

Table S1. Concentrations and RI of volatile compounds of samples from day 0, 1 and CK1 by HS-SPME-GC-MS.

NO	Compound	RI	Concentration ($\mu\text{g/kg}$)		
			0d	CK 1d	1d
1	hexanal	1077	1304.6 \pm 170.8	903.1 \pm 74.4	846.1 \pm 181.7
2	α -terpinene	1187	24.4 \pm 3.2	13.8 \pm 5.3	36.1 \pm 9.2
3	D-limonene	1206	207.7 \pm 16.4	167.0 \pm 16.8	318.4 \pm 110.1
4	β -phellandrene	1218	44.6 \pm 2.6	21.5 \pm 18.6	28.6 \pm 15.3
5	(E)-2-hexenal	1228	882.6 \pm 117.3	633.2 \pm 55.1	406.7 \pm 91.0
6	trans- β -ocimene	1242	149.7 \pm 12.2	185.6 \pm 4.5	166.2 \pm 107.8
7	cis- β -ocimene	1259	270.2 \pm 14.5	219.3 \pm 10.7	396.2 \pm 112.4
8	styrene	1269	34.1 \pm 1.6	46.7 \pm 5.6	38.1 \pm 7.1
9	p-cymene	1280	3.3 \pm 2.8	3.1 \pm 2.7	4.1 \pm 1.9
10	terpinolene	1287	61.8 \pm 6.2	44.2 \pm 0.3	90.5 \pm 27.8
11	trans-2-(2-pentenyl)furan	1311	13.8 \pm 2.4	14.2 \pm 3.5	27.8 \pm 5.4
12	6-methyl-5-hepten-2-one	1345	34.6 \pm 3.8	26.0 \pm 0.7	24.3 \pm 1.3
13	1-hexanol	1355	68.5 \pm 6.5	58.1 \pm 5.3	72.0 \pm 2.4
14	trans-rose oxide	1359	65.6 \pm 4.3	60.3 \pm 5.6	58.0 \pm 13.8
15	cis-rose oxide	1377	18.0 \pm 1.1	19.1 \pm 1.8	20.4 \pm 6.6
16	allo-ocimene	1379	70.0 \pm 4.4	64.2 \pm 6.7	106.0 \pm 33.2
17	(Z)-3-hexen-1-ol	1388	4.1 \pm 0.4	3.8 \pm 0.6	6.2 \pm 4.6
18	nonanal	1402	45.4 \pm 4.6	36.5 \pm 3.0	24.6 \pm 7.9
19	(Z)-2-hexen-1-ol	1409	32.8 \pm 1.3	37.9 \pm 1.3	41.1 \pm 12.4
20	(E,E)-2,4-hexadienal	1416	9.2 \pm 1.4	6.8 \pm 0.6	8.4 \pm 6.2
21	4-ethyl-2-hexynal	1426	13.1 \pm 0.9	17.0 \pm 1.0	23.9 \pm 11.5
22	perillen	1430	6.1 \pm 0.6	12.5 \pm 0.9	16.1 \pm 8.2
23	(E)-2-octenal	1441	12.6 \pm 0.5	24.2 \pm 0.8	17.8 \pm 8.2
24	linalool oxide (furanoid)	1450	65.9 \pm 3.6	56.1 \pm 2.4	87.9 \pm 30.8
25	1-octen-3-ol	1453	7.3 \pm 0.2	15.2 \pm 6.0	11.7 \pm 2.6
26	6-methyl-5-hepten-2-ol	1465	31.8 \pm 0.8	45.0 \pm 2.7	55.8 \pm 6.0
27	citronellal	1489	2.1 \pm 0.2	5.4 \pm 1.0	2.4 \pm 0.5
28	2-ethyl-1-hexanol	1492	5.3 \pm 0.3	6.7 \pm 0.8	7.0 \pm 2.0
29	(E,E)-2,4-heptadienal	1507	9.4 \pm 0.7	11.5 \pm 0.9	10.0 \pm 2.9
30	benzaldehyde	1543	5.8 \pm 0.5	9.1 \pm 0.4	6.9 \pm 1.2
31	(E)-2-nonenal	1547	12.1 \pm 2.4	19.0 \pm 5.2	12.2 \pm 2.6
32	linalool	1553	6719.5 \pm 101.7	5573.3 \pm 409.8	8732.2 \pm 2735.7
33	3,7-dimethyl-3,6-octadienal	1572	1.6 \pm 0.2	0.7 \pm 0.6	3.0 \pm 1.3
34	(E,Z)-2,6-nonadienal	1600	10.9 \pm 2.5	9.6 \pm 2.8	6.5 \pm 0.3
35	hotrienol	1615	21.4 \pm 4.8	13.7 \pm 0.8	16.6 \pm 6.4
36	(E)-2-octen-1-ol	1620	1.3 \pm 1.1	2.1 \pm 1.2	0.8 \pm 0.7
37	decanoic acid ethyl ester	1644	7.2 \pm 2.7	7.9 \pm 3.5	12.3 \pm 6.4
38	benzeneacetaldehyde	1665	31.3 \pm 1.8	33.2 \pm 4.4	38.0 \pm 4.3
39	citronellyl acetate	1669	3.1 \pm 0.3	3.3 \pm 0.6	2.1 \pm 1.9

