

Heat Stability Bentonite Trial with Petit Manseng (2015)

Horton Vineyards

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Summary:

Identically sourced Petit Manseng 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-Dulaou 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-Dulaou equation). All lots were settled and racked.

Lab Results:

Bentonite additions did not affect the chemical constitution of the wines in any perceptible way examined in this study.

| | Control | Heated | Outcome |
|----------|---------|-------------|------------|
| Control | 0.6 | Precipitate | Not Stable |
| 40 g/hL | 0.49 | 8.29 | Not Stable |
| 150 g/hL | 0.57 | 0.6 | Stable |

| | pH | TA (g/L) | AA (g/L) | %EtOH | Gluc+Fruc | Malic | TSO2 | FSO2 |
|----------|------|----------|----------|-------|-----------|-------|------|------|
| Control | 3.48 | 7.03 | 0.42 | 13.41 | 2439 | 244 | 117 | 26 |
| 40 g/hL | 3.5 | 6.89 | 0.42 | 13.29 | 2483 | 242 | 116 | 25 |
| 150 g/hL | 3.51 | 6.74 | 0.41 | 13.04 | 2376 | 237 | 118 | 26 |

Results:

Of respondents (n=13) 54% preferred the control (0 g/hL), 23% preferred 40 g/hL, and 23% preferred 150 g/hL.