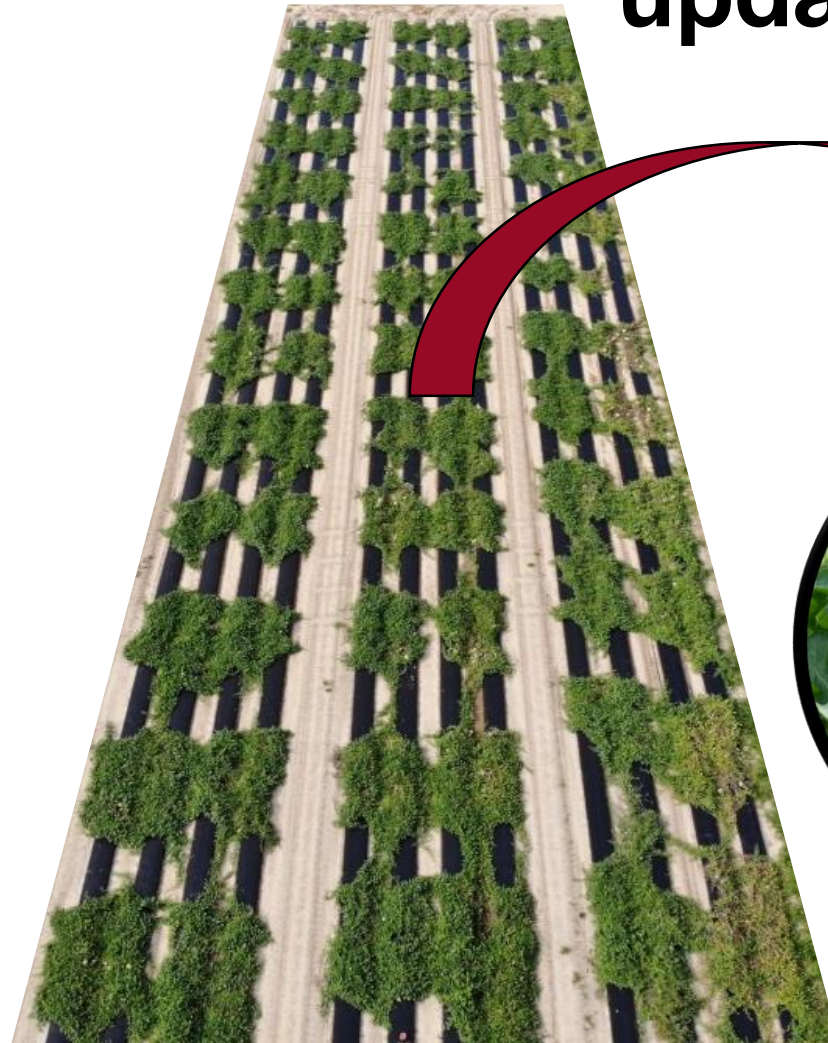


2020 Melon and watermelon variety and crop management update

Crisp County Vegetable Meeting

Andre da Silva, PhD
Extension vegetable specialist



Melon variety trial

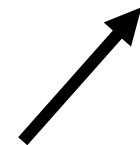
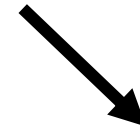
Honeydew

Treatment	Variety
1	HD-252
2	OC-164
3	HD-150



Cantaloupe

Treatment	Variety
1	Athena
2	Aphrodite
3	Infinite Gold
4	Da Vinci
5	F-39



Melon Yield

Total yield

Marketable yield according to size

- **23 count:** 1.5-1.72 lb.
- **18 count:** 1.73-2.24 lb.
- **15 count:** 2.25-3.00 lb.
- **12 count:** 3.01-3.89 lb.
- **9 count:** 3.90-5.60 lb.
- **6 count:** > 5.61 lb.



Melon Quality

Brix (%)