40	(E)-β-farnesene	1673	32.2±9.5	29.0±0.8	16.5±4.6
41	neral	1696	20.0±0.9	26.9±2.5	38.5±16.7
42	α-terpineol	1706	174.6±19.4	105.8±3.6	84.4±25.8
43	α-cyclogeraniol	1714	6.6±1.3	6.3±1.2	8.1±0.7
44	trans-citral	1746	39.9±1.5	49.4±1.5	61.9±12.3
45	trans-pyranoid linalool oxide	1748	41.3±15.8	37.3±1.1	17.6±15.3
46	α-citronellol	1762	4.6±0.8	4.4±0.5	4.1±1.8
47	geranyl acetate	1765	1.4±0.2	2.1±0.2	3.0±1.9
48	β-citronellol	1770	413.9±4.9	324.0±7.9	248.9±67.2
49	7-methyl-3-methylene-6-octen-1-ol	1793	28.9±0.2	23.5±1.1	18.0±3.9
50	nerol	1807	543.4±15.8	501.5±31.5	505.2±84.5
51	isogeraniol	1818	7.4±0.2	7.1±1.2	6.3±1.8
52	trans-geraniol	1853	1076.2±23.0	1026.7±63.1	944.3±99.0
53	isopulegol	1861	14.1±4.5	12.4±6.7	9.1±3.3
54	benzyl alcohol	1881	4.8±1.0	4.9±0.6	4.7±0.6
55	phenylethyl alcohol	1931	4.9±0.6	5.1±0.5	7.2±1.8
56	nerolic acid	2349	18.0±0.7	50.8±15.4	14.4±2.3

a Values shown represent the averages of triplicate samples, results were expressed as the mean value ± standard deviation (SD).

b Volatile compounds of grape samples from day 0, 1 and CK1 : namely 0d, 1d, CK1d.

Table S2. Concentrations and RI of volatile compounds of samples from day 0, 1 and CK1 by DLLME-GC-MS.

NO	Compound	RI	Concentration (μg/kg)		
			0 d	CK 1d	1 d
57	ethyl acetate	903	216.2±18.8	222.2±38.2	91.7±17.2
58	butyl acetate	1066	411.7±22.4	456.5±40.0	440.1±28.9
59	hexanal	1077	254.1±30.7	131.7±55.0	292.9±46.6
60	(E)-2-hexenal	1228	207.6±25.1	186.0±21.6	67.6±42.1
61	linalool	1553	1037.6±27.4	1429.0±133.9	2716.8±549.2
62	trans-pyranoid linalool oxide	1748	277.9±70.7	184.4±26.8	230.6±55.6
63	β-citronellol	1770	196.2±24.9	278.0±22.8	205.7±41.3
64	nerol	1807	632.3±73.8	1750.0±141.6	947.6±137.4
65	trans-geraniol	1853	2089.5±146.9	19995.9±110.5	2258.4±157.2
66	benzyl alcohol	1881	51.6±10.2	127.5±32.4	86.5±27.5
67	phenylethyl alcohol	1931	93.0±31.2	174.4±40.1	121.0±0.6
68	(E)-2,6-dimethyl-3,7-octadien-2,6-diol	1938	121.3±54.4	106.3±28.8	198.3±55.5
69	2,6-dimethyl-1,7-octadiene-3,6-diol	2104	87.5±19.3	139.2±89.0	135.2±38.2
70	2,4-di-tert-butylphenol	2326	7762.8±860.3	12168.8±4481.6	9891.0±1692.9
71	nerolic acid	2349	1518.4±56.2	2864.3±112.4	2697.0±409.5

a Values shown represent the averages of triplicate samples, results were expressed as the mean value \pm standard deviation (SD).

b Volatile compounds of grape samples from day 0, 1 and CK1: namely 0d, 1d, CK1d.

