

Table S1. Free aromatic fraction profile (Values are expressed as percentages).

Variety	Year	%ALCOHOLS	%ACIDS	%ALDEHYDES	%C6	%THIOLS	%ESTERS	%PHENOLS
AT	[2015]	21.85	10.99	1.56	55.29	n.d.	n.d.	n.d.
	[2016]	13.71	10.14	0.14	72.46	n.d.	0.72	0.64
	[2017]	15.02	5.50	n.d.	75.13	n.d.	0.27	0.49
		16.86 ± 4.37 ab	8.88 ± 2.96 ab	0.57 ± 0.86 a	67.63 ± 10.77 bc	n.d. a	0.33 ± 0.36 a	0.38 ± 0.34 ab
CO	[2015]	22.96	26.00	1.67	38.75	n.d.	n.d.	0.46
	[2016]	15.85	2.99	0.38	77.21	n.d.	0.18	0.18
	[2017]	9.62	3.22	1.72	81.85	0.51	n.d.	n.d.
		16.14 ± 6.68 ab	10.74 ± 13.22 ab	1.26 ± 0.76 a	65.94 ± 23.66 bc	0.17 ± 0.29 a	0.06 ± 0.11 a	0.21 ± 0.23 ab
ES	[2015]	8.33	8.72	0.67	78.05	n.d.	0.29	0.20
	[2016]	22.81	3.83	0.79	64.33	n.d.	0.14	1.32
	[2017]	16.35	5.72	0.74	71.19	n.d.	0.15	0.28
		15.83 ± 7.25 ab	6.09 ± 2.46 ab	0.73 ± 0.06 a	71.19 ± 6.86 bc	n.d. a	0.20 ± 0.08 a	0.60 ± 0.62 ab
EV3	[2015]	10.33	12.51	0.16	71.19	n.d.	n.d.	n.d.
	[2016]	36.15	6.57	n.d.	45.41	n.d.	n.d.	0.85
	[2017]	6.79	3.40	1.37	82.82	n.d.	0.14	0.45
		17.76 ± 16.03 ab	7.49 ± 4.62 ab	0.51 ± 0.75 a	66.47 ± 19.15 bc	n.d. a	0.05 ± 0.08 a	0.43 ± 0.42 ab
EV4	[2015]	19.81	16.04	1.48	53.61	n.d.	n.d.	0.59
	[2016]	10.99	3.79	0.43	81.71	n.d.	n.d.	0.63
	[2017]	22.19	4.06	n.d.	66.22	n.d.	n.d.	0.14
		17.66 ± 5.90 ab	7.96 ± 6.99 ab	0.64 ± 0.76 a	67.18 ± 14.07 bc	n.d. a	n.d. a	0.45 ± 0.27 ab
EV6	[2015]	17.71	21.78	1.12	54.86	n.d.	n.d.	0.27
	[2016]	41.30	14.08	3.45	33.96	n.d.	0.45	0.72
	[2017]	10.73	3.29	1.89	80.08	0.23	0.38	0.06
		23.25 ± 16.02 ab	13.05 ± 9.28 ab	2.16 ± 1.19 a	56.30 ± 23.09 bc	0.08 ± 0.13 a	0.28 ± 0.24 a	0.35 ± 0.34 ab
FE	[2015]	11.09	58.26	0.63	25.73	n.d.	n.d.	0.70
	[2016]	8.84	2.04	5.12	78.27	n.d.	2.28	0.08

