



Wine Production

Our winemakers make over 125 wines each year. Our goals are to identify hybrids with superior winemaking potential, and to optimize the wine production from our new cultivars. We experiment with different styles to help the industry make the best possible wines.

Wine Evaluation

In our state-of-the-art facility, an expert staff uses numerous instruments to evaluate all aspects of our experimental wines. Instruments are used to measure polyphenols (pigment and tannins), acidity, and sugar, as well as aroma and flavor. A trained taste panel evaluates various sensory aspects, including visual appeal, bouquet, flavor, and mouthfeel.



The expert use of the latest advances in propagation, hybridization and selection, cultivation, and winemaking ensures the introduction of vines with superior performance in both vineyard and winery.

U of M Varieties Make Award Wining Wines



Medal Winners

Proof that excellent wine can be made when U of M varieties are well grown and vinified is being demonstrated not only in cold climates, but also in more temperate wine growing areas. Numerous prestigious awards in national and international competitions, including Best of Class, Double Gold, and Gold, are being awarded for wines produced from varieties developed by the University of Minnesota.

Availability

Frontenac gris, La Crescent, and Marquette are patented varieties that can only be propagated by licensed nurseries. Propagation of Frontenac and Frontenac blanc by Minnesota Nursery Research Corporation (MNRC) participants supports continued research at the U of M.

Discover More

Frontenac blanc, a white-fruited mutation of Frontenac and Frontenac gris, is being evaluated to determine if it provides the same outstanding vine growth, disease resistance traits, and award winning vinification opportunities. Visit our grape website for updates, licensed and MNRC nursery listings, licensing information, and viticulture and enology guidance.

www.grapes.umn.edu

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UNIVERSITY OF MINNESOTA

Cold Hardy Wine Grapes



Expertise Results in High Quality Wine Grapes

At the University of Minnesota, we're known worldwide for expertise in cold hardy varieties. We've bred grapes over a century and formally initiated a wine grape breeding program in 1978. In 2000, we completed a state-of-the-art enology lab and research winery. Today, we're recognized as one of the top wine grape programs in the United States. Our goal is to develop high quality, cold hardy, and disease resistant wine and table grape cultivars.



Extensive Breeding

Our program encompasses over 12 acres of research vineyards with approximately 12,000 experimental vines. Seedlings are produced each year using a diverse genetic base that includes classic *Vitis vinifera* cultivars, quality French hybrids, and cold hardy, disease resistant selections based on *V. riparia*, Minnesota's native grape. Over 3,000 vines are planted each year and subjected to high standards of rigorous evaluation.

Thorough Testing

Currently over 100 U of M advanced selections are being tested, as well as over 400 cultivars and selections from other breeding programs. In addition to cold hardiness and disease resistance, viticultural traits such as productivity, cluster size, growth habit, bud break, and ripening times are evaluated.

Delectable Wines From Cold Hardy Vines

Frontenac



Introduced 1996

Frontenac grapes reflect the best characteristics of their parents, *V. riparia 89* and the French hybrid Landot 4511. This vine has borne a full crop after temperatures as low as -33° F when properly cared for. It's very disease resistant, with near-immunity to downy mildew. Frontenac is a consistently heavy producer, with small, black berries in medium to large clusters. The most popular vine in Minnesota, it is now being widely planted throughout the Midwest, New England, and Quebec.

Wine Profile

Frontenac's deep garnet color complements its distinctive cherry aroma and inviting palate of blackberry, black currant, and plum. This versatile grape can be made into a variety of wine styles, including rosé, red, and port.

Frontenac gris



Introduced 2003

Frontenac gris, started as a single bud mutation of Frontenac, yielding gray (gris, in French) fruit and amber-colored juice. The vine exhibits the same optimum growth characteristics as Frontenac, and requires the same cultural practices. Arching canes and minimal tendrils provide easy training and pruning to simplify vine management. In Minnesota, Frontenac and Frontenac gris ripen in late mid-season, and are good sugar producers with 24-25° Brix not uncommon.

Wine Profile

Frontenac gris wines present aromas of peach and apricot with hints of enticing citrus and tropical fruit. A brilliant balance of fruit and acidity creates lively, refreshing wines. Unique and complex flavors make this an excellent grape for table, dessert, and ice wines.

La Crescent



Introduced 2002

La Crescent combines St. Pepin and a Swenson selection from *V. riparia* x Muscat Hamburg. With this hardy heritage, trunks have survived -36° F when well cared for in good vineyard sites. Moderately disease resistant, leaves sometimes exhibit downy mildew, which can be controlled with a standard spray program. Proper conditions and care result in very productive vines.

Wine Profile

La Crescent's intense nose of apricot, peach, and citrus lends itself to superior quality off-dry or sweet white wines. Produced in a Germanic style, La Crescent wine is reminiscent of Vignoles or Riesling. The grape's high acidity provides good structure for excellent dessert or late-harvest style wines.

Marquette



Introduced 2006

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 Ravat 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.