	nitrile-specifier protein 3 (NSP3)
278	A_84_P500433	-5.73	AT3G16410	nitrile-specifier protein 4 (NSP4)
279	A_84_P219878	-2.20	AT3G16450	jacalin-like lectin domain-containing protein
280	A_84_P17428	-2.101	AT3G16490	protein IQ-domain 26
281	A_84_P531488	-2.51	AT3G16900	LURP-one-related 13 protein
282	A_84_P187174	-2.13	AT3G17520	late embryogenesis abundant domain-containing protein
283	A_84_P13635	-2.86	AT3G18400	NAC domain containing protein 58 (NAC058)
284	A_84_P762878	-2.28	AT3G18550	transcription factor TCP18
285	A_84_P831705	-3.86	AT3G18900	hypothetical protein
286	A_84_P18382	-2.56	AT3G19160	adenylate isopentenyltransferase 8 (IPT8)
287	A_84_P761070	-2.05	AT3G19184	AP2/B3 domain-containing transcription factor
288	A_84_P517322	-3.15	AT3G19200	hypothetical protein
289	A_84_P784688	-2.31	AT3G19680	hypothetical protein
290	A_84_P16489	-2.57	AT3G19700	receptor-like protein kinase (IKU2)
291	A_84_P10802	-3.76	AT3G20380	TRAF-like family protein
292	A_84_P19301	-2.54	AT3G21770	peroxidase 30
293	A_84_P759230	-2.93	AT3G21933	similar to receptor-like protein kinase homolog RK20-1
294	A_84_P17426	-2.93	AT3G22040	cysteine-rich repeat secretory protein 34
295	A_84_P838159	-3.03	AT3G22560	GCN5-related N-acetyltransferase (GNAT) family protein
296	A_84_P50790	-5.10	AT3G22620	bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein
297	A_84_P796248	-2.11	AT3G22790	kinase interacting KIP1-like protein

298	A_84_P21200	-4.52	AT3G23060	putative E3 ubiquitin protein ligase DRIPH
299	A_84_P777695	-4.81	AT3G23290	hypothetical protein
300	A_84_P560759	-2.02	AT3G23430	phosphate transporter (PHO1)
301	A_84_P841353	-2.34	AT3G23955	F-box family protein
302	A_84_P20263	-3.02	AT3G24130	putative pectinesterase 29
303	A_84_P11760	-2.25	AT3G24340	chromatin remodeling 40
304	A_84_P800077	-2.87	AT3G24517	hypothetical protein
305	A_84_P785389	-3.10	AT3G24650	B3 domain-containing transcription factor (ABI3)
306	A_84_P15115	-3.24	AT3G24982	receptor like protein 40 (RLP40)
307	A_84_P12686	-2.63	AT3G25180	cytochrome P450, family 82, subfamily G, polypeptide 1
308	A_84_P13631	-3.49	AT3G25190	vacuolar iron transporter-like protein
309	A_84_P18388	-3.29	AT3G26330	cytochrome P450 71B37 (CYP71B37)
310	A_84_P568745	-2.23	AT3G27250	hypothetical protein
311	A_84_P277340	-4.10	AT3G27650	LOB domain-containing protein 25 (LBD25)
312	A_84_P22129	-4.61	AT3G27660	oleosin 4
313	A_84_P10810	-4.50	AT3G27920	trichome differentiation protein GL1
314	A_84_P549255	-2.24	AT3G28600	AAA-type ATPase family protein
315	A_84_P24073	-3.47	AT3G28740	cytochrome P450 (CYP81D11)
316	A_84_P502242	-2.61	AT3G28770	hypothetical protein
317	A_84_P11776	-2.53	AT3G29410	terpene cyclase class C1 domain-containing protein
318	A_84_P13657	-4.96	AT3G29590	HXXXXD-type acyl-transferase-like protein
319	A_84_P759810	-2.06	AT3G29727	non-LTR retrotransposon family protein
320	A_84_P521787	-3.91	AT3G30340	nodulin MtN21 /EamA-like transporter family protein
321	A_84_P10779	-2.23	AT3G30530	basic leucine-zipper 42 (bZIP42)
322	A_84_P759907	-2.57	AT3G32445	putative ribonucleotide reductase

323	A_84_P807217	-2.53	AT3G32980	peroxidase 32
324	A_84_P762117	-3.65	AT3G42385	hypothetical protein
325	A_84_P828509	-3.40	AT3G43190	sucrose synthase 4 (SUS4)
326	A_84_P762161	-2.56	AT3G43291	hypothetical protein
327	A_84_P198514	-2.09	AT3G43715	hypothetical protein
328	A_84_P518239	-3.79	AT3G43990	bromo-adjacent homology (BAH) domain-containing protein
329	A_84_P761512	-2.09	AT3G44212	maternally expressed gene (MEG) family protein
330	A_84_P245685	-2.60	AT3G44300	nitrilase 2 (NIT2)
331	A_84_P19356	-2.87	AT3G44540	putative fatty acyl-CoA reductase 4 (FAR4)
332	A_84_P740321	-2.95	AT3G44550	putative fatty acyl-CoA reductase 5 (FAR5)
333	A_84_P11794	-2.38	AT3G45080	sulfotransferase family protein
334	A_84_P286710	-2.10	AT3G45160	putative membrane lipoprotein
335	A_84_P759856	-2.08	AT3G45460	IBR domain containing protein
336	A_84_P22199	-2.18	AT3G45940	alpha-glucosidase
337	A_84_P838660	-2.44	AT3G47740	ABC transporter A family member 3
338	A_84_P21263	-4.08	AT3G48010	cyclic nucleotide gated channel (CNGC16)
339	A_84_P205218	-2.38	AT3G48340	putative cysteine proteinase
340	A_84_P840181	-2.10	AT3G48450	RPM1-interacting protein 4 (RIN4)
341	A_84_P583050	-2.69	AT3G48630	unknown protein
342	A_84_P521810	-2.25	AT3G48810	pentatricopeptide repeat-containing protein
343	A_84_P20320	-2.13	AT3G48920	myb domain protein 45 (MYB45)
344	A_84_P19375	-6.65	AT3G49110	peroxidase 33
345	A_84_P15594	-3.76	AT3G49700	1-aminocyclopropane-1-carboxylate synthase 9 (ACS9)
346	A_84_P14650	-2.08	AT3G49960	peroxidase 35
347	A_84_P21272	-2.38	AT3G50230	leucine-rich repeat protein kinase-like protein

348	A_84_P760516	-4.80	AT3G50290	HXXXD-type acyl-transferase family protein
349	A_84_P22221	-2.27	AT3G50940	cytochrome BC1 synthesis-like protein
350	A_84_P845665	-4.13	AT3G51350	aspartyl protease family protein
351	A_84_P18443	-2.10	AT3G52440	dof zinc finger protein DOF3.5
352	A_84_P591086	-2.53	AT3G52550	hypothetical protein
353	A_84_P22228	-2.10	AT3G52700	hypothetical protein
354	A_84_P19393	-2.37	AT3G53200	myb domain protein 27 (MYB27)
355	A_84_P16557	-2.14	AT3G53510	ABC transporter G family member 20
356	A_84_P607989	-2.00	AT3G54550	hypothetical protein
357	A_84_P21292	-14.56	AT3G54660	glutathione reductase (GR2)
358	A_84_P19403	-2.47	AT3G55230	disease resistance-responsive, dirigent domain-containing protein
359	A_84_P760611	-2.48	AT3G55300	copia-like retrotransposon family protein
360	A_84_P761387	-3.15	AT3G55515	protein rotundifolia like 7
361	A_84_P295824	-5.10	AT3G56970	transcription factor ORG2
362	A_84_P57900	-3.62	AT3G56980	transcription factor ORG3
363	A_84_P23195	-3.40	AT3G57130	ankyrin repeat and BTB/POZ domain-containing protein (BOP1)
364	A_84_P525365	-3.30	AT3G57500	hypothetical protein
365	A_84_P570603	-2.48	AT3G58370	TRAF-like family protein
366	A_84_P295514	-2.10	AT3G58550	bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein
367	A_84_P538694	-2.89	AT3G58770	hypothetical protein
368	A_84_P12803	-2.02	AT3G59730	concanavalin A-like lectin kinase-like protein
369	A_84_P790736	-3.59	AT3G60670	PLATZ transcription factor family protein
370	A_84_P591116	-5.11	AT3G60890	protein little zipper 2 (ZPR2)
371	A_84_P24156	-3.07	AT3G60900	fasciclin-like arabinogalactan protein 10
372	A_84_P21323	-4.21	AT3G62170	pectinesterase (VGDH2)

373	A_84_P137289	-2.40	AT3G62230	F-box protein
374	A_84_P24163	-3.45	AT3G62730	hypothetical protein
375	A_84_P18490	-2.42	AT3G63280	serine/threonine-protein kinase (NEK4)
376	A_84_P587560	-2.60	AT4G00416	methyl-CPG-binding domain 3 protein (MBD3)
377	A_84_P281390	-2.67	AT4G01140	hypothetical protein
378	A_84_P10935	-2.74	AT4G01380	plastocyanin-like domain-containing protein
379	A_84_P592920	-2.43	AT4G01390	TRAF-like family protein
380	A_84_P542240	-4.04	AT4G01525	sadhu non-coding retrotransposon family protein
381	A_84_P763949	-2.88	AT4G01595	protein kinase-like protein
382	A_84_P847684	-4.03	AT4G02290	endoglucanase 17
383	A_84_P14722	-2.59	AT4G02700	sulfate transporter 3.2
384	A_84_P586693	-2.97	AT4G03590	cystatin-related domain-containing protein
385	A_84_P14725	-4.98	AT4G03610	metallo-hydrolase/oxidoreductase superfamily protein
386	A_84_P763002	-2.25	AT4G03816	copia-like retrotransposon family protein
387	A_84_P838983	-2.66	AT4G03830	hypothetical protein
388	A_84_P763953	-2.04	AT4G04100	CACTA-like transposase family protein
389	A_84_P763895	-2.32	AT4G04405	non-LTR retrotransposon family protein
390	A_84_P172203	-2.19	AT4G04635	unknown protein
391	A_84_P16621	-2.85	AT4G05170	basic helix-loop-helix domain-containing protein
392	A_84_P763524	-3.44	AT4G06493	similar to putative reverse transcriptase
393	A_84_P763212	-2.40	AT4G06614	similar to putative transposase
394	A_84_P764250	-2.66	AT4G06652	CACTA-like transposase family protein
395	A_84_P763409	-3.44	AT4G07454	gypsy-like retrotransposon family protein
396	A_84_P763662	-3.84	AT4G07738	gypsy-like retrotransposon family protein
397	A_84_P765811	-2.61	AT4G07812	unknown protein

398	A_84_P22299	-3.15	AT4G07960	putative xyloglucan glycosyltransferase 12 (CSLC12)
399	A_84_P802670	-2.08	AT4G08150	homeobox protein knotted-1-like 1 (KNAT1)
400	A_84_P106116	-2.34	AT4G08680	mutator-like transposase family protein
401	A_84_P82119	-3.09	AT4G08895	inorganic phosphate transporter family protein
402	A_84_P811890	-2.19	AT4G08950	phosphate-responsive 1 family protein
403	A_84_P10013	-2.51	AT4G09940	AIG1-like protein
404	A_84_P14740	-2.19	AT4G10240	B-box type zinc finger-containing protein
405	A_84_P17578	-2.85	AT4G10270	putative wound-responsive protein
406	A_84_P10964	-4.38	AT4G11190	disease resistance-responsive, dirigent domain-containing protein
407	A_84_P18528	-5.59	AT4G11290	peroxidase 39
408	A_84_P20420	-2.47	AT4G11320	putative cysteine proteinase
409	A_84_P23259	-3.98	AT4G11580	putative F-box protein
410	A_84_P812535	-3.00	AT4G11650	osmotin-like protein (OSM34)
411	A_84_P592948	-2.29	AT4G11911	hypothetical protein
412	A_84_P580438	-2.29	AT4G11930	hypothetical protein
413	A_84_P528968	-2.97	AT4G12450	hypothetical protein
414	A_84_P11916	-3.38	AT4G12870	gamma interferon responsive lysosomal thiol (GILT) reductase family protein
415	A_84_P13806	-2.36	AT4G12890	gamma interferon responsive lysosomal thiol (GILT) reductase family protein
416	A_84_P23265	-2.19	AT4G13090	xyloglucan endotransglucosylase/hydrolase protein 2 (XTH2)
417	A_84_P764224	-3.61	AT4G13261	hypothetical protein
418	A_84_P548483	-2.18	AT4G14250	structural constituent of ribosome
419	A_84_P298854	-5.44	AT4G14465	AT-hook motif nuclear-localized protein 20 (AHL20)
420	A_84_P835822	-2.11	AT4G14590	integrator complex subunit 3
421	A_84_P800959	-3.51	AT4G15160	bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein
422	A_84_P567982	-2.58	AT4G15210	beta-amylase 5

423	A_84_P609850	-2.18	AT4G16550	HSP20-like chaperone
424	A_84_P174401	-2.39	AT4G16820	lipase class 3 family protein
425	A_84_P155385	-3.73	AT4G17280	putative auxin-responsive protein
426	A_84_P183974	-3.22	AT4G17480	palmitoyl protein thioesterase family protein
427	A_84_P765645	-2.08	AT4G17914	ubiquitin-specific protease
428	A_84_P10980	-2.14	AT4G19000	transcription elongation factor (TFIIS) family protein
429	A_84_P260800	-3.62	AT4G19430	hypothetical protein
430	A_84_P21386	-4.19	AT4G20230	terpene cyclase, C1 domain-containing protein
431	A_84_P763975	-2.01	AT4G20240	cytochrome P450, family 71, subfamily A, polypeptide 27 (CYP71A27)
432	A_84_P518362	-4.07	AT4G20290	hypothetical protein
433	A_84_P847533	-2.82	AT4G20970	basic helix-loop-helix domain-containing protein
434	A_84_P10042	-2.49	AT4G21020	late embryogenesis abundant domain-containing protein
435	A_84_P21392	-2.01	AT4G21650	subtilase family protein
436	A_84_P13826	-3.28	AT4G21760	beta-glucosidase 47
437	A_84_P763342	-3.86	AT4G22185	hypothetical protein
438	A_84_P555590	-2.54	AT4G22212	defensin-like protein 98
439	A_84_P607208	-2.23	AT4G22217	defensin-like protein 100
440	A_84_P823257	-2.29	AT4G22235	defensin-like protein 95
441	A_84_P764941	-6.72	AT4G22485	bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein
442	A_84_P20449	-6.24	AT4G22490	bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein
443	A_84_P764946	-7.43	AT4G22505	bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein
444	A_84_P764933	-6.81	AT4G22513	bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein
445	A_84_P764950	-6.67	AT4G22517	bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein
446	A_84_P798916	-2.10	AT4G22520	bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin-like protein
447	A_84_P516606	-3.47	AT4G22600	hypothetical protein

448	A_84_P197194	-4.93	AT4G22870	leucoanthocyanidin dioxygenase
449	A_84_P12885	-4.87	AT4G22880	leucoanthocyanidin dioxygenase (LDOX)
450	A_84_P822012	-2.66	AT4G24000	cellulose synthase-like protein G2 (CSLG2)
451	A_84_P765436	-2.39	AT4G24231	hypothetical protein
452	A_84_P20460	-2.47	AT4G25090	putative respiratory burst oxidase-like protein protein G
453	A_84_P96816	-3.61	AT4G25760	glutamine dumper 2 (GDU2)
454	A_84_P12898	-2.77	AT4G25790	allergen V5/Tpx-1-related family protein
455	A_84_P13844	-2.35	AT4G25980	peroxidase 43
456	A_84_P13845	-4.61	AT4G26170	hypothetical protein
457	A_84_P765054	-2.11	AT4G26255	hypothetical protein
458	A_84_P284290	-3.53	AT4G26380	cysteine/histidine-rich C1 domain-containing protein
459	A_84_P10392	-2.40	AT4G28560	ROP-interactive CRIB motif-containing protein 7 (RIC7)
460	A_84_P831659	-2.64	AT4G28680	tyrosine decarboxylase (TYRDC)
461	A_84_P808742	-2.92	AT4G29030	putative membrane lipoprotein
462	A_84_P161803	-2.57	AT4G29150	protein IQ-domain 25
463	A_84_P515742	-4.07	AT4G29280	putative defensin-like protein 157
464	A_84_P824302	-2.08	AT4G29310	hypothetical protein
465	A_84_P16698	-3.44	AT4G29700	alkaline-phosphatase-like protein
466	A_84_P548542	-3.00	AT4G30090	protein embryo defective 1353
467	A_84_P14808	-6.36	AT4G30140	GDSL esterase/lipase
468	A_84_P17646	-2.05	AT4G30170	peroxidase 45
469	A_84_P21430	-4.53	AT4G30250	AAA domain-containing protein
470	A_84_P119612	-2.59	AT4G31620	B3 domain-containing protein REM3
471	A_84_P22386	-3.20	AT4G32540	YUCCA family monooxygenase
472	A_84_P511310	-2.24	AT4G32785	hypothetical protein

473	A_84_P592126	-2.66	AT4G32810	carotenoid cleavage dioxygenase 8 (CCD8)
474	A_84_P22392	-3.86	AT4G34170	putative F-box/kelch-repeat protein
475	A_84_P830495	-2.48	AT4G34400	AP2/B3 domain-containing protein
476	A_84_P11046	-3.99	AT4G34410	ethylene-responsive transcription factor (ERF109)
477	A_84_P576971	-3.11	AT4G35810	oxidoreductase, 2OG-Fe(II) oxygenase family protein
478	A_84_P17671	-2.78	AT4G35900	protein FD
479	A_84_P21483	-3.12	AT4G36590	MADS-box transcription factor family protein
480	A_84_P235233	-2.34	AT4G36610	hydrolase, alpha/beta fold family protein
481	A_84_P16754	-2.22	AT4G36740	homeobox protein 40
482	A_84_P23376	-2.61	AT4G36880	cysteine proteinase1 (CP1)
483	A_84_P505118	-2.05	AT4G37270	myb domain protein 73
484	A_84_P814616	-3.26	AT4G37410	cytochrome P450, family 81, subfamily F, polypeptide 4 (CYP81F4)
485	A_84_P524641	-2.20	AT4G39675	hypothetical protein
486	A_84_P542371	-2.40	AT5G01140	hypothetical protein
487	A_84_P17705	-2.16	AT5G01660	hypothetical protein
488	A_84_P17706	-5.10	AT5G01870	non-specific lipid-transfer protein 10
489	A_84_P22437	-2.81	AT5G02140	pathogenesis-related thaumatin-like protein
490	A_84_P537948	-2.18	AT5G03010	kelch repeat-containing protein
491	A_84_P18659	-3.27	AT5G03840	protein TERMINAL FLOWER 1
492	A_84_P512226	-2.09	AT5G04130	DNA gyrase subunit B
493	A_84_P20558	-2.48	AT5G06250	AP2/B3 domain-containing protein
494	A_84_P12995	-2.91	AT5G06940	probably inactive leucine-rich repeat receptor-like protein kinase
495	A_84_P17723	-2.07	AT5G07030	aspartyl protease family protein
496	A_84_P102376	-2.29	AT5G08000	glucan endo-1,3-beta-glucosidase-like protein 3
497	A_84_P14142	-2.31	AT5G09480	hydroxyproline-rich glycoprotein family protein

498	A_84_P13948	-2.24	AT5G09520	hydroxyproline-rich glycoprotein family protein
499	A_84_P861864	-2.98	AT5G09530	hydroxyproline-rich glycoprotein family protein
500	A_84_P580770	-2.13	AT5G09750	transcription factor (HEC3)
501	A_84_P570783	-4.25	AT5G10100	haloacid dehalogenase-like hydrolase domain-containing protein
502	A_84_P200714	-3.55	AT5G10580	hypothetical protein
503	A_84_P13010	-2.82	AT5G11190	ethylene-responsive transcription factor SHINE 2
504	A_84_P767924	-2.37	AT5G11320	flavin-binding monooxygenase family protein
505	A_84_P768330	-2.29	AT5G11510	myb domain protein 3r-4
506	A_84_P23416	-4.00	AT5G11820	self-incompatibility S1 family protein
507	A_84_P231259	-4.05	AT5G12330	lateral root primordium protein-like protein (LRP1)
508	A_84_P15851	-2.76	AT5G12940	leucine-rich repeat-containing protein
509	A_84_P274830	-2.37	AT5G12990	protein CLAVATA3/ESR-related 40
510	A_84_P23420	-2.43	AT5G13580	ABC transporter G family member 6
511	A_84_P595747	-2.52	AT5G13900	lipid transfer-like protein VAS
512	A_84_P834918	-3.17	AT5G14230	hypothetical protein
513	A_84_P19794	-2.17	AT5G14750	transcription factor WER (MYB66)
514	A_84_P17749	-4.55	AT5G15120	hypothetical protein
515	A_84_P515827	-2.68	AT5G15340	pentatricopeptide repeat-containing protein
516	A_84_P728426	-4.22	AT5G15995	mutator-like transposase family protein
517	A_84_P13968	-2.34	AT5G16410	HXXXD-type acyl-transferase-like protein
518	A_84_P769226	-3.01	AT5G17795	hypothetical protein
519	A_84_P18699	-3.17	AT5G17800	myb domain protein 56 (MYB56)
520	A_84_P23434	-2.74	AT5G19040	adenylate isopentenyltransferase 5 (IPT5)
521	A_84_P286080	-2.09	AT5G19410	ABC transporter G family member 23
522	A_84_P177214	-4.89	AT5G19600	putative sulfate transporter 3.5

523	A_84_P541541	-2.39	AT5G20640	hypothetical protein
524	A_84_P272600	-4.86	AT5G21960	ethylene-responsive transcription factor ERF016
525	A_84_P824908	-2.37	AT5G22460	esterase/lipase/thioesterase family protein
526	A_84_P16815	-2.27	AT5G22810	GDSL esterase/lipase
527	A_84_P787281	-3.13	AT5G23260	protein TRANSPARENT TESTA 16 (TT16)
528	A_84_P16819	-2.64	AT5G23940	BAHD acyltransferase DCR (PEL3)
529	A_84_P20603	-2.13	AT5G23990	ferric reduction oxidase 5 (FRO5)
530	A_84_P19658	-7.79	AT5G24240	phosphatidylinositol 3- and 4-kinase family protein / ubiquitin family protein
531	A_84_P511413	-2.05	AT5G24250	hypothetical protein
532	A_84_P18713	-2.20	AT5G24510	large subunit ribosomal protein LP1
533	A_84_P867371	-2.21	AT5G25090	early nodulin-like protein 3 (ENODL13)
534	A_84_P10206	-3.81	AT5G25160	zinc finger protein 3 (ZFP3)
535	A_84_P23446	-2.03	AT5G25390	ethylene-responsive transcription factor SHINE 3 (SHN2)
536	A_84_P11153	-4.28	AT5G25420	putative nucleobase-ascorbate transporter 9
537	A_84_P20610	-3.85	AT5G25880	malate dehydrogenase (oxaloacetate-decarboxylating)(NADP+) (NADP-ME3)
538	A_84_P574390	-2.46	AT5G26050	self-incompatibility S1 family protein
539	A_84_P838601	-3.25	AT5G26090	self-incompatibility S1 family protein
540	A_84_P66934	-2.26	AT5G26630	MADS-box protein AGL35
541	A_84_P87749	-2.21	AT5G27570	cell division cycle 20, cofactor of APC complex
542	A_84_P527390	-2.61	AT5G28490	hypothetical protein (LSH1)
543	A_84_P767466	-2.42	AT5G28525	hypothetical protein
544	A_84_P765990	-2.55	AT5G28712	hypothetical protein
545	A_84_P766917	-2.53	AT5G28888	similar to terpenoid cyclase/protein prenyltransferase alpha-alpha toroid
546	A_84_P16836	-2.65	AT5G35390	leucine-rich repeat protein kinase-like protein
547	A_84_P198944	-4.23	AT5G36000	hypothetical protein

548	A_84_P593141	-2.29	AT5G36280	hypothetical protein
549	A_84_P840966	-4.75	AT5G36870	callose synthase (GSL09)
550	A_84_P556641	-2.12	AT5G36960	hypothetical protein
551	A_84_P839463	-2.65	AT5G37478	TPX2 (targeting protein for Xklp2) family protein
552	A_84_P767553	-4.07	AT5G37940	2-alkenal reductase
553	A_84_P549559	-2.44	AT5G38100	putative S-adenosylmethionine-dependent methyltransferase
554	A_84_P767563	-2.45	AT5G38320	hypothetical protein
555	A_84_P18737	-3.75	AT5G38710	proline dehydrogenase 2
556	A_84_P216298	-2.93	AT5G38930	germin-like protein subfamily 1 member 10
557	A_84_P287700	-4.36	AT5G38940	germin-like protein subfamily 1 member 11
558	A_84_P20630	-2.05	AT5G38970	brassinosteroid-6-oxidase 1 (BR6OX1)
559	A_84_P841984	-2.81	AT5G39220	hydrolase, alpha/beta fold family protein
560	A_84_P14955	-3.36	AT5G39220	hydrolase, alpha/beta fold family protein
561	A_84_P206178	-2.92	AT5G39420	cyclin-dependent kinase (CDC2C)
562	A_84_P23470	-2.17	AT5G39720	avirulence induced protein 2 like protein (AIG2L)
563	A_84_P128141	-3.44	AT5G39890	hypothetical protein
564	A_84_P80109	-2.80	AT5G40630	ubiquitin family protein
565	A_84_P841998	-2.74	AT5G40645	RPM1-interacting protein 4 (RIN4)
566	A_84_P595814	-2.94	AT5G40800	hypothetical protein
567	A_84_P768200	-2.53	AT5G41663	a microRNA
568	A_84_P525626	-4.20	AT5G42610	hypothetical protein
569	A_84_P551331	-3.76	AT5G42655	disease resistance-responsive (dirigent-like protein) family protein
570	A_84_P17806	-5.06	AT5G42800	dihydroflavonol-4-reductase (DFR)
571	A_84_P507895	-2.03	AT5G43240	hypothetical protein
572	A_84_P22538	-4.21	AT5G43530	helicase protein with RING/U-box domain