GA	[2017]	20.82	5.03	n.d.	68.24	n.d.	0.14	0.49
		13.58 ± 6.37 ab	21.77 ± 31.63 b	1.92 ± 2.79 a	57.41 ± 27.89 bc	n.d. a	0.80 ± 1.28 ab	0.42 ± 0.32 ab
	[2015]	9.60	15.60	0.96	64.89	n.d.	0.18	0.40
	[2016]	13.30	5.82	0.31	77.82	n.d.	n.d.	0.08
	[2017]	25.90	9.38	0.62	47.33	n.d.	n.d.	0.75
GN		16.27 ± 8.54 ab	10.27 ± 4.95 ab	0.63 ± 0.32 a	63.34 ± 15.30 bc	n.d. a	0.06 ± 0.10 a	0.41 ± 0.34 ab
	[2016]	17.36	6.82	1.24	66.48	n.d.	n.d.	0.41
	[2017]	15.96	7.11	1.69	68.87	n.d.	0.09	0.92
		16.66 ± 0.99 ab	6.96 ± 0.21 ab	1.46 ± 0.31 a	67.68 ± 1.69 bc	n.d. a	0.04 ± 0.06 a	0.66 ± 0.36 abc
HI	[2015]	15.94	13.27	1.11	50.40	n.d.	1.02	0.34
	[2016]	17.80	7.45	0.44	63.91	n.d.	0.37	0.24
		16.87 ± 1.32 ab	10.36 ± 4.11 ab	0.78 ± 0.47 a	57.15 ± 9.55 bc	n.d. a	0.70 ± 0.46 ab	0.29 ± 0.07 ab
MA	[2015]	4.12	8.62	1.74	81.97	n.d.	0.34	0.84
	[2016]	10.50	3.21	1.62	79.09	n.d.	0.12	0.56
	[2017]	13.07	5.14	1.58	75.44	0.14	0.50	0.85
		9.23 ± 4.61 a	5.65 ± 2.74 a	1.65 ± 0.08 a	78.83 ± 3.27 c	0.05 ± 0.08 a	0.32 ± 0.19 a	0.75 ± 0.17 bc
ME	[2015]	2.44	2.64	0.37	81.05	n.d.	1.07	0.10
	[2016]	11.03	2.14	4.49	78.54	n.d.	n.d.	0.07
	[2017]	38.89	15.65	n.d.	29.43	0.63	n.d.	0.91
		17.45 ± 19.06 ab	6.81 ± 7.66 ab	1.62 ± 2.49 a	63.00 ± 29.11 bc	0.21 ± 0.36 a	0.36 ± 0.62 ab	0.36 ± 0.48 ab
MZ	[2015]	12.80	21.73	1.13	57.67	n.d.	n.d.	0.16
	[2016]	12.99	11.48	0.79	69.82	0.16	0.28	0.28
	[2017]	38.70	4.17	0.89	42.96	n.d.	n.d.	0.24
		21.50 ± 14.90 ab	12.46 ± 8.82 ab	0.94 ± 0.18 a	56.82 ± 13.45 bc	0.05 ± 0.09 a	0.09 ± 0.16 a	0.23 ± 0.06 ab
MH	[2015]	8.16	5.41	n.d.	4.63	n.d.	n.d.	0.30
	[2016]	15.08	6.06	1.14	21.56	n.d.	n.d.	0.96
	[2017]	14.15	0.87	0.48	19.41	0.52	1.71	0.20
		12.46 ± 3.76 ab	4.11 ± 2.82 a	0.54 ± 0.57 a	15.20 ± 9.22 a	0.17 ± 0.30 a	0.57 ± 0.99 ab	0.49 ± 0.42 ab
MO	[2015]	19.41	14.69	n.d.	58.61	0.18	n.d.	0.35

	[2016]	25.69	12.81	3.27	52.68	n.d.	0.30	1.04
	[2017]	35.69	9.42	0.68	38.53	0.47	0.49	0.61
		26.93 ± 8.21 b	12.30 ± 2.67 ab	1.32 ± 1.72 a	49.94 ± 10.32 b	0.22 ± 0.24 a	0.26 ± 0.25 a	0.67 ± 0.35 bc
PE	[2016]	14.64	1.35	n.d.	76.55	n.d.	4.10	0.47
	[2017]	15.83	2.23	0.53	73.82	n.d.	1.79	n.d.
		15.23 ± 0.84 ab	1.79 ± 0.62 a	0.26 ± 0.37 a	75.18 ± 1.93 bc	n.d. a	2.95 ± 1.64 c	0.23 ± 0.33 ab
PC	[2015]	4.78	3.93	n.d.	84.80	n.d.	0.58	0.16
	[2016]	28.07	11.89	2.29	50.78	n.d.	2.26	0.22
	[2017]	28.38	16.40	0.64	43.14	n.d.	1.30	0.37
		20.41 ± 15.54 ab	10.74 ± 6.31 ab	0.98 ± 1.18 a	59.57 ± 22.18 bc	n.d. a	1.38 ± 0.84 b	0.25 ± 0.11 ab
PN	[2015]	14.88	23.58	0.58	52.12	n.d.	n.d.	0.61
	[2016]	22.90	1.73	1.53	63.24	n.d.	2.14	1.26
	[2017]	25.54	4.81	n.d.	60.96	n.d.	0.25	1.71
		21.11 ± 5.55 ab	10.04 ± 11.83 ab	0.70 ± 0.77 a	58.77 ± 5.87 bc	n.d. a	0.80 ± 1.17 ab	1.19 ± 0.56 c
TE	[2015]	15.14	7.90	0.77	69.65	0.16	n.d.	0.40
	[2016]	13.11	1.92	1.32	77.80	0.07	0.13	0.17
	[2017]	19.38	9.10	1.97	59.24	n.d.	n.d.	0.34
		15.88 ± 3.20 ab	6.30 ± 3.85 ab	1.35 ± 0.60 a	68.89 ± 9.30 bc	0.08 ± 0.08 a	0.04 ± 0.07 a	0.30 ± 0.12 ab
XA	[2019]	13.40	14.12	0.86	62.89	n.d.	n.d.	n.d.
	[2020]	8.88	10.30	0.11	75.64	n.d.	n.d.	n.d.
		11.14 ± 3.19 ab	12.21 ± 2.70 ab	0.48 ± 0.53 a	69.26 ± 9.01 bc	n.d. a	n.d. a	n.d. a
ZA	[2015]	10.20	4.93	n.d.	66.68	n.d.	n.d.	0.45
	[2016]	27.23	2.87	1.87	59.43	0.14	1.18	0.84
	[2017]	14.51	1.57	0.13	79.43	n.d.	n.d.	n.d.
		17.31 ± 8.85 ab	3.12 ± 1.69 a	0.67 ± 1.04 a	68.51 ± 10.13 bc	0.05 ± 0.08 a	0.39 ± 0.68 ab	0.43 ± 0.42 ab
Significance		ns	ns	ns	*	ns	*	ns
Variety	Year	%KETONES	%LACTONS	%TERPENES	%NORISOPRENOIDS	%PAH'S	%SESQUITERPENES	
AT	[2015]	4.26	3.45	0.46	n.d.	2.13	n.d.	
	[2016]	0.62	n.d.	0.32	n.d.	1.25	n.d.	

