

Table 1 Suppl. Lethal temperature of the Yingjie.

	Logistic equation	$R^2$	LT <sub>50</sub> (°C)
Yingjie	$Y=142.52/(1+4.74e^{0.13X})$	0.95	-11.97

Table 2 Suppl. Primer names and sequences used in this study.

Prime name	Sequence (5' to 3')
EF1 $\alpha$ -F	CCATTCAAGCGACAGACTCA
EF1 $\alpha$ -R	TTTTGGTATCTGGTCCTGGAG
CHR00065067-F	GAAGCCAAGAGCACAGCCATA
CHR00065067-R	GTGACTAGGACTGGATATGAAT
CHR00020806-F	ACACCTCACGCTACGGTGAC
CHR00020806-R	TCTGACGAGTATCTGTAGC
CHR00027541-F	CAAGATGATCATGAGCTCGGA
CHR00027541-R	ATATCCGTATCATCTCAT
CHR00035711-F	AGTCACAATACGGTATTG
CHR00035711-R	CTGACACTTTGTTACCAT
CHR00046138-F	ATGTCGTTGTTGCTTGAAGA
CHR00046138-R	GCTAGCTCTCGCAGCACA
CHR00006576-F	ATATCGTCACATCGTGACA
CHR00006576-R	TCTGCAAGTGCTCCATCAATC
CHR00065771-F	GACTGAGTCATCATCAGACTC
CHR00065771-R	TCTCAGACAGTTGCCCTCCTTG
CHR00069581-F	CTCGACAACA ACTATTACAG
CHR00069581-R	CAACATTGCATTGTTGTCT
CHR00080449-F	CGTCAAAGAGCTGTTATT
CHR00080449-R	ACATTGAGGCGTGATGCTAT
CHR00064596-F	GACTTGCAATAGCCACA
CHR00064596-R	GATTGTGCACGCGCCAT
CHR00078080-F	ATATTCATGCTCTTGGTGATA
CHR00078080-R	ATCACAACCAACTCTAGCA
CHR00093594-F	ATAGTTGCTGTATCTCGA
CHR00093594-R	CTCAAGAAGCTGCACATAT
CHR00060679-F	ATAGTTGCTGTATCTCGC
CHR00060679-R	ACCTGATGACCACGATGAG
CHR00087441-F	TGAAGTACTAAGCAATG
CHR00087441-R	AGTGATTCAATGAAGCTCT

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CHR00028537-F	ATGCTGGACTATGCGGA
CHR00028537-R	TCAAGCTATCTTGACACTG
CHR00091803-F	TCTGCTGGTTGTAGAGA
CHR00091803-R	ATATATTGTTGATGATCT
CHR00079733-F	TTATCACGCCGTTGAGGCTACA
CHR00079733-R	GTAGGTTTCGATTGGCTATCACA
CHR00093170-F	GAAGCCTACGTCAACAGCA
CHR00093170-R	CTACAACAGGAGGTTCAAC
CHR00025981-F	GAAGATATTGTTGCTAATTG
CHR00025981-R	AGCAGCTGAATGAATCTCT
CHR00015708-F	AGATGATATATTGGACATA
CHR00015708-R	GTATGCAATATAGTGTGC
CHR00071374-F	TCCACGCTGTATATTATTCAAC
CHR00071374-R	TAGATATGAACACATAGGA
CHR00020948-F	CAGAAGTTGCTATGGATTA
CHR00020948-R	GTTCCATAAGGACATGTCAGCA
CHR00020949-F	GTCTAATCATGTAGCGGATAT
CHR00020949-R	TTCCATAAGGACATGTCAG
CHR00020956-F	TGCTGACTCGGTATGGCGA
CHR00020956-R	TACTACCATATCCAACGA
CHR00020961-F	GAGTCTAATGATGTAGCGGA
CHR00020961-R	TCCATAGAGACATGTTAGCA
CHR00020962-F	GAGTCTAATGATGTAGCAGAT
CHR00020962-R	AGTTCATAAGGACATGTCA
CHR00020963-F	TACGAATCTTATGACTCTATTC
CHR00020963-R	TGTAAACTGGATGTCGGGTCT
CHR00020971-F	TGGCTAGGGACTCATCCAA
CHR00020971-R	TCTTCATTCATGTAATAATC
CHR00020972-F	ACATACGAAACCAGAAGTT
CHR00020972-R	CTATAAGTTCCATAAGGA
CHR00052675-F	CAGAATCTAATGATATAGCGGA
CHR00052675-R	GCTGTGCAGATGTATTGTTCTGTGT
CHR00069918-F	AGAGTGTGGCTTGGTACACATGATA
CHR00069918-R	TCATCCTCGTCGACTTGATAACA
CHR00090843-F	ACCGATCGTAGAGATTGTGA
CHR00090843-R	CTAATTAGAACCACACAACGACAT
CHR00090844-F	CGAGGTGTAAGGAGTAGGA
CHR00090844-R	AGACTTGGCCGCTTCTTGGC
CHR00044059-F	GATGATCTAGTTATCTCGGAT
CHR00044059-R	ATCTGACCACTGAGACTAATGTC
CHR00092416-F	GGAGCTAGCTCACATCCTA
CHR00092416-R	TTGACTCAGCCGAGTCATAAC
CHR00018253-F	GAACCAAGCACACCACATGCAAGTA
CHR00018253-R	TCTTCCTCAGTGGTGCTGCCATT

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Table 3 Suppl. Number of responses to stimulus-related genes, membrane-related genes, cell junction-related genes, and antioxidant activity during cold stress.

