

Southern Highbush Blueberry Trial Update

Kiki Fontenot, PhD



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Southern Highbush VS. Rabbiteye Blueberry Shrubs

- **Rabbiteye (*Vaccinium ashei*):** Native to the SE US. Relatively tolerant of many diseases*** produce berries mid to late **May – July**. Prefer well drained acidic soils. Need supplemental water if conditions are extremely dry. But considered tolerant of droughts and less than ideal soil pH.
- **Southern Highbush (*Vaccinium corymbosum* interspecific hybrid):** Hybrids of the wild blueberries growing North America. Produce berries as early as **Mid-February through June**. Prefer well drained, acidic soils high in organic matter. Not very tolerant of disease or wet soils. Have very low chilling requirements and can stay evergreen in mild winters.

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We Can Grow Both in Containers... Why One Over the Other?

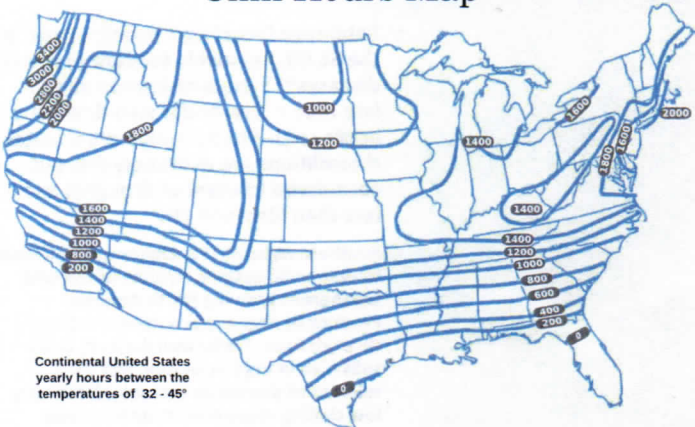
- Availability to Home Gardeners
- Drought but also flood tolerance? Seems to be better in Rabbiteye's
- SHB Prolonged harvest for home gardeners and potential for evergreen habitat is very intriguing to home gardeners.
- People Love the Bees! SHB earlier bloom



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Why Are We Looking at Southern Highbush for South Louisiana Production?

Chill Hours Map



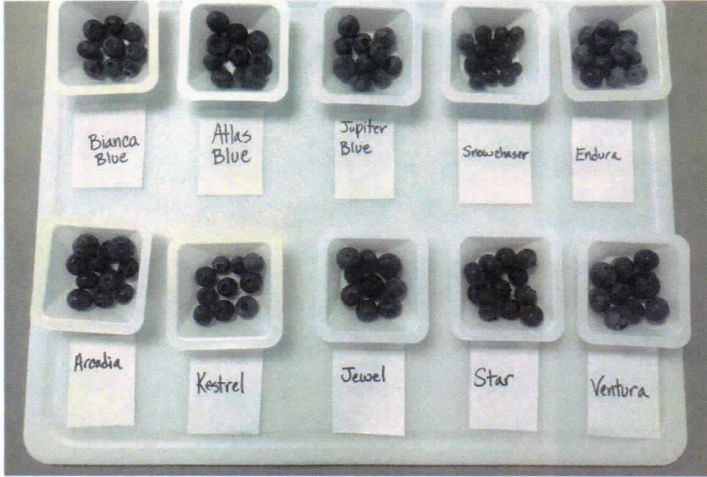
Continental United States yearly hours between the temperatures of 32 - 45°

- Southern Highbush blueberry plants require very little chill hours
 - 0-500 hrs.
- Chill Hr. = After dormancy has set in temps are <45F
- Southern High bush blueberries produce earlier than Rabbiteye and have an extended harvest season
 - SHB our trials begin production in **February/ March - June**
 - Rabbiteye typical production ranges **mid to late May - July**



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Cultivars in this Study



- Bianca Blue, Atlas Blue, Jupiter Blue = 0 chill hrs.
- Snowchaser = 100-200 chill hrs.
- Endura, Arcadia = 150 chill hrs.
- Kestrel, Jewel = 200 chill hrs.
- Star = 400-500 chill hrs.
- Ventura = 300-500 chill hrs.
- University of Florida Releases

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Planting Dates and Plant Source

- Planted in October 2018 from 38 count plugs (every variety except 'Snowchaser' which was in 1 liter pots)
- Sourced from Fall Creek Farm & Nursery



38 Cell Liner



1 Liter Pot



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Media, Amendments & Irrigation

- Pure Pine Bark – Phillips Bark
- Amended with **Ironite** & **Nursery Special** early spring and after harvest finishes.
- 2 spray nozzles per container
- Containers are 45 gal.



