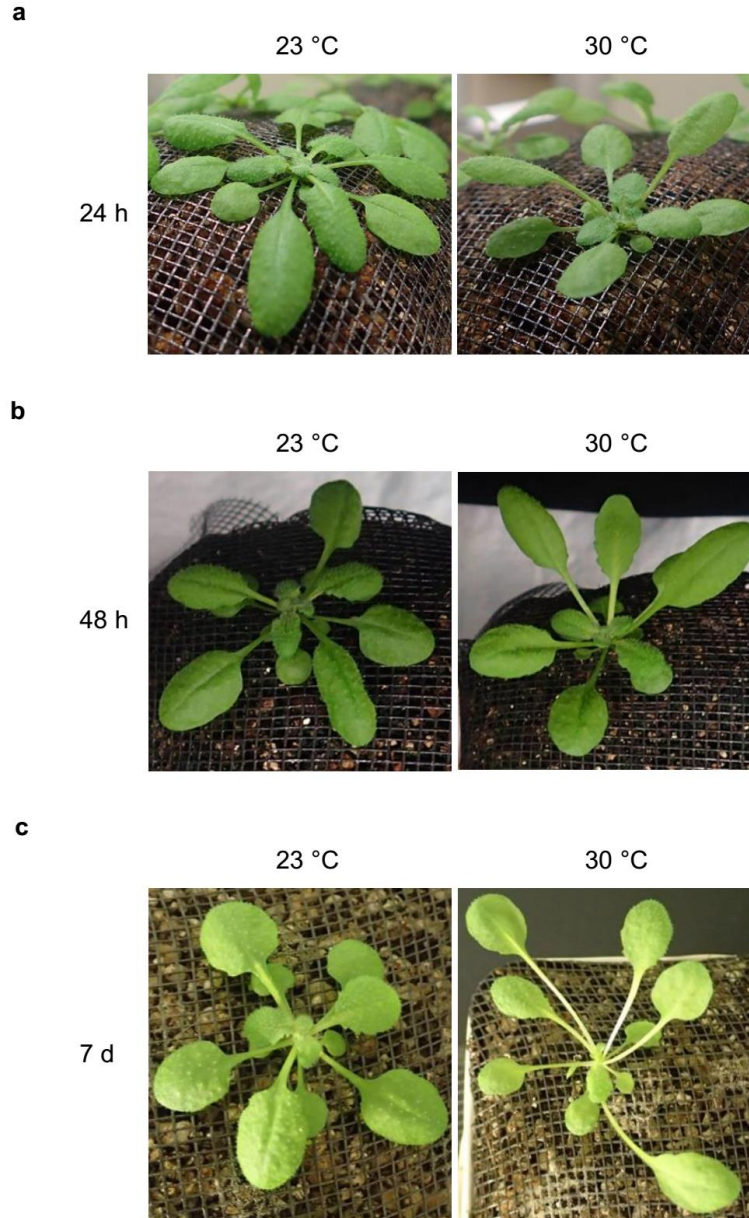
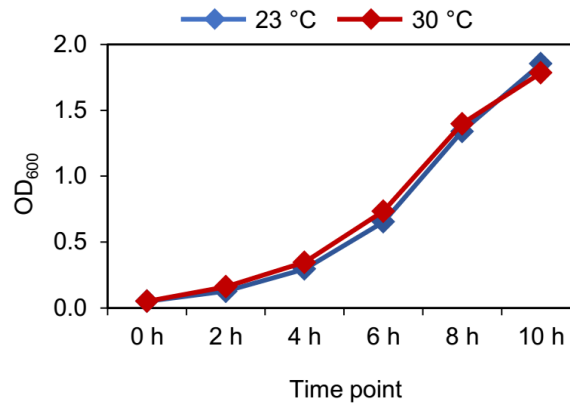


1 Supplementary Figures



Supplementary Figure 1. Morphological response of *Arabidopsis* plants to elevated temperature. Four-week-old plants were shifted to test chambers at 23 °C or 30 °C. Pictures were taken (a) 24 h or (b) 48 h after temperature shift. (c) Two-week-old plants were shifted to test chambers at 23 °C or 30 °C. Pictures were taken 7 days after temperature shift.



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11 **Supplementary Figure 2. Effect of temperature on *Pst* DC3000 growth *in vitro*.** *Pst* DC3000

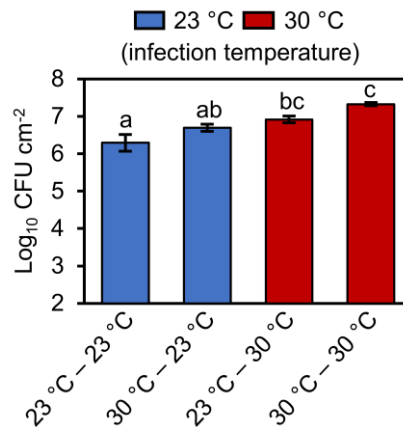
12 was grown in liquid culture at 23 °C or 30 °C. Diamonds indicate the mean reading of three

13 biological replicates $\pm$ the standard error of the mean (s.e.m.). Data represent three independent

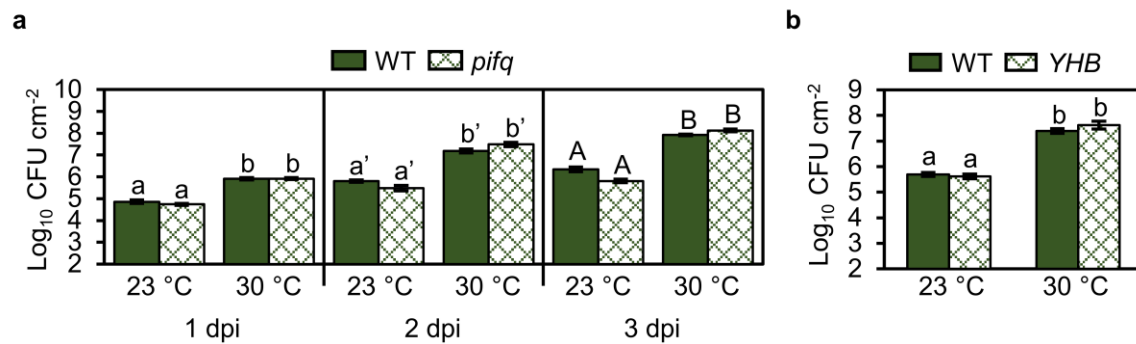
14 experiments.

