

# ITASCA: A Great White Hope ?

or, The Grape Formally Known As:

**MN 1285**

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# U of MN Cold Climate Fruit Breeding

- Program began in 1906
- Breeding of Grapes, Apples, Berries, Trees
- Located in Excelsior, MN
- About 10,000 vines, 7,000 new seedlings/year
- NOT “GMO”, but classic hybridization through specific cross-pollination and isolation...
- Frontenac, La Crescent, Marquette, etc.

My! What nice clusters you have!!...



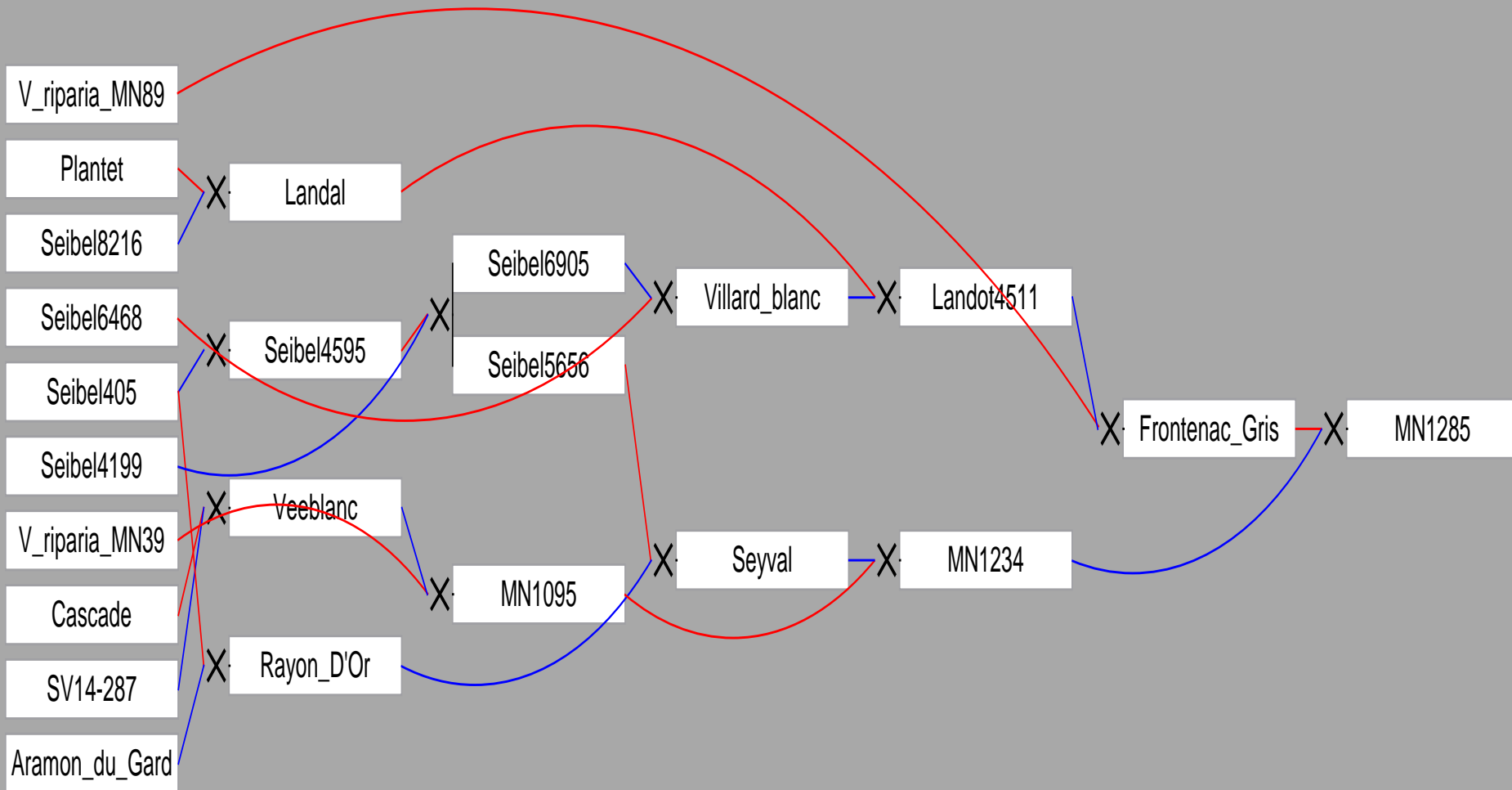


# Itasca (Frontenac Gris X MN 1234)



- Cross made in 2002
- Selected in 2009
- Harvest mid-September
- Very Hardy
- Disease Resistant
- No Phylloxera
- High Quality Fruit Chemistry
- A great white hope??

