Table S1. Statistical analysis of (*E*)-β-farnesene and (*E*)-α-bergamotene emission for two lines of *TPS10* and WT plants (Fig. 1), after applying the Holm-Bonferroni correction for the number of tests listed (No. tests). Significant *P*-values (< 0.05) are in **bold**, while marginal *P*-values (< 0.1) are in *italics*.

Compound	Treatment	Comparison	Test statistic	DF or n	No. tests	Corrected P
(*E*)-β-Farnesene	Con	WT vs. 10-3	W = 16	n = 4	2	**0.0421**
		WT vs. 10-4	W = 14	n = 4	2	*0.0689*
	W+W	WT vs. 10-3	W = 16	n = 4	2	**0.0421**
		WT vs. 10-4	W = 16	n = 4	2	**0.0211**
	W+OS	WT vs. 10-3	t = 3.397	df = 4.639	2	**0.0434**
		WT vs. 10-4	W = 12.5	n = 4	2	0.2186
	Lan	WT vs. 10-3	W = 16	n = 4	2	**0.0421**
		WT vs. 10-4	W = 10	n = 3 to 4	2	0.1227
	Lan+MJ	WT vs. 10-3	W = 16	n = 4	2	**0.0421**
		WT vs. 10-4	W = 16	n = 4	2	**0.0211**
(*E*)-α-Bergamotene	Con	WT vs. 10-3	W = 16	n = 4	2	*0.0530*
		WT vs. 10-4	W = 16	n = 4	2	*0.0530*
	W+W	WT vs. 10-3	t = 4.885	df = 3.957	2	**0.0167**
		WT vs. 10-4	W = 15	n = 4	2	*0.0591*
	W+OS	WT vs. 10-3	t = 3.421	df = 3.671	2	*0.0612*
		WT vs. 10-4	t = 1.643	df = 5.022	2	0.1611
	Lan	WT vs. 10-3	W = 16	n = 4	2	*0.0530*

Compound	Treatment	Comparison	Test statistic	DF or n	No. tests	Corrected P
	Lan+MJ	WT vs. 10-4	W = 9.5	n = 3 to 4	2	0.2419
		WT vs. 10-3	t = 3.946	df = 3.759	2	**0.0380**
		WT vs. 10-4	t = 2.864	df = 4.487	2	**0.0400**

Table S2. Statistical analysis of (*E*)-β-farnesene and (*E*)-α-bergamotene emission for one line of *TPS10M* and WT plants (Fig. 1). Significant *P*-values (< 0.05) are in **bold**.

Compound	Treatment	Comparison	Test statistic	DF or n	No. tests	P
(*E*)-β-Farnesene	Con	WT vs. M-1	W = 12	n = 3 to 4	1	**0.0436**
	W+W	WT vs. M-1	W = 16	n = 4	1	**0.0211**
	W+OS	WT vs. M-1	W = 12	n = 3 to 4	1	**0.0319**
	Lan	WT vs. M-1	W = 12	n = 3 to 4	1	**0.0319**
	Lan+MJ	WT vs. M-1	W = 6	n = 2 to 3	1	0.1066
(*E*)-α-Bergamotene	Con	WT vs. M-1	t = 2.087	df = 3.568	1	0.1136
	W+W	WT vs. M-1	t = 4.989	df = 4.722	1	**0.0048**
	W+OS	WT vs. M-1	t = 4.276	df = 4.751	1	**0.0088**
	Lan	WT vs. M-1	W = 12	n = 4	1	**0.0436**
	Lan+MJ	WT vs. M-1	t = 0.0744	df = 2.852	1	0.9456

Table S3. HGL-DTGS in two lines of *TPS10* and WT (mean ± SEM, n = 4). Values are peak areas in counts*s normalized to mg fresh mass relative to an internal standard. Corrected $*P < 0.05$, $**P < 0.01$ versus WT within the same treatment in Welch's t-tests after a Bonferroni correction for multiple comparisons (individual HGL-DTGs and total HGL-DTGs were tested, and WT was tested against each line; total HGL-DTGs are shown in Figure 4).

Compound	Line	Con	W+W	W+OS	Lan	Lan+MJ
Lyciumoside I	WT	**3.43** ± 1.16	**2.43** ± 0.51	**2.08** ± 0.35	**2.42** ± 0.17	**4.78** ± 0.67
	10-3	**1.95** ± 0.25	**1.23** ± 0.11	**1.53** ± 0.05	**2.16** ± 0.30	**3.51** ± 0.80
	10-4	**2.25** ± 0.37	**0.81** ± 0.20	**1.49** ± 0.44	**1.79** ± 0.54	**4.08** ± 0.37
Lyciumoside II	WT	**2.39** ± 0.38	**3.65** ± 1.17	**4.22** ± 0.51	**1.64** ± 0.11	**3.66** ± 0.60
	10-3	**2.58** ± 0.25	**3.21** ± 0.40	**3.98** ± 0.75	**2.43** ± 0.37	**3.02** ± 0.55
	10-4	**2.71** ± 0.19	**2.56** ± 0.27	**3.17** ± 0.32	**4.31** ± 2.02	**2.78** ± 0.33
Lyciumoside IV	WT	**339.31** ± 39.83	**604.60** ± 257.82	**388.82** ± 50.61	**329.36** ± 17.80	**751.60** ± 99.53
	10-3	**371.79** ± 12.54	**418.69** ± 41.93	**399.94** ± 55.69	**403.76** ± 59.68	**686.03** ± 62.16
	10-4	**434.44** ± 24.38	**335.42** ± 41.74	**348.47** ± 47.93	**740.98** ± 302.79	**631.12** ± 73.05
Nicotianoside I	WT	**268.78** ± 29.05	**377.25** ± 85.33	**306.27** ± 22.64	**286.18** ± 7.78	**520.05** ± 56.29
	10-3	**283.22** ± 14.43	**310.94** ± 13.69	**290.43** ± 22.06	**303.10** ± 28.15	**476.38** ± 26.44
	10-4	**299.43** ± 21.02	**212.98** ± 11.58	**271.78** ± 32.91	** **353.27** ± 10.51	**462.49** ± 26.00
Nicotianoside II	WT	**434.22** ± 124.93	**345.57** ± 55.88	**228.99** ± 20.05	**172.63** ± 7.95	**372.10** ± 53.58
	10-3	**409.25** ± 92.68	**382.82** ± 65.24	**203.65** ± 22.71	**146.57** ± 13.81	**340.91** ± 18.38
	10-4	**388.45** ± 113.38	**179.92** ± 47.49	**155.28** ± 25.98	**161.73** ± 49.68	**281.71** ± 25.75
Nicotianoside III	WT	**10.81** ± 1.37	**15.80** ± 4.00	**11.95** ± 0.95	**9.73** ± 0.70	**21.77** ± 3.08

