Transcriptomic Analysis Provides Insights into Anthocyanin Accumulation in Mulberry Fruits

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Table S1. Primers used for qRT-PCR analysis in this study.

Primer Name	Forward primer	Reverse primer
CHS(M.alba_G0019389)	GAACACAAGACTGAACTCAA	ATCTCCACCACCACTATG
CHI(M.alba_G0003811)	CCAGGGTGACGATGATAT	GTGTGAAGAGAATAGAGGAAC
F3H(M.alba_G0005697)	GGCGTGAGATAGTGACATA	ATGGCTTCTGACAATACCT
DFR1(M.alba_G0013172)	CGGGTTACATCGGATCAT	TCCACAGTGTCAGGTTAC
DFR1(M.alba_G0013173)	AAGATGACTGGATGGATGTAT	AGCGTTGGAATAATAGTAATGAA
ANS(M.alba_G000542)	GTTGGAAGCAGGAAGACTA	GTTGTGGAGGATGAAGGT
MYB(M.alba_G0017209)	CTCTTGCTTAATGACGCTATT	CTGTCCTTCTTCAATGGTATG
MYB(M.alba_G0017689)	CAAGAACTATTGGAACACTCA	TGGAAGAAGAAGAAGAAGGTA
bHLH(M.alba_G0012659)	AAGAATCGTTGGAAGAAGAC	AGGAGGTGAGGAAGAGTA
bHLH(M.alba_G0009347)	AGGAGGAACTATGCCAAG	CAACAAGTCTTCACCATCTT
bHLH3(M.alba_G0016257)	CGAAGAAGGTCTGGTAGG	CTTGATTGCTCCGTTGTAAT
ERF(M.alba_G0016603)	TCTACACAGAACACCAGAT	CAAGCCAGAACCAGATAAG
MaActin	GCATGAAGATCAAGGTGGTG	CATCTGCTGGAAGGTGCTAA

Table S2. Statistics of the RNA-seq profiles between both genotypes (ZJ and ZZB) at seven different developmental stages.

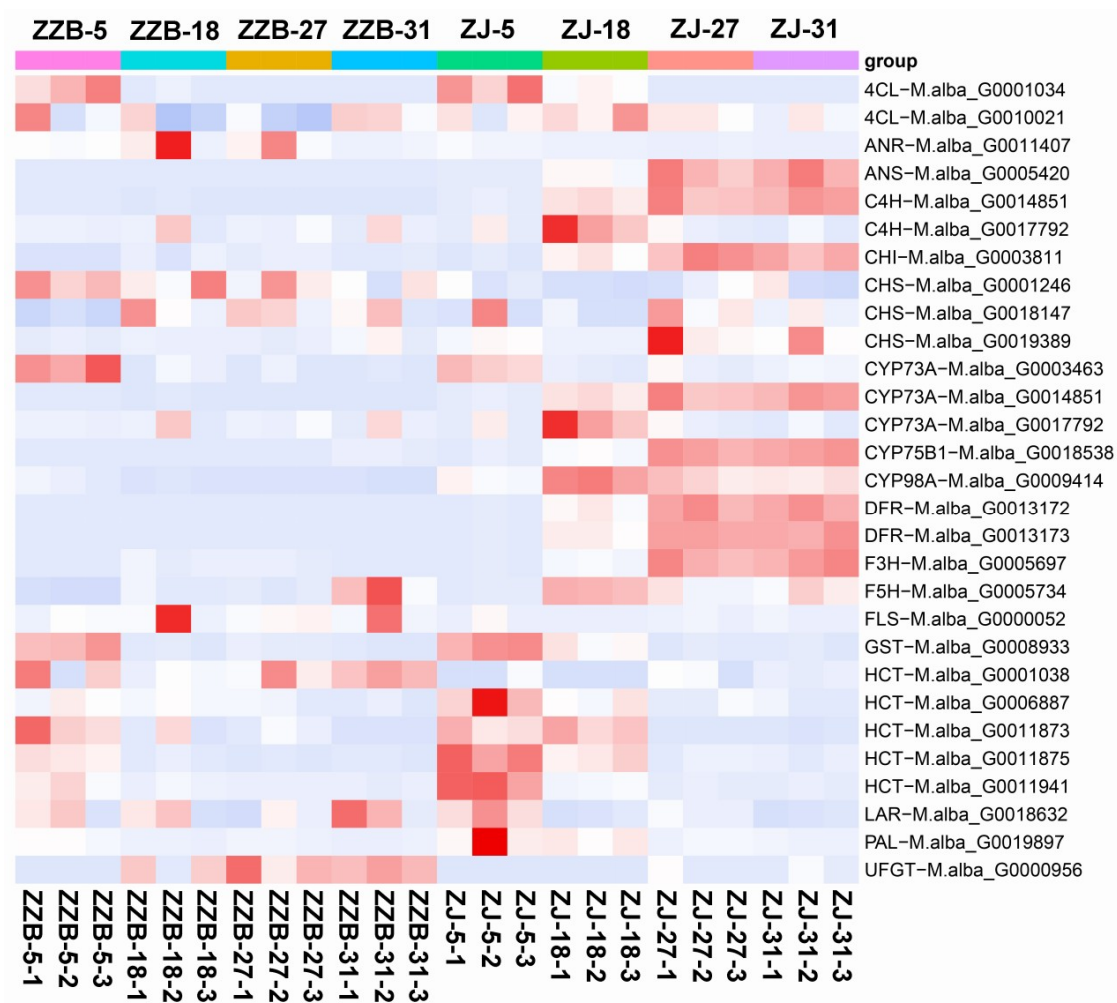| Sample	Total_reads n	Clean_reads n	Mapped_to _gene n	Mapped_to _gene %	Q20 (%)	Q30 (%)
ZJ-5-1	43991576	41002582	33802336	91.80	97.26	92.9
