

Making wine with Vignoles

By Doug Bakker
Winemaker, Madison County Winery
St. Charles, IA

I. Harvest Dates

- A. 2011 – Sept. 3rd (normal)
- B. 2012 – Aug. 20th (2 weeks early)

II. Juice Analysis at Harvest

- A. 2011 – 20°B, pH 3.11
- B. 2012 – 21.3°B, pH 3.08
 - a. Higher brix but also higher acid (2 weeks early)
 - b. Excellent overall quality of fruit but very low yield

III. Crush

- A. Basic crush/press procedures
 - a. Spray grapes w/ Pectic Enzyme prior to crush/destem
 - b. Add rice hulls at crusher
 - c. Press and analysis juice
- B. Adjustments to juice
 - a. Add Calcium Carbonate to reduce acidity
- C. Cold Settle
 - a. Drop juice temperature to 56°F
 - b. Fine w/ Bentonite
 - c. Add 30 ppm Potassium Metabisulfite
 - d. Top ullage w/ Argon
- D. Rack off 2 days later

IV. Fermentation

- A. Inoculated w/ Red Star Premier Cuvée
- B. Jumpstarted w/ yeast nutrient, Superferment
- C. Cold fermentation, 54°F
- D. Added DAP during fermentation
- E. Fermentation completed in 21 days
- F. Racked off lees/added 50 ppm Potassium Metabisulfite

V. Fining

- A. Fined w/ Sparkolloid
- B. Follow up with Bentonite 3 days later
- C. Racked/Added 35 ppm Potassium Metabisulfite
- D. Allow to settle for about 2 ½ months
 - a. During this time Grape Skin Tannins can be added to improve mouthfeel and balance acidity

VI. Finishing

- A. Racked to chiller tank to begin Cold Stabilization
 - a. Sparged w/ CO₂ during racking
 - b. Drop temp to 24°F
 - c. Seeded w/ Potassium Bitartrate

VII. Filtration

- A. Filter off sediment of Cold Stabilization
 - a. Allowed to warm to room temperature
 - b. Again sparge w/ CO₂ to remove DO
- B. Multiple filtrations, down to .45 micron
- C. Final Sparge to remove DO before bottling
- D. Added 35 ppm Potassium Metabisulfite
- E. Bottled
 - a. Final DO test showed .51

VIII. Final Analysis

- A. Test results from Midwest Grape & Wine Institute
 - a. pH 3.46
 - b. 11.8% Alc.
 - c. 0% RS
 - d. 8.27 TA
 - e. FSO² 53.6 ppm

IX. Important Equipment

- A. DO meter
 - a. \$400 - \$800 for good quality meter
- B. Carbodoseur
 - a. \$230 - \$275
- C. Carbonation/Aeration Stone setup
 - a. \$225 - \$300
- D. Tee Valve (TriClamp)
 - a. \$30 - \$40
- E. CO₂, Nitrogen, and/or Argon gases