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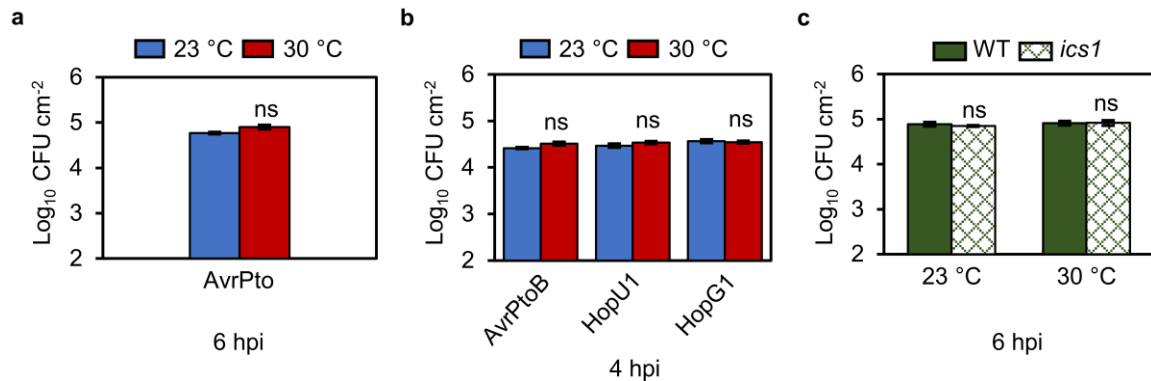
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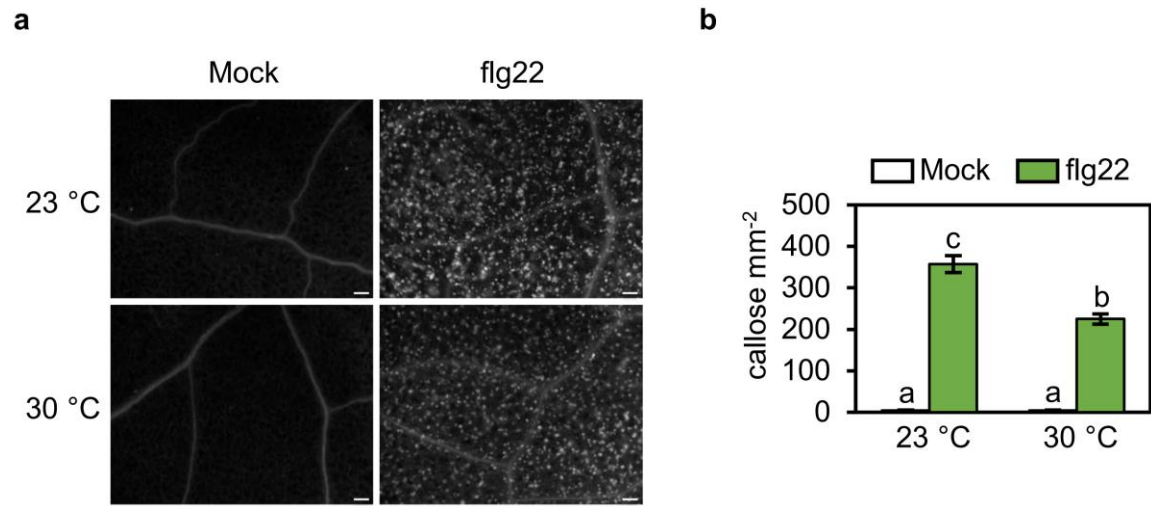
Supplementary Figure 3. Disease outcomes of *Arabidopsis* plants with indicated temperature treatments before or after infection. Bacterial growth in plants ($n = 4$) three days after syringe-infiltration with *Pst* DC3000. Plants were (i) acclimated and kept at 23 °C following infection (23 °C – 23 °C), (ii) acclimated at 30 °C and shifted to 23 °C (30 °C – 23 °C), (iii) acclimated at 23 °C and shifted to 30 °C following infection (23 °C – 30 °C), or (iv) acclimated and kept at 30 °C following infection (30 °C – 30 °C). Data represent three independent experiments, and are presented as the mean $\pm$ s.e.m., with n = biological replicates. Letters indicate statistical significance based on a two-factor ANOVA with Tukey's HSD post hoc analysis (p -value < 0.05); samples sharing letters are not significantly different.



Supplementary Figure 4. Enhanced growth of *Pst* DC3000 at 30 °C does not require PIFs or phyB. (a) Bacterial growth in WT (Col-0) and *pifq* mutant plants (n = 4) one, two and three days after syringe-infiltration with *Pst* DC3000. (b) Bacterial growth in WT (Ler) and YHB transgenic plants (n = 4) three days after syringe-infiltration with *Pst* DC3000. All data are representative of three independent experiments and are presented as the mean $\pm$ s.e.m., with n = biological replicates. Letters indicate statistical significance based on a two-factor ANOVA with Tukey's HSD post hoc analysis (p -value < 0.05); samples sharing letters are not significantly different. Data for each time point in (a) were analysed separately.

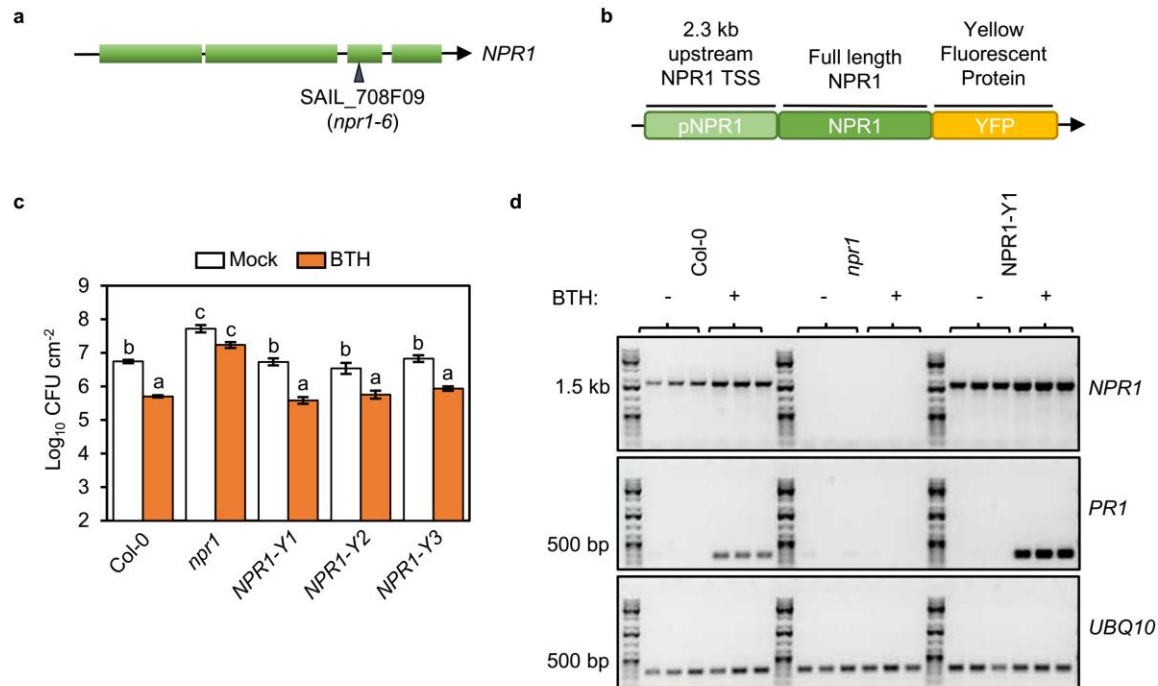


Supplementary Figure 5. Elevated temperature does not affect bacterial growth *in planta* at 4 to 6 hpi. Bacterial growth in WT plants (a) 6 h after syringe-infiltration with *Pst* DC3000 *P_{nptII}::avrPto-CyaA* (n = 4) (b) 4 h after syringe-infiltration with *Pst* DC3000(*P_{tac}::avrPtoB-CyaA*) (n = 4), *Pst* DC3000(*P_{tac}::HopU1-CyaA*) (n = 6), or *Pst* DC3000(*P_{tac}::HopG1-CyaA*) (n = 6) strains. (c) Bacterial growth in WT and *ics1* mutant plants (n = 4) 6 h after syringe-infiltration with *Pst* DC3000(*P_{nptII}::avrPto-CyaA*). Data are presented as the mean ± s.e.m. with n = biological replicates, and are representative of three independent experiments. “ns” indicates no statistical significance based on a Student’s *t*-test (*p*-value > 0.05) of pairwise comparisons between samples at 23 °C vs. 30 °C (a and b) or between genotypes at each temperature (c).

