

Physiological characteristics and gene regulation mechanism of juvenile leaves of *Acer rubrum* L. during leaf color transformation in spring

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Supplementary material

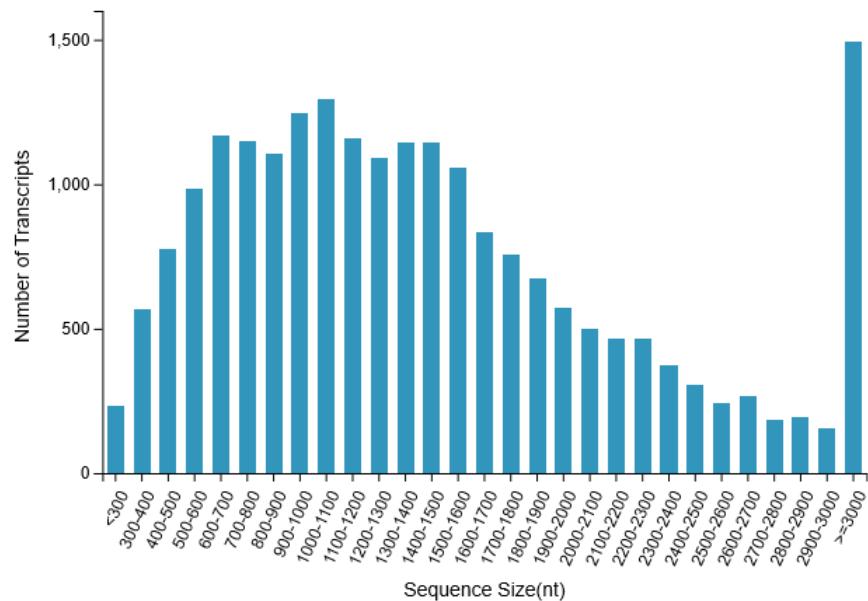
Table S1. Pairwise correlations between various physiological and biochemical indexes in *A. rubrum*.

Indexes	L*	a*	b*	Chla	Chlb	Car	Acy	NPQ	qP	Fv/Fm	SOD	POD	CAT	PAL	PPO
L*	1														
a*	-	1													
		0.943**													
b*	0.954**	-	1												
			0.998**												
Chla	0.948**	-		0.998**	1										
			0.997**												
Chlb	0.948**	-		0.998**	0.999**	1									
			0.999**												
Car	0.917**	-		0.993**	0.994**	0.996**	1								
			0.997**												
Acy	-	0.997**	-	-	-	-	-	-	-	1					
		0.947**		0.998**	1.000**	0.998**	0.993**								
NPQ	-	0.992**	-	-	-	-	-	-	0.992**	1					
		0.927**		0.985**	0.993**	0.994**	0.992**								
qP	0.972**	-0.871*	0.891*	0.873*	0.877*	0.840*	-0.870*	-0.836*	1						
Fv/Fm	0.857*	-	0.962**	0.954**	0.950**	0.962**	-	-	0.788	1					
		0.956**					0.957**	0.929**							
SOD	-	0.996**	-	-	-	-	-	1.000***	0.992**	-0.876*	-	1			
		0.950**		0.998**	1.000**	0.998**	0.993**				0.954**				
POD	-	0.995**	-	-	-	-	-	0.999**	0.989**	-0.853*	-	0.998**	1		
		0.936**		0.996**	0.998**	0.995**	0.992**				0.967**				
CAT	-	0.986**	-	-	-	-	-	0.985**	0.992**	-0.829*	-0.915*	0.983**	0.982**	1	
		0.929**		0.976**	0.984**	0.986**	0.980**								
PAL	-0.877*	0.878*	-0.858*	-0.875*	-0.884*	-0.861*	0.874*	0.909*	-0.775	-0.710	0.874*	0.859*	0.934**	1	
PPO	0.717	-0.665	0.665	0.679	0.668	0.629	-0.691	-0.682	0.580	0.590	-0.685	-0.698	-0.751	-0.770	1

*P < 0.05; **P < 0.01.

Table S2. Details of the transcriptome sequencing.