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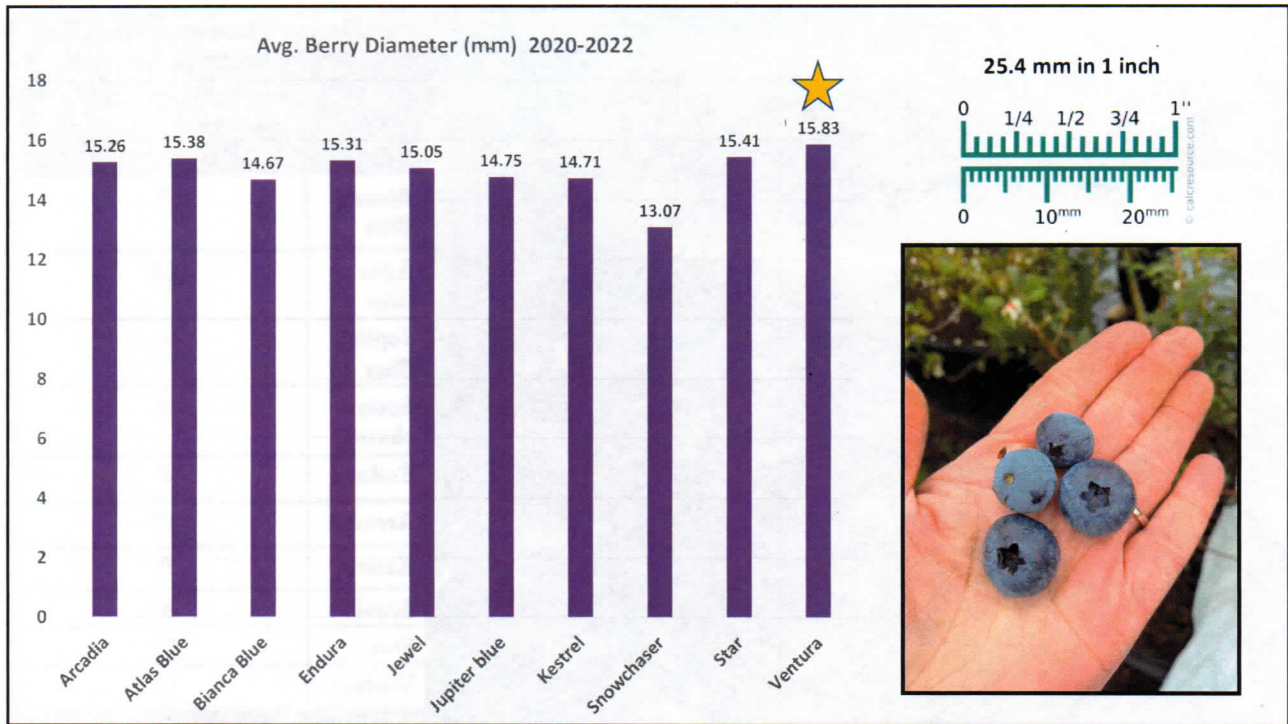


