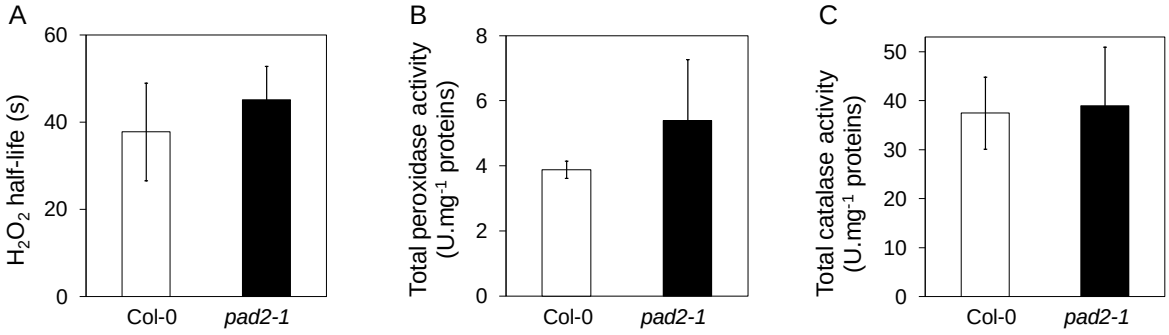
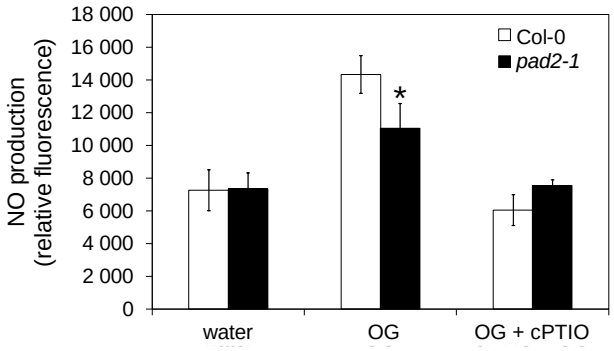
SUPPLEMENTAL MATERIAL

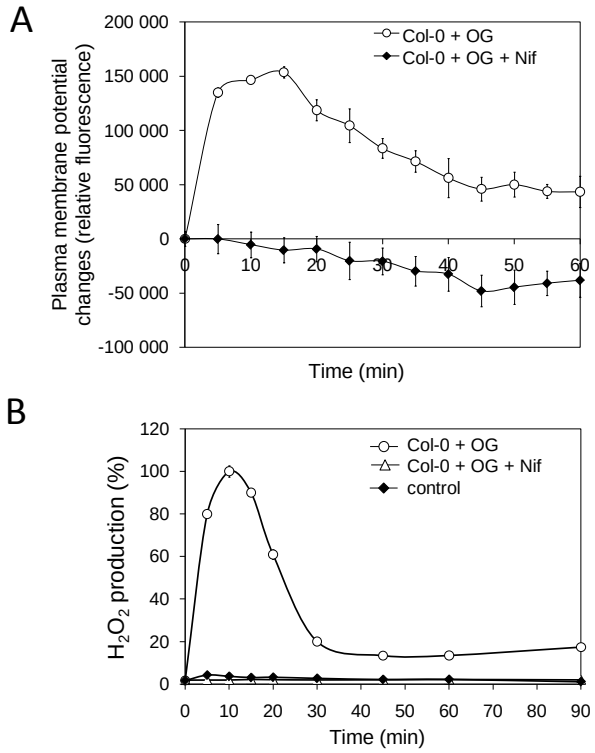
SUPPLEMENTAL FIGURES



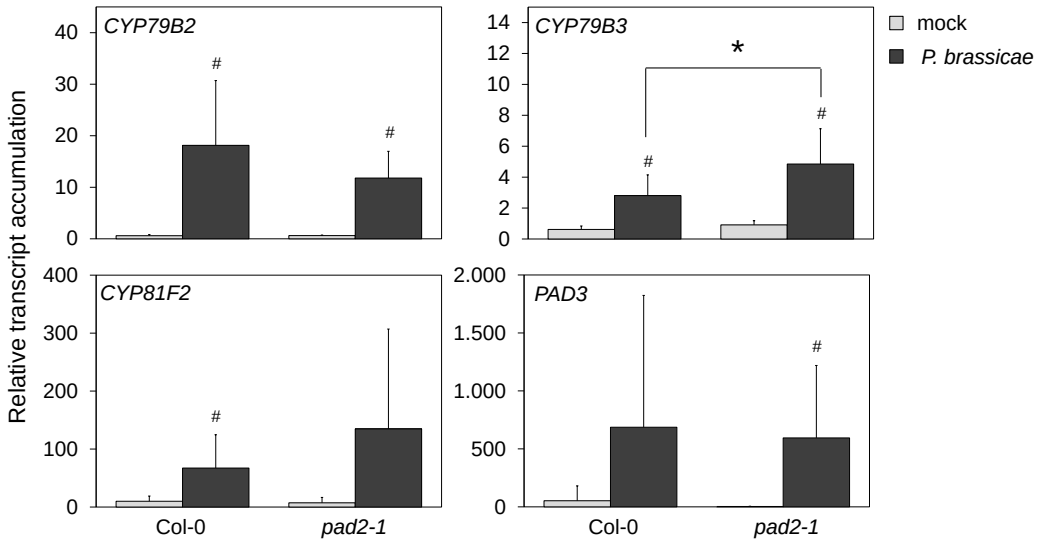
Supplemental Figure S1. Measurement of H_2O_2 half-life, total peroxidase and catalase activity in Col-0 and *pad2-1*. A, Half-life of H_2O_2 was determined by measuring the absorbance of H_2O_2 at 240 nm. B, Total peroxidase activity determined by measuring the absorbance of oxidized guaiacol substrate at 470 nm. C, Total catalase activity determined by measuring the absorbance of H_2O_2 at 240 nm. Results are the mean of three independent experiments. No significant difference was observed between Col-0 and *pad2-1* for assays of H_2O_2 half-life, peroxidase and catalase activity.



