



UF/IFAS Blueberry Breeding Update FBGA

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Selection released as cultivar 2023

FL17-141

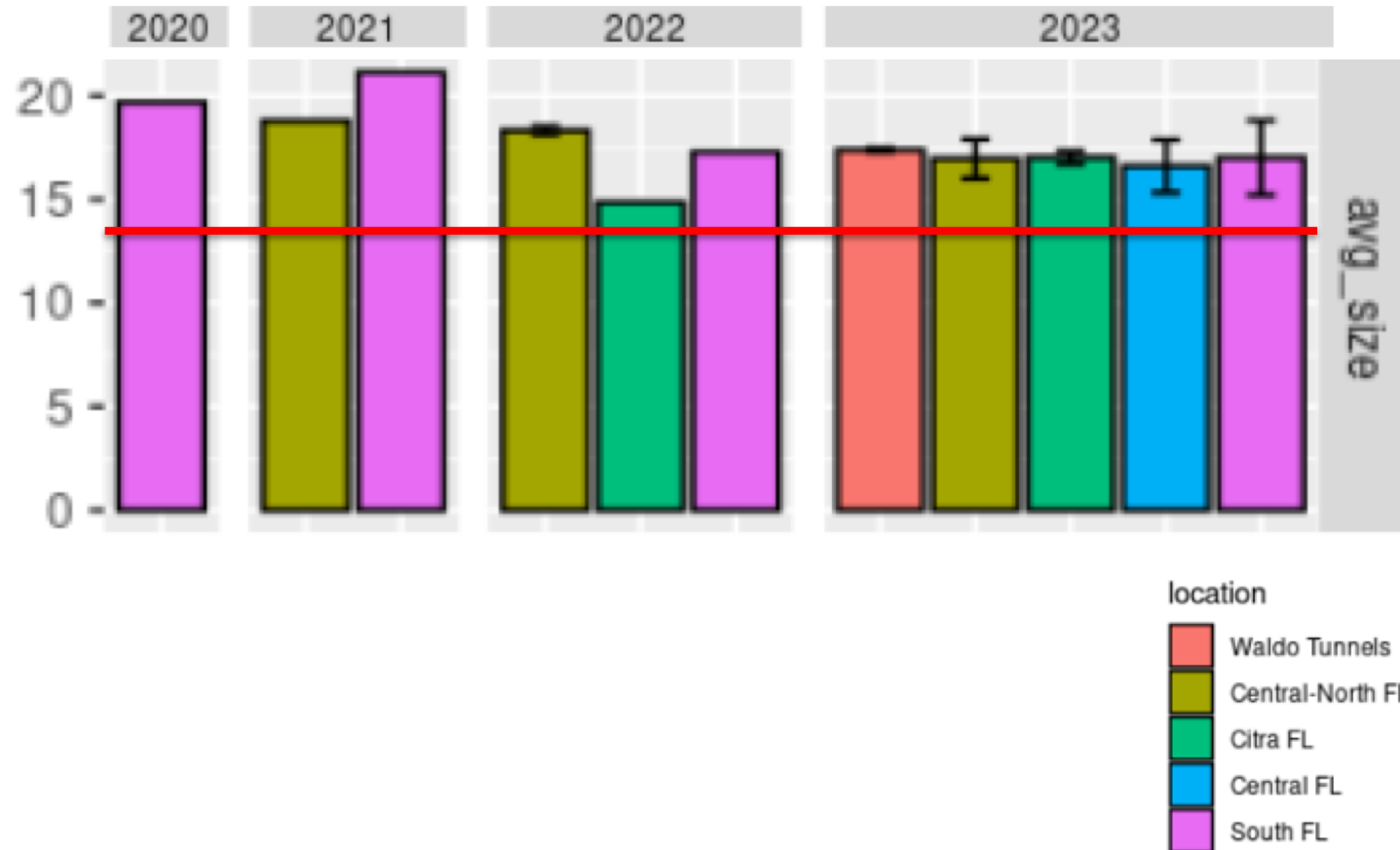
FL17-141 was selected based on **regional potential for South and Central Florida**

FL17-141 has been tested from Arcadia, FL to Waldo, FL.

'FL17-141'



