

Forty Years in Blackberry Breeding: Stories, Wanderings and Wonderings



John R. Clark
Distinguished Professor of Horticulture



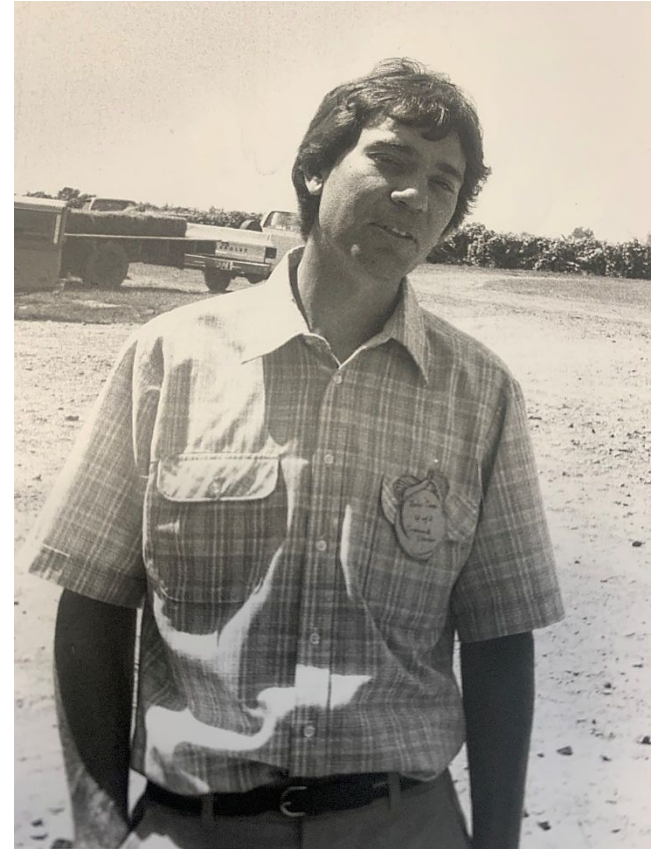
A Little Background

- Grew up on a dairy/beef/row crop farm
- First job, picking cotton (5 cents/pound).....
- Picked blackberries on fencerows and pond dams etc...for cobbler



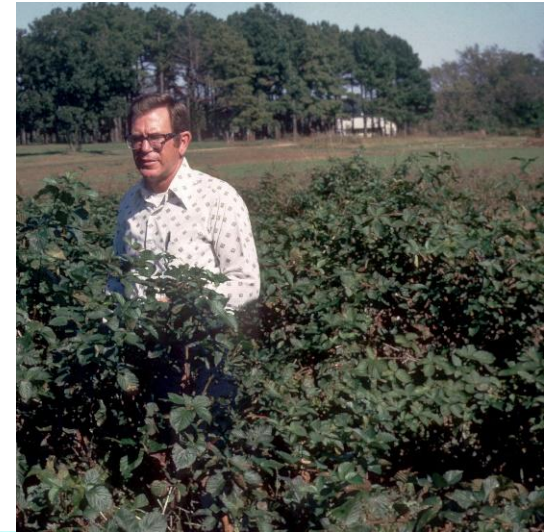
Learning About Fruits/Berries

- Started working at the University of Arkansas in 1980
- Fruit Research Station director, 1983-1994
- Moved to faculty in 1994
- Finishing up UA work 2022



We Build on Other's Foundations

- Dr Jim Moore
 - Started the UA Fruit Breeding Program in 1964
 - His vision, stories



Taking the Reigns of Fruit Breeding

- 16 years of program work before leadership of breeding effort in 1997 (at forty years old)
- Blending the past and the present..... and then building toward the future....that's the message



Getting Lucky in Blackberry Breeding – Double Blossom/Rosette, the Devastating Blackberry Disease in the South

- All Arkansas thorny varieties were susceptible, the 1983-released Shawnee maybe the worst
- The disease does not exist at the Arkansas Fruit Research Station, Clarksville, thus no screening for resistance possible
- No source of resistance known other than Humble from Texas....

Double Blossom/Rosette



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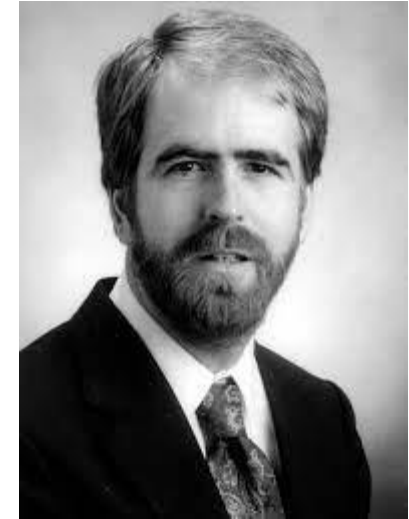
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Where Was the Luck?