Compound	Line	Con	W+W	W+OS	Lan	Lan+MJ
	10-3	**11.45** ± 0.62	**13.42** ± 0.26	**11.12** ± 0.95	**10.82** ± 1.00	**20.61** ± 1.81
	10-4	**11.65** ± 0.86	**8.89** ± 0.45	**9.71** ± 1.32	**17.16** ± 3.52	**17.74** ± 1.51
Nicotianoside IV	WT	**93.72** ± 22.08	**119.91** ± 19.92	**91.18** ± 7.12	**67.86** ± 5.63	**160.11** ± 26.77
	10-3	**91.50** ± 9.48	**122.43** ± 10.08	**84.53** ± 5.48	**73.25** ± 7.38	**162.90** ± 12.29
	10-4	**90.92** ± 11.71	**61.71** ± 8.35	**71.55** ± 9.15	**103.67** ± 13.20	**126.18** ± 8.10
Nicotianoside V	WT	**122.78** ± 31.82	**139.85** ± 13.95	**134.13** ± 11.10	**81.17** ± 9.66	**234.02** ± 40.51
	10-3	**110.59** ± 16.94	**160.79** ± 16.94	**114.20** ± 11.39	**65.48** ± 6.89	**234.94** ± 14.75
	10-4	**88.10** ± 23.63	* **65.83** ± 9.89	**88.83** ± 16.06	**85.95** ± 27.06	**164.50** ± 9.50
Attenoside	WT	**2.14** ± 0.38	**6.52** ± 2.40	**7.12** ± 0.57	**1.62** ± 0.28	**3.30** ± 0.70
	10-3	**2.30** ± 0.26	**5.50** ± 0.54	**6.53** ± 1.48	**2.17** ± 0.25	**2.93** ± 0.65
	10-4	**2.29** ± 0.17	**2.99** ± 0.36	**4.81** ± 0.79	**6.05** ± 2.51	**1.68** ± 0.30
Nicotianoside VI	WT	**71.47** ± 14.94	**163.87** ± 27.72	**159.07** ± 18.14	**40.67** ± 2.91	**59.56** ± 10.43
	10-3	**79.74** ± 8.00	**161.91** ± 19.09	**148.49** ± 27.33	**47.39** ± 5.49	**57.80** ± 9.26
	10-4	**76.89** ± 11.57	**73.35** ± 10.68	**111.30** ± 11.83	**77.60** ± 22.10	**34.34** ± 2.16
Nicotianoside VII	WT	**17.47** ± 3.70	**36.69** ± 3.48	**45.77** ± 7.16	**12.02** ± 1.00	**15.19** ± 2.87
	10-3	**17.12** ± 2.45	**38.44** ± 2.75	**40.26** ± 9.23	**10.47** ± 0.85	**14.29** ± 1.88
	10-4	**13.61** ± 2.78	* **14.99** ± 1.84	**28.82** ± 3.87	**15.84** ± 6.37	**8.07** ± 0.93

Table S4. HGL-DTGS in one line of *TPS10M* and WT (mean ± SEM, n = 4). Values are peak areas in counts*s normalized to mg fresh mass relative to an internal standard. There were no significant differences (corrected $P > 0.05$) in Welch's t-tests or Wilcoxon rank-sum tests between line M-1 and WT within each treatment after Bonferroni corrections for multiple comparisons (individual HGL-DTGs and total HGL-DTGs were tested, total HGL-DTGs are shown in Figure 4).

