

Muscadine Cultivar Performance in Mississippi

SRSFC Muscadine Agent Training

September 13 - 15, 2006

John H. Braswell, Ph. D.

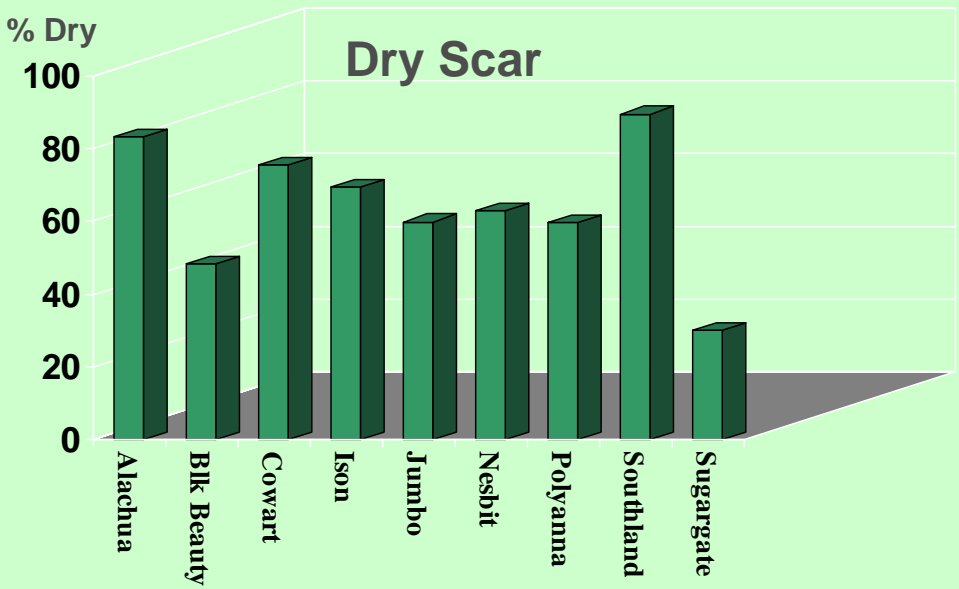
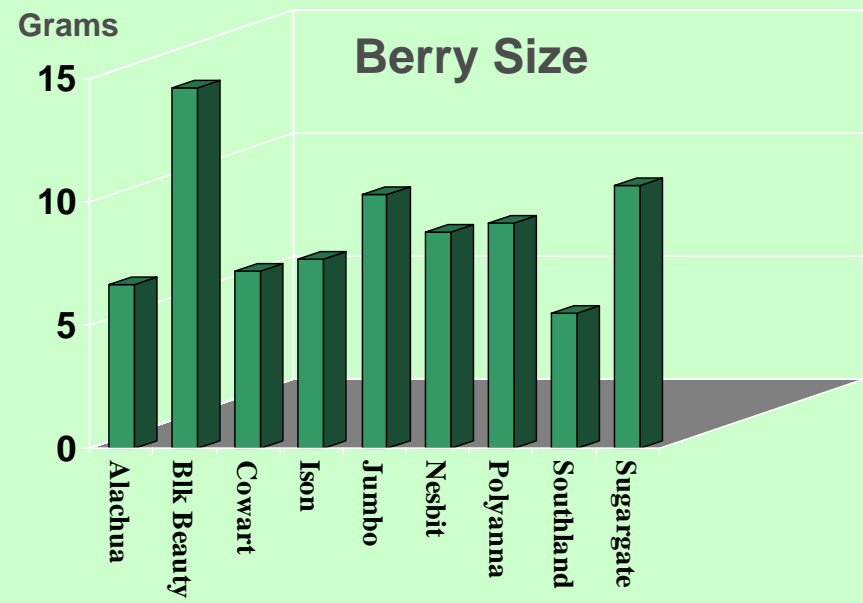
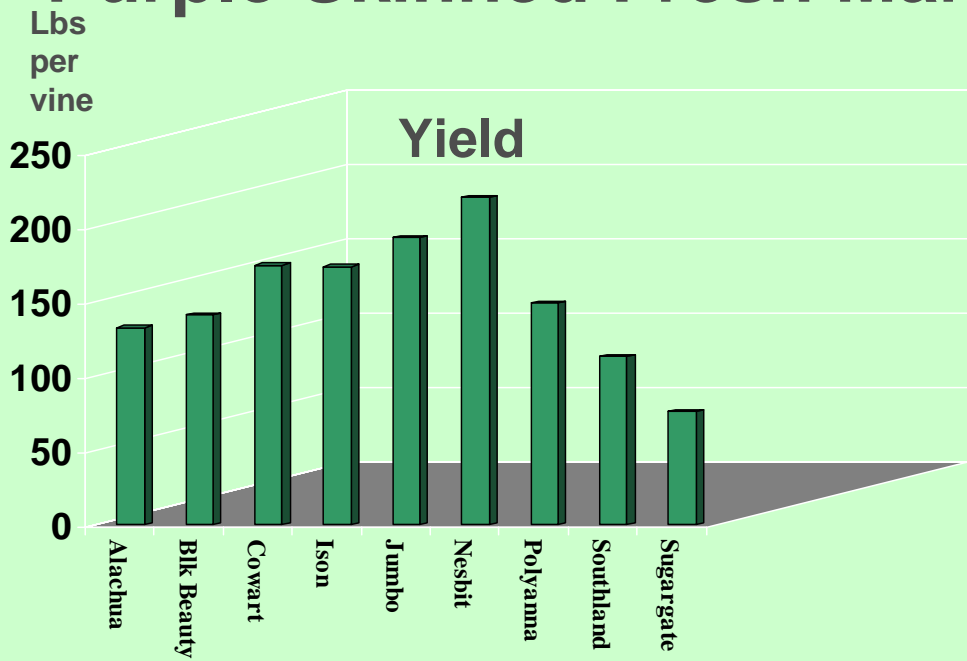
Mississippi State University

