Figure S1. Expression of b-CHI and VSP2 in wild-type and tga256 mutant plants after treatment with JA, ACC or JA and ACC. 12-day-old wild-type and tga256 mutant seedlings were treated as indicated in Figure 2a. b-CHI (a) and VSP2 (b) transcript levels were determined by quantitative real-time RT PCR analysis. Values of JA/ACC-(a) or JA-treated (b) wild-type plants were set to 100%. The mean values (±SE) obtained from three samples from three independent experiments are shown. Asterisks represent significant differences between wild-type and tga256 plants within a treatment (two-way anova: ***P < 0.001).

Figure S2. Expression of PDF1.2(TGACG):GUS and PDF1.2(TTTTT):GUS in independent plant lines after treatment with JA and ACC. GUS activities (pmol methylumbelliferyl glucuronide/mg protein) of 14 independent F2 lines encoding PDF1.2(TGACG):GUS and PDF1.2(TTTTT):GUS plants as indicated are shown. The means are displayed in Figure 3.

Figure S3. Comparison between the relative ORA59 transcript levels in wild-type plants after infection with Botrytis cinerea or treatment with JA and ACC. Quantitative real-time RT-PCR analysis of relative ORA59 transcript levels in wild-type plants after 48 h of JA/ACC treatment or 4 days of spray inoculation with B. cinerea. The cDNAs were taken from the experiments described in Figure 1 (B. cinerea) and Figure 5 (pharmacological assay) and analyzed together in one PCR run. Mean values of the relative ORA59 expression (±SE) of JA/ACC-.treated wild-type plants from three independent experiments with one ot five independent replicates each were set to 100%. The mean values (±SE) of 12 individual infected wild-type plants are shown. Different letters denote significant differences among treatments (Student's t test; P < 0.05).

Figure S4. Expression of PDF1.2, ORA59 and ERF1 in wild-type and tga256 jin1 mutant plants after treatment with JA/ACC and SA/JA/ACC. Relative PDF1.2 (a), ORA59 (b) and ERF1 (c) transcript levels of three independent experiments with 1–5 samples each are shown. The mean values of JA/ACC-treated wild-type plants from each experiment were set to 100%. The single values of JA/ACC and SA/JA/ACC- treated wild-type and tga256 jin1 plants were calculated accordingly. Arrows indicate values that were not considered for calculation of the means in Figure 5.

Figure S5. Time-course of TGA2, TGA5 and TGA6 expression after treatment with JA and ACC. Twelve-day-old wild-type seedlings were treated with JA and ACC as described in Figure 2a. Plants were harvested for RNA extraction after the indicated hours. The mock value is from plants transferred for 48 hours to MS plates containing 0.01% ethanol. TGA2 (a), TGA5 (b) and TGA6 (c) transcript levels were determined by quantitative real-time RT PCR analysis. The mean values of the relative expression (+/− SE) of two samples from two independent experiments are shown. Statistical analysis yielded no significant differences between the treatments (one-way anova, P < 0.05).

Table S1: List of Primers used for Genotyping, Cloning and Real-Time RT-PCR Analysis.

Figure S1

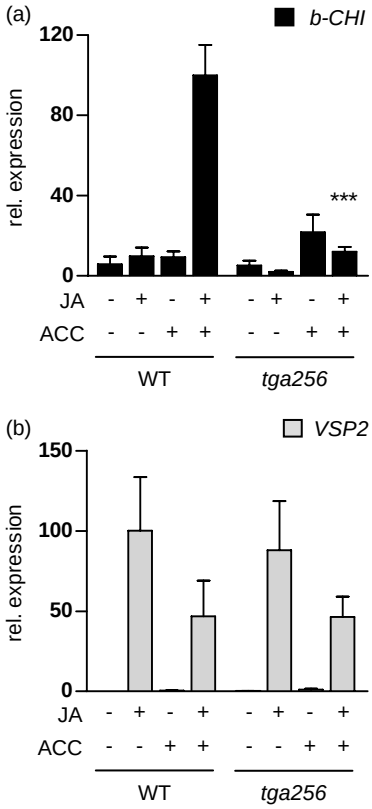

(a)
b-CHI
rel. expression
120
80
40
0
***
JA - + - + - + - +
ACC - - + + - - + +
WT
tga256
(b)
VSP2
rel. expression
150
100
50
0
JA - + - + - + - +
ACC - - + + - - + +
WT
tga256

