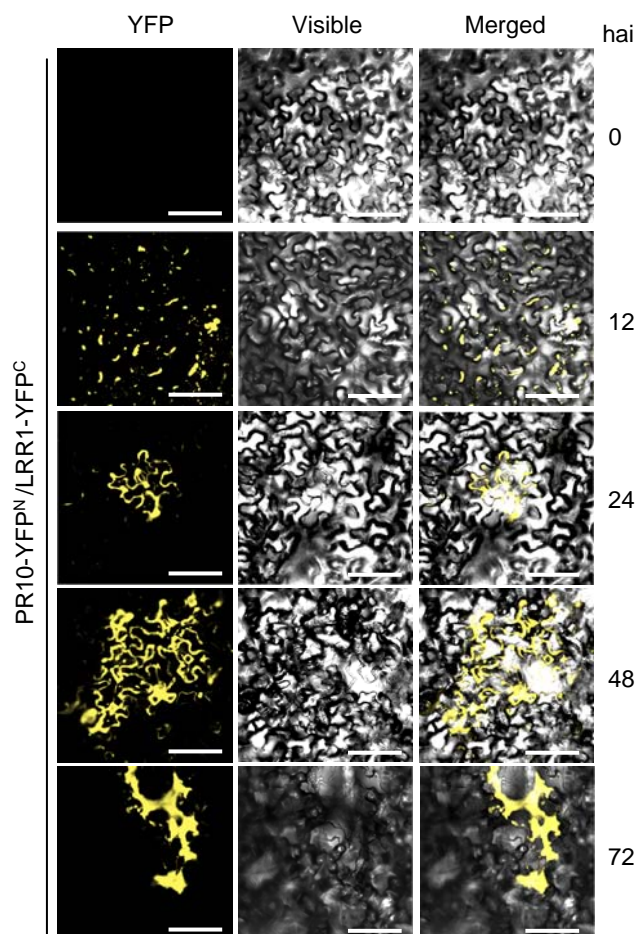


Supplemental Figure 1. Expression Patterns of *PR10* in Pepper Leaves Infected with *Xanthomonas campestris pv. vesicatoria* (*Xcv*).

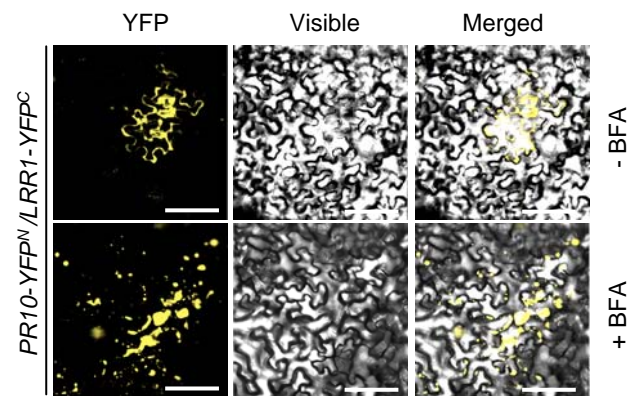
(A) Induction of *LRR1* and *PR10* in leaf tissues at various time points after inoculation with virulent (compatible) strain Ds1 and avirulent (incompatible) strain Bv5-4a of *Xcv*. *LRR1*- and *PR10*-specific probes were labeled with α -[32 P] dCTP. Equal loading (20 μ g) was verified by visualizing rRNA on a gel stained with ethidium bromide. H, healthy leaves; Mock, MgCl₂ infiltration.

(B) Immunoblot analysis of *LRR1* and *PR10* expression in pepper leaf tissues at various time points after inoculation with *Xcv* virulent (compatible) strain Ds1 and avirulent (incompatible) strain Bv5-4a. Total proteins were extracted and immunoblotted using *LRR1*- and *PR10*-specific antibodies to detect the protein expression levels. H, healthy leaves; CBB, Coomassie brilliant blue staining of the gel to show equal loading.

