



Viticulture, enology and marketing  
for cold-hardy grapes



# Brianna and La Crescent: Ten Viticulture Tips

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University of Minnesota



Photo by Nicholas Howard



Photo by Dave Hansen  
Univ. of Minnesota



# Brianna

- Bred by Elmer Swenson, 1983
- Named by Ed Swanson, Cuthills Vineyard, NE in 2002
- Kay Gray x ES 2-12-13

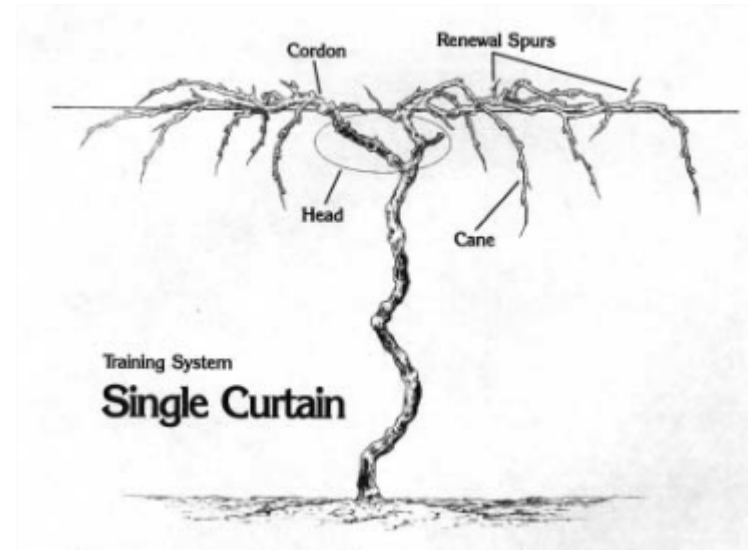




# Brianna

## Site Selection and Vineyard Establishment

- **Vine spacing** of 8' will fill the trellis, except in some low fertility, high pH soils.
- **Vines fight upward growth.** Do not use a VSP trellis system.



Ohio State Univ Bulletin 815





# Brianna

## Training and Pruning

- Long, trailing shoots with stubborn tendrils.
- Long shoot internodes so leaf pulling not as critical as for La Crescent.





# Brianna Training and Pruning

- **Cluster weights** are typically under 1/4 pound.
  - Buds on node position 4 - 12 generally produce larger clusters
  - Very fruitful from secondary buds

