

Supplemental Table 2 Mean gene up regulation (fold change) in leaves of Russian wheat aphid (RWA)-susceptible (*Dn0*) wheat plants at 24 hr after phloem feeding by RWA biotype 1

Gene ID	Species	Putative ID	Mean Fold Change (+) ^a	<i>P</i> (<i>t</i> -test)	E-value
Stress Response^b					
CA731030	rice	OSJNBa0011J08.14 protein	2.91	0.0010	1.0E-62
CA486652	rice	Adenylate kinase A (EC 2.7.4.3)	2.61	0.1175	4.0E-08
CA606493	rice	Putative Rho GTPase activating protein 2	2.60	0.0685	1.0E-32
CA606852	rice	Putative FEG protein	2.04	0.0718	3.0E-27
β- glucanases					
CA694274	barley	β-D-glucan exohydrolase isoenzyme	4.10	0.3366	2.0E-55
Membrane Proteins					
U32429	wheat	Wheat sulfur-rich/thionin-like protein	6.82	0.0000	7.0E23
CA631461	barley	Amino acid selective channel protein	4.03	0.4841	6.0E-21
CA741282	barley	Possible membrane protein LEM1	2.92	0.0264	3.0E-19
BJ303490	rice	Pectin methylesterase-like protein	2.87	0.3131	4.0E-68
CA598178	barley	Nonspecific lipid-transfer protein precursor	2.53	0.2656	3.0E-21
BJ266247	rice	Putative proteophosphoglycan	2.47	0.4166	2.0E-39
BJ225484	rice	Putative GTP-binding protein	2.45	0.2982	2.0E-18
CA719923	rice	Putative proline-rich protein APG	2.24	0.1332	3.0E-51
CA616450	maize	Physical impedance induced protein e-39,	2.21	0.3687	1.0E-39
BJ208688	rice	Embryogenesis transmembrane protein-like	2.09	0.4330	1.0E-15
Calcium & Iron Ion Binding					
CA593441	timothy	Calcium binding pollen allergen Phl p 7	4.15	0.0165	2.0E-21
CA683302	rice	Glutathione synthetase	3.35	0.0103	1.0E-14
CA649400	rice	Putative PrMC3	3.26	0.1049	1.0E-21
BQ161605	rice	zinc ion binding protein	3.22	0.0400	1.0E-17
CA729248	rice	Putative regulator of gene silencing	3.21	0.0077	9.0E-28
CK212638	barley	Putative calcium binding EF-hand protein	3.11	0.0001	2.0E-21
CD490932	maize	Putative glutathione peroxidase	3.02	0.2807	2.0E-53
CA680802	rice	Putative alpha-mannosidase	2.78	0.2517	3.0E-18
CA620148	rice	Putative NRAMP metal ion transporter 1	2.58	0.1316	3.0E-25

CA610518	rice	O-methyltransferase	2.43	0.1250	3.0E-27
CA725665	rice	Putative flavonol glucosyltransferase	2.36	0.0372	1.0E-13
CD491198	rice	Putative glutathione peroxidase	2.29	0.4288	7.0E-60
CA727746	rice	Ubiquitin conjugating enzyme	2.22	0.3410	4.0E-35
CA744340	Arabidopsis	F8K7.7 protein (zinc ion binding)	2.08	0.0289	1.0E-07
Jasmonate Signaling					
CD887052	rice	Plastocyanin-like domain, putative	3.74	0.1094	1.0E-13
BU672305	wheat	Jasmonate-induced protein	3.73	0.0490	2.0E-57
BQ578758	maize	Lipoxygenase (Fragment)	2.78	0.0010	8.0E-29
BQ578758	rice	Putative lung α/β hydrolase protein 1	2.60	0.0010	1.0E-23
CA614158	rice	Putative glyoxysomal fatty acid β -oxidation protein	2.17	0.0398	1.0E-37
BQ483424	rice	Putative S-adenosyl-L-methionine:JA carboxyl methyltransferase	2.07	0.0385	3.0E-24
Salicylate Signaling					
BJ277748	rice	Pathogen-related protein (JIOsPR10)	3.50	0.0073	2.0E-74
BJ312602	rice	Putative ankyrin-like protein	3.11	0.0136	2.0E-34
CA660270	rice	Putative disease resistance response protein	2.51	0.0045	2.0E-13
BJ276052	Arabidopsis	Disease resistance protein, putative	2.30	0.4207	1.0E-06
Pathogen Defense Response Protein					
CA663614	rice	Putative allergen Amb a I.2 (<i>Amb a II</i>)	2.31	0.0198	2.0E-10
Monoxygenases/Oxidoreductases					
CD878492	rice	Putative malate dehydrogenase	2.72	0.0772	3.0E-30
CA686152	Aspergillus	Glycerol dehydrogenase, putative	2.36	0.0008	3.0E-13
CA600349	rice	Putative tafazzin isoform	2.26	0.0091	2.0E-41
BQ162573	rice	Putative oxoglutarate-dependent oxygenase	2.11	0.1823	2.0E-38
BJ310258	rye	β -glucosidase (EC 3.2.1.21)	2.64	0.0076	9.0E-07
Arthropod Chemical Defense Proteins					
CA694095	wheat	Wali3 protein	4.56	0.1035	4.0E-34
AF483596	wheat	Hessian fly response gene 1 protein	3.63	0.0083	8.0E-56
CA649528	barley	Subtilisin-chymotrypsin inhibitor 2	3.57	0.0482	3.0E-09
CA615345	rice	Putative oxidase-like	3.17	0.0292	3.0E-60
CA697581	wheat	Xylanase inhibitor (fragment)	2.82	0.1338	1.0E-08