Poplarville, Mississippi

Muscadine Grape Cultivar Performance Evaluations 2001 - 2004

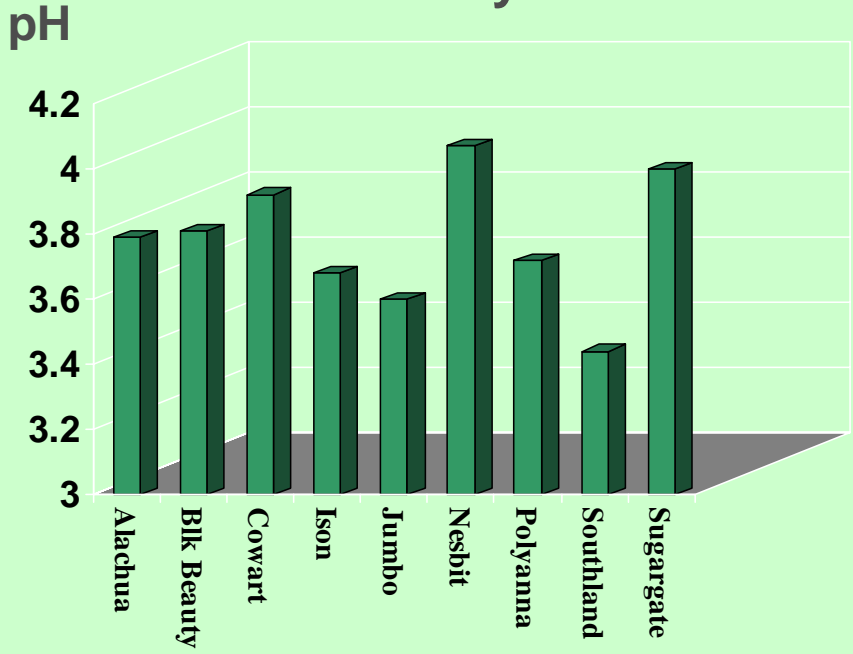
- **Vineyard – 70+ Cultivars and Advanced Breeding Lines (Serves as Repository, Cultural Practices, Breeding)**
- **Planted in 1992; Geneva Double Trellis**
- **Optimum Fertility and Supplemental Drip Irrigation**
- **Observations: Yield, Fruit Quality, Berry size, Scar, Fruit pH, Brix**

