

**Table S1.** Candidate structural genes related to flavonoid biosynthesis at 90 DAFB.

Gene ID	FPKM			Description	Annotation
	CK	T1	T2		
VIT_16s0039g01130	0.13	0.05	0.57	phenylalanine ammonia-lyase	PAL
VIT_11s0065g00350	0.35	0.23	6.17	cytochrome P450 CYP73A100	CYP73A
VIT_16s0039g02040	16.09	13.77	28.50	4-coumarate:CoA ligase	4CL
VIT_18s0001g14310	324.19	278.52	529.70	flavanone 3-dioxygenase-like	F3H
VIT_06s0009g02970	0.47	2.15	1.92	flavonoid 3'5' hydroxylase	F3'5'H
VIT_06s0061g01430	6.05	7.96	11.62	flavanone 7-O-glucoside 2"-O-beta-L-rhamnosyltransferase	
VIT_07s0031g00350	794.02	492.30	294.25	caffeoyl-CoA O-methyltransferase	
VIT_08s0040g00780	16.60	4.96	4.16	cytochrome P450 98A2	CYP98A
VIT_11s0037g00440	1.09	0.18	1.66	shikimate O-hydroxycinnamoyltransferase	
VIT_11s0065g00350	20.84	13	44.5	chalcone synthase	CHS
VIT_16s0022g01020	0.51	1.53	6.58	stilbene synthase 3	CHS
VIT_16s0022g01140	0	0.18	0.35	chalcone synthase	CHS
VIT_16s0022g01190	0.26	0.23	1.63	chalcone synthase	CHS
VIT_16s0100g00750	0.45	0.22	5.74	stilbene synthase 2	CHS
VIT_16s0100g00770	0.18	0.04	1.1	stilbene synthase 5	CHS
VIT_16s0100g00830	0.10	0.06	1.61	stilbene synthase 5-like	CHS
VIT_16s0100g00840	0	0.02	0.27	stilbene synthase 4-like	CHS
VIT_16s0100g00850	0	0.02	0.21	stilbene synthase 4-like	CHS
VIT_16s0100g00910	0.24	0.18	2.58	stilbene synthase 5	CHS
VIT_16s0100g00930	0	0.03	0.28	stilbene synthase 4-like	CHS
VIT_16s0100g01000	0	0.05	1.33	stilbene synthase 4-like	CHS
VIT_16s0100g01010	0.09	0.17	1.74	stilbene synthase 2	CHS
VIT_16s0100g01020	0.05	0.05	1.35	stilbene synthase 4-like	CHS
VIT_16s0100g01040	0.04	0.04	0.78	stilbene synthase 4	CHS
VIT_16s0100g01070	0.25	0.01	2.55	stilbene synthase 1	CHS
VIT_16s0100g01100	0.03	0.01	0.53	stilbene synthase 6-like	CHS
VIT_16s0100g01110	0.05	0	0.07	stilbene synthase 1-like	CHS
VIT_16s0100g01120	0.05	0.08	0.75	stilbene synthase 5	CHS
VIT_16s0100g01140	0.01	0.03	0.49	stilbene synthase 1	CHS
VIT_16s0100g01150	0.18	0.29	4.98	stilbene synthase 6	CHS
VIT_16s0100g01190	0.01	0.08	0.73	resveratrol synthase	CHS
VIT_18s0001g03430	0.68	0.81	3.63	flavonol synthase/flavanone 3-hydroxylase	FLS
VIT_18s0001g03470	1.66	0.24	10.74	flavonol synthase/flavanone 3-hydroxylase	FLS
VIT_02s0025g04720	1329.98	1352.67	539.08	leucoanthocyanidin dioxygenase	ANS
VIT_18s0041g00740	12.43	11.31	25.65	anthocyanidin 5,3-O-glucosyltransferase-like	UFGT

**Table S2.** Candidate structural genes related to flavonoid biosynthesis at 110 DAFB.

Gene ID	FPKM			Description	Annotation
	CK	T1	T2		
VIT_16s0039g01130	1.32	0.11	0.05	phenylalanine ammonia-lyase	PAL
VIT_11s0065g00350	7.01	2.32	0.33	cytochrome P450 CYP73A100	CYP73A
VIT_11s0065g00350	7.00	2.32	0.33	4-coumarate:CoA ligase	4CL
VIT_18s0001g14310	407.29	471.37	372.95	flavanone 3-dioxygenase-like	F3H
VIT_06s0009g02970	2.14	1.52	1.73	flavonoid 3'5' hydroxylase	F3'5'H
VIT_07s0031g00350	147.99	190.1	879.26	caffeoyl-CoA O-methyltransferase	
VIT_08s0040g00780	0.41	0.71	13.46	cytochrome P450 98A2	CYP98A
VIT_09s0018g01190	8.03	7.29	25.37	shikimate O-hydroxycinnamoyltransferase	
VIT_10s0042g00920	0.31	0.02	0	stilbene synthase 2	CHS2
VIT_11s0037g00570	0.41	1.03	1.07	spermidine hydroxycinnamoyl transferase-like	
VIT_14s0068g00930	17.8	44.78	23.98	chalcone synthase	CHS
VIT_16s0022g01020	7.90	7.76	1.31	stilbene synthase 3	CHS
VIT_16s0022g01140	0.74	0.40	0.04	chalcone synthase	CHS
VIT_16s0022g01190	0.84	1.87	0.09	chalcone synthase	CHS
VIT_16s0100g00750	11.40	1.69	0.46	stilbene synthase 2	CHS
VIT_16s0100g00770	2.22	0.46	0.04	stilbene synthase 5	CHS
VIT_16s0100g00830	4.47	0.34	0.10	stilbene synthase 5-like	CHS
VIT_16s0100g00840	0.42	0	0	stilbene synthase 4-like	CHS
VIT_16s0100g00880	1.08	0.05	0.03	stilbene synthase 4-like	CHS
VIT_16s0100g00910	7.19	0.83	0.09	stilbene synthase 5	CHS
VIT_16s0100g00920	0.28	0.02	0	stilbene synthase 4-like	CHS
VIT_16s0100g01000	1.76	0.25	0.05	stilbene synthase 4-like	CHS
VIT_16s0100g01010	4.27	0.27	0.18	stilbene synthase 2	CHS
VIT_16s0100g01020	3.11	0.48	0.13	stilbene synthase 4-like	CHS
VIT_16s0100g01040	0.60	0.05	0	stilbene synthase 4	CHS
VIT_16s0100g01070	4.79	0.40	0.06	stilbene synthase 1	CHS
VIT_16s0100g01120	0.85	0.13	0	stilbene synthase 5	CHS
VIT_16s0100g01150	9.37	0.52	0.14	stilbene synthase 6	CHS
VIT_16s0100g01190	1.03	0.11	0	resveratrol synthase	CHS
VIT_18s0001g03430	7.24	2.16	0.26	flavonol synthase/flavanone 3-hydroxylase	FLS
VIT_18s0001g03470	0.21	11.17	1.40	flavonol synthase/flavanone 3-hydroxylase	FLS
VIT_02s0025g04720	538.00	617.95	1360.90	leucoanthocyanidin dioxygenase	ANS
VIT_18s0041g00900	3.47	6.74	9.91	UDP-glycosyltransferase 88F5-like	P2'GT