

Electronic Supplemental Materials:

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An oriental melon 9-lipoxygenase gene *CmLOX09* response to stresses, hormones, and signal substances

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Fig. S1 *Cis*-regulatory elements analysis of *CmLOX09* promoter

The translation start site is defined as +1. The putative *cis*-regulatory elements are shaded and the arrows show their directions

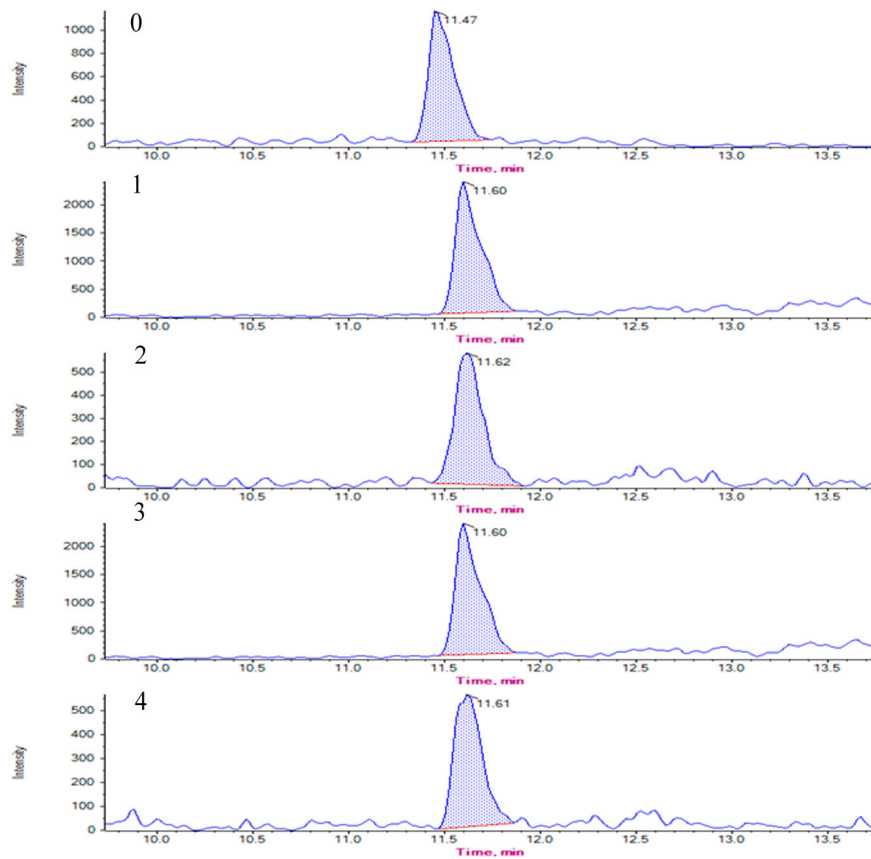


Fig. S2 Level of JA in oriental melon leaves after inoculation with *Podosphaera xanthii* analyzed with HPLC-MS/MS

Numbers indicate the different disease grade (0 = no lesions; 1 = a mild disease, lesion area 0%-25%; 2= the onset of mild, lesion area 25%-50%; 3 = moderate incidence, lesion area 50% - 75%; 4 = severe disease, lesion area \geq 75%)

Table S1 Emission of GLVs in control and MeJA treatment leaves at 6, 72, and 168 h

Green Leaf Volatiles (GLVs)	Treatment time					
	6 h		72 h		168 h	
	CK	MeJA	CK	MeJA	CK	MeJA
Alcohols (14)						
2-hexynol	0.115	49.572	0.121	80.322	3.02	10.545
(Z)-2-penten-1-ol	0.003	nd	nd	nd	nd	nd
2-Pentyn-1-ol	0.02	0.421	nd	nd	nd	0.045
trimethyl-Silanol	nd	1.172	0.058	2.853	0.043	0.314
2,4-Hexadien-1-ol	0.022	0.153	nd	0.191	0.008	nd
(Z)-5-Octen-1-ol	nd	22.49	nd	nd	0.012	0.336
3-Octen-1-ol	nd	nd	nd	41.843	nd	nd
trans-2-Nonen-1-ol	nd	nd	0.013	nd	nd	nd
2-(1,1-Dimethylethoxy) ethanol	nd	1.252	nd	nd	nd	nd
2,4-Dimethyl-3-pentanol	nd	nd	nd	nd	nd	0.016
2,4-Decadien-1-ol	nd	nd	0.033	nd	nd	nd
2-hexyl-1-Decanol	nd	nd	nd	nd	0.22	nd
Stigmastan-3-ol	nd	0.282	nd	nd	nd	nd
tert-Hexadecanethiol	nd	nd	nd	3.372	0.016	nd
Aldehydes (4)						
2-hexenal	nd	48.003	nd	77.744	nd	10.354
trans-2-Hexenal	7.011	nd	6.011	nd	nd	nd
2,6,6-trimethyl-1-cyclohexe ne-1-carboxaldehyde	0.019	nd	nd	nd	nd	nd
beta-cyclocitral	nd	nd	0.014	nd	0.02	nd
Esters (5)						
17alpha-Hydroxy-yohimban -16alpha-carboxylic acid methyl ester	33.2	2310.53	37.494	4904.85	31.011	426.78
Crystal violet lactone	nd	3.36	nd	nd	0.03	nd
Methyl dihydrojasmonate	nd	4.722	nd	nd	nd	nd
Dihydrocarveol acetate	nd	nd	nd	nd	nd	0.012
Methyl arachidonate	nd	nd	0.133	nd	nd	0.006
Ketones (3)						
beta-Ionone	0.181	nd	0.251	nd	0.066	nd
2-(1-cyclohexen-1-yl)-Cycl ohexanone	nd	0.09	nd	nd	nd	0.339
18-Pentatriacontanone	nd	nd	0.008	nd	nd	nd
Others (4)						
Chlorotoluron	0.036	1.022	0.077	1.953	0.073	0.174
ketazolam	nd	1.226	nd	2.497	nd	nd
Clozapine	nd	nd	nd	4.845	nd	0.357
4-Nonene	nd	1.983	nd	nd	nd	nd

Note: nd stands for not detected