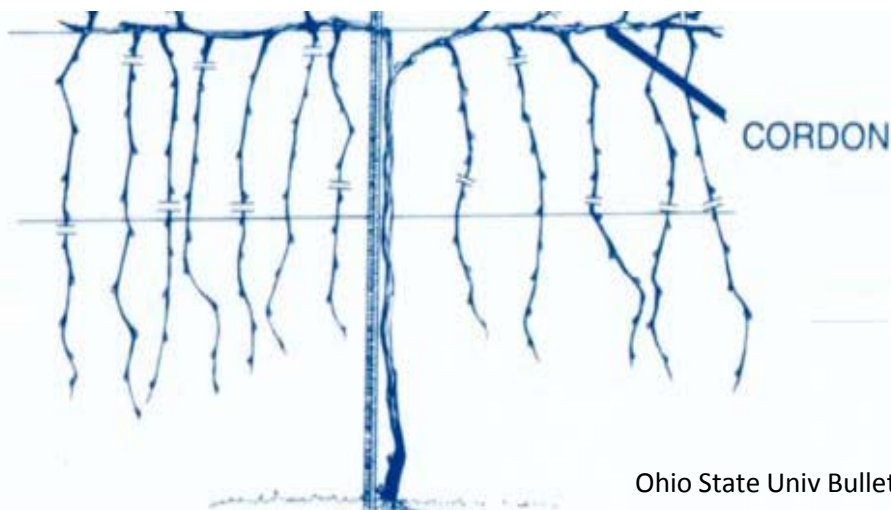




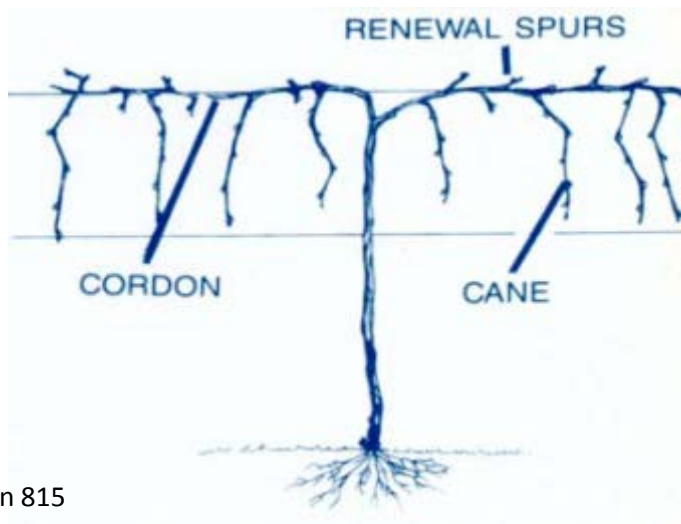
# Brianna Training and Pruning

- **Long cane renewal pruning with renewal spurs** may work well for many areas.
  - Can tie 2 canes together in both directions to improve yields during cordon renewal.
- **5 to 8 buds per foot** of trellis retained at pruning works well on healthy, mature vines.

Before Pruning



After Pruning







# Brianna

## Disease and Pest Management

- Clusters are **susceptible to Downy Mildew**.
  - Vine is **highly sensitive to copper** and moderately sensitive to sulfur.



Downy Mildew on leaf and Cluster



Copper damage



# Brianna

## Harvest Considerations

- **Berries plump up after veraison.** Compact clusters tend to split some berries inviting wasps and sour rots to take hold.
- **Harvest at around 14-16 Brix** to avoid over-development of unwanted foxy aromas.
  - usually late August to early September in Minnesota.