CO	[2017]	1.53	n.d.	1.05	0.11	0.91	n.d.
		2.14 ± 1.90 abc	1.15 ± 1.99 a	0.61 ± 0.39 a	0.04 ± 0.06 a	1.43 ± 0.63 abc	n.d. a
	[2015]	5.30	1.19	0.26	0.82	2.59	n.d.
	[2016]	1.59	0.51	n.d.	n.d.	1.10	n.d.
	[2017]	1.77	0.27	0.09	0.10	0.80	0.05
		2.89 ± 2.09 abc	0.66 ± 0.48 a	0.12 ± 0.13 a	0.31 ± 0.45 ab	1.50 ± 0.96 abc	0.02 ± 0.03 a
	ES	[2015]	2.14	0.28	0.02	0.10	n.d.
		[2016]	2.99	n.d.	0.41	n.d.	n.d.
		[2017]	2.57	0.29	0.79	0.55	n.d.
		2.57 ± 0.42 abc	0.19 ± 0.17 a	0.40 ± 0.38 a	0.22 ± 0.29 ab	1.98 ± 1.22 abcd	n.d. a
EV3	[2015]	2.85	n.d.	1.27	0.31	1.37	n.d.
	[2016]	3.44	1.49	1.84	n.d.	4.25	n.d.
	[2017]	1.51	2.29	1.23	n.d.	n.d.	n.d.
		2.60 ± 0.99 abc	1.26 ± 1.16 a	1.45 ± 0.34 ab	0.10 ± 0.18 ab	1.87 ± 2.17 abcd	n.d. a
EV4	[2015]	5.40	n.d.	0.33	n.d.	2.08	0.64
	[2016]	1.45	0.80	0.08	n.d.	0.13	n.d.
	[2017]	3.91	n.d.	0.26	n.d.	3.22	n.d.
		3.59 ± 2.00 bc	0.27 ± 0.46 a	0.23 ± 0.13 a	n.d. a	1.81 ± 1.56 abcd	0.21 ± 0.37 b
EV6	[2015]	3.39	0.43	n.d.	0.44	n.d.	n.d.
	[2016]	5.95	n.d.	0.07	n.d.	n.d.	n.d.
	[2017]	1.58	0.51	0.02	n.d.	1.18	0.04
		3.64 ± 2.20 bc	0.31 ± 0.27 a	0.03 ± 0.04 a	0.15 ± 0.25 ab	0.39 ± 0.68 a	0.01 ± 0.02 a
FE	[2015]	n.d.	n.d.	0.63	1.91	1.05	n.d.
	[2016]	n.d.	2.10	n.d.	n.d.	1.28	n.d.
	[2017]	n.d.	n.d.	1.34	1.01	2.93	n.d.
		n.d. a	0.70 ± 1.21 a	0.66 ± 0.67 a	0.98 ± 0.96 bc	1.76 ± 1.03 abcd	n.d. a
GA	[2015]	3.82	n.d.	0.73	0.15	3.69	n.d.
	[2016]	1.19	n.d.	0.29	n.d.	1.19	n.d.
	[2017]	7.37	n.d.	3.72	0.57	4.36	n.d.