Purple Skinned Fresh Market Muscadine Cultivars

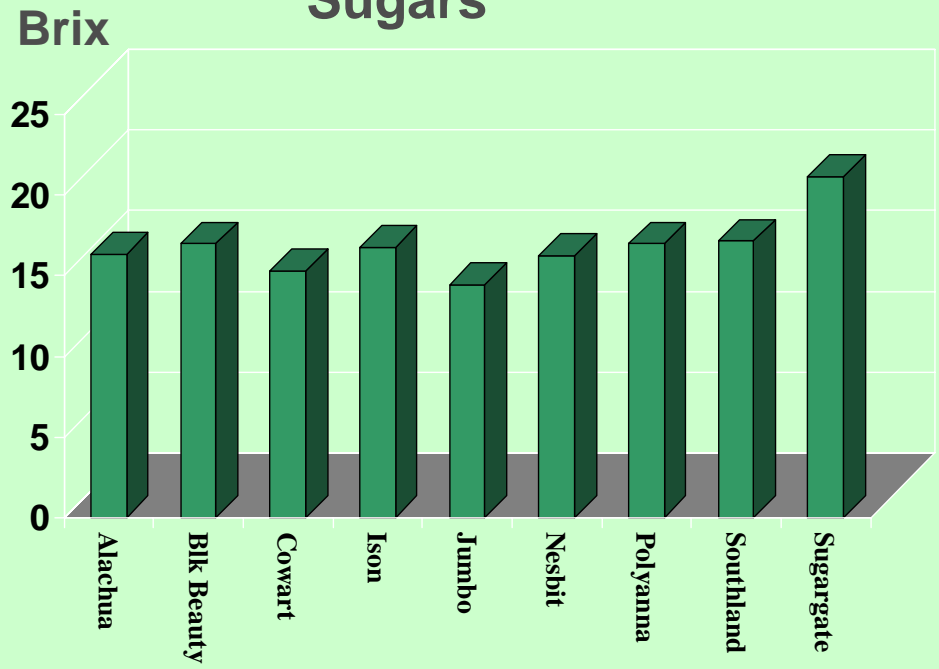


Purple Skinned Fresh Market Muscadine Cultivars

Acidity



Sugars



Purple Fresh Market Cultivars

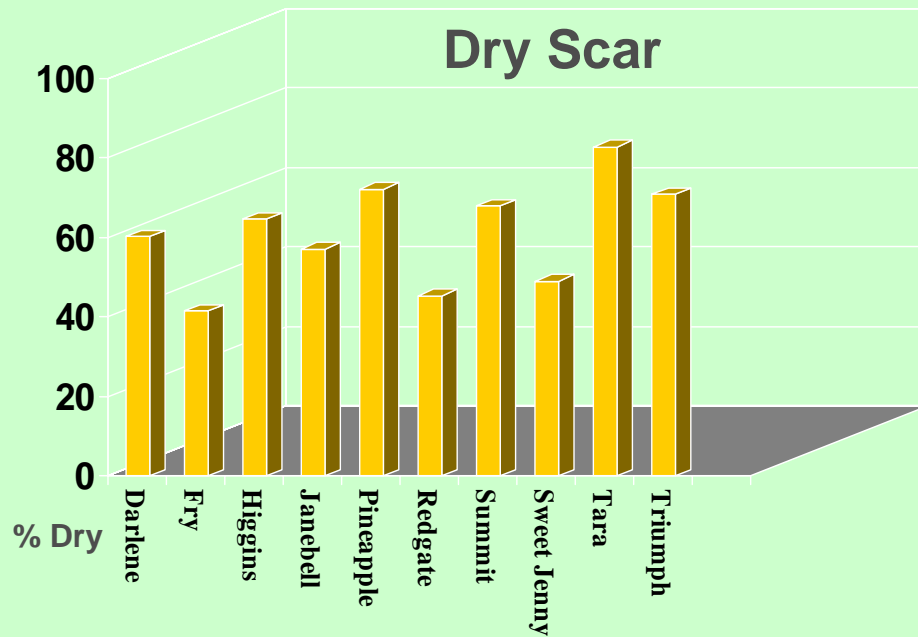
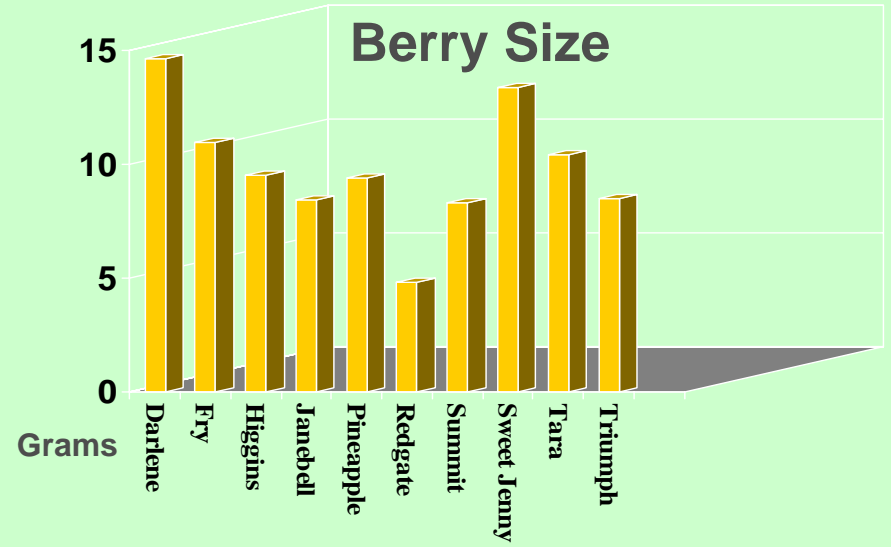
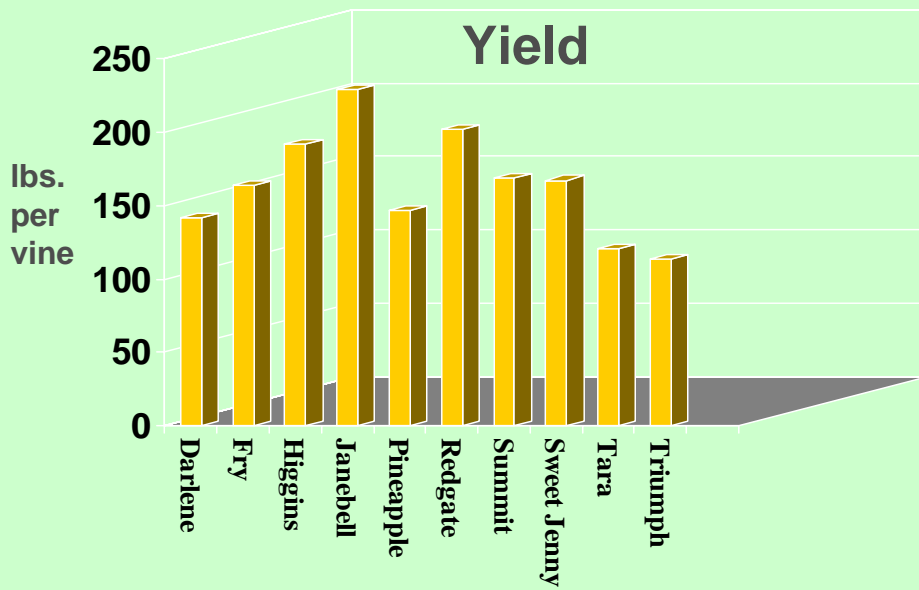
<u>Cultivar</u>	<u>Flower</u>	<u>Vigor</u>
Alachua	Self Fertile	Medium
Black Beauty	Female	High
Cowart	Self Fertile	Med. High
Ison	Self Fertile	Very High
Jumbo	Female	Med. High
Nesbit	Self Fertile	Medium
Pollyanna	Self Fertile	High
Southland	Self Fertile	Medium
Sugargate	Female	Medium