Compound	Line	Con	W+W	W+OS	Lan	Lan+MJ
Lyciumoside I	WT	**2.76** ± 0.19	**1.47** ± 0.25	**2.62** ± 0.82	**2.54** ± 0.37	**17.72** ± 4.19
	M-1	**2.53** ± 0.51	**2.07** ± 0.33	**2.27** ± 0.32	**2.24** ± 0.93	**12.83** ± 3.14
Lyciumoside II	WT	**14.28** ± 8.08	**15.86** ± 5.01	**6.57** ± 0.80	**34.63** ± 3.06	**9.66** ± 2.00
	M-1	**24.55** ± 3.57	**24.05** ± 3.76	**18.90** ± 8.52	**19.58** ± 5.95	**6.62** ± 1.05
Lyciumoside IV	WT	**976.42** ± 160.26	**1063.14** ± 136.72	**455.57** ± 5.59	**1602.69** ± 177.44	**1352.12** ± 343.99
	M-1	**1273.83** ± 216.23	**1412.91** ± 140.18	**646.58** ± 83.34	**1159.98** ± 342.72	**1249.35** ± 214.24
Nicotianoside I	WT	**143.42** ± 69.75	**144.33** ± 44.34	**236.96** ± 22.44	**15.19** ± 1.71	**666.60** ± 126.48
	M-1	**25.74** ± 20.88	**93.25** ± 39.06	**161.16** ± 52.98	**13.62** ± 2.06	**698.44** ± 105.94
Nicotianoside II	WT	**59.52** ± 30.22	**23.09** ± 14.62	**106.98** ± 18.41	**0.04** ± 0.01	**317.89** ± 51.95
	M-1	**1.01** ± 0.79	**7.84** ± 4.82	**42.43** ± 21.53	**0.07** ± 0.04	**310.25** ± 39.75
Nicotianoside III	WT	**12.56** ± 2.36	**13.95** ± 0.90	**11.19** ± 0.57	**14.16** ± 2.50	**27.75** ± 5.21
	M-1	**8.71** ± 2.61	**14.15** ± 1.84	**9.41** ± 1.99	**8.31** ± 2.46	**28.44** ± 3.99
Nicotianoside IV	WT	**38.92** ± 15.88	**51.49** ± 10.07	**48.59** ± 5.43	**10.91** ± 1.70	**146.51** ± 23.42
	M-1	**15.52** ± 10.85	**41.94** ± 13.82	**37.98** ± 11.21	**7.88** ± 0.94	**160.12** ± 18.18
Nicotianoside V	WT	**16.73** ± 8.90	**12.16** ± 7.42	**55.56** ± 11.82	**0.01** ± 0.01	**157.35** ± 23.05
	M-1	**0.43** ± 0.40	**3.74** ± 2.15	**21.84** ± 11.57	**0.10** ± 0.06	**172.57** ± 16.79

Compound	Line	Con	W+W	W+OS	Lan	Lan+MJ
Attenoside	WT	**4.16** ± 1.96	**13.44** ± 5.15	**4.69** ± 0.35	**15.50** ± 0.77	**2.85** ± 0.62
	M-1	**7.11** ± 1.14	**16.04** ± 2.21	**14.23** ± 6.02	**10.15** ± 2.41	**2.45** ± 0.30
Nicotianoside VI	WT	**37.90** ± 15.40	**88.61** ± 7.31	**107.33** ± 6.03	**11.79** ± 1.07	**49.70** ± 6.20
	M-1	**12.64** ± 5.94	**71.84** ± 20.69	**124.51** ± 12.50	**11.68** ± 0.63	**44.17** ± 5.00
Nicotianoside VII	WT	**3.50** ± 1.75	**6.95** ± 2.44	**28.66** ± 3.02	**0.16** ± 0.03	**8.64** ± 0.58
	M-1	**0.29** ± 0.22	**3.08** ± 1.41	**16.94** ± 5.80	**0.18** ± 0.05	**7.19** ± 0.70

Table S5. Statistical analysis of growth for two lines of *TPS10* and WT plants grown alone or in competition (Fig. 8), after applying the Bonferroni correction for the number of tests listed (No. tests). Significant *P*-values (<0.05) are in **bold**.

Measurement	Day	Individual/Competing	Effect	Test	Test statistic	DF	No. tests	Corrected P
Rosette diameter	27	Individual	Line	Kruskal-Wallis	$\chi^2 = 5.053$	2	2	0.1599
Rosette diameter	27	Individual v. competing	Competition	Wilcoxon rank-sum	W = 217		3	0.1068
Rosette diameter	27	Individual v. competing	Competition	Wilcoxon rank-sum	W = 181		3	0.9840
Rosette diameter	27	Individual v. competing	Competition	Wilcoxon rank-sum	W = 129		3	1.0000
Rosette diameter	27	Competing	Line	Kruskal-Wallis	$\chi^2 = 7.0211$	2	3	0.0896
Rosette diameter	27	Competing	Neighbor	Kruskal-Wallis	$\chi^2 = 1.8998$	2	3	1.0000
Rosette diameter	30	Individual	Line	Kruskal-Wallis	$\chi^2 = 3.8116$	2	2	0.2974
Rosette diameter	30	Individual v. competing	Competition	Wilcoxon rank-sum	W = 228		3	**0.0446**
Rosette diameter	30	Individual v. competing	Competition	Wilcoxon rank-sum	W = 213		3	0.1460
Rosette diameter	30	Individual v. competing	Competition	Wilcoxon rank-sum	W = 158		3	1.0000
Rosette diameter	30	Competing	Line	Kruskal-Wallis	$\chi^2 = 4.9625$	2	3	0.2509
Rosette diameter	30	Competing	Neighbor	Kruskal-Wallis	$\chi^2 = 1.1909$	2	3	1.0000
Rosette diameter	34	Individual	Line	Kruskal-Wallis	$\chi^2 = 1.7395$	2	2	0.8382
Rosette diameter	34	Individual v. competing	Competition	Wilcoxon rank-sum	W = 275		3	**0.0003**
Rosette diameter	34	Individual v. competing	Competition	Wilcoxon rank-sum	W = 289		3	**<0.0001**
Rosette diameter	34	Individual v. competing	Competition	Wilcoxon rank-sum	W = 289		3	**<0.0001**
Rosette diameter	34	Competing	Line	Kruskal-Wallis	$\chi^2 = 14.8551$	2	4	**0.0024**
Rosette diameter	34	Competing	Line	Wilcoxon rank-sum	W = 221		4	**0.0028**