GN		4.13 ± 3.10 bc	n.d. a	1.58 ± 1.87 ab	0.24 ± 0.30 ab	3.08 ± 1.67 cd	n.d. a
	[2016]	4.08	2.20	n.d.	n.d.	1.41	n.d.
	[2017]	1.76	1.64	1.02	n.d.	0.94	n.d.
		2.92 ± 1.64 abc	1.92 ± 0.40 a	0.51 ± 0.72 a	n.d. a	1.17 ± 0.33 abc	n.d. a
HI	[2015]	6.39	n.d.	7.83	0.16	3.17	0.38
	[2016]	2.77	n.d.	5.44	0.09	1.47	n.d.
		4.58 ± 2.55 bc	n.d. a	6.63 ± 1.69 b	0.12 ± 0.04 ab	2.32 ± 1.20 abcd	0.19 ± 0.27 b
	[2015]	1.04	n.d.	0.37	0.34	0.62	n.d.
MA	[2016]	1.87	2.14	0.10	n.d.	0.80	n.d.
	[2017]	1.81	n.d.	0.19	0.11	1.16	n.d.
		1.57 ± 0.46 ab	0.71 ± 1.24 a	0.22 ± 0.14 a	0.15 ± 0.17 ab	0.86 ± 0.27 ab	n.d. a
	[2015]	5.70	n.d.	0.10	n.d.	6.54	n.d.
ME	[2016]	1.79	n.d.	0.04	n.d.	1.90	n.d.
	[2017]	7.57	3.87	0.24	n.d.	2.82	n.d.
		5.02 ± 2.95 c	1.29 ± 2.24 a	0.13 ± 0.10 a	n.d. a	3.75 ± 2.46 d	n.d. a
MZ	[2015]	3.90	n.d.	0.23	0.15	2.22	n.d.
	[2016]	2.66	n.d.	0.05	n.d.	1.49	n.d.
	[2017]	5.67	3.53	1.00	0.52	2.08	0.23
		4.08 ± 1.52 bc	1.18 ± 2.04 a	0.43 ± 0.50 a	0.22 ± 0.27 ab	1.93 ± 0.39 abcd	0.08 ± 0.14 ab
MH	[2015]	2.08	0.14	77.35	n.d.	1.94	n.d.
	[2016]	0.99	1.96	51.55	n.d.	0.69	n.d.
	[2017]	1.84	n.d.	59.77	n.d.	1.04	n.d.
		1.64 ± 0.57 ab	0.70 ± 1.10 a	62.89 ± 13.18 c	n.d. a	1.22 ± 0.64 abc	n.d. a
MO	[2015]	3.23	n.d.	0.11	0.12	3.30	n.d.
	[2016]	2.97	n.d.	0.03	n.d.	1.21	n.d.
	[2017]	8.07	n.d.	0.54	n.d.	5.19	0.31
		4.76 ± 2.87 c	n.d. a	0.23 ± 0.27 a	0.04 ± 0.07 a	3.23 ± 1.99 cd	0.10 ± 0.18 ab
PE	[2016]	1.96	n.d.	n.d.	0.00	0.88	0.05
	[2017]	2.43	1.31	0.28	0.21	1.49	0.08

PC		2.19 ± 0.34 abc	0.65 ± 0.93 a	0.14 ± 0.20 a	0.10 ± 0.15 ab	1.19 ± 0.43 abc	0.07 ± 0.02 ab
	[2015]	1.65	0.86	n.d.	n.d.	3.24	n.d.
	[2016]	2.48	n.d.	0.21	n.d.	1.77	0.03
	[2017]	4.63	n.d.	0.95	0.37	3.82	n.d.
		2.92 ± 1.54 abc	0.29 ± 0.49 a	0.38 ± 0.50 a	0.12 ± 0.21 ab	2.94 ± 1.06 bcd	0.01 ± 0.02 a
PN	[2015]	3.70	n.d.	0.43	2.15	1.89	0.06
	[2016]	2.49	3.18	0.14	n.d.	1.39	n.d.
	[2017]	1.88	2.00	0.97	n.d.	1.83	0.04
		2.69 ± 0.92 abc	1.73 ± 1.61 a	0.51 ± 0.42 a	0.72 ± 1.24 abc	1.70 ± 0.27 abcd	0.03 ± 0.03 ab
TE	[2015]	3.61	n.d.	n.d.	0.08	2.09	0.21
	[2016]	2.09	0.92	0.92	0.14	1.43	n.d.
	[2017]	2.93	3.26	1.30	n.d.	2.35	0.13
		2.87 ± 0.76 abc	1.39 ± 1.68 a	0.74 ± 0.67 a	0.07 ± 0.07 a	1.96 ± 0.48 abcd	0.11 ± 0.11 ab
XA	[2019]	4.32	n.d.	0.53	1.10	2.67	0.10
	[2020]	2.56	0.20	0.30	0.60	1.41	n.d.
		3.44 ± 1.24 bc	0.10 ± 0.14 a	0.41 ± 0.17 a	0.85 ± 0.36 abc	2.04 ± 0.89 abcd	0.05 ± 0.07 ab
ZA	[2015]	3.27	n.d.	10.24	2.69	1.38	0.15
	[2016]	4.74	n.d.	0.07	n.d.	1.62	n.d.
	[2017]	0.44	0.08	1.36	1.14	1.28	0.06
		2.82 ± 2.19 abc	0.03 ± 0.05 a	3.89 ± 5.54 ab	1.28 ± 1.35 c	1.43 ± 0.17 abc	0.07 ± 0.08 ab
Significance		ns	ns	***	ns	ns	ns

PAHs.: polycyclic aromatic hydrocarbons; n.d.: non detected; ns indicates non-significant difference. Mean value, SD and different roman letters (a–d), showing significant differences according to Fisher’s test ($p < 0.05$), are indicated in bold for each variety. See Table 1 for varieties abbreviations.