Firmness



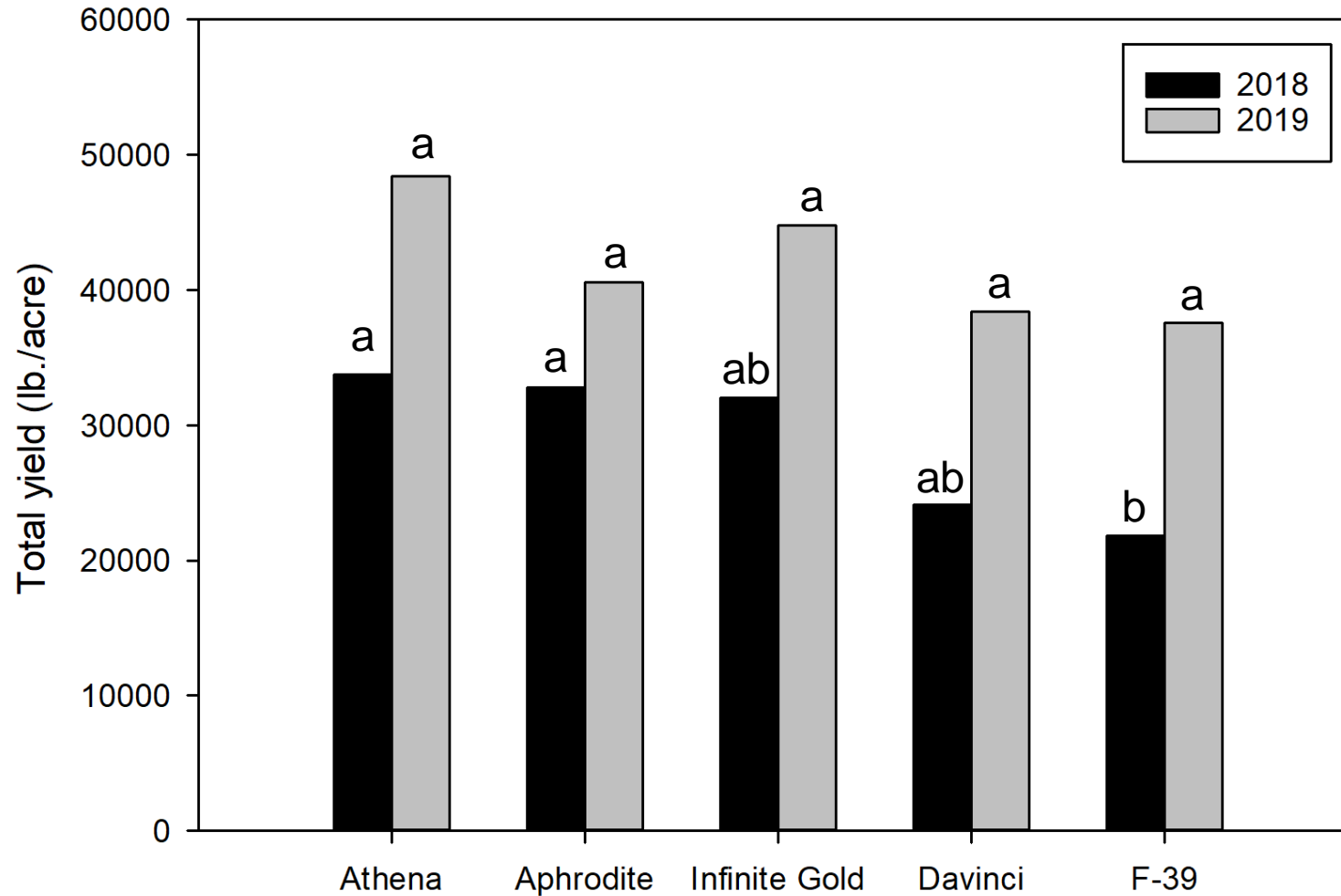
Seed cavity