- Navaho, released in 1989, Arapaho in 1993
- Dr. Blair Buckley, located at the LSU Calhoun Research Station, testing
- Testing started in late 1990, evaluated 1992-94
- This is where resistance was discovered.....



What Was the REAL Luck?

- Getting thornlessness and Double Blossom/Rosette resistance in one package
- We would likely not be in this room today without this resistance being identified....
- Is there a moral or message here??????
- In my career, always be looking and noticing.....

There Better Be Some Money....

- A little University origin and funding background.....
- Grants? To do what? Breed fruits? Huh??!!!
- Dr Moore and the first patents and royalty income
- My expanding sights on royalty income to support breeding, 2001 or so....

There Better Be Some Money....

- A few things happened:
 - Blackberry planting increased (more later)
 - Ouachita blackberry released 2003
 - Ozarkblue blueberry use expanded



 **Prime-Ark[®]**
Primocane-Fruiting **Blackberries**

There Better Be Some Money....

- Plus, expanding cooperations in breeding and testing agreements
- Have someone pay to access testing or breeding rights and create program support back home
- Today's example: International Fruit Genetics and Cotton Candy table grape



International Fruit Genetics Cooperation



History

- Initial discussion, David Cain, 2001
- First material exchange, 2002 (Cotton Candy's parent)
- Has moved the Arkansas grape breeding achievements into much broader use!
- And created much more value for the genetic assets and the future of Arkansas breeding



Cotton Candy Story

- I remember the day.....about 2005 or 2006.....first seen by JRC
- Too much flavor David Cain says.....I say this is pretty good....
- A little soft, some color concern.....
- JRC really impressed with first-generation quality



Cotton Candy Grape



There Better Be Some Money....

- And for now at least, there is!
- And did this income reality/potential impact my retirement conversations begun back in 2014 with UA leaders?
- The message.....look out for what you dream about....

Blackberry Planting Expansion

- Prior to 2004 or so, Arkansas blackberries were mainly local market, PYO and other uses (gardens)...
- For instance in the 1990s, Navaho sold approx. 70,000 plants per year compared to Ouachita in the 500,000 range in 2007

Blackberry Planting Expansion

- My experience with Sunnyridge Farms
- First SRF presentation, 2002
- Planting began in the early 2000s, the beginning of the southern blackberry shipping industry



The Mixons
and Stanley
Scarborough

Blackberry Planting Expansion

- Growers and relationships - Georgia



Steve McMillan,
Enigma, GA



Ben Strickland and Mitchell Ponder,
Lakeland, GA

Blackberry Planting Expansion

- Growers and relationships - NC



Ervin Lineberger, Kings Mtn, NC

Jeff Crofts, Lawndale, NC

And Don't Forget LOCAL MARKETS!



Anne Geyer and Pierson Geyer, Hanover, VA

Blackberry Planting Expansion

- Learned the impact of a variety and environment
- Understanding (???) shipper/marketer and grower relationships
- The message...Learning how regions of production and the world of berries fits together, maybe...

