

COLD HARDY WINE GRAPES



Itasca

Itasca is named after Lake Itasca, the source lake for the Mississippi River, in northwestern Minnesota. It was released in 2017. This white wine grape variety stands out for its extreme cold hardiness, high quality fruit chemistry and low acidity, and disease resistance.

College of Food, Agricultural
and Natural Resource Sciences (CFANS)
University of Minnesota Extension


UNIVERSITY OF MINNESOTA
Driven to Discover®



FRUIT CHARACTERISTICS

Itasca produces medium to large-sized clusters between 95-145 grams. Itasca wine can take on notes of pear, quince, kiwi, starfruit, gooseberry, and honeydew melon.

HARDINESS

During the 2014 polar vortex in Minnesota, Itasca survived temperatures of -31 °F with over 60% primary bud survival, outperforming the Frontenacs, La Crescent, Marquette, and Brianna. During the polar vortex on January 30-31, 2019, Itasca survived nighttime temperatures of -28 °F with 80% primary bud survival. Secondary buds were still nearly 100% alive after both events.

VIGOR

Itasca is considered a medium-high vigor variety.

BUD BREAK AND HARVEST TIMING

Itasca bud break occurs earlier than the Frontenacs, but slightly later than or on par with Marquette. Some nodes may produce primary, secondary, and tertiary buds simultaneously. In this case, the secondary and tertiary buds should be removed to prevent overcrowding. It is generally harvested in mid-September in Minnesota, slightly before Marquette and La Crescent but after Edelweiss and Brianna. It often produces a rosy berry or two once ripe. Itasca can hang longer in some seasons for late harvest style winemaking, but berry integrity must be closely monitored.

HARVEST PARAMETERS

Harvest Itasca between 24.7-28.2 °Brix, and between 3.04 and 3.31 pH. It has been shown to perform well in late harvests at the UMN Horticultural Research Center (HRC). Historically, the titratable acidity target for Itasca has been 8.7 to 10.8 g/L. However, lower TA levels below 6 g/L have been observed some years at the HRC.

TRAINING SYSTEMS

Itasca can be successfully trained to Vertical Shoot Positioning (VSP), High Wire (HW), or Geneva Double Curtain (GDC) depending on grower preference. Itasca produces a notably upright growth habit, making it suitable for VSP if desired. However, its high vigor also suits it well for HW or GDC. Anecdotal observations from the HRC show generally higher yields on HW vines compared to VSP vines.

BUDS AND CLUSTERS PER VINE

6-7 buds per linear foot of cordon, or 35-50 buds per vine at 6 foot vine spacing, depending on the training system (80 to 100 buds/vine for GDC). Development of 2 clusters per shoot is common. Clusters generally weigh between 0.15 to 0.25 lbs. As vines mature, yields of 1.5 to 2.5 lbs. of fruit per linear foot of trellis are common.

PRUNING AND CANOPY MANAGEMENT

Itasca shoots consistently produce buds every 3 inches on average. When spur pruning, maintain 3-3.5 buds per linear foot, and shoot thin to 2 shoots per spur. Trials are ongoing to test Itasca's performance under cane pruning. However, its ability to support 6-7 viable buds per linear foot suggests that Itasca can potentially be cane pruned with two canes in each direction without overcrowding the vine.

Use fruit zone leaf removal and shoot thinning to balance vegetative and reproductive growth, and to expose fruit to sunlight to encourage ripening.

Use strong renewal canes to establish new cordons. Itasca can produce 10-12 healthy buds per cane with ideal soil, weather conditions, and management. With buds spaced 3 inches apart, you may establish an entire 3-foot cordon in one season if the wood remains pencil-diameter. As with other varieties, prune back to healthy, pencil-diameter wood when establishing new cordons, and avoid using bull canes.

PEST SUSCEPTIBILITY

Itasca has strong resistance to powdery mildew, downy mildew and leaf phylloxera. Anthracnose and black rot may be problematic under wet, warm, and humid conditions.

FOR MORE INFORMATION:

MATT CLARK | CLARK776@UMN.EDU | ENOLOGY.UMN.EDU