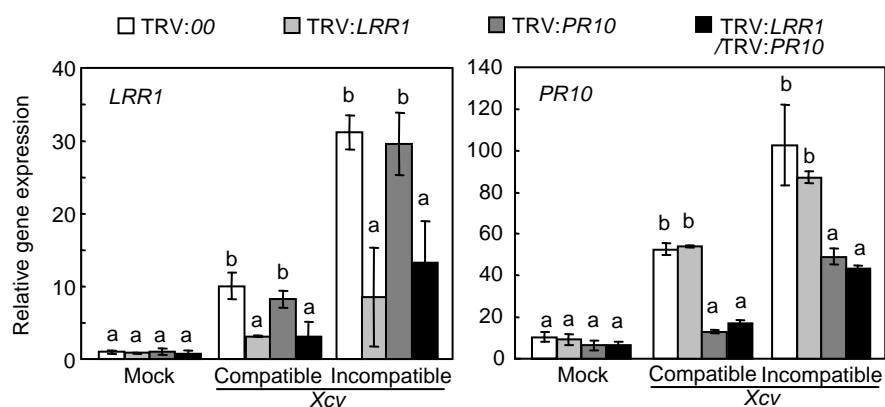


Supplemental Figure 2. LRR1 and PR10 Interact in the Cytoplasm and Are Released into the Apoplast.

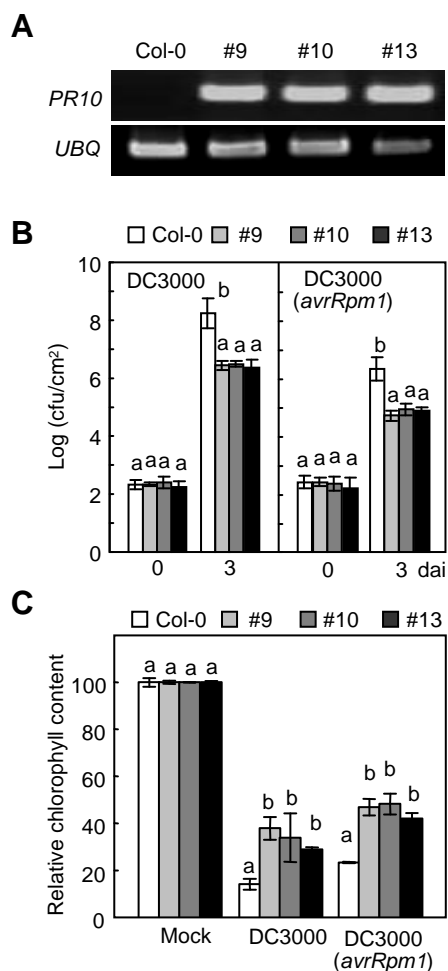
Bimolecular fluorescence complementation (BiFC) was used to visualize the LRR10/PR10 interaction in *Nicotiana benthamiana* leaves infiltrated with *Agrobacterium*. Yellow fluorescence, visible light and merged images were taken of epidermal cells infiltrated with a mixture of *Agrobacterium* suspensions harboring the constructs encoding LRR1-YFP^C and PR10-YFP^N fusion proteins. Time course images were obtained by a confocal microscopy after *Agro*-infiltration. Bars=100 μm.



Supplemental Figure 3. Localization of the LRR1 and PR10 Complex in *Nicotiana benthamiana* Leaves Treated with BFA ($10 \mu\text{g mL}^{-1}$), an Inhibitor of Secretion, 24 h after *Agro*-infiltration. BiFC images were obtained by a confocal microscopy. Yellow fluorescence, visible light and merged images were taken of epidermal cells infiltrated with a mixture of *Agrobacterium* suspensions harboring the constructs encoding the LRR1-YFP^C and PR10-YFP^N fusion proteins. Bars=100 μm .



Supplemental Figure 4. Quantitative Real-Time RT-PCR Analysis of the Expression of *LRR1* and/or *PR10* in the Empty Vector Control (TRV:00) and VIGS Pepper Leaves 24 h after Inoculation with Virulent (compatible) Strain Ds1 and Avirulent (incompatible) Strain Bv5-4a of *Xanthomonas campestris* pv. *vesicatoria* (Xcv). Expression values are normalized by the expression level of *ACTIN*. Data represent the means \pm standard deviations from three independent experiments. Different letters indicate significant differences, as statistically analyzed by Fisher's protected least significant difference (LSD) test ($P < 0.05$). Mock, treated with 10 mM MgCl₂.

