Terpenoid biosynthesis in *Arabidopsis* attacked by caterpillars and aphids: effects of aphid density on the attraction of a caterpillar parasitoid

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Supplemental material 4. Volatile organic compounds emitted by *Arabidopsis* wild-type Col-0 after single *P. xylostella* infestation, dual *P. xylostella* and *B. brassicae* infestation and without infestation (Undamaged). Dual infestation was done with either a low (LD) or high (HD) *B. brassicae* density. Plants were sampled at 72 h after insect infestation.

					Treatment (n = 7)			
					Undamaged	*P. xylostella*	Dual LD	Dual HD
ID	Compound	[A]Quantifier (target) ion (m/z)	[B]LRI_{Exp}	[C]LRI_{Lit}	[D]Peak area/g plant fresh weight ± SE			
	Alcohols							
1	1-Penten-3-ol	57	661	672	568 ± 191[a]	1873 ± 334[b]	1567 ± 186[b]	2092 ± 345[b]
14	6-Methyl-1-octanol	97	1145	1145[E]	93 ± 25	251 ± 79	242 ± 105	248 ± 126
35	12-Methyl-(*E,E)*-2,13-octadecadien-1-ol	121	1928	NF	122 ± 27	142 ± 35	133 ± 31	148 ± 36
36	2-Methyl-(*Z,Z)*-3,13-octadecadien-1-ol	121	1943	NF	155 ± 35	168 ± 27	163 ± 40	183 ± 46
39	2-Methyl-(*E,E)*-3,13-octadecadien-1-ol	121	1968	NF	86 ± 17	102 ± 25	98 ± 22	105 ± 23
	Terpenoids							
3	β-Citronellene	67	947	944[E]	78 ± 11	100 ± 27	92 ± 29	121 ± 39
4	Camphene	93	952	952	12 ± 1	14 ± 2	17 ± 2	16 ± 3
5	Cyclohexene, 4-ethenyl-1,4-dimethyl-	93	960	949[F]	61 ± 12	79 ± 17	81 ± 17	87 ± 21
6	Myrcene	93	992	992	131 ± 14	211 ± 45	171 ± 21	165 ± 28
7	Limonene	136	1032	1033	591 ± 84	722 ± 135	742 ± 123	755 ± 171
8	1,8-Cineole	139	1034	1034	10 ± 5	8 ± 1	20 ± 12	10 ± 2

9	Sylvestrene	93	1039	1032	44 ± 17	69 ± 42	23 ± 5	25 ± 4
10	(*E*)-β-Ocimene	93	1049	1050	63 ± 11	89 ± 21	72 ± 12	73 ± 15
11	Y-Terpinene	93	1062	1062	245 ± 40	245 ± 49	301 ± 58	287 ± 66
12	Terpinolene	93	1092	1092	44 ± 7	74 ± 19	61 ± 17	80 ± 34
13	Linalool	93	1101	1101	59 ± 14	153 ± 48	91 ± 27	92 ± 27
15	Menthone	154	1160	1160	54 ± 38	33 ± 11	97 ± 74	35 ± 12
16	Isomenthone	154	1171	1170	13 ± 9 (n=5)	8 ± 2	21 ± 15(n=6)	10 ± 3
17	Menthol	123	1179	1177[E]	293 ± 177	264 ± 95	527 ± 395	257 ± 128
18	α-Terpineol	121	1197	1198	60 ± 15	97 ± 25	59 ± 12	63 ± 11
22	Limonene, 1,2,8,9-diepoxy-	81	1376	NF	136 ± 34	196 ± 56	203 ± 41	199 ± 51
24	Isodauca-6,9-diene	161	1387	NF	9 ± 1	11 ± 1	11 ± 1	10 ± 1
25	Longifolene	161	1423	1423	21 ± 2	25 ± 3	24 ± 3	25 ± 3
26	α-Cedrene	119	1429	1430	28 ± 2	33 ± 4	30 ± 3	35 ± 5
27	(*E*)-β-Caryophyllene	133	1434	1434	9 ± 2 (n=5)	7 ± 1 (n=6)	9 ± 1 (n=5)	8 ± 1
28	(*E*,*E*)-α-Farnesene	93	1512	1512	34 ± 4[a]	124 ± 33[b]	94 ± 16[b]	104 ± 19[b]
29	(*E*,*E*)-TMTT[*]	81	1582	1589[E]	95 ± 31[a]	791 ± 302[b]	640 ± 165[b]	513 ± 158[b]
	Esters							
19	Methyl salicylate	152	1201	1201	15 ± 2[a]	153 ± 73[b]	81 ± 20[ab]	67 ± 21[ab]
20	Linalyl acetate	93	1257	1257	151 ± 53	202 ± 62	134 ± 48	155 ± 64
21	α-Terpinyl acetate	93	1355	1347[E]	44 ± 8	58 ± 11	53 ± 13	46 ± 10
23	Neryl acetate	136	1384	1386	7 ± 1 (n=6)	10 ± 3	8 ± 2	9 ± 3 (n=6)
30	Methyl jasmonate, *cis*	153	1661	1654[E]	239 ± 47	193 ± 49	221 ± 66	218 ± 37
41	Nerolidol isobutyrate	121	1999	NF	187 ± 40	222 ± 57	209 ± 47	235 ± 53
	Others							
2	Allyl isothiocyanate	99	886	887	267 ± 143 (n=5)	347 ± 186 (n=4)	24 ± 11 (n=5)	124 ± 46
34	Farnesyl acetaldehyde	136	1845	1856[E]	55 ± 12	44 ± 12	68 ± 19	47 ± 13
	Unknowns							
31	unknown compound	164	1754	NA	289 ± 76	358 ± 109	356 ± 96	391 ± 107
32	unknown compound	164	1764	NA	231 ± 60	288 ± 81	285 ± 74	310 ± 84

33	unknown compound	95	1787	NA	351 ± 93	433 ± 120	433 ± 117	478 ± 131
37	unknown compound	121	1957	NA	82 ± 17	98 ± 28	98 ± 22	103 ± 26
38	unknown compound	121	1961	NA	122 ± 27	137 ± 37	128 ± 30	140 ± 34
40	unknown compound	121	1987	NA	171 ± 36	198 ± 50	194 ± 42	211 ± 50

[A]: Quantifier ion used for relative quantification of the respective volatile compounds.

[B]: $LRI_{Exp.}$: Linear retention indices experimentally obtained on a ZB-5MSi analytical column as described in Marques et al. (2000).

[C]: $LRI_{Lit.}$: Linear retention indices obtained from NIST 2008, on a column with (5 %-Phenyl)-methylpolysiloxane stationary phase or equivalent unless stated.

[D]: Volatile emissions are given as peak area (mean ± SE) per gram plant shoot fresh weight divided by 10^5 with the number of replicates between brackets. If emission of a volatile compound was not found in all the samples of a treatment, volatile emission values are followed by the number of samples in which the compound was detected. Mean values indicated with different letters are significantly different between means (GLM, $P < 0.05$).

[E]: $LRI_{Lit.}$ obtained from Abu-Dahab et al. (2014), Adams (1995), Babushok et al. (2011) and Kos et al. (2013).

[F]: $LRI_{Lit.}$: Linear retention indices on a column with 100% methylpolysiloxane (PDMS) stationary phase or equivalent.

NA: Not Applicable

NF: $LRI_{Lit.}$ Not Found

(*E*, *E*)–TMTT: (*E*, *E*)–4,8,12-trimethyltrideca-1,3,7,11-tetraene

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