

**Additional file 2.** Volatile organic compounds (VOCs) collected from the headspace of *Brassica rapa* Maarssen (BR) (for details on the method see Bruinsma *et al.* 2014). The ratio of the peak areas in the gas chromatogram was calculated of VOCs collected from an empty receiver cylinder exposed to two flowering plants in the emitter cylinder (BR) and from an empty receiver cylinder when the emitter cylinder was left empty (BG). VOCs with a ratio of  $\leq 0.8$  (not grey) in a sample were determined by total ion composition (TIC) and retention index (RI). The sample number is indicated when the identity of a VOC was confirmed (conf.). VOCs with a BG/BR ratio  $\leq 0.8$ , which were confirmed at least in one sample, are marked yellow. Confirmed VOCs by TIC in the *B. rapa* samples were additionally confirmed by squaring RI with literature and their peak areas in the gas chromatogram are presented by BR and BG in Additional file 3.

VOCs in headspace collection (BR)	Peak area of BG/BR $\leq 0.8$	RT	Conf. by TIC (BR)	Conf. by TIC (BG)	RI (cal.)	Conf. by RI (BR)
2-Methylbutanenitrile	2, 3, 6	6.94	2, 3	4	723	all
3-Methyl-3-buten-1-ol	4, 6	7.12	no	-	729	-
Tiglic-aldehyde	1-6	7.48	no	-	742	-
Dimethyl disulfide	1-4, 6	7.6	1-4, 6	all	747	all
Methallyl cyanide	1	7.99	1	all	761	all
2-Methylbutanoic acid, methyl ester	1, 3, 4, 6	8.38	no	-	775	-
2,4-Dithiapentane	1	11.95	no	-	898	-
Prenyl acetate	6	12.59	no	-	919	-
Anisole	6	12.67	no	-	922	-
Butane, 1-isothiocyanato	2, 3, 6	13.02	no	-	934	-
$\alpha$ -pinene		13.3	1-4, 6	all	943	all
Camphene		13.8	-	-	960	-
Dimethyl trisulfide	1-4, 6	14.43	no	-	982	-
3-Butenyl isothiocyanate	1-4, 6	14.51	1-4, 6	all	984	all
$\beta$ -pinene	6	14.64	6	all	989	-
$\beta$ -Myrcene		14.7	-	-	991	-
3-Hexen-1-ol, acetate, (Z)-	4	15.06	4	-	1003	all
Hexyl acetate	4	16.03	no	-	1038	-
Limonene		16.02	-	-	1038	-
$\beta$ -Myrcene hydroperoxide	1-3, 6	16.34	no	-	1049	-
Phenylacetaldehyde	1-6	16.45	no	-	1053	-
Methyl benzoate	3, 6	17.84	no	-	1103	-
4,8-Dimethyl-1,3,7-nonatriene, (E)-		18.16	-	-	1116	-
Benzyl cyanide		19.03	-	-	1148	-
Limonene, 8,9-epoxy-		21.24	-	-	1233	-
$\beta$ -Caryophyllene, (E)-	2, 3	26.26	no	-	1446	-
Geranylacetone		26.38	-	-	1452	-
$\alpha$ -Farnesene, (Z,E)-		27.29	-	-	1493	-
$\alpha$ -Farnesene, (E,E)-	1-3, 6	27.62	no	-	1508	-
1,3,7,11-Tridecatetraene, 4,8,12-trimethyl-, (E,E)-		29.06	-	-	1578	-