	Response to stimulus	Membrane related	Cell junction-related	Antioxidant activity
Control vs. chilling.	354	1405	45	35
Control vs. freezing	164	659	32	10

Table 4 Suppl. Differential expression of MYB transcription factor. (The yellow boxes are CHR00035711, CHR00027541 and CHR00065067)

Control vs. chilling											
	#ID	Gene_name	Ch FPKM	CK FPKM	FDR	log2FC	Rgulated	KEGG_ann	Pfam_annotation	Swiss_Prot_annotation	NR_annotation
1	CHR00089615	CHR00089615	9.662902	3.997975	3.34856E-05	1.062124	up	--	MYB-CC type t	Myb family transcription factor PHL5 OS=Arabidopsis thaliana OX=3702 GN=PHL5 PE=2 SV=1	protein PHOSPHATE STARVATION RESPONSE 2-like [Helianthus annuus]
2	CHR00035457	CHR00035457	2.947286	0.484948	0.000123419	2.158069	up	K09422 2.0	Myb-like DNA	Transcription factor MYB52 OS=Arabidopsis thaliana OX=3702 GN=MYB52 PE=2 SV=1	transcription factor MYB52-like [Helianthus annuus]
3	CHR00033812	CHR00033812	30.25089	2.715107	2.72684E-74	3.240936	up	K14491 2.4	Response regul	Two-component response regulator ORR26 OS=Oryza sativa subsp. japonica OX=39947 GN=RR26 PE=3 SV=	CheY-like superfamily [Cynara cardunculus var. scolymus]
4	CHR00006942	CHR00006942	19.25438	7.12257	1.12316E-06	1.221845	up	--	Myb-like DNA	Transcription factor SRM1 OS=Arabidopsis thaliana OX=3702 GN=SRM1 PE=1 SV=1	transcription factor MYBS1 [Helianthus annuus]
5	CHR00069507	CHR00069507	10.91006	1.584597	0.000128653	2.332185	up	--	Myb-like DNA	Protein RADIALIS-like 6 OS=Arabidopsis thaliana OX=3702 GN=RL6 PE=2 SV=1	protein RADIALIS-like 3 [Lactuca sativa]
6	CHR00058376	CHR00058376	101.4233	31.33636	2.72939E-09	1.477713	up	--	Myb/SANT-lik	Trihelix transcription factor GTL2 OS=Arabidopsis thaliana OX=3702 GN=At5g28300 PE=2 SV=1	trihelix protein, partial [Chrysanthemum x morifolium]
7	CHR00018871	CHR00018871	5.527386	1.00384	1.17188E-06	2.091944	up	--	Myb-like DNA	Putative Myb family	uncharacterized protein

										transcription factor At1g14600 OS=Arabidopsis thaliana OX=3702 GN=At1g14600 PE=2 S	LOC111885023 [Lactuca sativa]
8	CHR00074552	CHR00074552	5.071719	1.283281	2.12726E-07	1.433548	up	--	DIRP;; Myb-like	Protein ALWAYS EARLY 3 OS=Arabidopsis thaliana OX=3702 GN=ALY3 PE=1 SV=1	DIRP-like protein [Cynara cardunculus var. scolymus]
9	CHR00040223	CHR00040223	14.30001	3.848456	2.65057E-06	1.644376	up	--	Myb-like DNA	Transcription factor DIVARICATA OS=Antirrhinum majus OX=4151 GN=DIVARICATA PE=2 SV=1	transcription factor DIVARICATA-like isoform X1 [Helianthus annuus]
10	CHR00056189	CHR00056189	6.961863	2.226911	3.72485E-05	1.402325	up	K09422 8.1	Myb-like DNA	Transcription factor MYB36 OS=Arabidopsis thaliana OX=3702 GN=MYB36 PE=1 SV=1	transcription factor RAX2- like [Lactuca sativa]
11	CHR00020868	CHR00020868	211.6816	37.20248	1.71116E-21	2.229384	up	K09422 2.9	Myb-like DNA	Transcription factor MYB48 OS=Arabidopsis thaliana OX=3702 GN=MYB48 PE=2 SV=1	MYB transcription factor 59 [Chrysanthemum x morifolium]
12	Chrysanthemu m_x_	--	3.49021	0.347478	3.08614E-06	2.793183	up	K09422 1.9	Myb-like DNA	Telomere repeat-binding factor 5 OS=Arabidopsis thaliana OX=3702 GN=At1g72740 PE=2 SV=1	telomere repeat-binding factor 5-like [Lactuca sativa]
13	CHR00052532	CHR00052532	33.09154	9.007743	1.1263E-14	1.675465	up	--	Myb-like DNA	Putative Myb family transcription factor At1g14600 OS=Arabidopsis thaliana OX=3702 GN=At1g14600 PE=2 S	transcription factor BOA- like isoform X1 [Lactuca sativa]
14	CHR00021525	CHR00021525	1.398385	0.151339	6.55542E-06	2.616341	up	--	Myb-like DNA	Transcription factor MYB3R-5 OS=Arabidopsis thaliana OX=3702 GN=MYB3R5 PE=2 SV=1	transcription factor MYB3R-5-like [Lactuca sativa]
15	CHR00053308	CHR00053308	5.30878	1.522782	1.64559E-07	1.531837	up	K09422 1.6	Myb-like DNA	Transcription factor MYB36 OS=Arabidopsis thaliana OX=3702 GN=MYB36 PE=1 SV=1	transcription factor MYB36 [Helianthus annuus]
16	CHR00061220	CHR00061220	4.067816	0.895927	3.85952E-06	1.870003	up	--	Myb-like DNA	Telomere repeat-binding factor 4 OS=Arabidopsis thaliana OX=3702 GN=At1g17520 PE=2 SV=2	probable ubiquitin-like- specific protease 2A isoform X1 [Lactuca sativa]
17	CHR00044387	CHR00044387	1.588431	0.088725	0.00098481 8	3.014499	up	--	Myb-like DNA	Putative Myb family transcription factor	putative Myb family transcription factor

