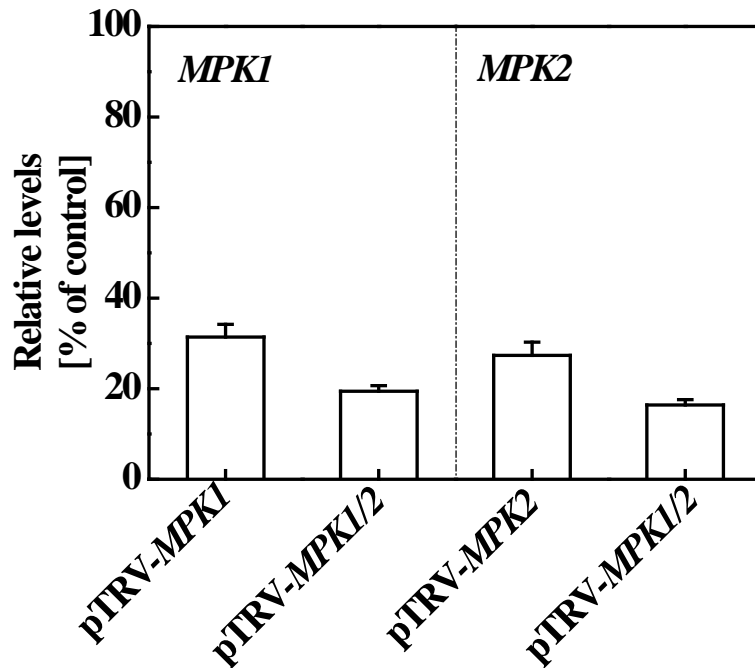


## SUPPLEMENTARY DATA

### Supplementary Figure S1

A



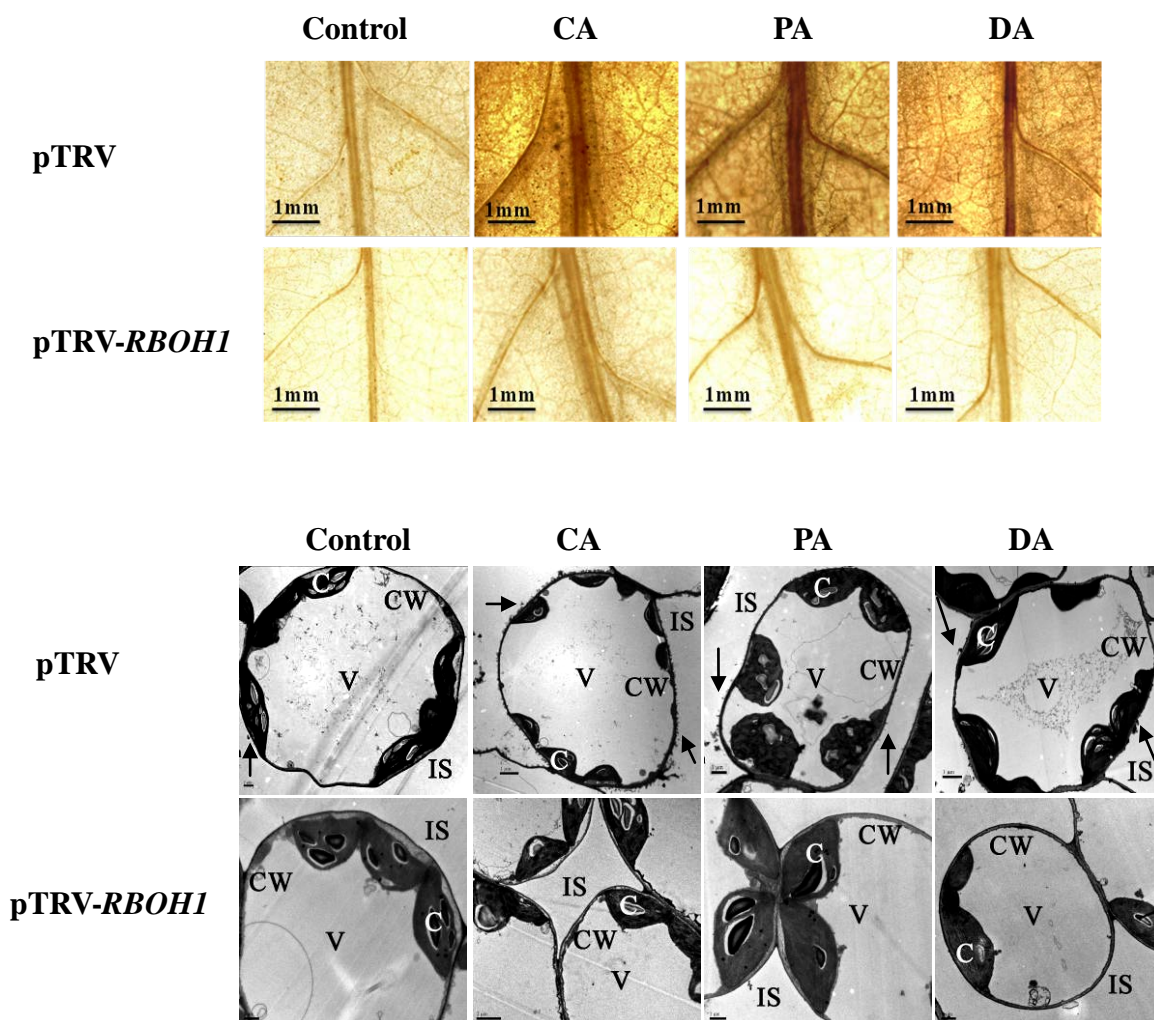
B



pTRV      pTRV-MPK1      pTRV-MPK2      pTRV-MPK1/2      pTRV-PDS

**Figure S1.** Relative mRNA abundance of *MPK1* and *MPK2* in VIGS plants (A) and the phenotypes of VIGS plants (B). The expression of *MPK1* and *MPK2* were analyzed at 30 d after *Agrobacterium*-infection. Data are the means of the 5<sup>th</sup> leaf of six silenced plants ( $\pm$ SD). The levels were expressed as percentages of the mean levels in control pTRV plants which were defined as 100%. The bleaching of the pTRV-*PDS* (phytoene desaturase) plants was used to monitor the progress of gene silencing.

Supplementary Figure S2.



**Figure S2.** Cross-acclimation induced ROS accumulation in pTRV and pTRV-RBOH1 plants

A, The *in situ* detection of H<sub>2</sub>O<sub>2</sub> in leaves. The leaf segments were loaded with DAB and incubated for 6 h. The H<sub>2</sub>O<sub>2</sub> accumulation was detected by microscope. Bar = 1.0 mm.

B, The cytochemical localization of H<sub>2</sub>O<sub>2</sub> accumulated in the mesophyll cells of leaves detected with CeCl<sub>3</sub> staining and transmission electron microscopy. Arrows, CeCl<sub>3</sub> precipitates; C, chloroplast; CW, cell wall; V, vacuole; IS, intercellular space.

