

**Supplementary Table S1.** Betweenness Centrality value ranking of hub genes.

Modules green		Modules black	
GeneID	Score	GeneID	Score
<i>CADG</i>	314.67	<i>FAB1</i>	21.53
<i>C4H</i>	184.33	<i>CAC3</i>	20.67
<i>OMT1</i>	67.33	<i>ACPI</i>	19.90
<i>CCR2</i>	44.0	<i>AtPDAT2</i>	14.13
<i>PAL</i>	25.67	<i>FATA2</i>	13.33
<i>BGLU21</i>	19.0	<i>PKT4</i>	12.90
<i>4CL1</i>	14.33	<i>ACCD</i>	12.03
<i>ALDH7B4</i>	14.33	<i>ACLA-3</i>	12.03
<i>PRX52</i>	11.53	<i>FAD3</i>	10.67
<i>PA2</i>	8.0	<i>AT3G55310</i>	6.0

**Supplementary Table S2.** Hub genes detected in the green and black modules.

Modules	Gene_id	Gene annotation
green	TRINITY_DN52222_c0_g3	<i>CADG (Probable cinnamyl alcohol dehydrogenase)</i>
	TRINITY_DN57476_c1_g2	<i>C4H (Cinnamate 4-hydroxylase)</i>
	TRINITY_DN55807_c0_g1	<i>OMT1 (Flavone 3'-O-methyltransferase 1)</i>
	TRINITY_DN50497_c0_g2	<i>CCR2 (Dihydroflavonol-4-reductase)</i>
	TRINITY_DN2977_c0_g1	<i>PAL (Phenylalanine ammonialyase)</i>
	TRINITY_DN54540_c4_g1	<i>BGLU21 (Beta-glucosidase 21)</i>
	TRINITY_DN48909_c0_g1	<i>4CL1 (4-coumarate--CoA ligase 1)</i>
	TRINITY_DN54466_c2_g5	<i>ALDH7B4 (Aldehyde dehydrogenase)</i>
	TRINITY_DN55621_c3_g5	<i>PRX52 (Peroxidase 52)</i>
	TRINITY_DN39540_c0_g1	<i>PA2 (Peroxidase 53)</i>
black	TRINITY_DN44444_c0_g1	<i>FAB1 (3-oxoacyl-[acyl-carrier-protein] synthase 2)</i>
	TRINITY_DN49634_c1_g1	<i>CAC3 (Acetyl-coenzyme A carboxylase carboxyl transferase subunit alpha)</i>
	TRINITY_DN40677_c0_g1	<i>ACPI(Acyl carrier protein 1)</i>
	TRINITY_DN140057_c0_g	<i>AtPDAT2 (Putative phospholipid:diacylglycerol acyltransferase 2)</i>
	TRINITY_DN4115_c0_g1	<i>FATA2 (Oleoyle-acyl carrier protein thioesterase 2)</i>
	TRINITY_DN63470_c0_g1	<i>PKT4 (3-ketoacyl-CoA thiolase 1)</i>
	TRINITY_DN55731_c2_g3	<i>ACCD (Acetyl-coenzyme A carboxylase carboxyl transferase subunit beta)</i>
	TRINITY_DN72476_c0_g1	<i>ACLA-3 (Elongation of fatty acids protein 3)</i>
	TRINITY_DN44771_c0_g1	<i>FAD3 (Omega-3 fatty acid desaturase)</i>
	TRINITY_DN99232_c0_g1	<i>AT3G55310 (Elongation of fatty acids protein A)</i>

**Supplementary Table S3** Primers of the candidate genes designed for qRT-PCR

Gene ID	Gene abbreviation	Gene name	Size (bp)	Forward primer Reverse primer
TRINITY_DN53682_c1_g1	<i>AtPME52</i>	<i>Pectin methylesterase 52</i>	104	TGTTGCGACAAGTGCAAGAGG CACCTTGTCTCCTCCCAAAA
TRINITY_DN57178_c2_g1	<i>SDH</i>	<i>Sorbitol dehydrogenase</i>	92	CTTGGAAGGTTTGTGGAGGA CATGGTGGCAGTTTTGTCTG
TRINITY_DN49634_c1_g1	<i>ACCase</i>	<i>Acetyl-CoA carboxylase 1</i>	107	TCCCATAACAATCCCACCAAG CGCCTAGCTCAATGGTTGAT
TRINITY_DN52424_c0_g1	<i>ACT</i>	<i>Agmatine coumaroyltransferase-2</i>	123	TATCGAACCGGAGCAGAATC TGCGAGCTAAGAAAGGGAAA
TRINITY_DN44726_c0_g1	<i>MGL</i>	<i>Monoglyceride lipase</i>	101	GAGGTGCTTGGAGTCCTGAA TTTCCACATCGAAGGAGACC
TRINITY_DN48651_c1_g2	<i>ESI3</i>	<i>Salt stress-induced hydrophobic peptide</i>	108	GCGGTATGGGTTGTAGTGCT GTCGTTGCCGAAGTACCAAT
TRINITY_DN48518_c0_g1	<i>ACX</i>	<i>Acyl-CoA oxidase</i>	148	GCGCAAGTTTGGCTCTTTAC AGCCCATGAATCATTGAGC
TRINITY_DN55657_c4_g1	<i>TPC1</i>	<i>Two pore calcium channel protein 1</i>	147	CCAAAGGGCCATTTTGTGT CGTGGTTGAAGCCAAATTCT