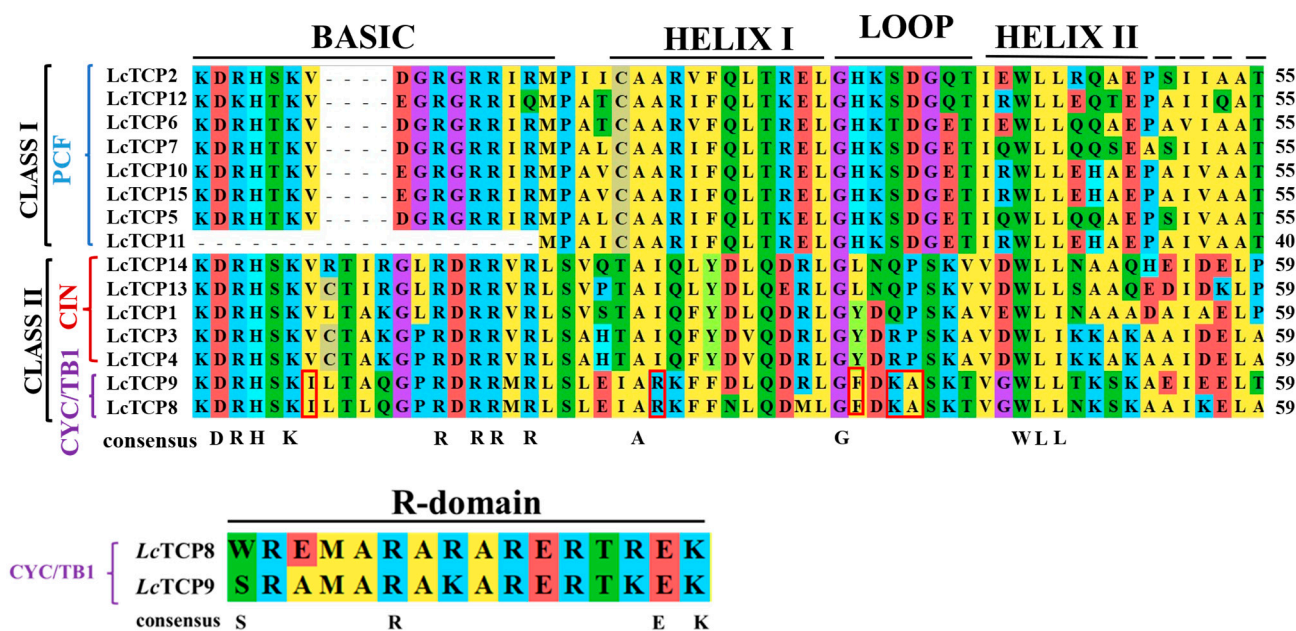


## Supplementary Material

# Comprehensive Bioinformatics and Expression Analysis of TCP Transcription Factors in *Liriodendron chinense* Reveals Putative Abiotic Stress Regulatory Roles