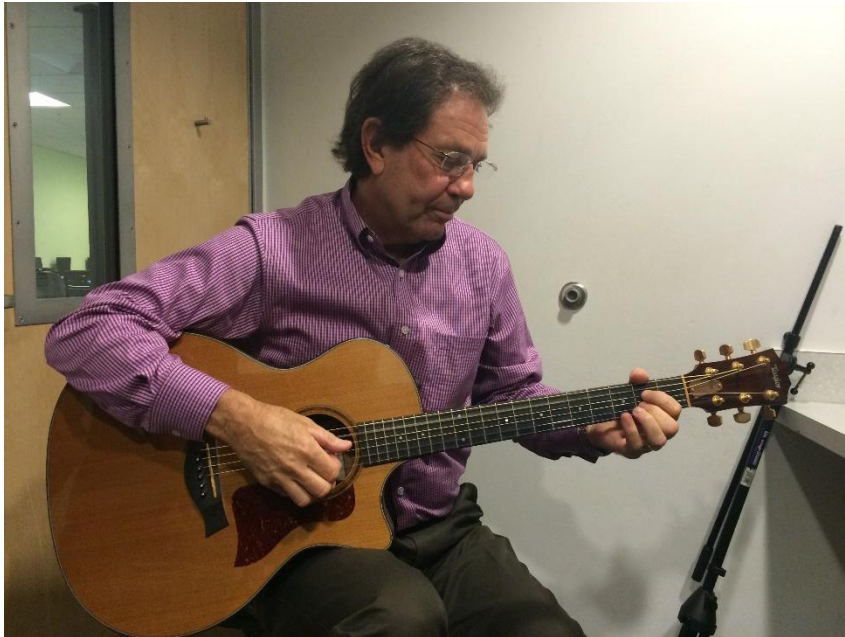
The Youtube Videos and Music

- In 2012, thinking on how to increase variety exposure.....
- The first Youtubes, 2013, blackberries, peaches/nectarines, table grapes



The Youtube Videos and Music

- 29 videos made, over 350,000 views
- Prime-Ark® Freedom the most, 60,000 views



Where Did the Music Come From?

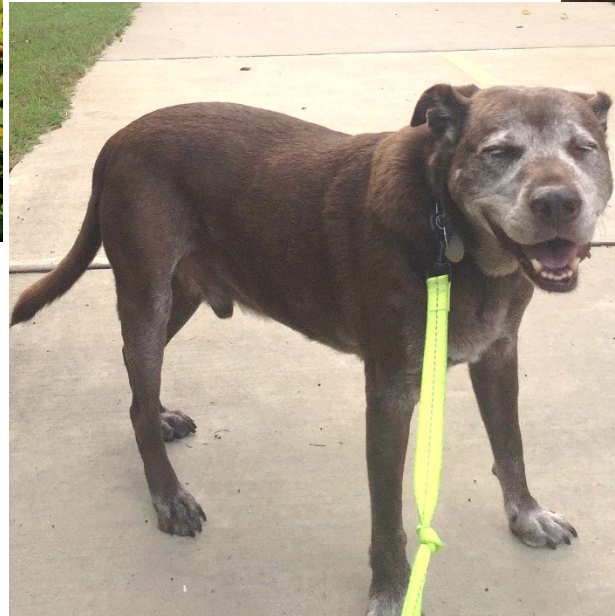
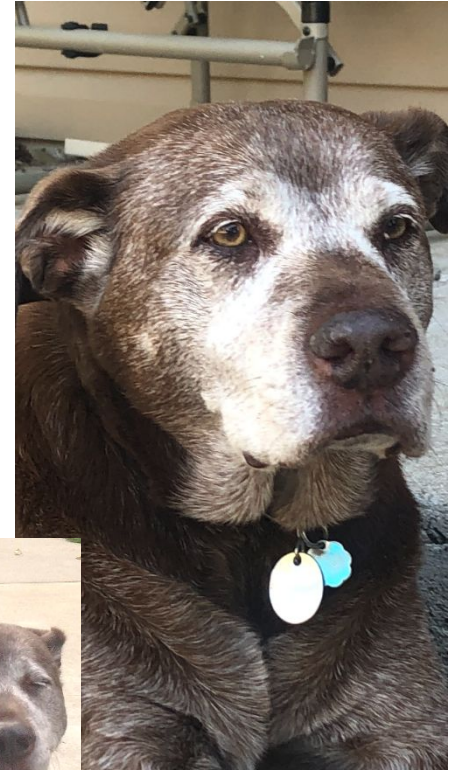
- Mama and piano lessons
- Jim Croce, John Prine
- Purple hull peas and corn....and the guitar(s)



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Composing for Fruit Varieties

- The composers... JRC and Ralph



Composing for Fruit Varieties: Failed Tunes...



Tunes that Made It

- Blackberry Freedom
- Blackberry Traveler
- Blackberry Horizon
- Table Grape Getalong
- Notes on Enchantment
- Tune for Opportunity
- Somekindamightyfine
(Song for Ponca)
- Melody for Indulgence
- A Little Dazzle for Dazzle!



The Future



Dr Worthington among the muscadines...

- At the University of Arkansas and fruit breeding, here she is!
- And a young team of others!
- More smarts, training, enthusiasm, excitement and breadth than the older fellow!
- The fruit breeding transition at UA the best ever?.....

The Future and Berry Breeding

- Public vs private varieties
- Where is the money?
- How do growers get the varieties?
- The message, keep an eye out for the future and your new variety options....

I Have Had A BIG TIME! THANKS!!!!

