

Table S1. Content (µg/L) of minor volatile compounds in white and red wines studied.

Compuesto	WHITE WINES						RED WINES			
	WC	WOX	WN ₂	WAr	WCO ₂	RC	ROX	RN ₂	RAr	RCO ₂
Ethyl butyrate	353 ± 3.1 b	342 ± 1.2 ab	340 ± 11.3 ab	346 ± 5.1 b	330 ± 5.8 a	224 ± 0.2 a	219 ± 1.1 a	219 ± 30.8 a	232 ± 8.7 a	232 ± 1.2 a
Ethyl hexanoate	751 ± 0.4 ab	752 ± 4.7 ab	76 ± 18.9 b	738 ± 5.1 a	733 ± 5.2 a	353 ± 0.4 a	348 ± 5.0 a	359 ± 42.9 a	391 ± 6.5 a	356 ± 20.8 a
Ethyl octanoate	508 ± 1.0 c	503 ± 7.9 c	459 ± 7.5 b	470 ± 11.0 b	436 ± 13.2 a	220 ± 1.9 a	215 ± 3.8 a	212 ± 41.9 a	247 ± 10.3 a	232 ± 14.1 a
Ethyl decanoate	94.2 ± 1.0 b	84.2 ± 1.3 a	87.8 ± 6.2 ab	86.9 ± 2.8 ab	82.8 ± 4.6 a	76.7 ± 1.2 b	67.9 ± 3.1 ab	60.9 ± 10.7 a	70.7 ± 2.4 ab	74.0 ± 8.5 b
Ethyl 2-methylbutyrate	19.0 ± 0.2	18.5 ± 0.1	18.3 ± 0.3	18.6 ± 0.2	17.6 ± 0.4	16.5 ± 0.1 a	16.5 ± 0.4 a	17.0 ± 3.3 a	18.9 ± 0.7 a	17.3 ± 0.2 a
Ethyl isovalerate	24.7 ± 0.1	23.6 ± 0.9	22.4 ± 0.3	21.1 ± 0.7	19.2 ± 0.4	12.9 ± 0.3 a	13.2 ± 0.8 a	12.9 ± 2.1 a	14.1 ± 0.6 a	13.9 ± 0.2 a
Total linear ethyl esters	1707 ± 1.6	1681 ± 3.3	1648 ± 43.0	1641 ± 22.6	1581 ± 24.4	874 ± 2.9 a	850 ± 10.8 a	851 ± 125.7 a	941 ± 26.6 a	894 ± 42.6 a
Total branched ethyl esters	43.8 ± 0.2	42.1 ± 0.7	40.7 ± 0.7	39.7 ± 0.8	36.8 ± 0.8	29.4 ± 0.4 a	29.7 ± 1.1 a	29.9 ± 5.4 a	33.0 ± 1.2 a	31.2 ± 0.1 a
Propyl acetate	42.6 ± 0.0 d	39.1 ± 0.9 cd	35 ± 1.1 ab	37.8 ± 1.0 bc	32.4 ± 3.3 a	57.5 ± 1.3 c	53.7 ± 1.6 bc	43.6 ± 2.4 a	44.3 ± 2.9 a	51.4 ± 3.8 b
Isobutyl acetate	18.9 ± 0.1 a	18 ± 0.4 a	17.7 ± 1.1 a	18.8 ± 0.5 a	17.4 ± 1.0 a	160.5 ± 1.9 c	153.4 ± 1.0 c	121.5 ± 8.1 a	112.5 ± 3.9 b	150.8 ± 4.9 c
Butyl acetate	n.d.	n.d.	n.d.	n.d.	n.d.	2.5 ± 0.1 c	2.0 ± 0.4 c	0.9 ± 0.3 b	1.1 ± 0.3 b	0.0 ± 0.0 a
Isoamyl acetate	421 ± 5.6 a	417 ± 18.9 a	420 ± 23.4 a	397 ± 23.2 a	389 ± 22.4 a	488 ± 25.2 ab	476 ± 0.6 ab	445 ± 63.9 a	455 ± 13.4 a	518 ± 26.6 b
Hexyl acetate	20 ± 0.2 a	20.1 ± 0.0 a	20.1 ± 0.3 a	21.1 ± 0.4 b	19.8 ± 0.5 a	4.3 ± 0.1 b	4.3 ± 0.1 b	3.4 ± 0.3 a	3.3 ± 0.1 a	4.1 ± 0.1 b
β-Phenethyl acetate	23.3 ± 0.2 a	23.4 ± 2.0ab	25.4 ± 1.5 abc	25.6 ± 1.0 bc	25.7 ± 0.6c	29.3 ± 1.0 bc	29.4 ± 1.0 bc	27.7 ± 0.6 ab	27.0 ± 0.8 a	30.5 ± 1.6 c