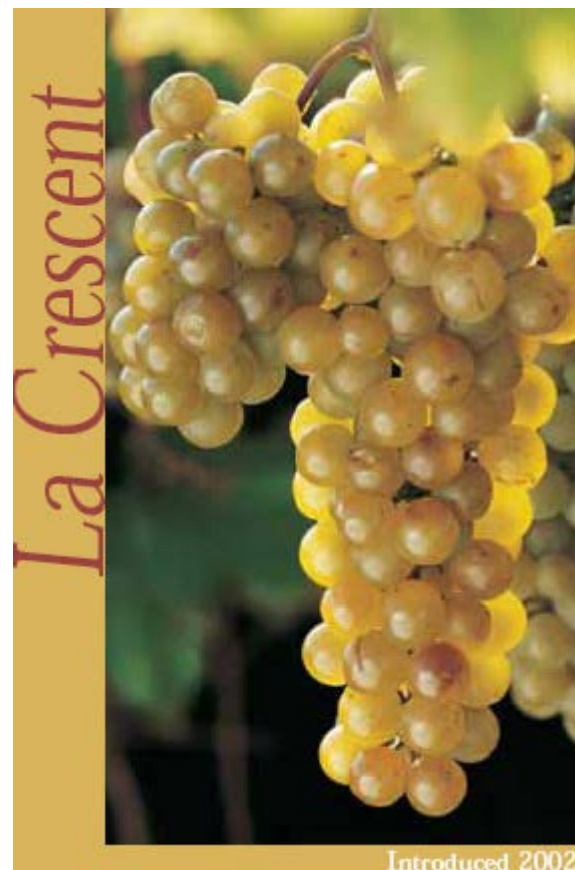
Wikipedia.org





# La Crescent

- Introduced in 2002 by UMN
- St. Pepin x ES 6-8-25





# La Crescent

## Site Selection and Vineyard Establishment

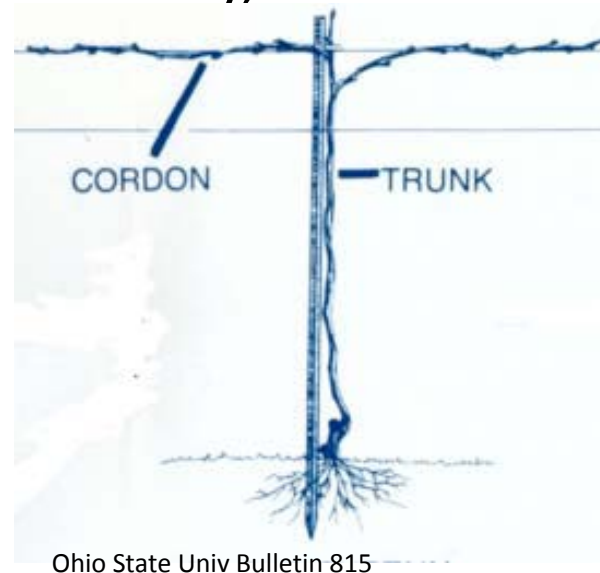
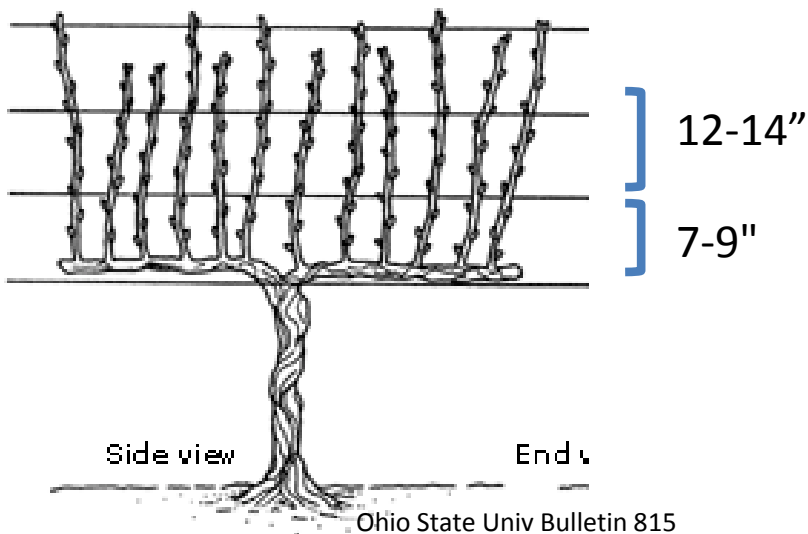
- **Vigorous vine**
  - Space vines 6' apart in the row if organic matter < 2.5%.
  - Space vines 8' apart if O.M. is > 3%.
  - Soils that are too fertile and too wet lead to hardiness issues.





# La Crescent Training and Pruning

- **For VSP**, shoots readily trained upward if catch wires are provided within 7-9" above the fruiting wire, and every 12-14" thereafter.
  - **High Cordon or GDC training is recommended for fertile sites** to de-vigorate shoot growth.
- **Avoid using the 'bull canes'**, which are less hardy, to build the vine's framework (trunk or cordon).