Purple Fresh Market Muscadine Cultivars

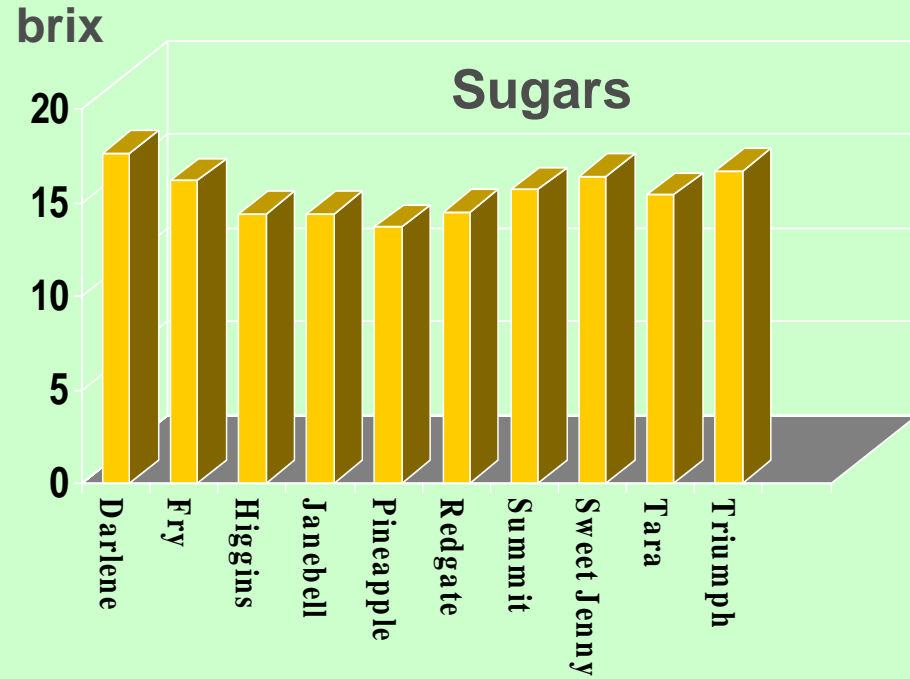
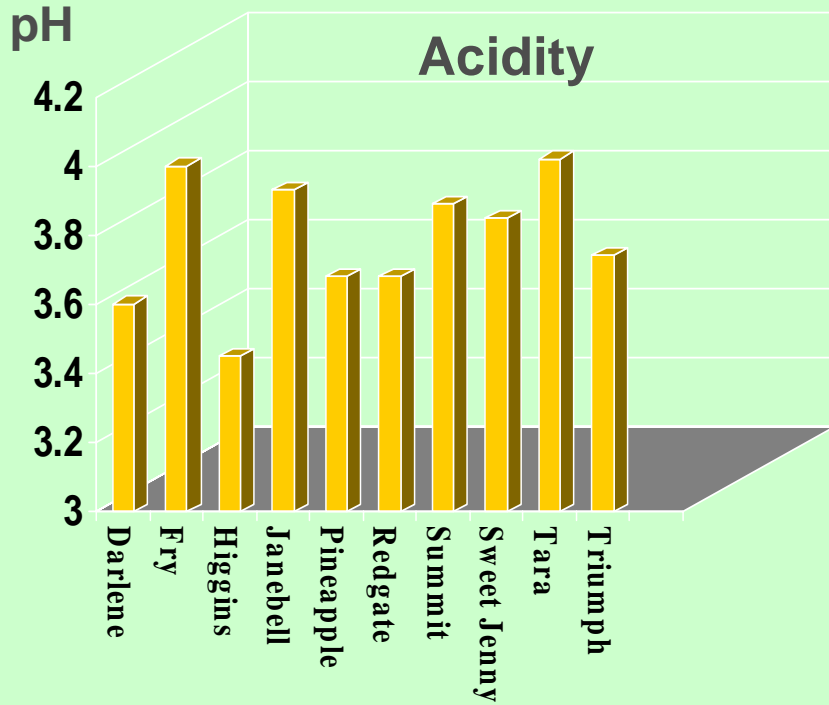
Top 5

