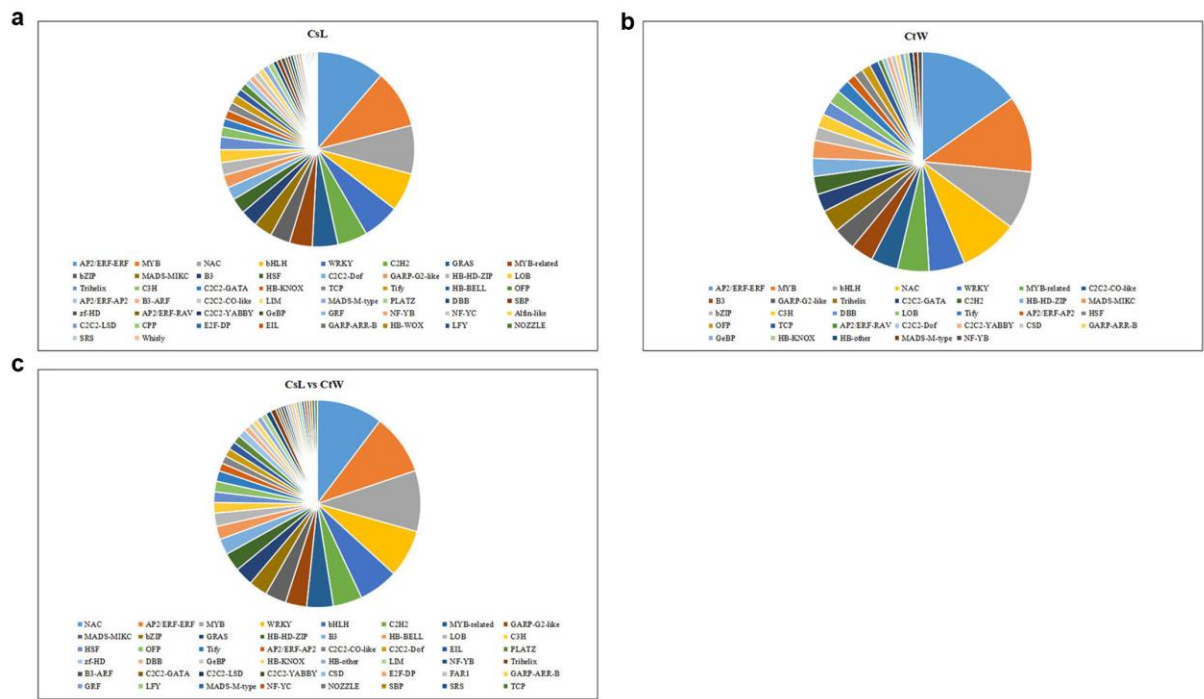


Transcriptome analysis of apricot kernel pistils reveals the mechanisms underlying ROS-mediated freezing resistance

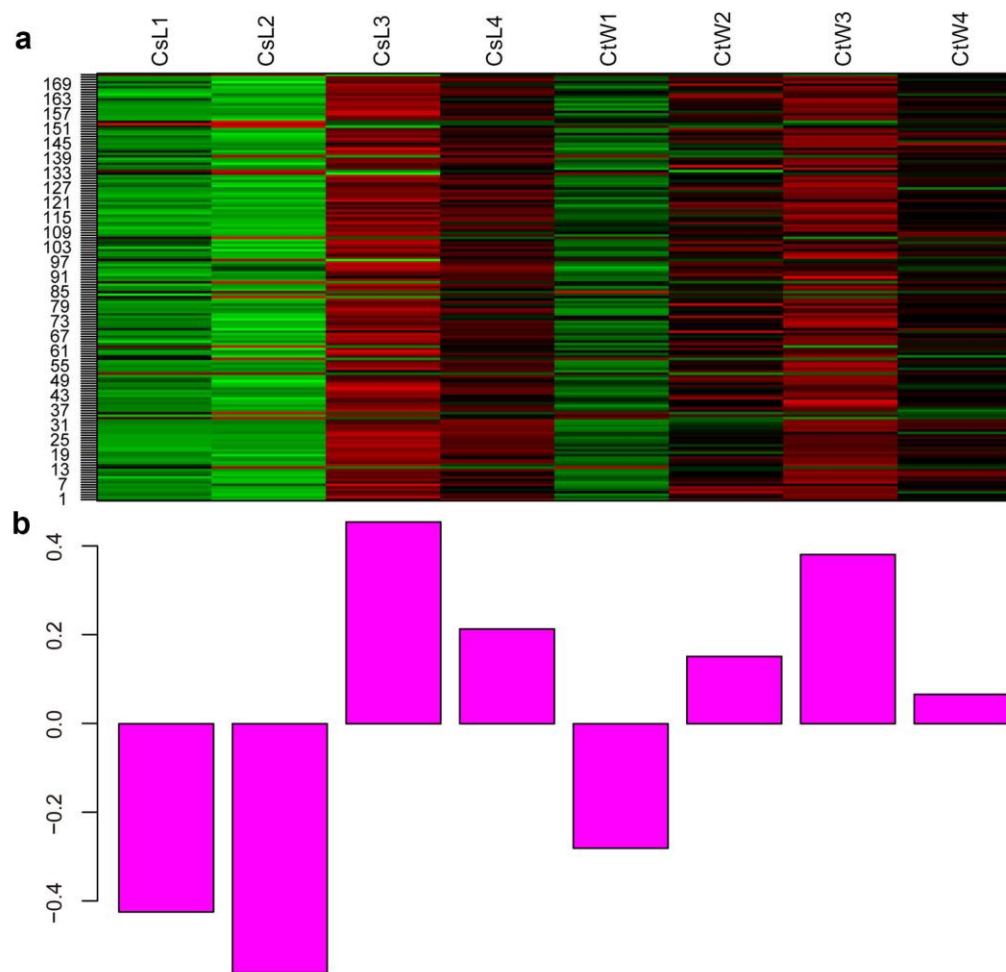
Xiaojuan Liu<sup>1</sup>, Yingying Yang<sup>1</sup>, Huihui Xu<sup>1</sup>, Dan Yu<sup>1</sup>, Quanxin Bi<sup>1</sup>, Libing Wang<sup>1\*</sup>