										At1g14600 OS=Arabidopsis thaliana OX=3702 GN=At1g14600 PE=2 S	At1g14600 [Helianthus annuus]
18	CHR00044081	CHR00044081	2.210873	0.2566	1.9084E-07	2.519325	up	K09422 2.0	Myb-like DNA	Transcription factor MYB3R-2 OS=Oryza sativa subsp. japonica OX=39947 GN=MYB3R-2 PE=2 SV=1	hypothetical protein LSAT_8X145621 [Lactuca sativa]
19	CHR00062990	CHR00062990	1.591048	0.035443	3.09162E-07	4.211419	up	K09422 8.4	Myb-like DNA	Transcription factor MYB61 OS=Arabidopsis thaliana OX=3702 GN=MYB61 PE=2 SV=1	R2R3 MYB transcription factor 17 [Cichorium intybus]
20	CHR00035711	CHR00035711	3.279088	0.286622	0.000398307	2.535105	up	K09422 9.9	Myb-like DNA	Transcription factor MYB119 OS=Arabidopsis thaliana OX=3702 GN=MYB119 PE=2 SV=1	Homeodomain-like protein [Cynara cardunculus var. scolymus]
21	CHR00070044	CHR00070044	9.194721	3.039987	0.000103045	1.345859	up	--	Myb-like DNA	Transcription factor DIVARICATA OS=Antirrhinum majus OX=4151 GN=DIVARICATA PE=2 SV=1	transcription factor DIVARICATA-like isoform X1 [Helianthus annuus]
22	CHR00055390	CHR00055390	3.038001	0.363182	1.12678E-05	2.539517	up	K09422 5.5	Myb-like DNA	Transcription factor MYB41 OS=Arabidopsis thaliana OX=3702 GN=MYB41 PE=1 SV=1	transcription factor MYB41-like [Helianthus annuus]
23	CHR00063143	CHR00063143	1.038883	0.20259	0.00049567	1.912018	up	K09422 5.1	Myb-like DNA	Transcription factor MYB3R-2 OS=Oryza sativa subsp. japonica OX=39947 GN=MYB3R-2 PE=2 SV=1	snRNA-activating protein complex subunit 4, partial [Lactuca sativa]
24	CHR00046138	CHR00046138	187.0678	16.27172	5.43997E-97	3.29845	up	K09422 3.1	Myb-like DNA	Transcription factor MYB2 OS=Oryza sativa subsp. japonica OX=39947 GN=MYB2 PE=2 SV=1	transcription factor MYB2-like [Helianthus annuus]
25	CHR00001628	CHR00001628	42.94338	8.166886	4.86752E-58	2.211044	up	K14491 8.0	Response regul	Two-component response regulator ORR22 OS=Oryza sativa subsp. indica OX=39946 GN=RR22 PE=3 SV=1	two-component response regulator ARR12-like [Helianthus annuus]
26	CHR00034862	CHR00034862	8.197052	2.790216	3.29424E-06	1.316829	up	K09422 2.2	Myb-like DNA	Transcription factor RAX3 OS=Arabidopsis thaliana OX=3702 GN=RAX3 PE=2 SV=1	transcription factor RAX3-like [Helianthus annuus]
27	CHR00018253	CHR00018253	1.725589	0.117276	0.000230829	2.884284	up	K09422 2.9	Myb-like DNA	Transcription factor MYB102 OS=Arabidopsis thaliana OX=3702	transcription factor MYB41-like [Lactuca sativa]