Figure S2

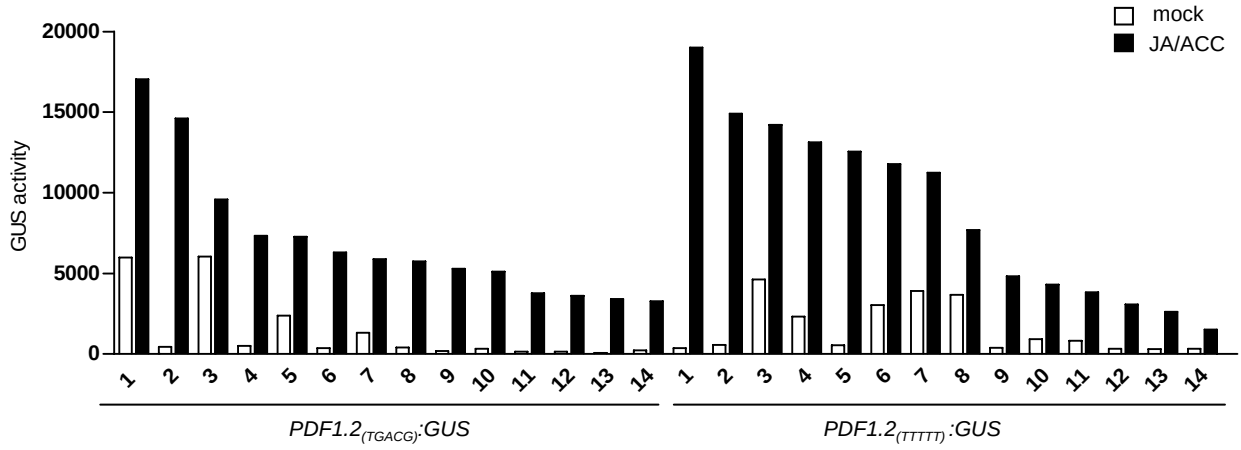

mock
JA/ACC
GUS activity
20000
15000
10000
5000
0
1 2 3 4 5 6 7 8 9 10 11 12 13 14
1 2 3 4 5 6 7 8 9 10 11 12 13 14
PDF1.2(TGACG):GUS
PDF1.2(TTTTT):GUS

Figure S3

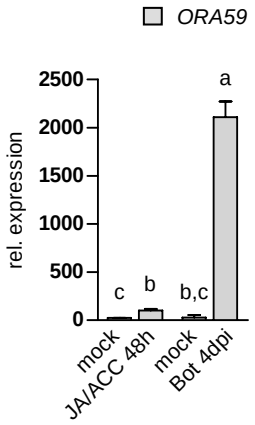

ORA59
rel. expression
2500
2000
1500
1000
500
0
a
c
b
b,c
mock
JA/ACC 48h
mock
Bot 4dpi

