

Sensory Evaluation of Merlot Wines from Research on Vineyard Irrigation Frequency and Nitrogen Fertilization

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The sensory quality of wines made in 2008 from a study of irrigation and N fertilization of Merlot vines will be evaluated by BCWGC Conference attendees. Treatments in the study included irrigation to provide the same total amount of water but applied daily or every 3 days; and N fertilization at 0 or 15 lb/ac applied at veraison in addition to the normal applications 25 and 20 lb/ac applied at budbreak and bloom, respectively. The wines were made when the fruit soluble solids averaged 25°Brix. From each of the four replicate plots of each treatment, 15 vines provided 45 Kg of fruit resulting in 38 L of must. The crushed and destemmed fruit was cold-soaked for 4 days at 10°C before the temperature was raised to 26°C and yeast (D254) was added. The following day, 1/3 of the nutrient mix (Fermaid K plus DAP) was added and the temperature was increased to 32°C. The other 2/3 was added two days later when the wines were at 15-20°Balling. The wines were punched down daily and pressed when they reached <5°Balling. The temperature was decreased to 28°C then 10 days later, when most of the wines had reached dryness, it was further decreased to 20°C. Once all of the wines were dry, 9 days later, malolactic bacteria (Viniflora CH16) was added. The malolactic fermentations took 4-6 weeks to complete. Once complete for each wine, the temperature was reduced to 2°C and SO₂ was added. After racking the wines there was a final SO₂ addition before bottling.