											GN=MYB102 PE=2 SV=1	
28	CHR00081400	CHR00081400	4.097544	1.122733	4.79992E-05	1.590859	up	K09422 8.8	Myb-like DNA	Transcription factor MYB36 OS=Arabidopsis thaliana OX=3702 GN=MYB36 PE=1 SV=1	transcription factor MYB36 [Helianthus annuus]	
29	CHR00036230	CHR00036230	19.74161	6.770761	4.87229E-07	1.321461	up	--	Myb-like DNA	Transcription factor HHO3 OS=Arabidopsis thaliana OX=3702 GN=HHO3 PE=2 SV=1	hypothetical protein LSAT_4X20080 [Lactuca sativa]	
30	CHR00047746	CHR00047746	15.88029	6.157545	1.59119E-07	1.155329	up	--	MYB-CC type t	Myb family transcription factor PHL8 OS=Arabidopsis thaliana OX=3702 GN=PHL8 PE=2 SV=1	myb family transcription factor PHL8-like [Lactuca sativa]	
31	CHR00042388	CHR00042388	5.067588	0.972455	3.29992E-19	2.139422	up	K09422 1.4	Myb-like DNA	Single myb histone 6 OS=Zea mays OX=4577 GN=SMH6 PE=2 SV=1	PREDICTED: telomere repeat-binding factor 1-like [Ipomoea nil]	
32	CHR00031769	CHR00031769	15.95341	5.331744	1.00814E-10	1.394064	up	--	Myb/SANT-lik	Trihelix transcription factor ASR3 OS=Arabidopsis thaliana OX=3702 GN=ASR3 PE=1 SV=1	trihelix transcription factor ASR3 [Lactuca sativa]	
33	CHR00023176	CHR00023176	6.882868	1.505526	1.69944E-05	1.856904	up	K09422 1.2	Myb-like DNA	Transcription factor MYB2 OS=Oryza sativa subsp. japonica OX=39947 GN=MYB2 PE=2 SV=1	transcription factor MYB57- like [Helianthus annuus]	
34	CHR00065067	CHR00065067	5.221552	1.663797	0.00099396 6	1.383856	up	--	Myb-like DNA	Transcription factor MYBS3 OS=Oryza sativa subsp. japonica OX=39947 GN=MYBS3 PE=2 SV=1	transcription factor MYBS3- like [Helianthus annuus]	
35	CHR00021332	CHR00021332	8.937461	24.08217	2.58865E-12	-1.60736	down	K09422 3.0	Myb-like DNA	Transcription factor MYB111 OS=Arabidopsis thaliana OX=3702 GN=MYB111 PE=1 SV=1	transcription factor MYB8- like [Helianthus annuus]	
36	CHR00074848	CHR00074848	2.892444	5.725821	5.9044E-05	-1.14744	down	--	Myb-like DNA	Transcription factor LUX OS=Arabidopsis thaliana OX=3702 GN=LUX PE=1 SV=1	PREDICTED: transcription factor PCL1 [Ziziphus jubaba]	
37	CHR00007969	CHR00007969	2.550185	7.124148	1.18993E-05	-1.62853	down	--	Myb-like DNA	AT-rich interactive domain- containing protein 2 OS=Arabidopsis thaliana OX=3702 GN=ARID2 PE=1 SV=1	uncharacterized protein LOC110895359 [Helianthus annuus]	
38	CHR00077055	CHR00077055	0	1.682652	3.14453E-09	-5.42169	down	--	Myb-like DNA	Protein REVEILLE 1 OS=Arabidopsis thaliana	protein REVEILLE 1-like [Helianthus annuus]	

											OX=3702 GN=RVE1 PE=2 SV=1	
39	CHR00043803	CHR00043803	5.086391	15.15088	2.3175E-05	-1.7049	down	--	Myb-like DNA	Transcription factor MYB44 OS=Arabidopsis thaliana OX=3702 GN=MYB44 PE=1 SV=1	transcription factor MYB77-like [Lactuca sativa]	
40	CHR00057593	CHR00057593	2.18229	7.657664	1.94838E-10	-1.94579	down	K09422 3.9	Myb-like DNA	Transcription factor MYB4 OS=Oryza sativa subsp. japonica OX=39947 GN=MYB4 PE=2 SV=2	transcription factor MYB13-like [Helianthus annuus]	
41	CHR00017984	CHR00017984	0.692523	12.4861	6.17436E-23	-3.9443	down	K09422 3.5	Myb-like DNA	Transcription factor MYB78 OS=Arabidopsis thaliana OX=3702 GN=MYB78 PE=2 SV=1	transcription factor MYB108-like [Helianthus annuus]	
42	CHR00078553	CHR00078553	4.048184	7.742145	0.00050175 9	-1.05143	down	--	Myb-like DNA	Protein REVEILLE 3 OS=Arabidopsis thaliana OX=3702 GN=RVE3 PE=2 SV=1	protein REVEILLE 6-like [Helianthus annuus]	
43	CHR00023377	CHR00023377	7.459508	31.19824	1.43215E-12	-2.21108	down	K09422 1.0	Myb-like DNA	Transcription factor MYB14 OS=Arabidopsis thaliana OX=3702 GN=MYB14 PE=2 SV=1	transcription factor MYB14-like [Lactuca sativa]	
44	CHR00093143	CHR00093143	0.394411	3.018101	2.80356E-06	-2.75284	down	--	Myb-like DNA	Transcription factor MYB44 OS=Arabidopsis thaliana OX=3702 GN=MYB44 PE=1 SV=1	transcription factor MYB44-like [Helianthus annuus]	
45	CHR00001721	CHR00001721	54.18225	59.41637	6.44515E-09	-1.32046	down	--	Myb-like DNA	Protein REVEILLE 1 OS=Arabidopsis thaliana OX=3702 GN=RVE1 PE=2 SV=1	Homeodomain-like protein [Cynara cardunculus var. scolymus]	
46	CHR00018278	CHR00018278	2.948501	5.639711	0.00050922 8	-1.10954	down	--	Myb-like DNA	Transcription factor HHO3 OS=Arabidopsis thaliana OX=3702 GN=HHO3 PE=2 SV=1	Homeodomain-like protein [Cynara cardunculus var. scolymus]	
47	CHR00070852	CHR00070852	0.904668	3.370336	0.00082959 1	-1.74559	down	K09422 1.3	Myb-like DNA	Transcription factor MYB62 OS=Arabidopsis thaliana OX=3702 GN=MYB62 PE=2 SV=1	hypothetical protein LSAT_3X97081 [Lactuca sativa]	
48	CHR00019631	CHR00019631	5.328576	16.9155	1.62839E-06	-1.78893	down	K09422 6.1	Myb-like DNA	Transcription factor MYB14 OS=Arabidopsis thaliana OX=3702 GN=MYB14 PE=2 SV=1	transcription factor MYB14-like [Helianthus annuus]	
49	CHR00004725	CHR00004725	5.487755	22.78194	1.54929E-19	-2.21728	down		Myb-like DNA	Transcription factor MYBS3 OS=Oryza sativa subsp. japonica OX=39947	Homeodomain-like protein [Cynara cardunculus var. scolymus]	