Table S2. Glicosidically bound fraction profile (Values are expressed as percentages).

Variety	Year	%ALCOHOLS	%ACIDS	%ALDEHYDES	%C6	%THIOLS	%ESTERS	%PHENOLS
AT	[2015]	43.85	n.d.	n.d.	31.10	n.d.	0.59	15.43
	[2016]	60.21	0.55	4.84	12.12	n.d.	5.28	8.86
	[2017]	49.08	2.94	1.94	15.95	0.33	9.34	7.70
		51.05 ± 8.35 de	1.16 ± 1.56 ab	2.26 ± 2.44 ab	19.72 ± 10.04 ef	0.11 ± 0.19 a	5.07 ± 4.38 a	10.66 ± 4.17 ab
CO	[2015]	22.66	n.d.	0.08	6.02	n.d.	2.86	67.60
	[2016]	14.70	5.04	0.23	7.44	n.d.	3.52	67.44
	[2017]	63.93	0.95	1.55	18.70	0.47	6.47	1.34
		33.77 ± 26.42 bcd	2.00 ± 2.68 abc	0.62 ± 0.81 ab	10.72 ± 6.94 abcde	0.16 ± 0.27 a	4.28 ± 1.93 a	45.46 ± 38.21 b
ES	[2015]	29.99	0.54	0.18	9.32	n.d.	0.93	54.02
	[2016]	60.95	2.31	2.69	25.11	n.d.	1.85	3.15
	[2017]	55.75	5.04	1.82	16.53	0.52	7.98	3.25
		48.90 ± 16.58 cde	2.63 ± 2.27 abc	1.57 ± 1.27 ab	16.99 ± 7.91 cdef	0.17 ± 0.30 a	3.59 ± 3.83 a	20.14 ± 29.34 ab
EV3	[2015]	49.10	0.13	1.94	18.01	0.07	6.94	10.93
	[2016]	23.94	6.58	0.52	3.69	n.d.	8.58	47.88
	[2017]	22.27	4.90	n.d.	5.13	0.07	3.26	52.80
		31.77 ± 15.03 bcd	3.87 ± 3.34 abc	0.82 ± 1.00 ab	8.94 ± 7.88 abcde	0.05 ± 0.04 a	6.26 ± 2.72 a	37.20 ± 22.89 ab
EV4	[2015]	29.40	n.d.	13.80	23.28	n.d.	13.97	1.56
	[2016]	11.87	1.74	0.63	2.78	0.10	36.98	41.35
	[2017]	36.86	13.89	n.d.	8.50	0.37	21.98	5.72
		26.04 ± 12.83 abc	5.21 ± 7.57 abc	4.81 ± 7.79 bc	11.52 ± 10.58 abcde	0.16 ± 0.19 a	24.31 ± 11.68 cd	16.21 ± 21.87 ab
EV6	[2015]	63.06	n.d.	1.86	22.28	1.10	8.04	0.33
	[2016]	46.04	9.19	0.48	8.14	n.d.	3.48	29.29
	[2017]	19.48	5.43	0.43	2.80	n.d.	4.28	66.06
		42.86 ± 21.96 cde	4.87 ± 4.62 abc	0.92 ± 0.81 ab	11.07 ± 10.07 abcd	0.37 ± 0.63 a	5.27 ± 2.44 a	31.89 ± 32.94 ab
FE	[2015]	33.83	0.86	0.10	19.27	n.d.	37.91	1.99
	[2016]	60.72	n.d.	5.02	19.21	0.11	8.41	2.47
	[2017]	57.15	1.30	1.11	18.19	n.d.	14.34	2.59

