

## Supplementary materials

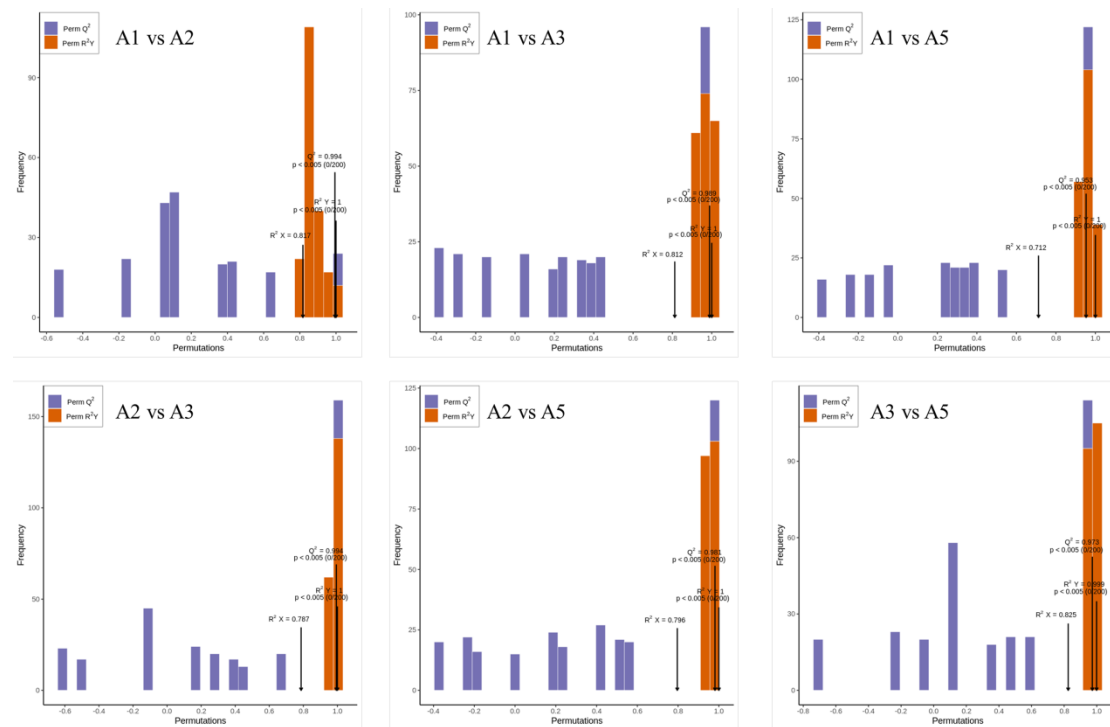
### Supplementary Table S1. DEGs identified in the pair-wise comparisons