<sup>1</sup>: State Key Laboratory of Tree Genetics and Breeding, Research Institute of Forestry, Chinese Academy of Forestry, 100091 Beijing, China.

\*: Corresponding author: Libing Wang (Tel.:010-62888593) (E-mail address :wlibing@caf.ac.cn )



**Figure S1.** The distribution of differently expressed transcription factors families in CsL (A), CtW (B), and CsL vs. CtW (C). CtW: cold-tolerant ‘Weixuan 1’; CsL: cold-sensitive ‘Longwangmao’.



**Figure S2.** The expression analysis of DEGs in the magenta module. (a) Heatmap of DEGs in the magenta module. (b) The overall expression level of eigengenes identified in the magenta module for each sample.

**Table S1. List of primers used for qRT-PCR.**

<i>ERF109 (PARG21235)</i>	F:ACCACATTGTTGACCCAGGAAACC R:TCGCTGCTTGTCACCTTGCTCTG
<i>ZAT11 (PARG02376)</i>	F:TTCCTGATGAGGTTGTTGTGCGCTTC R:TCTCCAATGGCGTCAAGTTCAAGTC
<i>JAZ8 (PARG11889)</i>	F:CCCTGTTGCTGGCTTGTCTATGAAG R:TGGAGATGTTGCTTGAACCCTATGC
<i>PP2C25 (PARG00509)</i>	F:TGGTTTCATGTTTCATCTCCGTCGTC R:CCTCTTCTCTTCAACTGCGTCAC
<i>PUB21 (PARG14268)</i>	F:ACGACGAGGGGACGGTAGAAAG R:GACAAGCAGCAGCCAATTCCATTC
<i>bHLH35 (PARG03967)</i>	F:GGAGGAAGAAGCTCAACGAAAGGC R:GAAGCTCCTGGATGTAGTCAATGGC
<i>PBP1 (PARG10601)</i>	F:GAGCGATGATGATCTACGGTCCATG R:CCACAACCGAGACTCATCCATAAGC
<i>OPR3 (PARG27690)</i>	F:AACCAACGGCGGCTTTCTGATC R:GAACGGCATCCACCACCTTCTTC
<i>NAC090 (PARG01190)</i>	F:TGAGTACAGAGCCATTGAAG R:GAAGGAGGTGGAGAGACGAAG
<i>18S</i>	F:ACACGGGGAGGTAGTGACAA R:CCTCCAATGGATCCTCGTTA

**Table S2. The antioxidant enzyme activities in apricot kernel pistils under freezing stress.**

	Sample	SOD (U/g)	POD (U/g)	CAT (U/g)
‘Longwangmao’ (CsL)	CsL1	311.66 (c)	179.86 (e)	128.50 (e)
	CsL2	692.79 (b)	506.07 (cd)	418.13 (cd)
	CsL3	857.44 (ab)	545.00 (bc)	491.01 (ac)
	CsL4	690.96 (b)	442.18 (d)	391.87 (d)
‘Weixuan 1’ (CtW)	CtW1	292.57 (c)	156.00 (e)	147.10 (e)
	CtW2	926.84 (ab)	532.21 (bd)	432.18 (bcd)
	CtW3	1070.22 (a)	684.01 (a)	551.68 (a)
	CtW4	734.09 (b)	612.09 (ab)	511.71 (ab)

Different lowercase letters (a-e) indicate a significant difference ( $p < 0.05$ ).