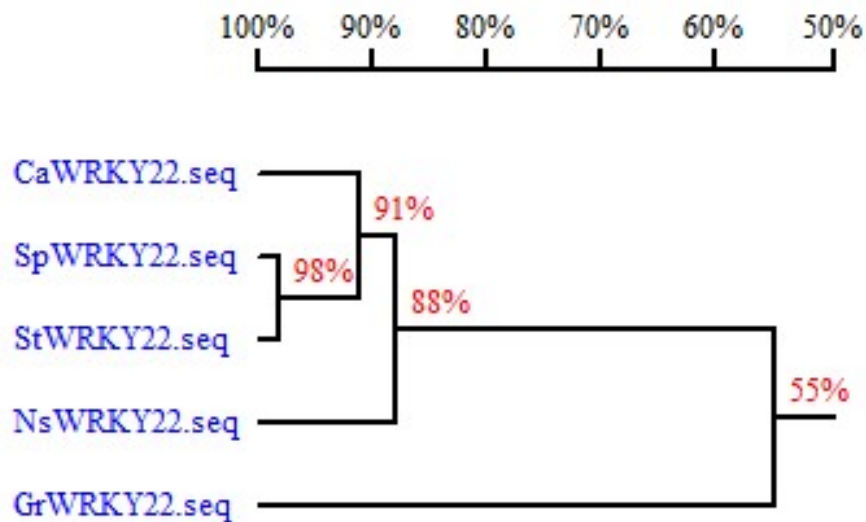


Supplementary Figure 1. Promoter *cis*-elements analysis of *CaWRKY22*

TCA-element: SA-relative element; TGACG-motif: MeJA-relative element; HSE: heat shock element; W-Box1, W-Box2: transcription factor WRKY binding element.



Supplementary Figure 2. Dendrogram presenting amino acid similarity of *CaWRKY22* and WRKYs from other species

CaWRKY22 shares 91%, 91%, 88% and 55% amino acid identities to *SpWRKY22*, *StWRKY22*, *NsWRKY22* and *GrWRKY22* respectively.

Supplementary Table 1

Pepper primers used for vectors construction in this study

Gene	Forward primer (5'-3')	Reverse primer (3'-5')	Bps
CaWRKY22 ¹	GGGGACAAGTTTGTACAAAAAAGCAGGC TTC ATGGAGGAAGATTGGGATCT	GGGGACCACTTTGTACAAGAAAGCTGGGT CTCAAACACCGCCAGCTGCGG	1122
CaWRKY22 ²	GGGACAAGTTTGTACAAAAAAGCAGGC GAGGCTGCACAGCTAGTTCCAC	GACCACTTTGTACAAGAAAGCTGGGTCGT CCACCAAGAACAGAGAGGGG	308
WRKY22 ³	GGGGACAAGTTTGTACAAAAAAGCAGGC TTC ATGGAGGAAGATTGGGATCT	GACCACTTTGTACAAGAAAGCTGGGTCAAC CCGCCAGCTGCGGTGG	1119

¹Primers for full length cloning of *CaWRKY22*

²Primers for construction of TRV::*CaWRKY22* vector

³Primers for construction of 35S::*CaWRKY22-GFP*

Supplementary Table 2

Primers used in Real time RT PCR analyses for this study

Gene	Accession number	Forward primers (5'-3')	Reverse primers(3'-5')
<i>CaWRKY22</i>	CA08g07730	GAGGCTGCACAGCTAGTTCCAC	CACCAAGAACAGAGAGGGG
<i>CaWRKY40</i>	AAX20040.1	AACTTGGATGTTGTGCCTGGA	CTGTAACCTTGGCTTTTATGTGC
<i>CaHIR1</i>	AY529867	GACAAAGCTAATGAAGCATTCTAC	GGTGTGCAAGTACTGGGTTACC
<i>CaPR4</i>	AF244122.1	CAACCCGCAGAACATCAACTGG	CCTCAAGCATCTACCGCAAGCA
<i>CaActin</i>	GQ339766	AGGGATGGGTCAAAGGATGC	GAGACAACACCGCCTGAATAGC
<i>18srRNA</i>	EF564281	CCGGTCCGCCTATGGTGTGCACCGGTCGTC	GCAGTTGTTTCGTCTTTCATAAATCCAAGAA
<i>CaDEF1</i>	AF442388	GTGAGGAAGAAGTTGAAAGA AAGTAC	TGCACAGCACTATCATTGCATAC AATTC
<i>CaACCoxidase</i>	AB434925.1	CCATTGTGGTCAACCTTGGC	GCATCGCTTCCTGGATTGTAA
<i>CaPO2</i>	DQ489711	GCCTATGCATTAATGTTGCAAA G	AGGCAGCATAACGAAGAATT
<i>CaBPRI</i>	AF053343	CAGGATGCAACACTCTGGTGG	ATCAAAGGCCGTTGGTC

¹Specific primers to detect relative expression of *CaWRKY22* designed according to the sequence in

3'UTR Specific primers for marker genes

Supplementary Table3

Pepper Primers Used for ChIP-PCR in This Study

Gene	Forward primers (5'-3')	Reverse primers(3'-5')
<i>CaWRKY22</i> 1W -p	TCATTTCTCGTCAAATAGAGTA	GCTGAATGGTGAGATAGTGGTA
<i>CaWRKY22</i> 2W -p	GAAACCAGCCAAATCACAAACA	GTTGACCTTC TTAGGGGATA GA
<i>CaWRKY40</i> 8/9W-p	CAAAAGTAGTTTCTGTTTCCAT	AGAGGCTCATCTGGGTGAATT
<i>pCaPRI</i> 1W-box	AGCTCCATCCCAAACCAACC	TGGTGTTGGGTCTGTGAGGC
<i>pCaDEF1</i> 1W-box	AATCAGTGCCGACTGTGGGG	GCGCACCTCGGCGCTGAGCT
<i>CaWRKY-22</i> OUTSIDE	AAATGGAACGGAGGGAGTAGTA	TTGGACCTTTTCTTTTATGGGT