Total alcohol acetates	525 ± 5.6 a	518 ± 19.6 a	519 ± 24.8 a	500 ± 25.6 a	485 ± 25.7 a	684 ± 27.9 b	665 ± 0.9 ab	598 ± 72.5 a	598 ± 18.0 a	704 ± 23.0 b
1-Hexanol	1903 ± 0.8 a	1854 ± 51.6 a	2064 ± 63.1 c	1959 ± 14.9 ab	2032 ± 96.9 bc	2216 ± 66.5 a	2282 ± 145.9 a	2330 ± 218.8 a	2346 ± 83.9 a	2395 ± 130.2 a
<i>Trans</i> -3-Hexen-1-ol	200 ± 1.9 a	196 ± 9.2 a	221 ± 6.5 b	210 ± 2.0 ab	223 ± 13.2 b	53.1 ± 1.4 a	54.7 ± 2.6 a	70.3 ± 10.9 bc	76.8 ± 2.3 c	63.5 ± 3.9 ab
<i>Cis</i> -3-Hexen-1-ol	203 ± 1.2 a	198 ± 6.8 a	221 ± 5.5 b	212 ± 1.2 ab	221 ± 13.7 b	286 ± 11.2 ab	294 ± 3.1 b	276 ± 25.7 ab	250 ± 10.9 a	303 ± 23.9 b
Total alcoholes C₆	2306 ± 3.9 a	2248 ± 67.7 a	2506 ± 75.1 c	2381 ± 16.7 ab	2476 ± 123.6 bc	2555 ± 79.1 a	2631 ± 180.2 a	2676 ± 253.1 a	2673 ± 95.9 a	2761 ± 157.2 a
Linalool	1.08 ± 0.03 ab	1.06 ± 0.02 ab	1.04 ± 0.06 a	1.14 ± 0.06 b	1.06 ± 0.06 ab	3.97 ± 0.13 c	3.89 ± 0.03 bc	3.55 ± 0.14 ab	3.43 ± 0.09 a	3.80 ± 0.32 bc
α-Terpineol	2.82 ± 0.00 a	3.02 ± 0.13 a	3.03 ± 0.13 a	3.26 ± 0.13 b	3.04 ± 0.12 a	3.16 ± 0.04 b	3.20 ± 0.10 b	3.01 ± 0.11 b	2.80 ± 0.11 a	2.96 ± 0.18 ab
Citronellol	0.271 ± 0.01 bc	0.178 ± 0.01 a	0.216 ± 0.01 ab	0.304 ± 0.06 b	0.219 ± 0.02 ab	2.06 ± 0.12 b	1.81 ± 0.05 a	1.82 ± 0.06 a	1.79 ± 0.04 a	1.87 ± 0.07 a
Geraniol	n.d.	n.d.	n.d.	n.d.	n.d.	0.33 ± 0.00 b	0.32 ± 0.01 b	0.31 ± 0.01 b	0.28 ± 0.01 a	0.32 ± 0.03 b
Total terpenes	4.17 ± 0.04 a	4.26 ± 0.14 a	4.29 ± 0.18 a	4.71 ± 0.23 b	4.32 ± 0.16 a	9.52 ± 0.29 c	9.22 ± 0.08 bc	8.69 ± 0.31 ab	8.30 ± 0.21 a	8.95 ± 0.58 bc
Vanillin	35.4 ± 1.5 a	36.9 ± 3.1 a	39.1 ± 6.1 a	38.1 ± 17.1 a	24.3 ± 4.2 a	57.2 ± 5.95 a	105.7 ± 45.5 bc	114.0 ± 15.6 c	113.6 ± 1.07 c	78.3 ± 14.0 ab
Methyl vanillate	18.9 ± 2.1 b	19 ± 2.2 b	17.8 ± 1.2 b	18.4 ± 0.5 b	14.8 ± 1.2 a	4.29 ± 0.70 a	5.59 ± 0.78 ab	6.88 ± 0.84 b	5.49 ± 0.23 a	5.25 ± 1.02 a
Ethyl vanillate	25.3 ± 0.5 c	22.5 ± 0.4 ab	24.4 ± 0.9 bc	25.1 ± 1.6 c	21.8 ± 0.2 a	203 ± 3.69 a	216 ± 4.23 a	284 ± 32.9 b	306 ± 9.68 b	240 ± 15.1 a
Acetovanillone	159 ± 7.2 c	132 ± 7.0 b	143 ± 4.2 b	140 ± 10.3 b	109 ± 5.9 a	111 ± 7.66 a	137 ± 0.72 c	126 ± 3.64 b	112 ± 2.81 a	124 ± 6.04 b