ZJ-5-2	41792118	38809038	31459187	91.01	97.12	92.67
ZJ-5-3	46084942	42564530	34715759	91.25	97.25	92.82
ZJ-18-1	45993830	42347176	34044727	90.32	97.08	92.53
ZJ-18-2	45600538	42459894	34602315	90.53	97.22	92.75
ZJ-18-3	44165960	41200468	32657926	89.59	97.17	92.8
ZJ-27-1	42219028	39312200	31536540	89.64	97.13	92.72
ZJ-27-2	44075988	41009902	33005741	90.30	97.1	92.56
ZJ-27-3	42602126	39769794	32128296	90.08	97.36	93.18
ZJ-31-1	40023860	37349058	30322721	90.44	97.18	92.75
ZJ-31-2	54806772	51388246	41731204	89.95	97.44	92.89
ZJ-31-3	41765098	39065318	31235653	89.61	97.08	92.6
ZZB-5-1	47731058	44622472	36350227	90.51	97.02	92.44
ZZB-5-2	40313714	37655818	30604133	90.56	97.23	92.94
ZZB-5-3	43522990	40456252	32623804	90.23	96.96	92.3
ZZB-18-1	39678182	37084754	30600321	91.36	97.09	92.56
ZZB-18-2	42460294	39617712	30381312	89.27	97.25	93.04
ZZB-18-3	46886042	43192936	35108175	90.65	96.43	90.67
ZZB-27-1	46514916	43305982	35472716	91.35	97.19	92.84
ZZB-27-2	43838368	40889362	32511324	90.80	97.14	92.82
ZZB-27-3	42924204	39848078	32421503	90.94	97.29	92.91
ZZB-31-1	43019936	40186340	32880140	91.06	96.93	92.34
ZZB-31-2	39722996	36986238	30251808	91.09	97.16	92.75
ZZB-31-3	40604888	37808568	31025938	90.92	97.35	93.05

Figure S1. Heatmap for DEG structural genes involved in flavonoid–anthocyanin biosynthesis between ZZB and ZJ at different development stages.