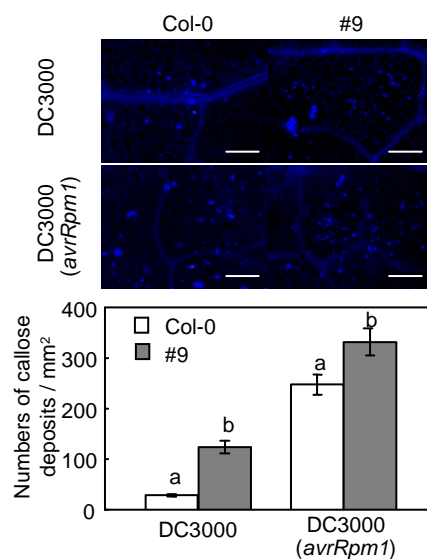


Supplemental Figure 5. Enhanced Resistance of *PR10*-OX Transgenic *Arabidopsis* Lines to Infection by *Pseudomonas syringae* pv. *tomato* (*Pst*).

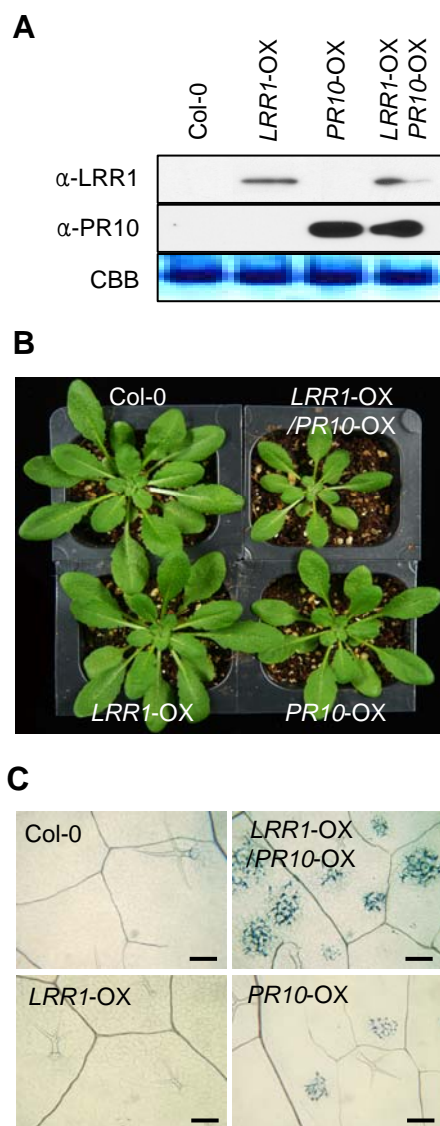
(A) RT-PCR analysis of the expression of the *PR10* gene in the leaves of the wild type (WT) and three transgenic lines.

(B) Bacterial growth and (C) chlorophyll content in the leaves of the wild-type and transgenic plants infected by *Pst* DC3000 and *Pst* DC3000 (*avrRpm1*) (5×10^4 cfu mL⁻¹).

(A-C) Data represent the means \pm standard deviations from three independent experiments. Different letters indicate significant differences, as analyzed by Fisher's protected least significant difference (LSD) test ($P < 0.05$).



Supplemental Figure 6. PR10 Contributes to Basal Resistance by Callose Deposition. Callose deposition (bright blue dots) and numbers of callose deposits in wild-type and transgenic plant leaves stained with aniline blue, as observed by fluorescence microscopy. Data represent the means \pm standard deviations from three leaves of each plant in three independent experiments. Different letters above the bars indicate significantly different means ($P < 0.05$), as statistically analyzed by Fisher's protected least significant difference (LSD) test.