Figure S4

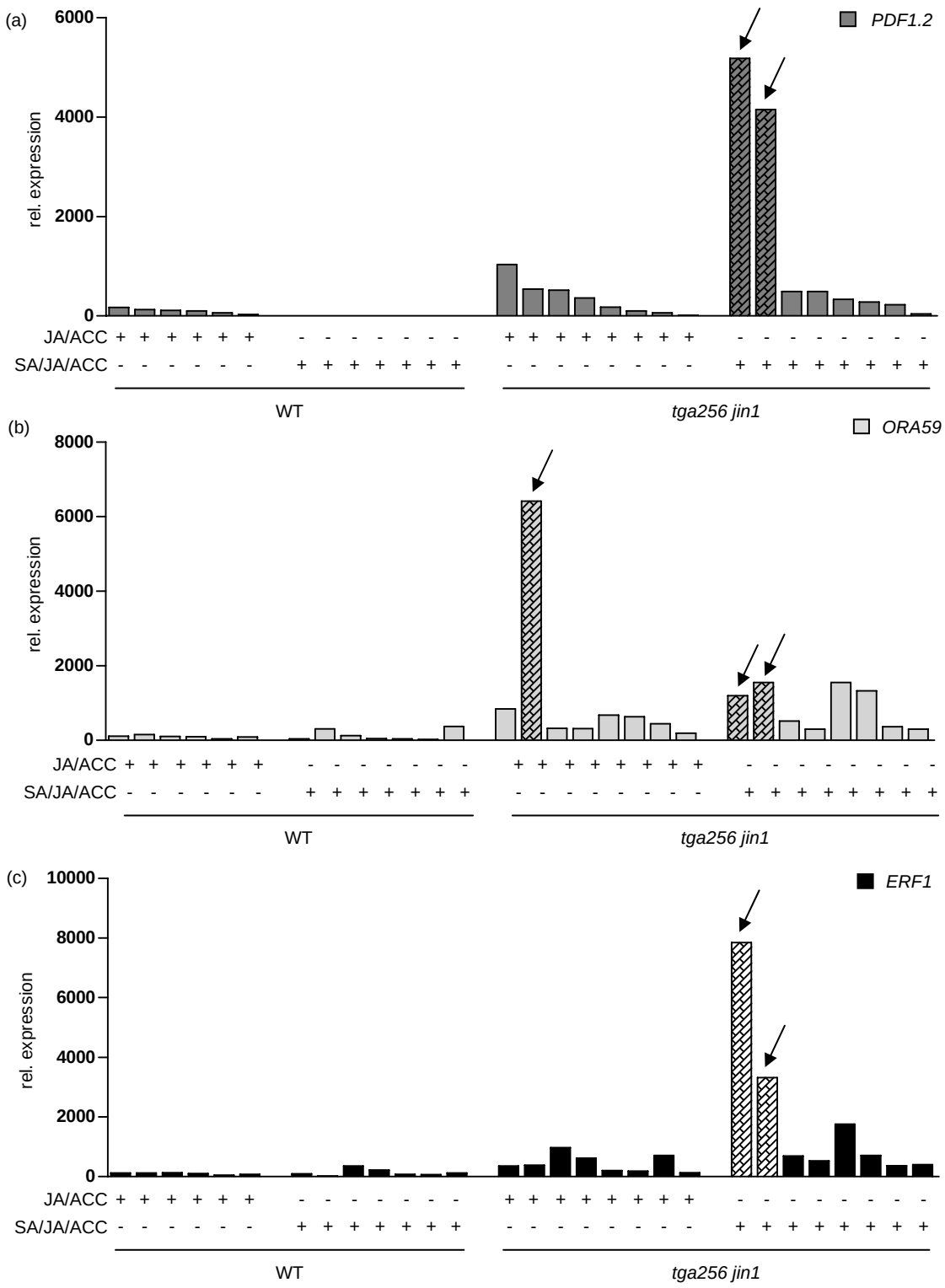
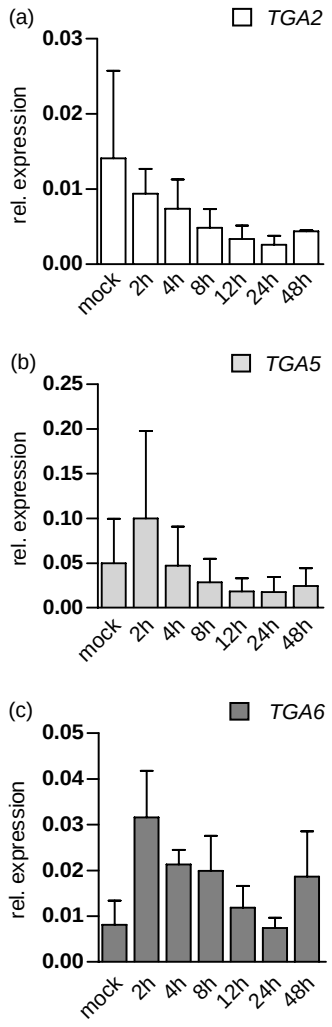

(a)
PDF1.2
rel. expression
6000
4000
2000
0
JA/ACC + + + + + + - - - - - - - + + + + + + + + - - - - - - - -
SA/JA/ACC - - - - - - + + + + + + + - - - - - - - - + + + + + + + +
WT
tga256 jin1
(b)
ORA59
rel. expression
8000
6000
4000
2000
0
JA/ACC + + + + + + - - - - - - - + + + + + + + + - - - - - - - -
SA/JA/ACC - - - - - - + + + + + + + - - - - - - - - + + + + + + + +
WT
tga256 jin1
(c)
ERF1
rel. expression
10000
8000
6000
4000
2000
0
JA/ACC + + + + + + - - - - - - - + + + + + + + + - - - - - - - -
SA/JA/ACC - - - - - - + + + + + + + - - - - - - - - + + + + + + + +
WT
tga256 jin1

Figure S5


(a)
TGA2
rel. expression
0.03
0.02
0.01
0.00
mock
2h
4h
8h
12h
24h
48h
(b)
TGA5
rel. expression
0.25
0.20
0.15
0.10
0.05
0.00
mock
2h
4h
8h
12h
24h
48h
(c)
TGA6
rel. expression
0.05
0.04
0.03
0.02
0.01
0.00
mock
2h
4h
8h
12h
24h
48h