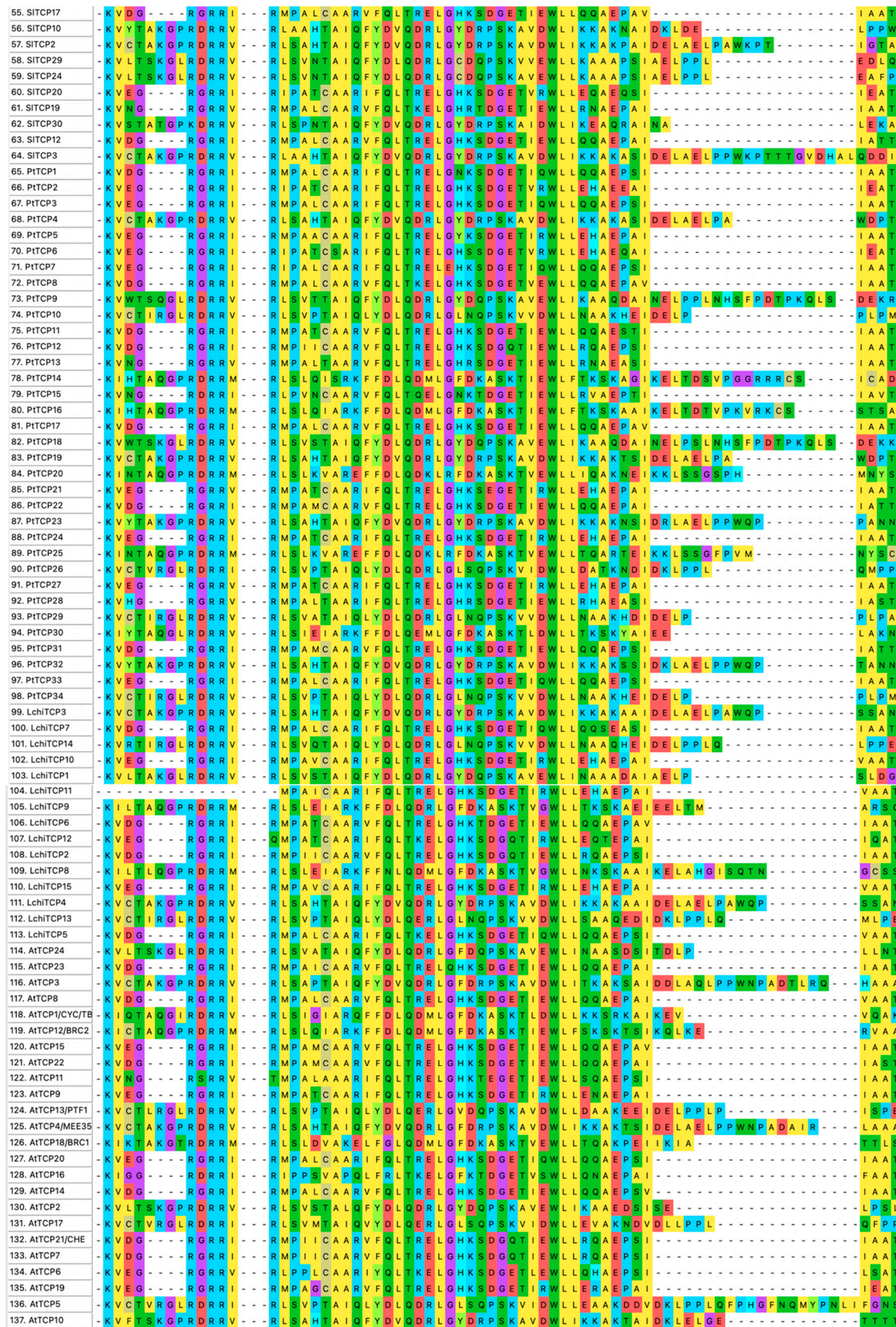
**Table S1.** List of primers used in the qRT-PCR.

Gene ID	Prime Name	Primer sequence
Lchi18883	LcTCP1.FOR	TGCTGCCGATGCTATTGCTGAG
Lchi18883	LcTCP1.REV	GCTGCTGTTGCTGTTGCTGTTG
Lchi11973	LcTCP10.FOR	AGCAGCAGTAGCGATGAAGAAGAAG
Lchi11973	LcTCP10.REV	TTGGAGGAGAAGGGCGAGAAGG
Lchi04918	LcTCP11.FOR	CGGCGAAGACGGTTCCAAGAAG
Lchi04918	LcTCP11.REV	CGAGGAAATAGACACCTGCTGCTG
Lchi13044	LcTCP12.FOR	GTGTGGATGATGCCGAGATGGATG
Lchi13044	LcTCP12.REV	TTTCTGGAGAGACGGAAGGGTAGAC
Lchi29056	LcTCP13.FOR	CCCAATCTTTTCGTCTCTCCCAAGC
Lchi29056	LcTCP13.REV	TGTCGTCGGCAACTCCCAATG
Lchi14648	LcTCP14.FOR	ACAGCAAGGTTCGCACCATAAGAG
Lchi14648	LcTCP14.REV	CGGCATTACAGCAACCAATCTACAAC
Lchi35464	LcTCP15.FOR	AGCAGCAGTAGCGATGAAGAAGAAG
Lchi35464	LcTCP15.REV	TTGGAGGAGAAGGGCGAGAAGG
Lchi01522	LcTCP2.FOR	AACGGTGCTATAACGGTAACGGAAC
Lchi01522	LcTCP2.REV	TCTTTTGCGGAGGCTTCTTAACG
Lchi09931	LcTCP3.FOR	TGGCGAGGAAGATGAGGAGGAAG
Lchi09931	LcTCP3.REV	TGGTATTGCTCGGATGCTGGAAC
Lchi33835	LcTCP4.FOR	GCCGCCGAAGAAGACCAAGAAG
Lchi33835	LcTCP4.REV	TGCTGCTGATGGTGTGGATGTTG
Lchi22568	LcTCP5.FOR	ACCCACACGGAGAGGAGATTGC
Lchi22568	LcTCP5.REV	CTCAACAGTCACGAGAGGCTTGC
Lchi14258	LcTCP6.FOR	TCAATTTCCATCAGAACGCCCTCAG
Lchi14258	LcTCP6.REV	ACGCTTCTTGTGTACCAAGTATCC
Lchi02489	LcTCP7.FOR	CTCAGATCACAGACACCAAGCCATC
Lchi02489	LcTCP7.REV	CCCGTCATCTTTCTCTGCCACAAC
Lchi13620	LcTCP8.FOR	GTCGGCGTGTCTCAACCAACTAC
Lchi13620	LcTCP8.REV	GGCTTAGCTGCTCATGATCCAAGG
Lchi22938	LcTCP9.FOR	GTGGCTGGTGATGGATGCTTCG
Lchi22938	LcTCP9.REV	AGGGAAGGTGTCGTTGAGTAGGTAC