- Yield: Nesbit, Jumbo, Cowart, Ison, Polyanna, Blk Beauty*
- Berry size: Black Beauty, Sugargate, Jumbo, Polyanna & Nesbit
- Dry scar: Southland, Alachua, Cowart, Ison & Nesbit
- pH: Nesbit, Sugargate, Cowart, Black Beauty, Alachua
- Brix: Sugargate, Southland, Polyanna, Black Beauty & Ison
- No cultivar appeared in the top 5 of all categories
- Nesbit excelled in all categories except Brix
- Black Beauty & Polyanna – High Yield, Large Berry, Brix
- Ison – High yield, Dry scar, High brix
- Sugargate – Large berry, High brix & pH

Bronze Skinned Fresh Market Muscadine Cultivars



Bronze Skinned Fresh Market Muscadine Cultivars



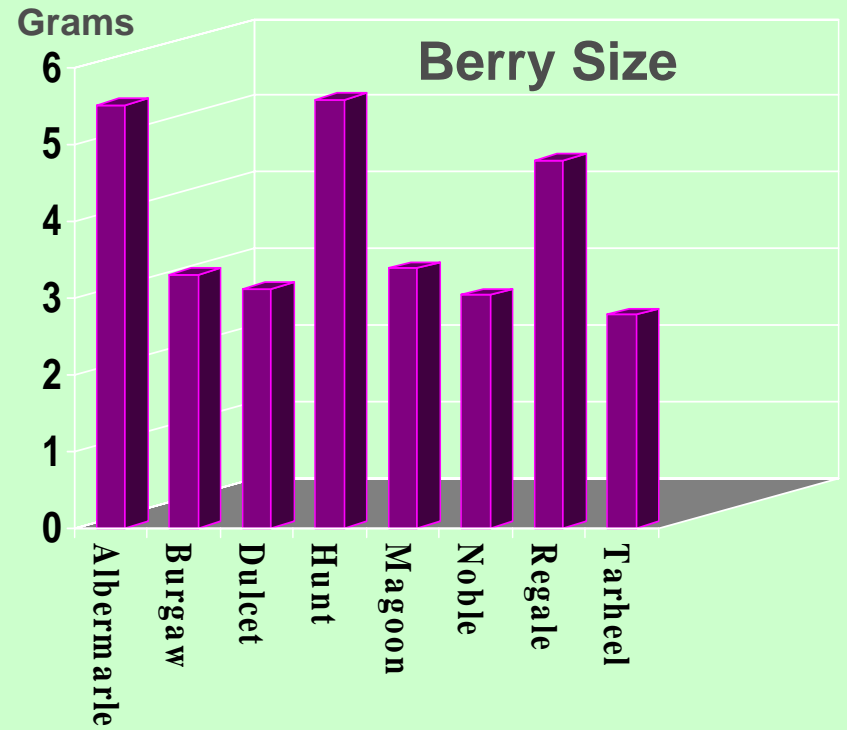
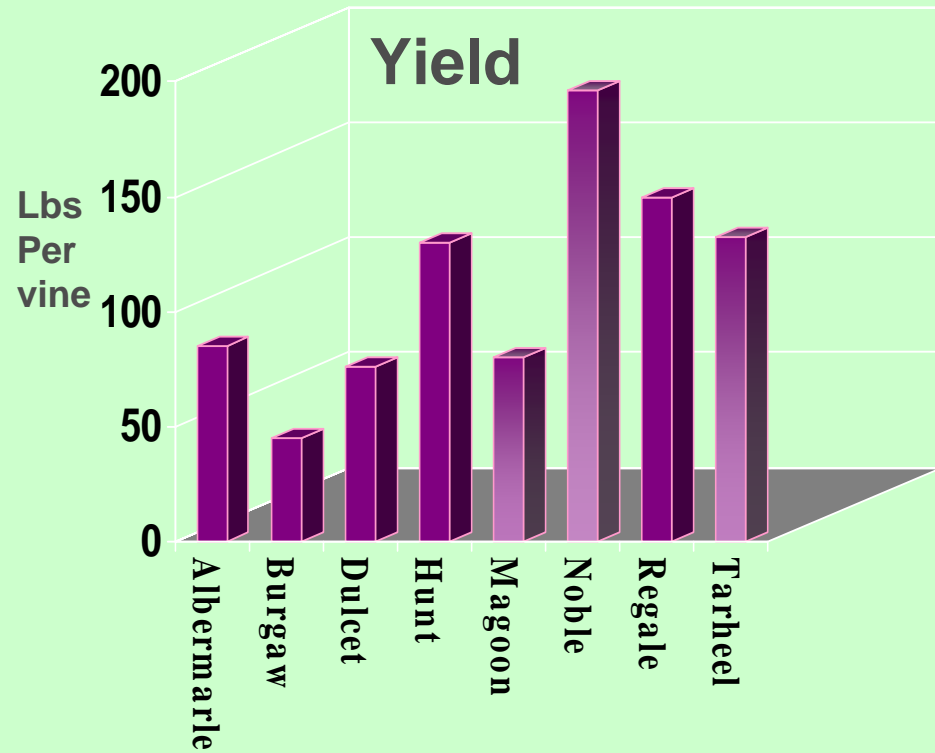
Bronze Fresh Market Cultivars

<u>Cultivar</u>	<u>Flower</u>	<u>Vigor</u>
Darlene	Female	Low
Fry	Female	Med. High
Higgins	Female	Medium
Janebell	Self Fertile	Medium
Pineapple	Self Fertile	High
Redgate	Self Fertile	High
Summit	Female	High
Sweet Jenny	Female	High
Tara	Self Fertile	High
Triumph	Self Fertile	Medium

