

Table S2 Primers information for population genetic analysis.

TR26276 c1_g1_i1 <i>Peroxidase 5-like (PROX3)</i>		F:TGCGGATGTTCCACTACTCAC, R:TGACACCAATCTGACCCATCG	56
Locus ID	Gene	Primers(5'→3')	Tm(°C)
Positively selected candidate genes			
TR934 c0_g1_i1	<i>A/G-specific adenine DNA glycosylase (ANG)</i>	F:CTGTTTCAGACTCCTGTCCCAC, R:GTTTAGCAGGCCAACTGGTG	56
TR74739 c0_g1_i1	<i>Uracil-DNA glycosylase (UNG)</i>	F:GCTCGGAGGAATTTTGATGCC, R:TGTGGTGGCAAAGTACCCAT	56
TR39350 c0_g4_i1	<i>vegetative cell wall protein gp1 isoform X2 (GPI)</i>	F:TTTTACCTCCACTGCTCGT, R:GCGTTATGGCCCTTAGCTTG	55
TR39755 c0_g1_i1	<i>Elongator complex protein 4 (ELP4)</i>	F:TGCGCTAACTCCTTGTCCTC, R:ATTTGTGCTCCTCAGTGTGG	55
TR40190 c7_g5_i1	<i>Calcium-dependent protein kinase 1 (CDPK1)</i>	F:GTCGTCGTCATTTGGTTG, R:GAATCGGACCAGGATAAAG	50
TR86494 c0_g1_i1	<i>Anthranilate N-benzoyltransferase /shikimate O-hydroxycinnamoyltransferase (HCT)</i>	F:GTGCAAGCTGGTCATGTGTG, R:AATTTAGGCACACCCAGCC	56
TR80792 c3_g1_i2	<i>Flavonol synthase/flavanone 3-hydroxylase (FLS)</i>	F:CCTACCCATTTCTCTGAACTGA, R:AACAGTGAGCAAGGACAGAACC	54
TR45359 c0_g1_i3	<i>caffeoyl CoA 3-O-methyltransferase (CCoAOMT)</i>	F:C meta AAGAGCCAACACCGT, R:TAGCCACATAACCTTCGCA	57
Putative reference loci			
TR25529 c0_g1_i1	<i>Spinacia oleracea pentatricopeptide repeat-containing protein At1g77405</i>	F:ACCATGTCTATCACCTGTTTG, R:CACTACTATGCACCCAATACTA	56
TR49649 c0_g2_i1	<i>Putative RING-H2 finger protein ATL53</i>	F:GCAAGATAGTGACCTACTCAAC, R:CTACACCAAACCTACTTCCAC	56
TR65119 c0_g1_i3	<i>Protein root UVB sensitive 2 (RUS2)</i>	F:CACTGGCTTGGAAAGTTATGTC, R:CGGTTTGGTGACCTTGTGTA	53
Flavonoid biosynthesis genes			
TR21621 c0_g2_i1	<i>Phenylalanine ammonia-lyase (PAL)</i>	F:TCTAACAACCATCGCAATCCA, R:GAAGAATACCGTAAGCCAAGT	56
TR76825 c0_g1_i1	<i>Flavonoid 3'-monooxygenase CYP75B4 (CYP75B4)</i>	F:TTACAACCCAGTCCCCAGAT, R:GGATTTGATTGCGGGAGGTA	58
TR69850 c0_g1_i1	<i>p-coumarate 3-hydroxylase (C3H)</i>	F:AACCTCGGAATAGGCACAG, R:AACGACAAGGGAGAAGTGG	58
TR27243 c0_g1_i3	<i>Cinnamic acid 4-hydroxylase (C4H)</i>	F:GGCTACAAGTCGGGGATGAC, R:GATCGGCTTCGCTCTCGAAT	60
TR50675 c0_g1_i1	<i>4-coumarate CoA ligase 7 (4CL7)</i>	F:ACCACCACAAATCCTACCCAC, R:AAATCCACAGCAGACCCACT	58
TR5907 c0_g2_i1	<i>Chalcone synthase (CHS)</i>	F:AAAGAATGGGGACAACCG, R:CACCCCAATCTAACCCCTC	55
TR27443 c0_g1_i1	<i>Chalcone isomerase (CHI)</i>	F:TGCCATTGACGGGACAACA, R:GGCTTTGTGCTCTTCTCATCT	58
TR76825 c0_g1_i1	<i>Caffeic acid 3-O-methyltransferase (COMT)</i>	F:CGAAGTTGCATGCTCATCGT, R:GAAATACTAGCCAGAGGAGCCA	58
TR37769 c0_g1_i1	<i>Flavonoid O-methyl transferase (FOMT)</i>	F:GTTTCGTAAGCCTGTGCTGG, R:TCCTGCTCGCTCATAGAACC	60
TR40038 c0_g1_i1	<i>Flavone synthase (FNS)</i>	F:ACATTGACGGCACTAGAAGGAG, R:AGAGACGATGAAACCGCCCT	60
TR66961 c0_g1_i3	<i>Flavanone 3-hydroxylase (F3H)</i>	F:GAGGGACTACACAAGGTGGC, R:CAACAAAAGCACCCCTCCACG	60
TR61024 c0_g1_i1	<i>Flavanoid 3'-hydroxylase (F3'H)</i>	F:CACCAGAAGGCAAAACCACC, R:CCCCCTGCAAATCCAACCTA	60