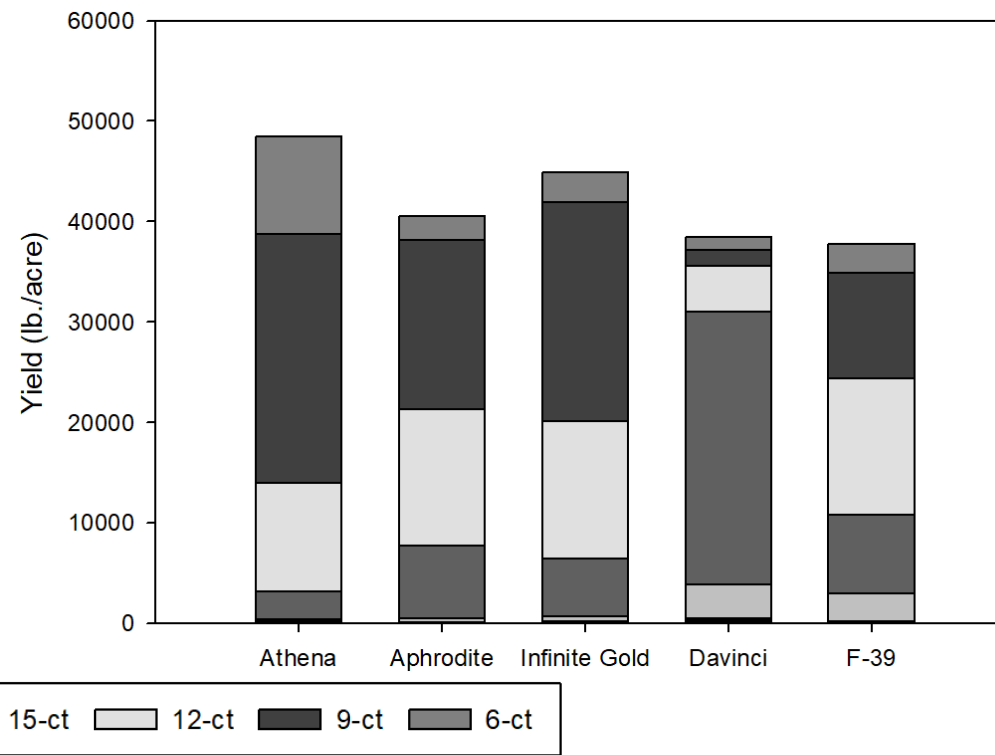
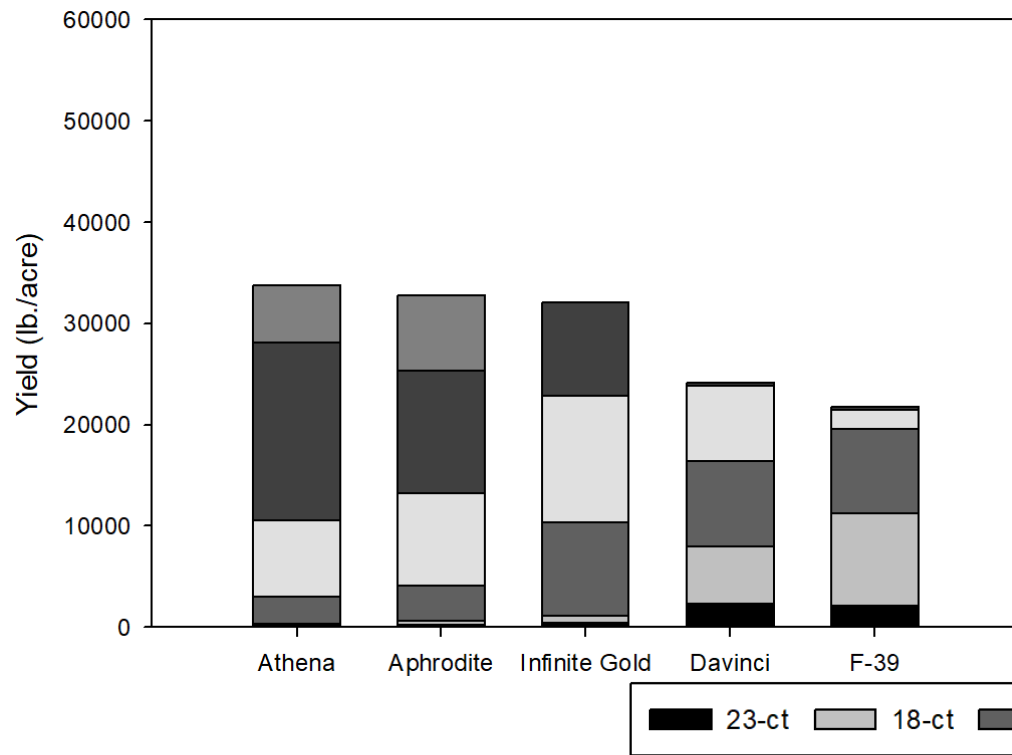
Rind Thickness