Total vanillic derivatives	239 ± 8.2 b	210 ± 12.7 b	224 ± 9.3 b	221 ± 23.0 b	170 ± 9.2 a	375 ± 18 a	464 ± 51 b	531 ± 41 c	537 ± 13 c	448 ± 32 b
Guaiaicol	0.384 ± 0.02 b	0.245 ± 0.02 a	0.275 ± 0.03 a	0.352 ± 0.03 b	0.349 ± 0.06 b	6.54 ± 0.33 a	6.81 ± 0.12 ab	7.54 ± 0.51 c	8.52 ± 0.27 d	7.23 ± 0.18bc
4-methylguaiaicol	n.d.	n.d.	n.d.	n.d.	n.d.	1.35 ± 0.02 a	1.36 ± 0.03 a	2.42 ± 0.04b	3.11 ± 0.10 c	1.64 ± 0.10 a
4-Propylguaiaicol	n.d.	n.d.	n.d.	n.d.	n.d.	0.72 ± 0.02 a	0.85 ± 0.02 a	2.82 ± 0.75 b	3.85 ± 0.10 c	1.43 ± 0.20 a
Eugenol	1.98 ± 0.1 b	1.88 ± 0.0 a	1.9 ± 0.0 a	1.96 ± 0.1 b	1.9 ± 0.0 a	16.8 ± 0.17 a	16.7 ± 0.04 a	18.1 ± 0.87 bc	18.3 ± 0.16 c	17.5 ± 0.16 ab
Syringol	n.d.	n.d.	n.d.	n.d.	n.d.	16.6 ± 0.12 a	21.7 ± 0.21b	24.9 ± 3.32 b	24.5 ± 0.92 b	22.3 ± 1.23 b
Total volatile phenols	2.36 ± 0.08 b	2.12 ± 0.02 a	2.18 ± 0.07 a	2.32 ± 0.08 b	2.25 ± 0.08 ab	42.0 ± 0.03 a	47.4 ± 0.31 ab	55.8 ± 5.81 b	58.3 ± 0.78 b	50.0 ± 1.40 b
2-methylbutanal	7.64 ± 0.1 a	8.07 ± 0.2 ab	9.39 ± 0.7bc	9.64 ± 0.4 c	8.28 ± 1.1 ab	16.4 ± 0.73 ab	15.0 ± 0.61 a	19.3 ± 0.72 cd	21.0 ± 1.71 d	17.7 ± 1.87 bc
3-methylbutanal	47.4 ± 1.4 a	43.9 ± 0.9 a	54.6 ± 2.0 b	47 ± 3.8 a	53.6 ± 2.7 b	43.5 ± 0.19 a	43.6 ± 1.75a	50.1 ± 1.42 b	58.3 ± 4.95 c	51.1 ± 3.81 b
Isobutyraldehyde	20.8 ± 0.2 b	16.8 ± 0.1 a	22.1 ± 1.1 b	22.2 ± 0.3 b	24.1 ± 1.5 c	32.3 ± 0.96 a	34.3 ± 0.91a	45.9 ± 3.14 b	50.3 ± 0.98 c	44.6 ± 4.33 b
Phenylacetaldehyde	11.8 ± 0.0 b	11.3 ± 0.7 ab	11.1 ± 1.0 ab	10.8 ± 0.3 ab	10.5 ± 0.7 a	34.8 ± 0.07 a	32.2 ± 2.59 a	34.1 ± 4.13 a	34.7 ± 2.97 a	34.7 ± 4.51 a
Total Strecker aldehydes	87.6 ± 1.5 b	80.1 ± 1.3 a	97.1 ± 4.1 c	89.7 ± 3.4 b	96.5 ± 2.4 c	127 ± 0.50 a	125 ± 2.36 ab	149 ± 6.14 c	164 ± 7.14 c	148 ± 7.46 b

n.d. Not detected.

White wine control (WC); white wine oxygenated (WOX); white wine sparged with N₂ (WN₂); white wine sparged with argon (WAr); white wine sparged with CO₂ (WCO₂). Red wine control (RC); red wine oxygenated (ROX); red wine sparged with N₂ (RN₂); red wine sparged with argon (RAr); red wine sparged with CO₂ (RCO₂).

Different letters in the same row indicate statistically significant differences.