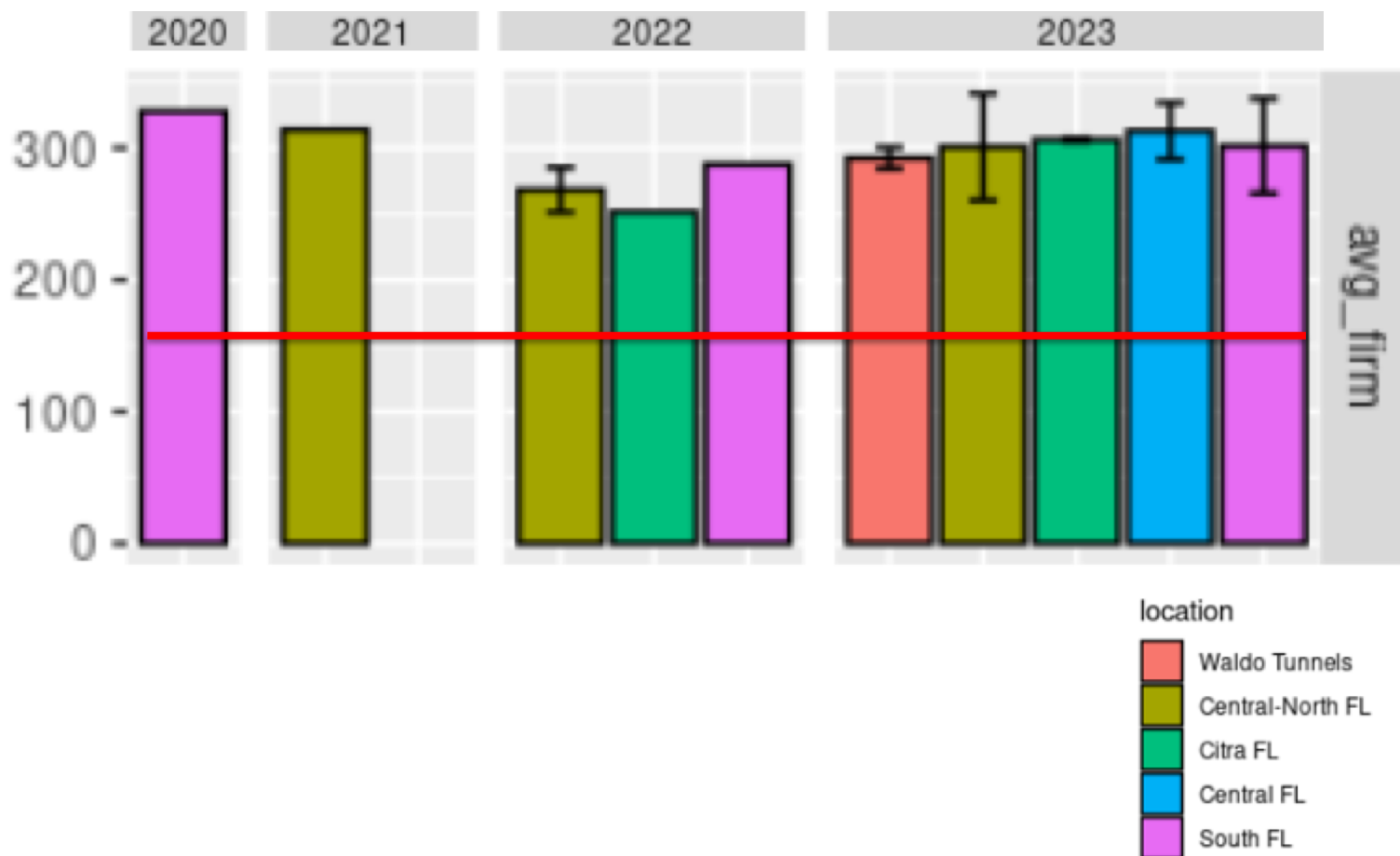
Fruit Diameter (mm)



Reference: Emerald = 16-20mm

Red line = 14 mm recommended minimum diameter acceptability (Hancock 2010)