573	A_84_P150218	-3.75	AT5G43935	flavonol synthase 6 (FLS6)
574	A_84_P20649	-2.60	AT5G44350	ethylene-responsive nuclear protein -like protein
575	A_84_P21595	-3.30	AT5G44360	FAD-binding and BBE domain-containing protein
575	A_84_P766117	-2.88	AT5G44418	hypothetical protein
576	A_84_P18762	-2.64	AT5G45580	transcription factor
577	A_84_P13089	-2.87	AT5G45730	cysteine/histidine-rich C1 domain-containing protein
578	A_84_P833384	-2.00	AT5G45830	delay of germination 1 protein (DOG1)
579	A_84_P552230	-2.81	AT5G46090	hypothetical protein
580	A_84_P21605	-3.30	AT5G46830	transcription factor bHLH28 (NIG1)
581	A_84_P10259	-2.12	AT5G47160	YDG/SRA domain-containing protein
582	A_84_P10265	-3.79	AT5G48650	nuclear transport factor 2 and RNA recognition motif domain-containing protein
583	A_84_P768175	-3.54	AT5G48953	defensin-like protein 76 (LCR86)
584	A_84_P585163	-2.74	AT5G49120	hypothetical protein
585	A_84_P245725	-2.73	AT5G50010	transcription factor bHLH145
586	A_84_P18780	-2.45	AT5G50120	transducin/WD40 domain-containing protein
587	A_84_P192414	-2.37	AT5G51790	transcription factor bHLH120
588	A_84_P15948	-4.49	AT5G51900	cytochrome P450 family protein
589	A_84_P858221	-2.16	AT5G51950	glucose-methanol-choline (GMC) oxidoreductase family protein
590	A_84_P582478	-2.28	AT5G52330	meprin and TRAF homology domain-containing protein
591	A_84_P14060	-2.52	AT5G52860	ABC transporter G family member 8
592	A_84_P573586	-2.08	AT5G53260	seed maturation protein
593	A_84_P590512	-2.72	AT5G53660	growth-regulating factor 7 (GRF7)
594	A_84_P251745	-2.84	AT5G53840	F-box/FBD/LRR-repeat protein
595	A_84_P22576	-3.01	AT5G53950	protein CUP-SHAPED COTYLEDON 2 (CUC2)
596	A_84_P16901	-2.94	AT5G54060	UDP-glucose:flavonoid 3-o-glucosyltransferase (UF3GT)

597	A_84_P521249	-3.40	AT5G54400	S-adenosyl-L-methionine-dependent methyltransferase-like protein
598	A_84_P13124	-2.26	AT5G55340	putative long-chain-alcohol O-fatty-acyltransferase 5
599	A_84_P15960	-2.47	AT5G55370	putative long-chain-alcohol O-fatty-acyltransferase 2
600	A_84_P10289	-2.03	AT5G55720	pectate lyase
601	A_84_P583397	-2.06	AT5G55893	hypothetical protein
602	A_84_P829753	-2.49	AT5G56230	PRA1 family protein G2 (PRA1.G2)
603	A_84_P787112	-2.14	AT5G56490	D-arabinono-1,4-lactone oxidase family protein
604	A_84_P11239	-2.81	AT5G56840	myb-like transcription factor family protein
605	A_84_P14075	-2.71	AT5G57240	OSBP(oxysterol binding protein)-related protein 4C (ORP4C)
606	A_84_P522226	-2.92	AT5G57420	auxin-responsive protein IAA33 (IAA33)
607	A_84_P14076	-2.10	AT5G57520	zinc finger protein 2 (ZFP2)
608	A_84_P19829	-4.37	AT5G58390	peroxidase 67
609	A_84_P17864	-3.55	AT5G58860	cytochrome P450 86A1 (CYP86A1)
610	A_84_P583408	-3.85	AT5G59305	hypothetical protein
611	A_84_P767554	-3.88	AT5G59330	lipid binding protein
612	A_84_P298084	-2.64	AT5G60180	pumilio 19 (PUM19)
613	A_84_P134445	-3.02	AT5G60760	2-phosphoglycerate kinase-related protein
614	A_84_P23549	-3.42	AT5G60830	basic leucine-zipper 70 (bZIP70)
615	A_84_P531900	-2.18	AT5G61050	histone deacetylase-like protein
616	A_84_P869736	-3.02	AT5G62165	protein agamous-like 42 (AGL42)
617	A_84_P843385	-4.01	AT5G63090	protein LATERAL ORGAN BOUNDARIES (LOB)
618	A_84_P67354	-2.13	AT5G63580	flavonol synthase 2 (FLS2)
619	A_84_P21669	-2.11	AT5G63590	flavonol synthase 3 (FLS3)
620	A_84_P859664	-2.06	AT5G63600	flavonol synthase 5 (FLS5)
621	A_84_P15996	-2.12	AT5G64110	peroxidase 70

622	A_84_P597689	-3.45	AT5G65340	hypothetical protein
623	A_84_P88939	-2.77	AT5G65510	AINTEGUMENTA-like 7 protein (AIL7)
624	A_84_P20731	-2.47	AT5G65530	protein kinase family protein
625	A_84_P501762	-2.03	AT5G66340	hypothetical protein
626	A_84_P20735	-2.19	AT5G66430	S-adenosyl-L-methionine-dependent methyltransferase-like protein
627	A_84_P20736	-2.17	AT5G66700	homeobox-leucine zipper protein ATHB-53 (HB53)
628	A_84_P21683	-2.22	AT5G66940	dof zinc finger protein DOF5.8
629	A_84_P513341	-4.32	AT5G66980	putative B3 domain-containing protein

Table S3. Comparative analysis of the genes enriched in specific GO terms between the transcriptomes of leaves of *igr2-9* and wild-type *Arabidopsis* at 29 days after sowing (DAS). The specific GO terms were those cited in Fig. S3F. The obtained data sets of the leaves at 29 DAS were referred to the report by Breeze et al. (2011).

Response to oxidative stress					
Leaves at 29 DAS		<i>igr2</i>		Overlapping genes	
AT1G13340	Unknown protein	AT1G72660	P-loop containing nucleoside triphosphate hydrolases superfamily protein	AT1G65040	Homologs of the yeast/human Hrd1 protein (HRD1B)
AT1G11210	Unknown protein	AT2G21640	Hypothetical protein	AT5G24110	WRKY transcription factor 30 (WRKY30)
AT2G19310	HSP20-like chaperones superfamily protein	AT1G44414	Unknown protein	AT5G64930	Constitutive expression of pr genes 5 (CPR5)
AT4G00940	Dof-type zinc finger DNA-binding family protein	AT1G17860	Kunitz family trypsin and protease inhibitor protein	AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)
AT2G46600	Calcium-binding EF-hand family protein	AT5G07330	Unknown protein	AT5G35320	Unknown protein
AT1G78420	RING/U-box superfamily protein	AT1G54840	HSP20-like chaperones superfamily protein	AT1G03850	Glutaredoxin 13 (GRXS13)
AT3G14430	Unknown protein	AT4G18450	Ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF)	AT4G25380	Stress-associated protein 10 (SAP10)
AT4G16190	Papain family cysteine protease	AT1G72060	Serine-type endopeptidase inhibitors	AT2G47000	ABC transporter B family member 4 (ABCB4)

AT5G59080	Unknown protein	AT1G78410	VQ motif-containing protein	AT1G78410	VQ motif-containing protein
AT1G78410	VQ motif-containing protein	AT5G51440	HSP20-like chaperones superfamily protein	AT5G39610	NAC domain containing protein 2 (NAC2)
AT4G33940	RING/U-box superfamily protein	AT3G25190	Vacuolar iron transporter-like protein	AT4G23493	Unknown protein
AT1G19020	unknown protein	AT1G14200	RING/U-box superfamily protein	AT1G52200	PLAC8 family protein
AT1G14200	RING/U-box superfamily protein	AT1G52200	PLAC8 family protein	AT1G14870	Plant cadmium resistance 2 (PCR2)
AT3G10020	Unknown protein	AT2G20940	Unknown function	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT5G47830	Unknown protein	AT5G37670	HSP20-like chaperones superfamily protein	AT3G17790	Expression is upregulated in the shoot of cax1/cax3 mutant (PAP17)
AT5G19875	Unknown protein	AT5G35320	Unknown protein	AT1G27730	Cys2/His2-type zinc-finger protein
AT1G52200	PLAC8 family protein	AT2G30480	Unknown protein	AT4G35770	Senescence 1 (SEN1)
AT4G13820	Leucine-rich repeat (LRR) family protein	AT4G23493	Unknown protein	AT3G51910	Heat shock transcription factor a7a (HSFA7A)
AT1G64360	Unknown protein	AT1G30070	SGS domain-containing protein	AT1G14200	RING/U-box superfamily protein
AT1G50290	Unknown protein	AT3G25250	Serine/threonine-protein kinase OXI1 (AGC2-1)	AT3G62770	protein required for autophagosome formation during nutrient deprivation and senescence

AT4G01280	Homeodomain-like superfamily protein	AT4G23810	Putative WRKY transcription factor 53 (WRKY53)		
AT1G64610	Transducin/WD40 repeat-like superfamily protein	AT2G19590	Aminocyclopropanecarboxylate oxidase (ACO1)		
AT5G39730	AIG2-like family protein	AT2G47000	ABC transporter B family member 4 (ABCB4)		
AT4G11170	Disease resistance protein (TIR-NBS-LRR class) family	AT3G62770	Protein required for autophagosome formation during nutrient deprivation and senescence		
AT5G35320	Unknown protein	AT2G46240	Bcl-2-associated athanogene protein (BAG6)		
AT1G80130	Tetratricopeptide repeat (TPR)-like superfamily protein	AT5G20230	Blue copper binding protein (SAG14)		
AT4G23493	Unknown protein	AT5G63160	BTB and TAZ domain protein.		
AT3G01420	Alpha-dioxygenase(DOX1)	AT3G48360	BTB and TAZ domain protein 2 (BT2)		
AT5G02490	Heat shock protein 70 (Hsp 70) family protein(Hsp70-2)	AT1G76080	Thioredoxin (CDSP32)		
AT2G06530	VPS2.1	AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)		
AT4G26080	ABA insensitive 1 (ABI1)	AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)		
AT5G59880	Actin depolymerizing factor 3 (ADF3)	AT3G63060	F-box protein (EDL3)		

AT2G47000	ABC transporter B family member 4 (ABCB4)	AT4G17490	Ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF6)		
AT3G62770	Protein required for autophagosome formation during nutrient deprivation and senescence	AT2G47180	Galactinol synthase (GOLS1)		
AT5G53400	Bobber1 (BOB1)	AT1G03850	Glutaredoxin 13 (GRXS13)		
AT5G42380	Calmodulin like 37 (CML37)	AT1G02930	Glutathione transferase		
AT1G10500	Chloroplast-localized isca-like protein (CPISCA)	AT3G04120	Cytosolic GADPH C subunit (GAPC1)		
AT5G64930	Constitutive expression of pr genes 5 (CPR5)	AT3G51910	Heat stress transcription factor		
AT2G40880	Cystatin a (CYSA)	AT1G65040	Homologs of the yeast/human Hrd1 protein (HRD1B)		
AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)	AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins		
AT3G20770	Ethylene-insensitive3 (EIN3)	AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)		
AT1G73730	Ethylene-insensitive3-like 3 (EIL3)	AT3G05790	Lon protease 4 (LON4)		
AT2G26300	G protein alpha subunit 1 (GP alpha 1)	AT1G16420	Cysteine-type endopeptidase (MC8)		
AT2G46270	G-box binding factor 3 (GBF3)	AT5G39610	NAC domain containing protein 2 (NAC2)		

AT3G63010	GA insensitive dwarf1b (GID1b)	AT5G04950	Nicotianamine synthase 1 (NAS1)		
AT1G56600	Galactinol synthase 2 (GOLS2)	AT1G04980	Disulfide isomerase-like protein (PDI10)		
AT1G03850	Glutaredoxin 13 (GRXS13)	AT1G14870	Cadmium resistance protein 2 (PCR2)		
AT5G02790	Glutathione transferase l3 (GSTI3)	AT3G17790	Expression is upregulated in the shoot of cax1/cax3 mutant (PAP17)		
AT3G51910	Heat shock transcription factor A7A (HSFA7A)	AT3G16050	Pyridocine biosynthesis 1.2 (PDX1.2)		
AT1G65040	Homolog of yeast hrd1 (HRD1B)	AT3G25230	FK506 binding protein (FKBP62)		
AT4G20380	Lesion simulating disease (LSD1)	AT1G27730	Cys2/His2-type zinc-finger protein		
AT2G18170	MAP kinase 7 (MPK7)	AT4G35770	Senescence 1 (SEN1)		
AT1G60870	Maternal effect embryo arrest 9 (MEE9)	AT4G02380	Late embryogenesis abundant like protein (SAG21)		
AT4G04800	Methionine sulfoxide reductase b3 (MSRB3)	AT4G25380	Stress-associated protein 10(SAP10)		
AT1G10210	Mitogen-activated protein kinase 1 (MPK1)	AT1G05680	UDP-glucosyltransferase (UGT74E2)		
AT3G24500	Multiprotein bridging factor 1c (MBF1c)	AT5G24110	WRKY DNA-binding protein 30 (WRKY30)		
AT5G39610	NAC domain containing protein 2 (NAC2)	AT4G24240	Ca-dependent calmodulin binding protein (WRKY7)		

AT3G51610	No primexine and plasma membrane undulation (NPU)				
AT5G06960	Ocs-element binding factor 5 (OBF5)				
AT2G40000	Ortholog of sugar beet hs1 pro-1 2 (HSPRO2)				
AT5G59420	Osbp(oxysterol binding protein)-related protein 3c (ORP3C)				
AT5G61640	Peptidemethionine sulfoxide reductase 1 (PMSR1)				
AT5G07470	Peptidemethionine sulfoxide reductase 3 (PMSR3)				
AT3G02800	Plant and fungi atypical dual-speciﬁcity phosphatase 3 (PFA-DSP3)				
AT1G14870	Plant cadmium resistance 2 (PCR2)				
AT3G17790	Expression is upregulated in the shoot of cax1/cax3 mutant (PAP17)				
AT1G69270	Receptor-like protein kinase 1 (RPK1)				
AT5G59820	Responsive to high light 41 (RHL41)				

AT1G27730	Cys2/His2-type zinc-finger protein				
AT3G55460	Sc35-like splicing factor 30 (SCL30)				
AT3G57520	Seed imbibition 2 (SIP2)				
AT4G35770	Senescence 1 (SEN1)				
AT4G02380	Senescence-associated gene 21 (SAG21)				
AT2G35510	Similar to rcd one 1 (SRO1)				
AT4G25380	Stress-associated protein 10 (SAP10)				
AT1G45145	Thioredoxin h-type 5 (TRX5)				
AT5G37770	Touch 2 (TCH2)				
AT5G64510	Tunicamycin induced 1 (TIN1)				
AT4G29380	Vacuolar protein sorting 15 (VPS15)				
AT5G24110	WRKY transcription factor 30 (WRKY30)				
AT4G34890	Xanthine dehydrogenase 1 (XDH1)				

Response to reactive oxygen species

Leaves at 29 DAS		<i>igr2</i>		Overlapping genes	
AT4G16190	Papain family cysteine protease	AT1G72660	P-loop containing nucleoside triphosphate hydrolases superfamily protein	AT1G65040	Homologs of the yeast/human Hrd1 protein (HRD1B)

AT4G33940	RING/U-box superfamily protein	AT4G18450	Ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF)	AT5G24110	WRKY transcription factor 30 (WRKY30)
AT5G47830	Unknown protein	AT1G14200	RING/U-box superfamily protein	AT5G64930	Constitutive expression of pr genes 5 (CPR5)
AT1G14200	RING/U-box superfamily protein	AT3G25190	Nodulin-like protein 21	AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)
AT4G13820	Leucine-rich repeat (LRR) family protein	AT5G51440	HSP20-like chaperones superfamily protein	AT5G35320	Unknown protein
AT2G19310	HSP20-like chaperones superfamily protein	AT2G20940	Unknown protein	AT4G25380	Stress-associated protein 10 (SAP10)
AT1G64610	Transducin/WD40 repeat-like superfamily protein	AT1G44414	Unknown protein	AT2G47000	ABC transporter B family member 4 (ABCB4)
AT4G01280	Homeodomain-like superfamily protein	AT1G17860	Kunitz family trypsin and protease inhibitor protein	AT5G39610	NAC domain containing protein 2 (NAC2)
AT4G00940	Dof-type zinc finger DNA-binding family protein	AT5G07330	Unknown protein	AT4G23493	Unknown protein
AT5G35320	Unknown protein	AT1G54840	HSP20-like chaperones superfamily protein	AT4G02380	Senescence-associated gene 21 (SAG21)
AT4G11170	Disease resistance protein (TIR-NBS-LRR class) family	AT5G37670	HSP20-like chaperones superfamily protein	AT3G17790	Expression is upregulated in the shoot of cax1/cax3 mutant (PAP17)
AT5G39730	AIG2-like (avirulence induced gene) family protein	AT5G35320	Unknown protein	AT3G51910	Heat shock transcription factor a7a (HSFA7A)

AT2G46600	Calcium-binding EF-hand family protein	AT2G30480	Unknown protein	AT1G14200	RING/U-box superfamily protein
AT1G78420	RING/U-box superfamily protein	AT1G30070	SGS domain-containing protein		
AT4G23493	Unknown protein	AT4G23493	Unknown protein		
AT3G01420	Alpha-dioxygenase(DOX1)	AT4G23810	WRKY Transcription Factor(WRKY53)		
AT5G02490	Heat shock protein 70 (Hsp 70) family protein(Hsp70-2)	AT2G19590	Aminocyclopropanecarboxylate oxidase (ACO1)		
AT2G06530	VPS2.1	AT2G47000	ABC transporter B family member 4 (ABCB4)		
AT4G26080	ABA insensitive 1 (ABI1)	AT2G46240	Bcl-2-associated athanogene protein (BAG6)		
AT2G47000	ABC transporter B family member 4 (ABCB4)	AT5G63160	Bcl-2-associated athanogene 6 (BAG6)		
AT5G53400	Bobber1 (BOB1)	AT3G48360	BTB and TAZ domain protein.		
AT5G42380	Calmodulin like 37 (CML37)	AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)		
AT1G10500	Chloroplast-localized isca-like protein (CPISCA)	AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)		
AT5G64930	Constitutive expression of pr genes 5 (CPR5)	AT3G63060	F-box protein (EDL3)		
AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)	AT4G17490	Ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF6)		

AT3G20770	Ethylene-insensitive3 (EIN3)	AT2G47180	Galactinol synthase (GOLS1)		
AT1G73730	Ethylene-insensitive3-like 3 (E3)	AT3G04120	Cytosolic GADPH C subunit (GAPC1)		
AT2G26300	G protein alpha subunit 1 (GP alpha 1)	AT3G51910	Heat stress transcription factor		
AT2G46270	G-box binding factor 3 (GBF3)	AT1G65040	Homologs of the yeast/human Hrd1 protein (HRD1B)		
AT3G63010	GA insensitive dwarf1b (G1B)	AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins		
AT5G02790	Glutathione transferase I3 (GSTI3)	AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)		
AT3G51910	Heat shock transcription factor a7a (HSFA7A)	AT1G16420	cysteine-type endopeptidase (MC8)		
AT1G65040	Homologs of the yeast/human Hrd1 protein (HRD1B)	AT5G39610	NAC-domain transcription factor (NAC2)		
AT4G20380	Lesion simulating disease (LSD1)	AT5G04950	NAC domain containing protein 2 (NAC2)		
AT2G18170	MAP kinase 7 (MPK7)	AT1G04980	Disulfide isomerase-like protein (PDI10)synthase 1 (NAS1)		
AT1G60870	Maternal effect embryo arrest 9 (MEE9)	AT3G17790	Expression is upregulated in the shoot of cax1/cax3 mutant (PAP17)		
AT1G10210	Mitogen-activated protein kinase 1 (MPK1)	AT3G16050	Pyridocine biosynthesis 1.2 (PDX1.2)		
AT3G24500	Multiprotein bridging factor 1c (MBF1c)	AT3G25230	FK506 binding protein (FKBP62)		

AT5G39610	NAC domain containing protein 2 (NAC2)	AT4G02380	Late embryogenesis abundant like protein (SAG21)		
AT5G06960	Ocs-element binding factor 5 (OBF5)	AT4G25380	Senescence-associated gene 21 (SAG21)		
AT5G59420	OSBP(oxysterol binding protein)-related protein 3c (ORP3C)	AT1G05680	UDP-glucosyltransferase (UGT74E2)		
AT3G02800	Plant and fungi atypical phosphatase 3 (PFA-DSP3)	AT5G24110	WRKY DNA-binding protein 30 (WRKY30)		
AT3G17790	Expression is upregulated in the shoot of cax1/cax3 mutant (PAP17)	AT4G24240	Ca-dependent calmodulin binding protein (WRKY7)		
AT1G69270	Receptor-like protein kinase 1 (RPK1)		WRKY transcription factor 7 (WRKY7)		
AT4G02380	Late embryogenesis abundant like protein (SAG21)				
AT4G25380	Stress-associated protein 10 (SAP10)				
AT5G37770	Touch 2 (TCH2)				
AT5G64510	Tunicamycin induced 1 (TIN1)				
AT4G29380	Vacuolar protein sorting 15 (VPS15)				
AT5G24110	WRKY transcription factor 30 (WRKY30)				
AT4G34890	Xanthine dehydrogenase 1 (XDH1)				

Response to hydrogen peroxide					
Leaves at 29 DAS		<i>igr2</i>		Overlapping genes	
AT4G26980	RNI-like superfamily protein	AT1G72660	P-loop containing nucleoside triphosphate hydrolases superfamily protein	AT5G64930	Constitutive expression of pr genes 5 (CPR5)
AT4G16190	Papain family cysteine protease	AT4G18450	a member of the ERF (ethylene response factor) subfamily B-3 of ERF/AP2 transcription factor family	AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)
AT1G14200	RING/U-box superfamily protein	AT1G14200	RING/U-box superfamily protein	AT5G35320	unknown protein
AT2G19310	HSP20-like chaperones superfamily protein	AT5G51440	HSP20-like chaperones superfamily protein	AT1G73260	Kunitz trypsin inhibitor 1 (KTIL)
AT3G46930	Protein kinase superfamily protein	AT2G20940	Unknown protein	AT4G23493	unknown protein
AT4G00940	Dof-type zinc finger DNA-binding family protein	AT1G44414	Unknown protein	AT3G17790	Expression is upregulated in the shoot of cax1/cax3 mutant (PAP17)
AT5G35320	unknown protein	AT1G17860	Kunitz family trypsin and protease inhibitor protein	AT3G51910	Heat shock transcription factor a7a (HSFA7A)
AT5G39730	AIG2-like (avirulence induced gene) family protein	AT5G07330	Unknown protein	AT1G14200	RING/U-box superfamily protein
AT2G20560	DNAJ heat shock family protein	AT1G54840	HSP20-like chaperones superfamily protein		
AT2G46600	Calcium-binding EF-hand family protein	AT5G37670	HSP20-like chaperones superfamily protein		

AT4G23493	unknown protein	AT5G35320	Unknown protein		
AT1G78420	RING/U-box superfamily protein	AT2G30480	Unknown protein		
AT5G03630	ATMDAR2	AT1G30070	SGS domain-containing protein		
AT2G06530	VPS2.1	AT4G23493	Unknown protein		
AT5G60360	Aleurain-like protease (ALP)	AT4G23810	WRKY transcription Factor(WRKY53)		
AT5G62000	Auxin response factor 2 (ARF2)	AT2G46240	Bcl-2-associated athanogene protein (BAG6)		
AT1G10500	Chloroplast-localized isca-like protein (CPISCA)	AT5G63160	Btb and taz domain protein 1 (BT1)		
AT5G64930	Constitutive expression of pr genes 5 (CPR5)	AT3G48360	Btb and taz domain protein 2 (BT2)		
AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)	AT5G64930	Constitutive expression of pr genes 5 (CPR5)		
AT1G47128	Esponsive to dehydration 21a (RD21a)	AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)		
AT5G01600	Ferretin 1 (FER1)	AT3G63060	F-box protein (EDL3)		
AT2G42590	General regulatory factor 9 (GRF9)	AT2G47180	Galactinol synthase 1 (GOLS1)		
AT5G02790	Glutathione transferase l3 (GSTI3)	AT3G04120	Cytosolic GADPH C subunit (GAPC1)		
AT3G12580	Heat shock protein 70 (HSP70)	AT3G51910	Heat shock transcription factor a7a (HSFA7A)		