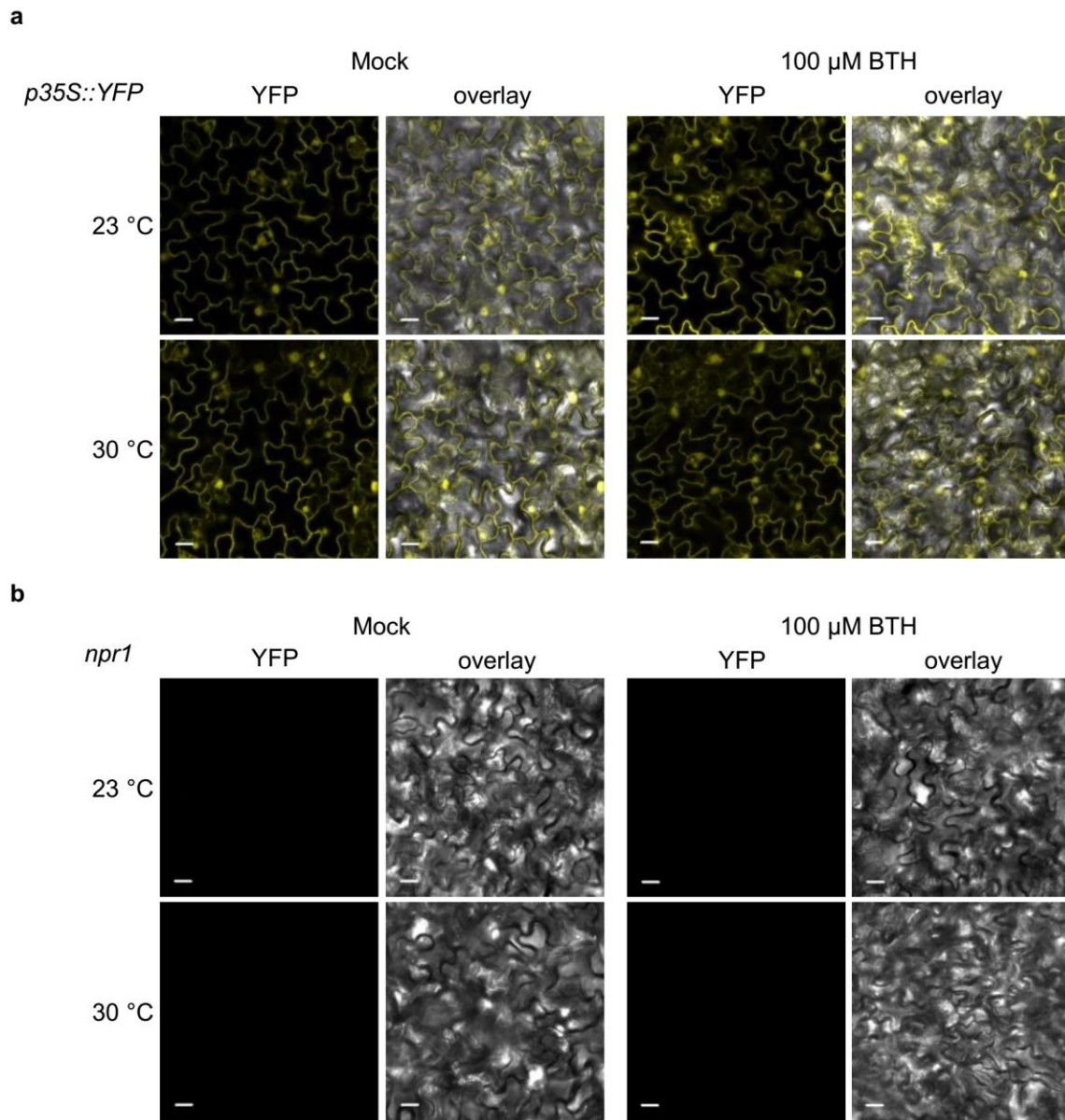


Supplementary Figure 6. Flg22 treatment induces callose at elevated temperature. (a)

Representative images of callose accumulation 24 hpi with mock or flg22 of temperature acclimated plants (n = 6). Scale-bar length represents 100 μ m. **(b)** Quantification of callose accumulation from plants treated as described in (a). Data are representative of three independent experiments. Graphical data are presented as the mean $\pm$ s.e.m., with n = biological replicates. Letters indicate statistical significance based on a two-factor ANOVA with Tukey's HSD post hoc analysis (p -value < 0.05); samples sharing letters are not significantly different.



Supplementary Figure 7. Characterization of *Arabidopsis npr1-6* mutant and *pNPR1::NPR1-YFP* transgenic lines. (a) Model of T-DNA insertion in *NPR1* for the SAIL_708F09 allele, named here *npr1-6*, and referred to as *npr1*. (b) Model of *pNPR1::NPR1-YFP* construct. The *NPR1* promoter used was 2.3 kb upstream of the *NPR1* transcriptional start site (TSS). (c) Bacterial growth in five-week-old mock- or BTH-pre-treated plants three days after syringe-infiltration with *Pst* DC3000. Data are presented as the mean ($n = 3$) $\pm$ s.e.m., and are representative of three independent experiments. Letters indicate statistical significance based on a two-factor ANOVA with Tukey's HSD post hoc analysis (p -value < 0.05); samples sharing letters are not significantly different. (d). Five-week-old plants ($n = 3$) were sprayed with mock or BTH 24 h prior to harvesting tissue for RNA extraction. Semi-quantitative gene expression analysis was used to determine the expression levels of *NPR1* (35 cycles) and *PR1* (25 cycles) with *UBQ10* (25 cycles) expression used as an internal control. Data are representative of two independent experiments. Primer sequences are provided in Supplementary Table 6.



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89 **Supplementary Figure 8. Effect of elevated temperature and BTH on *p35S::YFP* and *npr1*-**

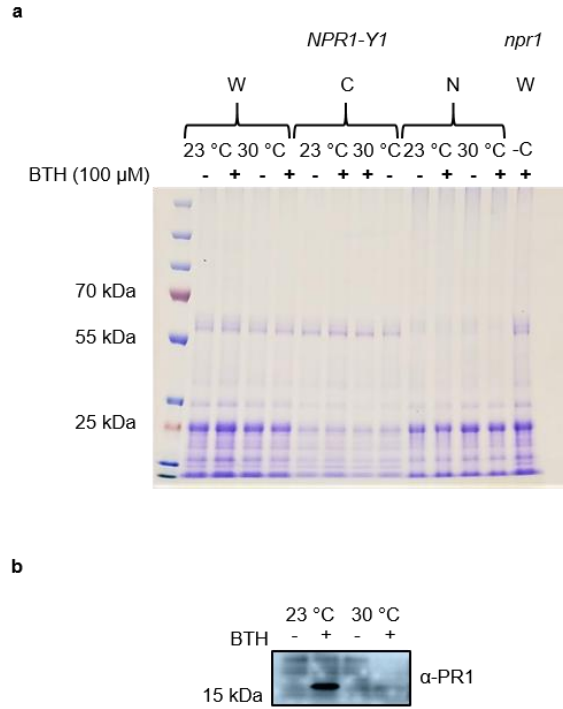
90 **6. Representative confocal microscopy images of (a) *p35S::YFP* and (b) *npr1* plants 24 h after**

91 spraying with mock or BTH. Images are of YFP (yellow) alone or YFP overlaid on Brightfield

92 (grey-scale). Scale bar length represents 10 μ m. Data are representative of three independent

93 experiments with four biological replicates per experiment.

94



Supplementary Figure 9. SDS polyacrylamide gel electrophoresis (PAGE) and western

blot of leaf proteins. (a) Leaf protein samples of whole cell lysate (W), non-nuclear (C,

cytosolic) and nuclear (N) enriched fractions isolated from *NPR1-Y1* transgenic plants treated

with mock (-) or BTH (+) solutions at 23 °C or 30 °C were loaded in equal volumes (10 μl) and

run in a 4 – 12 % gradient SDS-PAGE gel. Whole cell lysate extracted from *npr1* plants treated

with BTH at 23 °C was used as the negative control for the NPR1-YFP band (for western

blotting shown in Fig. 4b). The gel was then stained with Coomassie to visualize protein bands

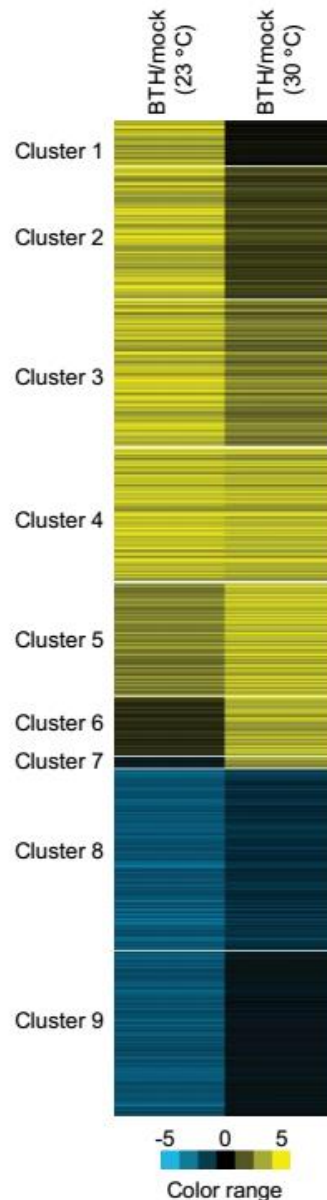
for assessment of equal loading. **(b)** Western blot of non-nuclear fraction isolated from leaves

pooled from four, temperature acclimated *NPR1-Y1* plants treated with mock (-) or BTH (+).