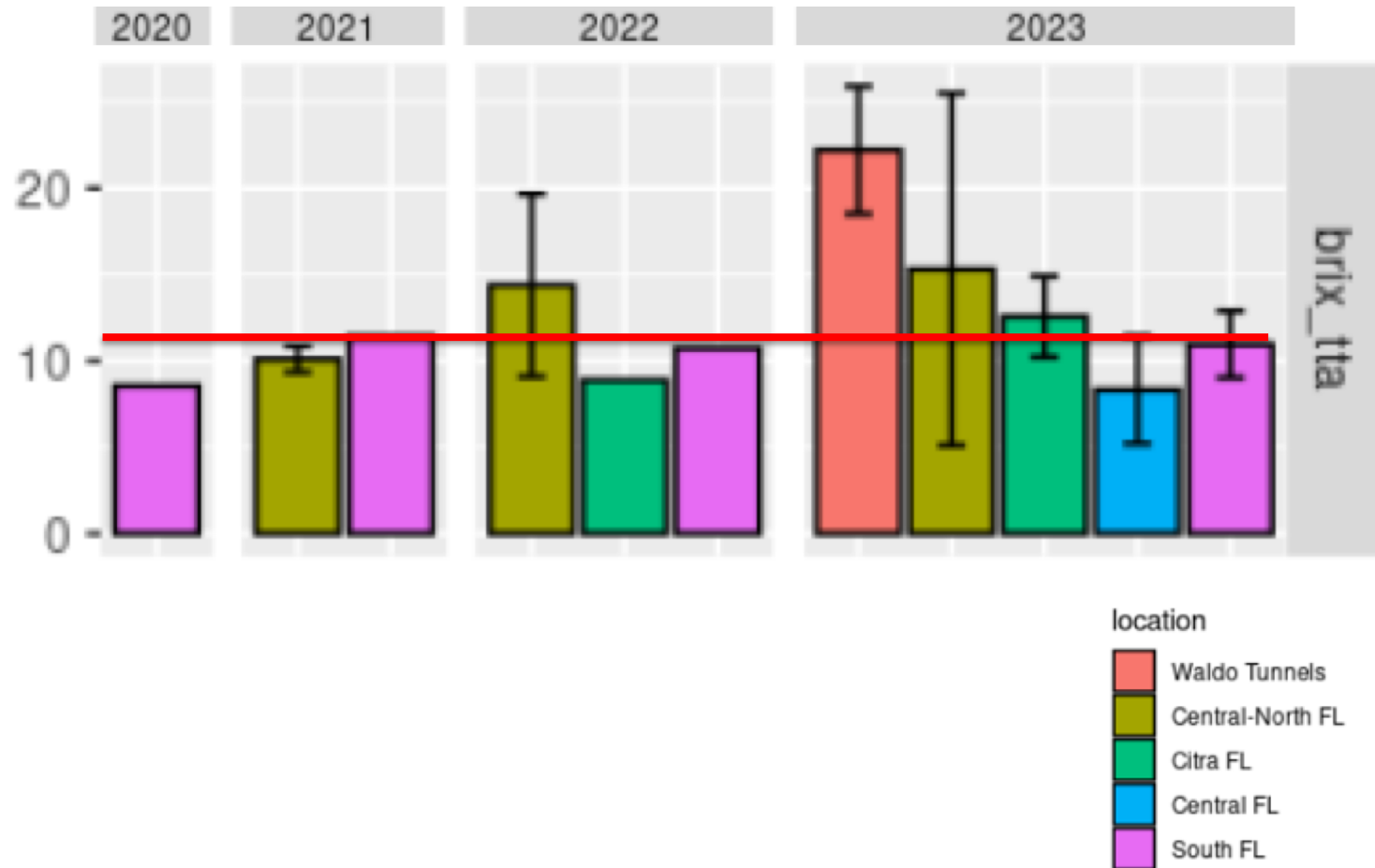
Firmness = Compression Force (g/mm)



Reference: Emerald = 160-210 g/mm

Red line = 150 g/mm recommended minimum firmness acceptability (Hancock 2010)

Brix/Acid Ratio



Reference: Emerald = 13-20

Red line = 14 recommended minimum Brix/acid acceptability (Hancock 2010)

Other Important Fruit Quality Traits

Fruit Scar - Small-to-medium size and dry. Seals well in cold

Wax/Bloom - Very good. Persist in storage

Color - No color issues or red/green backs detected

Defects - None observed

Overall liking score from tasting panels.

7.5 Colossus (Positive Control)

6.9 FL17-141 (4 panels ~400 people 2 years)

6.6 Average 2021 (n>42 selections)

6.3 Emerald

5.9 Endura (Negative control)

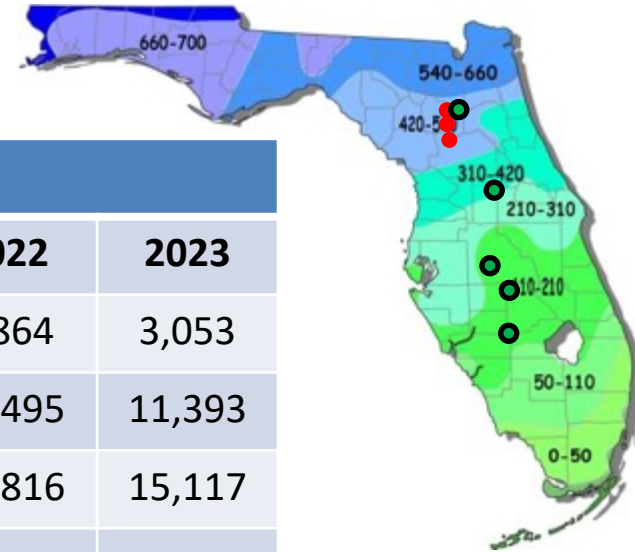
Pest and Diseases

No specific problems of pest and diseases since planted in Windsor in 2018

No specific problems of pest and diseases since planted across FL in 2020

Preliminary controlled experiments: FL17-141 has shown high resistance to Botrytis (only 5% incidence) when artificially inoculated (will be repeated)

Yield (Lb/Acre) across years and location



Location/ Year Planted/Weeks*	Season			
	2020	2021	2022	2023
Waldo, FL 2021 (14-17-20)			2,864	3,053
Windsor, FL 2018 (13-17-19)		16,260	19,495	11,393
Citra, FL 2021 (11-17-19)			11,816	15,117
Waldo Tunnel** 2021 (13-16-20)			20,520	7,993
Umatilla, FL 2021 (11-15-17)				17,980
Bartow, FL 2021 (8-12-16)				8,054
Avon Park, FL 2021 (11-14-18)				10,820
Arcadia, FL 2018 (8-14-17)	22,596	28,933	39,671	17,276