AT3G51910	Heat shock transcription factor a7a (HSFA7A)	AT1G65040	Homologs of the yeast/human Hrd1 protein (HRD1B)		
AT1G73260	Kunitz trypsin inhibitor 1 (KTIL)	AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins		
AT4G34120	Loss of the timing of et and ja biosynthesis 1 (LEJ1)	AT1G73260	Kunitz trypsin inhibitor 1 (KTII)		
AT3G19640	Magnesium transporter 4 (MGT4)	AT1G16420	Cysteine-type endopeptidase (MC8)		
AT2G18170	MAP kinase 7 (MPK7)	AT1G04980	Disulfide isomerase-like protein (PDI10)		
AT1G60870	Maternal effect embryo arrest 9 (MEE9)	AT3G17790	Expression is upregulated in the shoot of cax1/cax3 mutant (PAP17)		
AT3G24500	Multiprotein bridging factor 1c (MBF1C)	AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)		
AT2G22240	Myo-inositol-1-phosphate synthase 2 (MIPS2)	AT3G25230	FK506 binding protein (FKBP62)		
AT5G59420	OSBP(oxysterol binding protein)-related protein 3c (ORP3C)	AT4G25380	Stress-associated protein 10 (SAP10)		
AT3G02800	Plant and fungi atypical phosphatase 3 (PFA-DSP3)	AT1G05680	UDP-glucosyltransferase (UGT74E2)		
AT3G17790	Expression is upregulated in the shoot of cax1/cax3 mutant (PAP17)	AT5G24110	WRKY transcription factor 30 (WRKY30)		
AT5G42980	Thioredoxin 3 (TRX3)	AT4G24240	Ca-dependent calmodulin binding protein (WRKY7)		

AT5G37770	Touch 2 (TCH2)				
AT4G12570	Ubiquitin protein ligase 5 (UPI5)				
Leaf senescence					
Leaves at 29 DAS		<i>igr2</i>		Overlapping genes	
AT4G35890	Winged-helix DNA-binding transcription factor family protein	AT4G23810	WRKY transcription factor(WRKY53)	AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)
AT1G73680	Alpha dioxygenase (Alpha DOX2)	AT2G13810	Agd2-like defense response protein 1 (ALD1)	AT3G10500	NAC domain containing protein 53 (NAC53)
AT4G18980	Ats40-3 (Ats40-3)	AT3G62770	Protein required for autophagosome formation during nutrient deprivation and senescence	AT5G39610	NAC domain containing protein 2 (NAC2)
AT3G62770	Autophagy 18a (AtATG18A)	AT5G64930	Constitutive expression of pr genes 5 (CPR5)	AT5G64930	Constitutive expression of pr genes 5 (CPR5)
AT5G45900	Autophagy 7 (APG7)	AT2G39200	MLO-like protein 12 (MLO12)		
AT1G11190	Bifunctional nuclease i (BFN1)	AT5G39610	NAC domain containing protein 2 (NAC2)		
AT5G64930	Constitutive expression of pr genes 5 (CPR5)	AT3G10500	NAC domain containing protein 53 (NAC053)		
AT5G39610	NAC domain containing protein 2 (NAC2)	AT3G11340	UDP-glycosyltransferase-like protein		
AT3G29035	NAC domain containing protein 3 (NAC3)	AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)		

AT2G43000	NAC domain containing protein 42 (NAC42)				
AT3G10500	NAC domain containing protein 53 (NAC53)				
AT5G13180	NAC domain containing protein 83 (NAC83)				
AT1G69490	NAC-like, activated by ap3/pi (NAP)				
AT1G73220	Organic cation/carnitine transporter1 (OCT1)				
AT5G13170	Senescence-associated gene 29 (SAG29)				
AT5G51640	Yellow-leaf-specific gene 7 (YLS7)				
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)				

Defense response

Leaves at 29 DAS		<i>igr2</i>		Overlapping genes	
AT1G25400	Unknown protein	AT2G43620	Chitinase-like protein	AT5G64930	Constitutive expression of PR genes 5 (CPR5)
AT3G51130	Unknown protein	AT3G28510	AAA-type ATPase family protein	AT1G03850	Glutaredoxin 13 (GRXS13)
AT1G13340	Unknown protein	AT1G78410	VQ motif-containing protein	AT1G78410	VQ motif-containing protein
AT1G74440	Unknown protein	AT5G39580	Peroxidase 62	AT4G02380	Late embryogenesis abundant like protein (SAG21)

AT3G51660	Tautomerase/MIF superfamily protein	AT2G27660	cysteine/histidine-rich domain-containing protein C1	AT1G27730	cys2/His2-type zinc-finger protein
AT1G65820	Microsomal glutathione s-transferase	AT1G13470	Unknown protein	AT3G28510	AAA-type ATPase family protein
AT3G28940	AIG2-like (avirulence induced gene) family protein	AT4G10500	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein	AT5G46050	Peptide transporter 3 (PTR3)
AT4G38540	FAD/NAD(P)-binding oxidoreductase family protein	AT4G39830	Putative L-ascorbate oxidase	AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)
AT5G10190	Major facilitator superfamily protein	AT1G51790	Leucine-rich repeat protein kinase family protein	AT3G23240	Ethylene response factor 1 (ERF1)
AT5G62150	Peptidoglycan-binding LysM domain-containing protein	AT5G64120	Peroxidase 71	AT3G62770	protein required for autophagosome formation during nutrient deprivation and senescence
AT4G18360	Aldolase-type TIM barrel family protein	AT5G51190	Ethylene response factor 105 (ERF105)	AT3G15500	NAC domain containing protein 3 (NAC3)
AT3G09020	Alpha 1,4-glycosyltransferase family protein	AT3G48640	Unknown protein	AT4G34410	redox responsive transcription factor 1 (RRTF1)
AT3G01830	Calcium-binding EF-hand family protein	AT4G23810	WRKY transcription factor (WRKY53)		
AT1G05575	Unknown protein	AT3G57240	Beta-1,3-glucanase 3 (BG3)		
AT3G47480	Calcium-binding EF-hand family protein	AT4G11890	Protein kinase family protein		

AT2G17740	Cysteine/Histidine-rich C1 domain family protein	AT2G13810	Agd2-like defense response protein 1 (ALD1)		
AT4G33940	RING/U-box superfamily protein	AT3G62770	Pprotein required for autophagosome formation during nutrient deprivation and senescence		
AT1G23710	Unknown function	AT4G12470	Azelaic acid induced 1 (AZI1)		
AT1G19020	Unknown protein	AT2G46240	Bcl-2-associated athanogene 6 (BAG6)		
AT1G50740	Transmembrane proteins 14C	AT5G20230	Blue-copper-binding protein (SAG14)		
AT1G15430	Unknown protein	AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)		
AT4G16260	Glycosyl hydrolase superfamily protein	AT4G23150	Cysteine-rich receptor-like protein kinase 7 (CRK7)		
AT1G64610	Transducin/WD40 repeat-like superfamily protein	AT5G64905	Elicitor peptide 3 precursor (PROPEP3)		
AT1G31130	Unknown protein	AT3G23240	Ethylene response factor 1 (ERF1)		
AT3G13950	Unknown protein	AT4G17490	Ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF6)		
AT1G15010	Unknown protein	AT2G44840	Ethylene-responsive transcription factor 13 (ERF13)		
AT5G05320	FAD/NAD(P)-binding oxidoreductase family protein	AT1G19250	Putative flavin-containing monooxygenase 1 (FMO1)		
AT3G60690	SAUR-like auxin-responsive protein	AT2G19190	Flg22-induced receptor-like kinase 1 (FRK1)		

AT3G28510	AAA-type ATPase family protein	AT1G03850	Glutaredoxin 13 (GRXS13)		
AT5G43570	PR (pathogenesis-related) peptide	AT1G02930	Glutathione transferase		
AT4G27450	Unknown protein	AT1G73260	Kunitz trypsin inhibitor 1 (1KTIL)		
AT2G32030	Acyl-CoA N-acyltransferases (NAT) superfamily protein	AT2G39200	MLO-like protein 12 (MLO12)		
AT5G66070	RING/U-box superfamily protein	AT5G14180	Triacylglycerol lipase 2 (MPL1)		
AT2G14080	Disease resistance protein (TIR-NBS-LRR class) family	AT3G15500	NAC domain containing protein 3 (NAC3)		
AT4G25900	Galactose mutarotase-like superfamily protein	AT2G14610	Pathogenesis-related gene 1 (PR1)		
AT4G00700	C2 calcium/lipid-binding plant phosphoribosyltransferase family protein	AT1G04980	Disulfide isomerase-like protein (PDI10)		
AT3G53600	C2H2-type zinc finger family protein	AT5G46050	Peptide transporter 3 (PTR3)		
AT4G19925	Toll-Interleukin-Resistance (TIR) domain family protein	AT5G44420	Plant defensin 1.2 (PDF1.2)		
AT2G15170	Plant basic secretory protein (BSP) family protein	AT3G23010	Receptor like protein 36 (RLP36)		
AT4G26120	Ankyrin repeat family protein / BTB/POZ domain-containing protein	AT4G34410	Redox responsive transcription factor 1 (MTF1)		
AT1G25275	unknown protein	AT1G27730	Cys2/His2-type zinc-finger protein		

AT1G03150	Acyl-CoA N-acyltransferases (NAT) superfamily protein	AT4G02380	Llate embryogenesis abundant like protein (SAG21)		
AT3G45040	Putative dolichol kinase.	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)		
AT3G52800	A20/AN1-like zinc finger family protein	AT2G24850	Tyrosine aminotransferase 3 (TAT3)		
AT1G78410	VQ motif-containing protein	AT3G11340	UDP-glycosyltransferase-like protein		
AT2G27310	F-box family protein	AT5G50200	Nitrate transmembrane transporter (WR3)		
AT5G18130	Unknown protein	AT5G22570	WRKY transcription factor 38 (WRKY38)		
AT1G76600	Unknown protein	AT5G26170	WRKY transcription factor 50 (WRKY50)		
AT4G39670	Glycolipid transfer protein (GLTP) family protein	AT5G01900	Putative WRKY transcription factor 62 (WRKY62)		
AT1G65690	Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family	AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)		
AT3G17410	Protein kinase superfamily protein				
AT2G32140	Transmembrane receptors				
AT4G11170	Disease resistance protein (TIR-NBS-LRR class) family				
AT2G37130	Peroxidase superfamily protein				
AT1G76070	Unknown protein				

AT3G48760	DHHC-type zinc finger family protein				
AT2G30020	AP2C1				
AT3G10800	Putative membrane-tethered transcriptional factor(BZIP28)				
AT2G40140	CZF1				
AT3G01420	Alpha-dioxygenase (CZF1)				
AT1G28480	Glutaredoxin (GRX480)				
AT5G02490	Heat shock protein 70 (Hsp 70) family protein(Hsp70-2)				
AT1G32130	(IWS1)				
AT2G02120	PR (pathogenesis-related) protein(PDF2.1)				
AT4G19700	BOI (Botrytis Susceptible 1 Interactor) (RING)				
AT3G10640	(VPS60.1)				
AT5G57220	Cytochrome p450, family 81, subfamily f, polypeptide 2 (CYP81f2)				
AT4G26080	ABA insensitive 1 (ABI1)				
AT3G44880	Accelerated cell death 1 (ACD1)				
AT2G34690	Accelerated cell death 11 (ACD11)				
AT2G26400	Acireductone dioxygenase 3 (ARD3)				

AT1G33560	Activated disease resistance 1 (ADR1)				
AT3G48990	Acyl-activating enzyme 3 (AAE3)				
AT5G04720	Adr1-like 2 (ADR1-I2)				
AT3G62770	Protein required for autophagosome formation during nutrient deprivation and senescence				
AT3G61710	Autophagy 6 (ATG6)				
AT5G45900	Autophagy 7 (APG7)				
AT4G21980	Autophagy 8a (APG8a)				
AT5G13320	Avrpphb susceptible 3 (PBS3)				
AT1G42990	Basic region/leucine zipper motif 60 (bZIP60)				
AT5G47120	Bax inhibitor 1 (BI1)				
AT5G41410	Bell 1 (BEL1)				
AT5G42380	Calmodulin like 37 (CML37)				
AT5G26920	CAM-binding protein 60-like g (CBP60g)				
AT5G27420	Carbon/nitrogen insensitive 1 (CNIL)				
AT5G25110	Cbl-interacting protein kinase 25 (CIPK25)				
AT1G20440	Cold-regulated 47 (COR47)				

AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)				
AT3G50260	Cooperatively regulated by ethylene and jasmonate 1 (CEJ1)				
AT4G01010	Cyclic nucleotide-gated channel 13 (CNJC13)				
AT1G70530	Cysteine-rich rlk (receptor-like protein kinase) 3 (CRK3)				
AT4G04490	Cysteine-rich rlk (receptor-like protein kinase) 36 (CRK36)				
AT4G04500	Cysteine-rich rlk (receptor-like protein kinase) 37 (CRK37)				
AT4G00550	Digalactosyl diacylglycerol deficient 2 (DGD2)				
AT3G62800	Double-stranded-rna-binding protein 4 (DRB4)				
AT3G60190	Dynamin-like 1e (DL1E)				
AT1G28370	Erf domain protein 11 (ERF11)				
AT3G23240	Ethylene response factor 1 (ERF1)				
AT5G61600	Ethylene response factor 104 (ERF104)				
AT4G17500	Ethylene responsive element binding factor 1 (ERF-1)				

AT5G47220	Ethylene responsive element binding factor 2 (ERF2)				
AT3G15210	Ethylene responsive element binding factor 4 (ERF4)				
AT3G20770	Ethylene-insensitive3 (EIN3)				
AT1G73730	Ethylene-insensitive3-like 3 (EIL3)				
AT5G09440	Exordium like 4 (EXL4)				
AT1G12200	Flavin monooxygenase (FMO)				
AT3G63010	GA insensitive dwarf1b (GID1B)				
AT1G09560	Germin-like protein 5 (GLP5)				
AT1G03850	Glutaredoxin 13 (GRXS13)				
AT2G47730	Glutathione s-transferase phi 8 (GSTF8)				
AT3G57550	Guanylate kinase (AGK2)				
AT5G62020	Heat shock transcription factor b2a (HSFB2A)				
AT1G70690	Hopw1-1-induced gene1 (HWI1)				
AT1G55110	Indeterminate(id)-domain 7 (IDD7)				
AT1G01470	Late embryogenesis abundant 14 (LEA14)				
AT5G01540	Lectin receptor kinase a4.1 (LECEKa4.1)				

AT4G20380	Lesion simulating disease (LSD1)				
AT3G50970	Low temperature-induced 30 (LTI30)				
AT1G01560	MAP kinase 11 (MPK11)				
AT3G21220	MAP kinase kinase 5 (MKK5)				
AT2G15890	Maternal effect embryo arrest 14 (MEE14)				
AT3G48890	Membrane-associated progesterone binding protein 3 (MAPR3)				
AT1G10210	Mitogen-activated protein kinase 1 (MPK1)				
AT1G51660	Mitogen-activated protein kinase kinase 4 (MKK4)				
AT2G42620	More axillary branches 2 (MAX2)				
AT3G06490	Myb domain protein 108 (MYB108)				
AT3G15500	NAC domain-containing protein 55 (NAC3)				
AT2G43000	NAC domain containing protein 42 (NAC42)				
AT3G49530	NAC domain containing protein 22 (NAC22)				

AT1G69490	NAC-like, activated by ap3/pi (NAP)				
AT3G11660	NDR1/hin1-like 1 (NHL1)				
AT3G11650	NDR1/hin1-like 2 (NHL2)				
AT5G06320	NDR1/hin1-like 3 (NHL3)				
AT1G02860	Nitrogen limitation adaptation (NLA)				
AT5G06960	Ocs-element binding factor 5 (OBF5)				
AT5G46180	Ornithine-delta-aminotransferase (Delta-OAT)				
AT2G40000	Ortholog of sugar beet hs1 pro-1 2 (HSPRO2)				
AT5G59420	OSBP(oxysterol binding protein)-related protein 3c (ORP3C)				
AT3G04720	Pathogenesis-related 4 (PR4)				
AT5G46050	Peptide transporter 3 (PTR3)				
AT5G06720	Peroxidase 2 (PA2)				
AT1G01820	Peroxin 11c (PEX11C)				
AT2G26560	Phospholipase a 2a (PLA2a)				
AT2G42010	Phospholipase d beta 1 (PLD beta1)				
AT4G20260	Plasma-membrane associated cation-binding protein 1 (PCAP1)				

AT4G18430	Rab gtpase homolog a1e (RAB a1e)				
AT2G32660	Receptor like protein 22 (RLP22)				
AT3G05360	Receptor like protein 30 (RLP30)				
AT1G47890	Receptor like protein 7 (RLP7)				
AT1G69270	Receptor-like protein kinase 1 (RPK1)				
AT4G34410	Redox responsive transcription factor 1 (RRTF1)				
AT3G46620	Ring and domain of unknown function 1117 1 (RDUF1)				
AT5G63970	Ring domain ligase 3 (RGLG3)				
AT1G27730	Cys2/His2-type zinc-finger protein				
AT4G02380	Late embryogenesis abundant like protein (SAG21)				
AT1G15310	Signal recognition particle 54 kda subunit (ATHSRP54A)				
AT3G52400	Syntaxin of plants 122 (SYP122)				
AT2G23810	Tetraspanin8 (TET8)				
AT3G12250	Tgacg motif-binding factor 6 (TGA6)				
AT1G45145	Thioredoxin h-type 5 (TRX5)				

AT5G37770	Touch 2 (TCH2)				
AT3G16720	Toxicos en levadura 2 (ATI2)				
AT2G30140	UDP-glucosyl transferase 87a2 (UGT87a2)				
AT5G43580	Unusual serine protease inhibitor (UPI)				
AT2G23320	WRKY transcription factor 15 (WRKY15)				
AT2G30250	WRKY transcription factor 25 (WRKY25)				
AT2G38470	WRKY transcription factor 33 (WRKY33)				
AT5G49520	WRKY transcription factor 48 (WRKY48)				
AT5G64810	WRKY transcription factor 51 (WRKY51)				
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)				
AT1G05300	Zinc transporter 5 precursor (ZIP5)				
AT3G19580	Zinc-finger protein 2 (ZF2)				
Salicylic acid mediated signaling pathway					
Leaves at 29 DAS		<i>igr2</i>		Overlapping genes	

AT3G60690	SAUR-like auxin-responsive protein family	AT3G28510	AAA-type ATPase family protein	AT3G28510	P-loop containing nucleoside triphosphate hydrolases superfamily protein
AT3G28510	P-loop containing nucleoside triphosphate hydrolases superfamily protein	AT5G64120	Peroxidase	AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)
AT1G25400	Unknown protein	AT1G78410	VQ motif-containing protein	AT1G78410	VQ motif-containing protein
AT1G13340	Unknown protein	AT3G48640	Unknown protein	AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)
AT3G22160	VQ motif-containing protein	AT1G13470	Unknown protein	AT3G15500	NAC domain containing protein 3 (NAC3)
AT4G27450	Unknown protein	AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)		
AT1G28190	Unknown protein	AT4G23810	WRKY transcription factor(WRKY53)		
AT4G26120	Ankyrin repeat family protein / BTB/POZ domain-containing protein	AT3G57240	Beta-1,3-glucanase 3 (BG3)		
AT3G09020	Alpha 1,4-glycosyltransferase family protein	AT4G11890	Protein kinase family protein		
AT3G45040	Putative dolichol kinase.	AT2G13810	Agd2-like defense response protein 1 (ALD1)		
AT2G27500	Glycosyl hydrolase superfamily protein	AT4G12470	Azelaic acid induced 1 (ZAI1)		

AT3G01830	Calcium-binding EF-hand family protein	AT2G44840	ethylene-responsive transcription factor 13 (ERF13)		
AT3G47480	Calcium-binding EF-hand family protein	AT2G19190	Flg22-induced receptor-like kinase 1 (FRK1)		
AT1G78410	VQ motif-containing protein	AT3G15500	NAC domain containing protein 3 (NAC3)		
AT1G19020	Unknown protein	AT2G14610	Pathogenesis-related gene 1 (PR1)		
AT4G13820	Leucine-rich repeat (LRR) family protein	AT3G26830	Cytochrome P450 71B15 (PAD3)		
AT4G25390	Protein kinase superfamily protein	AT4G02380	Late embryogenesis abundant like protein (SAG21)		
AT1G15430	Unknown protein	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)		
AT4G39670	Glycolipid transfer protein (GLTP) family protein	AT5G22570	WRKY transcription factor 38 (WRKY38)		
AT3G17410	Protein kinase superfamily protein	AT5G01900	Putative WRKY transcription factor 62 (WRKY62)		
AT1G64610	Transducin/WD40 repeat-like superfamily protein	AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)		
AT3G13950	Unknown protein				
AT3G48760	DHHC-type zinc finger family protein				
AT5G38710	Methylenetetrahydrofolate reductase family protein				
AT2G26530	Unknown protein				

AT3G10800	Putative membrane-tethered transcriptional factor(BZIP28)				
AT2G40140	(CZF1)				
AT1G28480	Glutaredoxin(GRX480)				
AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)				
AT1G22400	(UGT85A1)				
AT3G10640	(VPS60.1)				
AT4G26080	ABA insensitive 1 (ABI1)				
AT2G26400	Acireductone dioxygenase 3 (ARD3)				
AT5G13320	Avrpphb susceptible 3 (PBS3)				
AT1G42990	Basic region/leucine zipper motif 60 (bZIP60)				
AT5G47120	Bax inhibitor 1 (BI1)				
AT5G41410	Bell 1 (BEL1)				
AT5G26920	CAM-binding protein 60-like g (CBP60g)				
AT4G01010	Cyclic nucleotide-gated channel 13 (CNGC13)				
AT4G04490	Cysteine-rich rlk (receptor-like protein kinase) 36 (CRK36)				
AT4G00550	Digalactosyl diacylglycerol deficient 2 (DGD2)				

AT3G60190	Dynamin-like 1e (DL1e)				
AT1G28370	Erf domain protein 11 (ERF11)				
AT3G20770	Ethylene-insensitive3 (EIN3)				
AT1G73730	Ethylene-insensitive3-like 3 (EIL3)				
AT2G26300	G protein alpha subunit 1 (GP alpha 1)				
AT3G63010	GA insensitive dwarf1b (GID1B)				
AT5G27320	GA insensitive dwarf1c (GID1C)				
AT5G13190	GSH-induced litaf domain protein (GILP)				
AT5G01540	Lectin receptor kinase a4.1 (LECRKa4.1)				
AT4G20380	Lesion simulating disease (LSD1)				
AT1G01560	MAP kinase 11 (MPK11)				
AT1G10210	Mitogen-activated protein kinase 1 (MPK1)				
AT1G51660	Mitogen-activated protein kinase kinase 4 (MKK4)				
AT3G15500	NAC domain containing protein 3 (NAC3)				
AT5G06960	Ocs-element binding factor 5 (OBF5)				

AT5G59420	Osbp(oxysterol binding protein)-related protein 3c (ORP3C)				
AT2G26560	Phospholipase a 2a (PLA2A)				
AT3G05360	Receptor like protein 30 (RLP30)				
AT1G69270	Receptor-like protein kinase 1 (RPK1)				
AT4G02380	late embryogenesis abundant like protein (SAG21)				
AT4G24210	Sleepy1 (SLY1)				
AT3G52400	Syntaxin of plants 122 (SYP122)				
AT3G12250	Tgacg motif-binding factor 6 (TGA6)				
AT3G16720	Toxicos en levadura 2 (ATI2)				
AT4G29380	Vacuolar protein sorting 15 (VPS15)				
AT2G30250	WRKY transcription factor 25 (WRKY25)				
AT2G38470	WRKY transcription factor 33 (WRKY33)				
AT2G35980	late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)				
Response to salicylic acid stimulus					

Leaves at 29 DAS		<i>igr2</i>		Overlapping genes	
AT3G60690	SAUR-like auxin-responsive protein family	AT3G28510	AAA-type ATPase family protein	AT5G24110	WRKY transcription factor 30 (WRKY30)
AT3G28510	AAA-type ATPase family protein	AT5G64120	Peroxidase	AT3G28510	P-loop containing nucleoside triphosphate hydrolases superfamily protein.
AT1G25400	Unknown protein	AT1G78410	VQ motif-containing protein	AT5G46050	Peptide transporter 3 (PT3)
AT1G13340	Unknown protein	AT3G48640	Unknown protein	AT2G35980	Yellow-leaf-specific gene 9 (YLS9)
AT3G22160	VQ motif-containing protein	AT1G13470	Unknown protein	AT1G78410	VQ motif-containing protein
AT4G27450	Aluminium induced protein with YGL and LRDR motifs	AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT4G02380	late embryogenesis abundant like protein (SAG21)
AT1G28190	unknown protein	AT4G23810	WRKY transcription factor (WRKY53)	AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)
AT4G26120	Ankyrin repeat family protein / BTB/POZ domain-containing protein	AT3G57240	Beta-1,3-glucanase 3 (BG3)	AT3G15500	NAC domain containing protein 3 (NAC3)
AT3G09020	Alpha 1,4-glycosyltransferase family protein	AT4G11890	protein kinase family protein		
AT3G45040	Putative dolichol kinase	AT2G13810	AGD2-like defense response protein 1 (ALD1)		
AT2G27500	Glycosyl hydrolase superfamily protein	AT4G12470	Azelaic acid induced 1 (AZI1)		