											GN=MYBS3 PE=2 SV=1	
50	CHR00091071	CHR00091071	1.802744	3.216668	0.00062517 7	-1.00438	down	K14491 3.2	Response regul	Two-component response regulator ARR1 OS=Arabidopsis thaliana OX=3702 GN=ARR1 PE=1 SV=2	two-component response regulator ARR1-like [Helianthus annuus]	
51	CHR00027609	CHR00027609	2.915154	10.26855	5.0891E-10	-1.96679	down	--	Myb-like DNA	Probable transcription factor KAN2 OS=Arabidopsis thaliana OX=3702 GN=KAN2 PE=2 SV=1	probable transcription factor KAN2 [Helianthus annuus]	
52	Chrysanthemu m_x_	--	0	6.473576	1.57287E-27	-8.3114	down	K14491 1.7	Myb-like DNA	Two-component response regulator ARR2 OS=Arabidopsis thaliana OX=3702 GN=ARR2 PE=1 SV=1	two-component response regulator ARR12-like [Lactuca sativa]	
53	CHR00027541	CHR00027541	0.175263	4.097678	2.38412E-08	-3.46783	down	K09422 2.2	Myb-like DNA	Transcription factor MYB12 OS=Arabidopsis thaliana OX=3702 GN=MYB12 PE=1 SV=1	hypothetical protein LSAT_6X19180 [Lactuca sativa]	
54	CHR00037475	CHR00037475	3.203887	13.38689	2.06052E-11	-2.18602	down	K09422 1.8	Myb-like DNA	Transcription factor MYB62 OS=Arabidopsis thaliana OX=3702 GN=MYB62 PE=2 SV=1	R2R3 MYB transcription factor 3 [Cichorium intybus]	

D vs C											
	#ID	gene_name	c fpkm	d-fpkm	FDR	log2FC	regulated	KEGG_ann	KEGG_pathwa	Swiss_Prot_annotation	NR_annotation
1	CHR00021332	CHR00021332	3.543125	24.08217	2.5269E-16	-2.56718	down	K09422 3.0	MYB3	Transcription factor MYB111 OS=Arabidopsis thaliana OX=3702 GN=MYB111 PE=1 SV=1	transcription factor MYB8-like [Helianthus annuus]
2	CHR00074848	CHR00074848	0.790639	5.725821	5.65585E-05	-2.29619	down	--	LUX	Transcription factor LUX OS=Arabidopsis thaliana	PREDICTED: transcription factor PCL1 [Ziziphus]

											OX=3702 GN=LUX PE=1 SV=1	jujuba]
3	CHR00043803	CHR00043803	2.07884	15.15088	1.77437E-05	-2.37987	down	--	MYB77	Transcription factor MYB44 OS=Arabidopsis thaliana OX=3702 GN=MYB44 PE=1 SV=1	transcription factor MYB77-like [Lactuca sativa]	
4	CHR00057593	CHR00057593	0.529976	7.657664	4.34177E-14	-3.33972	down	K09422 3.9	myb58	Transcription factor MYB4 OS=Oryza sativa subsp. japonica OX=39947 GN=MYB4 PE=2 SV=2	transcription factor MYB13-like [Helianthus annuus]	
5	CHR00093143	CHR00093143	0.099345	3.018101	9.73577E-10	-3.71818	down	--	MYB44	Transcription factor MYB44 OS=Arabidopsis thaliana OX=3702 GN=MYB44 PE=1 SV=1	transcription factor MYB44-like [Helianthus annuus]	
6	Chrysanthemu m_x_	--	0.02841	6.473576	3.9057E-26	-5.86031	down	K14491 1.7	arr12	Two-component response regulator ARR2 OS=Arabidopsis thaliana OX=3702 GN=ARR2 PE=1 SV=1	two-component response regulator ARR12-like [Lactuca sativa]	
7	CHR00027541	CHR00027541	0.064217	4.097678	1.38119E-11	-4.26632	down	K09422 2.2		Transcription factor MYB12 OS=Arabidopsis thaliana OX=3702 GN=MYB12 PE=1 SV=1	hypothetical protein LSAT_6X19180 [Lactuca sativa]	
8	CHR00035457	CHR00035457	4.014532	0.484948	0.000109608	2.471922	up	K09422 2.0	MYB54	Transcription factor MYB52 OS=Arabidopsis thaliana OX=3702 GN=MYB52 PE=2 SV=1	transcription factor MYB52-like [Helianthus annuus]	
9	CHR00018255	CHR00018255	22.65508	7.92792	0.000182412	1.46805	up	K09422 2.2	MYB62	Transcription factor MYB62 OS=Arabidopsis thaliana OX=3702 GN=MYB62 PE=2 SV=1	transcription factor MYB62-like [Helianthus annuus]	
10	CHR00069507	CHR00069507	9.532139	1.584597	0.000112228	2.227747	up	--		Protein RADIALIS-like 6 OS=Arabidopsis thaliana OX=3702 GN=RL6 PE=2 SV=1	protein RADIALIS-like 3 [Lactuca sativa]	
11	CHR00058376	CHR00058376	82.7491	31.33636	3.1979E-05	1.400573	up	--	myb542	Trihelix transcription factor GTL2 OS=Arabidopsis thaliana OX=3702 GN=At5g28300 PE=2 SV=1	trihelix protein, partial [Chrysanthemum x morifolium]	
12	CHR00037838	CHR00037838	11.82488	5.624811	0.00029878	1.183682	up	--	myb2	Myb-related protein 2 OS=Arabidopsis thaliana OX=3702 GN=MYR2 PE=1 SV=1	Homeodomain-like protein [Cynara cardunculus var. scolymus]	
13	CHR00005161	CHR00005161	4.550354	1.593549	1.13121E-10	1.77484	up	K09422 1.3	MYB5	Transcription repressor MYB5 OS=Arabidopsis	Transcription factor, Myb superfamily [Handroanthus	