Sample	Total Raw Reads (M)	Total Clean Reads (M)	Total Clean Bases (Gb)	Clean Reads Q20 (%)	Clean Reads Q30 (%)	Clean Reads Ratio (%)
CK1	80.63	75.52	11.33	97.53	89.90	93.66
CK2	78.88	75.74	11.36	97.81	90.81	96.03
red1	71.12	64.90	9.73	97.21	88.94	91.25
red2	75.37	72.23	10.83	97.97	91.37	95.83

**Figure S1.** Transcript length distribution.

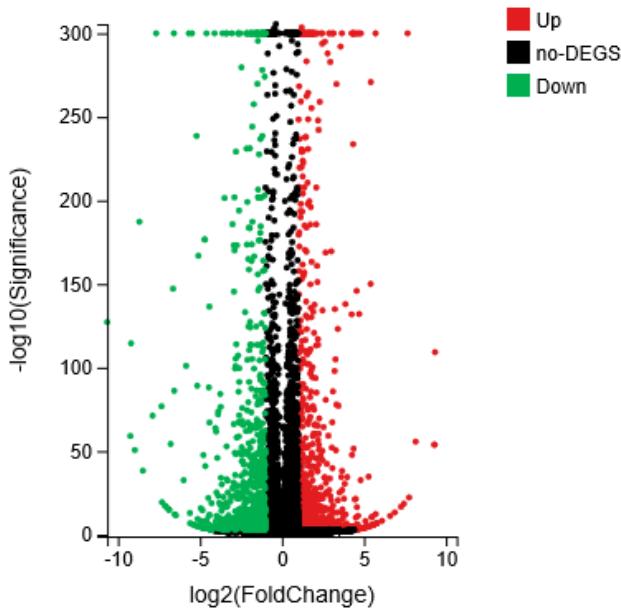


Figure S2. Volcano plot showing the genes differentially expressed between green (CK) and red (red) leaves.

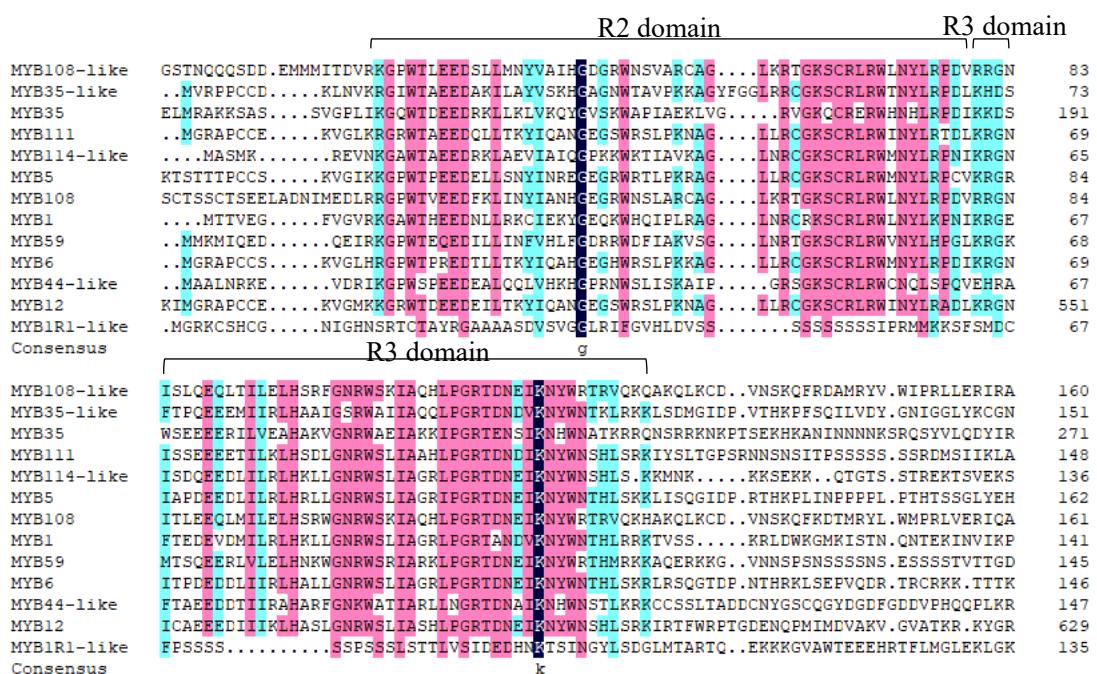


Figure S3. Multiple sequence alignment of 13 MYB proteins.