

Supplementary Information

Table S1. Levels ($\mu\text{mol g}^{-1}$ dry weight) of total aliphatic and indole glucosinolates, total glucosinolates, and individual indole glucosinolates in pak choi sprouts and mature leaves 48 h after application of the respective elicitors.

	Total aliphatic	Total indole	Total GS	I3M	4OHI3M	4MOI3M	1MOI3M
Sprouts							
Control	41.82 $\pm$ 3.17	0.61 $\pm$ 0.07	42.43 $\pm$ 3.18	0.17 $\pm$ 0.03	0.10 $\pm$ 0.01	0.24 $\pm$ 0.02	0.10 $\pm$ 0.03
MeJA	50.84 $\pm$ 8.22	5.22 $\pm$ 1.41	56.06 $\pm$ 9.60	0.90 $\pm$ 0.29	0.10 $\pm$ 0.03	0.32 $\pm$ 0.07	3.90 $\pm$ 1.07
JA	47.02 $\pm$ 3.11	4.47 $\pm$ 0.49	51.49 $\pm$ 3.55	0.91 $\pm$ 0.13	0.13 $\pm$ 0.11	0.30 $\pm$ 0.06	3.13 $\pm$ 0.31
LA	44.06 $\pm$ 10.74	0.95 $\pm$ 0.30	45.02 $\pm$ 11.03	0.35 $\pm$ 0.11	0.14 $\pm$ 0.06	0.34 $\pm$ 0.07	0.14 $\pm$ 0.05
MeS	42.47 $\pm$ 14.10	0.75 $\pm$ 0.30	43.22 $\pm$ 14.38	0.25 $\pm$ 0.11	0.02 $\pm$ 0.01	0.31 $\pm$ 0.11	0.18 $\pm$ 0.07
Mature leaves							
Control	0.439 $\pm$ 0.184	0.071 $\pm$ 0.03	0.510 $\pm$ 0.210	0.05 $\pm$ 0.03		0.006 $\pm$ 0.002	0.01 $\pm$ 0.00
MeJA	1.788 $\pm$ 0.604	0.832 $\pm$ 0.32	2.619 $\pm$ 0.891	0.17 $\pm$ 0.06		0.010 $\pm$ 0.003	0.65 $\pm$ 0.33
JA	1.469 $\pm$ 0.216	1.678 $\pm$ 1.19	3.147 $\pm$ 1.263	0.62 $\pm$ 0.46		0.009 $\pm$ 0.004	1.05 $\pm$ 0.66
LA	0.645 $\pm$ 0.028	0.185 $\pm$ 0.10	0.830 $\pm$ 0.102	0.16 $\pm$ 0.09		0.013 $\pm$ 0.005	0.02 $\pm$ 0.01
MeS	0.882 $\pm$ 0.407	0.168 $\pm$ 0.05	1.051 $\pm$ 0.440	0.11 $\pm$ 0.04		0.010 $\pm$ 0.004	0.04 $\pm$ 0.01

GS, glucosinolates; I3M, Indol-3-ylmethyl; 4OHI3M, 4-Hydroxy-indol-3-ylmethyl; 4MOI3M, 4-Methoxy-indol-3-ylmethyl; 1MOI3M, 1-Methoxy-indol-3-ylmethyl; MeJA, methyl jasmonate; JA, jasmonic acid; LA, linolenic acid; MeS, methyl salicylate. Each value represents the mean $\pm$ SD of five replicates.

Table S2. Expression levels of semi-quantitative realtime RT-PCR in pak choi sprouts and mature leaves 48 h after application of the respective elicitors. Each value represents the mean $\pm$ SD from three biological replicates obtained from semi-quantitative qRT-PCR analysis of gene expression levels after elicitor treatment compared to control plants. Significant changes compared to control are marked with an asterisk (Dunnett test, $p \leq 0.05$).