Cantaloupe Yield



Cantaloupe Fruit Sizes



Cantaloupe Fruit Quality

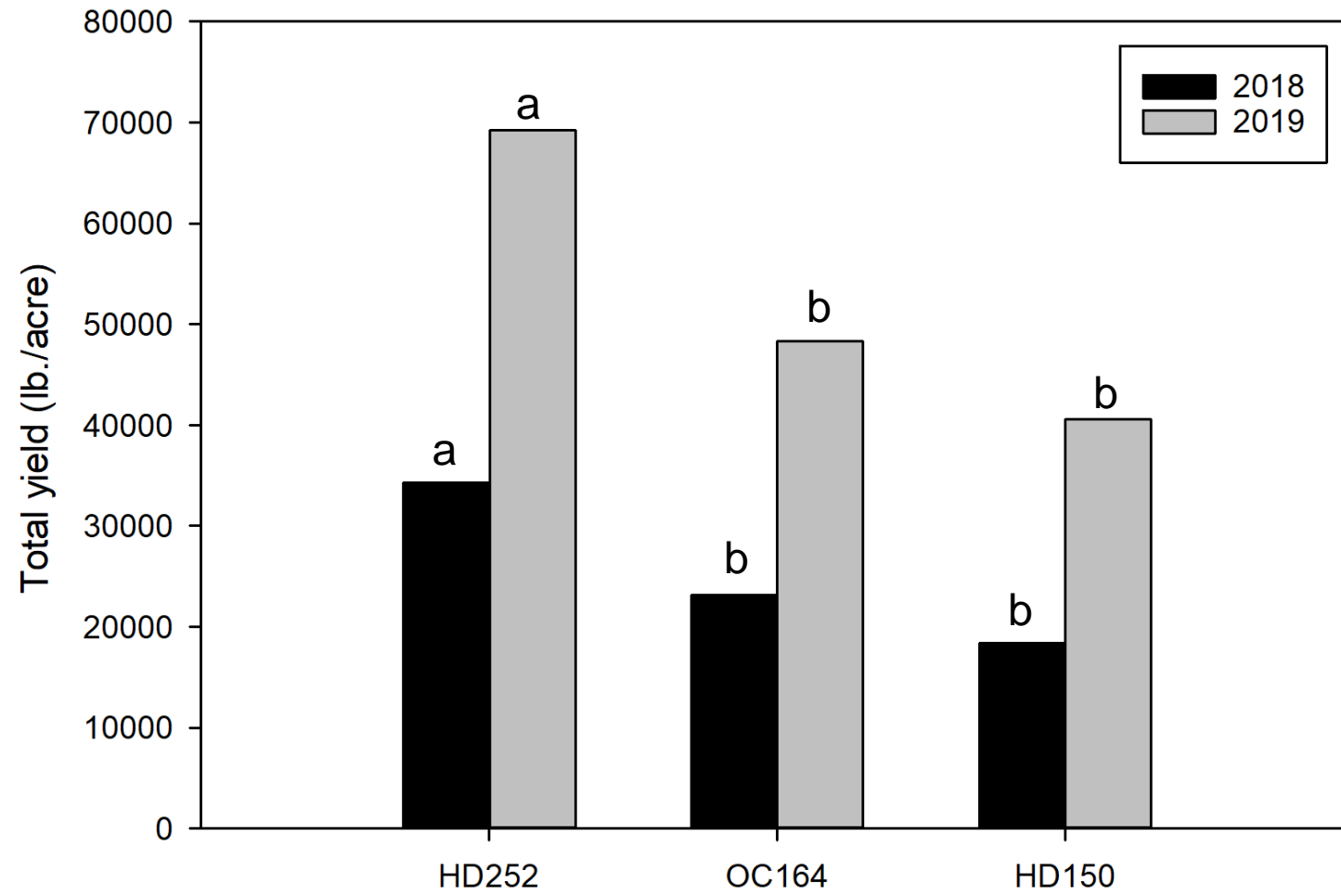
2018

Variety	Brix (%)	Firmness (lbf)	Rind (inches)	Seed Cavity:Melon
Athena	11.1 b	5.3bc	0.32 a	0.46 ab
Aphrodite	11.1 b	3.8cd	0.19bc	0.52 a
Infinite	11.6 ab	7.3 a	0.16c	0.42 bc
Gold	12.3 a	7.0 ab	0.13c	0.40 bc
Davinci	9.5 c	2.2d	0.25 ab	0.35 c