Table S3. Determination of OTA in grapes (n=5)

Spiked level ($\mu\text{g/kg}$)	Grape		
	Cabernet Gernischt	Cabernet Sauvignon	Red Globe
1.5	82.61	106.88	107.92
Recovery (%)	15	116.49	118.93
	40	105.94	109.48
	1.5	4.71	4.32
RSD (%)	15	4.35	3.07
	40	3.64	1.53

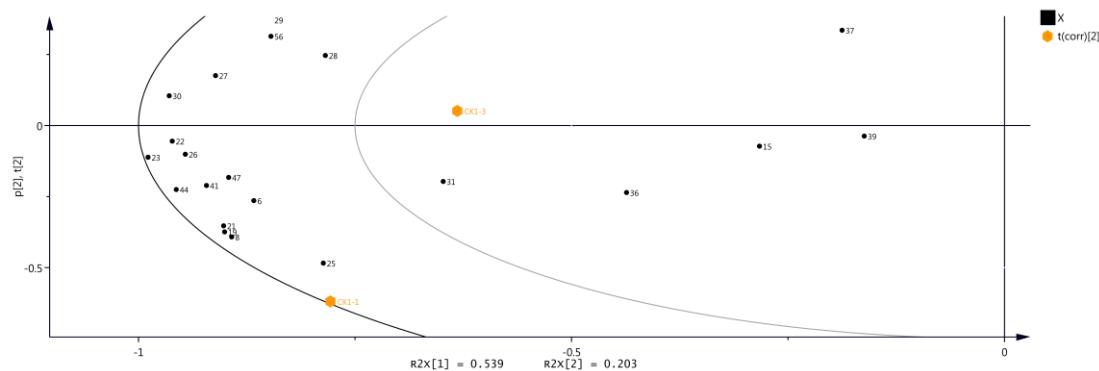


Figure S1. Supplementary figure for Figure 2.

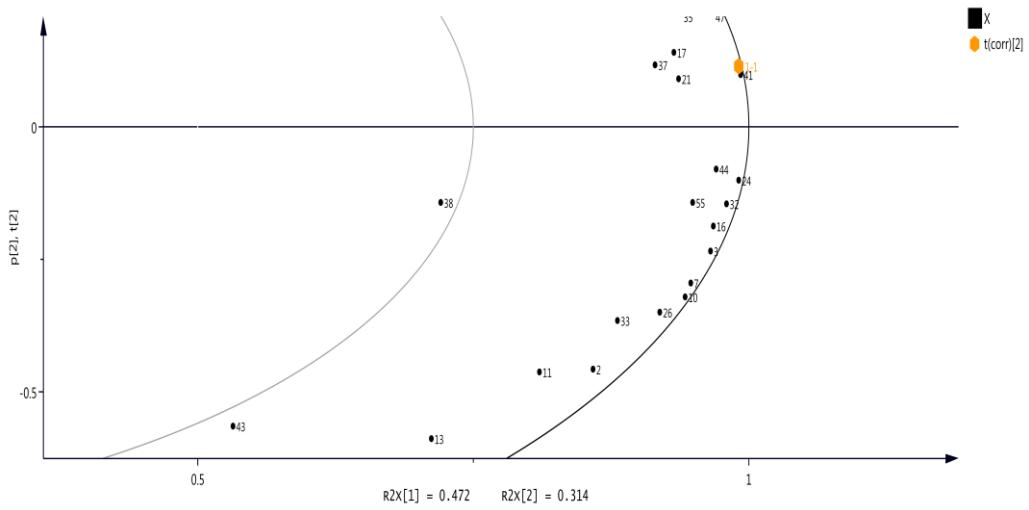


Figure S2. Supplementary figure for Figure 3.