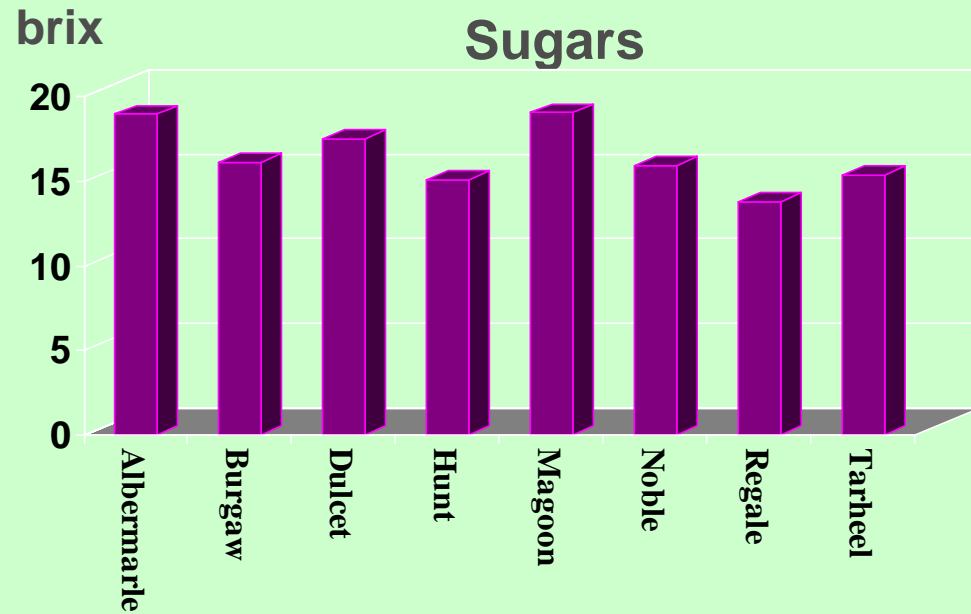
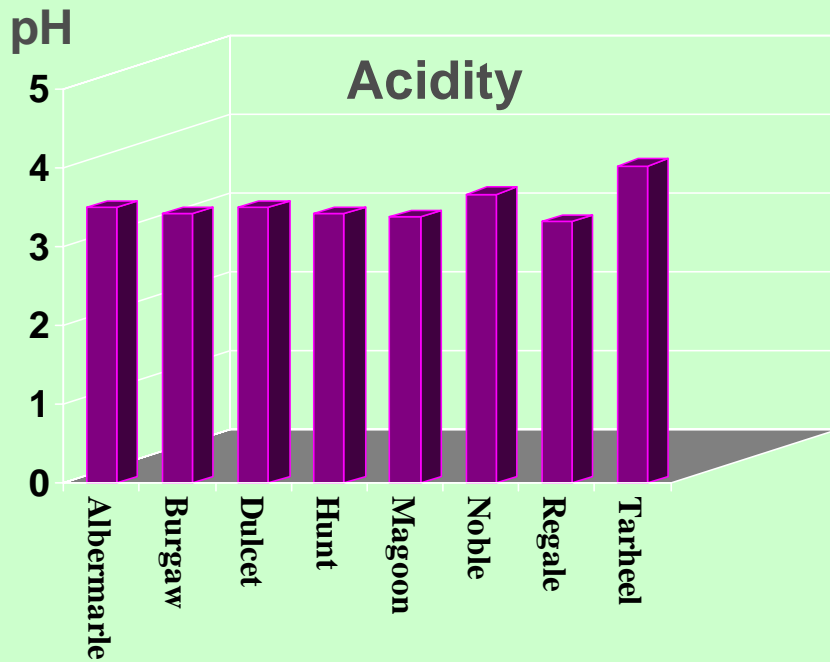
Bronze Skinned Fresh Market Cultivars Top 5

- Yield: Janebell, Redgate, Higgins, Summit & Sweet Jenny
- Berry size: Darlene, Sweet Jenny, Fry, Tara & Higgins
- Dry scar: Tara, Pineapple, Triumph, Summit & Higgins
- pH: Tara, Fry, Janebell, Summit & Sweet Jenny
- Brix: Darlene, Triumph, Sweet Jenny, Fry, Summit & Tara
- None appeared in the top 5 of all categories
- Sweet Jenny excelled in all areas except dry scar
- Tara excelled in all areas except high yield
- Summit excelled in all areas except berry size
- Fry & Darlene— large berry & high brix
- Higgins – large berry & dry scar