										thaliana OX=3702 GN=MYB5 PE=1 SV=1	impetiginosus]
14	CHR00024419	CHR00024419	202.574	59.95948	2.98341E-08	1.768317	up	--	--	Transcription factor SRM1 OS=Arabidopsis thaliana OX=3702 GN=SRM1 PE=1 SV=1	hypothetical protein Ccrd_014221 [Cynara cardunculus var. scolymus]
15	CHR00030257	CHR00030257	5.252543	1.166351	0.000833948	1.900389	up	--	--	Transcription activator GLK1 OS=Arabidopsis thaliana OX=3702 GN=GLK1 PE=1 SV=2	transcription activator GLK1-like [Lactuca sativa]
16	CHR00035711	CHR00035711	1.170146	0.286622	0.000902714	1.729433	up	K09422 9.9		Transcription factor MYB119 OS=Arabidopsis thaliana OX=3702 GN=MYB119 PE=2 SV=1	Homeodomain-like protein [Cynara cardunculus var. scolymus]
17	CHR00063143	CHR00063143	1.031075	0.20259	0.000282695	1.945235	up	K09422 5.1		Transcription factor MYB3R-2 OS=Oryza sativa subsp. japonica OX=39947 GN=MYB3R-2 PE=2 SV=1	snRNA-activating protein complex subunit 4, partial [Lactuca sativa]
18	CHR00046138	CHR00046138	49.58945	16.27172	4.57058E-11	1.66844	up	K09422 3.1	--	Transcription factor MYB2 OS=Oryza sativa subsp. japonica OX=39947 GN=MYB2 PE=2 SV=1	transcription factor MYB2- like [Helianthus annuus]
19	CHR00036230	CHR00036230	19.33526	6.770761	1.88805E-08	1.54061	up	--	--	Transcription factor HHO3 OS=Arabidopsis thaliana OX=3702 GN=HHO3 PE=2 SV=1	hypothetical protein LSAT_4X20080 [Lactuca sativa]
20	CHR00042388	CHR00042388	2.453141	0.972455	0.000500011	1.176257	up	K09422 1.4	--	Single myb histone 6 OS=Zea mays OX=4577 GN=SMH6 PE=2 SV=1	PREDICTED: telomere repeat-binding factor 1-like [Ipomoea nil]
21	CHR00023381	CHR00023381	6.024451	0.283617	1.20457E-15	3.808876	up	K09422 1.6	--	Transcription factor MYB13 OS=Arabidopsis thaliana OX=3702 GN=MYB13 PE=2 SV=1	transcription factor MYB14 [Helianthus annuus]
22	CHR00087144	CHR00087144	32.05018	7.260657	0.000221529	1.917297	up	K09422 1.1	MYB52	Transcription factor MYB48 OS=Arabidopsis thaliana OX=3702 GN=MYB48 PE=2 SV=1	transcription factor MYB59- like [Helianthus annuus]
23	CHR00023176	CHR00023176	7.856103	1.505526	6.14064E-06	2.165886	up	K09422 1.2	--	Transcription factor MYB2 OS=Oryza sativa subsp. japonica OX=39947 GN=MYB2 PE=2 SV=1	transcription factor MYB57- like [Helianthus annuus]
24	CHR00035021	CHR00035021	23.38325	12.03408	2.38098E-09	1.027514	up	--	--	--	uncharacterized protein LOC110867585 [Helianthus annuus]

