

Supplementary Table 7. Gene specific primers used for qRT-PCR analysis

Gene ID	Primer F (5'-3')	Primer R (5'-3')	TM (F)	TM (R)	Product
Zm00001d021647	AGCCACCTATGCTGCTGTTT	CGCAAACGAATAGGACAGCG	59.96	59.97	136
Zm00001d042886	TTGTCTGAGCTTGACGTGCT	ACCGGTGGCACAAACTTGA	59.90	60.08	171
Zm00001d025015	CTGTAAGTTTGCACGCCCTC	TGCAAACCTAGCCCTAACAGC	59.48	58.18	151
Zm00001d025831	ATAGGAGGTGGGTGGTTGGG	GTGGGTGGGCAGATTCACAA	60.92	60.54	120
Zm00001d040399	TTTTCTGCACCGCTGGTAT	GGCAAGACAATCGAACACAGG	59.96	59.80	184
Zm00001d018220	TCTGGGCTGACTTCATCGAC	ATGAATGTGCGTGAGGACAC	59.47	58.56	92
Zm00001d011132	TGCTCACATTCATCGCCATCT	ACCCAATTCCAACCCACAGAG	60.13	60.20	144
Zm00001d043992	AGTGGGGATCACAGCCTAGAA	TGTTGGCTAACTCGGAACATCA	60.27	59.96	96
Zm00001d051556	GACGACAAGCCGACACAGAA	GATGTTGGATGGCCCTGACA	60.60	60.03	192
Zm00001d041853	GCCACACCAACATGCTGTC	GCAGTGCAGAGGAGGTACAG	59.71	60.11	150
Zm00001d044812	TCGCTTTTGGACTTTGCACG	AACGTCAGTCAGTGGCAGAG	59.97	59.97	100
Zm00001d024839	TCCTCTCTATTGCTAGCTGCTT	GGCGTAGCCATATGTCCTGT	58.70	59.61	183

Supplementary Table 8. The qRT-PCR results

Gene_id	Gene_name	Gene_description	V12 stage		VT stage		R2 stage		R4 stage	
			RNA-Seq	qRT-PCR	RNA-Seq	qRT-PCR	RNA-Seq	qRT-PCR	RNA-Seq	qRT-PCR
Zm00001d021647		ABC transporter G family member 34	0.83	1.01					-0.78	-0.51
Zm00001d042886	protein phosphatase homolog3	Protein phosphatase homolog3			0.65	0.90			0.84	1.26
Zm00001d025015		Glucose-6-phosphate 1-dehydrogenase	0.60	0.79			0.60	0.86		
Zm00001d025831	ammonium transporter1	Ammonium transporter1			-0.69	-0.86	0.59	0.94		
Zm00001d040399		Peroxidase 24			-0.67	-1.21	-0.76	-0.68		
Zm00001d018220	glutathione transferase24	Glutathione transferase24	-0.69	-0.91					-0.69	-0.86
Zm00001d011132		Protein phosphatase 2C 16	1.32	1.11			-0.69	-1.00		
Zm00001d043992	bZIP transcription factor1	bZIP transcription factor1	0.99	0.85	0.74	1.35				
Zm00001d051556	nine-cis-epoxycarotenoid dioxygenase6	Nine-cis-epoxycarotenoid dioxygenase6	-0.68	-0.85					0.96	1.60
Zm00001d041853	myb transcription factor8	Myb transcription factor8	0.84	0.96	0.73	0.97				
Zm00001d044812	PIN-formed protein1	Putative auxin efflux carrier	0.86	1.13					-0.83	-1.21
Zm00001d024839	glutathione S-transferase2	Glutathione S-transferase2			-1.39	-1.10	-0.64	-0.95		