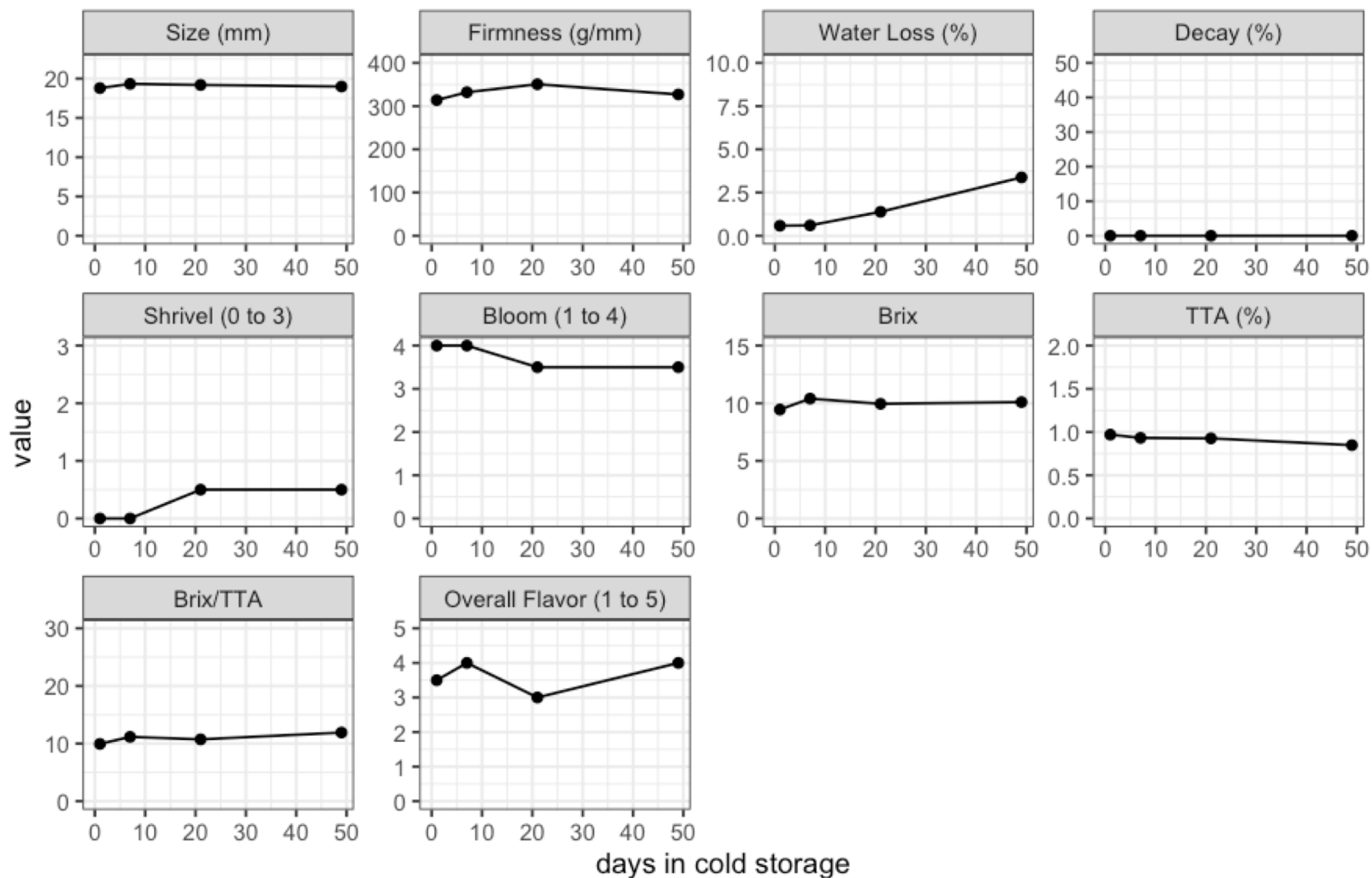
Density planting 1452 plants/acre

** Density of Planting 3630 plants/acre

* Weeks: beginning, peak and ending of harvest

Postharvest Performance

Evolution of 17-141 fruit quality traits during postharvest storage at 1C



Selection released as cultivar 2023

FL19-006

FL19-006 was selected based on **regional potential for South and Central Florida**