25	CHR00036854	CHR00036854	4.166547	1.798217	9.23489E-05	1.026173	up	K09422 3.8	--	Transcription factor GAMYB OS=Oryza sativa subsp. japonica OX=39947 GN=GAMYB PE=1 SV=1	transcription factor GAMYB-like [Helianthus annuus]
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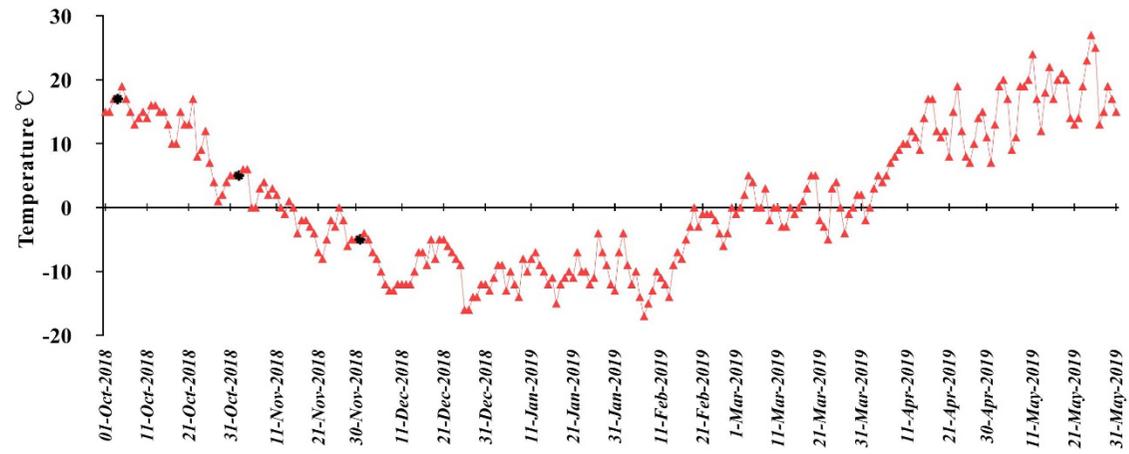


Fig. 1 Suppl. Soil average temperature in Yanji, China, in 2019. The asterisk represents the sampling date.

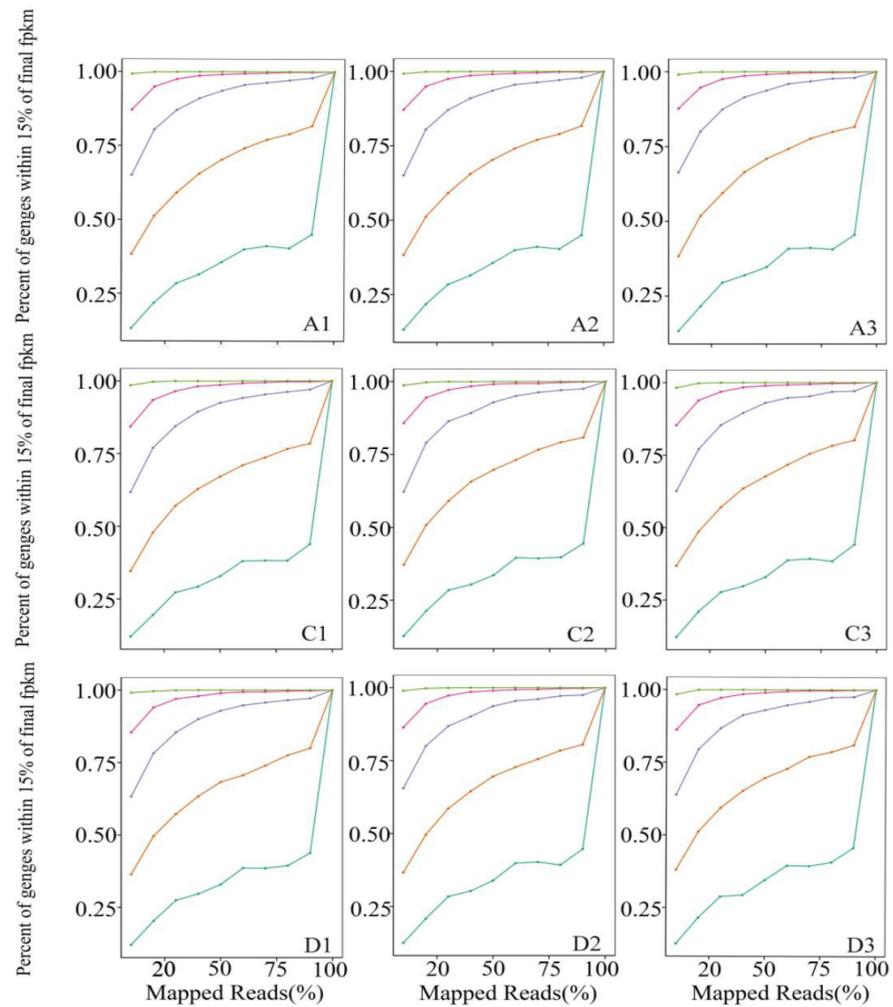


Fig. 2 Suppl. Random mRNA fragmentation, length of insert fragmentation, and sequencing data saturation in each libraries: A – chilling (5°C), C – freezing (-5°C), D – control (20°C). A1, A2, A3, C1, C2, C3, D1, D2, and D3 are three biological replicates.