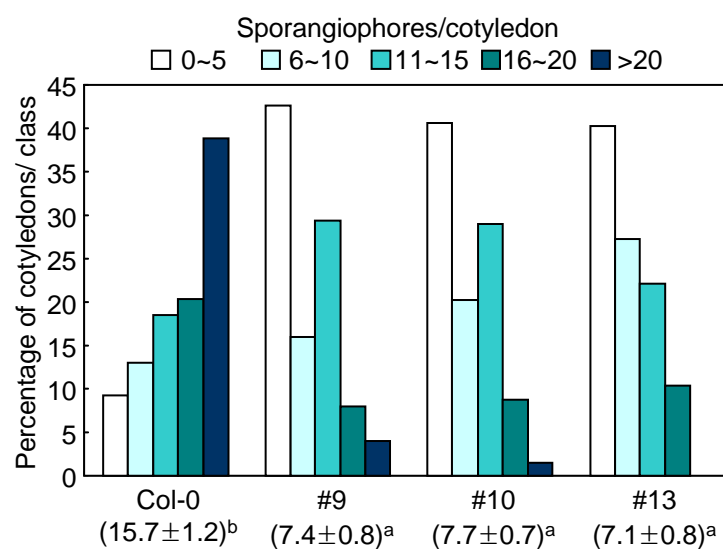


Supplemental Figure 7. Transgenic *Arabidopsis* Plants Overexpressing *LRR1* and/or *PR10*.

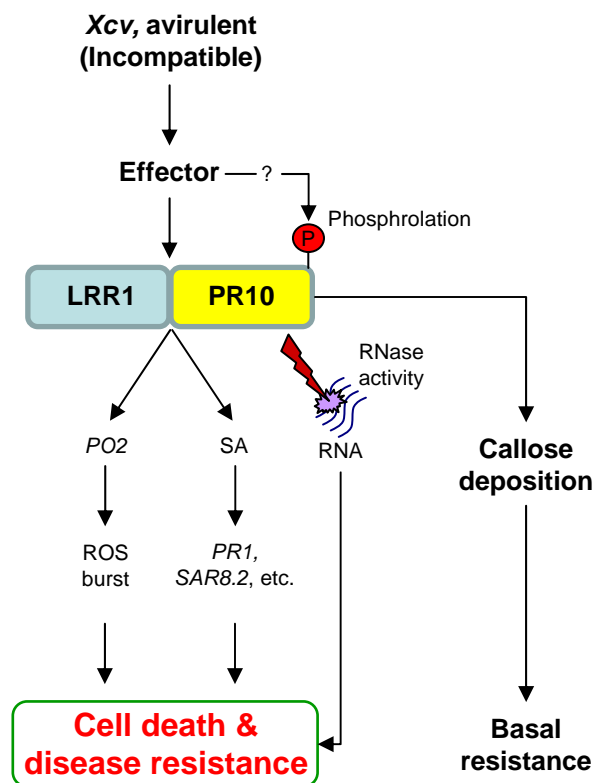
(A) Immunoblot analysis of PR10 and LRR1 expression in wild-type (WT) and transgenic plants. Gene-specific antibodies were used for the detection of PR10 and LRR1. CBB, Coomassie brilliant blue staining of the gels to verify equal loading.

(B) Growth phenotypes of 5-week-old wild-type and transgenic *Arabidopsis* plants.

(C) Spontaneous cell death response in *LRR1-/PR10-OX* leaf tissues, as detected by trypan blue staining. Bars=200 μ m.



Supplemental Figure 8. Enhanced Resistance of *PR10-OX* Transgenic *Arabidopsis* Lines to Infection by *Hyaloperonospora arabidopsidis*. Quantification of asexual sporangiophores on 50 cotyledons 7 days after inoculation. The number below each line represents the mean of sporangiophores/cotyledon, as classified into five groups: 0 ~ 5, 6 ~ 10, 11 ~ 15, 16 ~ 20, and > 20. Data represent the means ± standard deviations from three independent experiments. Different letters indicate significant differences, as analyzed by Fisher's protected least significant difference (LSD) test ($P < 0.05$).



Supplemental Figure 9. Proposed Model for the Role of the PR10 and LRR1 Complex in Cell Death-Mediating Defense Signaling in Plants.