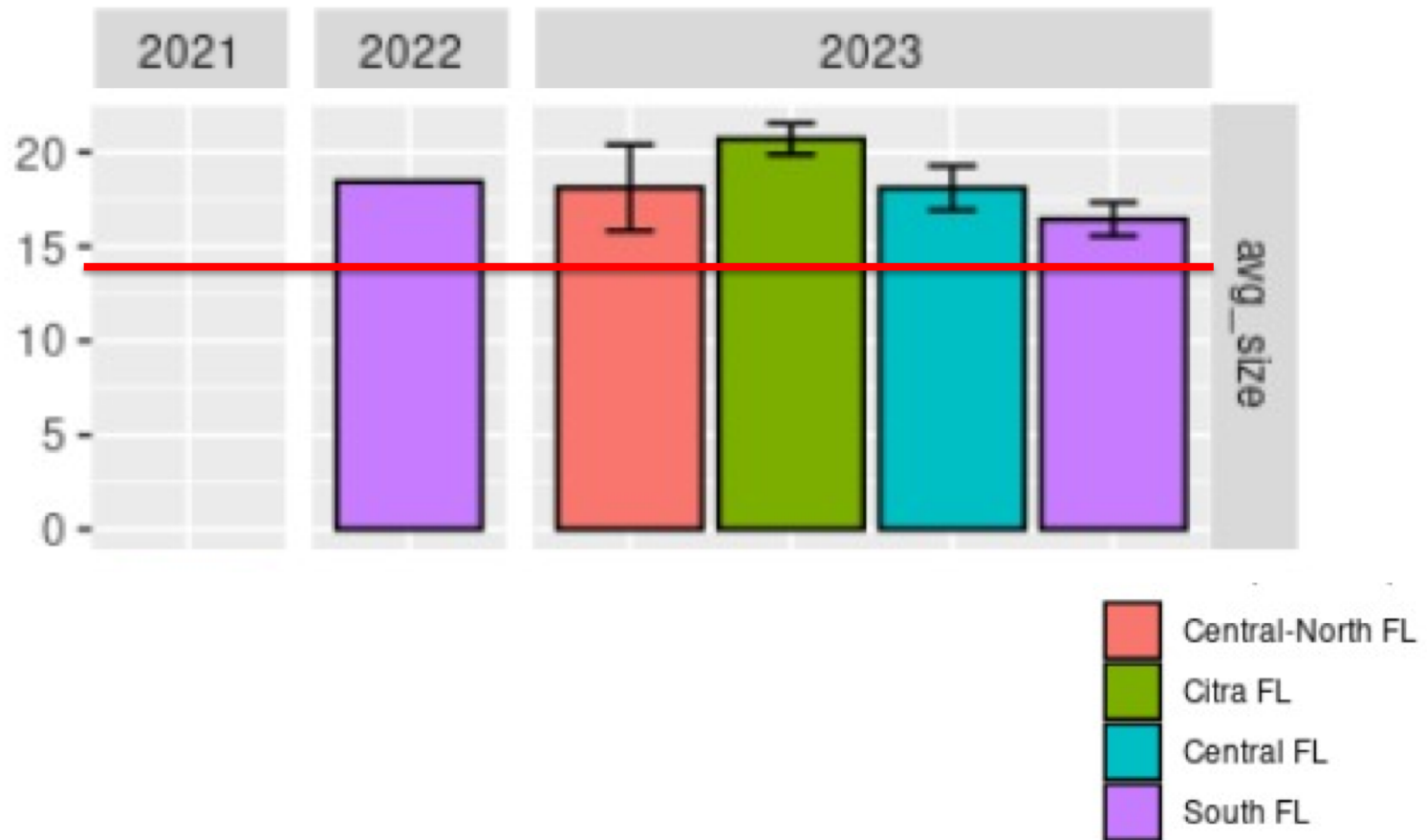
FL19-006 has been tested from Arcadia, FL to Waldo, FL.

In **North FL** under tunnel production system

‘FL19-006’



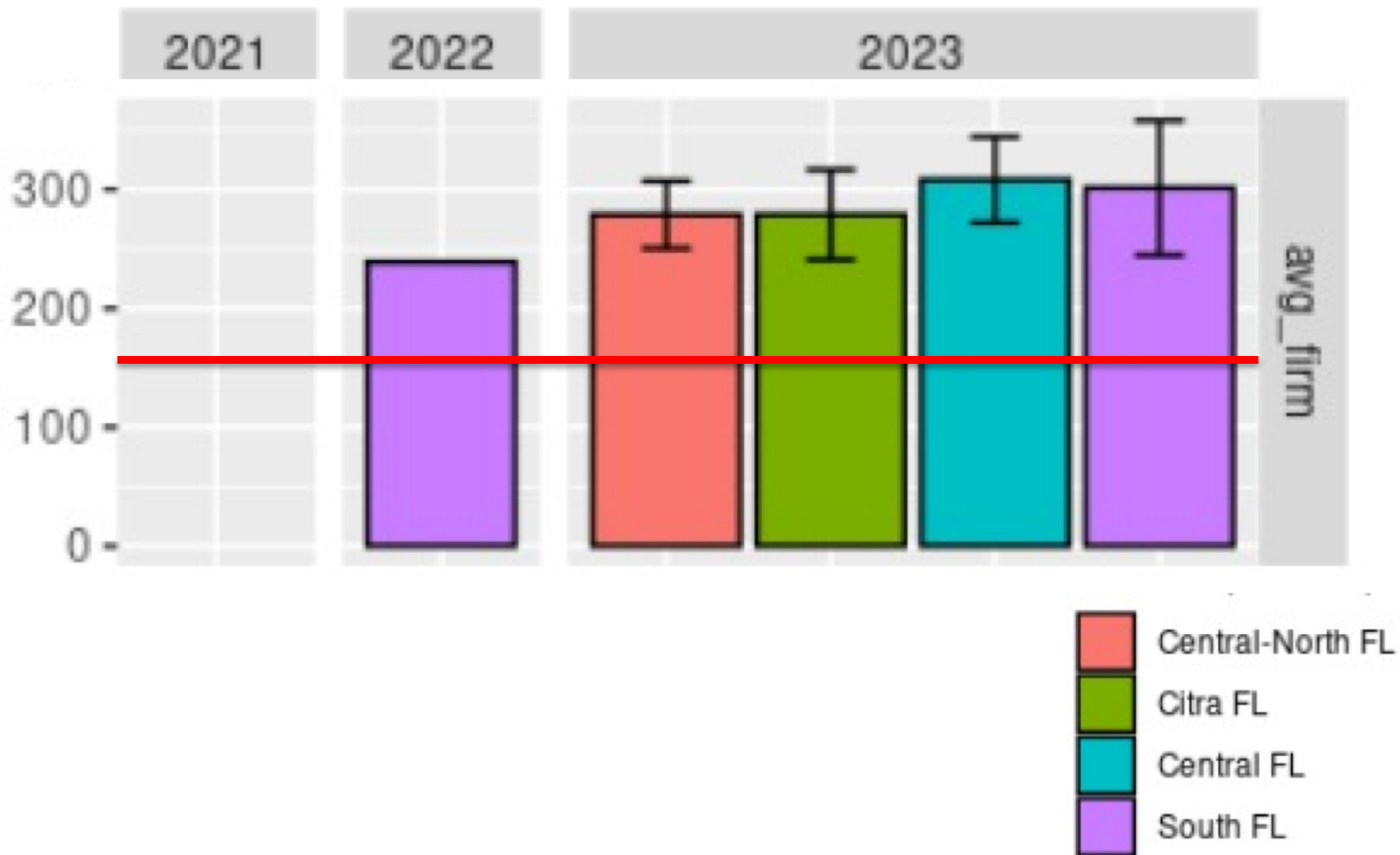
Fruit Diameter (mm)