Equal volumes (10 μl) of each protein sample were loaded and run a 4 – 12 % gradient SDS-

PAGE gel. Following transfer, the PVDF membrane was probed using a α-PR1 primary antibody

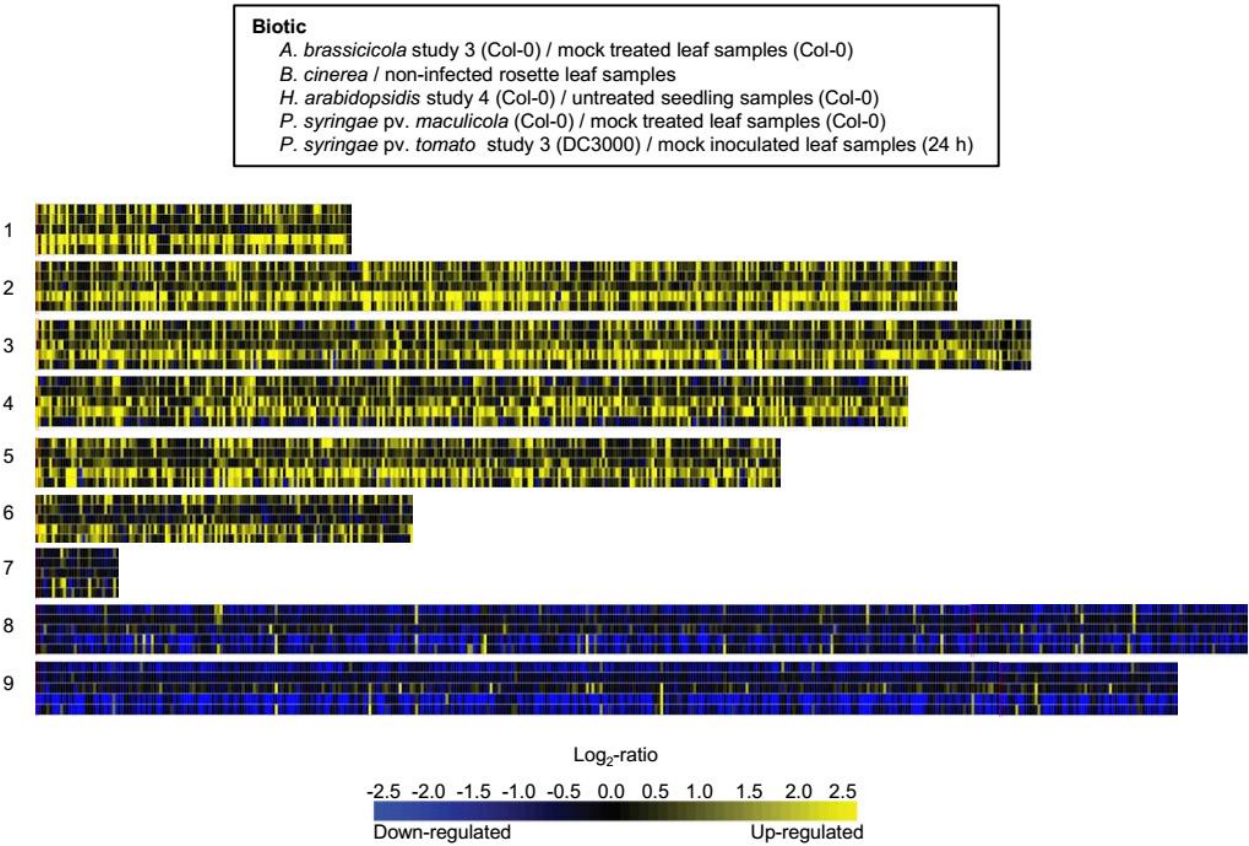
(expected MW ~16 kD). Data are representative of three independent experiments.



Supplementary Figure 10. Effect of elevated temperature on the BTH regulated transcriptome. Differentially expressed genes were identified from RNA-seq data and k-means clustering was conducted as described in Supplementary Note 1 and the main text. The heat map shows a visual representation of gene expression patterns based on fold change (BTH/mock) within each cluster. Down-regulation of expression between the mock- and BTH-treated plants at each temperature is denoted by the level of blue color, up-regulation by the level of yellow color and no change by black color as indicated by the color scale.

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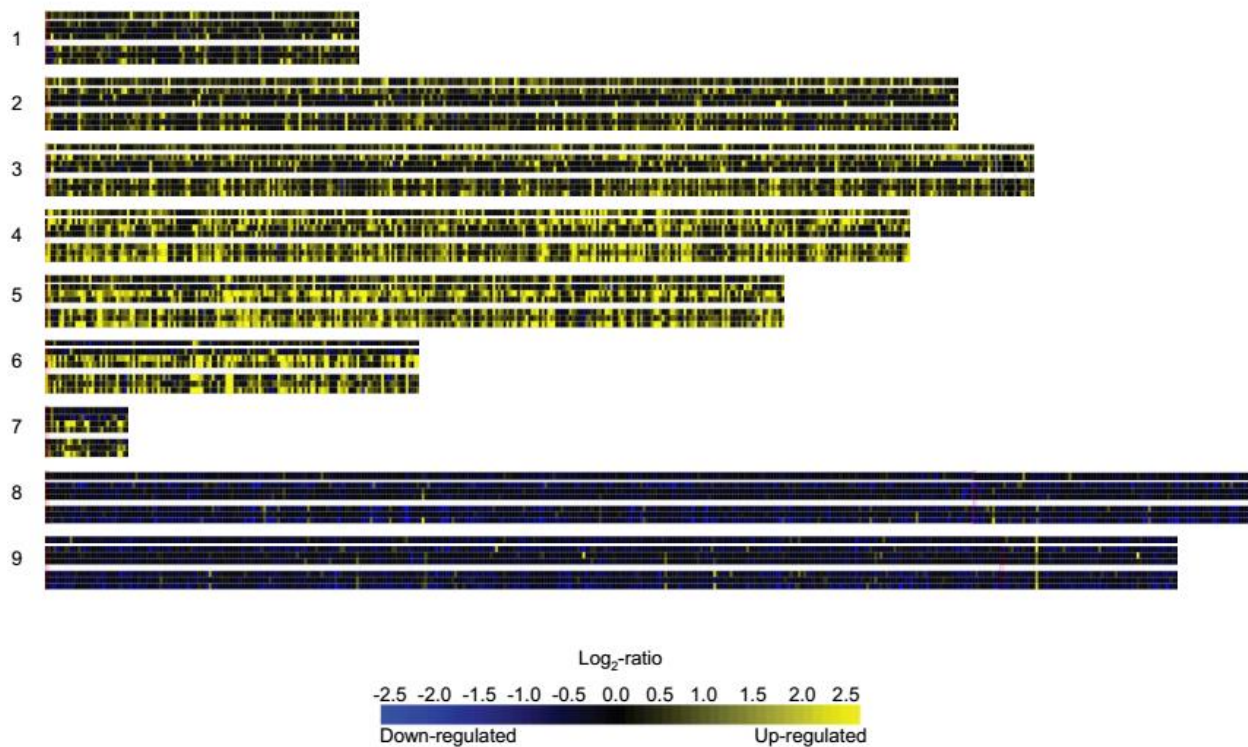
131

Supplementary Figure 11. Genevestigator analysis using publicly available microarray expression data of genes in response to biotic stress. Of the pathogens listed under biotic stress, *Alternaria brassicicola* and *Botrytis cinerea* are necrotrophic pathogens, *Hyaloperonospora arabidopsidis* is an obligate biotrophic pathogen and both strains of *Pseudomonas syringae* are hemi-biotrophic pathogens. Numbers to the left of each panel indicate the cluster to which that set of genes is assigned. Expression values are log₂ ratios of treated vs. untreated or mock controls, with down-regulation of expression denoted by the level of blue color, up-regulated denoted by the level of yellow color and no change in expression denoted by black color as indicated by the color scale.