Purple Skinned Wine/Juice Muscadine Cultivars



Purple Skinned Wine/Juice Muscadine Cultivars



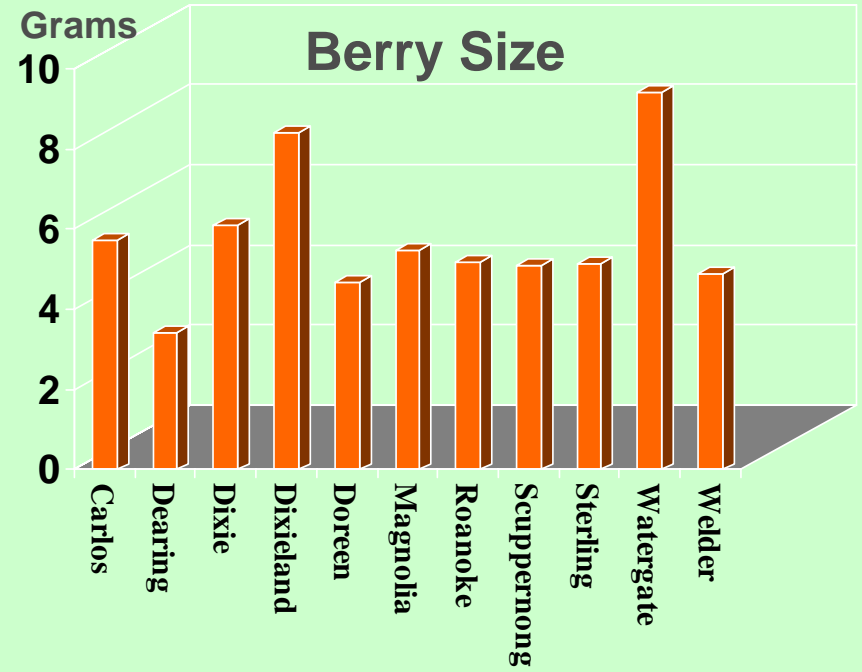
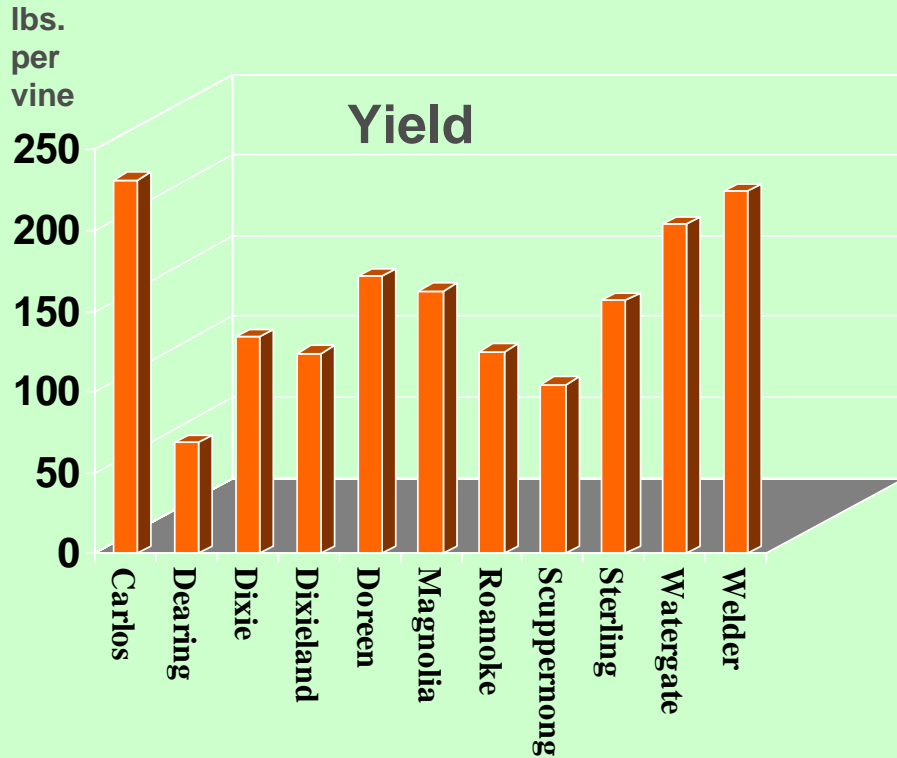
Purple Juice / Wine Cultivars

<u>Cultivar</u>	<u>Flower</u>	<u>Vigor</u>
Albermarle	Self Fertile	Med. High
Burgaw	Self Fertile	Med. High
Dulcet	Female	Low Med
Hunt	Female	Very High
Magoon	Self Fertile	Low
Noble	Self Fertile	High
Regale	Self Fertile	High
Tarheel	Self Fertile	High