Measurement	Day	Individual/Competing	Effect	Test	Test statistic	DF	No. tests	Corrected P
Rosette diameter	34	Competing	Line	Wilcoxon rank-sum	W = 669		4	**0.0045**
Rosette diameter	34	Competing	Line	Wilcoxon rank-sum	W = 439		4	1.0000
Rosette diameter	34	Competing	Neighbor	Kruskal-Wallis	$\chi^2 = 0.1589$	2	4	1.0000
Rosette diameter	41	Individual	Line	Kruskal-Wallis	$\chi^2 = 0.7884$	2	2	1.0000
Rosette diameter	41	Individual v. competing	Competition	Wilcoxon rank-sum	W = 290		3	**<0.0001**
Rosette diameter	41	Individual v. competing	Competition	Wilcoxon rank-sum	W = 282		3	**<0.0001**
Rosette diameter	41	Individual v. competing	Competition	Wilcoxon rank-sum	W = 281		3	**0.0001**
Rosette diameter	41	Competing	Line	Kruskal-Wallis	$\chi^2 = 0.6326$	2	3	1.0000
Rosette diameter	41	Competing	Neighbor	Kruskal-Wallis	$\chi^2 = 0.4569$	2	3	1.0000
Rosette diameter	44	Individual	Line	Kruskal-Wallis	$\chi^2 = 0.5341$	2	2	1.0000
Rosette diameter	44	Individual v. competing	Competition	Wilcoxon rank-sum	W = 283		3	**<0.0001**
Rosette diameter	44	Individual v. competing	Competition	Wilcoxon rank-sum	W = 257		3	**<0.0001**
Rosette diameter	44	Individual v. competing	Competition	Wilcoxon rank-sum	W = 258		3	**0.0003**
Rosette diameter	44	Competing	Line	Kruskal-Wallis	$\chi^2 = 0.6977$	2	3	1.0000
Rosette diameter	44	Competing	Neighbor	Kruskal-Wallis	$\chi^2 = 0.9869$	2	3	1.0000
Rosette diameter	48	Individual	Line	Kruskal-Wallis	$\chi^2 = 1.1015$	2	2	1.0000
Rosette diameter	48	Individual v. competing	Competition	Wilcoxon rank-sum	W = 272		3	**<0.0001**
Rosette diameter	48	Individual v. competing	Competition	Wilcoxon rank-sum	W = 248		3	**0.0001**
Rosette diameter	48	Individual v. competing	Competition	Wilcoxon rank-sum	W = 266		3	**0.0001**
Rosette diameter	48	Competing	Line	Kruskal-Wallis	$\chi^2 = 0.2088$	2	3	1.0000

Measurement	Day	Individual/Competing	Effect	Test	Test statistic	DF	No. tests	Corrected P
Rosette diameter	48	Competing	Neighbor	Kruskal-Wallis	$\chi^2 = 1.4376$	2	3	1.0000
Stalk length	34	Individual	Line	Kruskal-Wallis	$\chi^2 = 1.123$	2	2	1.0000
Stalk length	34	Individual v. competing	Competition	Wilcoxon rank-sum	W = 108		3	0.5934
Stalk length	34	Individual v. competing	Competition	Wilcoxon rank-sum	W = 167		3	1.0000
Stalk length	34	Individual v. competing	Competition	Wilcoxon rank-sum	W = 162		3	1.0000
Stalk length	34	Competing	Line	Kruskal-Wallis	$\chi^2 = 5.3606$	2	3	0.2056
Stalk length	34	Competing	Neighbor	Kruskal-Wallis	$\chi^2 = 0.7864$	2	3	1.0000
Stalk length	41	Individual	Line	Kruskal-Wallis	$\chi^2 = 1.9655$	2	2	0.7486
Stalk length	41	Individual v. competing	Competition	Wilcoxon rank-sum	W = 122		3	1.0000
Stalk length	41	Individual v. competing	Competition	Wilcoxon rank-sum	W = 213		3	0.1517
Stalk length	41	Individual v. competing	Competition	Wilcoxon rank-sum	W = 175		3	1.0000
Stalk length	41	Competing	Line	Kruskal-Wallis	$\chi^2 = 4.9075$	2	3	0.2579
Stalk length	41	Competing	Neighbor	Kruskal-Wallis	$\chi^2 = 0.4133$	2	3	1.0000
Stalk length	44	Individual	Line	Kruskal-Wallis	$\chi^2 = 0.2858$	2	2	1.0000
Stalk length	44	Individual v. competing	Competition	Wilcoxon rank-sum	W = 186		3	0.3807
Stalk length	44	Individual v. competing	Competition	Wilcoxon rank-sum	W = 254		3	**0.0014**
Stalk length	44	Individual v. competing	Competition	Wilcoxon rank-sum	W = 225		3	**0.0025**
Stalk length	44	Competing	Line	Kruskal-Wallis	$\chi^2 = 4.3566$	2	3	0.3396
Stalk length	44	Competing	Neighbor	Kruskal-Wallis	$\chi^2 = 0.2875$	2	3	1.0000
Stalk length	48	Individual	Line	Kruskal-Wallis	$\chi^2 = 0.893$	2	2	1.0000