# Pedigree of Itasca (MN 1285)



# Origins of the name **Itasca**

- The name of the source-lake for the Mississippi River, made from combining the Latin words *veritas* “truth” and *caput* “head”.
- Native American legend, also, mentions **I-tesk-ka**, the daughter of Hiawatha, whose tears of anguish at being spirited away to the netherworld reputedly formed the source of the Mississippi.

<http://www.britannica.com/place/Lake-Itasca>



# Itasca, the vine

- **Growth habit is open and manageable**
- **Shoots can grow either upright or procumbent (downward)**
- **Vines can be vigorous**
- **Cold-hardiness is excellent**

# Itasca, the vine

- Great disease resistance
- Fruit exposure is good, can benefit from minor adjustments
- Canes of 10-12 buds perform well after harsh cold events
- Spur pruning also works well
- Vine Spacing: 6 feet with  $\leq 2.5$  % OM, 8 feet for  $\geq 3$  % OM



# Young MN 1285 vine, planted in 2011



**Some upright shoots**

**Pictured in 2015**



# Same vine after pruning



**Picture  
Taken in  
2015**



# The before and after





# Itasca is extremely hardy

**Secondary  
Bud Alive**

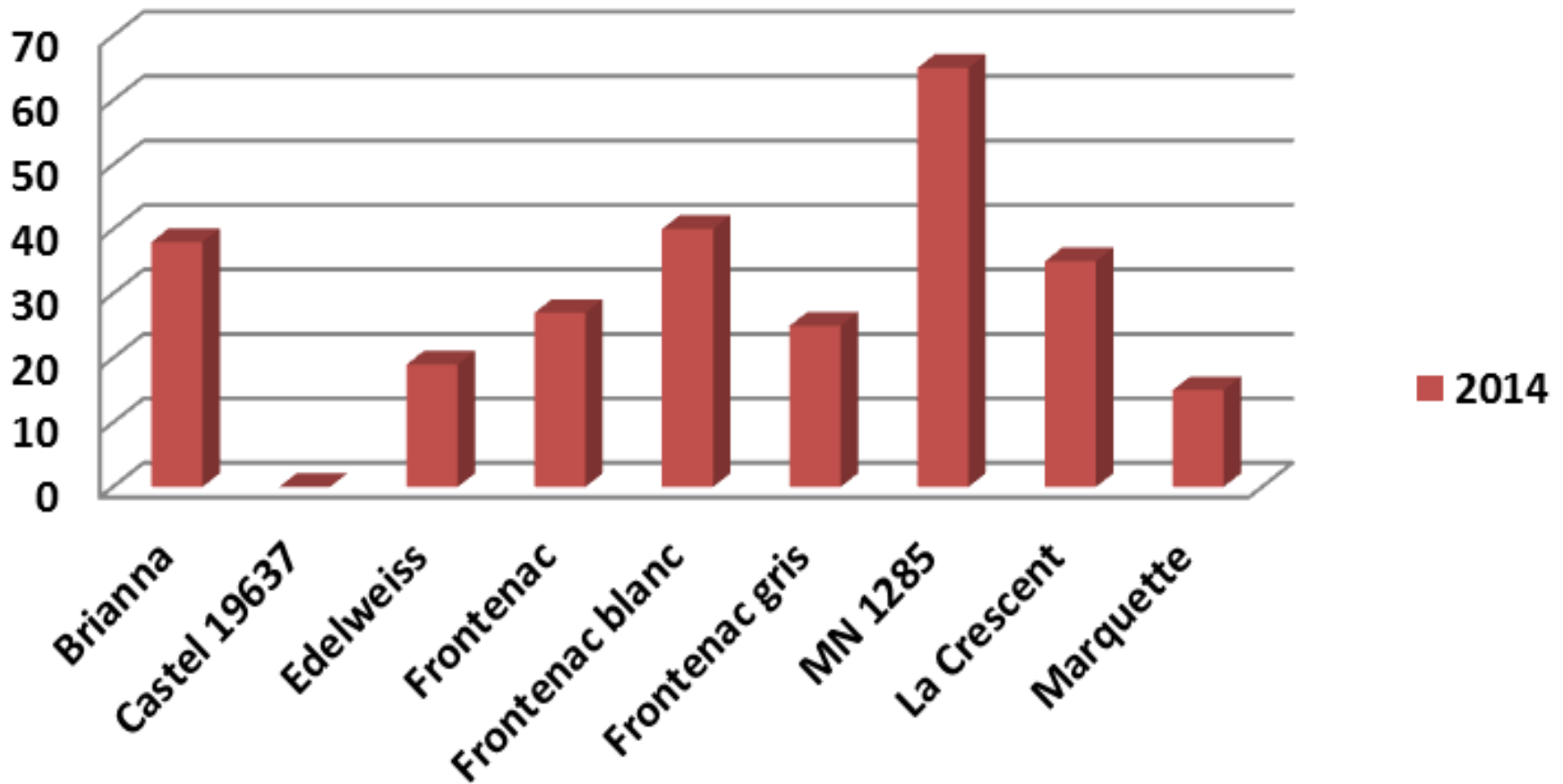


**Primary  
Bud Alive**



# % Primary bud survival after polar vortex

2014





# Disease resistance is very high





Itasca's fruit is easy to expose





# Itasca can grow vigorously



Leaves are Fig-leaf shaped and curl under naturally



# Itasca Mother vine before pruning 2016



Kicker shoots on the trunk will help “de-vigorate” the growth



# Itasca after Pruning 2016



**Kicker shoots pruned off, back to short spurs**



# Itasca the fruit

- The fruit ripens nicely by mid to late September.
- Clusters are cylindrical and often shouldered or winged, structure is moderately compact.