Reference: Emerald = 16-20mm

Red line = 14 mm recommended minimum diameter acceptability (Hancock 2010)

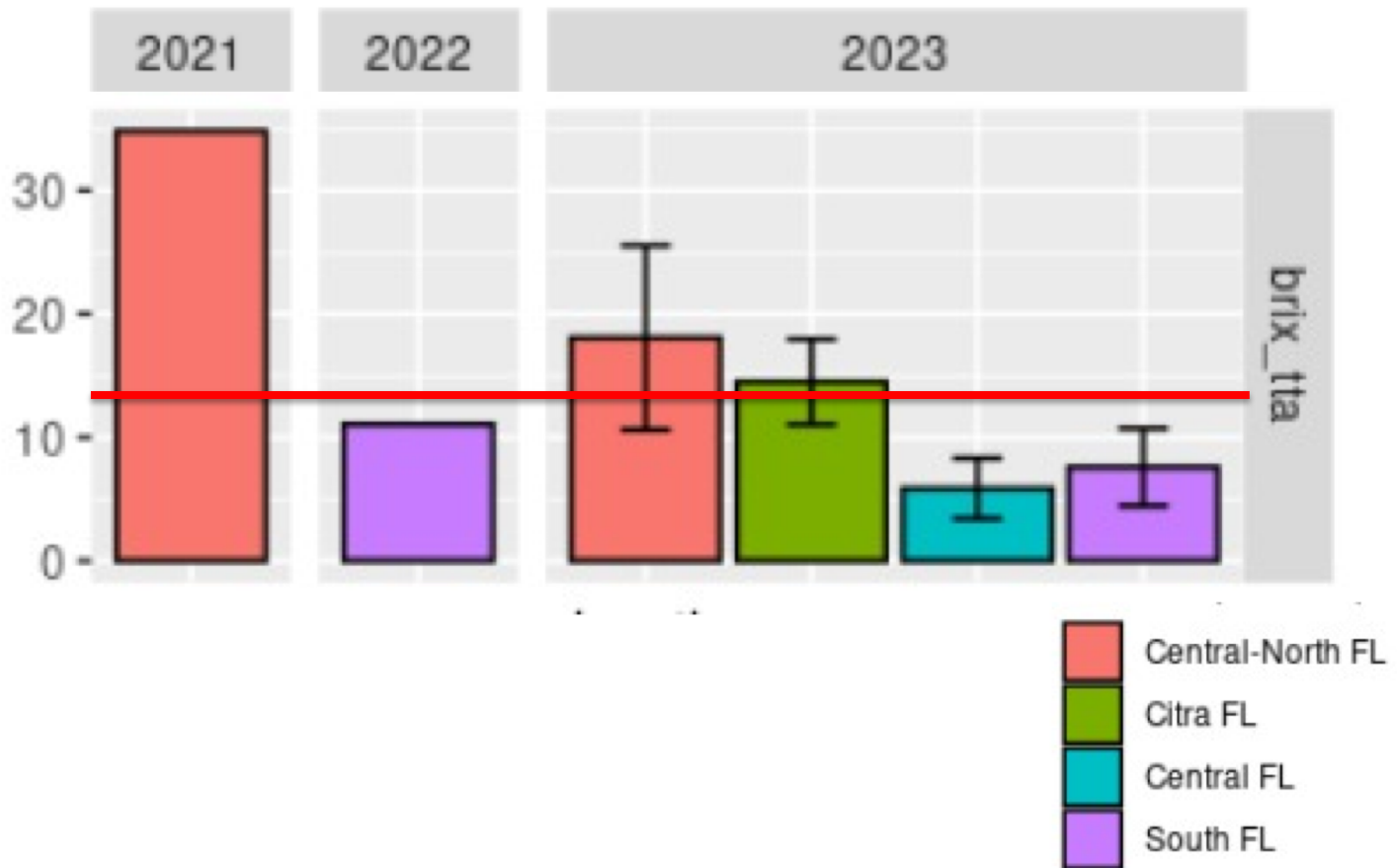
Firmness = Compression Force (g/mm)