Measurement	Day	Individual/Competing	Effect	Test	Test statistic	DF	No. tests	Corrected P
Stalk length	48	Individual v. competing	Competition	Wilcoxon rank-sum	W = 228		3	**0.0105**
Stalk length	48	Individual v. competing	Competition	Wilcoxon rank-sum	W = 269		3	**0.0001**
Stalk length	48	Individual v. competing	Competition	Wilcoxon rank-sum	W = 258		3	**<0.0001**
Stalk length	48	Competing	Line	Kruskal-Wallis	$\chi^2 = 4.8246$	2	3	0.2688
Stalk length	48	Competing	Neighbor	Kruskal-Wallis	$\chi^2 = 0.506$	2	3	1.0000
Stalk length	51	Individual	Line	Kruskal-Wallis	$\chi^2 = 1.3134$	2	2	1.0000
Stalk length	51	Individual v. competing	Competition	Wilcoxon rank-sum	W = 229		3	**0.0041**
Stalk length	51	Individual v. competing	Competition	Wilcoxon rank-sum	W = 267		3	**0.0001**
Stalk length	51	Individual v. competing	Competition	Wilcoxon rank-sum	W = 246		3	**<0.0001**
Stalk length	51	Competing	Line	Kruskal-Wallis	$\chi^2 = 2.5033$	2	3	0.8580
Stalk length	51	Competing	Neighbor	Kruskal-Wallis	$\chi^2 = 0.1037$	2	3	1.0000
Stalk length	55	Individual	Line	Kruskal-Wallis	$\chi^2 = 0.4196$	2	2	1.0000
Stalk length	55	Individual v. competing	Competition	Wilcoxon rank-sum	W = 223		3	**0.0032**
Stalk length	55	Individual v. competing	Competition	Wilcoxon rank-sum	W = 267		3	**0.0001**
Stalk length	55	Individual v. competing	Competition	Wilcoxon rank-sum	W = 221		3	**0.0001**
Stalk length	55	Competing	Line	Kruskal-Wallis	$\chi^2 = 1.1865$	2	3	1.0000
Stalk length	55	Competing	Neighbor	Kruskal-Wallis	$\chi^2 = 0.1494$	2	3	1.0000
Stalk length	59	Individual	Line	Kruskal-Wallis	$\chi^2 = 0.6218$	2	2	1.0000
Stalk length	59	Individual v. competing	Competition	Wilcoxon rank-sum	W = 217		3	**0.0023**
Stalk length	59	Individual v. competing	Competition	Wilcoxon rank-sum	W = 265		3	**0.0001**

Measurement	Day	Individual/Competing	Effect	Test	Test statistic	DF	No. tests	Corrected P
Stalk length	59	Individual v. competing	Competition	Wilcoxon rank-sum	W = 242		3	**0.0001**
Stalk length	59	Competing	Line	Kruskal-Wallis	χ^2 = 1.0272	2	3	1.0000
Stalk length	59	Competing	Neighbor	Kruskal-Wallis	χ^2 = 0.2844	2	3	1.0000
Stalk length	62	Individual	Line	Kruskal-Wallis	χ^2 = 1.5353	2	2	0.9282
Stalk length	62	Individual v. competing	Competition	Wilcoxon rank-sum	W = 216		3	**0.0028**
Stalk length	62	Individual v. competing	Competition	Wilcoxon rank-sum	W = 262		3	**0.0002**
Stalk length	62	Individual v. competing	Competition	Wilcoxon rank-sum	W = 244		3	**<0.0001**
Stalk length	62	Competing	Line	Kruskal-Wallis	χ^2 = 0.5701	2	3	1.0000
Stalk length	62	Competing	Neighbor	Kruskal-Wallis	χ^2 = 0.5951	2	3	1.0000
Stalk length	66	Individual	Line	Kruskal-Wallis	χ^2 = 3.0814	2	2	0.4284
Stalk length	66	Individual v. competing	Competition	Wilcoxon rank-sum	W = 215		3	**0.0030**
Stalk length	66	Individual v. competing	Competition	Wilcoxon rank-sum	W = 258		3	**0.0003**
Stalk length	66	Individual v. competing	Competition	Wilcoxon rank-sum	W = 234		3	**<0.0001**
Stalk length	66	Competing	Line	Kruskal-Wallis	χ^2 = 1.2635	2	3	1.0000
Stalk length	66	Competing	Neighbor	Kruskal-Wallis	χ^2 = 0.2061	2	3	1.0000

Table S6. Statistical analysis of reproduction for two lines of *TPS10* and WT plants grown alone or in competition (Fig. 9), after applying the Bonferroni correction for the number of tests listed (No. tests). Significant corrected *P*-values (<0.05) are in **bold**.