AT3G01830	Calcium-binding EF-hand family protein	AT5G63160	Btb and taz domain protein 1 (BT1)		
AT3G47480	Calcium-binding EF-hand family protein	AT3G48360	Btb and taz domain protein 2 (BT2)		
AT5G52660	Homeodomain-like superfamily protein	AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)		
AT1G74840	Homeodomain-like superfamily protein	AT2G19190	Flg22-induced receptor-like kinase 1 (FRK1)		
AT1G78410	VQ motif-containing protein	AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)		
AT1G19020	Unknown protein	AT4G37260	Myb domain protein 73 (MYB73)		
AT4G13820	Leucine-rich repeat (LRR) family protein	AT3G50060	Myb domain protein 77 (MYB77)		
AT4G25390	Protein kinase superfamily protein	AT3G15500	NAC domain containing protein 3 (NAC3)		
AT1G15430	Unknown protein	AT2G14610	Pathogenesis-related gene 1 (PR1)		
AT3G17410	Protein kinase superfamily protein	AT5G46050	Peptide transporter 3 (PTR3)		
AT4G39670	Glycolipid transfer protein (GLTP) family protein	AT3G26830	cytochrome P450 71B15 (PAD3)		
AT4G01280	Homeodomain-like superfamily protein	AT4G02380	late embryogenesis abundant like protein (SAG21)		
AT1G64610	Transducin/WD40 repeat-like superfamily protein	AT2G03760	flavonol sulfotransferase-like protein (SOT12)		
AT3G13950	Unknown protein	AT5G24110	WRKY transcription factor 30 (WRKY30)		

AT3G48760	DHHC-type zinc finger family protein	AT5G22570	WRKY transcription factor 38 (WRKY38)		
AT5G38710	Methylenetetrahydrofolate reductase family protein	AT5G01900	WRKY transcription factor 62 (WRKY62)		
AT2G26530	Unknown function	AT2G35980	late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)		
AT3G10800	Putative membrane-tethered transcriptional factor(BZIP28)				
AT2G40140	(CZF1)				
AT3G01420	Alpha-dioxygenase(DOX1)				
AT1G28480	Glutaredoxin(GRX480)				
AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)				
AT1G22400	(UGT85A1)				
AT3G10640	(VPS60.1)				
AT2G34720	Nuclear factor y, subunit a4 (NF-YA4)				
AT4G26080	ABA insensitive 1 (ABI1)				
AT2G34690	Accelerated cell death 11 (ACD11)				
AT2G26400	Acireductone dioxygenase 3 (ARD3)				
AT5G13320	Avrpphb susceptible 3 (PBS3)				

AT1G42990	Basic region/leucine zipper motif 60 (bZIP60)				
AT5G47120	Bax inhibitor 1 (BI1)				
AT5G41410	Bell 1 (BEL1)				
AT3G61190	Bon association protein 1 (BAP1)				
AT5G26920	CAM-binding protein 60-like g (CBP60g)				
AT4G01010	Cyclic nucleotide-gated channel 13 (CNGC13)				
AT4G04490	Cysteine-rich rlk (receptor-like protein kinase) 36 (CRK36)				
AT4G00550	Digalactosyl diacylglycerol deficient 2 (DGD2)				
AT3G60190	Dynamin-like 1e (DL1e)				
AT1G28370	Erf domain protein 11 (ERF11)				
AT3G20770	Ethylene-insensitive3 (EIN3)				
AT1G73730	Ethylene-insensitive3-like 3 (EIL3)				
AT2G26300	G protein alpha subunit 1 (GP alpha 1)				
AT3G63010	GA insensitive dwarf1b (GID1b)				
AT5G27320	GA insensitive dwarf1c (G1c)				
AT5G13190	GSH-induced litaf domain protein (GILP)				

AT5G01540	Lectin receptor kinase a4.1 (LECRKa4.1)				
AT4G20380	Lesion simulating disease (LSD1)				
AT1G01560	MAP kinase 11 (MPK11)				
AT1G10210	Mitogen-activated protein kinase 1 (MPK1)				
AT1G51660	Mitogen-activated protein kinase kinase 4 (MKK4)				
AT1G48000	Myb domain protein 112 (MYB112)				
AT1G06180	Myb domain protein 13 (MYB13)				
AT2G47190	Myb domain protein 2 (MYB2)				
AT1G22640	Myb domain protein 3 (MYB3)				
AT5G59780	Myb domain protein 59 (MYB59)				
AT3G11440	Myb domain protein 65 (MYB65)				
AT2G16720	Myb domain protein 7 (MYB7)				
AT1G71030	Myb-like 2 (MYBL2)				
AT3G15500	NAC domain containing protein 3 (NAC3)				
AT1G02860	Nitrogen limitation adaptation (NLA)				

AT5G06960	Ocs-element binding factor 5 (OBF5)				
AT2G40000	Ortholog of sugar beet hs1 pro-1 2 (HSPRO2)				
AT5G59420	Osbp(oxysterol binding protein)-related protein 3c (ORP3c)				
AT5G46050	Peptide transporter 3 (PT3)				
AT2G26560	Phospholipase a 2a (PLA2a)				
AT3G05360	Receptor like protein 30 (RLP30)				
AT1G69270	Receptor-like protein kinase 1 (RPK1)				
AT5G13330	Related to ap2 6l (RAP2.6l)				
AT4G02380	late embryogenesis abundant like protein (SAG21)				
AT5G13170	Senescence-associated gene 29 (SAG29)				
AT4G24210	Sleepy1 (SLY1)				
AT3G52400	Syntaxin of plants 122 (SYP122)				
AT3G12250	TGACG motif-binding factor 6 (TGA6)				
AT3G16720	Toxicos en levadura 2 (ATI2)				
AT4G29380	Vacuolar protein sorting 15 (VPS15)				

AT2G30250	WRKY transcription factor 25 (WRKY25)				
AT5G24110	WRKY transcription factor 30 (WRKY30)				
AT2G38470	WRKY transcription factor 33 (WRKY33)				
AT2G35980	late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)				

Jasmonic acid mediated signaling pathway

Leaves at 29 DAS		<i>igr2</i>		Overlapping genes	
AT3G47480	Calcium-binding EF-hand family protein	AT1G78410	VQ motif-containing protein	AT5G64930	Constitutive expression of pr genes 5 (CPR5)
AT1G25400	Unknown protein	AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT2G35980	Yellow-leaf-specific gene 9 (YLS9)
AT1G78410	VQ motif-containing protein	AT4G23810	WRKY transcription factor (WRKY53)	AT3G23240	Ethylene response factor 1 (ERF1)
AT4G25390	Protein kinase superfamily protein	AT3G57240	Beta-1,3-glucanase 3 (B3)	AT1G78410	VQ motif-containing protein
AT1G15430	Unknown protein	AT5G64930	Constitutive expression of pr genes 5 (CPR5)	AT4G02380	late embryogenesis abundant like protein (SAG21)
AT4G39670	Glycolipid transfer protein (GLTP) family protein	AT3G23240	Ethylene response factor 1 (ERF1)	AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)

AT1G28190	Unknown protein	AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT3G15500	NAC domain containing protein 3 (NAC3)
AT1G64610	Transducin/WD40 repeat-like superfamily protein	AT2G19190	Flg22-induced receptor-like kinase 1 (FRK1)		
AT2G27500	Glycosyl hydrolase superfamily protein	AT3G15500	NAC domain containing protein 3 (NAC3)		
AT3G09020	Alpha 1,4-glycosyltransferase family protein	AT2G14610	Pathogenesis-related gene 1 (PR1)		
AT5G38710	Methylenetetrahydrofolate reductase family protein	AT3G26830	cytochrome P450 71B15 (PAD3)		
AT3G01830	Calcium-binding EF-hand family protein	AT4G02380	late embryogenesis abundant like protein (SAG21)		
AT2G26530	Unknown protein(AR781)	AT2G03760	flavonol sulfotransferase-like protein (SOT12)		
AT3G10800	Putative membrane-tethered transcriptional factor(BZIP28)	AT2G24850	Tyrosine aminotransferase 3 (TAT3)		
AT1G28480	Glutaredoxin(GRX480)	AT5G22570	WRKY transcription factor 38 (WRKY38)		
AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT5G26170	WRKY transcription factor 50 (WRKY50)		
AT1G22400	(UGT85A1)	AT2G35980	late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)		
AT3G10640	(VPS60.1)				

AT4G26080	ABA insensitive 1 (ABI1)				
AT5G13320	Avrpphb susceptible 3 (PBS3)				
AT1G42990	Basic region/leucine zipper motif 60 (bZIP60)				
AT5G47120	Bax inhibitor 1 (BI1)				
AT5G26920	CAM-binding protein 60-like g (CBP60g)				
AT5G64930	Constitutive expression of pr genes 5 (CPR5)				
AT4G04490	Cysteine-rich rlk (receptor-like protein kinase) 36 (CRK36)				
AT4G00550	Digalactosyl diacylglycerol deficient 2 (DGD2)				
AT3G60190	Dynamin-like 1e (DL1E)				
AT1G28370	Erf domain protein 11 (ERF11)				
AT3G23240	Ethylene response factor 1 (ERF1)				
AT5G47220	Ethylene responsive element binding factor 2 (ERF2)				
AT3G15210	Ethylene responsive element binding factor 4 (ERF4)				
AT1G73730	Ethylene-insensitive3-like 3 (EIL3)				
AT3G63010	GA insensitive dwarf1b (GID1B)				

AT5G27320	GA insensitive dwarf1c (GID1C)				
AT5G13190	GSH-induced litaf domain protein (GILP)				
AT5G01540	Lectin receptor kinase a4.1 (LECRKa4.1)				
AT1G01560	MAP kinase 11 (MPK11)				
AT1G10210	Mitogen-activated protein kinase 1 (MPK1)				
AT1G51660	Mitogen-activated protein kinase kinase 4 (MKK4)				
AT3G06490	Myb domain protein 108 (MYB108)				
AT3G15500	NAC domain containing protein 3 (NAC3)				
AT2G26560	Phospholipase a 2a (PLA2a)				
AT3G05360	Receptor like protein 30 (RLP30)				
AT1G69270	Receptor-like protein kinase 1 (RPK1)				
AT5G63970	Ring domain ligase 3 (RGLG3)				
AT4G02380	late embryogenesis abundant like protein (SAG21)				
AT4G24210	Sleepy1 (SLY1)				
AT3G52400	Syntaxin of plants 122 (SYP122)				

AT3G16720	Toxicos en levadura 2 (AT12)				
AT2G38470	WRKY transcription factor 33 (WRKY33)				
AT5G64810	WRKY transcription factor 51 (WRKY51)				
AT2G35980	late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)				

Response to jasmonic acid stimulus

Leaves at 29 DAS		<i>igr2</i>		Overlapping genes	
AT1G25400	Unknown protein	AT1G78410	VQ motif-containing protein	AT1G27730	cys2/His2-type zinc-finger protein
AT1G32920	Unknown protein	AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT5G64930	Constitutive expression of pr genes 5 (CPR5)
AT1G63720	Hydroxyproline-rich glycoprotein family protein	AT4G23810	WRKY Transcription Factor (WRKY53)	AT5G46050	Peptide transporter 3 (PTR3)
AT3G57450	Unknown protein	AT3G57240	Beta-1,3-glucanase 3 (BG3)	AT2G35980	late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)
AT1G28190	Unknown protein	AT2G47000	ABC transporter B family member 4 (ABCB4)	AT4G35770	Senescence 1 (SEN1)
AT4G33905	Peroxisomal membrane 22 kDa (Mpv17/PMP22) family protein	AT5G20230	blue copper binding protein (SAG14)	AT3G23240	Ethylene response factor 1 (ERF1)
AT2G27500	Glycosyl hydrolase superfamily protein	AT3G48360	Btb and taz domain protein 2 (BT2)	AT2G47000	ABC transporter B family member 4 (ABCB4)

AT3G09020	Alpha 1,4-glycosyltransferase family protein	AT5G64930	Constitutive expression of pr genes 5 (CPR5)	AT1G78410	VQ motif-containing protein
AT3G01830	Calcium-binding EF-hand family protein	AT3G23240	Ethylene response factor 1 (ERF1)	AT5G39610	NAC domain containing protein 2 (NAC2)
AT3G47480	Calcium-binding EF-hand family protein	AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT4G02380	late embryogenesis abundant like protein (SAG21)
AT5G52660	Homeodomain-like superfamily protein	AT2G19190	Flg22-induced receptor-like kinase 1 (FRK1)	AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)
AT1G74840	Homeodomain-like superfamily protein	AT4G37260	MYB domain protein 73 (MYB73)	AT3G15500	NAC domain containing protein 3 (NAC3)
AT1G78410	VQ motif-containing protein	AT5G39610	NAC domain containing protein 2 (NAC2)		
AT4G25390	Protein kinase superfamily protein	AT3G15500	NAC domain containing protein 3 (NAC3)		
AT1G15430	Unknown protein	AT2G14610	Pathogenesis-related gene 1 (PR1)		
AT4G39670	Glycolipid transfer protein (GLTP) family protein	AT5G46050	Peptide transporter 3 (PTR3)		
AT4G28085	Unknown protein	AT3G26830	cytochrome P450 71B15 (PAD3)		
AT1G64610	Transducin/WD40 repeat-like superfamily protein	AT5G44420	Plant defensin 1.2 (PDF1.2)		
AT4G01280	Homeodomain-like superfamily protein	AT4G27410	NAC domain-containing protein 72 (RD26)		
AT1G63840	RING/U-box superfamily protein	AT1G27730	cys2/His2-type zinc-finger protein		

AT5G38710	Methylenetetrahydrofolate reductase family protein	AT4G35770	Senescence 1 (SEN1)		
AT2G26530	Unknown protein(AR781)	AT4G02380	late embryogenesis abundant like protein (SAG21)		
AT1G01720	Putative transcriptional activators with NAC domain (ATAF1)	AT2G30360	CBL-interacting serine/threonine-protein kinase 11 (SIP4)		
AT3G10800	(BZIP28)	AT2G03760	flavonol sulfotransferase-like protein (SOT12)		
AT1G28480	Glutaredoxin (GRX480)	AT2G24850	Tyrosine aminotransferase 3 (TAT3)		
AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT5G22570	WRKY transcription factor 38 (WRKY38)		
AT1G22400	(UGT85A1)	AT5G26170	putative WRKY transcription factor 50 (WRKY50)		
AT3G10640	(VPS60.1)	AT2G35980	late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)		
AT2G34720	Nuclear factor y, subunit a4 (NF-YA4)				
AT4G26080	ABA insensitive 1 (ABI1)				
AT2G47000	ABC transporter B family member 4 (ABCB4)				
AT5G13320	Avrpphb susceptible 3 (PBS3)				

AT1G42990	Basic region/leucine zipper motif 60 (bZIP60)				
AT5G47120	Bax inhibitor 1 (BI1)				
AT3G61190	Bon association protein 1 (BAP1)				
AT1G76650	Calmodulin-like 38 (CML38)				
AT5G26920	Cam-binding protein 60-like g (CBP60G)				
AT5G27420	Carbon/nitrogen insensitive 1 (CNI1)				
AT3G07370	Carboxyl terminus of hsc70-interacting protein (CHIP)				
AT1G71697	Choline kinase 1 (CK1)				
AT4G19810	Class V chitinase (CHIC)				
AT5G64930	Constitutive expression of pr genes 5 (CPR5)				
AT4G04490	Cysteine-rich rlk (receptor-like protein kinase) 36 (CRK36)				
AT4G00550	Digalactosyl diacylglycerol deficient 2 (DGD2)				
AT3G60190	Dynamin-like 1e (DL1E)				
AT1G28370	Erf domain protein 11 (ERF11)				
AT3G23240	Ethylene response factor 1 (ERF1)				

AT5G47220	Ethylene responsive element binding factor 2 (ERF2)				
AT3G15210	Ethylene responsive element binding factor 4 (ERF4)				
AT1G73730	Ethylene-insensitive3-like 3 (EIL3)				
AT2G46270	G-box binding factor 3 (GBF3)				
AT3G63010	GA insensitive dwarf1b (GIB1B)				
AT5G27320	GA insensitive dwarf1c (GID1C)				
AT5G13190	GSH-induced litaf domain protein (GILP)				
AT1G51950	Indole-3-acetic acid inducible 18 (IAA18)				
AT5G01540	Lectin receptor kinase a4.1 (LECRKA4.1)				
AT1G01560	MAP kinase 11 (MPK11)				
AT5G10300	Methyl esterase 5 (MES5)				
AT1G10210	Mitogen-activated protein kinase 1 (MPK1)				
AT1G51660	Mitogen-activated protein kinase kinase 4 (MKK4)				
AT3G06490	Myb domain protein 108 (MYB108)				

AT1G06180	Myb domain protein 13 (MYB13)				
AT2G47190	Myb domain protein 2 (MYB2)				
AT1G22640	Myb domain protein 3 (MYB3)				
AT5G59780	Myb domain protein 59 (MYB59)				
AT2G16720	Myb domain protein 7 (MYB7)				
AT1G71030	Myb-like 2 (MYBL2)				
AT5G39610	NAC domain containing protein 2 (NAC2)				
AT3G15500	NAC domain containing protein 3 (NAC3)				
AT5G46050	Peptide transporter 3 (PTR3)				
AT2G26560	Phospholipase a 2a (PLAA)				
AT3G02150	Plastid transcription factor 1 (PTF1)				
AT3G05360	Receptor like protein 30 (RLP30)				
AT1G69270	Receptor-like protein kinase 1 (RPK1)				
AT5G13330	Related to ap2 6l (RAP2.6l)				
AT5G59820	Responsive to high light 41 (RHL41)				
AT5G63970	Ring domain ligase 3 (RGLG3)				
AT1G27730	cys2/His2-type zinc-finger protein				

AT4G35770	Senescence 1 (SEN1)				
AT4G02380	late embryogenesis abundant like protein (SAG21)				
AT4G24210	Sleepy1 (SLY1)				
AT1G74020	Strictosidine synthase 2 (SS2)				
AT3G52400	Syntaxin of plants 122 (SYP122)				
AT3G16720	Toxicos en levadura 2 (AT12)				
AT2G38470	WRKY transcription factor 33 (WRKY33)				
AT5G64810	WRKY transcription factor 51 (WRKY51)				
AT5G51640	Yellow-leaf-specific gene 7 (YLS7)				
AT2G35980	late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)				
AT3G19580	Zinc-finger protein 2 (ZF2)				
Response to ethylene stimulus					
Leaves at 29 DAS		<i>igr2</i>		Overlapping genes	
AT4G01870	TolB protein-related	AT3G28580	AAA-type ATPase family protein	AT1G27730	cys2/His2-type zinc-finger protein
AT1G32920	Unknown protein	AT4G18450	A member of the ERF (ethylene response factor) subfamily B-3 of ERF/AP2 transcription factor family	AT1G28360	Erf domain protein 12 (ERF12)

AT4G30390	Unknown protein	AT1G78410	VQ motif-containing protein	AT3G23240	Ethylene response factor 1 (ERF1)
AT3G54150	S-adenosyl-L-methionine-dependent methyltransferases superfamily protein	AT3G25190	Nodulin-like21	AT2G47000	ABC transporter B family member 4 (ABCB4)
AT1G63720	Hydroxyproline-rich glycoprotein family protein	AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT1G78410	VQ motif-containing protein
AT2G32030	Acyl-CoA N-acyltransferases (NAT) superfamily protein	AT2G47000	ABC transporter B family member 4 (ABCB4)	AT5G39610	NAC domain containing protein 2 (NAC2)
AT1G28190	Unknown protein	AT3G55950	putative serine/threonine-protein kinase-like protein CCR3 (CCR3)	AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)
AT4G19370	Unknown protein	AT1G28360	Erf domain protein 12 (ERF12)	AT3G15500	NAC domain containing protein 3 (NAC3)
AT1G69890	Unknown protein	AT3G23240	Ethylene response factor 1 (ERF1)		
AT5G27760	Hypoxia-responsive family protein	AT4G17490	ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF6)		
AT4G37290	Unknown protein	AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)		
AT1G05575	Unknown protein	AT4G37260	Myb domain protein 73 (MYB73)		
AT5G65600	Concanavalin A-like lectin protein kinase family protein	AT3G50060	Myb domain protein 77 (MYB77)		
AT1G26380	FAD-binding Berberine family protein	AT5G39610	NAC domain containing protein 2 (NAC2)		

AT5G52660	Homeodomain-like superfamily protein	AT3G15500	NAC domain containing protein 3 (NAC3)		
AT1G74840	Homeodomain-like superfamily protein	AT5G04950	Nicotianamine synthase 1 (NAS1)		
AT1G78410	VQ motif-containing protein	AT3G48850	Phosphate transporter 3;2 (PHT3;2)		
AT2G27310	F-box family protein	AT3G26830	cytochrome P450 71B15 (PAD3)		
AT1G23710	Unknown protein	AT5G44420	Plant defensin 1.2 (PDF1.2)		
AT4G33940	RING/U-box superfamily protein	AT5G54190	Protochlorophyllide oxidoreductase a (PORa)		
AT4G13820	Leucine-rich repeat (LRR) family protein	AT4G27440	protochlorophyllide oxidoreductase B (PORB)		
AT1G15430	unknown protein	AT4G27410	NAC domain-containing protein 72 (RD26)		
AT1G76600	unknown protein	AT1G27730	cys2/His2-type zinc-finger protein		
AT4G39670	Glycolipid transfer protein (GLTP) family protein	AT2G30360	CBL-interacting serine/threonine-protein kinase 11 (SIP4)		
AT4G01280	Homeodomain-like superfamily protein	AT2G24850	Tyrosine aminotransferase 3 (TAT3)		
AT1G64610	Transducin/WD40 repeat-like superfamily protein				
AT3G48760	DHHC-type zinc finger family protein				
AT5G65300	unknown protein				
AT1G63840	RING/U-box superfamily protein				

AT1G28480	Glutaredoxin (GRX480)				
AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)				
AT3G10640	(VPS60.1)				
AT5G57220	Cytochrome p450, family 81, subfamily f, polypeptide 2 (CYP81F2)				
AT2G34720	Nuclear factor y, subunit a4 (NF-YA4)				
AT4G26080	ABA insensitive 1 (ABI1)				
AT3G12740	Ala-interacting subunit 1 (ALIS1)				
AT1G32350	Alternative oxidase 1d (AOX1D)				
AT2G47000	ABC transporter B family member 4 (ABCB4)				
AT2G21240	Basic pentacysteine 4 (BPC4)				
AT1G42990	Basic region/leucine zipper motif 60 (bZIP60)				
AT1G76650	Calmodulin-like 38 (CML38)				
AT5G27420	Carbon/nitrogen insensitive 1 (CNI1)				

AT3G07370	Carboxyl terminus of hsc70-interacting protein (CHIP)				
AT1G30270	Cbl-interacting protein kinase 23 (CIPK23)				
AT5G25350	Ein3-binding f box protein 2 (EBF2)				
AT1G28370	Erf domain protein 11 (ERF11)				
AT1G28360	Erf domain protein 12 (ERF12)				
AT3G23240	Ethylene response factor 1 (ERF1)				
AT3G20310	Ethylene response factor 7 (ERF7)				
AT1G53170	Ethylene response factor 8 (ERF8)				
AT4G17500	Ethylene responsive element binding factor 1 (ERF-1)				
AT5G47220	Ethylene responsive element binding factor 2 (ERF2)				
AT3G15210	Ethylene responsive element binding factor 4 (ERF4)				
AT3G20770	Ethylene-insensitive3 (ETN3)				
AT1G73730	Ethylene-insensitive3-like 3 (EIL3)				
AT2G26300	G protein alpha subunit 1 (GP alpha 1)				

AT2G46270	G-box binding factor 3 (GBF3)				
AT3G63010	GA insensitive dwarf1b (GID1b)				
AT5G27320	GA insensitive dwarf1c (GID1c)				
AT1G68765	Inflorescence deficient in abscission (IDA)				
AT4G32040	Knotted1-like homeobox gene 5 (KNAT5)				
AT4G20380	Lesion simulating disease (LSD1)				
AT1G01560	MAP kinase 11 (MPK11)				
AT1G73500	MAP kinase kinase 9 (MKK9)				
AT3G48890	Membrane-associated progesterone binding protein 3 (MAPR3)				
AT1G10210	Mitogen-activated protein kinase 1 (MPK1)				
AT3G58680	Multiprotein bridging factor 1b (MBF1B)				
AT3G24500	Multiprotein bridging factor 1c (MBF1C)				
AT3G06490	Myb domain protein 108 (MYB108)				
AT2G47190	Myb domain protein 2 (MYB2)				
AT1G22640	Myb domain protein 3 (MYB3)				

AT5G59780	Myb domain protein 59 (MYB59)				
AT3G11440	Myb domain protein 65 (MYB65)				
AT2G16720	Myb domain protein 7 (MYB7)				
AT1G71030	Myb-like 2 (MYB12)				
AT5G39610	NAC domain containing protein 2 (NAC2)				
AT3G15500	NAC domain containing protein 3 (NAC3)				
AT2G43000	NAC domain containing protein 42 (NANC42)				
AT5G06960	Ocs-element binding factor 5 (OBF5)				
AT3G04720	Pathogenesis-related 4 (PR4)				
AT2G26560	Phospholipase a 2a (PLA2A)				
AT3G02800	Plant and fungi atypical dual-speciﬁcity phosphatase 3 (PFA-DSP3)				
AT1G69270	Receptor-like protein kinase 1 (RPK1)				
AT1G78080	Related to ap2 4 (RAP2.4)				
AT5G13330	Related to ap2 6l (RAP2.6l)				
AT3G46620	Ring and domain of unknown function 1117 1 (RDUF1)				

AT1G27730	cys2/His2-type zinc-finger protein				
AT4G24210	Sleepy1 (SLY1)				
AT3G52400	Syntaxin of plants 122 (SYP122)				
AT3G21780	UDP-glucosyl transferase 71b6 (DGT71b6)				
AT2G15490	UDP-glycosyltransferase 73b4 (UGT73b4)				
AT4G29380	Vacuolar protein sorting 15 (VPS15)				
AT5G13080	WRKY transcription factor 75 (WRKY75)				
AT5G51640	Yellow-leaf-specific gene 7 (YLS7)				
AT3G19580	Zinc-finger protein 2 (ZF2)				