Supplemental Table 1. Gene-Specific Primers for qRT-PCR Used in This Study

Gene	Forward and reverse primer
<i>LRR1</i>	F:5'-ATGAGGTTTCATTGCCCTGG-3' R:5'-CTAGGCTTTCATGTCTTGGAC-3'
<i>PR10</i>	F:5'-ATGGGTGCTTATACCTTTACTGAC-3' R:5'-TTAAACATAGACAGAAGGATTGG-3'
Ca <i>PR1</i>	F:5'-CAGGATGCAACACTCTGGTGG-3' R:5'-ATCAAAGGCCGGTTGGTC-3'
Ca <i>DEF1</i>	F:5'-CAAGGGAGTATGTGCTAGTGAGAC-3' R:5'-TGCACAGCACTATCATTGCATAC-3'
Ca <i>SAR82</i>	F:5'-CAGGGAGATGAATTCTGAGGC-3' R:5'-CATATGAACCTCTATGGATTTCTG-3'
Ca <i>PO2</i>	F:5'-ATGGCAGAGAAAACCACCAGCA-3' R:5'-TCAAAAAAAAAAGTGACCTCCTTTCTGT-3'
Ca <i>ACT</i>	F:5'-TTGGA CTCTGGTGATGGTGTG-3' R:5'-AACATGGTTGAGCCACCACTG-3'
Nb <i>VPE1a</i>	F:5'-CAGGCCGACGTGTGCCACGCG-3' R:5'-GGCGTCGCTTTGGTTGATAGCCTGTTG-3'
Nb <i>HSR203J</i>	F:5'-GAGCCCTGGCTCAACAATTA-3' R:5'-CATATGAACCTCTATGGATTTCTG-3'
Nb β - <i>TUB</i>	F:5'-GGAGTTTACCGAGGCTGAAAG-3' R:5'-CCTCCTGAGCTTCTCTTCAT-3'
At <i>PR1</i>	F:5'-GGAGCTACGCAGAACAATA-3' R:5'-AGTATGGCTTCTCGTTCACA-3'
At <i>SAG13</i>	F:5'-CTCTTGTGACCAACGAGTGA-3' R:5'-TCATTTGCTTCTCCAACACG-3'
At <i>RbohD</i>	F:5'-AACGGCCTCTTACTCTCTGCCAAGT-3' R:5'-TCATTTGCTTCTCCAACACG-3'
At <i>ACTIN2</i>	F:5'-AAGCTCTCCTTTGTTGCTGTT-3' R:5'-GACTTCTGGGCATCTGAATCT-3'

Supplemental Table 2. Primers for Generation of Various Gene Constructs Used in This Study.

Gene	Forward and reverse primer
<i>LRR1</i> for pGADT7 and pGBKT7	F:5'-CATATGGGATCCATGAGGTTTCATTGCC-3' R:5'-GGATCCAGGCTTTCATGTCTTGGACA-3'
<i>PR10</i> for pGADT7 and pGBKT7	F:5'-CATATGATGGGTGCTTATACCTTTACTGAC-3' R:5'-GGATCCAACATAGACAGAAGGATTGGC-3'
<i>LRR1</i> for pSPYNE, pSPYCE, p35S-6HA, and p35S-8Myc	F:5'-TCTAGAATGAGGTTTCATTGCCCTGGTATTC-3' R:5'-GGATCCGGCTTTCATGTCTTGGAC-3'
<i>PR10</i> for pSPYNE, pSPYCE, p35S-6HA, and p35S-8Myc	F:5'-TCTAGAATGGGTGCTTATACCTTTACTGAC-3' R:5'-GGATCCAACATAGACAGAAGGATTGG-3'
<i>PR10</i> for pET28a	F:5'-GGATCCATGGGTGCTTATACCTTTAC-3' R:5'-GAGCTCTTAAACATAGACAGAAGGATTGG-3'
<i>LRR1</i> for pGEX-5X	F:5'-AAGGTCGTGGGATCCCGATGAGGTTTCATTGCCCTGGT-3' R:5'-ATGCGGCCGCTCGAGCTAGGCTTTCATGTCTTGGACAAT-3'
<i>LRR1</i> for pBIN35S-GFP	F:5'-TCTAGATGAGGTTTCATTGCCCTG-3' R:5'-GGATGGAGGCTTTCATATCTTG-3'
<i>PR10</i> for pBIN35S-GFP	F:5'-TCTAGATGGGTGCTTATACCTTTACTG-3' R:5'-GGATCCGAACATAGACAGAAGG-3'
<i>PR10</i> for pBIN35S	F:5'-TCTAGAATGGGTGCTTATACCTTTACTGAC-3' R:5'-GGATCCTTAAACATAGACAGAAGGATTGGC-3'
<i>LRR1</i> for pTRV2	F:5'-ATGGCCTCTATGTGAAAG-3' R:5'-TTTGCTTGTGCTAGATATTA-3'
<i>PR10</i> for pTRV2	F:5'-CGGCACGGCAATCATC'-3' R:5'-AATGTTTTGATTAATTTGCC-3'