

Table 2S: Concentration of major volatile compounds (mg/L) produced during fermentation in wines with different oak formats and quantified at the end of alcoholic fermentation (AF). Values represent the mean of two independent replicative analyses. Distinct letters denote means that are statistically different as assessed by Tukey's Honest Significant Difference (HSD) post hoc test at a 95% confidence interval. 'Sig.' denotes the level of significance from the ANOVA test: 'ns': non-significant, *: $p < 0.05$ level, **: $p < 0.01$ level, and ***: $p < 0.001$ level.

			Effect of the addition of different oak formats					Effect of the timing of addition			
	RT (min)	LRI	Control	Staves	Cubes	Chips	Sig.	Test	During AF	After AF	Sig.
isobutanol	10.20	1102	80.93	84.65	87.22	103.27	ns	80.9	91.7	88.2	ns
isoamyl acetate	11.50	1130	1.31	1.01	0.60	1.07	ns	1.3	0.9	0.7	ns
1-butanol	11.60	1171	1.37	1.84	1.66	1.80	ns	1.4	1.8	1.5	ns
isoamyl alcohol	15.80	1208	129.66	125.20	125.17	121.28	ns	129.7	123.9	129.8	ns
ethyl hexanoate	16.80	1215	0.25	0.24	0.27	0.26	ns	0.3	0.3	0.3	ns
hexyl acetate	17.78	1275	1.92	1.88	1.30	1.76	ns	1.9	1.6	1.4	ns
acetoin	18.80	1309	6.76 a	5.75 a	1.05 b	1.22 b	*	6.8	2.7	2.0	ns
ethyl lactate	22.25	1330	1.10	1.28	1.18	1.11	ns	1.1	1.2	1.1	ns
1-hexanol	22.40	1351	4.94	5.45	5.82	6.23	ns	4.9	5.8	6.3	ns
ethyl octanoate	26.19	1433	0.32	0.36	0.31	0.46	ns	0.3	0.4	0.3	ns
ethyl 3-hydroxybutyrate	32.15	1540	0.19	0.18	0.18	0.18	ns	0.2	0.2	0.2	ns
isobutyric acid	32.18	1568	0.98	0.04	0.09	0.84	ns	1.0 a	0.3 a	1.0 a	**
butyric acid	35.20	1627	0.27	0.25	0.26	0.25	ns	0.3	0.3	0.3	ns
γ -butyrolactone	34.80	1632	7.41	6.98	7.26	7.58	ns	7.4	7.3	7.3	ns
ethyl decanoate	35.20	1665	0.30	0.32	0.30	0.30	ns	0.3	0.3	0.2	ns
isovaleric acid	36.40	1696	3.64	4.14	4.10	4.89	ns	3.6	4.4	4.3	ns
diethyl succinate	36.70	1681	0.30	0.22	0.30	0.34	ns	0.3	0.3	0.3	ns
methionol	38.20	1711	2.10	1.80	1.83	1.67	ns	2.1	1.8	1.5	ns
ethyl 4-hydroxybutanoate	40.08	1787	2.16	2.47	2.41	1.54	ns	2.2	2.1	2.4	ns
phenethyl acetate	42.60	1818	0.02	0.01	0.01	0.01	ns	0.0	0.0	0.0	ns
hexanoic acid	42.70	1845	0.02	0.36	0.33	0.02	ns	0.0	0.2	0.3	ns
benzyl alcohol	44.20	1879	0.11	0.10	0.10	0.10	ns	0.1	0.1	0.1	ns
2-phenylethanol	45.75	1905	55.31 b	58.65 a	59.33 a	55.39 b	*	55.3	57.8	60.3	ns
caprylic acid	50.34	2059	0.02 b	0.17 a	0.13 a	0.11 a	**	0.02 b	0.14 a	0.12 a	*
capric acid	57.20	2272	0.02	0.04	0.04	0.04	ns	0.02 a	0.04 a	0.04 a	ns
monoethylsuccinate	59.90	2379	0.71	1.26	1.10	0.69	ns	0.7	1.0	1.0	ns