		50.57 ± 14.60 de	0.72 ± 0.66 ab	2.08 ± 2.60 ab	18.89 ± 0.61 def	0.04 ± 0.06 a	20.22 ± 15.61 bcd	2.35 ± 0.32 a
	[2016]	43.57	3.25	2.86	11.99	n.d.	17.69	15.98
GN	[2017]	57.08	0.28	2.85	20.49	0.08	5.83	2.01
		50.32 ± 9.55 cde	1.77 ± 2.10 ab	2.85 ± 0.01 abc	16.24 ± 6.01 cdef	0.04 ± 0.06 a	11.76 ± 8.39 abcd	8.99 ± 9.88 ab
	[2015]	32.74	0.18	n.d.	9.13	n.d.	0.11	50.74
GA	[2016]	62.54	n.d.	n.d.	11.23	n.d.	0.19	16.40
	[2017]	44.06	5.46	n.d.	12.03	n.d.	10.32	6.31
		46.45 ± 15.04 cde	1.88 ± 3.10 abc	n.d. a	10.80 ± 1.50 abcde	n.d.	3.54 ± 5.87 a	24.48 ± 23.29 ab
	[2015]	13.97	n.d.	n.d.	9.38	n.d.	8.88	55.43
HI	[2016]	16.38	1.44	n.d.	7.62	n.d.	28.51	41.07
		15.18 ± 1.71 ab	0.72 ± 1.02 ab	n.d. ab	8.50 ± 1.24 abcd	n.d.	18.70 ± 13.88 abcd	48.25 ± 10.15 b
	[2015]	51.68	0.19	1.75	29.98	0.00	2.82	10.04
MA	[2016]	47.58	n.d.	0.72	19.04	0.00	3.72	26.70
	[2017]	46.67	7.64	0.70	19.77	0.41	7.40	7.84
		48.64 ± 2.67 cde	2.61 ± 4.36 abc	1.06 ± 0.60 ab	22.93 ± 6.12 f	0.14 ± 0.24 a	4.65 ± 2.43 a	14.86 ± 10.31 ab
	[2015]	8.90	7.35	0.24	2.88	0.07	7.25	72.09
ME	[2016]	34.52	9.14	0.65	6.92	0.16	36.91	8.04
	[2017]	37.14	12.08	0.69	5.73	n.d.	32.33	3.91
		26.85 ± 15.61 abc	9.52 ± 2.39 c	0.53 ± 0.25 ab	5.18 ± 2.07 ab	0.08 ± 0.08 a	25.50 ± 15.97 d	28.02 ± 38.22 ab
	[2015]	46.08	0.80	1.22	10.04	n.d.	0.53	37.31
MZ	[2016]	63.74	5.09	3.96	15.47	n.d.	5.52	2.93
	[2017]	67.30	1.08	1.51	15.23	n.d.	5.79	0.55
		59.04 ± 11.37 e	2.32 ± 2.40 abc	2.23 ± 1.51 ab	13.58 ± 3.07 bcdef	n.d. a	3.95 ± 2.96 a	13.60 ± 20.57 ab
	[2015]	8.43	5.84	n.d.	0.95	n.d.	5.25	0.50
MH	[2016]	4.16	7.10	n.d.	0.51	n.d.	21.23	22.33
	[2017]	5.36	2.14	1.72	1.75	n.d.	5.53	0.21
		5.98 ± 2.20 a	5.03 ± 2.58 abc	0.57 ± 0.99 ab	1.07 ± 0.62 a	n.d. a	10.67 ± 9.15 abc	7.68 ± 12.69 a
MO	[2015]	49.94	1.04	1.02	19.49	0.47	1.40	18.44
	[2016]	32.82	n.d.	0.21	6.91	n.d.	1.56	51.60

PN	[2017]	32.62	23.32	1.18	10.43	0.20	12.29	12.03
		38.46 ± 9.94 bcde	8.12 ± 13.18 bc	0.80 ± 0.52 ab	12.28 ± 6.49 bcdef	0.22 ± 0.23 a	5.08 ± 6.24 a	27.36 ± 21.24 ab
	[2015]	38.80	n.d.	0.49	20.45	0.11	27.52	5.06
	[2016]	25.35	6.60	0.62	4.83	n.d.	18.47	40.48
	[2017]	34.06	3.08	0.90	8.28	n.d.	5.68	42.87
PC		32.73 ± 6.82 bcd	3.23 ± 3.30 abc	0.67 ± 0.21 ab	11.19 ± 8.20 abcde	0.04 ± 0.06 a	17.22 ± 10.97 abcd	29.47 ± 21.17 ab
	[2015]	40.96	1.85	0.89	15.38	n.d.	1.98	34.98
	[2016]	44.11	4.72	1.06	9.16	n.d.	5.85	33.52
	[2017]	54.52	0.19	5.62	22.51	0.58	5.12	3.63
		46.53 ± 7.10 cde	2.25 ± 2.29 abc	2.52 ± 2.68 abc	15.68 ± 6.68 bcdef	0.19 ± 0.33 a	4.32 ± 2.06 a	24.05 ± 17.69 ab
PE	[2016]	43.31	3.47	0.82	4.50	0.14	7.68	35.59
	[2017]	65.63	9.06	0.55	8.59	n.d.	7.89	3.75
		54.47 ± 15.78 de	6.26 ± 3.95 abc	0.69 ± 0.19 ab	6.54 ± 2.89 abc	0.07 ± 0.10 a	7.79 ± 0.15 ab	19.67 ± 22.52 ab
	[2015]	46.18	0.26	0.19	10.11	n.d.	0.53	23.05
	[2016]	46.70	3.85	0.70	10.76	n.d.	5.21	29.58
TE	[2017]	64.39	0.91	2.43	15.42	0.12	6.93	4.73
		52.42 ± 10.37 de	1.67 ± 1.91 ab	1.11 ± 1.17 ab	12.10 ± 2.90 abcdef	0.04 ± 0.07 a	4.23 ± 3.31 a	19.12 ± 12.88 ab
	[2019]	45.78	2.93	0.62	5.74	n.d.	6.59	30.80
	[2020]	51.30	5.01	0.59	4.54	0.36	10.13	17.82
		48.54 ± 3.90 cde	3.97 ± 1.47abc	0.61 ± 0.02 ab	5.14 ± 0.85 ab	0.18 ± 0.25 a	8.36 ± 2.50 ab	24.31 ± 9.18 ab