Reference: Emerald = 160-210 g/mm

Red line = 150 g/mm recommended minimum firmness acceptability (Hancock 2010)

Brix/Acid Ratio



Reference: Emerald = 13-20

Red line = 14 recommended minimum Brix/acid acceptability (Hancock 2010)

Other Important Fruit Quality Traits

Fruit Scar - Very small and dry. Seals well in cold

Wax/Bloom - Very good. Persist well in storage up to 3 weeks

Color - No color issues or red/green backs detected

Defects - None observed

Overall liking score (1-5) from Internal tasting panels (2020-2023).

3.60 Colossus (Positive Control)

3.40 FL19-006 (2 years – 12 datapoints)

2.83 Average breeding program stage III, IV & Cultivars (n=1957)

2.48 Emerald

1.95 Endura (Negative control)

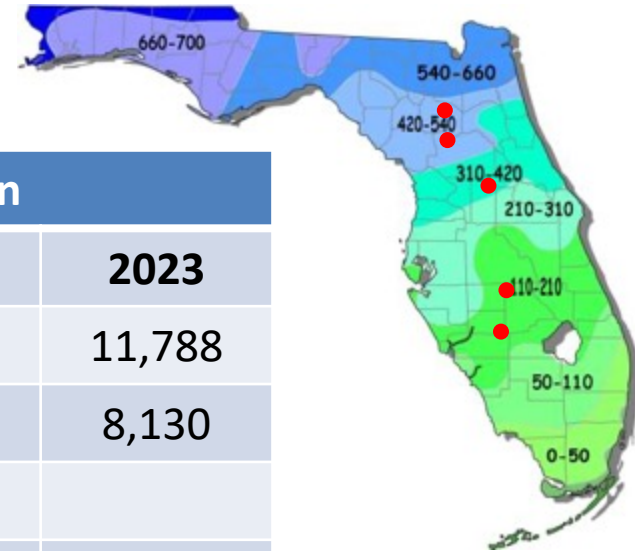
Pest and Diseases

No specific problems of pest and diseases since planted in Waldo in 2020

No specific problems of pest and diseases since planted across FL in 2021

Preliminary experiments: FL19-006 has shown high resistance to Botrytis (only 6% incidence) when artificially inoculated