Response to abscisic acid stimulus

Leaves at 29 DAS		<i>igr2</i>		Overlapping genes	
AT3G54770	RNA-binding (RRM/RBD/RNP motifs) family protein	AT3G28580	AAA-type ATPase family protein	AT1G27730	cys2/His2-type zinc-finger protein
AT4G01870	TolB protein-related	AT2G32020	GCN5-related N-acetyltransferase-like protein	AT5G46050	Peptide transporter 3 (PTR3)
AT2G32020	GCN5-related N-acetyltransferase-like protein	AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT2G47000	ABC transporter B family member 4 (ABCB4)

AT1G73980	Phosphoribulokinase / Uridine kinase family	AT1G48130	1-Cysteine peroxiredoxin 1 (PER1)	AT5G39610	NAC domain containing protein 2 (NAC2)
AT3G54150	S-adenosyl-L-methionine-dependent methyltransferases superfamily protein	AT4G11890	protein kinase family protein	AT2G32020	GCN5-related N-acetyltransferase-like protein
AT1G63720	Hydroxyproline-rich glycoprotein family protein	AT2G47000	ABC transporter B family member 4 (ABCB4)	AT4G02380	late embryogenesis abundant like protein (SAG21)
AT3G22160	VQ motif-containing protein	AT3G48360	BTB and TAZ domain protein 2 (BT2)	AT3G28210	Putative zinc finger protein (PMZ).
AT1G11210	Unknown protein	AT3G55950	putative serine/threonine-protein kinase-like protein CCR3 (CCR3)	AT3G15500	NAC domain containing protein 3 (NAC3)
AT3G57450	Unknown protein	AT3G63060	F-box protein (EDL3)		
AT2G32030	Acyl-CoA N-acyltransferases (NAT) superfamily protein	AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)		
AT1G28190	Unknown protein	AT2G47180	galactinol synthase (GOLS1)		
AT1G05575	Unknown protein	AT4G37260	Myb domain protein 73 (MYB73)		
AT5G52660	Homeodomain-like superfamily protein	AT5G39610	NAC domain containing protein 2 (NAC2)		
AT5G22540	Unknown protein	AT3G15500	NAC domain containing protein 3 (NAC3)		
AT1G74840	Homeodomain-like superfamily protein	AT5G46050	Peptide transporter 3 (PTR3)		
AT4G33940	RING/U-box superfamily protein	AT3G26830	cytochrome P450 71B15 (PAD3)		
AT2G27310	F-box family protein	AT4G27410	NAC domain-containing protein 72 (RD26)		

AT1G15430	Unknown protein	AT1G27730	cys2/His2-type zinc-finger protein		
AT4G39670	Glycolipid transfer protein (GLTP) family protein	AT4G02380	late embryogenesis abundant like protein (SAG21)		
AT4G01280	Homeodomain-like superfamily protein	AT2G30360	CBL-interacting serine/threonine-protein kinase 11 (SIP4)		
AT1G64610	Transducin/WD40 repeat-like superfamily protein	AT2G24850	Tyrosine aminotransferase 3 (TAT3)		
AT3G12320	Unknown protein	AT1G05680	Uridine diphosphate glycosyltransferase 74e2 (UGT74E2)		
AT3G48760	DHHC-type zinc finger family protein				
AT5G65300	Unknown protein				
AT1G63840	RING/U-box superfamily protein				
AT2G30020	AP2C1				
AT2G23120	Late embryogenesis abundant protein				
AT1G01720	Putative transcriptional activators with NAC domain(ATAF1)				
AT3G10800	Putative membrane-tethered transcriptional factor (BZIP28)				
AT3G01420	Alpha-dioxygenase(DOX1)				
AT1G28480	Glutaredoxin (GRX480)				

AT2G23430	Cyclin-dependent kinase inhibitor protein(ICK1)				
AT3G63210	Zinc-finger protein(MARD1)				
AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)				
AT3G10640	(VPS60.1)				
AT2G34720	Nuclear factor Y, Subunit A4 (NF-YA4)				
AT4G26080	ABA insensitive 1 (ABI1)				
AT4G23450	ABA insensitive ring protein 1(AIRP1)				
AT5G20910	ABI3-interacting protein 2(AIP2)				
AT3G19290	ABRE binding factor 4(ABF4)				
AT3G12740	ALA-interacting subunit 1(ALIS1)				
AT4G25000	ALPHA-amylase-like (AMY1)				
AT1G32350	ERF domain protein 11(ERF11)				
AT2G47000	ABC transporter B family member 4 (ABCB4)				
AT5G13320	Avrpphb susceptible 3 (PBS3)				
AT1G42990	Basic region/leucine zipper motif 60 (BZIP60)				
AT5G47120	Bax inhibitor1 (BI1)				

AT1G76650	Calmodulin-like 38 (CML38)				
AT5G27420	Carbon/nitrogen insensitive 1 (CNI1)				
AT3G07370	Carboxyl terminus of hsc70-interacting protein (CHIP)				
AT3G17510	CBL-interacting protein kinase 1(CIPK1)				
AT1G30270	CBL-interacting protein kinase 23 (CIPK23)				
AT4G19810	Class V chitinase(ChiC)				
AT1G20440	Cold-regulated 47 (COR47)				
AT3G50260	Cooperatively regulated by ethylene and jasmonate 1 (CEJ1)				
AT1G62810	Copper amine oxidase 1(CUAO1)				
AT5G20650	Copper transpoter 5(COPT5)				
AT4G21410	Cysteine-rich rlk (receptor-like protein kinase) 29 (CRK29)				
AT4G04490	Cysteine-rich rlk (receptor-like protein kinase) 36 (CRK36)				
AT3G55610	Delta 1-pyrroline-5-carboxylate synthase 2 (P5CS2)				
AT4G00550	Digalactosyl diacylglycerol deficient 2 (DGD2)				

AT1G76180	Early response to dehydration 14 (ERD14)				
AT5G11260	Elongated hypocotyl 5 (HY5)				
AT1G28370	Erf domain protein 11 (ERF11)				
AT3G20310	Ethylene response factor 7 (ERF7)				
AT4G17500	Ethylene responsive element binding factor 1 (ERF-1)				
AT5G47220	Ethylene responsive element binding factor 2 (ERF2)				
AT3G15210	Ethylene responsive element binding factor 4 (ERF4)				
AT3G20770	Ethylene-insensitive3 (EIN3)				
AT1G73730	Ethylene-insensitive3-like 3 (EIL3)				
AT3G14090	Exocyst subunit exo70 family protein d3 (EXO70D3)				
AT4G08980	F-box with wd-40 2 (FBW2)				
AT2G26300	G protein alpha subunit 1 (GP alpha 1)				
AT1G52920	G protein coupled receptor (GPCR)				
AT2G46270	G-box binding factor 3 (GBF3)				
AT3G63010	GA insensitive dwarf1b (GID1B)				

AT5G27320	GA insensitive dwarf1c (GID1C)				
AT1G56600	Galactinol synthase 2 (GOLS2)				
AT1G07430	Highly aba-induced pp2c gene 2 (HAI2)				
AT1G01470	Late embryogenesis abundant 14 (LEA14)				
AT2G35300	Late embryogenesis abundant 18 (LEA18)				
AT2G40170	Late embryogenesis abundant 6 (GEA6)				
AT5G01540	Lectin receptor kinase a4.1 (LECRKa4.1)				
AT5G01550	Lectin receptor kinase a4.1 (LECRKa4.2)				
AT4G20380	Lesion simulating disease (LSD1)				
AT1G02340	Long hypocotyl in far-red (HFR1)				
AT3G50970	Low temperature-induced 30 (LTI30)				
AT1G01560	MAP kinase 11 (MPK11)				
AT1G74660	Mini zinc finger 1 (MIF1)				
AT1G10210	Mitogen-activated protein kinase 1 (MPK1)				

AT1G51660	Mitogen-activated protein kinase kinase 4 (MKK4)				
AT3G24500	Multiprotein bridging factor 1c (MBF1c)				
AT3G06490	Myb domain protein 108 (MYB108)				
AT1G48000	Myb domain protein 112 (MYB112)				
AT2G47190	Myb domain protein 2 (MYB2)				
AT1G22640	Myb domain protein 3 (MYB3)				
AT5G59780	Myb domain protein 59 (MYB59)				
AT2G16720	Myb domain protein 7 (MYB7)				
AT5G49620	Myb domain protein 78 (MYB78)				
AT1G71030	Myb-like 2 (MYB12)				
AT5G39610	NAC domain containing protein 2 (NAC2)				
AT3G15500	NAC domain containing protein 3 (NAC3)				
AT5G13180	NAC domain containing protein 83 (NAC083)				
AT3G14440	Nine-cis-epoxycarotenoid dioxygenase 3 (NCED3)				
AT5G06960	Ocs-element binding factor 5 (OBF5)				

AT5G46050	Peptide transporter 3 (PTR3)				
AT3G02800	Plant and fungi atypical dual-speciﬁcity phosphatase 3 (PFA-DSP3)				
AT2G33700	Protein phosphatase 2c g group 1 (PP2CG1)				
AT3G05360	Receptor like protein 30 (RLP30)				
AT1G69270	Receptor-like protein kinase 1 (RPK1)				
AT5G13330	Related to ap2 6l (RAP2.6l)				
AT3G46620	Ring and domain of unknown function 1117 1 (RDUF1)				
AT1G27730	cys2/His2-type zinc-finger protein				
AT4G02380	late embryogenesis abundant like protein (SAG21)				
AT5G13170	Senescence-associated gene 29 (SAG29)				
AT1G17020	Senescence-related gene 1 (SRG1)				
AT4G24210	Sleepy1 (SLY1)				
AT5G66880	Sucrose nonfermenting 1(snf1)-related protein kinase 2.3 (SNRK2.3)				

AT3G52400	Syntaxin of plants 122 (SYP122)				
AT5G37770	Touch 2 (TCH2)				
AT2G47770	Tspo(outer membrane tryptophan-rich sensory protein)-related (TSPO)				
AT3G02140	Two or more abres-containing gene 2 (TMAC2)				
AT3G21780	Udp-glucosyl transferase 71b6 (UGT71B6)				
AT5G51640	Yellow-leaf-specific gene 7 (YLS7)				
AT3G19580	Zinc-finger protein 2 (ZF2)				

Table S4. List of NAC and WRKY transcription factors induced in the leaves of *igr2-9* and *GO5* (with overexpressed glycolate oxidase in the chloroplast) plants. The obtained data sets of *GO5* transcriptome were referred to the report by Balazadeh et al. (2014).

<i>igr2</i>		<i>GO5</i>		Overlapping genes	
AT5G26170	WRKY transcription factor 50 (WRKY50)	At2g38470	WRKY transcription factor 33 (WRKY33)	At4g23810	WRKY transcription factor 53 (WRKY53)
AT5G24110	WRKY DNA-binding protein (WRKY30)	At2g30250	WRKY transcription factor 25 (WRKY25)	At3g10500	NAC domain containing protein 053 (NAC053) ANAC053
AT5G22570	WRKY transcription factor 38 (WRKY38)	At4g23810	WRKY transcription factor 53 (WRKY53)		
AT5G14000	NAC domain containing protein 84 (NAC084)	At2g46400	WRKY transcription factor 46 (WRKY46)		
AT5G01900	WRKY transcription factor 62 (WRKY62)	At1g80840	WRKY transcription factor 40 (WRKY40)		
AT4G23810	WRKY transcription factor 53 (WRKY53)	At1g32870	NAC domain containing protein 13 (NAC013)		
AT4G24240	WRKY transcription factor 7 (WRKY7)	At2g43000	NAC domain containing protein 42 (NAC042)		
AT4G11070	WRKY transcription factor 41 (WRKY41)	At5g18270	NAC domain containing protein 87 (NAC087)		
AT3G15500	NAC domain-containing protein 3 (NAC3)	At5g63790	NAC domain containing protein 102 (NAC102)		
AT3G10500	NAC domain containing protein 53 (NAC053)	At3g10500	NAC domain containing protein 053 (NAC053)		

AT3G01600	NAC domain containing protein 44 (NAC044)				
AT5G39610	NAC-domain transcription factor (NAC2)				

Table S5. Genes induced in the leaves of *gr1* plants grown under long-day conditions. The obtained data sets of *gr1* transcriptome were referred to the reports by Mhamdi et al. (2010).

TAIR Locus	Description
AT3G55920	Cyclophilin-like peptidyl-prolyl cis-trans isomerase family protein
AT3G62550	Adenine nucleotide alpha hydrolases-like superfamily protein
AT4G13180	NAD(P)-binding rossmann-fold superfamily protein
AT3G14990	DJ-1 homolog a (DJ1A)
AT2G05380	Glycine-rich protein 3 short isoform (GRP3S)
AT2G46970	Phytochrome interacting factor 3-like 1 (PIL1)
AT5G48850	Sulphur deficiency-induced 1 (AtSDI1)

Table S6. Genes induced in the leaves of *cad2* plants grown under long-day conditions. The obtained data sets of *cad2* transcriptome were referred to the reports by Han et al. (2013).

TAIR Locus	Description
AT1G07550	Leucine-rich repeat protein kinase family protein
AT2G31600	Unknown protein
AT5G49000	Galactose oxidase/kelch repeat superfamily protein
AT3G24060	Plant self-incompatibility protein S1 family
AT1G72140	Major facilitator superfamily protein
AT4G10240	B-box zinc finger family protein
AT5G23490	Unknown protein
AT2G29220	Concanavalin A-like lectin protein kinase family protein
AT4G13050	Acylic-ACP thioesterase
AT2G24160	Leucine rich repeat protein family
AT2G20070	Unknown protein
AT2G20170	Unknown protein
AT3G09360	Cyclin/Brf1-like TBP-binding protein
AT5G49690	UDP-Glycosyltransferase superfamily protein
AT3G42780	Unknown protein
AT2G16200	Structural molecules
AT2G16900	Phospholipase-like protein (PEARLI 4) family
AT1G76210	Unknown protein
AT1G05577	Unknown protein
AT2G19400	AGC (cAMP-dependent, cGMP-dependent and protein kinase C) kinase family protein
AT2G11462	Unknown protein

AT5G50510	Molecular chaperone Hsp40/DnaJ family protein
AT3G53220	Thioredoxin superfamily protein
AT2G20910	Vacuolar ATP synthase subunit B
AT1G12720	Transposable element gene
AT1G20360	F-box family protein
AT2G46150	Late embryogenesis abundant (LEA) hydroxyproline-rich glycoprotein family
AT5G38780	S-adenosyl-L-methionine-dependent methyltransferases superfamily protein
AT3G48790	Pyridoxal phosphate (PLP)-dependent transferases superfamily protein
AT5G41710	Transposable element gene
AT5G66270	Zinc finger C-x8-C-x5-C-x3-H type family protein
AT5G28773	Transposable element gene
AT5G35118	Transposable element gene
AT2G02720	Pectate lyase family protein
AT2G25260	Unknown protein
AT2G19420	Unknown protein
AT3G21937	Unknown protein
AT5G59760	Unknown protein
AT5G03700	D-mannose binding lectin protein with Apple-like carbohydrate-binding domain
AT2G38152	Alpha 1,4-glycosyltransferase family protein
AT5G51080	RNase H family protein
AT1G64720	Membrane related protein (CP5)
AT2G16500	Arginine decarboxylase 1 (ADC1)
AT3G53460	Chloroplast rna-binding protein 29 (CP29)
AT1G13790	Factor of DNA methylation 4 (FDM4)
AT4G03550	Glucan synthase-like 5 (GSL05)

AT5G67230	Irregular xylem 14-like (IRX14-I)
AT1G32240	Kanadi 2 (KAN2)
AT5G56490	1 -Gulono-1,4-lactone (1 -gull) oxidase 4 (GULLO4)
AT5G62250	Microtubule-associated protein 65-9 (MAP65-9)
AT5G46590	NAC domain containing protein 96 (NAC096)
AT3G57670	No transmitting tract (NTT)
AT2G41210	Phosphatidylinositol- 4-phosphate 5-kinase 5 (PIP5K5)
AT4G29880	Plant intracellular ras group-related lrr 7 (PIRL7)
AT1G71270	Poky pollen tube (POK)
AT2G22410	Slow growth 1 (SLO1)
AT2G18990	Thioredoxin domain-containing protein 9 homolog (TXND9)
AT3G27190	Uridine kinase-like 2 (UKL2)

Table S7. Comparative analysis of the up-regulated genes enriched in specific GO terms between the transcriptomes of leaves of *igr2-9* and *cat2* plants grown under short-day (SD) conditions. The specific GO terms were those cited in Fig. S5A. The obtained data sets of *cat2* transcriptome were referred to the report by Mhamdi et al. (2010).

Response to oxidative stress					
<i>igr2</i>		<i>cat2</i>		<i>Overlapping genes</i>	
AT1G72660	P-loop containing nucleoside triphosphate hydrolases superfamily protein	AT3G13610	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein	AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins
AT2G21640	Hypothetical protein	AT1G75280	Isoflavone reductase	AT5G20230	Blue copper binding protein (SAG14)
AT1G44414	Unknown protein	AT2G29500	HSP20-like chaperones superfamily protein	AT2G47180	Galactinol synthase 1(GOLS1)
AT1G17860	Kunitz family trypsin and protease inhibitor protein	AT2G46600	Calcium-binding EF-hand family protein	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT5G07330	Unknown protein	AT1G07400	HSP20-like chaperones superfamily protein.		
AT1G54840	HSP20-like chaperones superfamily protein	AT3G09440	Heat shock protein 70 (HSP 70)		
AT4G18450	Ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF)	AT3G44190	FAD/NAD(P)-binding oxidoreductase family protein		
AT1G72060	Serine-type endopeptidase inhibitors	AT5G03630	ATMDAR2		
AT1G78410	VQ motif-containing protein	AT1G09970	leucine-rich repeat class of receptor-like kinase (LRR-RLKs)		

AT5G51440	HSP20-like chaperones superfamily protein	AT1G54100	Aldehyde dehydrogenase 7b4 (ALDH7b4)		
AT3G25190	Vacuolar iron transporter-like protein	AT2G16500	Arginine decarboxylase 1 (ADC1)		
AT1G14200	RING/U-box superfamily protein	AT4G34710	Arginine decarboxylase 2 (ADC2)		
AT1G52200	PLAC8 family protein	AT1G07890	Ascorbate peroxidase 1 (APX1)		
AT2G20940	Unknown protein(DUF1279)	AT5G20230	Blue-copper-binding protein (SAG14)		
AT5G37670	HSP20-like chaperones superfamily protein	AT5G67480	Btb and taz domain protein 4 (BT4)		
AT5G35320	Unknown protein	AT1G08830	Copper/zinc superoxide dismutase 1 (CSD1)		
AT2G30480	Unknown protein	AT3G09350	Fes1a (FES1a)		
AT4G23493	Unknown protein	AT2G47180	Galactinol synthase 1 (GOLS1)		
AT1G30070	SGS domain-containing protein	AT2G29450	Glutathione s-transferase tau 5 (GSTU5)		
AT3G25250	Serine/threonine-protein kinase OXI1 (AGC2-1)	AT1G78380	Glutathione s-transferase tau 19 (GSTU19)		
AT4G23810	WRKY Transcription Factor (WRKY53)	AT1G16030	Heat shock protein 70b (HSP70B)		
AT2G19590	1-aminocyclopropane-1-carboxylate oxidase (ACO1)	AT5G52640	Heat shock protein 90.1 (HSP90.1)		
AT2G47000	ABC transporter B family member 4 (ABCB4)	AT2G26150	Heat shock transcription factor a2 (HSFA2)		
AT3G62770	Protein required for autophagosome formation during nutrient deprivation and senescence	AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins		

AT2G46240	Bcl-2-associated athanogene (BAG6)	AT1G72520	Lipoxygenase 4 (LOX4)		
AT5G20230	Blue copper binding protein (SAG14)	AT5G27600	Long-chain acyl-coa synthetase 7 (LACS7)		
AT5G63160	BTB and TAZ domain protein (BT1)	AT4G25200	Mitochondrion-localized small heat shock protein 23.6 (HSP23.6-mito)		
AT3G48360	BTB and TAZ domain protein2 (BT2)	AT3G24500	Multiprotein bridging factor 1c (MBF1C)		
AT1G76080	Thioredoxin (CDSP32)	AT2G06050	Oxophytodienoate-reductase 3 (OPR3)		
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)	AT3G57520	Seed imbibition 2 (SIP2)		
AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)	AT4G02380	Late embryogenesis abundant like protein (SAG21)		
AT3G63060	F-box protein (EDL3)				
AT4G17490	Ethylene responsive element binding factor 6 (ERF6)				
AT2G47180	Galactinol synthase 1(GOLS1)				
AT1G03850	Glutaredoxin 13 (GRXS13)				
AT1G02930	Gluathione S-transferase 6(GSTF6)				
AT3G04120	Cytosolic GADPH C subunit (GAPC1)				
AT3G51910	Heat shock transcription factor				
AT1G65040	Homolog of yeast HRD1 (HRD1B)				
AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins				

AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)				
AT3G05790	Lon protease 4 (LON4)				
AT1G16420	Cysteine-type endopeptidase 8(MC8)				
AT5G39610	NAC-domain transcription factor (NAC2)				
AT5G04950	Nicotianamine synthase 1 (NAS1)				
AT1G04980	Disulfide isomerase-like protein (PDI10)				
AT1G14870	Plant cadmium resistance 2 (PCR2)				
AT3G17790	Purple acid phosphatase 17 (PAP17)				
AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)				
AT3G25230	FK506 binding protein (FKBP62)				
AT1G27730	Cys2/His2-type zinc-finger protein				
AT4G35770	Senescence 1 (SEN1)				
AT4G02380	Late embryogenesis abundant like protein (SAG21)				
AT4G25380	Stress-associated protein 10(SAP10)				
AT1G05680	UDP-glucosyltransferase (UGT74E2)				
AT5G24110	WRKY transcription factor 30 (WRKY30)				
AT4G24240	WRKY Transcription Factor 7(WRKY7)				
Response to reactive oxygen species					
<i>igr2</i>		<i>cat2</i>		<i>Overlapping genes</i>	

AT1G72660	P-loop containing nucleoside triphosphate hydrolases superfamily protein	AT3G13610	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein	AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins
AT4G18450	Ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF)	AT2G29500	HSP20-like chaperones superfamily protein	AT2G47180	Galactinol synthase 1 (GOLS1)
AT1G14200	RING/U-box superfamily protein	AT2G46600	Calcium-binding EF-hand family protein	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT3G25190	Vacuolar iron transporter-like protein	AT3G09440	Heat shock protein 70 (HSP70) family protein		
AT5G51440	HSP20-like chaperones superfamily protein	AT3G44190	FAD/NAD(P)-binding oxidoreductase family protein		
AT2G20940	Unknown protein	AT5G03630	ATMDAR2		
AT1G44414	Unknown protein	AT1G54100	Aldehyde dehydrogenase 7b4 (ALDHA7b4)		
AT1G17860	Kunitz family trypsin and protease inhibitor protein	AT1G07890	Ascorbate peroxidase 1 (APX1)		
AT5G07330	Unknown protein	AT5G67480	Btb and taz domain protein 4 (BT4)		
AT1G54840	HSP20-like chaperones superfamily protein	AT1G08830	Copper/zinc superoxide dismutase 1 (CSD1)		
AT5G37670	HSP20-like chaperones superfamily protein	AT3G09350	Fes1a (FES1A)		
AT5G35320	Unknown protein	AT2G47180	Galactinol synthase 1 (GOLS1)		
AT2G30480	Unknown protein	AT1G16030	Heat shock protein 70b (HSP70B)		
AT1G30070	SGS domain-containing protein	AT5G52640	Heat shock protein 90.1 (HSP90.1)		
AT4G23493	Unknown protein	AT2G26150	Heat shock transcription factor a2		

			(HSFA2)		
AT4G23810	WRKY Transcription Factor(WRKY53)	AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins		
AT2G19590	Acc oxidase 1 (ACOL)	AT1G72520	Lipoxygenase 4 (LOX4)		
AT2G47000	ABC transporter B family member 4 (ABCB4)	AT5G27600	Long-chain acyl-coa synthetase 7 (LACS7)		
AT2G46240	Bcl-2-associated athanogene 6 (BAG6)	AT4G25200	Mitochondrion-localized small heat shock protein 23.6 (HSP23.6-mito)		
AT5G63160	Btb and taz domain protein 1 (BT1)	AT3G24500	Multiprotein bridging factor 1c (MBF1c)		
AT3G48360	Btb and taz domain protein 2 (BT2)	AT2G06050	Oxophytodienoate-reductase 3 (OPR3)		
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)	AT4G02380	Late embryogenesis abundant like protein (SAG21)		
AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)				
AT3G63060	F-box protein (EDL3)				
AT4G17490	Ethylene responsive element binding factor 6 (ERF6)				
AT2G47180	Galactinol synthase 1 (GOLS1)				
AT3G04120	Cytosolic GADPH C subunit (GAPC1)				
AT3G51910	Heat shock transcription factor				
AT1G65040	Homolog of yeast hrd1 (HRD1B)				
AT4G12400	Carboxylate clamp-tetratricopeptide				

	repeat proteins				
AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)				
AT1G16420	Cysteine-type endopeptidase 8(MC8)				
AT5G39610	NAC domain containing protein 2 (NAC2)				
AT5G04950	Nicotianamine synthase 1 (NAS1)				
AT1G04980	Disulfide isomerase-like protein (PDI10)				
AT3G17790	Purple acid phosphatase 17 (PAP17)				
AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)				
AT3G25230	FK506 binding protein (FKBP62)				
AT4G02380	Late embryogenesis abundant like protein (SAG21)				
AT4G25380	Stress-associated protein 10 (SAP10)				
AT1G05680	UDP-glucosyltransferase (UGT74E2)				
AT5G24110	WRKY dna-binding protein 30 (WRKY30)				
AT4G24240	WRKY dna-binding protein 7 (WRKY7)				

