

Supplementary Materials: Free and Bound Volatile Aroma Compounds of 'Maraština' Grapes as Influenced by Dehydration Techniques

Table S1. Average values ($\pm$ standard deviation) of volatile compounds after hydrolysis (free and bound fractions).

Compound	Abbreviation	Concentration ($\mu\text{g/L}$)		
		Fresh Grapes	Greenhouse-Dried Grapes	Chamber-Dried Grapes at 50 °C
2-methyl-1-propanol	A1 (H)	n.d.	n.d.	n.d.
1-butanol	A2 (H)	0.55 ± 0.34	4.25 ± 0.42 a	0.7 ± 0.25
3-methyl-1-butanol	A3 (H)	16.12 ± 11.59	41.73 ± 4.61 a	23.77 ± 14.04
2-methyl-1-butanol	A4 (H)	0.55 ± 0.36	1.3 ± 0.15 a	0.37 ± 0.52
2-hexen-1-ol	A5 (H)	19.08 ± 16.98	72.24 ± 8.79 a	n.d.
1-hexanol	A6 (H)	47.87 ± 29.47	149.91 ± 8.32 a	n.d.
benzyl alcohol	A7 (H)	n.d.	n.d.	n.d.
2-phenylethanol	A8 (H)	n.d.	n.d.	n.d.
Σ alcohols	Alcohol (H)	84.17 ± 49.63	269.43 ± 22.01 a	24.83 ± 14.81
ethyl acetate	E1 (H)	10.95 ± 8.36	22.58 ± 2.75	34.84 ± 15.98 a
ethyl lactate	E2 (H)	n.d.	n.d.	n.d.
isoamyl acetate	E3 (H)	n.d.	n.d.	n.d.
ethyl hexanoate	E4 (H)	n.d.	0.08 ± 0.14	n.d.
hexyl acetate	E5 (H)	0.06 ± 0.05	0.36 ± 0.06 a	n.d.
ethyl octanoate	E6 (H)	n.d.	n.d.	n.d.
2-phenyl-ethyl acetate	E7 (H)	n.d.	n.d.	n.d.
ethyl nonanoate	E8 (H)	n.d.	n.d.	n.d.
ethyl decanoate	E9 (H)	n.d.	n.d.	n.d.
Σ esters	Esters (H)	11.01 ± 8.4	23.02 ± 2.83	34.84 ± 15.98 a
α -pinene	T1 (H)	n.d.	n.d.	0.11 ± 0.16
myrcene	T2 (H)	0.73 ± 0.52	1.24 ± 0.1	1.61 ± 0.2
o-cymene	T3 (H)	0.88 ± 0.65	3.32 ± 0.52 a	1.88 ± 0.11
linalool oxide	T4 (H)	8.47 ± 5.34	19.32 ± 1.16 a	54.76 ± 25.65 a
linalool	T5 (H)	7.82 ± 6.35	18.74 ± 2.33 a	18.26 ± 2.66
cis-limonene epoxide	T6 (H)	0.3 ± 0.66	n.d.	n.d.
trans-limonene epoxide	T7 (H)	0.9 ± 2.02	n.d.	n.d.
terpinen-4-ol	T8 (H)	0.3 ± 0.29	9.66 ± 1.31 a	0.95 ± 0.18 a
alpha-terpineol	T9 (H)	n.d.	n.d.	n.d.
citronellol	T10 (H)	n.d.	n.d.	n.d.
nerol	T11 (H)	n.d.	n.d.	n.d.
linalool acetate	T12 (H)	0.03 ± 0.07	0.19 ± 0.17	n.d.
geraniol	T13 (H)	n.d.	n.d.	n.d.
geranyl acetone	T14 (H)	n.d.	n.d.	0.19 ± 0.27

nerolidol	T15 (H)	n.d.	n.d.	n.d.
Σ terpenes	Terpenes (H)	19.43 ± 14	52.47 ± 5.18 a	77.75 ± 23.33 a
2-hexenal	Ald-1 (H)	5.5 ± 3.3	7.85 ± 0.78	0.39 ± 0.55
benzaldehyde	Ald-2 (H)	2.21 ± 1.44	6.62 ± 0.44 a	15.01 ± 7.29 a
acetal	Ald-3 (H)	n.d.	n.d.	0.1 ± 0.14
Σ aldehydes	Aldehydes (H)	7.71 ± 4.6	14.46 ± 1.21	15.5 ± 7.98
α-ionone	K1 (H)	n.d.	n.d.	n.d.
6-methyl-5-heptene-2-one	K2 (H)	0.87 ± 0.49	0.95 ± 0.12	1.47 ± 0.69
2,3-pentadione	K3 (H)	0.59 ± 0.37	2.79 ± 0.4 a	0.81 ± 1.14
Σ ketones	Ketones (H)	1.46 ± 0.85	3.75 ± 0.52 a	2.28 ± 0.45
β-damascenone	β-dem (H)	19.59 ± 15.94	69.22 ± 16.24 a	12.23 ± 6.37
γ-hexalactone	γ-hex (H)	n.d.	n.d.	n.d.
Σ benzenoids (A7+A8+Ald-2)	Benzenoids (H)	2.21 ± 1.44	6.62 ± 0.44 a	15.01 ± 7.29 a

a statistically significant differences in volatile concentrations in dried grape in comparison to fresh grape, p<0.05.

n.d.-not detected