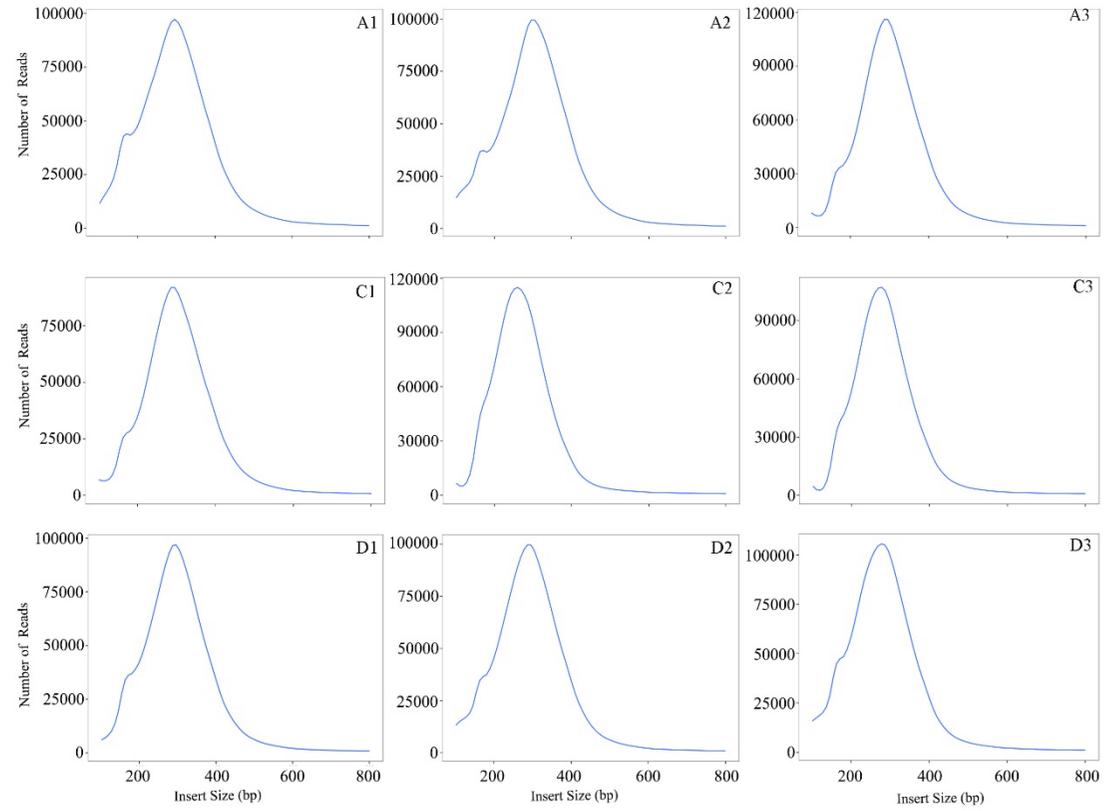


Fig. 3 Suppl. Phylogenetic relationship analysis of *MYB* gene family: A - chilling, C - freezing, D - control. A – chilling (5°C), C – freezing (-5°C), D – control (20°C). A1, A2, A3, C1, C2, C3, D1, D2, and D3 are three biological replicates.

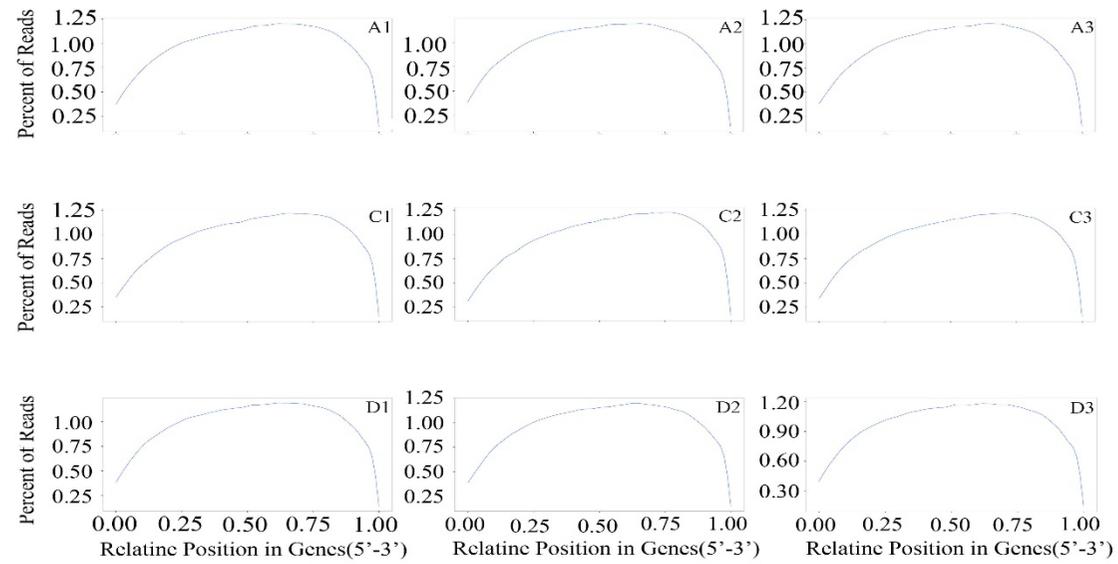


Fig. 4 Suppl. The relative expression of DREB transcription factor in low temperature: A - chilling, C - freezing, D - control. A - chilling (5°C), C - freezing (-5°C), D - control (20°C). A1, A2, A3, C1, C2, C3, D1, D2, and D3 are three biological replicates.