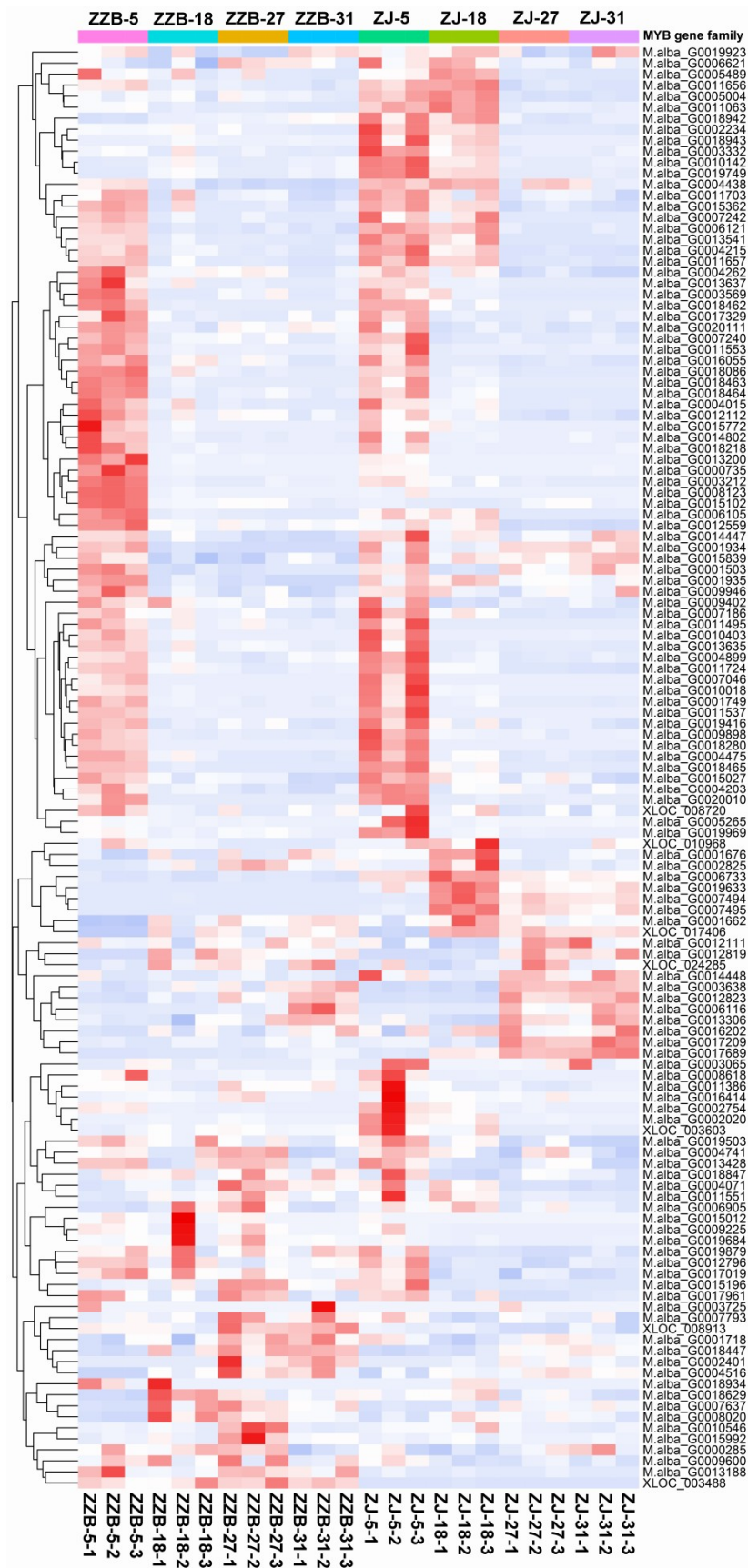
Figure S2. Heatmap for the DEGs of the *MYB* gene family between ZZB and ZJ at different development stages
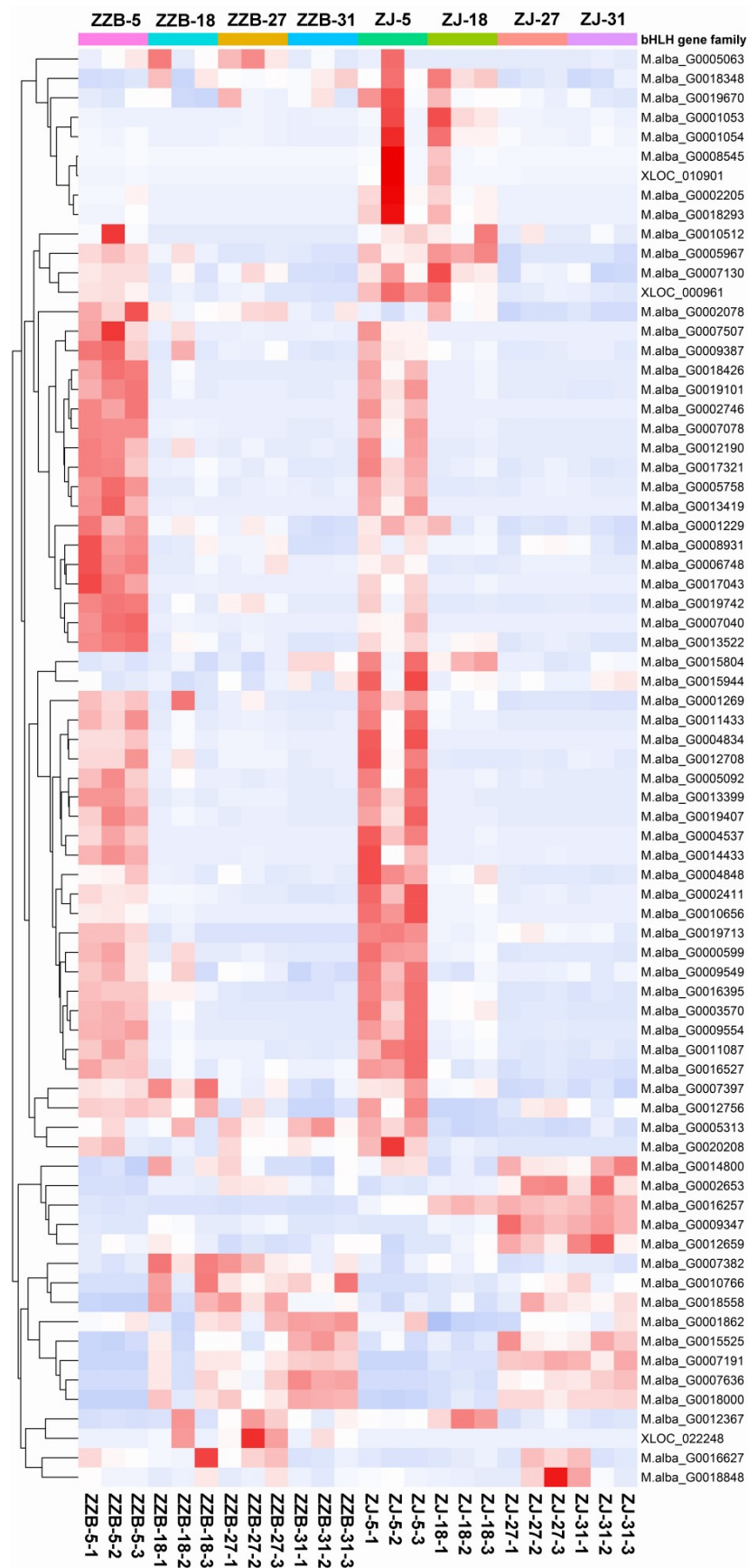