Measurement	Individual/Competing	Effect	Test	Test statistic	DF	No. tests	Corrected P
Buds	Individual	Line	ANOVA	F = 2.681	2, 26	2	0.1748
Buds	Competing	Line	ANOVA minimal model	F = 2.373	2, 72	2	0.2000
Buds	Individual v. competing, WT	Competition	Welch's t-test	t = 3.7759	16.184	2	**0.0033**
Buds	Individual v. competing, 10-3	Competition	Welch's t-test	t = 4.6398	15.109	2	**0.0006**
Buds	Individual v. competing, 10-4	Competition	Welch's t-test	t = 6.2095	13.691	2	**0.0001**
Flowers	Individual	Line	ANOVA	F = 4.191	2, 26	2	0.0528
Flowers	Competing	Line	ANOVA minimal model	F = 1.307	2, 72	2	0.5540
Flowers	Individual v. competing, WT	Competition	Welch's t-test	t = 2.7779	14.608	2	**0.0287**
Flowers	Individual v. competing, 10-3	Competition	Welch's t-test	t = 1.9182	13.492	2	0.1530
Flowers	Individual v. competing, 10-4	Competition	Welch's t-test	t = 6.4014	16.048	2	**<0.0001**
Unripe capsules	Individual	Line	ANOVA	F = 2.997	2, 26	2	0.1348
Unripe capsules	Competing	Line	ANOVA minimal model	F = 6.481	2, 72	2	**0.0052**
Unripe capsules	Competing: 10-3 v. 10-4	Line	Tukey			2	**0.0060**
Unripe capsules	Competing: WT v. 10-3	Line	Tukey			2	0.0638
Unripe capsules	Competing: WT v. 10-4	Line	Tukey			2	1.0000
Unripe capsules	Individual v. competing, WT	Competition	Welch's t-test	t = 8.0416	14.095	2	**<0.0001**
Unripe capsules	Individual v. competing, 10-3	Competition	Welch's t-test	t = 7.0834	22.344	2	**<0.0001**
Unripe capsules	Individual v. competing, 10-4	Competition	Welch's t-test	t = 5.0078	13.499	2	**0.0004**

Measurement	Individual/Competing	Effect	Test	Test statistic	DF	No. tests	Corrected P
Ripe capsules	Individual	Line	ANOVA	F = 1.807	2, 26	2	0.3680
Ripe capsules	Competing	Line	ANOVA minimal model	F = 5.15	2, 72	2	**0.0162**
Ripe capsules	Competing: 10-3 v. 10-4	Line	Tukey			2	**0.0299**
Ripe capsules	Competing: WT v. 10-3	Line	Tukey			2	1.0000
Ripe capsules	Competing: WT v. 10-4	Line	Tukey			2	**0.0449**
Ripe capsules	Individual v. competing, WT	Competition	Welch's t-test	t = 3.2678	9.621	2	**0.0178**
Ripe capsules	Individual v. competing, 10-3	Competition	Welch's t-test	t = 5.5625	20.767	2	**<0.0001**
Ripe capsules	Individual v. competing, 10-4	Competition	Welch's t-test	t = 4.9421	19.738	2	**0.0002**

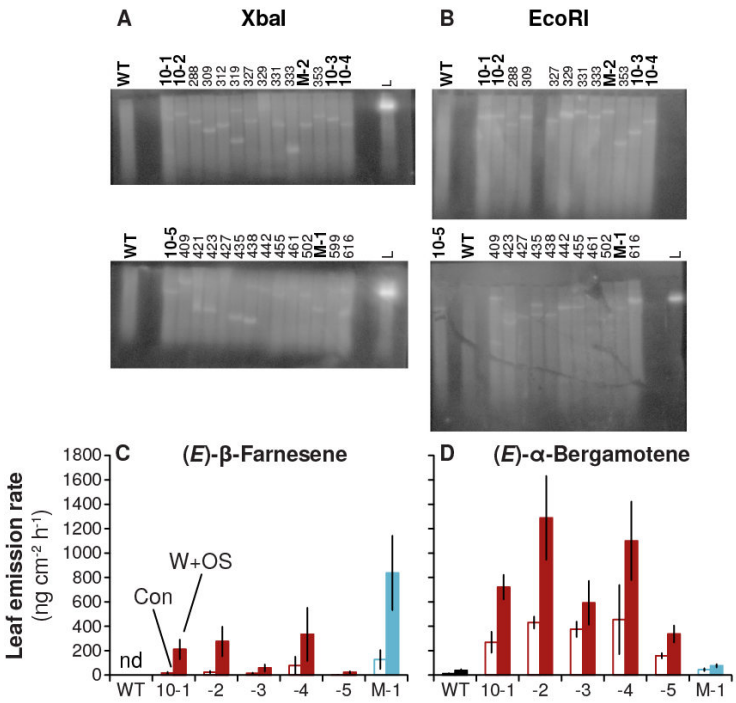

Figure S1. Selection of *TPS10* and *TPS10M* lines with a single transgene copy and enhanced emission of the target volatiles (*E*)-β-farnesene and (*E*)-α-bergamotene (mean ± SEM, n = 4). (A, B) Images of Southern blots hybridized with a probe for the hygromycin resistance marker gene *HPTII* for independent lines of *TPS10* and *TPS10M* following digestion of DNA with XbaI (A) or EcoRI (B). Lanes are labeled with line numbers, WT (wild-type) or L (ladder positive Con: contains the target *HPTII* sequence). *TPS10* and *TPS10M* lines selected for further experiments are indicated by line numbers in bold (*TPS10*: 10-#, *TPS10M*: M-#). Full line numbers are A-09-# (e.g. A-09-409); full line numbers for selected lines are A-09-279 (10-1), A-09-287 (10-2), A-09-389 (10-3), A-09-391 (10-4), A-09-396 (10-5), A-09-596 (M-1), and A-09-334 (M-2). Each line number represents a transformation event; homozygous lines from this event were used for experiments. (C) (*E*)-β-Farnesene is present in the leaf headspace of *TPS10* (10-#, red) and *TPS10M* (M-1, blue), but not WT, constitutively and 24-32 h after W+OS treatment; emission from a line of *TPS10M* is greatest. Differences in (*E*)-β-farnesene abundance among lines were not significant in Con measurements ($P = 0.3821$) but became significant after W+OS treatment ($P = 0.0211$), and the effect of W+OS treatment on (*E*)-β-farnesene abundance was also significant ($P < 0.001$). (D) (*E*)-α-Bergamotene is detectable in the leaf headspace of *TPS10* and *TPS10M* lines and of WT constitutively, but increased 24-32 h after W+OS treatment ($P = 0.0167$); the effect of line was significant both in Con measurements ($P = 0.0034$) and after W+OS treatment ($P = 0.0011$). *P*-values result from Bonferroni correction of Kruskal-Wallis tests used to

compare lines within treatments, and Wilcoxon rank-sum tests used to compare Con and W+OS treatments for each volatile.