ZA	[2015]	20.33	0.34	n.d.	5.62	n.d.	28.61	0.82
	[2016]	60.25	0.17	15.33	11.59	n.d.	4.56	3.86
		40.29 ± 28.23 bcde	0.25 ± 0.12 a	7.66 ± 10.84 c	8.61 ± 4.22 abcd	n.d. a	16.59 ± 17.01 abcd	2.34 ± 2.15 a

Significance		**	ns	ns	*	ns	*	ns
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Variety	Year	%KETONES	%LACTONS	%TERPENES	%NORISOPRENOIDS	%PAH’S	%SESQUITERPENES
AT	[2015]	3.07	n.d.	5.77	n.d.	n.d.	0.19
	[2016]	0.63	n.d.	6.11	0.03	1.27	0.11
	[2017]	0.63	n.d.	11.85	n.d.	0.20	0.04
		1.44 ± 1.41 ab	n.d. a	7.91 ± 3.41 ab	0.01 ± 0.01 a	0.49 ± 0.68 ab	0.11 ± 0.08 cde

CO	[2015]	0.33	n.d.	0.40	n.d.	0.02	0.03
	[2016]	0.53	n.d.	0.96	n.d.	0.13	0.02
	[2017]	1.16	n.d.	4.77	0.01	0.58	0.08
		0.67 ± 0.43 ab	n.d. a	2.05 ± 2.38 a	0.00 a	0.24 ± 0.30 ab	0.04 ± 0.03 abc
ES	[2015]	0.71	n.d.	4.01	n.d.	0.27	0.02
	[2016]	2.02	n.d.	0.46	n.d.	1.33	0.12
	[2017]	1.48	n.d.	6.88	0.07	0.67	n.d.
		1.40 ± 0.66 ab	n.d. a	3.79 ± 3.22 a	0.02 ± 0.04 a	0.76 ± 0.54 b	0.05 ± 0.06 abcd
EV3	[2015]	0.34	n.d.	12.33	n.d.	0.20	0.02
	[2016]	0.87	n.d.	7.60	n.d.	0.34	0.01
	[2017]	0.49	n.d.	10.73	n.d.	0.29	0.06
		0.57 ± 0.28 ab	n.d. a	10.22 ± 2.41 ab	n.d. a	0.28 ± 0.07 ab	0.03 ± 0.03 abc
EV4	[2015]	0.31	n.d.	17.57	n.d.	n.d.	0.11
	[2016]	0.57	n.d.	3.86	n.d.	0.03	0.07
	[2017]	2.97	n.d.	9.25	n.d.	0.39	0.07
		1.29 ± 1.47 ab	n.d. a	10.23 ± 6.91 ab	n.d. a	0.14 ± 0.22 a	0.08 ± 0.02 abcde
EV6	[2015]	0.35	n.d.	2.98	n.d.	n.d.	n.d.
	[2016]	1.55	n.d.	1.14	n.d.	0.70	n.d.
	[2017]	0.60	n.d.	0.78	n.d.	0.15	n.d.
		0.83 ± 0.63 ab	n.d. a	1.63 ± 1.18 a	n.d. a	0.28 ± 0.37 ab	n.d. a
FE	[2015]	0.15	n.d.	5.88	n.d.	n.d.	n.d.
	[2016]	2.08	n.d.	0.96	n.d.	1.03	n.d.
	[2017]	0.79	n.d.	4.16	n.d.	0.38	n.d.
		1.00 ± 0.98 ab	n.d. a	3.66 ± 2.50 a	n.d. a	0.47 ± 0.52 ab	n.d. a
GN	[2016]	1.05	n.d.	3.15	n.d.	0.31	0.15
	[2017]	1.01	n.d.	9.60	n.d.	0.61	0.16
		1.03 ± 0.03 ab	n.d. a	6.38 ± 4.56 ab	n.d. a	0.46 ± 0.21 ab	0.15 ± 0.01 ef
GA	[2015]	0.60	n.d.	6.37	0.07	0.04	0.02
	[2016]	0.22	n.d.	9.42	n.d.	n.d.	n.d.