Hormone
salicylic acid / mock treated seedlings

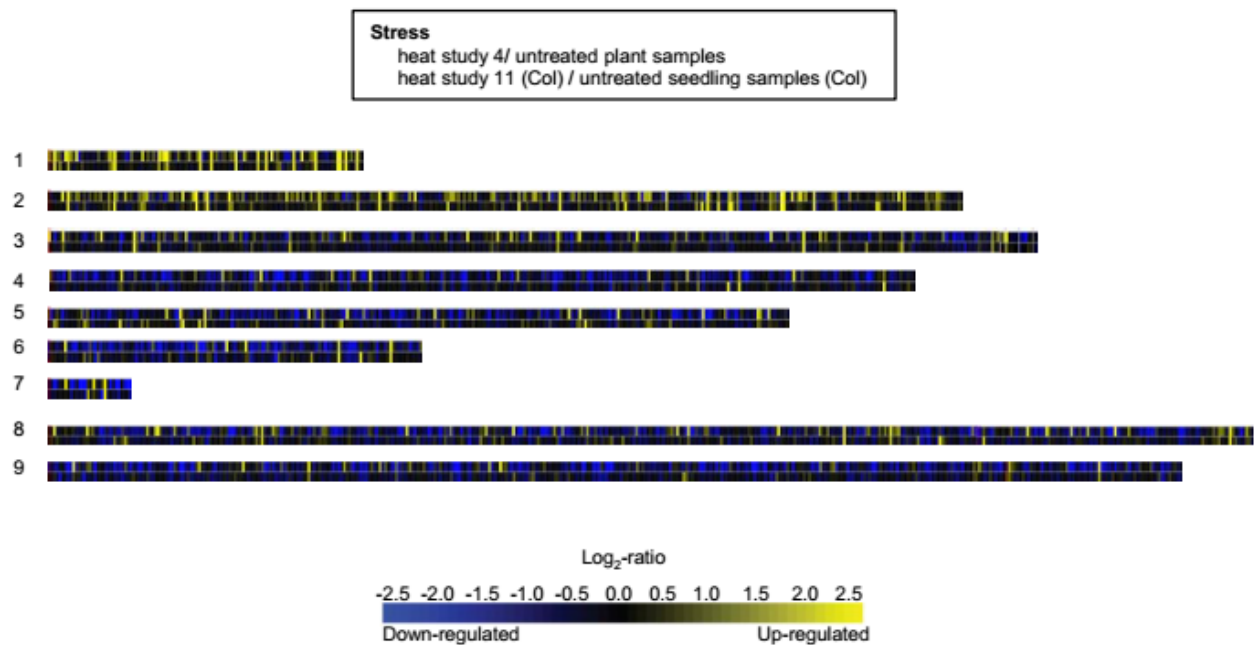
Chemical
benzothiadiazole study 3 (Col-0) / untreated (Col-0) plant samples
chitin / mock treated seedlings
H₂O₂ study 3 (Col-0) / untreated seedlings (Col-0)

Elicitor
EF-Tu (elf18) study 3 (Col-0) / mock treated seedling samples (Col-0)
FLG22 (1 h) / H₂O treated leaf samples (1 h)
Pep2 (Col-0) / mock treated seedling samples (Col-0)



Supplementary Figure 12. Genevestigator analysis using publicly available microarray expression data genes in response to SA or PAMP elicitors. Numbers to the left of each panel indicate the cluster to which that set of genes is assigned. Expression values are log₂ ratios of treated vs untreated or mock controls, with down-regulation of expression denoted by the level of blue color, up-regulated denoted by the level of yellow color and no change in expression denoted by black color as indicated by the color scale.

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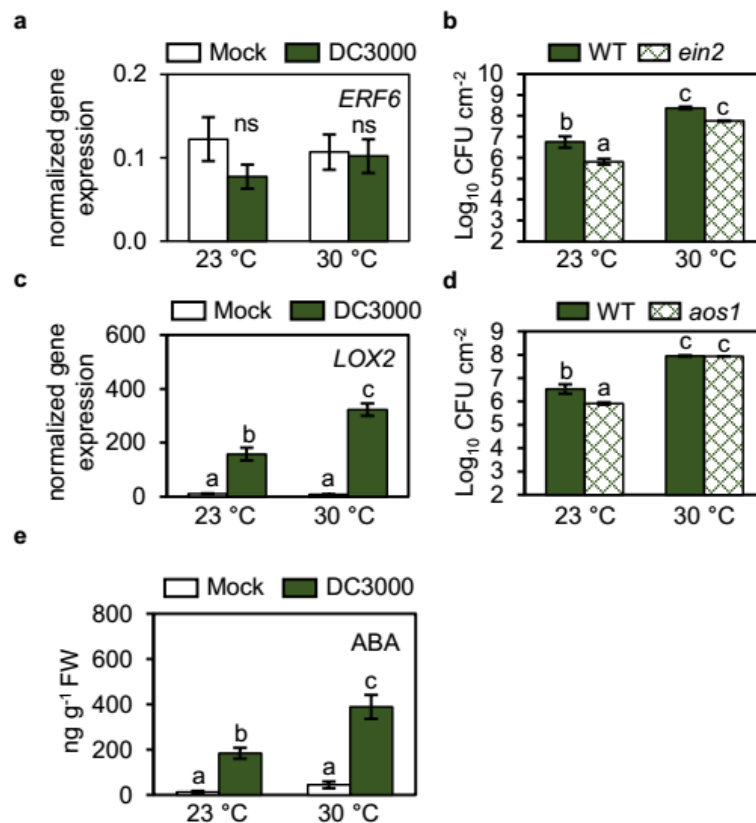
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Supplementary Figure 13. Genevestigator analysis using publicly available microarray expression data of genes in response to heat stress. Numbers to the left of each panel indicate the cluster to which that set of genes is assigned. Expression values are log₂ ratios of treated vs untreated or mock controls, with down-regulation of expression denoted by the level of blue color, up-regulated denoted by the level of yellow color and no change in expression denoted by black color as indicated by the color scale.

151

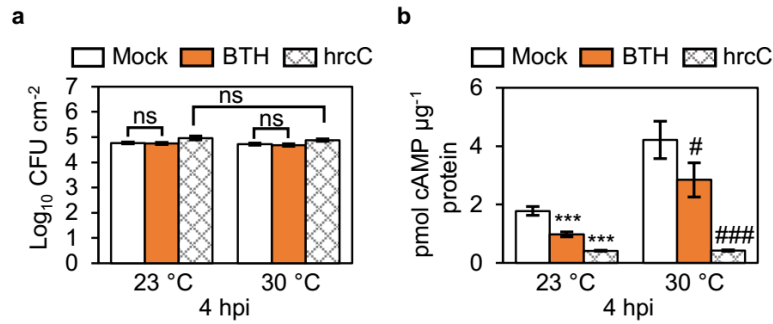


152

153 **Supplementary Figure 14. Hormone pathways known to antagonize SA are not involved**
 154 **in elevated temperature-associated enhanced susceptibility.** (a) ET and (c) JA marker gene
 155 expression (n = 3) in plants 24 h after vacuum-infiltration with mock or *Pst* DC3000. qPCR was
 156 used for gene expression analysis, with expression of *ERF6* and *LOX2* normalized to the
 157 expression of *PP2AA3*. Bacterial growth in WT, (b) *ein2* and (d) *aos1* mutant plants (n = 4)
 158 three days after vacuum-infiltration with *Pst* DC3000. (e) ABA metabolite levels in plants (n = 4)
 159 24 h after vacuum-infiltration with mock or *Pst* DC3000. All data are representative of three
 160 independent experiments and are presented as the mean ± s.e.m., with n = biological
 161 replicates. Letters indicate statistical significance based on a two-factor ANOVA with Tukey's
 162 HSD post hoc analysis (*p*-value < 0.05); samples sharing letters are not significantly different.
 163 "ns" indicates no statistical significance.

164

165



166

167 **Supplementary Figure 15. Bacterial populations and effector translocation in plants**

168 **treated with mock or BTH. (a)** Bacterial growth in plants (n = 4) 4 hpi; tissue was collected
 169 from the same plants as were used to measure cAMP data presented in Fig. 7g . Plants were
 170 pre-treated with mock or BTH 24 h before syringe-infiltration with *Pst* DC3000(*P_{nptII}::avrPto-*
 171 *CyaA*). Additional mock-treated plants (n = 4 for each temperature) were infiltrated with *hrcC*
 172 (*P_{nptII}::avrPto-CyaA*) as a negative control. **(b)** Translocation of bacterial effector proteins in
 173 plants (n = 4) pre-treated with mock or BTH 24 h before syringe-infiltration with *Pst*
 174 DC3000(*P_{nptII}::avrPto-CyaA*) or *hrcC* (*P_{nptII}::avrPto-CyaA* strains). Tissue was collected at 4 hpi
 175 for quantification of cAMP, which was normalized by total protein. Data are presented as the
 176 mean ± s.e.m. with n = biological replicates. Data in (b) and Fig. 7g are two of three
 177 independent experiments. In (a), “ns” indicates no statistical significance based on a Student’s *t*-
 178 test (*p*-value > 0.05). Symbols in (b) denote statistical significance based on a one-factor
 179 ANOVA with Dunnett’s post hoc analysis (***, ### *p*-value < 0.001, # *p*-value < 0.05) using the
 180 mock-treated sample at each temperature as the means for comparison.