CD878492	rice	Putative malate dehydrogenase	2.72	0.0772	3.0E-30
CA701100	rice	Tetratricopeptide repeat protein 2-like	2.47	0.5013	1.0E-43
BJ299555	<i>C. intestinalis</i>	Trypsin inhibitor precursor	2.30	0.2444	1.0E-14

Metabolism

CD491148	beetle	Ribosomal protein L15e (fragment)	4.12	0.0886	1.0E-44
CA600350	rice	Putative β -N-acetylhexosaminidase	4.09	0.1935	1.0E-26
CA609394	wheat	ATP binding factor	4.02	0.2209	8.0E-13
CA599171	barley	Putative acid phosphatase	3.48	0.2103	4.0E-22
CA608970	rice	electron transport protein	3.28	0.1095	4.0E-18
BJ269262	rice	DNA integration protein	2.89	0.0708	6.0E-48
CA610415	Arabidopsis	Nuclear protein-like binding protein	2.86	0.0279	1.0E-12
CA623021	rice	Putative gag-pol	2.81	0.2386	4.0E-06
CA486547	mosquito	Ribosomal protein S27	2.67	0.0860	5.0E-37
CA708090	tobacco	60S ribosomal protein L34	2.65	0.1514	6.0E-13
CK154533	wheat	S-adenosylmethionine decarboxylase	2.65	0.0119	4.0E-66
CK163272	rice	Growth-regulating factor 1	2.51	0.4572	1.0E-09
CA485835	rice	F-box family protein-like	2.42	0.1245	3.0E-31
CA741208	rice	Putative 5'-phosphoribosyl- 5-aminoimidazole synthetase	2.33	0.0064	2.0E-55
CA502685	beetle	Ribosomal protein S6e (Fragment)	2.27	0.0516	5.0E-10
BJ309490	rice	OSJNBa0068L06.10 protein	2.20	0.0280	5.0E-37

Cell Division

CA649873	barley	Putative CENP-E-like kinetochore protein	2.66	0.1308	1.0E-28
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Proteolysis / Peptidolysis

CD491471	rice	OSJNBb0116K07.9 protein	2.61	0.0868	7.0E-43
U32430	wheat	Putative cysteine-type endopeptidase	2.57	0.0003	6.0E-51
CA650443	rice	Putative RNA apurinic site specific lyase	2.56	0.1049	4.0E-21
CK213306	Arabidopsis	26S proteasome subunit RPN12	2.30	0.0033	6.0E-11
CA640252	Arabidopsis	At5g19740	2.23	0.1143	1.0E-06

Auxin Related Proteins

CK215961	rice	Transcription Factor	6.43	0.0220	1.0E-24
CA735785	rice	Putative plastid protein SufE	4.12	0.0010	2.0E-36
BJ317014	rice	Putative Aux/IAA protein	2.69	0.0054	2.0E-06
BQ161714	rice	Putative Nt-gh3 Auxin-responsive protein	2.62	0.1425	1.0E-28

CA665172	oat	Aux/IAA1 (Fragment)	2.39	0.0085	5.0E-14
AB107992	wheat	PISTILLATA-like MADS box protein	2.20	0.4207	9.0E-42
Physical Resistance Proteins					
BQ161248	rice	Putative cyclopropane synthase	2.89	0.0291	4.0E-07
CD491373	rice	Putative ABA-responsive protein	2.03	0.1576	1.0E-72
UVB-resistance					
BE430349	rice	Putative UVB-resistance protein (UVR8)	2.18	0.1183	1.0E-20

Mean log₂ transcript values present or marginal in 3 of 4 arrays hybridized with *Dn0* probes.

^b Functional classification determined by GO Annotation Pub Med.