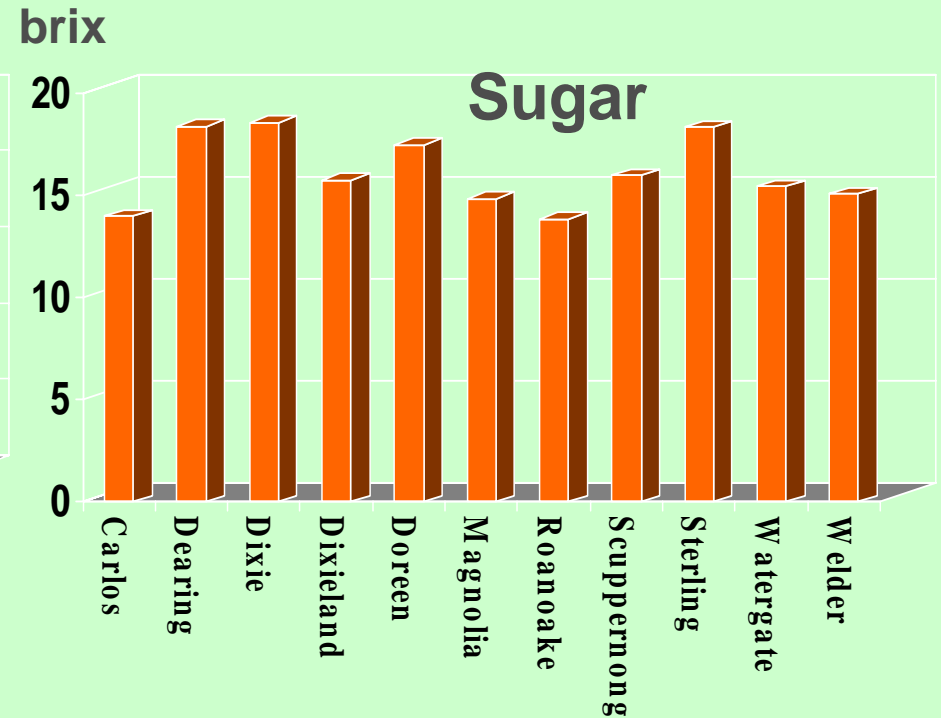
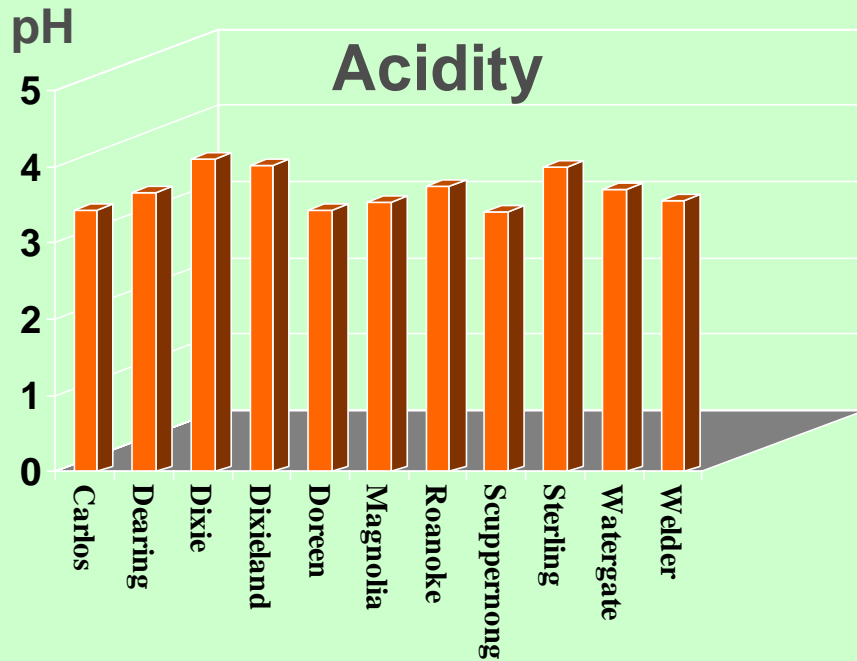
Purple Skinned Wine/Juice Muscadine Cultivars Top 5

- **Highest Yield: Noble, Regale, Tarheel, Hunt & Albermarle**
- **Berry size: Hunt, Albermarle, Regale, Magoon & Burgaw**
- **pH: Tarheel, Noble, Albermarle, Dulcet, Hunt & Burgaw**
- **Brix highest: Magoon, Albermarle, Dulcet, Burgaw & Noble**
- **Cultivar in the top 5 of all categories was: Albermarle**
- **Noble excelled in all categories except berry size ***
- **Hunt excelled in all categories except Brix**
- **Regale – High yield and large berries, high vigor & SF**
- **Burgaw – large berry, high pH & brix, high vigor & SF**

Bronze Skinned Wine/Juice Muscadine Cultivars



Bronze Skinned Wine/Juice Muscadine Cultivars



Bronze Juice / Wine Cultivars

<u>Cultivar</u>	<u>Flower</u>	<u>Vigor</u>
Carlos	Self Fertile	Very High
Dixie	Self Fertile	Very High
Dixieland	Self Fertile	Medium
Doreen	Self Fertile	High
Magnolia	Self Fertile	Med. High
Roanoke	Self Fertile	Med. High
Scuppernong	Female	Med. High
Sterling	Self Fertile	Medium
Watergate	Female	Medium
Welder	Self Fertile	High

Bronze Skinned Wine/Juice Muscadine Cultivars

Top 6

- **Yield: Carlos, Welder, Watergate, Doreen, Magnolia & Sterling**
- **Berry size: Watergate, Dixieland, Dixie, Carlos, Magnolia & Sterling**
- **pH: Dixie, Dixieland, Sterling, Roanoake Watergate & Dearing**
- **Brix: Dixie, Dearing, Sterling, Doreen, Dixieland & Watergate**
- **Cultivar in the top 6 of all categories: Sterling & Watergate**
- **Carlos & Magnolia – High yield & large berry**
- **Doreen – High yield & high brix**
- **Dixie & Dixieland – Large berry, High pH & high brix**

