Effect of Bentonite Additions Prior to Fermentation on Protein Stability in Edna Valley Sauvignon blanc

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Sauvignon blanc often requires large amounts of bentonite in order to remove haze proteins and make the wine heat stable. However, large bentonite additions can affect the sensory perception of the wine. We studied the effect of adding small amounts of bentonite before fermentation on the subsequent amount required after fermentation to heat stabilize the wine. Protein stability was evaluated in two lots of Sauvignon blanc juice from two blocks of the same Edna Valley vineyard. Bentonite (Volclay KWK, American Colloid Co.), 4.6 g suspended in 200 mL water, was added to 19 L of juice prior to fermentation. The control had 200 mL water added only. Juice treated with bentonite before fermentation required the lowest amounts of postfermentation bentonite to achieve protein stability, as determined by heat
stability tests using a nephelometer. A correlation was observed between the turbidity of heated juices treated with different amounts of bentonite and protein measured by the Bradford Protein method. Sensory studies were conducted to ascertain if the effect of different bentonite additions and timing of additions changed the sensory perception of the resulting wine.