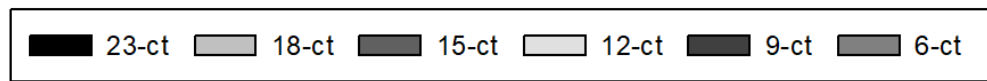
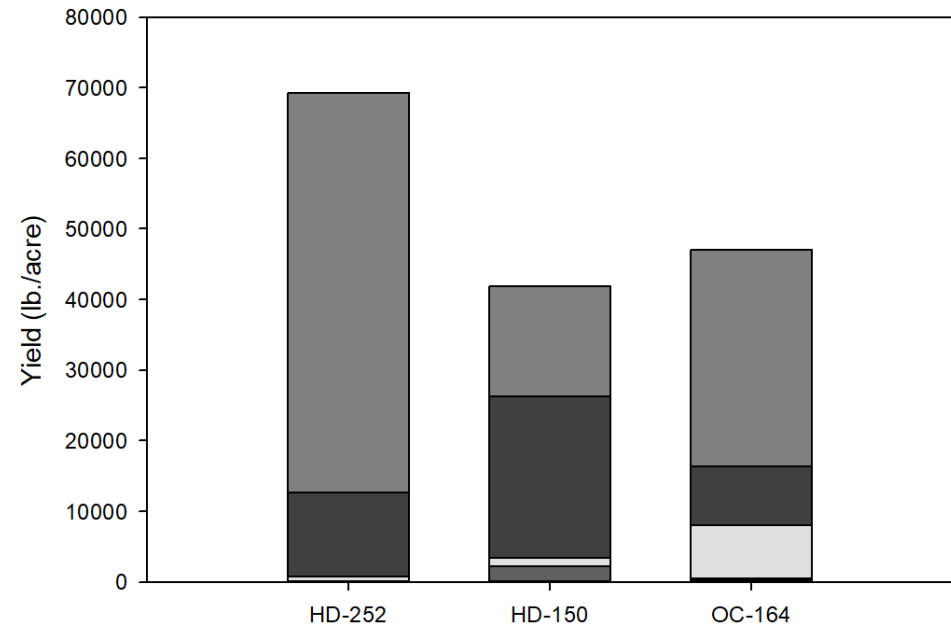
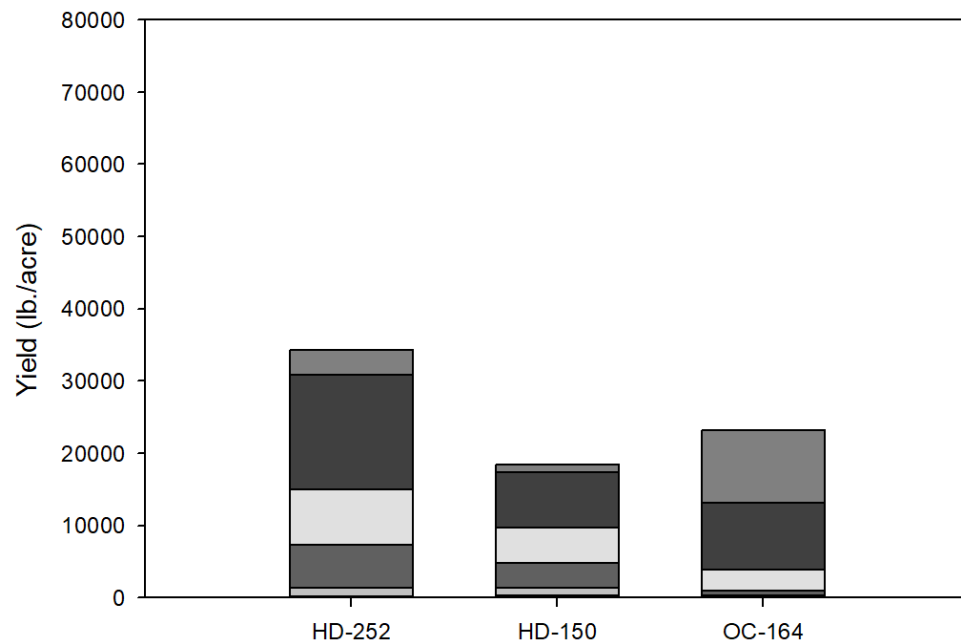
2019

Variety	Brix (%)	Firmness (lbf)	Rind (inches)	Seed Cavity:Melon
Athena	11.5 ab	4.5bc	0.24 a	0.44 a
Aphrodite	12.5 a	5.7 ab	0.28 a	0.41 ab
Infinite	11.6 ab	7.5 a	0.28 a	0.42 a
Gold	12.4 a	8.6 a	0.27 a	0.36 b
Davinci	9.6 b	2.3c	0.29 a	0.39 ab

Honeydew Yield



Honeydew Fruit Sizes



Honeydew Fruit Quality

2018

Variety	Brix (%)	Firmness (lbf)	Rind (inches)	Seed Cavity:Melon
HD-252	11.8 a	7.3 a	0.31 b	0.46 a
HD-150	14.5 a	6.8 b	0.53 a	0.51 a
OC-164	12.6 a	7.9 b	0.50 a	0.50 a

2019

Variety	Brix (%)	Firmness (lbf)	Rind (inches)	Seed Cavity:Melon
HD-252	11.8 a	6.6 a	0.12 b	0.52 a
HD-150	12.8 a	4.2 b	0.16 b	0.51 a
OC-164	12.7 a	4.4 b	0.25 a	0.50 a

Overview on melon variety trial

Cantaloupe

- Athena highest yields
- Da vinci majority of fruits 15 ct.
- Infinite gold and Da vinci consistent higher brix

Honeydew

- HD252 highest yield
- HD150 majority of fruits 15 ct.



Watermelon Variety Trial

Varieties: 27

Syngenta	Seminis	Sakata	Enza Zaden	Harris Moran	Nunhems	Seedway
Captivation	Tailgate	Kingman	Red Garnet	Turnpike	7197	SW1981
Exclamation	Road Trip	Charismatic	Red Amber	Troubledor	Embassy	SW2004
Excursion	Joyride	Unbridled	E26C.00063		Warrior	
Fascination	Bottle rocket	Secretariat			Declaration	
Sweet Gem	Summer Breeze					
WDL 6404	SV 0241					

Planting Date: 12 February

Transplanted: 25 April

Plant Spacing: 6 ft. centers black TIF plastic mulch, 42” in-row spacing (2,074 per acre pop.)