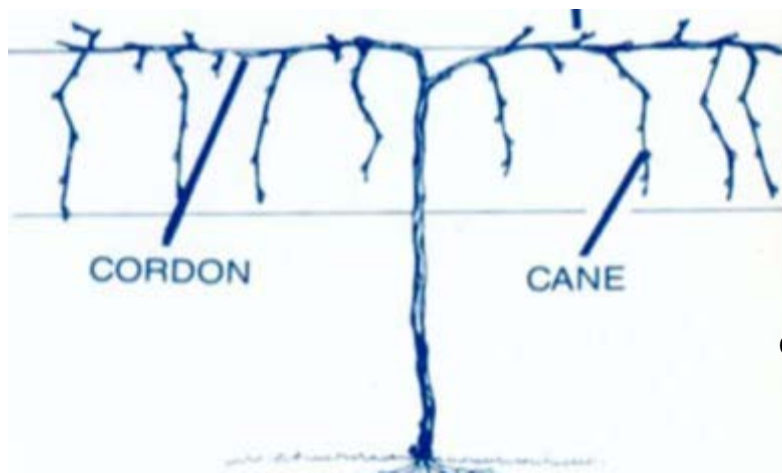






# La Crescent Training and Pruning

- **Cane or Spur Pruning Systems work well.**
  - An old cordon can be phased out while a new cordon is phased by tying down a cane in tandem with an aging cordon to ensure fruitfulness.
- **Open canopy** best achieved by **retaining 5 to 7 buds per foot** of trellis when ~100% bud survival.
  - Adjust shoot counts before the 12" shoot stage.





# La Crescent Training and Pruning

- Best fruit quality is achieved with > 85-95% of the fruit fully exposed to the sun. Should safely ripen 3 to 5 Tons/A.
- **Leaves and laterals need to be pulled from the fruit zone very early (soon after bloom)** to achieve best juice chemistry, flavor, and aroma results.





# La Crescent

## Disease and Pest Management

- La Crescent **leaves are very susceptible** to Downy Mildew, but the **fruit is very resistant**.







# La Crescent Harvest Considerations

- Berries have a tendency to shell in some cases before full ripeness is achieved.
  - Harvest in Minnesota occurs in mid to late September.





# Viticulture, enology and marketing for cold-hardy grapes

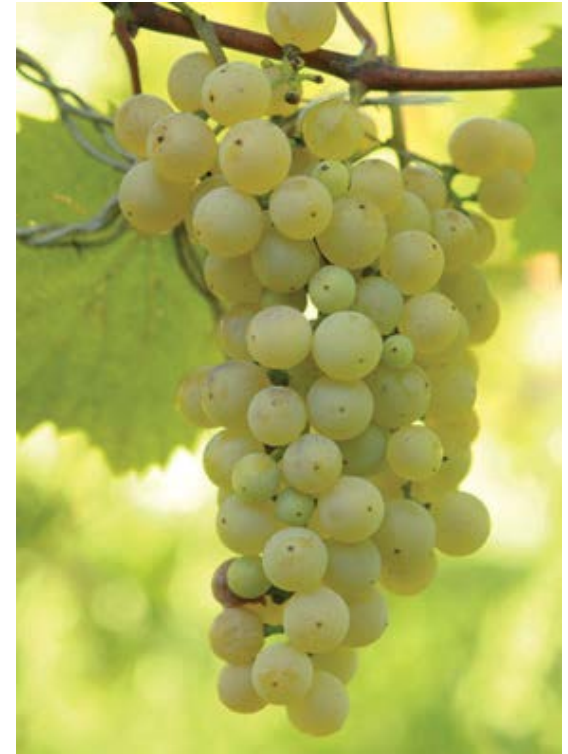


Thank you!



# Brianna

## Viticulture, Enology, and Wine tasting



**Jim Luby and Murli R Dharmadhikari  
NGP meeting Kalamazoo MI  
2/24/16**



# Brianna

- Synonyms: 7-4-76
- Pedigree: 'Kay Gray' x E.S. 2-12-13
- Origin: Osceola, Wisconsin. Bred by Elmer Swenson
- Cross/Selection/Test: Cross made in 1983; selected in 1989 as a table grape and 2001 as wine grape
- Named by **Ed Swanson**, Cuthills Vineyard, Pierce NE, 2002

# Styles of Brianna

1. *Crisp light bodied white: **crisp, lively, light in alcohol and not assertive in taste or aroma***

Ex: Sauv. Blanc, Pinot Gris, Pinot Grigio, and Chenin Blanc

2. *Smooth medium bodied white: **medium in body, flavor and acidity with a touch of sweetness in some cases***

3. *Aromatic dry or off dry white: **fruity, perfumed, aromatic, floral medium bodied dry or off-dry***

Ex: Riesling, Muscat, Gewurztraminer , Sauv. Blanc

# Styles of Brianna, cont.

4. *Barrel-fermented or partially barrel-fermented style: increased aromatics, richness and mouth-feel*

Ex: Chardonnay

5. *Sparkling: 100% pure or in a blend, either bulk-carbonated or “Methode Champenoise”*: Sparkling wines are becoming more popular every day, low Brix at harvest lends itself to secondary in-the-bottle fermentation

Ex: Successful sparkling wines from L. Mawby (MI) and Illinois Sparkling Wine Co.

