

Supplemental Table S2. RNA-Seq validation: primer sequences and Real-time RT-PCR parameters.

Gene Ensembl ID	Primer sequence	Real-time RT-PCR parameter	
<i>Bcin08g00340</i>	Forward 5' - CGGTTCCCTCAGTTTTGTGT	Polymerase activation and denaturation: 95 °C 2 min	Number of cycles used: 40
	Reverse 5' - CGAGACTGAATAACGCGACA		
<i>Bcin13g02250</i>	Forward 5' - TAGGTGACGGCCATTGTGTA		
	Reverse 5' - CGAATACTCCCCGAAACAAA		
<i>Bcin13g02210</i>	Forward 5' - CAGTGCTACCCTTACACCGT	Denaturation: 95 °C 10 sec	
	Reverse 5' - AGAGTAAGGTTGGGGTCGGT		
<i>Bcin14g03170</i>	Forward 5' - CATTGCCAATATGGATGCTG		
	Reverse 5' - TTGAAGTGCGTTGCTACACC		
<i>Bcin04g00060</i>	Forward 5' - CCTCAGAAGGCACCTCACAA		
	Reverse 5' - GCCCAAGGTTCGCCATTAGA		
<i>VIT_07s0151g00130</i>	Forward 5' - AGCAGCAGTCACAAATTGGC		
	Reverse 5' - GGGCTGAGAAGTTGAGGGAT		
<i>VIT_07s0005g00740</i>	Forward 5' - TCATCACTGCCCTCAATTGC	Annealing and extention: 60 °C 30 sec	
	Reverse 5' - GTCGATGGCTCTGATTGCTC		
<i>VIT_07s0141g00690</i>	Forward 5' - TAGGTTGGATGCGGTGGATT		
	Reverse 5' - TCACCATCAAGCTTCGGAGA		
<i>VIT_06s0004g05700</i>	Forward 5' - GCGAGAGGAAGCGATTGAAG		
	Reverse 5' - AGGCTCCCAACCGAACTTTA		
<i>VIT_05s0062g00310</i>	Forward 5' - TTGGAACCAGAGGCCCTAAG		
	Reverse 5' - TGCTTTGATAACACCGCGAG		

Supplemental Table S3. Real-time RT-PCR verification of RNA-Seq results. Transcript abundance fold-changes between healthy and noble rot-affected Furmint samples are shown after log₂ transformation.

	Consecutive stages of noble rot					
	I.		II.		III.	
	RNA-Seq	Real-time RT-PCR	RNA-Seq	Real-time RT-PCR	RNA-Seq	Real-time RT-PCR
<i>VIT_07s0141g00690</i>	5.08	4.80	6.00	6.06	5.31	4.64
<i>VIT_06s0004g05700</i>	4.06	4.13	4.62	4.29	4.85	4.29
<i>VIT_05s0062g00310</i>	6.79	6.88	7.52	7.31	6.75	5.22
<i>VIT_07s0151g00130</i>	3.41	4.74	3.44	4.86	-0.14	0.29
<i>VIT_07s0005g00740</i>	4.88	5.98	5.51	6.76	3.44	3.57
<i>BCIN_08g00340</i>	4.43	3.74	4.85	4.86	1.56	3.11
<i>BCIN_13g02250</i>	4.16	4.64	4.05	4.65	2.74	4.49
<i>BCIN_13g02210</i>	2.84	1.64	3.47	2.19	2.24	1.86
<i>BCIN_14g03170</i>	3.54	3.91	3.27	3.54	2.33	2.85
<i>BCIN_04g00060</i>	0.61	-1.91	1.93	0.17	4.67	3.38
Correlation	0.93		0.90		0.85	

Supplemental Table S4. Details of targeted abscisic acid, phaseic acid and dihydrophaseic acid analysis by UPLC-US-MS/MS method - According to Vrhovsek et al 2012. and Pál et al. 2019, with modifications.

UPLC:	Waters Acquity I-class							
Column:	Waters HSS T3 column (1.8 μm, 100 mm × 2.1 mm) at 40°C							
inj vol.:	2 μl	Autosampler temperature:		10 °C				
Gradient conditions								
A: Water (0.1 v/v% formic acid)		B: Acetonitrile (0.1 v/v% formic acid)						
Time (min)	Flow rate (ml/min)	A%	B%					
0	0.4	95	5					
3	0.4	80	20					
4.3	0.4	80	20					
9	0.4	55	45					
11	0.4	0	100					
13	0.4	0	100					
13.01	0.4	95	5					
15	0.4	95	5					
Detector:								
Xevo TQ-XS with Unispray source								
Resolution:	Unit mass (+/- 0.8 Da)							
Impactor voltage:		2 kV						
Desolvation temperature:		550°C						
Nebulizer gas:		6.5 bar N ₂						
Desolvation gas flow:		1000 L/h N ₂						
Cone gas flow:		450 L/h N ₂						
Collision gas flow:		0.15 ml/min Argon 5.0						
Component name	Unispray Impactor voltage polarity	quant. MS/MS transition	Pred.RT (min)	RT found (min)	Cone voltage (V)	Collision ennergy (eV)	Calibrated to	QC
[2H6](+)-cis,trans-abscisic acid Internal standard	negative	269.1 > 159.1	7.13	7.13	20	10	external	spike recovery
abscisic acid	negative	263.1 > 153	7.18	7.16	20	10	external	IS recovery and spike recovery
phaseic acid	negative	279.12 > 139	5.24	5.18	25	12	external	spike recovery
dihydrophaseic acid	negative	281.14 > 237.2	3.56	3.52	25	12	external	spike recovery

References:

Vrhovsek, U., Masuero, D., Gasperotti, M., Franceschi, P., Caputi, L., Viola, R., et al. (2012). A versatile targeted metabolomics method for the rapid quantification of multiple classes of phenolics in fruits and beverages. *J. Agric. Food Chem.* 60, 8831–8840. doi:10.1021/jf2051569.

Pál, M., Ivanovska, B., Oláh, T., Tajti, J., Hamow, K. Á., Szalai, G., et al. (2019). Role of polyamines in plant growth regulation of *Rht* wheat mutants. *Plant Physiol. Biochem.* 137, 189–202. doi:10.1016/j.plaphy.2019.02.013.