### Supplementary Table S2. DEGs related to light-harvesting chlorophyll protein complex

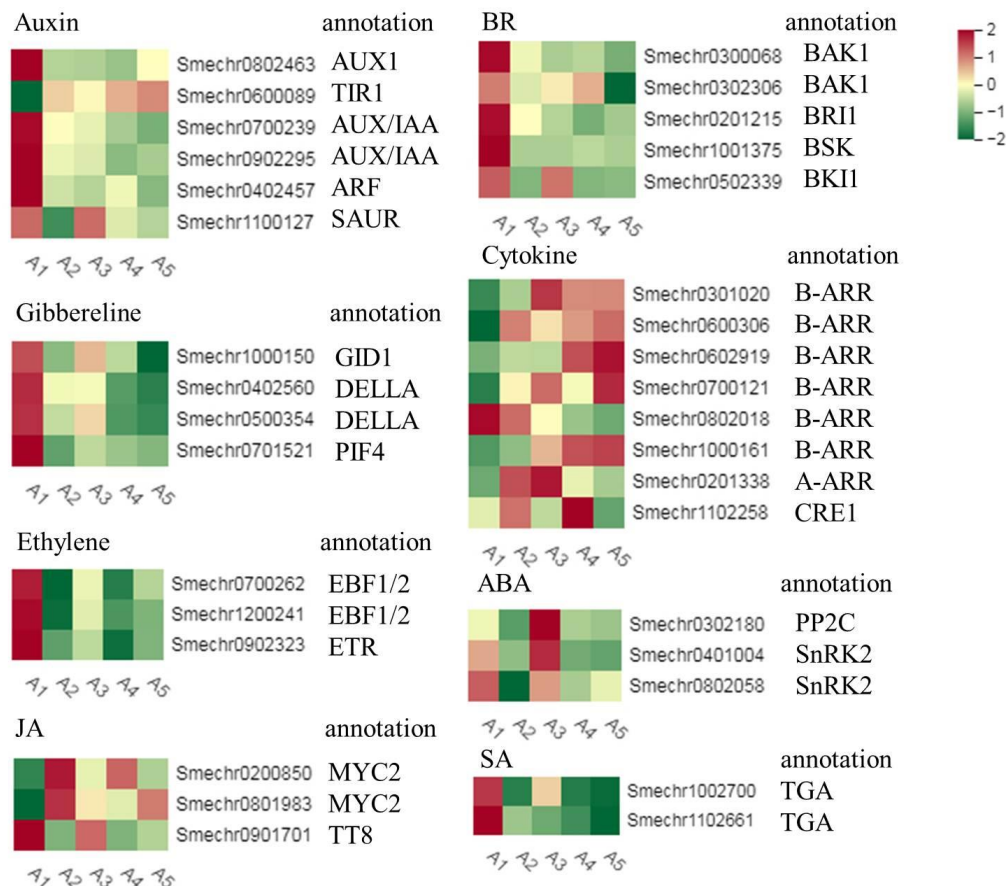
ID	annotation	A1_FPKM	A2_FPKM	A3_FPKM	A4_FPKM	A5_FPKM
Smechr0500697	Lhca1	423.39	582.08	268.39	26.85	25.88
Smechr0500699	Lhca1	33.26	38.92	14.29	2.62	2.68
Smechr0400151	Lhca2	206.07	274.72	140.28	19.67	11.11
Smechr1200202	Lhca2	0.58	14.68	0.34	0.00	0.02
Smechr0400296	Lhca3	153.72	237.91	121.20	15.87	9.53
Smechr0303053	Lhca4	286.63	350.87	145.82	18.38	10.73
Smechr0701037	Lhca5	17.17	42.56	21.35	10.71	7.75
Smechr0801141	Lhcb1	68.68	101.22	16.88	0.06	0.05
Smechr0801142	Lhcb1	2358.65	3117.48	1297.21	31.87	7.02
Smechr1000379	Lhcb3	209.30	166.36	88.26	9.19	3.01
Smechr0900664	Lhcb4	274.51	237.36	148.14	22.85	9.73
Smechr0602085	Lhcb5	109.34	158.79	115.57	10.11	5.11
Smechr0100613	Lhcb6	72.55	151.10	65.22	1.79	0.56
Smechr0100616	Lhcb6	90.47	101.71	56.47	4.19	2.59
Smechr0402609	Lhcb7	14.79	11.91	8.23	8.82	4.82