# Brianna Aroma/Flavor Descriptors

- Wine Quality and Characteristics: 'Brianna' can be made into a semi-sweet white wine with pronounced **pineapple nose** and flavor when fully ripe.
- For light table wines with more **grapefruit, tropical, and slight floral** characteristics, 'Brianna' is best harvested between **3.2-3.4 pH**.
- Elmer Swanson noted that the grapes are **high in pectin**, and need extra enzymes for good juice yield. Whole-cluster pressing can help.
- Acquaviva winery: Sweet, medium body wine. Flavors are predominantly **peaches, apricots, lime-candies, grapefruit, and pineapple**. Ideal as a dessert wine.
- Miletta Vista : Brianna wine is filled with flavors of tropical fruits like **pineapple, mango and kiwi**. A great sipping wine for the sweeter palate.



# Brianna Vinification

- Harvest early based on pH. Whole-cluster press with rice hulls and pectinase enzyme to boost clarification and juice yield
- Settle well, may use Bentolact-S addition to pre-fine/settle the juice
- Ferment cool with chosen yeast strain, 52F to 58F
- Minimize Oxygen exposure
- Clean racking and proper sulfiting during processing/maturing, aim to inhibit Malo-Lactic (secondary) fermentation
- Clarify, stabilize, filter, and bottle

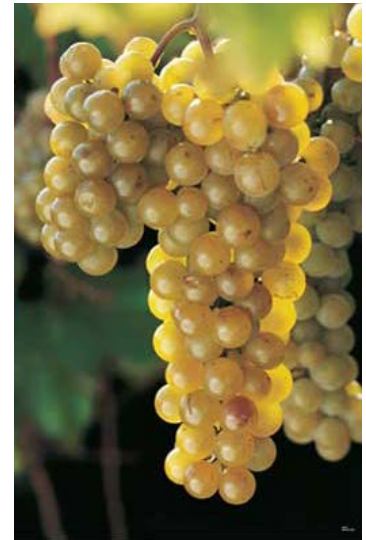
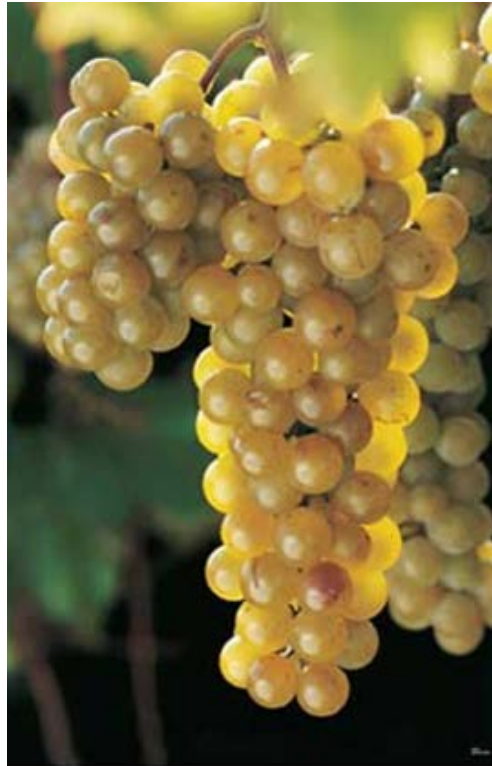
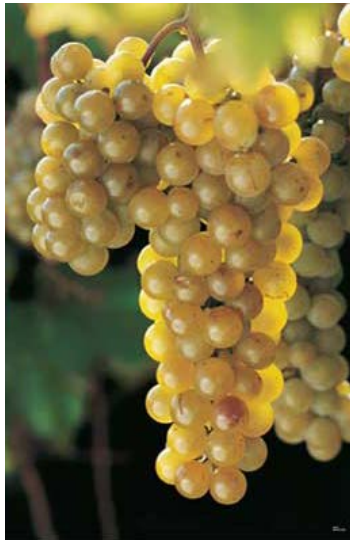
# Whole-Cluster Processing

(...and you won't need to clean you de-stemmer!)