Pollenizer: Wild Card (Sakata) placed after every 3rd and 5th plant in a plot (4 per plot, 2/row).

Watermelon Variety Trial

Pollination Services: 6 honeybee hives located approximately 500 feet from planting.

Fumigation: Pic-Chlor 60 with black TIF plastic applied in Feb.

Fertilization: 500 lbs. 10-10-10 under plastic when laid. Drip irrigation applied roughly 1 inch of water per week. Fertigation provided with 7-0-7 at a rate of 10-12 lbs./N/acre week for 12 weeks (approx. 170 lbs. N total).

Herbicide: Row middle applications of Chateau, Curbit, and Dual Magnum.

Pest Control: Weekly fungicide and insecticide sprays according to UGA recommendations.



Watermelon Variety Trial

Harvest Dates: 19 June and 3 July – 86, and 100 days after transplant.

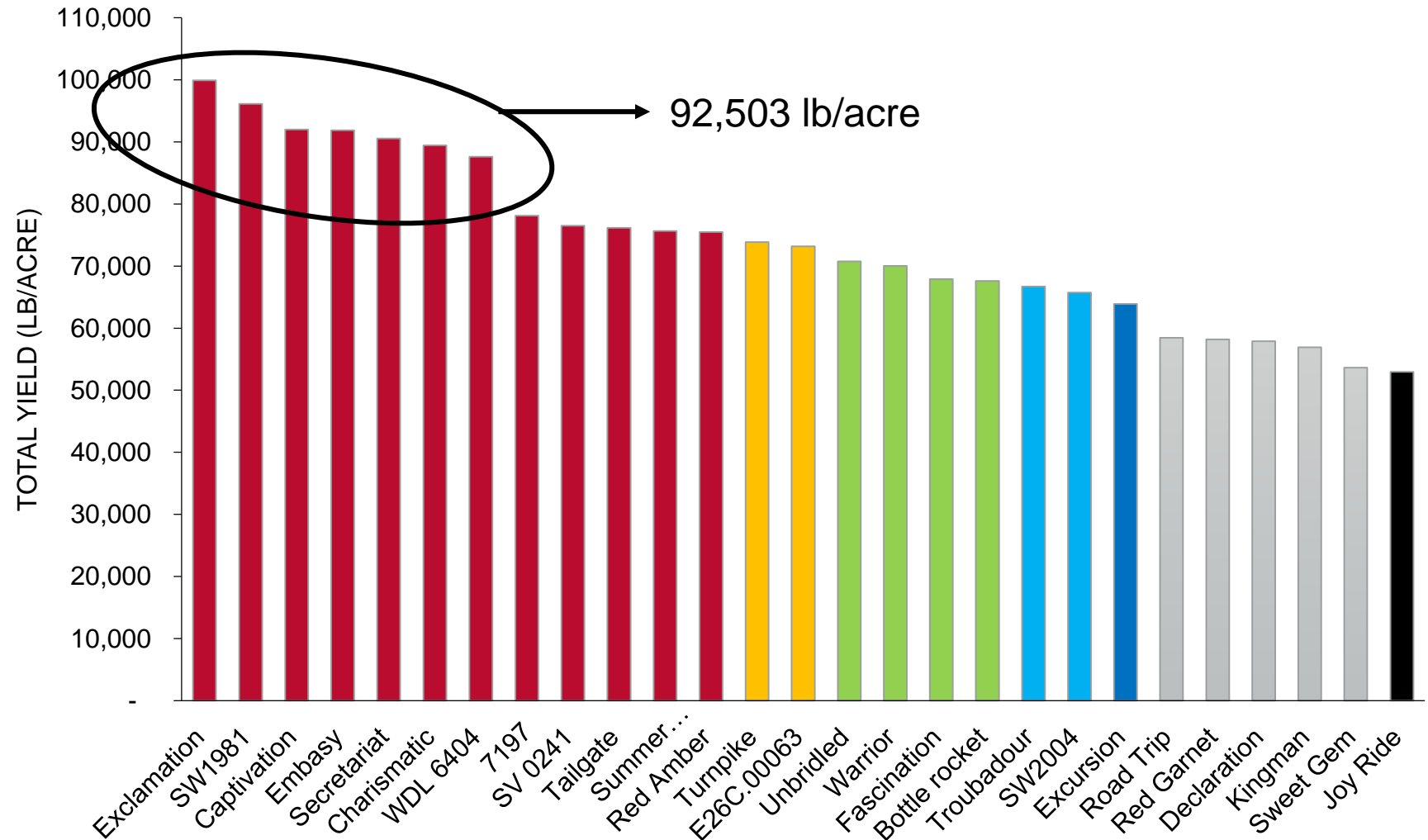
Fruit were harvested when tendrils had turned brown and ground-spots were yellow. Each fruit was weighed and graded into:

