

Supplemental materials

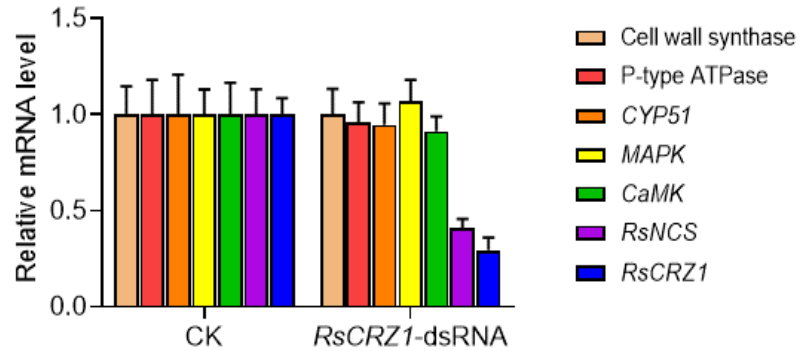


Figure S1. Expression levels of *RsCRZ1* and its downstream genes in *R. solani* after co-incubation with *RsCRZ1*-dsRNA. RT-qPCR were performed to detect RNA levels for *RsCRZ1* and downstream genes, such as cell wall synthase gene, P-type ATPase gene, *CYP51*, *MAPK*, *CaMK* and *RsNCS*, in *R. solani* which was co-incubated with *RsCRZ1*-dsRNA for 48 hours.

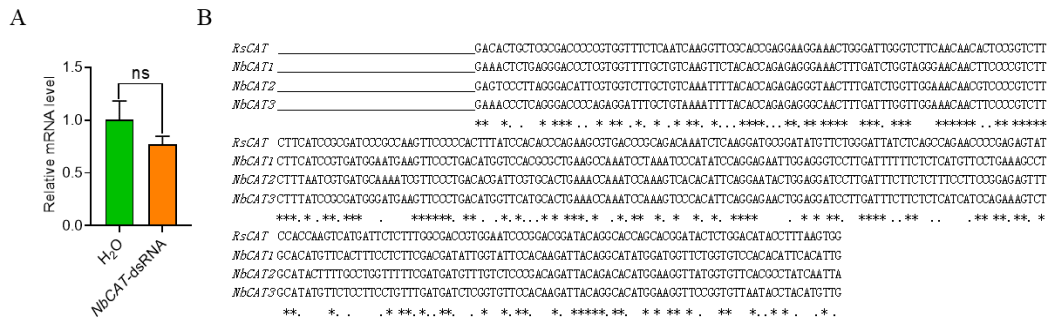


Figure S2. Expression levels of *NbCAT* genes in tobacco sprayed with *RsCAT*-dsRNA and their homologies with *RsCAT*. (A) Expression levels of *NbCAT1*, *NbCAT2* and *NbCAT3* in tobacco 48 h after spraying with *RsCAT*-dsRNA. ns, no significant differences (B) Sequences comparison of *RsCAT*, *NbCAT1*, *NbCAT2* and *NbCAT3*. * indicates identical nucleotide.

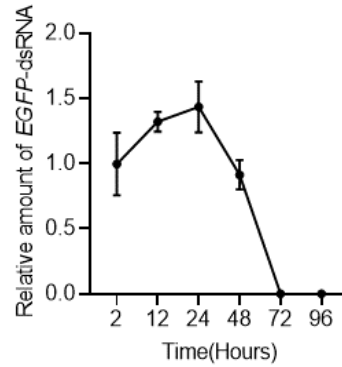


Figure S3. Detection of exogenous EGFP-dsRNA in the maize leaves at the different times after spray. EGFP-dsRNA in RNA samples collected at different time points was detected by RT-qPCR.

Table S1. Primers used to product dsRNA targeting different genes.

Name	Sequence (5' → 3')
<i>EGFP</i> -dsF	cacatgaagcagcagcactt
<i>EGFP</i> -dsR	gttcaccttgatgccgttctt
<i>EGFP</i> -dsT7F	taatacgactcactatagggcacatgaagcagcagcactt
<i>EGFP</i> -dsT7R	taatacgactcactataggggttcaccttgatgccgttctt
<i>RsCAT</i> -dsF	gacactgctcgcgaccc
<i>RsCAT</i> -dsR	ccacttaaaggatgtccagagt
<i>RsCAT</i> -dsT7F	taatacgactcactataggggacactgctcgcgaccc
<i>RsCAT</i> -dsT7R	taatacgactcactatagggccacttaaaggatgtccagagt
<i>RsCRZ1</i> -dsF	gctcgttctgtcggagatg
<i>RsCRZ1</i> -dsR	ctcatgtcgcttgagtcagtc
<i>RsCRZ1</i> -T7dsF	taatacgactcactataggggctcgttctgtcggagatg
<i>RsCRZ1</i> -T7dsR	taatacgactcactatagggctcatgtcgcttgagtcagtc
<i>RsPG1</i> -dsF	cgggaaagggtatcacattcaa
<i>RsPG1</i> -dsR	ggttcgagatgctgtaggtatg
<i>RsPG1</i> -dsT7F	taatacgactcactatagggcgaggaaagggtatcacattcaa
<i>RsPG1</i> -dsT7R	taatacgactcactataggggggttcgagatgctgtaggtatg

Table S2. Primers used to qRT-PCR detection.

q <i>EGFP</i> -R	ccgaccactaccagcagaacac
q <i>EGFP</i> -R	tcacgaactccagcaggaccat
q <i>RsCAT</i> -F	ccacattgacctctcgctcac
q <i>RsCAT</i> -R	gatggcagcacggcagatgtt
q <i>RsCRZI</i> -F	tctcggtcaaacgggtctctc
q <i>RsCRZI</i> -R	ttccgctccctgttcgctcat
q <i>RsGAPDH</i> -F	tgttggtggcgtgaacttgattc
q <i>RsGAPDH</i> -R	gcaccgtagtcatcaaaccctca
q <i>RsNCS</i> -F	cgaggaagccgaatacagagagc
q <i>RsNCS</i> -R	actgcatcgagcgaacagagga
q <i>RsPGIF</i>	ggatggtcagggcggtaatgga
q <i>RsPGIR</i>	tgtaggtatgtgcgggcgagtt
q <i>ZmUBQ9</i> -F	tgcggtgcgggtgtcttcat
q <i>ZmUBQ9</i> -R	tgcttgataggtaggcgggtga