# La Crescent

Viticulture Enology and Wine tasting



# La Crescent

- Pedigree: 'St. Pepin' x E.S. 6-8-25 (*V. riparia* x 'Muscat Hamburg')
- Origin: University of Minnesota Horticultural Research Center. Developed by Peter Hemstad and James Luby
- Cross/Selection/Test: Cross made in 1988; selected in 1992; tested as MN 1166
- Introduction: 2002



# Styles of LaCrescent

1. *Crisp light bodied white: crisp, lively, light in alcohol and not assertive in taste or aroma with a dry finish*

Ex: Sauvignon Blanc, Pinot Gris, Chenin Blanc

2. *Smooth medium bodied white: medium in body, flavor and acidity with a touch of oak*

Ex: Chardonnay, Sauv. Blanc, Pinot Gris , Semillon and other blends

3. *Aromatic dry or off dry white: fruity, perfumed, aromatic, floral medium bodied dry or off-dry*

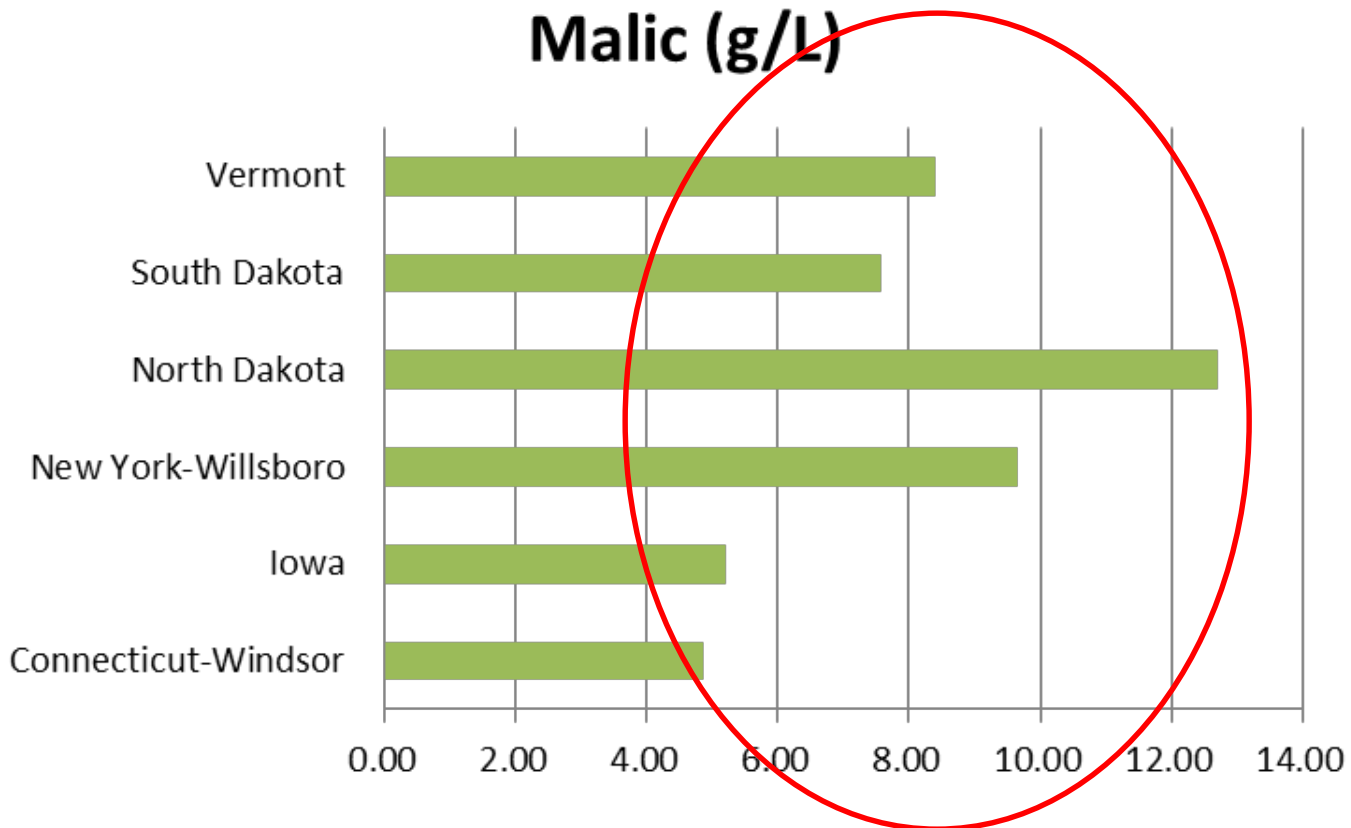
Ex: Riesling, Muscat, Gewurztraminer , Sauv Blanc