- Berries take on a beautiful golden hue when ripe.



# Itasca the fruit

- Some clusters exhibit a few rosy-colored berries.
- Juice TA chemistry can come in under 10 g/L
- Brix can reach 25%,
- pH of 3.05 – 3.35



# Sun-ripened, Golden Fruit of Itasca





# Winged Cluster of Itasca





# Itasca achieves Great Fruit Quality



2012 Numbers - Brix: 26.0 pH: 3.35 TA: 9.33



# Juice Chemistry

- **Brix: 24.7 - 28.2**
- **pH: 3.04 - 3.31**
- **TA: 9.5 - 10.8 g/L**
- **95 - 145 g clusters**



# Fruit Quality Traits of MN Cultivars

<b>Genotype</b>	<b>°Brix</b>	<b>TA (g/L)</b>	<b>pH</b>	<b>Bud Survival % in 2014</b>
<b>Itasca*</b>	<b>24.7</b>	<b>10.85</b>	<b>3.04</b>	<b>64.6</b>
<b>Frontenac</b>	<b>24.8</b>	<b>15.33</b>	<b>3.07</b>	<b>27.1</b>
<b>Front. Gris</b>	<b>23.7</b>	<b>15.62</b>	<b>2.99</b>	<b>25.0</b>
<b>La Crescent</b>	<b>21.9</b>	<b>14.49</b>	<b>3.00</b>	<b>39.6</b>
<b>Marquette</b>	<b>24.4</b>	<b>12.85</b>	<b>2.99</b>	<b>14.6</b>

# Itasca, the wine & wine making

- **Aromas and flavors:**

Apple, Quince, Melon,  
Citrus, Pear, Gooseberry,  
Star fruit & Mineral

Beautiful golden color

Medium bodied

Full-flavored, rich, intense

(Like warm-climate Sauv. Blanc)

- **Winemaking:**

Whole-cluster pressing

De-stem & Cold-soaking

“Designer” yeasts

Barrel ferment, or partial...

Full MLF or partial

# Itasca is a Grower-Friendly Vine and a Winemaker's Grape at the Same Time.





Itasca, a great grape!





# Itasca – Available in 2017



# Acknowledgements

**Dr. James Luby**



**Peter Hemstad**



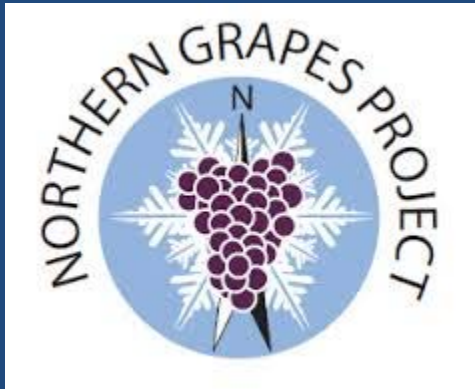


# Acknowledgements



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## Questions ???

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