	Control	MeJA	JA	LA	MeS
Sprouts					
<i>BrMYB34_1</i>	13.01 $\pm$ 0.25	10.25 $\pm$ 0.72 *	10.23 $\pm$ 0.34 *	12.24 $\pm$ 0.97	11.47 $\pm$ 0.32 *
<i>BrMYB34_2</i>	11.05 $\pm$ 0.42	4.19 $\pm$ 0.34 *	4.98 $\pm$ 1.21 *	8.02 $\pm$ 0.76 *	8.80 $\pm$ 0.65 *
<i>BrMYB34_3</i>	6.80 $\pm$ 0.18	2.69 $\pm$ 0.57 *	3.51 $\pm$ 0.30 *	5.98 $\pm$ 0.94	5.20 $\pm$ 0.25 *
<i>BrMYB51_1</i>	6.81 $\pm$ 0.34	6.23 $\pm$ 0.93	4.24 $\pm$ 1.99 *	5.74 $\pm$ 1.51	4.92 $\pm$ 0.27
<i>BrMYB51_2</i>	5.31 $\pm$ 0.26	4.26 $\pm$ 0.49 *	2.50 $\pm$ 0.43 *	4.01 $\pm$ 0.79 *	3.23 $\pm$ 0.27 *
<i>BrMYB51_3</i>	8.56 $\pm$ 0.28	5.74 $\pm$ 0.05 *	5.01 $\pm$ 0.30 *	5.51 $\pm$ 1.67 *	6.23 $\pm$ 0.67 *
<i>BrMYB51_4</i>	10.30 $\pm$ 0.23	7.97 $\pm$ 0.58 *	7.97 $\pm$ 0.39 *	7.76 $\pm$ 0.89 *	7.71 $\pm$ 0.31 *
<i>BrMYB122_1</i>	7.78 $\pm$ 0.36	4.71 $\pm$ 0.12 *	3.73 $\pm$ 0.78 *	5.72 $\pm$ 1.07 *	5.97 $\pm$ 0.51 *
<i>BrMYB122_2</i>	7.10 $\pm$ 0.29	5.69 $\pm$ 0.23 *	5.47 $\pm$ 0.29 *	5.96 $\pm$ 1.30 *	5.72 $\pm$ 0.27 *
<i>BrCYP79B2_1</i>	8.54 $\pm$ 0.46	4.20 $\pm$ 0.65 *	4.69 $\pm$ 0.43 *	5.95 $\pm$ 0.92 *	6.68 $\pm$ 0.30 *
<i>BrCYP79B2_2</i>	8.72 $\pm$ 0.31	5.43 $\pm$ 1.13 *	4.88 $\pm$ 0.38 *	7.18 $\pm$ 0.88 *	6.91 $\pm$ 0.34 *
<i>BrCYP79B3</i>	7.23 $\pm$ 0.43	4.23 $\pm$ 0.89 *	4.72 $\pm$ 0.34 *	5.50 $\pm$ 1.28	5.80 $\pm$ 0.45
<i>BrSOT16</i>	8.24 $\pm$ 0.42	4.69 $\pm$ 0.60 *	4.19 $\pm$ 0.63 *	6.20 $\pm$ 0.52 *	6.20 $\pm$ 0.38 *
<i>BrCYP81F1</i>	9.24 $\pm$ 0.63	7.42 $\pm$ 0.18 *	4.62 $\pm$ 0.24 *	6.17 $\pm$ 1.41 *	7.30 $\pm$ 0.96 *
<i>BrCYP81F2</i>	10.55 $\pm$ 0.36	7.68 $\pm$ 0.42 *	6.69 $\pm$ 0.48 *	7.97 $\pm$ 1.78	8.67 $\pm$ 0.55
<i>BrCYP81F3_1</i>	6.28 $\pm$ 0.23	3.74 $\pm$ 0.42 *	4.00 $\pm$ 0.36 *	4.98 $\pm$ 1.14 *	5.25 $\pm$ 0.72
<i>BrCYP81F3_2</i>	6.53 $\pm$ 0.20	5.69 $\pm$ 0.20	4.75 $\pm$ 0.16 *	6.24 $\pm$ 1.52	6.51 $\pm$ 0.75
<i>BrCYP81F4_1</i>	7.53 $\pm$ 0.61	2.48 $\pm$ 0.65 *	1.99 $\pm$ 0.37 *	5.49 $\pm$ 1.63 *	5.99 $\pm$ 0.84
<i>BrCYP81F4_2</i>	8.52 $\pm$ 0.40	0.72 $\pm$ 0.75 *	1.48 $\pm$ 0.44 *	5.50 $\pm$ 1.38 *	6.01 $\pm$ 0.63 *
<i>BrOMT_1</i>	8.31 $\pm$ 0.51	2.95 $\pm$ 0.99 *	3.25 $\pm$ 0.44 *	5.51 $\pm$ 1.77 *	6.27 $\pm$ 0.84
<i>BrOMT_2</i>	10.04 $\pm$ 0.36	8.72 $\pm$ 0.39	7.49 $\pm$ 0.60 *	7.47 $\pm$ 1.70 *	8.49 $\pm$ 0.91
Mature leaves					