Yield (Lb/Acre) across years and location



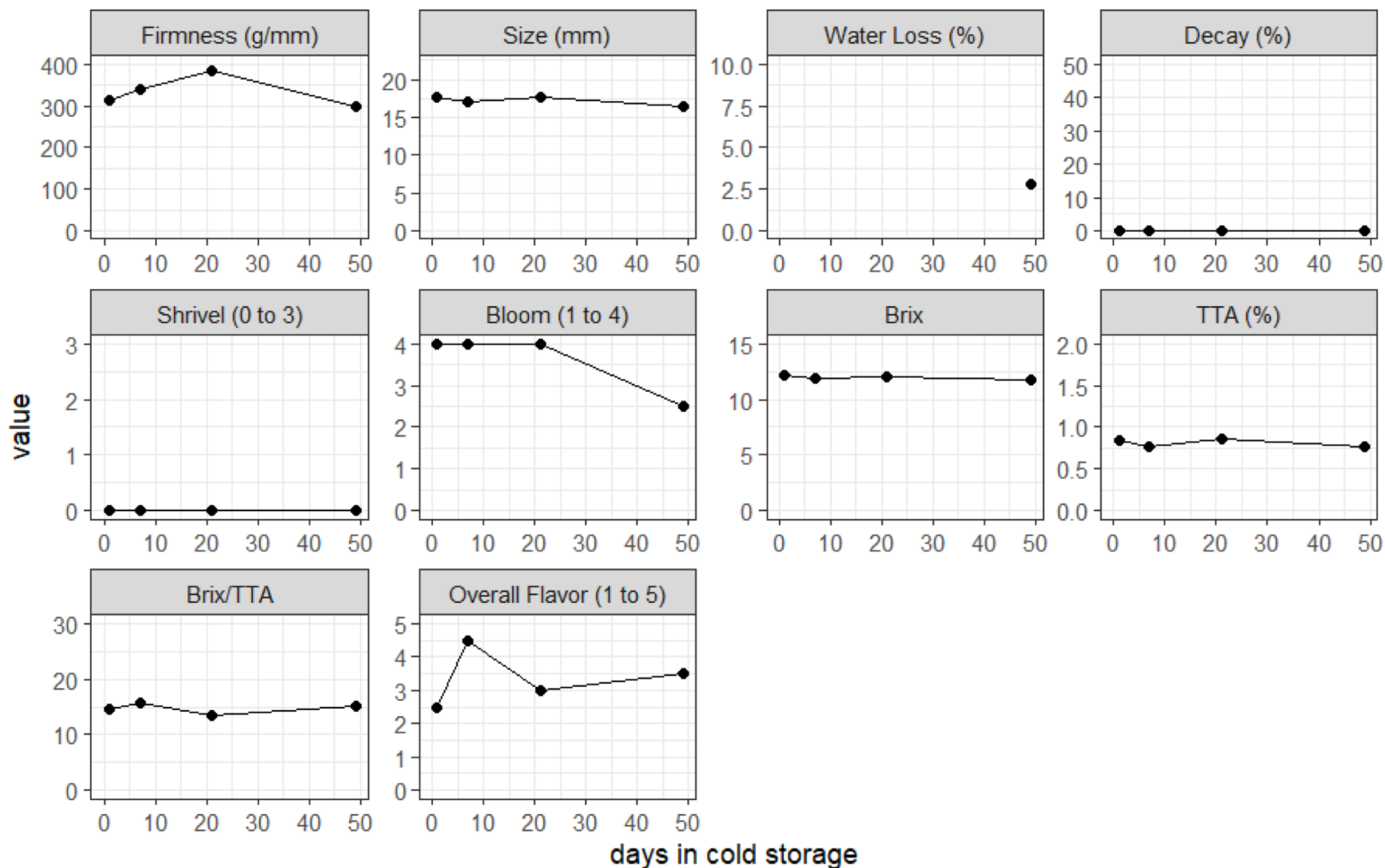
Location/ Year Planted/Weeks*	Season		
	2021	2022	2023
Waldo, FL 2020 (12-14-16)			11,788
Citra, FL 2022 (11-15-18)			8,130
Umatilla, FL 2022 (11-13-17)			11,070
Avon Park, FL 2022 (11-14-18)			6,892
Arcadia, FL 2020 (09-12-16)		23,807	24,678

Density planting 1452 plants/acre

* Weeks: beginning, peak and ending of harvest

Postharvest Performance

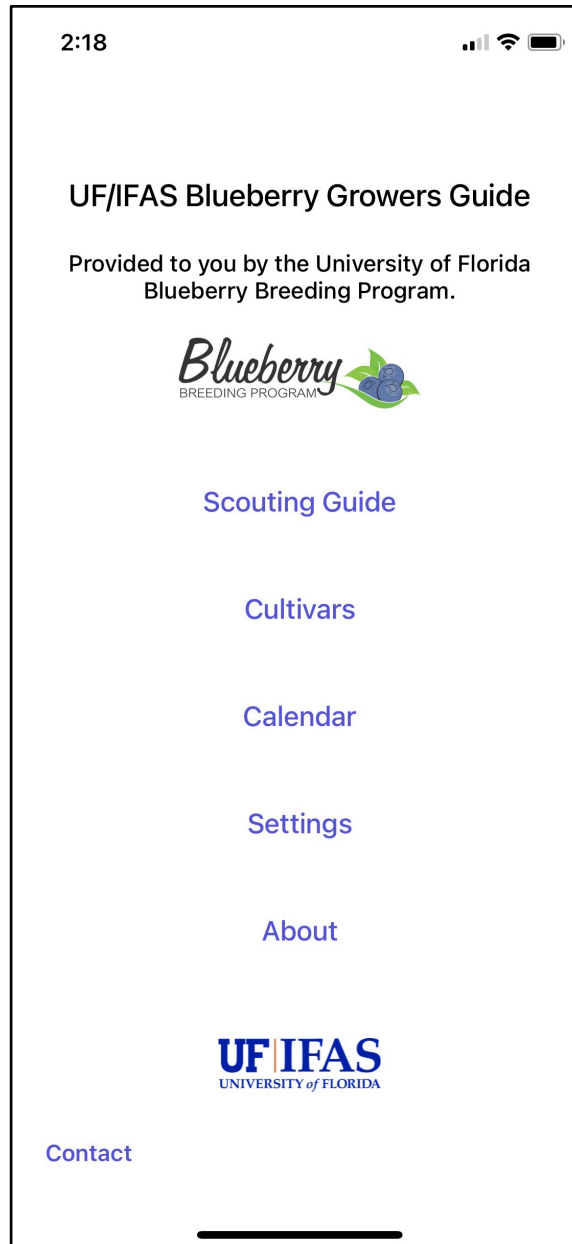
Evolution of 19-6 fruit quality traits during postharvest storage at 1°C



Why release these cultivars 2023?

Because it is the program's goal to provide 5-6 high yielding and high-quality cultivars for each of the production's areas.

Where to find more information



**Information already in
Phone App and webpage
Thanks to Doug Phillips**

Visit us at www.blueberrybreeding.com



QUESTIONS??