181

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Fig. 4b

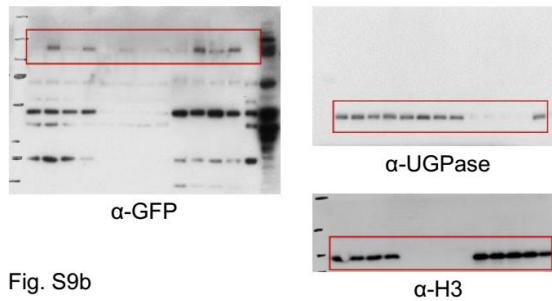


Fig. S9b

α-PR1

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185 **Supplementary Figure 16. Uncropped western blot images.** Uncropped scans of western
186 blots shown in Fig. 4b and Supplementary Fig. 9b. Red boxes indicate cropped sections used in
187 figures. Images were edited to remove saturation to show in grayscale. Marker lines were drawn
188 on some X-ray scans to show bands in PAGE ruler to determine band size. Last lane in first blot
189 (α-GFP) has the Precision Plus Protein™ WesternC™ Standard (Bio Rad).

Supplementary Tables

Supplementary Table 1. Functional annotations for differentially expressed genes based on 23 °C Mock vs. 30 °C Mock analysis.

Category	GO term	Up at 30 °C	Down at 30 °C
Biotic Stress	Defence		30
	Chitin		16
	Fungus		13
	Bacterium		10
	SA		6
	ET		12
	JA		11
	Cell wall		10
Abiotic stress	Abiotic stress	17	22
	Response to oxygen	10	38
	Temperature/heat	14	

The Gene ontology (GO) term is provided in the second column. Subsequent columns provide the number of genes for the corresponding GO term that are either up- or down-regulated at 30 °C relative to expression levels observed at 23 °C. There is some redundancy of genes across categories (e.g. all temperature genes are also annotated as involved in abiotic stress). GO analysis was conducted using DAVID (<https://david.ncifcrf.gov/>). For data used to compile this table, see Supplementary Data 2.

Supplementary Table 2. Distribution of differentially expressed genes in response to BTH by group and cluster.

a

	Cluster →	1	2	3	4	5	6	7	8	9	Total
Group	A	121	344	318	160	12	1	0			956
	B	12	36	97	221	266	87	6			725
	C	0	0	1	1	40	80	30			152
	D								365	445	810
	E								149	28	177
	Total	133	380	416	382	318	168	36	514	473	

b

	Cluster →	1	2	3	4	5	6	7	8	9	Total
Group	A	91%	91%	76%	42%	4%	1%				52%
	B	9%	9%	23%	58%	84%	52%	17%			40%
	C					13%	48%	83%			8%
	D								71%	94%	82%
	E								29%	6%	18%
	Total	7%	21%	23%	21%	17%	9%	2%	52%	48%	

Number **(a)** or percentage **(b)** of DEGs in each group and cluster. Groups A through C are defined as genes induced by BTH at 23 °C (genes in clusters 1 – 7) that show lower expression at 30 °C (Group A), similar expression levels at 30 °C (Group B) or higher expression at 30 °C (Group C). Groups D and E are defined as genes suppressed by BTH at 23 °C (genes in clusters 8 and 9) that show higher expression levels at 30 °C. Percentage totals are calculated based on the total number of genes within the cluster or group divided by the total number of induced (1,833) or suppressed (987) genes. For data used to compile this table, see Supplementary Data 1.

Supplementary Table 3. Functional annotations for differentially expressed genes based on BTH vs. Mock analysis.

a

Category	GO term	1	2	3	4	5	6	7	8	9
Biotic Stress	Defence			40	53	54	21			
	Cell death			20	20	21				
	Bacterium	7	13	15	17	14				
	Chitin				16	32	20	3		
	Callose									
	SA/SAR			10	19					
	ET					9	17			
	JA					8				
Abiotic stress	Abiotic stress						17			
	ABA				13		7			
	heat	7	8							
Growth	Chloroplast part								34	45
	photosynthesis									26
	auxin								10	12

b

Category	GO term	A	B	C	D
Biotic Stress	Defence	70	53	77	
	Cell death	29	20	24	
	Bacterium	35	17	17	
	Chitin		16	55	
	Callose	4		5	
	SA/SAR	17	16		
	ET			28	
	JA			13	
Abiotic stress	Abiotic stress			41	65
	ABA		13		
	heat	17			
Growth	Chloroplast part				79
	photosynthesis				30
	auxin	5			52

The GO term is provided in the second column. Subsequent columns provide the number of genes within each cluster (**a**) or group (**b**) containing the corresponding GO term. GO analysis was conducted using DAVID (<https://david.ncifcrf.gov/>). For data used to compile this table, see Supplementary Data 3 and 4.

226 **Supplementary Table 4. Differentially expressed genes involved in SA biosynthesis and**
227 **signalling.**

Process	AGI Number	Gene Name	Cluster	Group	References
Positive regulation of SA biosynthesis	AT3G52430	PAD4	3	A	1-3
	AT3G48090	EDS1	4	A	4, 5
	AT3G20600	NDR1	5	B	6
	AT5G13320	PBS3	2	A	7, 8
	AT5G26920	CBP60G	4	A	9
	AT1G73805	SARD1	4	A	9
	AT4G18170	WRKY28	5	B	10
	AT2G46400	WRKY46	4	A	10
	AT1G74710	ICS1, SID2	1	A	11, 12
	AT4G39030	EDS5, SID1	1	A	11
	AT4G14400	ACD6	4	B	13
	AT2G13810	ALD1	2	A	14, 15
	AT1G64280	NPR1, SAI1, NIM1	4	B	2
Negative regulation of SA biosynthesis	AT2G40750	WRKY54	4	B	16
	AT3G56400	WRKY70	4	A	16
	AT1G29690	CAD1	5	B	17
	AT2G39660	BIK1	4	B	18
	AT1G28380	NSL1	5	B	19
	AT1G64280	NPR1, SAI1, NIM1	4	B	2, 20
	AT1G52890	ANAC019	5	B	21
	AT3G15500	ANAC055	5	B	21
	AT4G27410	ANAC072	5	B	21
	AT1G32640	MYC2	7	C	21
Positive role in SA signalling/SAR	AT1G64280	NPR1, SAI1, NIM1	4	B	20, 22, 23
	AT5G55170	SUMO3	4	B	24
	AT1G22070	TGA3	3	A	25, 26
	AT5G06960	TGA5, OBF5	2	A	27
	AT4G31800	WRKY18	4	A	16
	AT4G23810	WRKY53	5	C	16
	AT2G40750	WRKY54	4	B	16
	AT3G56400	WRKY70	4	A	16
	AT2G13810	ALD1	2	A	14, 28
	AT1G19250	FMO1	3	A	29
	AT2G14610	PR1	2	A	30
	AT3G57260	PR2, BGL2	4	A	30
	AT1G75040	PR5	4	A	30
Negative role in SA signalling/SAR	AT5G45110	NPR3	4	B	31, 32
	AT1G02450	NIMIN1	4	A	33, 34
	AT3G25882	NIMIN-2	4	A	33, 34

	AT4G31800	WRKY18	4	A	35
	AT5G22570	WRKY38	4	B	16, 36
	AT3G01080	WRKY58	4	A	16
	AT2G25000	WRKY60	3	A	35
	AT5G01900	WRKY62	3	A	36, 37
	AT5G04340	ZAT6	6	B	38

228

229 Genes are identified based on their Arabidopsis Genome Initiative (AGI) number and commonly
 230 used gene name. Cluster numbers are based on k-means clustering. Group classifications are
 231 based on expression level differences (2-fold cut-off) between the BTH-treated samples at 23
 232 °C and 30 °C. See Supplementary Data 1 for spreadsheet containing full list of DEGs.