<i>BrMYB34_1</i>	14.16 $\pm$ 0.89	13.97 $\pm$ 0.89	13.15 $\pm$ 1.67	14.96 $\pm$ 2.80	13.76 $\pm$ 1.15
<i>BrMYB34_2</i>	6.29 $\pm$ 0.44	6.50 $\pm$ 0.68	6.80 $\pm$ 3.15	8.75 $\pm$ 0.71	8.23 $\pm$ 3.26
<i>BrMYB34_3</i>	3.54 $\pm$ 0.91	4.00 $\pm$ 0.47	-0.62 $\pm$ 1.02 *	4.50 $\pm$ 0.32	8.48 $\pm$ 0.41 *
<i>BrMYB51_1</i>	8.01 $\pm$ 1.63	8.73 $\pm$ 0.38	7.43 $\pm$ 1.11	8.26 $\pm$ 0.77	7.51 $\pm$ 0.61
<i>BrMYB51_2</i>	3.97 $\pm$ 0.35	5.94 $\pm$ 0.09 *	6.45 $\pm$ 0.41 *	6.52 $\pm$ 0.40 *	5.75 $\pm$ 0.18 *
<i>BrMYB51_3</i>	11.53 $\pm$ 0.75	11.25 $\pm$ 0.58	10.76 $\pm$ 0.31	10.22 $\pm$ 1.19	9.25 $\pm$ 0.19 *
<i>BrMYB51_4</i>	10.54 $\pm$ 0.39	11.50 $\pm$ 0.32 *	11.78 $\pm$ 0.27 *	10.47 $\pm$ 0.24	9.68 $\pm$ 0.44 *
<i>BrMYB122_1</i>	12.01 $\pm$ 0.98	12.55 $\pm$ 0.66	8.47 $\pm$ 1.79 *	13.17 $\pm$ 0.33	11.66 $\pm$ 1.07
<i>BrMYB122_2</i>	12.38 $\pm$ 2.72	9.45 $\pm$ 0.51	9.40 $\pm$ 0.78	8.96 $\pm$ 2.42 *	8.97 $\pm$ 0.53 *
<i>BrCYP79B2_1</i>	6.00 $\pm$ 0.61	5.89 $\pm$ 1.41	3.94 $\pm$ 0.16 *	7.44 $\pm$ 0.20	6.82 $\pm$ 0.31
<i>BrCYP79B2_2</i>	8.95 $\pm$ 0.78	8.69 $\pm$ 0.99	5.15 $\pm$ 0.16 *	9.40 $\pm$ 0.54	9.27 $\pm$ 0.59
<i>BrCYP79B3</i>	10.52 $\pm$ 0.79	9.27 $\pm$ 1.19	5.91 $\pm$ 0.93 *	8.18 $\pm$ 0.87 *	9.25 $\pm$ 0.58
<i>BrSOT16</i>	5.45 $\pm$ 0.53	2.88 $\pm$ 0.14 *	0.37 $\pm$ 0.07 *	5.93 $\pm$ 0.52	4.69 $\pm$ 0.36
<i>BrCYP81F1</i>	14.38 $\pm$ 0.35	15.36 $\pm$ 0.75	13.23 $\pm$ 0.74	15.85 $\pm$ 0.78 *	13.68 $\pm$ 0.17
<i>BrCYP81F2</i>	14.77 $\pm$ 1.83	14.89 $\pm$ 1.87	13.76 $\pm$ 1.31	17.47 $\pm$ 0.07	15.16 $\pm$ 2.40
<i>BrCYP81F3_1</i>	6.52 $\pm$ 0.61	5.42 $\pm$ 0.43 *	5.75 $\pm$ 0.31	7.48 $\pm$ 0.24 *	5.72 $\pm$ 0.39

Table S2. *Cont.*

	Control	MeJA	JA	LA	MeS
<i>BrCYP81F3_2</i>	9.53 ± 0.74	8.98 ± 1.24	9.73 ± 1.02	10.98 ± 1.04	9.75 ± 0.39
<i>BrCYP81F4_1</i>	8.50 ± 0.69	7.03 ± 3.47	7.11 ± 2.86	9.72 ± 0.21	7.66 ± 2.68
<i>BrCYP81F4_2</i>	11.77 ± 0.43	−0.02 ± 0.14 *	0.72 ± 0.53 *	12.55 ± 0.26	10.57 ± 1.12
<i>BrOMT_1</i>	5.00 ± 0.75	0.48 ± 0.49 *	1.00 ± 0.12 *	9.25 ± 2.14 *	6.99 ± 0.44 *
<i>BrOMT_2</i>	14.22 ± 0.73	13.11 ± 0.32	12.48 ± 0.27	15.63 ± 0.55	13.18 ± 1.84

MeJA, methyl jasmonate; JA, jasmonic acid; LA, linolenic acid; MeS, methyl salicylate.

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