

Marquette Wine

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Marquette



- **Harvest*:**
 - 26.1 °Brix
 - 3.0 pH
 - 11.6 TA (tartaric)

**8 year average*

[Final Chemistry]

Cultivar	% Alcohol	pH	TA (g/L)
Marquette	14.6	3.3	8.2
Maréchal Foch	12.8	3.4	7.9
Frontenac	13.4	3.3	10.3
Merlot	12.4	3.4	7.2

All cultivar data averaged over 4 years, 2003-2006

[Juice Phenolics (AU)]

Cultivar	Total	Visible Color	Density	Hue
Marquette	12.0	5.6	6.5	1.0
Maréchal Foch	9.6	2.1	3.6	0.8
Frontenac	22.6	15.6	21.2	0.3
Merlot	1.5	0.8	1.5	0.8

All cultivar data averaged over 4 years, 2004-2007

[Sensory]

- **Ruby**
 - similar to *V. vinifera*
- **Complex, well-balanced palate**
 - cherry
 - black currant
 - black pepper
 - berry
 - spice
- **Moderate tannins**
 - Comparable to Pinot noir

[Maceration]

- **Nutrients**
 - Good N₂ concentrations; ammonia may be low
 - Further research needed
- **Fermentation: 7-10 days on skin**
 - Optimal tannin extraction
 - Color rich but not inky; *Vinifera*-like
 - Extended maceration?
- **Fermentation temperature**
 - Moderate temps (70°F)
 - High temperature may suppress fruity notes

[Fermentation]

■ Yeast

- Pasteur Red (*Red Star*)
- BM 45 (*Lallemand*)*
 - Jammy fruit, cedar, earthy notes; enhanced body
- RC212 (*Lallemand*)*
 - Berry fruit, spice
- Strains tolerant of moderate to high alcohols

* Nutrient addition recommended with these yeasts

[Malolactic]

■ Malolactic fermentation

- High malic acid content?
- As much as 3 g/L drop in TA
- Strains tolerant of higher alcohol, low pH
 - CH 11 (*Chris Hansen*)

[Malolactic]

- **Inoculation time**
 - **Sequential**
 - Last third of AF, or a few days following
 - Racking?
 - **Co-inoculation**
 - Addition 1 day following fermentation
 - Quicker MLF, lower diacetyl
 - ICVD 254 + VP41, Vitalactic H+, Enoferm beta (*Lallemand*)

[Alcohol]

- **Alcohol content?**
 - Can be as high as 14-15%
 - Amelioration
 - Blending
 - Maréchal Foch, St. Croix

[Finishing]

- **Cold Stabilization**
 - Highly recommended
- **Chemical Deacidification**
 - Usually, only minor additions needed
 - Final TA: 6.5-7.5 g/L

[Aging]

- **Oak Aging**
 - Highly recommended
 - Barrels, beans, chips or spirals
 - Heavy toast preferred over medium in winemaker's roundtables
- **Enological tannins**
 - Generally not recommended

[Issues]

- High alcohol
 - Amelioration
- Seasonal variation
 - Tannins lower some seasons
 - Overcropping?
- Moderate acid
 - Potential pH/acid discrepancy

[Works in progress]

- Continued co-inoculation research
- NOPA analysis
- Port production
- Rosé production

The screenshot shows a Mozilla Firefox browser window displaying the website <http://www.grapes.umn.edu/marquette/index.html>. The page header includes the University of Minnesota logo and the slogan "Driven to Discover™". The main title is "Cold Hardy Grapes".

What's Inside

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Cold Hardy Grapes Home

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Marquette

Marquette is a cousin of Frontenac and grandson of Pinot noir. It originated from a cross of MN 1094, a complex hybrid of *V. riparia*, *V. vinifera*, and other *Vitis* species, with Rayat 262. Viticulturally, Marquette is outstanding. Resistance to downy mildew, powdery mildew, and black rot has been very good. Its open, orderly growth habit makes vine canopy management efficient.

Wine Profile

Marquette's high sugar and moderate acidity make it very manageable in the winery. Finished wines are complex, with attractive ruby color, pronounced tannins, and desirable notes of cherry, berry, black pepper, and spice on both nose and palate. As a red wine, Marquette represents a new standard in cold hardy viticulture and enology.

Availability

Marquette officially introduced in 2006, is almost sold out. Please plan ahead and place your order for future years. Contact your favorite nursery. Please contact your favorite nursery or visit our [licensed nurseries](#) list for a supplier who would be happy to help you.

Navigation Links: [Viticulture](#), [Enology](#), [Order Promotional Materials](#), [Download Pics & Text](#)

Image: A large photograph of a bunch of dark blue grapes with green leaves. The word "Marquette" is written vertically in a stylized font to the left of the grapes. Below the image, it says "Introduced 2006".

At the bottom of the browser window, the address bar shows <http://www.grapes.umn.edu/index.html>.