- 60 count – 9-13.5 lbs.
- 45 count – 13.6-17.5 lbs.
- 36 count – 17.6-21.4 lbs.
- 30 count – 21.5 + lbs.
- Fruits heavier than 27 lbs. were not included in the analysis

Watermelon yield

Results

- Exclamation
- SW1981
- Captivation
- Embassy
- Secretariat
- Charismatic
- WDL 6404
- 7197
- SV0241
- Tailgate



Watermelon size distribution

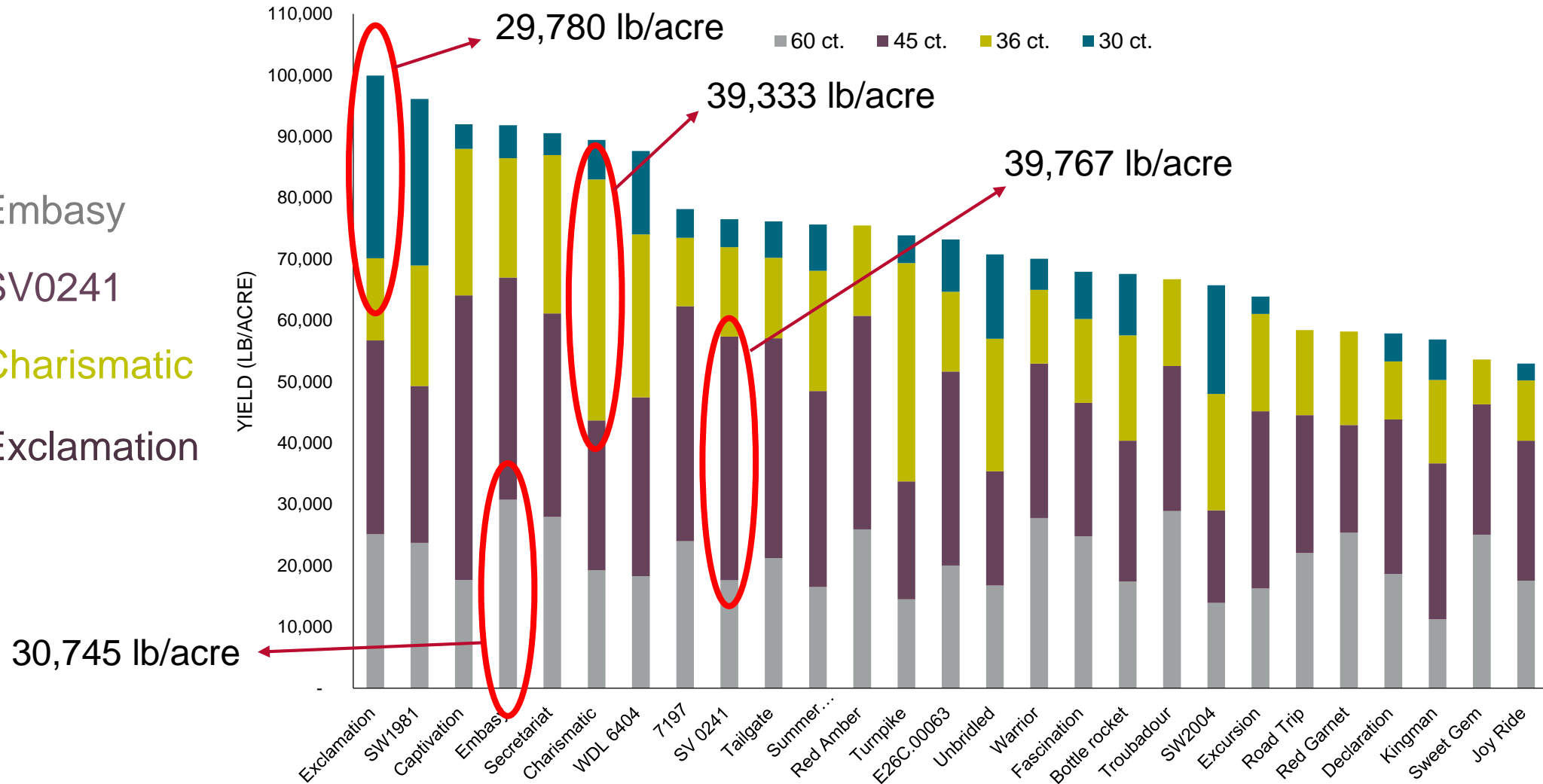
Results

60 counts: Embassy

45 counts: SV0241

36 counts: Charismatic

30 counts: Exclamation



Size proportion

Variety	60 count	45 count	36 count	30 count
	%			
SV 0241		52.3a		
Captivation		51.1 ab		
7197		49.6abc		