Photos by Ruthie Losavio

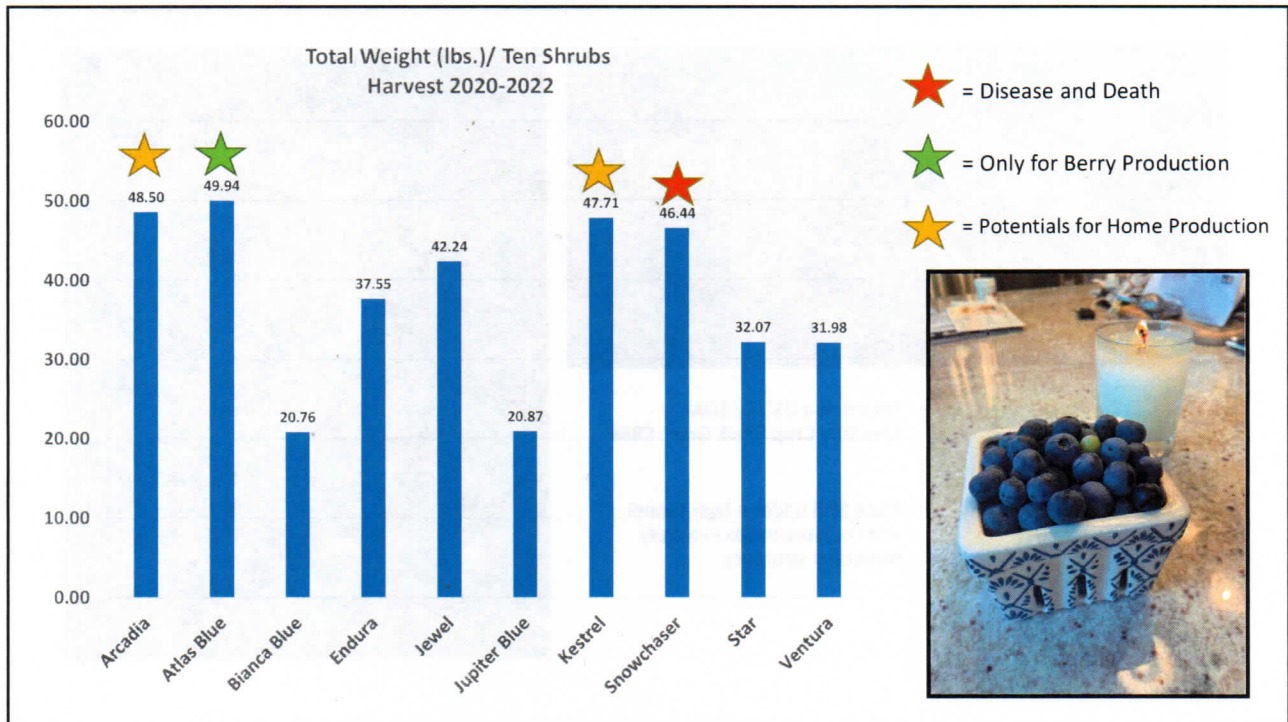


Incredible Growth

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Cultivar	Number of Surviving Plants (out of 10), at the End of the 2021 Harvest
Bianca Blue	7
Atlas Blue	10
Jupiter Blue	5
Snow-chaser	4
Endura	8
Arcadia	10
Kestrel	9
Jewel	8
Star	10
Ventura	10

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Current Production Management for this Crop

- Awarded a USDA / LDAF Specialty Crop Block Grant \$88k
- Place SHB under a high tunnel and measure yields in a truly protected structure.

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Specific Discoveries

- **Snowchaser High Yields** but was very susceptible to *Phytophthora* root rot
- **Ventura Nice Berry Size** shading is a factor in yields
- **Arcadia (10) & Kestrel (9) Cold & Disease Tolerant** – Best Yields Home Production
- **Atlas Blue (10) for commercial berry production.** Excellent Yields.

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People Want It!!!!

- #1 question asked since 2020....
- Home Gardener: Where Can I Buy These???



LSU AgCenter posted a video to playlist Gardening
April 26, 2020
Vegetable specialist Kiki Fontenot and horticulture professor David Piche discuss how the Southern highbush blueberries could be an innovative boon to growers.

quality and composition to determine the differences in

Allen Daniels, Darra Fortenberry Gillett and 183 others
30 Comments · 97 Shares


articles } Early-producing Southern highbush blueberries could unlock new markets

Early-producing Southern highbush blueberries could unlock new markets

Randy LaBauve

(04/20/20) BATON ROUGE, La. — Blueberries in Louisiana don't typically ripen until about a month or so from now. But researchers with the LSU AgCenter are exploring the unique possibilities of Southern highbush varieties for both producers and consumers.

"What's special about these blueberries is that they're different from



+Star & Jewel available now for retail nursery

It is possible that the University of FL would be up to opening some of their varieties up to retail sale but we would need to have that conversation with their licensing team." We would be interested in ... **Arcadia, Kestrel +Jupiter Blue, Bianca Blue, Atlas Blue are exclusive to commercial growing

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How Can YOU Obtain These Cultivars?

PROPAGATION: LEGAL REQUIREMENTS

- The newer cultivars developed by the blueberry breeding program at the University of Florida are patented. This program is financed to a large extent by revenues from royalty payments on patented cultivars. Propagation of these cultivars requires a license.

DO YOU OWN A NURSERY AND NEED A LICENSE?

To inquire about licenses for UF/IFAS cultivars, contact:

Florida Foundation Seed Producers, Inc.

PO Box 110200

Gainesville, FL 32611-0200

Phone: (352) 273-3656

Email: jwatson@ffsp.net

Growers planting patented cultivars do not require a license if the plants were purchased from a nursery that holds a license to propagate these cultivars. Keep the documentation you receive from a licensed nursery indicating the plants were legally obtained. Propagation of patented cultivars without a license is a violation of the law, even if you own the plants from which the cuttings are taken.

- <https://edis.ifas.ufl.edu/publication/HS1245>

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Retail Outlet / Landscape Services Potential

Display

- Plants
- Pots
- Media
- Fertilizer
- Irrigation*
- Weather Protection Cloth



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Thank You!

Any Questions?

Funding for the project entitled "Intensive protected structure production and fruit quality evaluation of southern highbush blueberries and primocane blackberries and raspberries for development as high-value Louisiana fruit crops." was made possible by the U.S. Department of Agriculture's (USDA) Agricultural Marketing Service through grant 21SCBPLA1040-00. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the USDA.