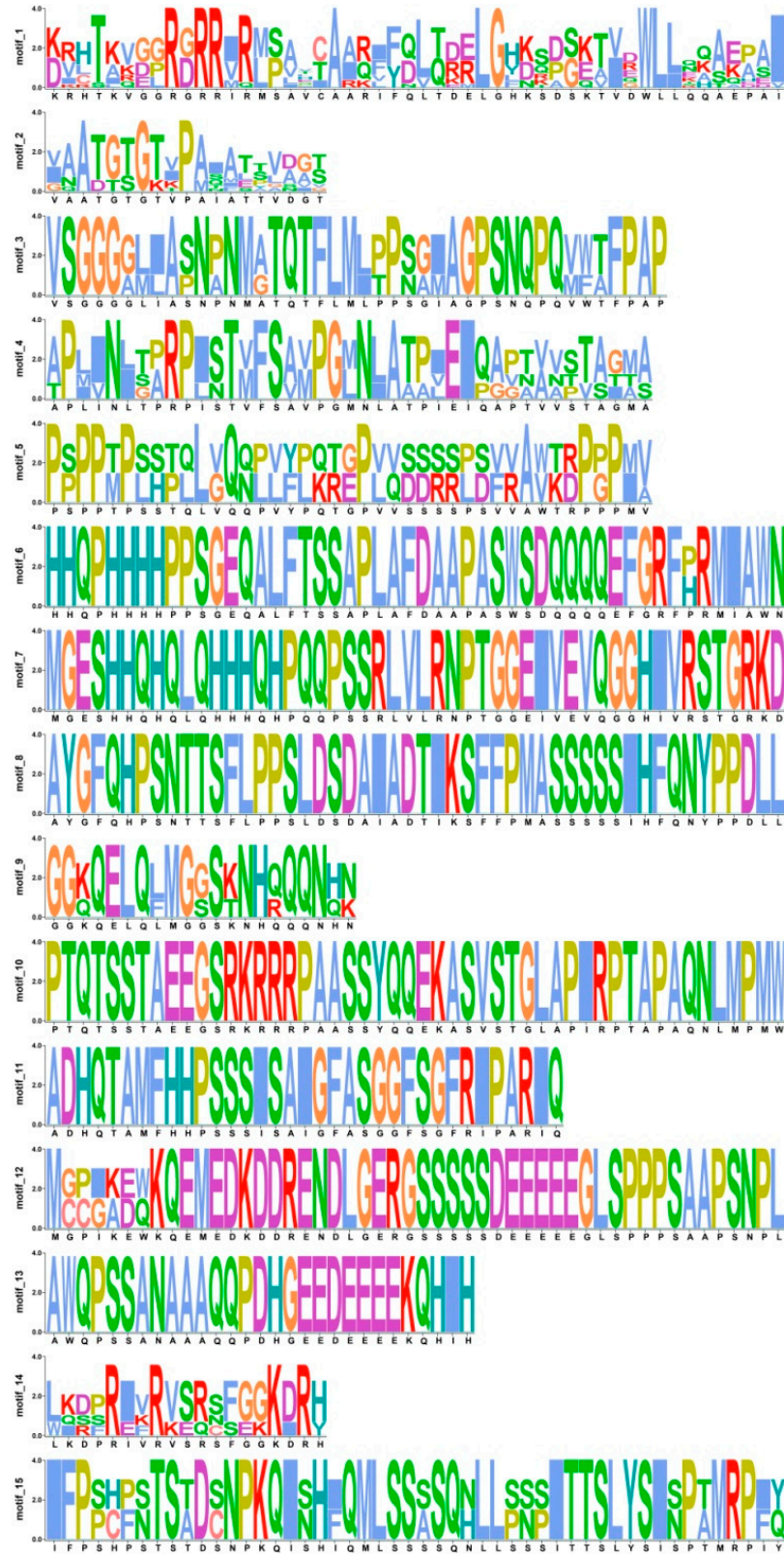


**Figure S1.** The alignment of full 15 *L. chinense* protein sequences constructed by Mega 11, different color schemes denote conserved amino acids within individual protein sequences. Classification of the identified TCPs shown in the far left described as Class I and II, showing the subfamilies PCF, CIN and CYC/TB1. Below is the R-domain in CYC/TB1 subclade, different color schemes denote the conserved amino acid consensus between the *LcTCP9* and *LcTCP8*.

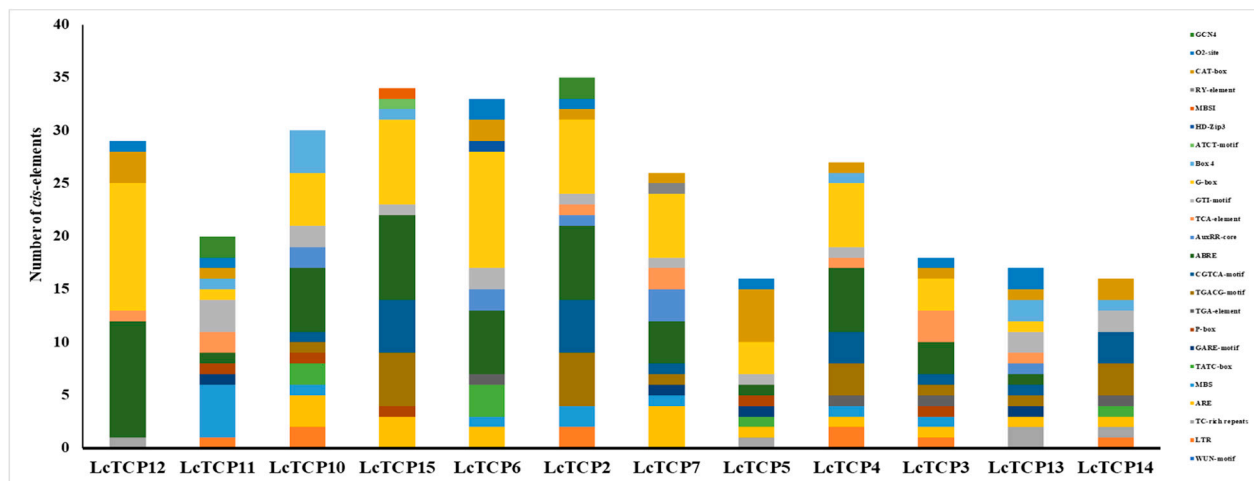
1. PtTCP1	-	K	V	D	G	-	-	-	R	G	R	R	I	-	R	M	P	A	I	C	A	A	R	I	F	Q	L	T	R	E	L	G	H	K	S	O	G	E	T	I	E	W	L	L	Q	S	E	S	I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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**Figure S2.** Multiple sequence alignment of the 137 proteins from 7 different plant species, showing the conserved TCP/bHLH domain in, *L. chinense*, *A. thaliana*, *O. sativa*, *S. lycopersicum*, *S. moellendorffii*, *P. trichorpa*, and *P. patens*. Different color schemes depict conserved amino sequences within different protein sequences.



**Figure S3.** *LcTCP* motif domain arrangement, colorful letters represent different amino acid conserved in the motif .



**Figure S4.** Summary of the *cis*-regulatory elements representation in different LcTCP proteins.