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**Supplementary Table 5. Transcription factors implicated in regulation of genes in BTH
vs. Mock analyses.**

a

cluster 2	cluster 3	cluster 4	cluster 5	cluster 6	cluster 8	cluster 9
TGA5		TGA5	TGA5	CAMTA2	PIF1	PIF1
TGA6		TGA6	TGA6	CAMTA3	PIF3	PIF3
TGA2				BZR1	PIF4	PIF4
ANAC55	ANAC55	ANAC55	ANAC55	ABF1	PIF5	PIF5
		WRKY48		ABF2	EDT1	EDT1
		WRKY33	WRKY33	ABF3	MYC2	MYC2
	WRKY51	WRKY51	WRKY51	ABI5	MYC3	MYC3
	WRKY60	WRKY60	WRKY60		MYC4	ATHB6
	WRKY40	WRKY40	WRKY40		JAM2	
WRKY47	WRKY47	WRKY47	WRKY47		BIM2	
WRKY8	WRKY8	WRKY8	WRKY8	WRKY8	BIM3	
WRKY12	WRKY12	WRKY12	WRKY12	WRKY12	BEE2	
WRKY14	WRKY14	WRKY14	WRKY14	WRKY14		
WRKY17	WRKY17	WRKY17	WRKY17	WRKY17		
WRKY21	WRKY21	WRKY21	WRKY21	WRKY21		
WRKY23	WRKY23	WRKY23	WRKY23	WRKY23		
WRKY30	WRKY30	WRKY30	WRKY30	WRKY30		
WRKY38	WRKY38	WRKY38	WRKY38	WRKY38		
WRKY45	WRKY45	WRKY45	WRKY45	WRKY45		
WRKY57	WRKY57	WRKY57	WRKY57	WRKY57		
WRKY62	WRKY62	WRKY62	WRKY62	WRKY62		
WRKY75	WRKY75	WRKY75	WRKY75	WRKY75		
	WRKY2	WRKY2	WRKY2	WRKY2		
	WRKY11	WRKY11	WRKY11	WRKY11		
	WRKY15	WRKY15	WRKY15	WRKY15		
	WRKY18	WRKY18	WRKY18	WRKY18		
	WRKY25	WRKY25	WRKY25	WRKY25		
	WRKY43	WRKY43	WRKY43	WRKY43		
	WRKY63	WRKY63	WRKY63	WRKY63		

b

Group A	Group B	Group C	Group D
TGA5	CAMTA2	CAMTA2	TCP4
TGA6	CAMTA3	CAMTA3	TCP15
NTL9	NTL9	GBF1	TCP16
	CCA1	GBF3	TCP23
	RVE1	GBF4	GBF4
	RVE6	ABI5	ABI5

	ABF3	ABF3	
WRKY2	WRKY2	ABF1	ABF1
WRKY8	WRKY8	AREB1	AREB1
WRKY11	WRKY11		MYC3
WRKY12	WRKY12	MYC2	MYC2
WRKY14	WRKY14	MYC4	MYC4
WRKY15	WRKY15	JAM1	JAM1
WRKY17	WRKY17	JAM2	JAM2
WRKY18	WRKY18		PIF1
WRKY21	WRKY21	PIF3	PIF3
WRKY23	WRKY23	PIF4	PIF4
WRKY25	WRKY25		PIF5
WRKY30	WRKY30	BZR1	BZR1
WRKY38	WRKY38	HY5	BIM2
WRKY40	WRKY40	EDT1	BIM3
WRKY43	WRKY43	BEE2	CIB5
WRKY45	WRKY45	BES1	HBI1
WRKY47	WRKY47	SPT	SPT
WRKY51	WRKY51		UNE10
WRKY60	WRKY60		SPL8
WRKY57	WRKY57	WRKY57	AGL8
WRKY62	WRKY62	WRKY62	SEP4
WRKY75	WRKY75	WRKY75	SEP3
WRKY63	WRKY63		BPE
	WRKY1		
	WRKY27		
	WRKY29		
	WRKY33		
	WRKY48		

Analysis of Motif Enrichment (AME; <http://meme-suite.org/tools/ame>) was conducted by cluster (a) and by group (b) as described in Supplementary Note 1. For each analysis, a subset of TFs, as implicated by enrichment of the motif to which they bind, was compiled based on known relevance to SA, ABA, JA, and growth-related processes. No enriched motifs were identified for clusters 1 and 7. See Supplementary Data 5 for html files with actual data output for each analysis.

248 **Supplementary Table 6. Primer sequences.**

AGI Number (Gene name)	Primer name	Primer sequence (5'-3')	Purpose
NA	SAIL_LB3	TAGCATCTGAATTTTCATAACCAATCTCGATACAC	Genotyping
AT1G64280 (NPR1)	SAIL708F09_LP	ATTTGTTTGAAGCACACCTGC	Genotyping
	SAIL708F09_RP	CTCTCAAAGGCCGACTATGTG	Genotyping
NA	SALK_LBb1.3	ATTTTGCCGATTTTCGGAAC	Genotyping
AT1G32640 (MYC2)	MYC2_GT_LP	GCTACAACCAACGATGAATC	Genotyping
	MYC2_GT_RP	TCATCAACAGCGTCATCCGA	Genotyping
NA	GABI_Kat_LB1	ATAACGCTGCGGACATCTACATT	Genotyping
AT5G46760 (MYC3)	MYC3_GT_LP	GTTAGATCAGCTGCGAATGATTCGG	Genotyping
	MYC3_GT_RP	CTCCGACTTTTCGTCATCAAAGCAAC	Genotyping
AT4G17880 (MYC4)	MYC4_GT_LP	GGATCCATGTCTCCGACGAATGTTCAAGTA	Genotyping
	MYC4_GT_RP	TCTCTCACAACCTTGATCCAGCTAA	Genotyping
AT1G64280 (NPR1)	NPR1_F	<u>agaattc</u> ATGGACACCACCATTGATGGA	Cloning
	NPR1_R	<u>agtcgac</u> CCGACGACGATGAGAGARTTTAC	Cloning
NPR1 promoter	pNPR1_F	<u>cgcggccgc</u> TCGTTTGTTTTCCGTTTTGTTCTGA	Cloning
	pNPR1_R	<u>agaattc</u> CAACAGGTTCCGATGAATTGAAAT	Cloning
AT1G64280 (NPR1)	NPR1-NT_F	AGGATCCATGGACACCACCATTGATGG	RT-PCR
	NPR1-CT_R	AGCGGCCGCTCACCGACGACGATGAGAGA	RT-PCR
At2g14610 (PR1)	PR1-RT-F	GTTCAACAACAGGCACGA	RT-PCR
	PR1-RT-R	CACCTCACTTTGGCACATCC	RT-PCR
AT4G05320 (UBQ10)	UBQ10-RT-F	ACCCTCCACTTGGTCCTCA	RT-PCR
	UBQ10-RT-R	AGTTTTCCAGTCAACGTCTT	RT-PCR
At1G13320 (PP2AA3)	PP2AA3_qRT_F1	GGTTACAAGACAAGGTTCACTC	qPCR
	PP2AA3_qRT_R1	CATTCAGGACCAAACCTCTTCAG	qPCR
At2g14610 (PR1)	PR1_qRT_F1	GGCTAACTACAACCTACGCTG	qPCR
	PR1_qRT_R1	TCTCGTTCACATAATTCCCAC	qPCR
At1g74710 (ICS1)	ICS1_qRT_F2	ACTTACTAACCAGTCCGAAAGACGA	qPCR
	ICS1_qRT_R2	ACAACAACCTGTGCATATATACCGT	qPCR
AT5G03280 (EIN2)	EIN2_qRT_F1	TGGGGAAAGTACACTTACGTTCTCAA	qPCR
	EIN2_qRT_R1	ATTCCGTTAGCTGAAGTCGGACT	qPCR
AT4G17490 (ERF6)	ERF6_qRT_F1	AGAGGAGAAGAGGCATTACAGAG	qPCR
	ERF6_qRT_R1	GAGCCAAACACGAGTTCCAC	qPCR
AT4G17880 (MYC2)	MYC2_qRT_F1	GAAACTCCAAATCAAGAACCAG	qPCR
	MYC2_qRT_R1	ATCTTCACTTCAATCTCCATCC	qPCR
At3g45140 (LOX2)	LOX2_qRT_F	GCCGTTAATAAGCAAACCTAGAC	qPCR
	LOX2_qRT_R	TTCTTTAGAGCCTCATCAACTG	qPCR
AT3G14440 (NCED3)	NCED3_qRT_F1	AAAGCCATCGGTGAGCTTCA	qPCR
	NCED3_qRT_R1	GCAGCTCTGGCGTAGAATAGC	qPCR

Supplementary Notes

Supplementary Note 1

RNA sequencing and data analysis. Extracted RNA was checked for purity using a BioAnalyzer Agilent 2100 and three biological replicates of each treatment type were selected based on having a RNA Integrity Number (RIN) score around 7. The final twelve samples were submitted to the Research Technology Support Facility at Michigan State University for preparation of next-generation sequencing libraries. Pooled samples were loaded on two lanes of an Illumina HiSeq 2500 Rapid Run flow cell (v1) and sequenced in a 1 x 50 bp single end format using Rapid SBS reagents. Base calling was done by Illumina Real Time Analysis (RTA) v1.18.61 and output of RTA was de-multiplexed and converted to FastQ format using Illumina Bcl2fastq v1.8.4. Due to inadvertent exclusion of sample 6, a second pool was generated and run on one lane of a Rapid Run flow cell, and sample 6 was also run individually on a MiSeq flow cell.