Response to hydrogen peroxide

<i>igr2</i>		<i>cat2</i>		<i>Overlapping genes</i>	
AT1G72660	P-loop containing nucleoside triphosphate hydrolases superfamily protein	AT3G13610	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein	AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins
AT4G18450	Ethylene response factor subfamily	AT2G29500	HSP20-like chaperones superfamily	AT2G47180	Galactinol synthase 1 (GOLS1)

	B-3 of ERF/AP2 transcription factor family (ERF)		protein		
AT1G14200	RING/U-box superfamily protein	AT2G46600	Calcium-binding EF-hand family protein		
AT5G51440	HSP20-like chaperones superfamily protein	AT3G09440	Heat shock protein 70 (HSP 70) family protein		
AT2G20940	Unknown protein	AT3G44190	FAD/NAD(P)-binding oxidoreductase family protein		
AT1G44414	Unknown protein	AT5G03630	Atmdar2		
AT1G17860	Kunitz family trypsin and protease inhibitor protein	AT1G07890	Ascorbate peroxidase 1 (APX1)		
AT5G07330	Unknown protein	AT5G67480	Btb and taz domain protein 4 (BT4)		
AT1G54840	HSP20-like chaperones superfamily protein	AT3G09350	Fes1a (FESLA)		
AT5G37670	HSP20-like chaperones superfamily protein	AT2G47180	Galactinol synthase 1 (GOLS1)		
AT5G35320	Unknown protein	AT1G16030	Heat shock protein 70b (HSP70b)		
AT2G30480	Unknown protein	AT5G52640	Heat shock protein 90.1 (HSP90.1)		
AT1G30070	SGS domain-containing protein	AT2G26150	Heat shock transcription factor a2 (HSFA2)		
AT4G23493	Unknown protein	AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins		
AT4G23810	WRKY transcription Factor(WRKY53)	AT4G25200	Mitochondrion-localized small heat shock protein 23.6 (HSP23.6-mito)		
AT2G46240	Bcl-2-associated athanogene 6	AT3G24500	Multiprotein bridging factor 1c		

	(BAG6)		(MBF1C)		
AT5G63160	Btb and taz domain protein 1 (BT1)				
AT3G48360	Btb and taz domain protein 2 (BT2)				
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)				
AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)				
AT3G63060	F-box protein (EDL3)				
AT2G47180	Galactinol synthase 1 (GOLS1)				
AT3G04120	Cytosolic GADPH C subunit (GAPC1)				
AT3G51910	Heat shock transcription factor				
AT1G65040	Homolog of yeast hrd1 (HRD1B)				
AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins				
AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)				
AT1G16420	Cysteine-type endopeptidase 8(MC8)				
AT1G04980	Disulfide isomerase-like protein (PDI10)				
AT3G17790	Purple acid phosphatase 17 (PAP17)				
AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)				
AT3G25230	FK506 binding protein (FKBP62)				
AT4G25380	Stress-associated protein 10 (SAP10)				
AT1G05680	UDP-glucosyltransferase (UGT74E2)				

AT5G24110	WRKY dna-binding protein 30 (WRKY30)				
AT4G24240	WRKY dna-binding protein 7 (WRKY7)				
Leaf senescence					
<i>igr2</i>		<i>cat2</i>		<i>Overlapping genes</i>	
AT4G23810	WRKY transcription factor(WRKY53)	AT3G11340	UDP-glycosyltransferase-like protein	AT3G11340	UDP-glycosyltransferase-like protein
AT2G13810	AGD2-like defense response protein 1 (ALD1)				
AT3G62770	Protein required for autophagosome formation during nutrient deprivation and senescence				
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)				
AT2G39200	MLO-like protein 12 (MLO12)				
AT5G39610	NAC-domain transcription factor (NAC2)				
AT3G10500	NAC domain containing protein 53 (NAC053)				
AT3G11340	UDP-glycosyltransferase-like protein				
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)				
Defense response					

<i>igr2</i>		<i>cat2</i>		<i>Overlapping genes</i>	
AT2G43620	Chitinase family protein	AT3G51660	Tautomerase/MIF superfamily protein	AT3G11340	UDP-glycosyltransferase-like protein
AT3G28510	AAA-type ATPase family protein	AT3G15356	Legume lectin family protein	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)
AT1G78410	VQ motif-containing protein	AT2G43620	Chitinase family protein	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT5G39580	Peroxidase 62	AT1G77920	bZIP transcription factor family protein	AT5G20230	Blue-copper-binding protein (SAG14)
AT2G27660	Cysteine/Histidine-rich C1 domain family protein	AT3G07720	Galactose oxidase/kelch repeat superfamily protein	AT2G43620	Chitinase family protein
AT1G13470	Unknown protein	AT1G66100	PR (pathogenesis-related) protein	AT2G24850	Tyrosine aminotransferase 3 (TAT3)
AT4G10500	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein	AT1G76070	Unknown protein		
AT4G39830	Putative L-ascorbate oxidase	AT1G76600	Unknown protein		
AT1G51790	Leucine-rich repeat protein kinase family protein	AT3G11480	SABATH methyltransferase (BSMT1)		
AT5G64120	Peroxidase 71	AT1G09970	RLK7 belongs to a leucine-rich repeat class of receptor-like kinase (LRR-RLKs) (LRR XI-23)		
AT5G51190	Ethylene response factor 105 (ERF105)	AT4G16760	Acyl-coa oxidase 1 (ACX1)		
AT3G48640	Unknown protein	AT5G42650	Allene oxide synthase (AOS)		

AT4G23810	WRKY transcription factor (WRKY53)	AT3G28930	Avrrpt2-induced gene 2 (AIG2)		
AT3G57240	Beta-1,3-glucanase 3 (BG3)	AT1G52400	Beta glucosidase 18 (BGLU18)		
AT4G11890	Protein kinase family protein	AT5G20230	Blue-copper-binding protein (SAG14)		
AT2G13810	AGD2-like defense response protein 1 (ALD1)	AT1G19670	Chlorophyllase 1 (CLH1)		
AT3G62770	Protein required for autophagosome formation during nutrient deprivation and senescence	AT1G72680	Cinnamyl-alcohol dehydrogenase (CAD1)		
AT4G12470	Azelaic acid induced 1 (AZI1)	AT1G20440	Cold-regulated 47 (COR47)		
AT2G46240	Bcl-2-associated athanogene 6 (BAG6)	AT1G08830	Copper/zinc superoxide dismutase 1 (CSD1)		
AT5G20230	Blue-copper-binding protein (SAG14)	AT1G70530	Cysteine-rich rlk (receptor-like protein kinase) 3 (CRK3)		
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)	AT3G48520	Cytochrome p450, family 94, subfamily b, polypeptide 3 (cyp94b3)		
AT4G23150	Cysteine-rich rlk (receptor-like protein kinase) 7 (CRK7)	AT5G03210	DBP-interacting protein 2 (DIP2)		
AT5G64905	Elicitor peptide 3 precursor (PROPEP3)	AT5G09440	Exordium like 4 (EXL4)		
AT3G23240	Ethylene response factor 1 (ERF1)	AT2G47730	Glutathione s-transferase phi 8 (GSTF8)		
AT4G17490	Ethylene responsive element binding factor 6 (ERF6)	AT5G02500	Heat shock cognate protein 70-1 (HSC70-1)		

AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT5G52640	Heat shock protein 90.1 (HSP90.1)		
AT1G19250	Flavin-dependent monooxygenase 1 (FMOL)	AT3G28730	High mobility group (HMG)		
AT2G19190	Senescence-induced receptor-like serine/threonine-protein kinase (FRK1)	AT1G17420	Lipoxygenase 3 (LOX3)		
AT1G03850	Glutaredoxin 13 (GRXS13)	AT1G72520	Lipoxygenase 4 (LOX4)		
AT1G02930	Glutathione s-transferase 6 (GSTF6)	AT3G02550	Lob domain-containing protein 41 (IBD41)		
AT1G73260	Kunitz trypsin inhibitor 1 (1KTIL)	AT3G50970	Low temperature-induced 30 (LTI30)		
AT2G39200	MLO-like protein 12 (MLO12)	AT1G52030	Myrosinase-binding protein 2 (MBP2)		
AT5G14180	Triacylglycerol lipase 2 (MPL1)	AT2G23150	Natural resistance-associated macrophage protein 3 (NRAMP3)		
AT3G15500	NAC domain containing protein 3 (NAC3)	AT1G59870	Penetration 3 (PEN3)		
AT2G14610	Pathogenesis-related gene 1 (PR1)	AT4G35630	Phosphoserine aminotransferase (PSAT)		
AT1G04980	Disulfide isomerase-like protein (PDI10)	AT5G06860	Polygalacturonase inhibiting protein 1 (PGIP1)		
AT5G46050	Peptide transporter PTR3-A (PTR3)	AT5G06870	Polygalacturonase inhibiting protein 2 (PGIP2)		
AT5G44420	Plant defensin 1.2 (PDF1.2)	AT4G17230	Scarecrow-like 13 (SCl13)		
AT3G23010	Receptor like protein 36 (RLP36)	AT4G02380	Late embryogenesis abundant like		

			protein (SAG21)		
AT4G34410	Redox responsive transcription factor 1 (RRTF1)	AT5G63780	Shoot apical meristem arrest 1 (SHA1)		
AT1G27730	Cys2/His2-type zinc-finger protein	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)		
AT4G02380	Late embryogenesis abundant like protein (SAG21)	AT5G36910	Thionin 2.2 (THI2.2)		
AT2G03760	Flavonol sulfotransferase-like protein (SOT12)	AT2G43510	Trypsin inhibitor protein 1 (TI1)		
AT2G24850	Tyrosine aminotransferase 3 (TAT3)	AT2G43520	Trypsin inhibitor protein 2 (TI2)		
AT3G11340	UDP-glycosyltransferase-like protein	AT1G52410	Tsk-associating protein 1 (TSA1)		
AT5G50200	nitrate transmembrane transporter (WR3)	AT2G24850	Tyrosine aminotransferase 3 (TAT3)		
AT5G22570	WRKY dna-binding protein 38 (WRKY38)	AT3G11340	UDP-glycosyltransferase-like protein		
AT5G26170	WRKY dna-binding protein 50 (WRKY50)	AT2G30140	UDP-glucosyl transferase 87a2 (UGT87a2)		
AT5G01900	WRKY dna-binding protein 62 (WRKY62)	AT1G80840	WRKY dna-binding protein 40 (WRKY40)		
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)	AT5G49520	WRKY dna-binding protein 48 (WRKY48)		
Salicylic acid mediated signaling pathway					
<i>igr2</i>		<i>cat2</i>		<i>Overlapping genes</i>	
AT3G28510	AAA-type ATPase family protein	AT2G27500	Glycosyl hydrolase superfamily	AT2G03760	Flavonol sulfotransferase-like

			protein		protein (SOT12)
AT5G64120	Peroxidase 71	AT3G28210	zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT1G78410	VQ motif-containing protein	AT4G16760	Acyl-coa oxidase 1 (ACX1)	AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)
AT3G48640	Unknown protein	AT5G42650	Allene oxide synthase (AOS)		
AT1G13470	Unknown protein	AT4G34710	Arginine decarboxylase 2 (ADC2)		
AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT3G28930	Avrrpt2-induced gene 2 (AIG2)		
AT4G23810	WRKY transcription factor(WRKY53)	AT1G19670	Chlorophyllase 1 (CLH1)		
AT3G57240	Beta-1,3-glucanase 3 (BG3)	AT1G19640	Jasmonic acid carboxyl methyltransferase (JMT)		
AT4G11890	Protein kinase family protein	AT3G02550	Lob domain-containing protein 41 (IBD41)		
AT2G13810	AGD2-like defense response protein 1 (ALD1)	AT1G52890	NAC domain containing protein 19 (NAC019)		
AT4G12470	Azelaic acid induced 1 (ZAI1)	AT1G19300	Parvus (PARVUS)		
AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT1G59870	Penetration 3 (PEN3)		
AT2G19190	Senescence-induced receptor-like serine/threonine-protein kinase (FRK1)	AT5G27520	Peroxisomal adenine nucleotide carrier 2 (PNC2)		
AT3G15500	NAC domain containing protein 3 (NAC3)	AT5G06860	Polygalacturonase inhibiting protein 1 (PGIP1)		

AT2G14610	Pathogenesis-related gene 1 (PR1)	AT5G06870	Polygalacturonase inhibiting protein 2 (PGIP2)		
AT3G26830	Cytochrome P450 71B15 (PAD3)	AT4G17230	Scarecrow-like 13 (SCL13)		
AT4G02380	Late embryogenesis abundant like protein (SAG21)	AT4G02380	late embryogenesis abundant like protein (SAG21)		
AT2G03760	Flavonol sulfotransferase-like protein (SOT12)	AT5G56760	Serine acetyltransferase 1;1 (SERAT1;1)		
AT5G22570	WRKY dna-binding protein 38 (WRKY38)	AT5G63780	Shoot apical meristem arrest 1 (SHA1)		
AT5G01900	WRKY dna-binding protein 62 (WRKY62)	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)		
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)	AT1G80840	WRKY dna-binding protein 40 (WRKY40)		

Jasmonic acid mediated signaling pathway

<i>igr2</i>		<i>cat2</i>		<i>Overlapping genes</i>	
AT1G78410	VQ motif-containing protein	AT2G34810	FAD-binding Berberine family protein	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)
AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT1G06620	2-oxoglutarate-dependent dioxygenase	AT2G24850	Tyrosine aminotransferase 3 (TAT3)
AT4G23810	WRKY transcription factor (WRKY53)	AT2G27500	Glycosyl hydrolase superfamily protein	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT3G57240	Beta-1,3-glucanase 3 (B3)	AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12

					(PMZ)
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)	AT5G42650	Allene oxide synthase (AOS)	AT4G34710	Arginine decarboxylase 2 (ADC2)
AT3G23240	Ethylene response factor 1 (ERF1)	AT4G34710	Arginine decarboxylase 2 (ADC2)		
AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT3G28930	Avrrpt2-induced gene 2 (AIG2)		
AT2G19190	Senescence-induced receptor-like serine/threonine-protein kinase (FRK1)	AT1G19670	Chlorophyllase 1 (CLH1)		
AT3G15500	NAC domain containing protein 3 (NAC3)	AT5G13220	Jasmonate-zim-domain protein 10 (JAZ10)		
AT2G14610	Pathogenesis-related gene 1 (PR1)	AT1G19640	Jasmonic acid carboxyl methyltransferase (JMT)		
AT3G26830	Cytochrome P450 71B15 (PAD3)	AT1G52890	NAC domain containing protein 19 (NAC019)		
AT4G02380	Late embryogenesis abundant like protein (SAG21)	AT2G06050	Oxophytodienoate-reductase 3 (OPR3)		
AT2G03760	Flavonol sulfotransferase-like protein (SOT12)	AT1G19300	Parvus (parvus)		
AT2G24850	Tyrosine aminotransferase 3 (TAT3)	AT1G59870	Penetration 3 (PEN3)		
AT5G22570	WRKY dna-binding protein 38 (WRKY38)	AT5G27520	Peroxisomal adenine nucleotide carrier 2 (PNC2)		
AT5G26170	WRKY dna-binding protein 50 (WRKY50)	AT5G06860	Polygalacturonase inhibiting protein 1 (PGIP1)		
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein	AT5G06870	Polygalacturonase inhibiting protein 2 (PGIP2)		

	(YLS9)				
		AT4G17230	Scarecrow-like 13 (SCL13)		
		AT4G02380	Late embryogenesis abundant like protein (SAG21)		
		AT5G56760	Serine acetyltransferase 1;1 (SERAT1;1)		
		AT5G63780	Shoot apical meristem arrest 1 (SHA1)		
		AT2G03760	Flavonol sulfotransferase-like protein (SOT12)		
		AT2G24850	Tyrosine aminotransferase 3 (TAT3)		
		AT1G80840	WRKY dna-binding protein 40 (WRKY40)		

Response to salicylic acid stimulus

<i>igr2</i>		<i>cat2</i>		<i>Overlapping genes</i>	
AT3G28510	AAA-type ATPase family protein	AT2G27500	Glycosyl hydrolase superfamily protein	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)
AT5G64120	Peroxidase 71	AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT1G78410	VQ motif-containing protein	AT4G16760	Acyl-coa oxidase 1 (ACX1)	AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)
AT3G48640	Unknown protein	AT5G42650	Allene oxide synthase (AOS)		

AT1G13470	Unknown protein	AT4G34710	Arginine decarboxylase 2 (ADC2)		
AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT3G28930	Avrrpt2-induced gene 2 (AIG2)		
AT4G23810	WRKY transcription factor (WRKY53)	AT5G67480	Btb and taz domain protein 4 (BT4)		
AT3G57240	Beta-1,3-glucanase 3 (BG3)	AT1G19670	Chlorophyllase 1 (CLH1)		
AT4G11890	Protein kinase family protein	AT2G29420	Glutathione s-transferase tau 7 (GSTU7)		
AT2G13810	AGD2-like defense response protein 1 (ALD1)	AT1G19640	Jasmonic acid carboxyl methyltransferase (JMT)		
AT4G12470	Azelaic acid induced 1 (AZI1)	AT3G02550	Lob domain-containing protein 41 (LBD41)		
AT5G63160	Btb and taz domain protein 1 (BT1)	AT1G52890	NAC domain containing protein 19 (NAC019)		
AT3G48360	Btb and taz domain protein 2 (BT2)	AT1G19300	Parvus (parvus)		
AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT1G59870	Penetration 3 (PEN3)		
AT2G19190	Senescence-induced receptor-like serine/threonine-protein kinase (FRK1)	AT5G27520	Peroxisomal adenine nucleotide carrier 2 (PNC2)		
AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)	AT5G06860	Polygalacturonase inhibiting protein 1 (PGIP1)		
AT4G37260	Myb domain protein 73 (MYB73)	AT5G06870	Polygalacturonase inhibiting protein 2 (PGIP2)		
AT3G50060	Myb domain protein 77 (MYB77)	AT1G43160	Related to ap2 6 (RAP2.6)		
AT3G15500	NAC domain containing protein 3	AT2G33380	Responsive to dessication 20		

	(NAC3)		(RD20)		
AT2G14610	Pathogenesis-related gene 1 (PR1)	AT4G17230	Sarecrow-like 13 (SCL13)		
AT5G46050	Peptide transporter PTR3-A (PTR3)	AT4G02380	Late embryogenesis abundant like protein (SAG21)		
AT3G26830	Cytochrome P450 71B15 (PAD3)	AT5G56760	Serine acetyltransferase 1;1 (SERAT1;1)		
AT4G02380	Late embryogenesis abundant like protein (SAG21)	AT5G63780	Shoot apical meristem arrest 1 (SAH1)		
AT2G03760	flavonol sulfotransferase-like protein (SOT12)	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)		
AT5G24110	WRKY dna-binding protein 30 (WRKY30)	AT1G80840	WRKY dna-binding protein 40 (WRKY40)		
AT5G22570	WRKY dna-binding protein 38 (WRKY38)				
AT5G01900	WRKY dna-binding protein 62 (WRKY62)				
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)				

Response to jasmonic acid stimulus

<i>igr2</i>		<i>cat2</i>		<i>Overlapping genes</i>	
AT1G78410	VQ motif-containing protein	AT2G34810	FAD-binding Berberine family protein	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT1G06620	2-oxoglutarate-dependent dioxygenase	AT3G28210	Zinc finger AN1 domain-containing

					stress-associated protein 12 (PMZ)
AT4G23810	WRKY Transcription Factor (WRKY53)	AT1G66760	MATE efflux family protein	AT5G20230	Blue-copper-binding protein (SAG14)
AT3G57240	Beta-1,3-glucanase 3 (BG3)	AT2G46520	Cellular apoptosis susceptibility protein	AT2G24850	Tyrosine aminotransferase 3 (TAT3)
AT2G47000	ABC transporter B family member 4 (ABCB4)	AT5G54170	Polyketide cyclase/dehydrase and lipid transport superfamily protein		
AT5G20230	Blue-copper-binding protein (SAG14)	AT2G27500	Glycosyl hydrolase superfamily protein		
AT3G48360	Btb and taz domain protein 2 (BT2)	AT3G11480	SABATH methyltransferase(BSMT1)		
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)	AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)		
AT3G23240	Ethylene response factor 1 (ERF1)	AT4G16760	Acyl-coa oxidase 1 (ACX1)		
AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT5G42650	Allene oxide synthase (AOS)		
AT2G19190	Senescence-induced receptor-like serine/threonine-protein kinase (FRK1)	AT4G34710	Arginine decarboxylase 2 (ADC2)		
AT4G37260	Myb domain protein 73 (MYB73)	AT3G28930	Avrrpt2-induced gene 2 (AIG2)		
AT5G39610	NAC-domain transcription factor (NAC2)	AT5G20230	Blue-copper-binding protein (SAG14)		
AT3G15500	NAC domain containing protein 3 (NAC3)	AT5G67480	Btb and taz domain protein 4 (BT4)		
AT2G14610	Pathogenesis-related gene 1 (PR1)	AT1G19670	Chlorophyllase 1 (CLH1)		

AT5G46050	Peptide transporter PTR3-A (PTR3)	AT4G23600	Coronatine induced 1 (CORI3)		
AT3G26830	Cytochrome P450 71B15 (PAD3)	AT3G48520	Cytochrome p450, family 94, subfamily b, polypeptide 3 (CYP94b3)		
AT5G44420	Plant defensin 1.2 (PDF1.2)	AT2G29450	Glutathione s-transferase tau 5 (GSTU5)		
AT4G27410	NAC domain-containing protein 72 (RD26)	AT3G16470	Jasmonate responsive 1 (JR1)		
AT1G27730	Cys2/His2-type zinc-finger protein	AT5G13220	Jasmonate-zim-domain protein 10 (JAZ10)		
AT4G35770	Senescence 1 (SEN1)	AT1G19640	Jasmonic acid carboxyl methyltransferase (JMT)		
AT4G02380	Late embryogenesis abundant like protein (SAG21)	AT3G45140	Lipoxygenase 2 (LOX2)		
AT2G30360	CBL-interacting serine/threonine-protein kinase 11 (SIP4)	AT1G17420	Lipoxygenase 3 (LOX3)		
AT2G03760	Flavonol sulfotransferase-like protein (SOT12)	AT1G72520	Lipoxygenase 4 (LOX4)		
AT2G24850	Tyrosine aminotransferase 3 (TAT3)	AT5G10300	Methyl esterase 5 (MES5)		
AT5G22570	WRKY dna-binding protein 38 (WRKY38)	AT4G31780	Monogalactosyl diacylglycerol synthase 1 (MGD1)		
AT5G26170	WRKY dna-binding protein 50 (WRKY50)	AT2G39030	N-Acetyltransferase activity 1 (NATA1)		
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein	AT1G52890	NAC domain containing protein 19 (NAC019)		

	(YLS9)				
		AT2G06050	Oxophytodienoate-reductase 3 (OPR3)		
		AT1G19300	Parvus (parvus)		
		AT1G59870	Penetration 3 (PEN3)		
		AT5G27520	Peroxisomal adenine nucleotide carrier 2 (PNC2)		
		AT5G06860	Polygalacturonase inhibiting protein 1 (PGIP1)		
		AT5G06870	Polygalacturonase inhibiting protein 2 (PGIP2)		
		AT1G43160	Related to ap2 6 (RAP2.6)		
		AT4G17230	Scarecrow-like 13 (SCL13)		
		AT4G02380	Late embryogenesis abundant like protein (SAG21)		
		AT5G56760	Serine acetyltransferase 1;1 (SERAT1;1)		
		AT5G63780	Shoot apical meristem arrest 1 (SHA1)		
		AT2G03760	Flavonol sulfotransferase-like protein (SOT12)		
		AT2G24850	Tyrosine aminotransferase 3 (TAT3)		
		AT1G80840	WRKY dna-binding protein 40 (WRKY40)		
Response to ethylene stimulus					

<i>igr2</i>		<i>cat2</i>		<i>Overlapping genes</i>	
AT3G28580	AAA-type ATPase family protein	AT4G01870	TolB protein-related	AT2G24850	Tyrosine aminotransferase 3 (TAT3)
AT4G18450	Ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF)	AT5G27760	Hypoxia-responsive family protein	AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)
AT1G78410	VQ motif-containing protein	AT1G76600	Unknown protein		
AT3G25190	Vacuolar iron transporter-like protein	AT5G03630	ATMDAR2		
AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)		
AT2G47000	ABC transporter B family member 4 (ABCB4)	AT1G54100	Aldehyde dehydrogenase 7b4 (ALDH7B4)		
AT3G55950	Putative serine/threonine-protein kinase-like protein CCR3 (CCR3)	AT4G34710	Arginine decarboxylase 2 (ADC2)		
AT1G28360	ERF domain protein 12 (ERF12)	AT3G28930	Avrrpt2-induced gene 2 (AIG2)		
AT3G23240	Ethylene response factor 1 (ERF1)	AT5G13220	Jasmonate-zim-domain protein 10 (JAZ10)		
AT4G17490	Ethylene responsive element binding factor 6 (ERF6)	AT1G19640	Jasmonic acid carboxyl methyltransferase (JMT)		
AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT1G72520	Lipoxygenase 4 (LOX4)		
AT4G37260	Myb domain protein 73 (MYB73)	AT3G24500	Multiprotein bridging factor 1c (MBF1C)		
AT3G50060	Myb domain protein 77 (MYB77)	AT1G52890	NAC domain containing protein 19		

			(NAC019)		
AT5G39610	NAC-domain transcription factor (NAC2)	AT2G06050	Oxophytodienoate-reductase 3 (OPR3)		
AT3G15500	NAC domain containing protein 3 (NAC3)	AT5G27520	Peroxisomal adenine nucleotide carrier 2 (PNC2)		
AT5G04950	Nicotianamine synthase 1 (NAS1)	AT1G78080	Related to ap2 4 (RAP2.4)		
AT3G48850	Phosphate transporter 3;2 (PHT3;2)	AT4G17230	Scarecrow-like 13 (SCL13)		
AT3G26830	Cytochrome P450 71B15 (PAD3)	AT2G24850	Tyrosine aminotransferase 3 (TAT3)		
AT5G44420	Plant defensin 1.2 (PDF1.2)	AT2G15490	UDP-glycosyltransferase 73b4 (UGT73B4)		
AT5G54190	Protochlorophyllide oxidoreductase a (PORA)	AT1G80840	WRKY dna-binding protein 40 (WRKY40)		
AT4G27440	Protochlorophyllide oxidoreductase b (PORB)				
AT4G27410	NAC domain-containing protein 72 (RD26)				
AT1G27730	Cys2/His2-type zinc-finger protein				
AT2G30360	CBL-interacting serine/threonine-protein kinase 11 (SIP4)				
AT2G24850	Tyrosine aminotransferase 3 (TAT3)				

Table S8. Comparative analysis of the up-regulated genes enriched in specific GO terms between the transcriptomes of leaves of *igr2-9* and *cat2* plants grown under long-day (LD) conditions. The specific GO terms were those cited in Fig. S5B. The obtained data sets of *cat2* transcriptome were referred to the report by Mhamdi et al. (2010).