Control, non acclimation; CA, cold acclimation; PA, paraquat acclimation; DA, drought acclimation.

**Supplementary Table S1.** Primers for qRT-PCR.

Gene	Accession Numbers	Forward primer	Reverse primer
<i>RBOH1</i>	S108g081690	5'-GGAGCTCCAGCACAAAGATTA-3'	5'-CTTGTTGCAGCACTCATGTC-3'
<i>MPK1</i>	S112g019460	5'- GCTGACAGATTGTTGCAGGT -3'	5'- TCCACCCCATAAAGATACATCA -3'
<i>MPK2</i>	S108g014420	5'- TACTCGCTCGTTTGCTGTTG -3'	5'- TTGGAGTACAGGAAAACAATGG -3'
<i>NPR1</i>	S107g040690	5'- GATAGCAACACGAAGCTGGA -3'	5'- GGCCTACAAGCTACATGCAA -3'
<i>NPR1.1</i>	S107g044980	5'- TGGACATACAGCCCTATCCA -3'	5'- AGCCGATCTTGGAGTCTTT -3'
<i>PR1</i>	S101g106600	5'- CGTGCAGGCAGTTAATTTGT -3'	5'- CACAAACCACCATTCACCAT -3'
<i>Fe-SOD</i>	S106g048410	5'- TAAATAGAGACTTTGGTTCC -3'	5'- TATATTTGCCTCTTAACCCT -3'
<i>Cu/Zn-SOD</i>	S111g066390	5'- GGCCAATCTTTGACCCTTTA -3'	5'- AGTCCAGGAGCAAGTCCAGT -3'
<i>cAPX</i>	S106g005160	5'- TCTGAATTGGGATTTGCTGA -3'	5'- CGTCTAACGTAGCTGCCAAA -3'
<i>GRI</i>	S109g091840	5'- TTGGTGGAACGTGTGTTCTT -3'	5'- TCTCATTCACCTCCCATCCA -3'
<i>CAT1</i>	S112g094620	5'- TGATCGCGAGAAGATACCTG -3'	5'-CTTCCACGTTTCATGGACAAC-3'
<i>Actin</i>	S111g005330	5'- TGTCCCTATTTACGAGGGTTATGC -3'	5'- CAGTTAAATCACGACCAGCAAGAT -3'