

Heat Stability Bentonite Trial with Pinot Gris (2015)

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Summary:

Identically sourced Pinot Gris was harvested, processed, and pressed. After alcoholic fermentation the wine was sulfured and racked. Prior to bottling the amount of bentonite (AEB) needed for protein stabilization was calculated using the Laurent-Delau equation (ICV eonologue) ($y = 1.48 \times \text{difference of NTU} + 2$ where $y = \text{g/hL of sodium bentonite}$). Three identically sized lots were given a different amount of bentonite. One lot received 0g/hL bentonite, the second lot 40 g/hL, and the third 150 g/hL (amount calculated from the Laurent-Delau equation). All lots were settled and racked.

Lab Results:

Wines treated with bentonite tended to have a lower titratable acidity and ethanol content.

	Control	Heated	Outcome
Control	1.07	Precipitate	Not Stable
40 g/hL	0.49	6.16	Not Stable
150 g/hL	0.52	0.49	Stable

	pH	TA (g/L)	AA (g/L)	%EtOH	Gluc+Fruc	Malic	TSO2	FSO2
Control	3.45	6.32	0.18	12.47	76	291	128	43
40 g/hL	3.48	5.80	0.17	11.86	73	275	120	48
150 g/hL	3.52	5.59	0.17	11.59	71	275	122	49

Results:

Of respondents (n=14) 57% preferred the control with 0g/hL, 31% preferred 40g/hL, and 12% preferred 150g/hL.