Supplemental Figure S2. Intracellular NO production at 8 h after treatment with OG in Col-0 and *pad2-1* plants. Leaf discs were vacuum-infiltrated with 2.5 g L^{-1} OG and 20 µM of NO-specific fluorescent probe DAF-2DA ± 500 µM NO scavenger cPTIO. NO production was monitored by measuring DAF-2T fluorescence. Values are means ± SE of eight parallels in a representative experiment out of three independent ones. Asterisk indicates statistically significant difference between OG-elicited Col-0 and *pad2-1* plants, using Student's t test ($p < 0.05$).



Supplemental Figure S3. Effect of the anionic channel inhibitor niflumic acid (Nif) on OG-induced changes of plasma membrane potential and H_2O_2 production in Col-0 cell suspensions. A, Cells were incubated with the voltage-sensitive fluorescent probe $DiBAC_4(3)$ (10 µm) in the dark and were treated with 200 µm niflumic acid 10 min before 0.5 g L^{-1} OG treatment. Plasma membrane depolarization was monitored by following the variation of $DiBAC_4(3)$ fluorescence. Values are means of three measurements of a representative experiment out of three independent ones. B, Effect of niflumic acid on OG-dependent H_2O_2 production in Col-0 cell suspensions. Cells were treated with 200 µM niflumic acid 10 min before OG treatment (0.5 g L^{-1}). H_2O_2 production was measured using chemiluminescence of luminol. Data are expressed in percentage of maximal H_2O_2 production in OG-treated cells and are means of three measurements ± SE. Results are representative of two independent experiments.



Supplemental Figure S4. Expression of genes involved in camalexin and glucosinolate biosynthesis in response to *P. brassicae* at 24 hpi. Plant leaves were infected by agar plug inoculation of 8-day-old mycelium. Mycelium-free plugs were used for mock treatment. The transcript accumulation of *CYP79B2*, *CYP79B3*, *CYP81F2* and *PAD3* (*CYP71B15*) was analyzed by real-time quantitative PCR. After normalization with *UBQ10*, results are expressed as the fold changes in transcript level compared to the t=0 sample (mean ± SE; n=3) from three biological independent experiments. Hash marks (#) indicate statistically significant difference between mock and infected samples ($p < 0.05$) and asterisks (*) indicate statistically significant difference between infected Col-0 and infected *pad2-1* samples ($p < 0.05$), using unpaired heteroscedastic Student's t-test.

SUPPLEMENTAL TABLE

Gene		Primer sequences 5' - 3'	
		Forward	Reverse
CYP79B2	At4g39950	CTCGCGAGACTTCTTCAAGG	CCATAACCAACGGTTTAGCC
CYP79B3	At2g22330	CCAGCCTTTGCTTACCGCTGAT	ATTCCACGGCGTTTGATGGGTT
CYP81F2	At5g57220	TGGCTATGCGTAAACTCGTG	CCGGTAAACTTCAAAATGGTG
GR1	At3g24170	TTGGGATACATCCATCTTCTG	CAAATCCTTTATTGGGACACGAG
GSTF6	At1g02930	CCAGCCTTTGAAGATGGAGA	CTTGCCAGTTGAGAGAAGGTTG
ICS1	At1g74710	GGGATAAGGGGTTCTCAC	AACAATCATAACAGCTAGGC
NPR1	At1g64280	ACCGTCTCACTGGTACGAAGAGAA	AGCCAGTTGAGTCAAGTCCTCACA
PAD3	At3g26830	GGGTACCATACTTGTTGAGATGG	TTGATGATCTCTTTGGCTTCC
PR-1	At2g14610	ACTACAACTACGCTGCGAACAC	TGGCTTCTCGTTCACATAATTCCC
RBOHD	At5g47910	TCCACAAGGTTATTGCAAGCG	CTGCTCCGTGCTTTCAGATCAA
UBQ10	At4g05320	GGCCTTGTATAATCCCTGATG	GAGATAACAGGAACGGAAACATAG

Supplemental Table S1. Primers used for qPCR.

SUPPLEMENTAL PROTOCOL

Supplemental Protocol S1. Measurement of H_2O_2 half-life, total peroxidase activity and total catalase activity. Total proteins from Col-0 and *pad2* cell suspension were extracted with 100 mM potassium phosphate buffer supplemented with 1% polyvinylpolypyrrolidone and 1 mM phenylmethylsulfonyl fluoride, pH 7. H_2O_2 half-life and catalase activity were determined by measuring the absorbance of H_2O_2 at 240 nm with a spectrophotometer. H_2O_2 solution was added in 95 µL of water + 5 µL of total proteins to measure an absorbance of 0.500. The absorbance was measured for 10 min. The decrease in absorbance was expressed in specific catalase activity (U mg^{-1} proteins). For peroxidase activity measurement, 50 mM of peroxidase substrate gaïacol and 2 mM H_2O_2 were added to total proteins and the absorbance of oxidized gaïacol was measured at 470 nm and was expressed in specific peroxidase activity (U mg^{-1} proteins).