Figure S3. Heatmap for the DEGs of the *bHLH* gene family between ZZB and ZJ at different development stages
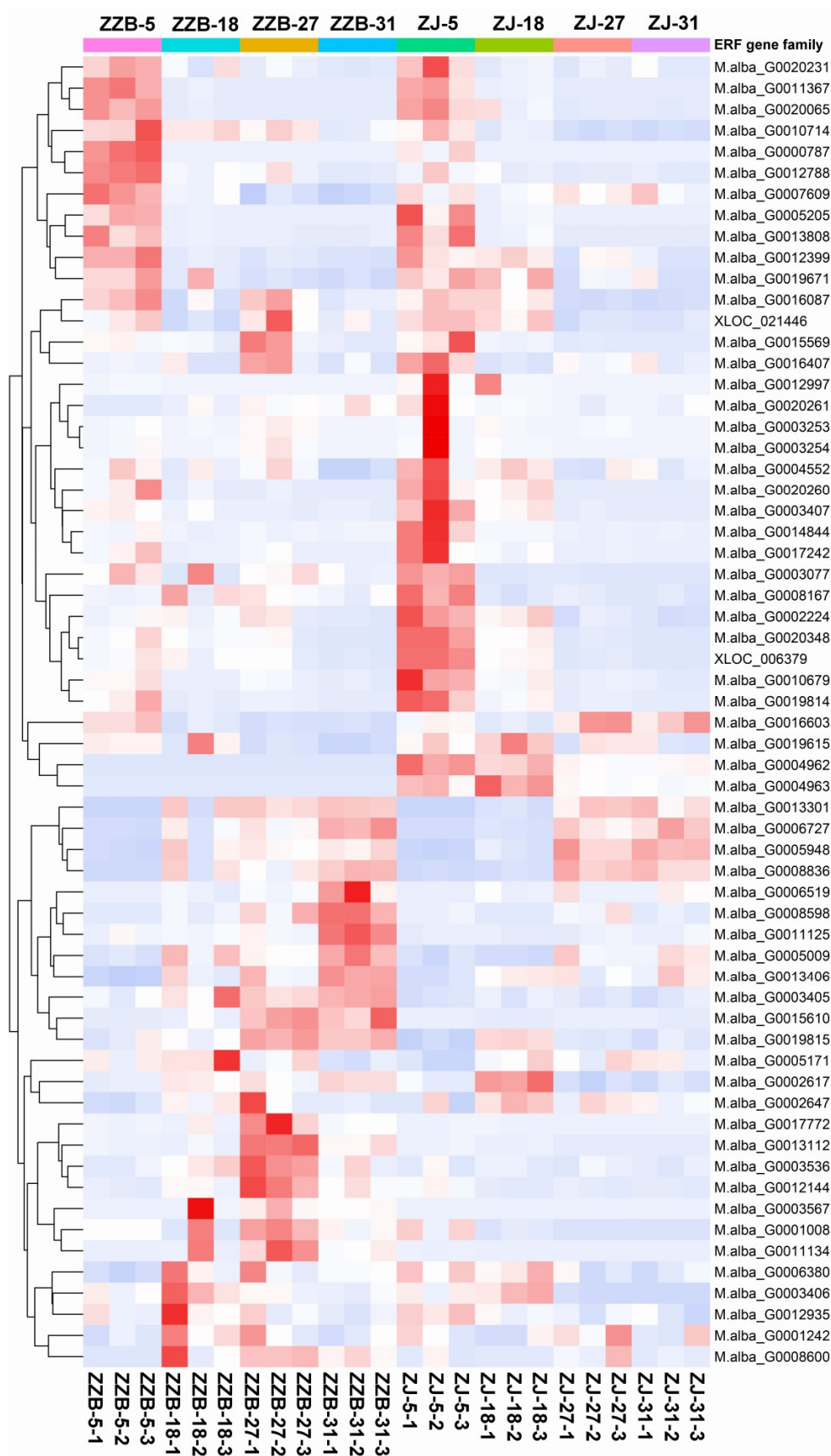
Figure S4. Heatmap for the DEGs of *ERF* gene family between ZZB and ZJ at different development stages
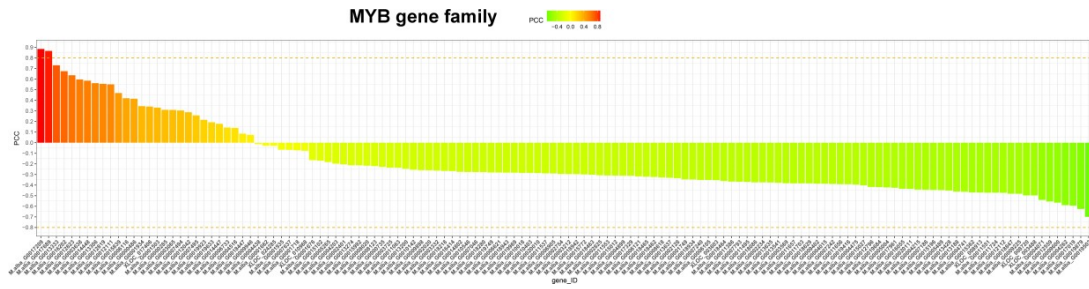
Figure S5. Pearson correlation coefficient, PCC (*r*) between the anthocyanin content and the expressions of the *MYB* gene family in ZJ and ZZB at different development stages.