	[2017]	1.40	n.d.	19.99	n.d.	0.43	n.d.
		0.74 ± 0.60 ab	n.d. a	11.93 ± 7.15 ab	0.02 ± 0.04 a	0.16 ± 0.24 ab	0.01 ± 0.01 ab
HI	[2015]	0.35	n.d.	11.92	n.d.	0.06	0.01
	[2016]	0.66	n.d.	4.06	n.d.	0.24	n.d.
		0.51 ± 0.22 ab	n.d. a	7.99 ± 5.56 ab	n.d. a	0.15 ± 0.13 a	0.00 ab
MA	[2015]	0.50	n.d.	2.83	n.d.	0.16	0.03
	[2016]	0.40	n.d.	1.67	n.d.	0.11	0.07
	[2017]	2.60	n.d.	6.04	0.01	0.86	0.06
		1.17 ± 1.24 ab	n.d. a	3.51 ± 2.26 a	0.00 a	0.38 ± 0.42 ab	0.05 ± 0.02 abcd
ME	[2015]	0.43	n.d.	0.67	n.d.	0.12	n.d.
	[2016]	1.30	0.03	2.07	n.d.	0.26	n.d.
	[2017]	3.98	0.01	3.36	n.d.	0.66	0.10
		1.90 ± 1.85 b	0.01 ± 0.01 b	2.03 ± 1.35 a	n.d. a	0.34 ± 0.28 ab	0.04 ± 0.06 abc
MZ	[2015]	0.40	n.d.	3.53	n.d.	0.11	n.d.
	[2016]	1.45	n.d.	1.06	n.d.	0.77	n.d.
	[2017]	0.60	n.d.	7.69	n.d.	0.26	n.d.
		0.81 ± 0.56 ab	n.d. a	4.09 ± 3.35 a	n.d. a	0.38 ± 0.35 ab	n.d. a
MH	[2015]	0.01	n.d.	78.99	n.d.	n.d.	0.02
	[2016]	0.38	n.d.	44.27	n.d.	n.d.	0.01
	[2017]	0.53	n.d.	82.44	n.d.	0.18	0.14
		0.31 ± 0.27 a	n.d. a	68.57 ± 21.11 c	n.d. a	0.06 ± 0.11 a	0.06 ± 0.07 abcd
MO	[2015]	1.86	n.d.	5.57	n.d.	0.78	n.d.
	[2016]	0.54	n.d.	6.12	n.d.	n.d.	0.24
	[2017]	3.19	0.03	4.34	n.d.	0.34	0.02
		1.86 ± 1.33 b	0.01 ± 0.02 b	5.34 ± 0.92 a	n.d. a	0.37 ± 0.39 ab	0.09 ± 0.13 abcde
PN	[2015]	0.52	n.d.	6.82	n.d.	n.d.	0.25
	[2016]	0.96	n.d.	2.44	n.d.	0.14	0.10
	[2017]	1.07	n.d.	3.77	n.d.	0.24	0.06
		0.85 ± 0.29 ab	n.d. a	4.34 ± 2.24 a	n.d. a	0.13 ± 0.12 a	0.14 ± 0.10 de

PC	[2015]	0.87	n.d.	2.49	0.05	0.40	0.14
	[2016]	0.38	n.d.	0.92	n.d.	0.17	0.10
	[2017]	1.51	n.d.	5.71	n.d.	0.54	0.07
		0.92 ± 0.57 ab	n.d. a	3.04 ± 2.44 a	0.02 ± 0.03 a	0.37 ± 0.19 ab	0.10 ± 0.04 cde
PE	[2016]	1.19	n.d.	3.02	n.d.	0.28	n.d.
	[2017]	0.10	n.d.	4.39	0.01	0.02	0.02
		0.65 ± 0.77 ab	n.d. a	3.70 ± 0.97 a	0.01 ± 0.01 a	0.15 ± 0.19 a	0.01 ± 0.01 ab
TE	[2015]	0.88	n.d.	18.23	0.10	0.28	0.09
	[2016]	1.20	0.01	1.71	n.d.	0.16	0.11
	[2017]	1.25	n.d.	3.00	0.06	0.68	0.09
		1.11 ± 0.20 ab	0.00 ± 0.01 ab	7.65 ± 9.19 ab	0.05 ± 0.05 a	0.37 ± 0.27 ab	0.09 ± 0.01 bcde
XA	[2019]	0.86	n.d.	6.13	n.d.	0.31	0.24
	[2020]	0.87	n.d.	8.74	0.01	0.40	0.23
		0.86 ± 0.00 ab	n.d. a	7.43 ± 1.85 ab	0.00 ± 0.01 a	0.36 ± 0.07 ab	0.23 ± 0.01 f
ZA	[2015]	0.56	n.d.	42.61	0.67	0.34	0.10
	[2016]	1.48	n.d.	1.78	n.d.	0.96	0.02
		1.02 ± 0.65 ab	n.d. a	22.19 ± 28.87 b	0.33 ± 0.47 b	0.65 ± 0.44 ab	0.06 ± 0.06 abcd
Significance		ns	ns	***	ns	ns	**

PAHs.: polycyclic aromatic hydrocarbons; n.d.: non detected; ns indicates non-significant difference. Mean value, SD and different roman letters (a–d), showing significant differences according to Fisher’s test ($p < 0.05$), are indicated in bold for each variety. See Table 1 for varieties abbreviations.