RNA-seq reads were cleaned and trimmed using Trimmomatic³⁹ and were aligned to the *Arabidopsis thaliana* genome assembly (TAIR10) using the STAR alignment program, allowing only unique alignments⁴⁰. Read counts were obtained for each gene using the featureCounts function from the Rsubread package in R⁴¹, and subsequent count data were normalized using TMM using the limma package in R⁴². Genes with average counts less than 10 across all samples were discarded. The count data were normalized with normalization factors calculated by the function calcNormFactors in the package edgeR in R, and log-transformed by the function voom in the package limma in R to yield log₂ counts per million⁴². The expression data were fit to a linear model (treatment:temp + replicate) by using the function lmFit in the limma package in R. The eBayes function in the limma package in R was used for variance shrinkage in calculation of the *p*-values, which were then used to calculate the Storey's *q*-values using the qvalue function in the qvalue package in R. Differentially expressed genes were identified with a

275 q -value < 0.01. Results were then filtered for those genes that exhibited a $\log_2$ -fold change
276 greater than 2. Gene ontology analysis was done for genes in each cluster using The Database
277 for Annotation, Visualization and Integrated Discovery (DAVID)⁴³. For motif enrichment analysis,
278 the 1,000 bp upstream of the transcription start sites of the selected genes were tested for
279 enrichment of the known *cis* elements using AME⁴⁴. The heatmap was generated with
280 CLUSTER using k-Means (k=9), and visualized by TREEVIEW⁴⁵.

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Supplementary Note 2

Confirmation of a T-DNA knock-out allele for NPR1. We identified a *npr1* mutant allele, SAIL_708F09, containing a T-DNA insertion in the third exon of the *NPR1* gene (Supplementary Fig. 7a). RT-PCR was used to confirm this allele has a complete loss of *NPR1* transcript and loss of *PR1* gene induction by BTH (Supplementary Fig. 7d). Bacterial growth in mock- and BTH-treated plants was assessed to confirm enhanced susceptibility relative to WT and loss of BTH-mediated protection (Supplementary Fig. 7c). We named this allele *npr1-6*.

Preparation, selection and complementation analysis of transgenic lines. The full length coding sequence of *NPR1* without the stop codon was PCR-amplified using NPR1_F and NPR1_R primers (Supplementary Table 6) and cloned into *EcoRI/XhoI* sites of pENJAZ9C⁴⁶ to create pENNPR1C, a Gateway compatible entry vector. Next, a 2.3 kb DNA fragment containing the *NPR1* promoter was PCR-amplified using pNPR1_F and pNPR1_R primers (Supplementary Table 6) and cloned into *NotI/EcoRI* sites of pENNPR1C to create pENpNPR1C::*NPR1*. Then, the pNPR1::*NPR1* construct was transferred by LR recombination into the binary expression vector pGWB540 to create the pNPR1::*NPR1-YFP* construct (Supplementary Fig. 7b). The correct construct was confirmed by sequencing and introduced into *Agrobacterium tumefaciens* (GV3101) by electroporation. GV3101 clones containing the gene fusion construct were selected on LB medium containing rifampicin (Rif, 100 mg L⁻¹), spectinomycin (50 mg L⁻¹), and gentamycin (25 mg L⁻¹) antibiotics and used to transform *npr1-6* by floral dipping⁴⁷. T1 seeds were plated on ½X Murashige and Skoog, 5 mM MES, 0.7 % Bacto agar plates (1/2 MMS) containing hygromycin and resistant seedlings were transplanted to soil. Ten T1 plants were selected for protein extraction, and transgene expression was assessed using Western blot analysis using an α-GFP primary antibody (1:5,000, Abcam, data not shown). T2 seeds were collected from the ten T1 lines and ~100 seeds each were sown on ½ MMS plus 1 % sucrose (1/2 MMSS) plates containing hygromycin (25 mg L⁻¹) to ascertain segregation ratios. Resistant T2 seedlings from lines exhibiting a 3:1 segregation ratio were then screened for induction by

BTH using confocal microscopy (data not shown). Lines showing strong induction were transplanted to soil. Homozygous T3 lines were selected by screening for 100 % resistance to hygromycin. BTH protection assays were conducted in three independent lines to confirm complementation of the *npr1-6* knockout mutation (Supplementary Fig. 7c). RT-PCR was also used to confirm recovery of *NPR1* expression and BTH-induction of *PR1* in the NPR1-Y1 line used for experiments (Supplementary Fig. 7d).

For generation of *p35S::YFP* transgenic plants, the GATEWAY cassette in pEARLEYGATE104⁴⁸ was removed by XmaI digestion, and the resulting linearized vector was re-ligated to create *pJYP35S::YFP*. This construct was used for Agrobacterium-mediated transformation of Arabidopsis Col-0 wild-type plants by floral dipping⁴⁷. A homozygous T3 line with the single T-DNA insertion was selected for the further experiments.

Supplementary Note 3

***Pst* DC3000 Inoculum Preparation.** *Pst* DC3000 was streaked from a frozen glycerol stock onto a LM (10.0 g Bacto Tryptone, 6.0 g Bacto yeast extract, 1.5 g K₂HPO₄, 0.6 g NaCl, 0.4 g MgSO₄ · 7 H₂O L⁻¹) + Rif (100 mg L⁻¹) plate and grown in the dark for two days at room temperature until single colonies were formed. Colonies from this plate were streaked onto a fresh LM+Rif plate and grown in the dark for one day at room temperature, after which 100 µl sterile LM media was added to the plate and the cells were spread evenly and kept in the dark at room temperature overnight to form a lawn. Cells were scraped from this lawn plate and re-suspended in 0.25 mM MgCl₂ by incubating at room temperature for 5 min and then vortexing vigorously. A DU800 Spectrophotometer (Beckman Coulter, Inc, Fullerton, California) was used to measure the optical density (OD) of the culture at an absorbance wavelength of 600 nm (OD₆₀₀), and an inoculation culture was prepared by first adjusting the starting culture to 1 x 10⁸ CFU ml⁻¹ (OD₆₀₀ of approximately 0.1) and then preparing 1:10 dilutions to reach the desired inoculum concentration of ~1 – 3 x 10⁶ CFU ml⁻¹ (OD₆₀₀ of approximately 0.001). For vacuum-infiltration, Silwet (0.005%) was added to the culture to enhance wetting of the leaves. Serial dilutions of inoculum were plated to determine the actual CFU ml⁻¹ of culture used in each experiment.

Disease and BTH protection assays. Following temperature acclimation and chemical treatments, syringe- or vacuum-infiltration was used to inoculate plants as previously described⁴⁹. Following infiltration, plants were immediately returned to the test chambers where the leaves were allowed to dry until leaves returned to the pre-infiltration appearance before covering with transparent domes to maintain high humidity. Bacterial quantification was done by harvesting and grinding leaf discs in 0.25 mM MgCl₂ and preparing serial dilutions, which were then plated on modified Luria-Bertani liquid medium (LM, 10.0 g Bacto tryptone, 6.0 g Bacto yeast extract, 1.5 g K₂HPO₄, 0.6 g NaCl, 0.4 g MgSO₄ · 7 H₂O L⁻¹ H₂O) + Rifampicin (Rif, 100

345 mg ml⁻¹) plates and kept for 24 h at 30 °C. CFUs were counted and the CFU cm⁻² calculated as
346 (CFUs * total dilution)/(vol plated)/leaf area harvested.

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