

Figure S1. Verification of *CbCN*-overexpression transgenic plant lines. Expression of *CbCN* was analysis at *CbCN^{OX}* and wild-type tobacco plants by RT-PCR. NbActin served as a control.

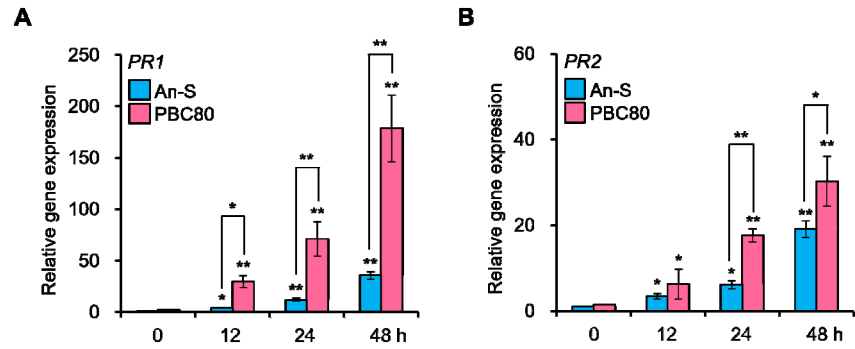


Figure S2. Expression analysis of *PR1* and *PR2* after *C. acutatum* inoculation. (A,B) Expression levels of *PR1* (A) and *PR2* (B) were measured after *C. acutatum* inoculation for the indicated times using RT-qPCR. Actin served as a control. Values represent means \pm SDs. Asterisks indicate values statistically different from An-S at 0 hour and between pepper varieties within same timepoint (* $P < 0.05$ and ** $P < 0.01$). All experiments were repeated at least three times, and they generated similar results.

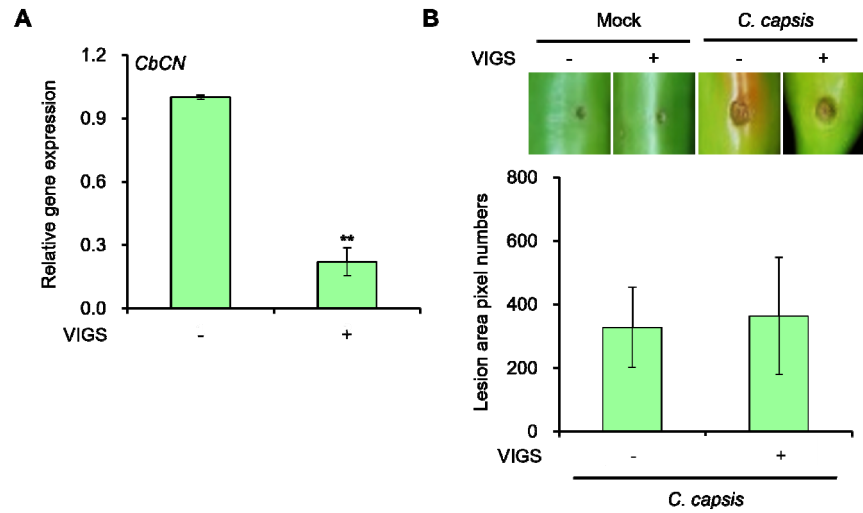


Figure S3. Analysis of the *CbCN*-silencing efficiency and disease resistance to *C. capsici* in *CbCN* knockdown pepper fruits. (A) Relative transcript levels of *CbCN* in *CbCN*-silenced pepper fruits and control. Relative *CbCN* transcript levels were determined by RT-qPCR. Actin served as a control. Values represent means \pm SDs. Asterisks indicate values statistically different from controls (** $P < 0.01$). (B) Pathogen susceptibility assays of VIGS-mediated *CbCN*-silenced pepper fruits after *C. capsici* inoculation. Pepper fruits of *CbCN*-silenced and wild-type plants were inoculated with *C. capsici* or mock inoculations. Images were captured after 6 days, and quantitative measurements of the disease area were obtained using the image-based plant disease phenotyping method. Values are expressed as means \pm SDs. All experiments were repeated at least three times, and they generated similar results.

Gene	Primer sequence	Purpose
<i>CbCN</i>	F: AAAAAGCAGGCTAAATGGCTCATGCAAGTGTGG	Cloning
	R: AGAAAGCTGGGTATCAACGGACGATGTACAA	Cloning
	R: AGAAAGCTGGGTAAACGGACGATGTACAAGGG	Cloning
	F: TCTAGAATGGCTCATGCAAGTGTC	VIGS
	R: GGTACCAACTTCAGTTACGCTTAGTT	VIGS
	F: GCCTGGGCTACTATTTGCA	qRT-PCR
	R: CATAGTCTCAGGCATCCCA	qRT-PCR
	F: GAGGACAACGTCCTATGGT	qRT-PCR
<i>PR1</i>	R: AACTCCAGTTACTGCACCATTA	qRT-PCR
<i>PR2</i>	F: CTACTTAAGCTTTGCAAGCACCA	qRT-PCR
	R: AGATCTCTTTCCTCATCGTCACTT	qRT-PCR
<i>NPR1</i>	F: TGAACAGGATTCAATAGAAGTGGA	qRT-PCR
	R: AAATCCAGCTCAAGTACCTCATTC	qRT-PCR
<i>ACT</i>	F: GTGCTGAGAGATTCCGTTGC	qRT-PCR
	R: ATGGTTGAGCCACCACTGAG	qRT-PCR
<i>NbPR1</i>	F: GTGCCCCAAATTCTCAACAAGACT	qRT-PCR
	R: AAATCGCCACTTCCCTCAGC	qRT-PCR
<i>NbPR2</i>	F: CAACATAACCTTCCACTCTTAGCCA	qRT-PCR
	R: CATAGAATCCAAAAGGGCATCAAAAAGA	qRT-PCR
<i>NbACT</i>	F: CCCAGATGGGCAGGTGATCA	qRT-PCR
	R: GAGTTGTATGTGGTCTCGTGGATTC	qRT-PCR

Table S1. List of primers used in this study.