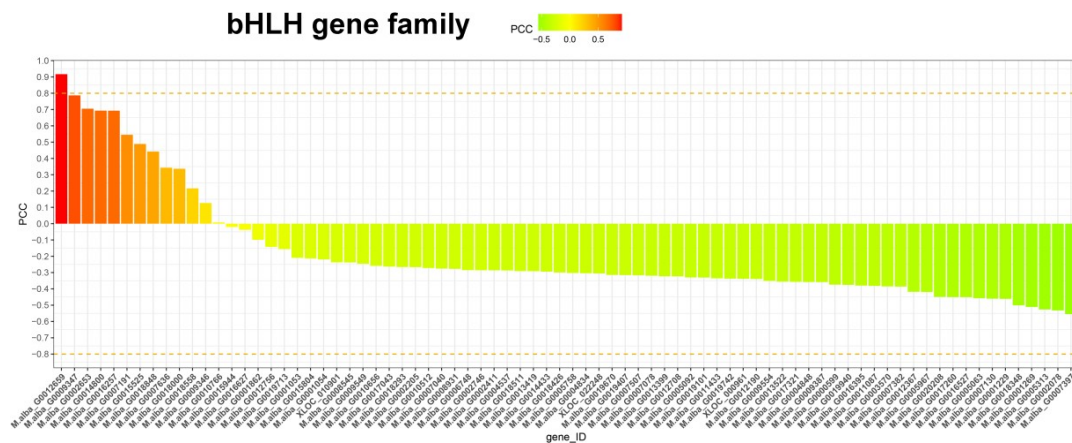

Figure S6. Pearson correlation coefficient, PCC (*r*) between the anthocyanin content and the expressions of the *bHLH* gene family in ZJ and ZZB at different development stages
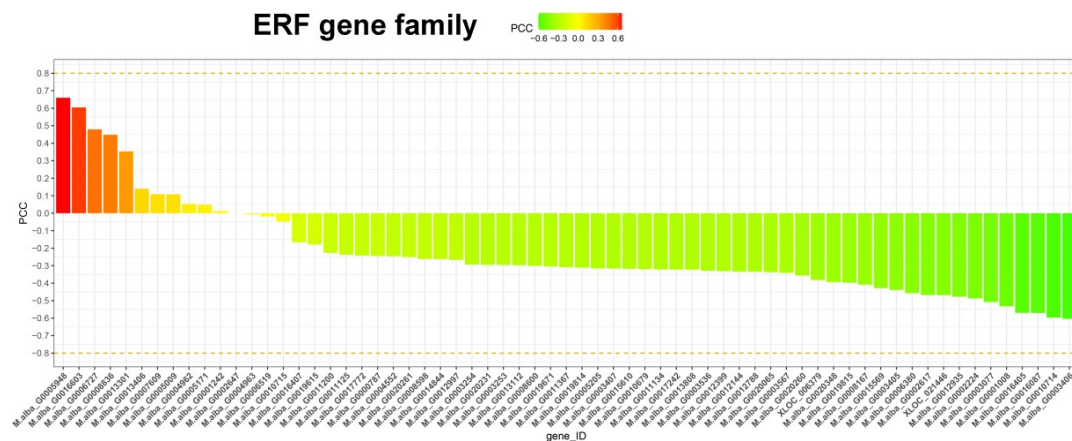

Figure S7. Pearson correlation coefficient, PCC (*r*) between the anthocyanin content and the expressions of the *ERF* gene family in ZJ and ZZB at different development stages.