Defense response					
<i>igr2</i>		<i>cat2</i>		<i>Overlapping genes</i>	
AT2G43620	Chitinase family protein	AT3G15356	Legume lectin family protein	AT1G73260	Kunitz trypsin inhibitor 1 (KTIL1)
AT3G28510	AAA-type ATPase family protein	AT5G10760	Eukaryotic aspartyl protease family protein	AT3G11340	UDP-glycosyltransferase-like protein
AT1G78410	VQ motif-containing protein	AT1G72680	Cinnamyl-alcohol dehydrogenase(CAD1)		
AT5G39580	Peroxidase 62	AT4G02520	Glutathione S-transferase PHI 2 (GSTF2)		
AT2G27660	Cysteine/Histidine-rich C1 domain family protein	AT2G05520	Glycine-rich protein 3 (GRP-3)		
AT1G13470	Unknown protein	AT5G52640	Heat shock protein 90.1(HSP90.1)		
AT4G10500	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein	AT3G28730	High mobility group (HMG)		
AT4G39830	Putative L-ascorbate oxidase	AT1G73260	Kunitz trypsin inhibitor 1 (KTIL1)		
AT1G51790	Leucine-rich repeat protein kinase family protein	AT1G75830	Low-molecular-weight cysteine-rich 67 (LCR67)		
AT5G64120	Peroxidase 71	AT2G23150	Natural resistance-associated macrophage protein 3 (NRAMP3)		

AT5G51190	Ethylene response factor 105 (ERF105)	AT3G04720	Pathogenesis-related 4 (PR4)		
AT3G48640	Unknown protein	AT1G75040	Pathogenesis-related gene 5 (PR5)		
AT4G23810	WRKY transcription factor (WRKY53)	AT2G37710	Receptor lectin kinase (RLK)		
AT3G57240	Beta-1,3-glucanase 3 (BG3)	AT2G43510	Trypsin inhibitor protein 1(TI1)		
AT4G11890	Protein kinase family protein	AT3G11340	UDP-glycosyltransferase-like protein		
AT2G13810	AGD2-like defense response protein 1 (ALD1)	AT2G25000	WRKY DNA-binding protein 60 (WRKY60)		
AT3G62770	Protein required for autophagosome formation during nutrient deprivation and senescence				
AT4G12470	Azelaic acid induced 1 (AZI1)				
AT2G46240	Bcl-2-associated athanogene 6 (BAG6)				
AT5G20230	Blue-copper-binding protein (SAG14)				
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)				
AT4G23150	Cysteine-rich rlk (receptor-like protein kinase) 7 (CRK7)				
AT5G64905	Elicitor peptide 3 precursor (PROPEP3)				
AT3G23240	Ethylene response factor 1 (ERF1)				

AT4G17490	Ethylene responsive element binding factor 6 (ERF6)				
AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)				
AT1G19250	Flavin-dependent monooxygenase 1 (FMOL)				
AT2G19190	Senescence-induced receptor-like serine/threonine-protein kinase (FRK1)				
AT1G03850	Glutaredoxin 13 (GRXS13)				
AT1G02930	Glutathione s-transferase 6 (GSTF6)				
AT1G73260	Kunitz trypsin inhibitor 1 (1KTIL)				
AT2G39200	MLO-like protein 12 (MLO12)				
AT5G14180	Triacylglycerol lipase 2 (MPL1)				
AT3G15500	NAC domain containing protein 3 (NAC3)				
AT2G14610	Pathogenesis-related gene 1 (PR1)				
AT1G04980	Disulfide isomerase-like protein (PDI10)				
AT5G46050	Peptide transporter PTR3-A (PTR3)				
AT5G44420	Plant defensin 1.2 (PDF1.2)				
AT3G23010	Receptor like protein 36 (RLP36)				
AT4G34410	Redox responsive transcription factor 1 (RRTF1)				

AT1G27730	Cys2/His2-type zinc-finger protein				
AT4G02380	Late embryogenesis abundant like protein (SAG21)				
AT2G03760	Flavonol sulfotransferase-like protein (SOT12)				
AT2G24850	Tyrosine aminotransferase 3 (TAT3)				
AT3G11340	UDP-glycosyltransferase-like protein				
AT5G50200	nitrate transmembrane transporter (WR3)				
AT5G22570	WRKY dna-binding protein 38 (WRKY38)				
AT5G26170	WRKY dna-binding protein 50 (WRKY50)				
AT5G01900	WRKY dna-binding protein 62 (WRKY62)				
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)				

Response to salicylic acid stimulus

<i>igr2</i>		<i>cat2</i>		<i>Overlapping genes</i>	
AT3G28510	AAA-type ATPase family protein	AT3G28210	Putative zinc finger protein (PMZ)	AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)
AT5G64120	Peroxidase 71	AT2G05520	Glycine-rich protein 3 (GRP-3)		
AT1G78410	VQ motif-containing protein	AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)		

AT3G48640	Unknown protein	AT1G71030	MYB-like 2 (MYBL2)		
AT1G13470	Unknown protein	AT1G75040	Pathogenesis-related gene 5 (PR5)		
AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT2G37710	Receptor lectin kinase (RLK)		
AT4G23810	WRKY transcription factor (WRKY53)	AT1G21270	Wall-associated kinase 2 (WAK2)		
AT3G57240	Beta-1,3-glucanase 3 (BG3)	AT2G25000	WRKY DNA-binding protein 60 (WRKY60)		
AT4G11890	Protein kinase family protein				
AT2G13810	AGD2-like defense response protein 1 (ALD1)				
AT4G12470	Azelaic acid induced 1 (AZI1)				
AT5G63160	Btb and taz domain protein 1 (BT1)				
AT3G48360	Btb and taz domain protein 2 (BT2)				
AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)				
AT2G19190	Senescence-induced receptor-like serine/threonine-protein kinase (FRK1)				
AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)				
AT4G37260	Myb domain protein 73 (MYB73)				
AT3G50060	Myb domain protein 77 (MYB77)				

AT3G15500	NAC domain containing protein 3 (NAC3)				
AT2G14610	Pathogenesis-related gene 1 (PR1)				
AT5G46050	Peptide transporter PTR3-A (PTR3)				
AT3G26830	Cytochrome P450 71B15 (PAD3)				
AT4G02380	Late embryogenesis abundant like protein (SAG21)				
AT2G03760	flavonol sulfotransferase-like protein (SOT12)				
AT5G24110	WRKY dna-binding protein 30 (WRKY30)				
AT5G22570	WRKY dna-binding protein 38 (WRKY38)				
AT5G01900	WRKY dna-binding protein 62 (WRKY62)				
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)				

Table S9. Comparative analysis of the up-regulated genes enriched in specific GO terms between the transcriptomes of leaves of *igr2-9* and *rml1* plants. The specific GO terms were those cited in Fig. S6. The obtained data sets of *rml1* transcriptome were referred to the report by Schnaubelt et al. (2014).

Response to oxidative stress					
<i>igr2</i>		<i>rml1</i>		<i>Overlapping genes</i>	
AT1G72660	P-loop containing nucleoside triphosphate hydrolases superfamily protein	AT4G16190	Papain family cysteine protease	AT1G02930	Glutathione s-transferase 6 (GSTF6)
AT2G21640	Hypothetical protein	AT1G78410	VQ motif-containing protein	AT1G05680	UDP-glucosyltransferase (UGT74E2)
AT1G44414	Unknown protein	AT1G19020	Unknown protein	AT5G51440	HSP20-like chaperones superfamily protein
AT1G17860	Kunitz family trypsin and protease inhibitor protein	AT1G73120	Unknown protein	AT2G47000	ABC transporter B family member 4 (ABCB4)
AT5G07330	Unknown protein	AT5G51440	HSP20-like chaperones superfamily protein	AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)
AT1G54840	HSP20-like chaperones superfamily protein	AT2G21640	Hypothetical protein	AT1G78410	VQ motif-containing protein
AT4G18450	Ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF)	AT5G16980	Zinc-binding dehydrogenase family protein	AT5G39610	NAC-domain transcription factor (NAC2)
AT1G72060	Serine-type endopeptidase inhibitors	AT1G21520	Unknown protein	AT2G21640	Hypothetical protein
AT1G78410	VQ motif-containing protein	AT1G80130	Tetratricopeptide repeat (TPR)-like superfamily protein	AT4G02380	Late embryogenesis abundant like protein (SAG21)

AT5G51440	HSP20-like chaperones superfamily protein	AT5G39730	AIG2-like (avirulence induced gene) family protein	AT1G27730	Cys2/His2-type zinc-finger protein
AT3G25190	Vacuolar iron transporter-like protein	AT2G46600	Calcium-binding EF-hand family protein		
AT1G14200	RING/U-box superfamily protein	AT1G09970	Leucine-rich repeat class of receptor-like kinase (LRR-RLKs)(LRR XI-23)		
AT1G52200	PLAC8 family protein	AT4G12720	Protein with ADP-ribose hydrolase activity(NUDT7)		
AT2G20940	Unknown protein(DUF1279)	AT4G26080	ABA insensitive 1 (ABI1)		
AT5G37670	HSP20-like chaperones superfamily protein	AT2G05710	Aconitase 3 (ACO3)		
AT5G35320	Unknown protein	AT1G54100	Aldehyde dehydrogenase 7b4 (ALDH7b4)		
AT2G30480	Unknown protein	AT5G16970	Alkenal reductase (AER)		
AT4G23493	Unknown protein	AT2G47000	ABC transporter B family member 4 (ABCB4)		
AT1G30070	SGS domain-containing protein	AT5G67480	BTB and TAZ domain protein 4 (BT4)		
AT3G25250	Serine/threonine-protein kinase OXI1 (AGC2-1)	AT1G20620	Catalase 3 (CAT3)		
AT4G23810	WRKY Transcription Factor (WRKY53)	AT3G12490	Cystatin b (CYSB)		
AT2G19590	1-aminocyclopropane-1-carboxylate oxidase (ACO1)	AT1G19570	Dehydroascorbate reductase (DHAR1)		

AT2G47000	ABC transporter B family member 4 (ABCB4)	AT2G46270	G-box binding factor 3 (GBF3)		
AT3G62770	Protein required for autophagosome formation during nutrient deprivation and senescence	AT1G02930	Glutathione s-transferase 6 (GSTF6)		
AT2G46240	Bcl-2-associated athanogene (BAG6)	AT2G22430	Homeobox protein 6 (HB6)		
AT5G20230	Blue copper binding protein (SAG14)	AT3G05970	Long-chain acyl-coa Synthetase 6 (LACS6)		
AT5G63160	BTB and TAZ domain protein (BT1)	AT5G27600	Long-chain acyl-coa synthetase 7 (LACS7)		
AT3G48360	BTB and TAZ domain protein 2 (BT2)	AT5G09590	Mitochondrial hso70 2 (MTHSC70-2)		
AT1G76080	Thioredoxin (CDSP32)	AT5G39610	NAC-domain transcription factor (NAC2)		
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)	AT2G19810	Oxidation-related zinc finger 1 (OZF1)		
AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)	AT3G02800	Plant and fungi atypical dual-speciﬁcity phosphatase 3 (PFA-DSP3)		
AT3G63060	F-box protein (EDL3)	AT3G22200	Pollen-pistil incompatibility 2 (POP2)		
AT4G17490	Ethylene responsive element binding factor 6 (ERF6)	AT1G56650	Production of anthocyanin pigment 1 (PAP1)		
AT2G47180	Galactinol synthase 1(GOLS1)	AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)		

AT1G03850	Glutaredoxin 13 (GRXS13)	AT5G59820	Responsive to high light 41 (RHL41)		
AT1G02930	Gluathione S-transferase 6(GSTF6)	AT1G49820	S-methyl-5-thioribose kinase (MTK)		
AT3G04120	Cytosolic GADPH C subunit (GAPC1)	AT1G27730	Cys2/His2-type zinc-finger protein		
AT3G51910	Heat stress transcription factor	AT4G02380	Late embryogenesis abundant like protein (SAG21)		
AT1G65040	Homolog of yeast HRD1 (HRD1B)	AT5G13930	Transparent testa 4 (TT4)		
AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins	AT1G05680	UDP-glucosyltransferase (UGT74E2)		
AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)				
AT3G05790	Lon protease 4 (LON4)				
AT1G16420	Cysteine-type endopeptidase 8(MC8)				
AT5G39610	NAC-domain transcription factor (NAC2)				
AT5G04950	Nicotianamine synthase 1 (NAS1)				
AT1G04980	Disulfide isomerase-like protein (PDI10)				
AT1G14870	Plant cadmium resistance 2 (PCR2)				
AT3G17790	Purple acid phosphatase 17 (PAP17)				
AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)				
AT3G25230	FK506 binding protein (FKBP62)				
AT1G27730	Cys2/His2-type zinc-finger protein				

AT4G35770	Senescence 1 (SEN1)				
AT4G02380	Late embryogenesis abundant like protein (SAG21)				
AT4G25380	Stress-associated protein 10(SAP10)				
AT1G05680	UDP-glucosyltransferase (UGT74E2)				
AT5G24110	WRKY DNA-binding protein 30 (WRKY30)				
AT4G24240	WRKY Transcription Factor 7(WRKY7)				

Response to reactive oxygen species

<i>igr2</i>		<i>rml1</i>		<i>Overlapping genes</i>	
AT1G72660	P-loop containing nucleoside triphosphate hydrolases superfamily protein	AT4G16190	Papain family cysteine protease	AT1G05680	UDP-glucosyltransferase (UGT74E2)
AT4G18450	Ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF)	AT5G51440	HSP20-like chaperones superfamily protein	AT5G51440	HSP20-like chaperones superfamily protein
AT1G14200	RING/U-box superfamily protein	AT5G39730	AIG2-like (avirulence induced gene) family protein	AT2G47000	ABC transporter B family member 4 (ABCB4)
AT3G25190	Vacuolar iron transporter-like protein	AT2G46600	Calcium-binding EF-hand family protein	AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)
AT5G51440	HSP20-like chaperones superfamily protein	AT4G12720	Protein with ADP-ribose hydrolase activity (NUDT7)	AT5G39610	NAC-domain transcription factor (NAC2)

AT2G20940	Unknown protein	AT4G26080	ABA INSENSITIVE 1 (ABI1)	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT1G44414	Unknown protein	AT2G05710	Aconitase 3 (ACO3)		
AT1G17860	Kunitz family trypsin and protease inhibitor protein	AT1G54100	Aldehyde dehydrogenase 7b4 (ALDH7b4)		
AT5G07330	Unknown protein	AT2G47000	ABC transporter B family member 4 (ABCB4)		
AT1G54840	HSP20-like chaperones superfamily protein	AT5G67480	BTB and TAZ domain protein 4 (BT4)		
AT5G37670	HSP20-like chaperones superfamily protein	AT1G20620	Catalase 3 (CAT3)		
AT5G35320	Unknown protein	AT1G19570	Dehydroascorbate reductase (DHAR1)		
AT2G30480	Unknown protein	AT2G46270	G-box binding factor 3 (GBF3)		
AT1G30070	SGS domain-containing protein	AT2G22430	Homeobox protein 6 (HB6)		
AT4G23493	Unknown protein	AT3G05970	Long-chain acyl-coa synthetase 6 (LACS6)		
AT4G23810	WRKY Transcription Factor(WRKY53)	AT5G27600	Long-chain acyl-coa synthetase 7 (LACS7)		
AT2G19590	Acc oxidase 1 (ACOL)	AT5G09590	Mitochondrial hso70 2 (MTHSC70-2)		
AT2G47000	ABC transporter B family member 4 (ABCB4)	AT5G39610	NAC-domain transcription factor (NAC2)		
AT2G46240	Bcl-2-associated athanogene 6 (BAG6)	AT3G02800	Plant and fungi atypical dual-speciﬁcity phosphatase 3 (PFD-DSP3)		

AT5G63160	BTB and TAZ domain protein 1 (BT1)	AT1G56650	Production of anthocyanin pigment 1 (PAP1)		
AT3G48360	BTB and TAZ domain protein 2 (BT2)	AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)		
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)	AT1G49820	S-methyl-5-thioribose kinase (MTK)		
AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)	AT4G02380	Late embryogenesis abundant like protein (SAG21)		
AT3G63060	F-box protein (EDL3)	AT1G05680	UDP-glucosyltransferase (UGT74E2)		
AT4G17490	Ethylene responsive element binding factor 6 (ERF6)				
AT2G47180	Galactinol synthase 1 (GOLS1)				
AT3G04120	Cytosolic GADPH C subunit (GAPC1)				
AT3G51910	Heat stress transcription factor				
AT1G65040	Homolog of yeast hrd1 (HRD1B)				
AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins				
AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)				
AT1G16420	Cysteine-type endopeptidase 8(MC8)				
AT5G39610	NAC-domain transcription factor (NAC2)				
AT5G04950	Nicotianamine synthase 1 (NAS1)				

AT1G04980	Disulfide isomerase-like protein (PDI10)				
AT3G17790	Purple acid phosphatase 17 (PAP17)				
AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)				
AT3G25230	FK506 binding protein (FKBP62)				
AT4G02380	Late embryogenesis abundant like protein (SAG21)				
AT4G25380	Stress-associated protein 10 (SAP10)				
AT1G05680	UDP-glucosyltransferase (UGT74E2)				
AT5G24110	WRKY DNA-binding protein 30 (WRKY30)				
AT4G24240	WRKY dna-binding protein 7 (WRKY7)				

Response to hydrogen peroxide

<i>igr2</i>		<i>rml1</i>		<i>Overlapping genes</i>	
AT1G72660	P-loop containing nucleoside triphosphate hydrolases superfamily protein	AT1G05680	UDP-glucosyltransferase (UGT74E2)	AT1G05680	UDP-glucosyltransferase (UGT74E2)
AT4G18450	Ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF)	AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)	AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)

AT1G14200	RING/U-box superfamily protein	AT5G51440	HSP20-like chaperones superfamily protein	AT5G51440	HSP20-like chaperones superfamily protein
AT5G51440	HSP20-like chaperones superfamily protein				
AT2G20940	Unknown protein				
AT1G44414	Unknown protein				
AT1G17860	Kunitz family trypsin and protease inhibitor protein				
AT5G07330	Unknown protein				
AT1G54840	HSP20-like chaperones superfamily protein				
AT5G37670	HSP20-like chaperones superfamily protein				
AT5G35320	Unknown protein				
AT2G30480	Unknown protein				
AT1G30070	SGS domain-containing protein				
AT4G23493	Unknown protein				
AT4G23810	WRKY transcription Factor(WRKY53)				
AT2G46240	Bcl-2-associated athanogene 6 (BAG6)				
AT5G63160	BTB and TAZ domain protein 1 (BT1)				
AT3G48360	BTB and TAZ domain protein 2 (BT2)				

AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)				
AT5G05410	Dehydration-responsive element-binding protein 2A (DREB2A)				
AT3G63060	F-box protein (EDL3)				
AT2G47180	Galactinol synthase 1 (GOLS1)				
AT3G04120	Cytosolic GADPH C subunit (GAPC1)				
AT3G51910	Heat stress transcription factor				
AT1G65040	Homolog of yeast hrd1 (HRD1B)				
AT4G12400	Carboxylate clamp-tetratricopeptide repeat proteins				
AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)				
AT1G16420	Cysteine-type endopeptidase 8(MC8)				
AT1G04980	Disulfide isomerase-like protein (PDI10)				
AT3G17790	Purple acid phosphatase 17 (PAP17)				
AT3G16050	Pyridoxine biosynthesis 1.2 (PDX1.2)				
AT3G25230	FK506 binding protein (FKBP62)				
AT4G25380	Stress-associated protein 10 (SAP10)				

AT1G05680	UDP-glucosyltransferase (UGT74E2)				
AT5G24110	WRKY DNA-binding protein 30 (WRKY30)				
AT4G24240	WRKY dna-binding protein 7 (WRKY7)				
Leaf senescence					
<i>igr2</i>		<i>rml1</i>		<i>Overlapping genes</i>	
AT4G23810	WRKY transcription factor(WRKY53)	AT5G39610	NAC-domain transcription factor (NAC2)	AT5G39610	NAC-domain transcription factor (NAC2)
AT2G13810	AGD2-like defense response protein 1 (ALD1)	AT3G10500	NAC domain containing protein 53 (NAC053)	AT3G10500	NAC domain containing protein 53 (NAC053)
AT3G62770	Protein required for autophagosome formation during nutrient deprivation and senescence				
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)				
AT2G39200	MLO-like protein 12 (MLO12)				
AT5G39610	NAC-domain transcription factor (NAC2)				
AT3G10500	NAC domain containing protein 53 (NAC053)				
AT3G11340	UDP-glycosyltransferase-like protein				

AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)				
Defense response					
<i>igr2</i>		<i>rml1</i>		<i>Overlapping genes</i>	
AT2G43620	Chitinase family protein	AT4G12490	Bifunctional inhibitor/lipid-transfer protein/seed storage 2S albumin superfamily protein	AT1G02930	Glutathione s-transferase 6 (GSTF6)
AT3G28510	AAA-type ATPase family protein	AT4G23670	Polyketide cyclase/dehydrase and lipid transport superfamily protein	AT2G37130	Peroxidase superfamily protein
AT1G78410	VQ motif-containing protein	AT1G77920	bZIP transcription factor family protein	AT4G12470	Azelaic acid induced 1 (AZI1)
AT5G39580	Peroxidase 62	AT2G33710	A member of the ERF (ethylene response factor) subfamily B-4 of ERF/AP2 transcription factor family	AT1G27730	Cys2/His2-type zinc-finger protein
AT2G27660	Cysteine/Histidine-rich C1 domain family protein	AT1G55210	Disease resistance-responsive (dirigent-like protein) family protein	AT1G78410	VQ motif-containing protein
AT1G13470	Hypothetical protein	AT3G60450	Phosphoglycerate mutase family protein	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)
AT4G10500	2-oxoglutarate (2OG) and Fe(II)-dependent oxygenase superfamily protein	AT1G72920	Toll-Interleukin-Resistance (TIR) domain family protein	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT4G39830	Putative L-ascorbate oxidase	AT5G42050	DCD (Development and Cell Death) domain protein	AT5G46050	Peptide transporter PTR3-A (PTR3)

AT1G51790	Leucine-rich repeat protein kinase family protein	AT3G16330	Unknown protein		
AT5G64120	Peroxidase 71	AT2G32030	Acyl-CoA N-acyltransferases (NAT) superfamily protein		
AT5G51190	Ethylene response factor 105 (ERF105)	AT5G52750	Heavy metal transport/detoxification superfamily protein		
AT3G48640	Hypothetical protein	AT1G72940	Toll-Interleukin-Resistance (TIR) domain-containing protein		
AT4G23810	WRKY transcription factor (WRKY53)	AT4G38540	FAD/NAD(P)-binding oxidoreductase family protein		
AT3G57240	Beta-1,3-glucanase 3 (BG3)	AT1G25275	Unknown protein		
AT4G11890	Protein kinase family protein	AT4G18360	Aldolase-type TIM barrel family protein		
AT2G13810	AGD2-like defense response protein 1 (ALD1)	AT4G33070	Thiamine pyrophosphate dependent pyruvate decarboxylase family protein		
AT3G62770	Protein required for autophagosome formation during nutrient deprivation and senescence	AT1G78410	VQ motif-containing protein		
AT4G12470	Azelaic acid induced 1 (AZI1)	AT4G22530	S-adenosyl-L-methionine-dependent methyltransferases superfamily protein		
AT2G46240	Bcl-2-associated athanogene 6 (BAG6)	AT1G19020	Unknown protein		
AT5G20230	Blue-copper-binding protein (SAG14)	AT5G18130	Unknown protein		

AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)	AT5G17760	P-loop containing nucleoside triphosphate hydrolases superfamily protein		
AT4G23150	Cysteine-rich rlk (receptor-like protein kinase) 7 (CRK7)	AT3G07720	Galactose oxidase/kelch repeat superfamily protein		
AT5G64905	Elicitor peptide 3 (PROPEP3)	AT2G37130	Peroxidase superfamily protein		
AT3G23240	Ethylene response factor 1 (ERF1)	AT1G72900	Toll-Interleukin-Resistance (TIR) domain-containing protein		
AT4G17490	Ethylene responsive element binding factor 6 (ERF6)	AT5G52810	NAD(P)-binding Rossmann-fold superfamily protein		
AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT2G40140	CZF1		
AT1G19250	Flavin-dependent monooxygenase 1 (FMOL)	AT1G09970	RLK7 belongs to a leucine-rich repeat class of receptor-like kinase (LRR-RLKs)(LRR XI-23)		
AT2G19190	Senescence-induced receptor-like serine/threonine-protein kinase (FRK1)	AT4G12720	Protein with ADP-ribose hydrolase activity(NUDT7)		
AT1G03850	Glutaredoxin 13 (GRXS13)	AT1G17745	3-phosphoglycerate dehydrogenase (PGDH)		
AT1G02930	Glutathione s-transferase 6 (GSTF6)	AT4G26080	ABA insensitive 1 (ABIL)		
AT1G73260	Kunitz trypsin inhibitor 1 (1KTIL)	AT4G16760	Acyl-coa oxidase 1 (ACX1)		
AT2G39200	MLO-like protein 12 (MLO12)	AT4G28390	ADP/ATP carrier 3 (AAC3)		
AT5G14180	triacylglycerol lipase 2 (MPL1)	AT5G04720	Adr1-like 2 (ADR1-I2)		

AT3G15500	NAC domain containing protein 3 (NAC3)	AT1G77120	Alcohol dehydrogenase 1 (ADH1)		
AT2G14610	Pathogenesis-related gene 1 (PR1)	AT4G12470	Azelaic acid induced 1 (AZI1)		
AT1G04980	Disulfide isomerase-like protein (PDI10)	AT4G17615	Calcineurin b-like protein 1 (CB11)		
AT5G46050	Peptide transporter PTR3-A (PTR3)	AT1G20620	Catalase 3 (CAT3)		
AT5G44420	Plant defensin 1.2 (PDF1.2)	AT3G44260	Ccr4- associated factor 1a (CAF1A)		
AT3G23010	Receptor like protein 36 (RLP36)	AT1G72680	Cinnamyl-alcohol dehydrogenase (CAD1)		
AT4G34410	Redox responsive transcription factor 1 (RRTF1)	AT5G12170	Crt (chloroquine-resistance transporter)-like transporter 3 (CLT3)		
AT1G27730	Cys2/His2-type zinc-finger protein	AT3G28740	Cytochrome p450, family 81, subfamily d, polypeptide 11 (CYP81D11)		
AT4G02380	Late embryogenesis abundant like protein (SAG21)	AT1G06080	Delta 9 desaturase 1 (ADS1)		
AT2G03760	Flavonol sulfotransferase-like protein (SOT12)	AT5G41070	DsRNA-binding protein 5 (DRD5)		
AT2G24850	Tyrosine aminotransferase 3 (TAT3)	AT4G33050	Embryo sac development arrest 39 (EDA39)		
AT3G11340	UDP-glycosyltransferase-like protein	AT1G28370	ERF domain protein 11 (ERF11)		
AT5G50200	Nitrate transmembrane transporter (WR3)	AT5G47220	Ethylene responsive element binding factor 2 (ERF2)		

AT5G22570	Putative WRKY transcription factor 38 (WRKY38)	AT5G09440	Exordium like 4 (EXI4)		
AT5G26170	WRKY dna-binding protein 50 (WRKY50)	AT5G46330	Flagellin-sensitive 2 (FLS2)		
AT5G01900	WRKY dna-binding protein 62 (WRKY62)	AT1G12200	Flavin monooxygenase (FMO)		
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)	AT1G02930	Glutathione s-transferase 6 (GSTF6)		
		AT1G03430	Histidine-containing phosphotransfer factor 5 (AHP5)		
		AT1G19180	Jasmonate-zim-domain protein 1 (JAZ1)		
		AT1G55020	Lipoxygenase 1 (LOX1)		
		AT3G05970	Long-chain acyl-coa synthetase 6 (LACS6)		
		AT1G18570	Myb domain protein 51 (MYB51)		
		AT2G43000	NAC domain containing protein 42 (NAC042)		
		AT5G46180	Ornithine-delta-aminotransferase (DELTA-OAT)		
		AT2G28900	Outer plastid envelope protein 16-1 (OEP16-1)		
		AT5G46050	Peptide transporter PTR3-A (PTR3)		
		AT4G08770	Peroxidase 37 (PRX37)		

		AT4G37870	Phosphoenolpyruvate carboxykinase 1 (PCK1)		
		AT4G35630	Phosphoserine aminotransferase (PSAT)		
		AT5G06860	Polygalacturonase inhibiting protein 1 (PGIP1)		
		AT1G56650	Production of anthocyanin pigment 1 (PAP1)		
		AT1G27730	Cys2/His2-type zinc-finger protein		
		AT4G02380	Late embryogenesis abundant like protein (SAG21)		
		AT2G03760	Flavonol sulfotransferase-like protein (SOT12)		
		AT2G43510	Trypsin inhibitor protein 1 (TIL)		
		AT2G30140	UDP-glucosyl transferase 87a2 (UGT87a2)		
		AT4G31800	WRKY dna-binding protein 18 (WRKY18)		
		AT1G80840	WRKY dna-binding protein 40 (WRKY40)		
		AT2G25000	WRKY dna-binding protein 60 (WRKY60)		
Salicylic acid mediated signaling pathway					
<i>igr2</i>		<i>rml1</i>		<i>Overlapping genes</i>	

AT3G28510	AAA-type ATPase family protein	AT4G33070	Thiamine pyrophosphate dependent pyruvate decarboxylase family protein	AT4G12470	Azelaic acid induced 1 (AZI1)
AT5G64120	Peroxidase 71	AT1G78410	VQ motif-containing protein	AT1G78410	VQ motif-containing protein
AT1G78410	VQ motif-containing protein	AT1G19020	Unknown protein	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)
AT3G48640	Hypothetical protein	AT1G72900	Toll-Interleukin-Resistance (TIR) domain-containing protein	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT1G13470	Hypothetical protein	AT5G42050	DCD (Development and Cell Death) domain protein		
AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT2G40140	CZF1		
AT4G23810	WRKY transcription factor(WRKY53)	AT4G12720	Protein with ADP-ribose hydrolase activity(NUDT7)		
AT3G57240	Beta-1,3-glucanase 3 (BG3)	AT4G26080	Aba insensitive 1 (ABI1)		
AT4G11890	Protein kinase family protein	AT4G16760	Acyl-coa oxidase 1 (ACX1)		
AT2G13810	AGD2-like defense response protein 1 (ALD1)	AT1G77120	Alcohol dehydrogenase 1 (ADH1)		
AT4G12470	Azelaic acid induced 1 (ZAI1)	AT4G12470	Azelaic acid induced 1 (AZI1)		
AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT4G17615	Calcineurin b-like protein 1 (CBL1)		
AT2G19190	Senescence-induced receptor-like serine/threonine-protein kinase (FRK1)	AT4G33050	Embryo sac development arrest 39 (EDA39)		

AT3G15500	NAC domain containing protein 3 (NAC3)	AT1G28370	ERF domain protein 11 (ERF11)		
AT2G14610	Pathogenesis-related gene 1 (PR1)	AT1G03430	Histidine-containing phosphotransfer factor 5 (AHP5)		
AT3G26830	Cytochrome P450 71B15 (PAD3)	AT1G19180	Jasmonate-zim-domain protein 1 (JAZ1)		
AT4G02380	Late embryogenesis abundant like protein (SAG21)	AT1G18570	Myb domain protein 51 (MYB51)		
AT2G03760	Flavonol sulfotransferase-like protein (SOT12)	AT5G27520	Peroxisomal adenine nucleotide carrier 2 (PBC2)		
AT5G22570	Putative WRKY transcription factor 38 (WRKY38)	AT5G06860	Polygalacturonase inhibiting protein 1 (PGIP1)		
AT5G01900	WRKY dna-binding protein 62 (WRKY62)	AT4G02380	Late embryogenesis abundant like protein (SAG21)		
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)	AT3G08720	Serine/threonine protein kinase 2 (S6K2)		
		AT2G03760	Flavonol sulfotransferase-like protein (SOT12)		
		AT1G80840	WRKY dna-binding protein 40 (WRKY40)		
		AT2G25000	WRKY dna-binding protein 60 (WRKY60)		
Jasmonic acid mediated signaling pathway					
<i>igr2</i>		<i>rml1</i>		<i>Overlapping genes</i>	

AT1G78410	VQ motif-containing protein	AT1G78410	VQ motif-containing protein	AT1G78410	VQ motif-containing protein
AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT5G42050	DCD (Development and Cell Death) domain protein	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)
AT4G23810	WRKY transcription factor (WRKY53)	AT4G12720	A protein with ADP-ribose hydrolase activity(NUDT7)	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT3G57240	Beta-1,3-glucanase 3 (B3)	AT4G26080	ABA insensitive 1 (ABI1)		
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)	AT4G17615	Calcineurin b-like protein 1 (CBL1)		
AT3G23240	Ethylene response factor 1 (ERF1)	AT4G33050	Embryo sac development arrest 39 (EDA39)		
AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT1G28370	ERF domain protein 11 (ERF11)		
AT2G19190	Senescence-induced receptor-like serine/threonine-protein kinase (FRK1)	AT5G47220	Ethylene responsive element binding factor 2 (ERF2)		
AT3G15500	NAC domain containing protein 3 (NAC3)	AT1G03430	Histidine-containing phosphotransfer factor 5 (AHP5)		
AT2G14610	Pathogenesis-related gene 1 (PR1)	AT1G19180	Jasmonate-zim-domain protein 1 (JAZ1)		
AT3G26830	Cytochrome P450 71B15 (PAD3)	AT1G18570	Myb domain protein 51 (MYB51)		
AT4G02380	Late embryogenesis abundant like protein (SAG21)	AT5G27520	Peroxisomal adenine nucleotide carrier 2 (PNC2)		
AT2G03760	Flavonol sulfotransferase-like protein (SOT12)	AT5G06860	Polygalacturonase inhibiting protein 1 (PGIP1)		

AT2G24850	Tyrosine aminotransferase 3 (TAT3)	AT4G02380	Late embryogenesis abundant like protein (SAG21)		
AT5G22570	Putative WRKY transcription factor 38 (WRKY38)	AT3G08720	Serine/threonine protein kinase 2 (S6K2)		
AT5G26170	WRKY dna-binding protein 50 (WRKY50)	AT5G07010	Sulfotransferase 2a (ST2A)		
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)		
		AT1G80840	WRKY dna-binding protein 40 (WRKY40)		
		AT2G25000	WRKY dna-binding protein 60 (WRKY60)		

Response to salicylic acid stimulus

<i>igr2</i>		<i>rml1</i>		<i>Overlapping genes</i>	
AT3G28510	AAA-type ATPase family protein	AT4G33070	Thiamine pyrophosphate dependent pyruvate decarboxylase family protein	AT4G12470	Azelaic acid induced 1 (AZI1)
AT5G64120	Peroxidase 71	AT1G19020	Unknown protein	AT1G78410	VQ motif-containing protein
AT1G78410	VQ motif-containing protein	AT1G78410	VQ motif-containing protein	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)
AT3G48640	Hypothetical protein	AT1G72900	Toll-Interleukin-Resistance (TIR) domain-containing protein	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT1G13470	Hypothetical protein	AT5G42050	DCD (Development and Cell Death) domain protein	AT5G46050	Peptide transporter PTR3-A (PTR3)

AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT5G08790	A large family of putative transcriptional activators with NAC domain (ATAF2)		
AT4G23810	WRKY transcription factor (WRKY53)	AT2G40140	(CZF1)		
AT3G57240	Beta-1,3-glucanase 3 (BG3)	AT4G12720	Protein with ADP-ribose hydrolase activity(NUDT7)		
AT4G11890	Protein kinase family protein	AT4G26080	ABA insensitive 1 (ABI1)		
AT2G13810	AGD2-like defense response protein 1 (ALD1)	AT4G16760	Acyl-coa oxidase 1 (ACX1)		
AT4G12470	Azelaic acid induced 1 (AZI1)	AT1G77120	Alcohol dehydrogenase 1 (ADH1)		
AT5G63160	BTB and TAZ domain protein 1 (BT1)	AT4G12470	Azelaic acid induced 1 (AZI1)		
AT3G48360	BTB and TAZ domain protein 2 (BT2)	AT5G67480	BTB and TAZ domain protein 4 (BT4)		
AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT4G17615	Calcineurin b-like protein 1 (CBL1)		
AT2G19190	Senescence-induced receptor-like serine/threonine-protein kinase (FRK1)	AT4G33050	Embryo sac development arrest 39 (EDA39)		
AT1G73260	Kunitz trypsin inhibitor 1 (KTI1)	AT1G28370	ERF domain protein 11 (ERF11)		
AT4G37260	Myb domain protein 73 (MYB73)	AT2G29420	Glutathione s-transferase tau 7 (GETU7)		
AT3G50060	Myb domain protein 77 (MYB77)	AT1G03430	Histidine-containing phosphotransfer factor 5 (AHP5)		

AT3G15500	NAC domain containing protein 3 (NAC3)	AT1G19180	Jasmonate-zim-domain protein 1 (JAZ1)		
AT2G14610	Pathogenesis-related gene 1 (PR1)	AT3G48920	Myb domain protein 45 (MYB45)		
AT5G46050	Peptide transporter PTR3-A (PTR3)	AT1G18570	Myb domain protein 51 (MYB51)		
AT3G26830	Cytochrome P450 71B15 (PAD3)	AT5G46050	Peptide transporter PTR3-A (PTR3)		
AT4G02380	Late embryogenesis abundant like protein (SAG21)	AT5G27520	Peroxisomal adenine nucleotide carrier 2 (PNC2)		
AT2G03760	Flavonol sulfotransferase-like protein (SOT12)	AT5G06860	Polygalacturonase inhibiting protein 1 (PGIP1)		
AT5G24110	WRKY DNA-binding protein 30 (WRKY30)	AT5G13330	Related to ap2 6l (RAP2.6l)		
AT5G22570	Putative WRKY transcription factor 38 (WRKY38)	AT2G33380	Responsive to dessication 20 (RD20)		
AT5G01900	WRKY dna-binding protein 62 (WRKY62)	AT4G02380	Late embryogenesis abundant like protein (SAG21)		
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)	AT3G08720	Serine/threonine protein kinase 2 (S6K2)		
		AT2G03760	Flavonol sulfotransferase-like protein (SOT12)		
		AT1G05560	UDP-glucosyltransferase 75b1 (UGT75b1)		
		AT4G31800	WRKY dna-binding protein 18 (WRKY18)		

		AT1G80840	WRKY dna-binding protein 40 (WRKY40)		
		AT2G25000	WRKY dna-binding protein 60 (WRKY60)		
Response to jasmonic acid stimulus					
<i>igr2</i>		<i>rml1</i>		<i>Overlapping genes</i>	
AT1G78410	VQ motif-containing protein	AT1G61890	MATE efflux family protein	AT2G47000	ABC transporter B family member 4 (ABCB4)
AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT1G78410	VQ motif-containing protein	AT1G78410	VQ motif-containing protein
AT4G23810	WRKY Transcription Factor (WRKY53)	AT5G53750	CBS domain-containing protein	AT5G39610	NAC-domain transcription factor (NAC2)
AT3G57240	Beta-1,3-glucanase 3 (BG3)	AT5G42050	DCD (Development and Cell Death) domain protein	AT2G03760	Flavonol sulfotransferase-like protein (SOT12)
AT2G47000	ABC transporter B family member 4 (ABCB4)	AT1G63840	RING/U-box superfamily protein	AT4G02380	Late embryogenesis abundant like protein (SAG21)
AT5G20230	Blue-copper-binding protein (SAG14)	AT1G01720	Putative transcriptional activators with NAC domain (ATAF1)	AT1G27730	Cys2/His2-type zinc-finger protein
AT3G48360	BTB and TAZ domain protein 2 (BT2)	AT5G08790	Putative transcriptional activators with NAC domain(ATAF2)	AT5G46050	Peptide transporter PTR3-A (PTR3)
AT5G64930	Regulator of pathogenesis-related (PR) genes (HYS1)	AT4G12720	Protein with ADP-ribose hydrolase activity (NUDT7)	AT5G47220	Ethylene responsive element binding factor 2 (ERF2)
AT3G23240	Ethylene response factor 1 (ERF1)	AT4G26080	ABA insensitive 1 (ABI1)		

AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT4G16760	Acyl-coa oxidase 1 (ACX1)		
AT2G19190	Senescence-induced receptor-like serine/threonine-protein kinase (FRK1)	AT2G47000	ABC transporter B family member 4 (ABCB4)		
AT4G37260	Myb domain protein 73 (MYB73)	AT1G59640	Big petal p (BPEP)		
AT5G39610	NAC-domain transcription factor (NAC2)	AT5G67480	BTB and TAZ domain protein 4 (BT4)		
AT3G15500	NAC domain containing protein 3 (NAC3)	AT4G17615	Calcineurin b-like protein 1 (CBL1)		
AT2G14610	Pathogenesis-related gene 1 (PR1)	AT1G76650	Calmodulin-like 38 (CML38)		
AT5G46050	Peptide transporter PTR3-A (PTR3)	AT4G23600	Coronatine induced 1 (CORI3)		
AT3G26830	Cytochrome P450 71B15 (PAD3)	AT1G19570	Dehydroascorbate reductase (DHAR1)		
AT5G44420	Plant defensin 1.2 (PDF1.2)	AT5G09980	Elicitor peptide 4 precursor (PROPEP4)		
AT4G27410	NAC domain-containing protein 72 (RD26)	AT4G33050	Embryo sac development arrest 39 (EDA39)		
AT1G27730	Cys2/His2-type zinc-finger protein	AT1G28370	ERF domain protein 11 (ERF11)		
AT4G35770	Senescence 1 (SEN1)	AT5G47220	Ethylene responsive element binding factor 2 (ERF2)		
AT4G02380	Late embryogenesis abundant like protein (SAG21)	AT2G46270	G-box binding factor 3 (GBF3)		

AT2G30360	CBL-interacting serine/threonine-protein kinase 11 (SIP4)	AT1G03430	Histidine-containing phosphotransfer factor 5 (AHP5)		
AT2G03760	Flavonol sulfotransferase-like protein (SOT12)	AT1G19180	Jasmonate-zim-domain protein 1 (JAZ1)		
AT2G24850	Tyrosine aminotransferase 3 (TAT3)	AT4G22880	Leucoanthocyanidin dioxygenase (LDOX)		
AT5G22570	Putative WRKY transcription factor 38 (WRKY38)	AT1G55020	Lipoxygenase 1 (LOX1)		
AT5G26170	WRKY dna-binding protein 50 (WRKY50)	AT1G18710	Myb domain protein 47 (MYB47)		
AT2G35980	Late embryogenesis abundant hydroxyproline-rich glycoprotein (YLS9)	AT1G18570	Myb domain protein 51 (MYB51)		
		AT5G39610	NAC-domain transcription factor (NAC2)		
		AT2G28900	Outer plastid envelope protein 16-1 (OEP16-1)		
		AT5G46050	Peptide transporter PTR3-A (PTR3)		
		AT5G27520	Peroxisomal adenine nucleotide carrier 2 (PNC2)		
		AT5G54490	Pinoid-binding protein 1 (PBP1)		
		AT5G06860	Polygalacturonase inhibiting protein 1 (PGIP1)		
		AT1G56650	Production of anthocyanin pigment 1 (PAP1)		

		AT5G13330	Related to ap2 6l (RAP2.6l)		
		AT5G59820	Responsive to high light 41 (RHL41)		
		AT1G27730	Cys2/His2-type zinc-finger protein		
		AT4G02380	Late embryogenesis abundant like protein (SAG21)		
		AT3G08720	Serine/threonine protein kinase 2 (S6K2)		
		AT5G07010	Sulfotransferase 2a (ST2A)		
		AT2G03760	Flavonol sulfotransferase-like protein (SOT12)		
		AT5G13930	Transparent testa 4 (TT4)		
		AT1G80840	WRKY dna-binding protein 40 (WRKY40)		
		AT2G25000	WRKY dna-binding protein 60 (WRKY60)		

Response to ethylene stimulus

<i>igr2</i>		<i>rml1</i>		<i>Overlapping genes</i>	
AT3G28580	AAA-type ATPase family protein	AT2G36970	UDP-Glycosyltransferase superfamily protein	AT2G47000	ABC transporter B family member 4 (ABCB4)
AT4G18450	Ethylene response factor subfamily B-3 of ERF/AP2 transcription factor family (ERF)	AT3G28580	AAA-type ATPase family protein	AT1G78410	VQ motif-containing protein
AT1G78410	VQ motif-containing protein	AT4G01870	TolB protein-related	AT5G39610	NAC-domain transcription factor (NAC2)

AT3G25190	Vacuolar iron transporter-like protein	AT1G78410	VQ motif-containing protein	AT1G27730	Cys2/His2-type zinc-finger protein
AT3G28210	Zinc finger AN1 domain-containing stress-associated protein 12 (PMZ)	AT2G33710	A member of the ERF (ethylene response factor) subfamily B-4 of ERF/AP2 transcription factor family	AT5G54190	Protochlorophyllide oxidoreductase a (PORa)
AT2G47000	ABC transporter B family member 4 (ABCB4)	AT2G32030	Acyl-CoA N-acyltransferases (NAT) superfamily protein		
AT3G55950	Putative serine/threonine-protein kinase-like protein CCR3 (CCR3)	AT1G64710	GroES-like zinc-binding dehydrogenase family protein		
AT1G28360	ERF domain protein 12 (ERF12)	AT5G65300	Unknown protein		
AT3G23240	Ethylene response factor 1 (ERF1)	AT5G27760	Hypoxia-responsive family protein		
AT4G17490	Ethylene responsive element binding factor 6 (ERF6)	AT1G63840	RING/U-box superfamily protein		
AT2G44840	Ethylene-responsive element binding factor 13 (ERF13)	AT4G37370	Cytochrome p450, family 81, subfamily d, polypeptide 8 (CYP81D8)		
AT4G37260	Myb domain protein 73 (MYB73)	AT4G26080	ABA insensitive 1 (ABI1)		
AT3G50060	Myb domain protein 77 (MYB77)	AT2G05710	Aconitase 3 (ACO3)		
AT5G39610	NAC-domain transcription factor (NAC2)	AT1G54100	Aldehyde dehydrogenase 7b4 (ALDH7B4)		
AT3G15500	NAC domain containing protein 3 (NAC3)	AT2G47000	ABC transporter B family member 4 (ABCB4)		
AT5G04950	Nicotianamine synthase 1 (NAS1)	AT4G17615	Calcineurin b-like protein 1 (CBL1)		
AT3G48850	Phosphate transporter 3;2 (PHT3;2)	AT1G76650	Calmodulin-like 38 (CML38)		
AT3G26830	Cytochrome P450 71B15 (PAD3)	AT3G44260	CCR4- associated factor 1a (CAF1A)		
AT5G44420	Plant defensin 1.2 (PDF1.2)	AT5G25350	Ein3-binding f box protein 2 (EBF2)		

AT5G54190	Protochlorophyllide oxidoreductase a (PORA)	AT1G28370	ERF domain protein 11 (ERF11)		
AT4G27440	Protochlorophyllide oxidoreductase b (PORB)	AT5G25190	Ethylene and salt inducible 3 (ESE3)		
AT4G27410	NAC domain-containing protein 72 (RD26)	AT5G47220	Ethylene responsive element binding factor 2 (ERF2)		
AT1G27730	Cys2/His2-type zinc-finger protein	AT2G46270	G-box binding factor 3 (GBF3)		
AT2G30360	CBL-interacting serine/threonine-protein kinase 11 (SIP4)	AT4G37580	Hookless 1 (HLS1)		
AT2G24850	Tyrosine aminotransferase 3 (TAT3)	AT1G19180	Jasmonate-zim-domain protein 1 (JAZ1)		
		AT1G73500	MAP kinase kinase 9 (MKK9)		
		AT1G18570	Myb domain protein 51 (MYB51)		
		AT5G39610	NAC-domain transcription factor (NAC2)		
		AT2G43000	NAC domain containing protein 42 (NAC042)		
		AT5G27520	Peroxisomal adenine nucleotide carrier 2 (PNC2)		
		AT5G54490	Pinoid-binding protein 1 (PBP1)		
		AT3G02800	Plant and fungi atypical dual-speciﬁcity phosphatase 3 (PFA-DSP3)		
		AT1G56650	Production of anthocyanin pigment 1 (PAP1)		

		AT5G54190	Protochlorophyllide oxidoreductase a (PORA)		
		AT5G13330	Related to ap2 6l (RAP2.6l)		
		AT1G49820	s-Methyl-5-thioribose kinase (MTK)		
		AT1G27730	Cys2/His2-type zinc-finger protein		
		AT3G08720	Serine/threonine protein kinase 2 (S6K2)		
		AT1G25560	Tempranillo 1 (TEM1)		
		AT2G15480	UDP-glucosyl transferase 73b5 (UGT73B5)		
		AT2G15490	UDP-glycosyltransferase 73b4 (UGT73B4)		
		AT1G80840	WRKY dna-binding protein 40 (WRKY40)		