4. *Sparkling: 100% pure or in a blend, either bulk-carbonated or "Methode Champenoise"*

Ex: Successful sparkling wines from L. Mawby (MI) and Illinois Sparkling Wine Co.

# LaCrescent Major Acid

- Malic acid



# La Crescent Winemaking Tips

- Hand harvest at cool temperatures if possible
- Consider whole-cluster pressing, rice hulls recommended
- Use SO<sub>2</sub> to prevent oxidation and to control “bad bugs”
- Add enzyme and Bentolact-S to help settle the juice.
- Rack juice and inoculate with aromatic style yeast (Note: Lalvin C, SVG and 71B can help lower TA via Malic to Ethanol conversion)
- Ferment at cooler temperatures, 52-58F
- Fine/clarify and stabilize wine
- Filter, back-sweeten slightly with “sweet reserve” (unfermented juice) or concentrate, or by stopping fermentation early, sugar
- Sterile Filter using .45 micron membrane/or add sorbate and bottle

# Brianna

Fireside , IA

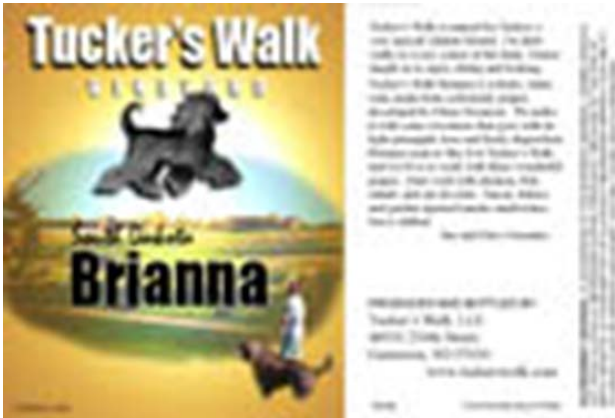


The nose is big and inviting while the palate is full of bright acidity and ends with a clean finish. The color is a light gold.



# Brianna

## Tucker's walk, SD



Tucker's Walk Brianna is a fruity, white wine made from cold hardy Brianna grapes developed by Elmer Swenson. We make it with some sweetness that goes with its light pineapple nose and fruity disposition. Brianna seem to like it at Tucker's Walk, and we love to work with these wonderful grapes. Pairs well with chicken, fish, salads, and our favorite - bacon, lettuce and garden ripened tomato sandwiches. Serve chilled.

# La Crescent

## Staller Estate WI



Reserve La Crescent, A dry oak-aged white from hand selected grapes displaying forward notes of apricot & sweet-cream butter followed by ripe pear, a chalk minerality and aged vanilla spice.

# La Crescent

## Northern Sun MI



LaCrescent is an off-dry wine bursting with fruit aromas. Winner of three medals in competitions including Indy International Wine, Michigan Wine and Spirits and Grand Harvest Awards in Sonoma California.

# Take time to enjoy