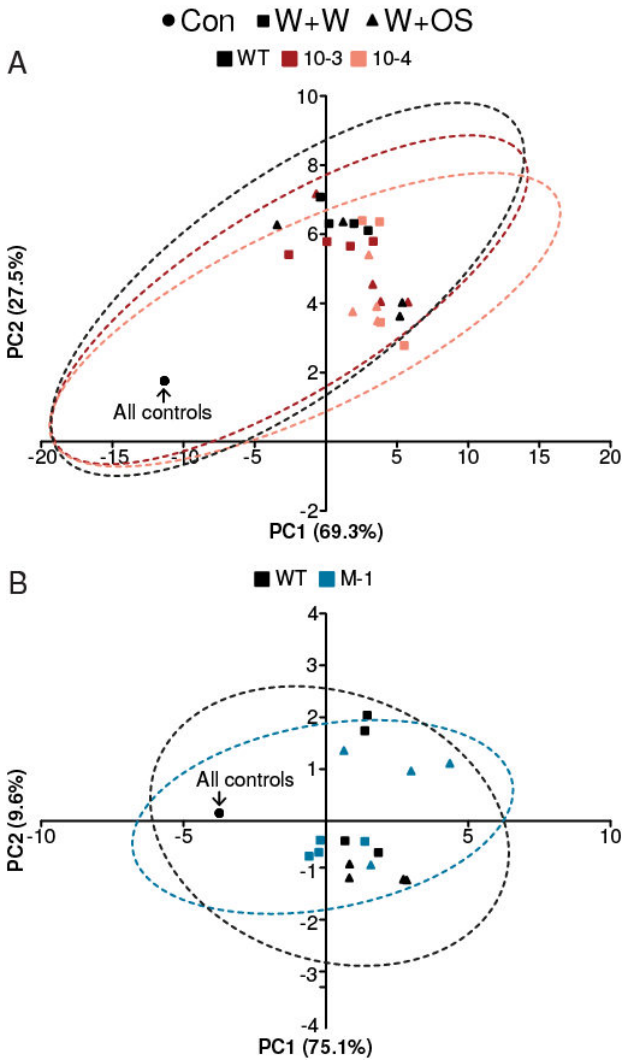

Figure S2. Green leaf volatiles (GLVs) are similar to WT in *TPS10* and *TPS10M* lines (n = 4 samples per line per treatment, n = 12 per line). A PCA with 95% confident intervals for each line is shown for all GLVs detected in the headspace of the +2 leaf in a comparison of WT and *TPS10* (A) or WT and *TPS10M* plants (B) for the first 3 h (during which the greatest amount of GLVs are released after damage) after no treatment (Con, circles) or treatment with W+W (squares) or W+OS (triangles).

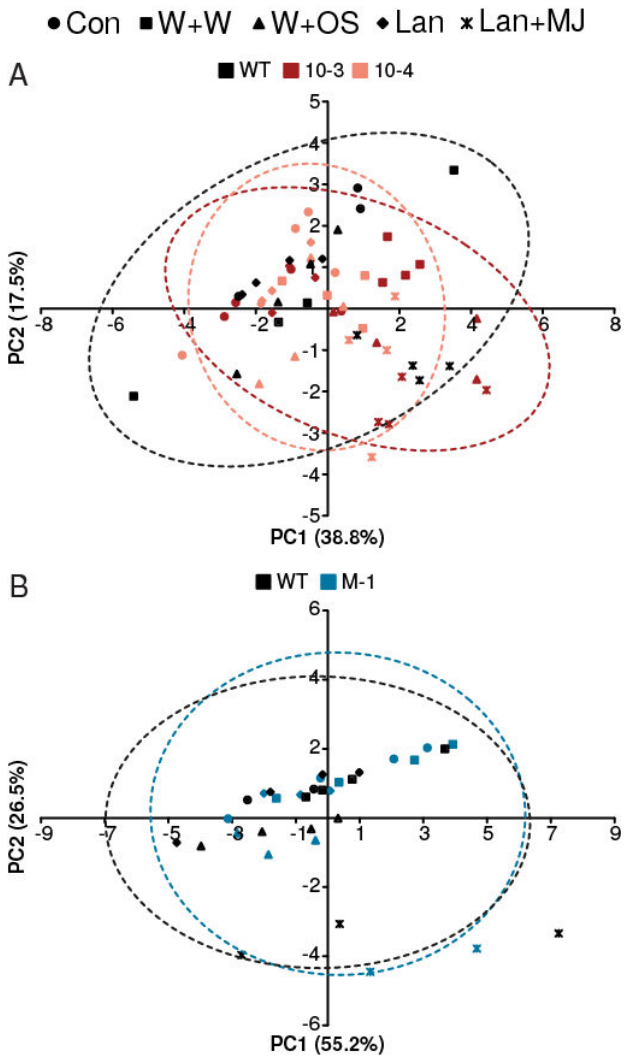

Figure S3. Plant volatiles (PVs) other than (*E*)-β-farnesene and (*E*)-α-bergamotene are similar to WT in *TPS10* and *TPS10M* (n=4 samples per line per treatment, n = 12 per genotype). A PCA with 95% confident intervals for each line is shown for all other PVs detected in the headspace of the +2 leaf in a comparison of WT and *TPS10* (A) or WT and *TPS10M* plants (B) for 24-32 h following treatment (during which the greatest amount of terpenoids are released after damage) from untreated leaves (Con, circles) or leaves treated with W+W (squares), W+OS (triangles), Lan (diamonds) or Lan+MJ (x's).