### Supplementary Table S3. Primers used for quantitative real-time PCR (qRT-PCR)

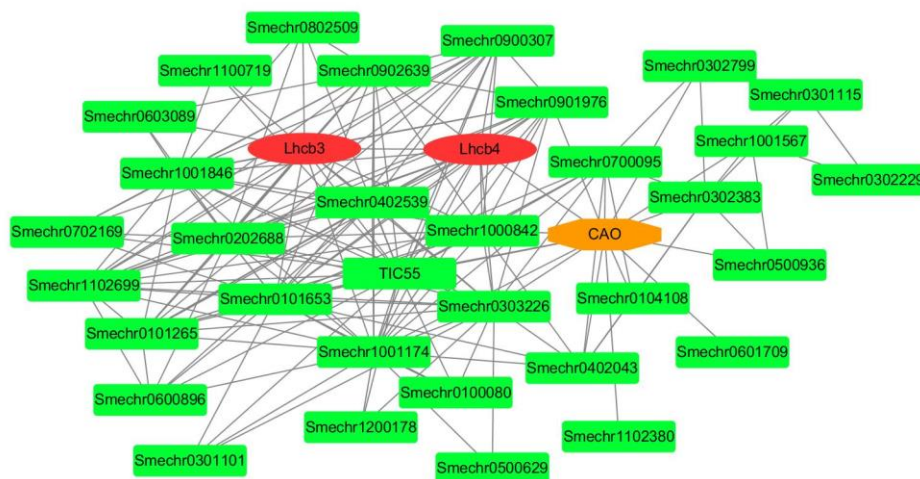
Genes	Forward primer (5' to 3')	Reverse primer ((5' to 3')
Smechr0702290	TCATCCGACGAATGTTTTCA	GTCCCGAAGTGTTGTTGGAT
Smechr0802143	CCCAATTTACCACGGTGTTTC	CAGCCATTTCAGGTGTAGCA
Smechr0802451	CGGCGAGTAAGCTAAAGGTG	ATAGCCGCGTGGTCATAAAC
Smechr0900664	GATTCGGATTTCGGACAGAAA	ATCCGTAGTCACCGACAAGG
Smechr1001846	AAGCCAGAAGCAGATGTCGT	AGCTGCACCTCCAGCTACAT
Smechr1002423	GATGGGGCAGTTACTTGGA	CTGGACCCAAAGTTCGTGAT
Smechr1200635	CCCTCTTGATCTTGCTCAG	CTGCAGGTGGATCATTTCT
Smechr1002213	AGTGGCATCTTGTTCTGCT	CCGAAGCAAAGTCACCTCTC
Smechr1002420	GGCCAGATTGCTGAAATTGT	GGCATTGCCTAGAGTTGCTC
Smechr1002081	GGTGGACCACAAACAATGAA	GCTGAAATTTCTCCCCATGA
Smechr0400031	ACAGGAGGTGCAGGCTACAT	TTCATCTGCACCACTGAAGC
Smechr0401078	TGGCCTAAAAACCCTCCTTT	CAGCTGCCTCAATCATTTCA
Smechr0303487	CATTGTGGACGTTTCTGTGG	TGCATTGGATTGTTCTTGGA
Smechr0500713	GTTTTGCCCAAGGAGATTGA	AGCCCCTAATTCTTCCCTCA
Smechr0302347	TTCGAGATAGGTGCGCTTTT	GCTTGCGGGACTCTTCTATG
Smechr0601814	TCTTTTGCACCCCCAGATAG	CCACCCACTTGGACTTTGTT
GAPDH	CCGCTCCTAGCAAAGATGCC	ACCCTCCACAATGCCAAACC



Supplementary Figure S1. Orthogonal partial least squares discriminant analysis (OPLS-DA) model of comparison groups including A1 vs. A2, A1 vs. A3, A1 vs. A5, A2 vs. A3, A2 vs. A5, and A3 vs. A5.



Supplementary Figure S2. Differentially expressed genes involved in plant hormone transduction.



Supplementary Figure S3. Gene network of the hub genes in the violet module, which positively correlated with total chlorophyll content ( $r^2=0.94$ ,  $p=1 \times 10^{-7}$ ).

A1	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPARA	GLNRCRKSCRLRWLN
A2	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPAA	GLNRCRKSCRLRWLN
A3	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPARA	GLNRCRKSCRLRWLN
A4	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPAA	GLNRCRKSCRLRWLN
A5	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPARA	GLNRCRKSCRLRWLN
green1	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPAA	GLNRCRKSCRLRWLN
green2	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPAA	GLNRCRKSCRLRWLN
green3	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPAA	GLNRCRKSCRLRWLN
purple1	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPARA	GLNRCRKSCRLRWLN
purple2	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPARA	GLNRCRKSCRLRWLN
purple3	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPARA	GLNRCRKSCRLRWLN
white1	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPAA	GLNRCRKSCRLRWLN
white2	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPAA	GLNRCRKSCRLRWLN
white3	MNNPPIICTSVRVRKGSWTEEDLLLRCMEKYGEGKWHLPAA	GLNRCRKSCRLRWLN
Consensus	mnnppiictsvrvrkgswteeedlllrkcmekeygegkwhlpaa	glnrcrkscrlrwln

Supplementary Figure S4. Sequence variation of *SmMYB113* among white, green and purple fruit of eggplant.