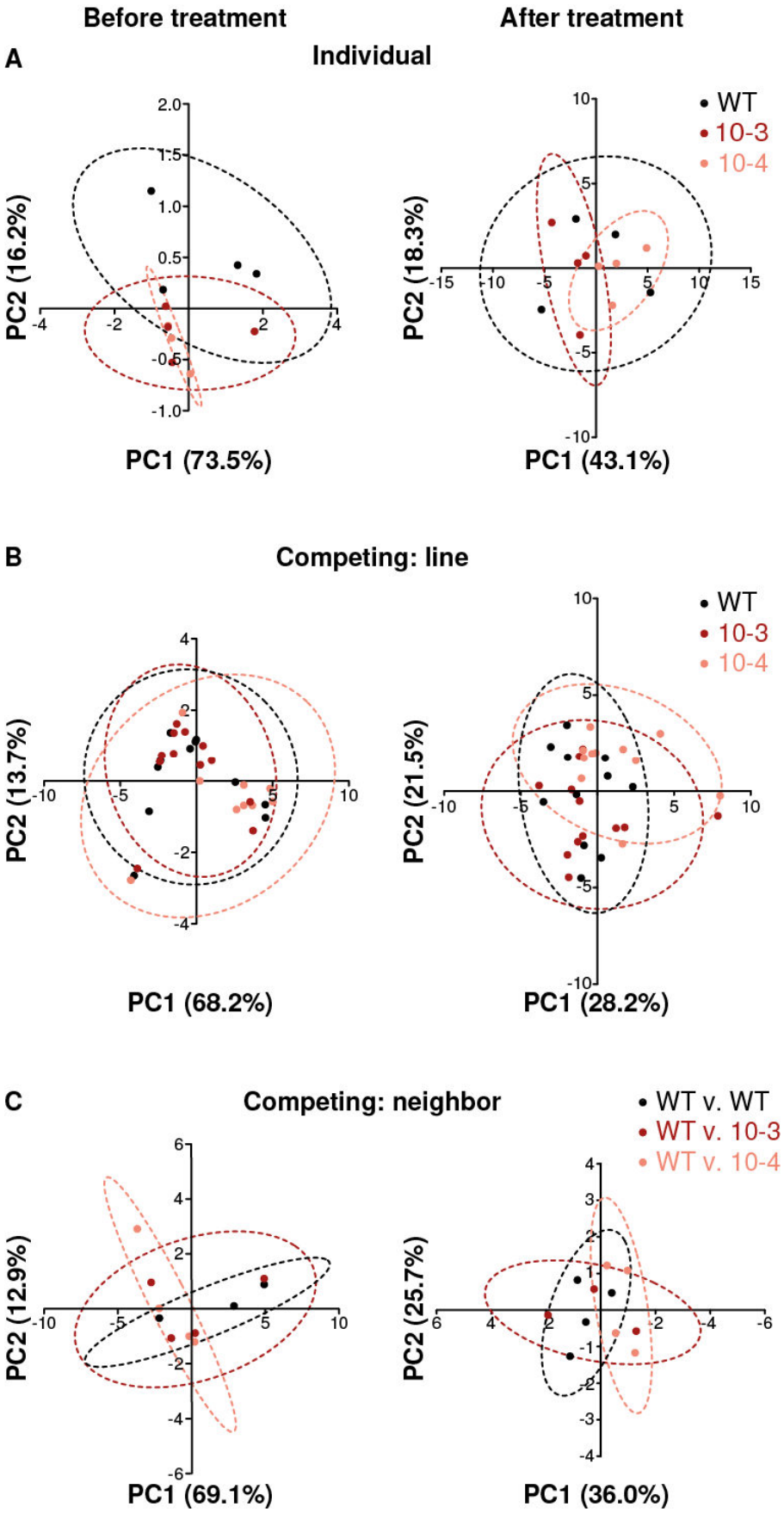
Before treatment
After treatment
A
Individual
PC2 (16.2%)
PC1 (73.5%)
PC2 (18.3%)
PC1 (43.1%)
WT
10-3
10-4
B
Competing: line
PC2 (13.7%)
PC1 (68.2%)
PC2 (21.5%)
PC1 (28.2%)
C
Competing: neighbor
WT v. WT
WT v. 10-3
WT v. 10-4
PC2 (12.9%)
PC1 (69.1%)
PC2 (25.7%)
PC1 (36.0%)

Figure S4. Plant volatiles other than (*E*)-β-farnesene and (*E*)-α-bergamotene are similar to WT in *TPS10* and are not affected by competition. A PCA with 95% confident intervals for each line is shown for all other volatiles detected in the headspace of the +2 leaf in a comparison of WT and *TPS10* planted alone (A, n = 4 per line) or in competition (B, n = 12 per line), and for WT plants competing with neighbors of different genotypes (C, n = 4 per neighbor type), for 6 h before treatment (left panels) or for 0-6 h following the last of three elicitations with W+OS over 18 h across 2 d (right panels).