Tailgate		47.4a-d		
Kingman		44.3a-e		
Red Amber		44.0a-f		
Declaration		43.5a-f		
Excursion		43.1 a-f		
E26C.00063		42.4a-f		
Summer Breeze		41.6a-f		
Joy Ride	33.8a-h	40.4a-g		
Embassy	33.2a-h	39.4a-g		
Sweet Gem	47.3a	39.2a-g		
Road Trip	37.6a-e	38.5a-g		
Secretariat		37.0a-g		
Warrior	39.5a-d	36.2a-g		
Troubadour	44.8ab			
Bottle rocket				14.9a-e
WDL 6404				15.1a-e
Exclamation				29.7a
Fascination	35.7a-g			
Red Garnet	42.0abc			
SW1981				22.3abc
Charismatic			43.8ab	
Turnpike			47.4a	
Unbridled				19.8a-d
SW2004				25.5ab

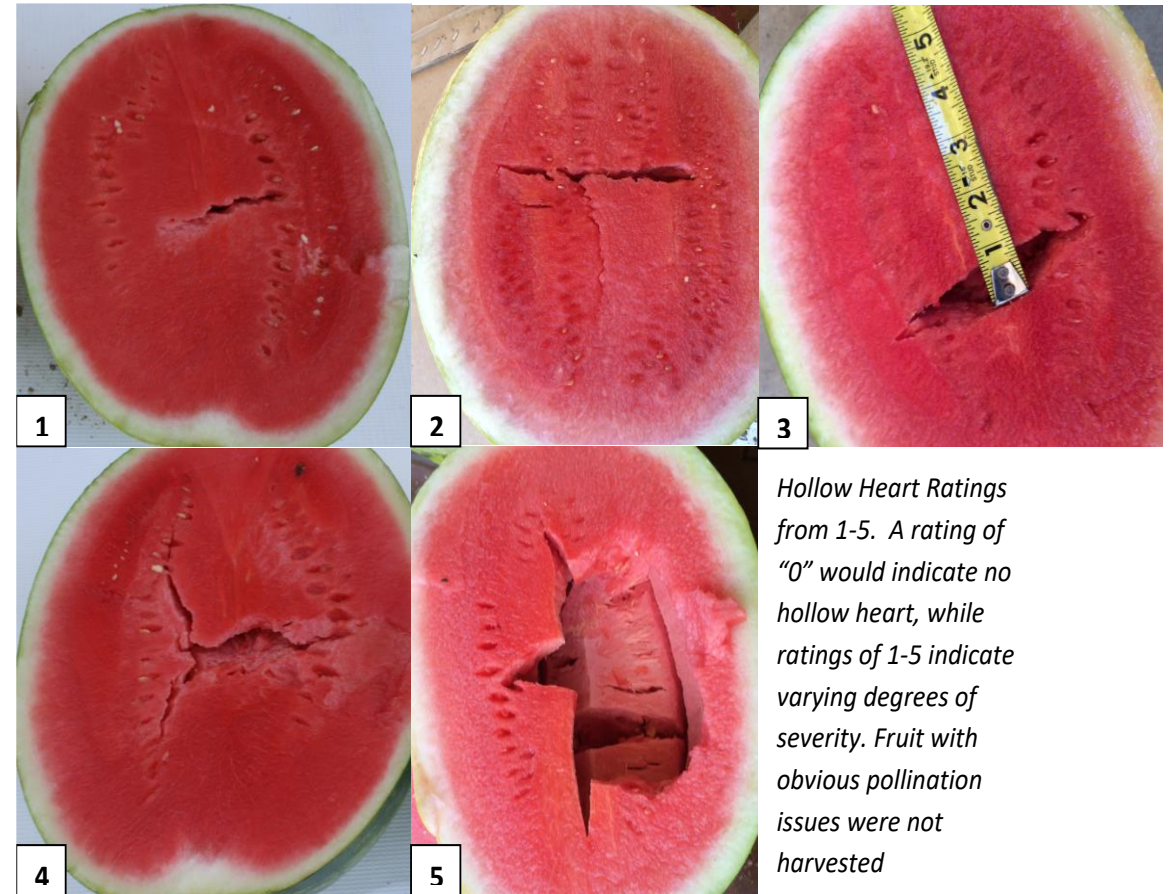
Watermelon quality data

Results

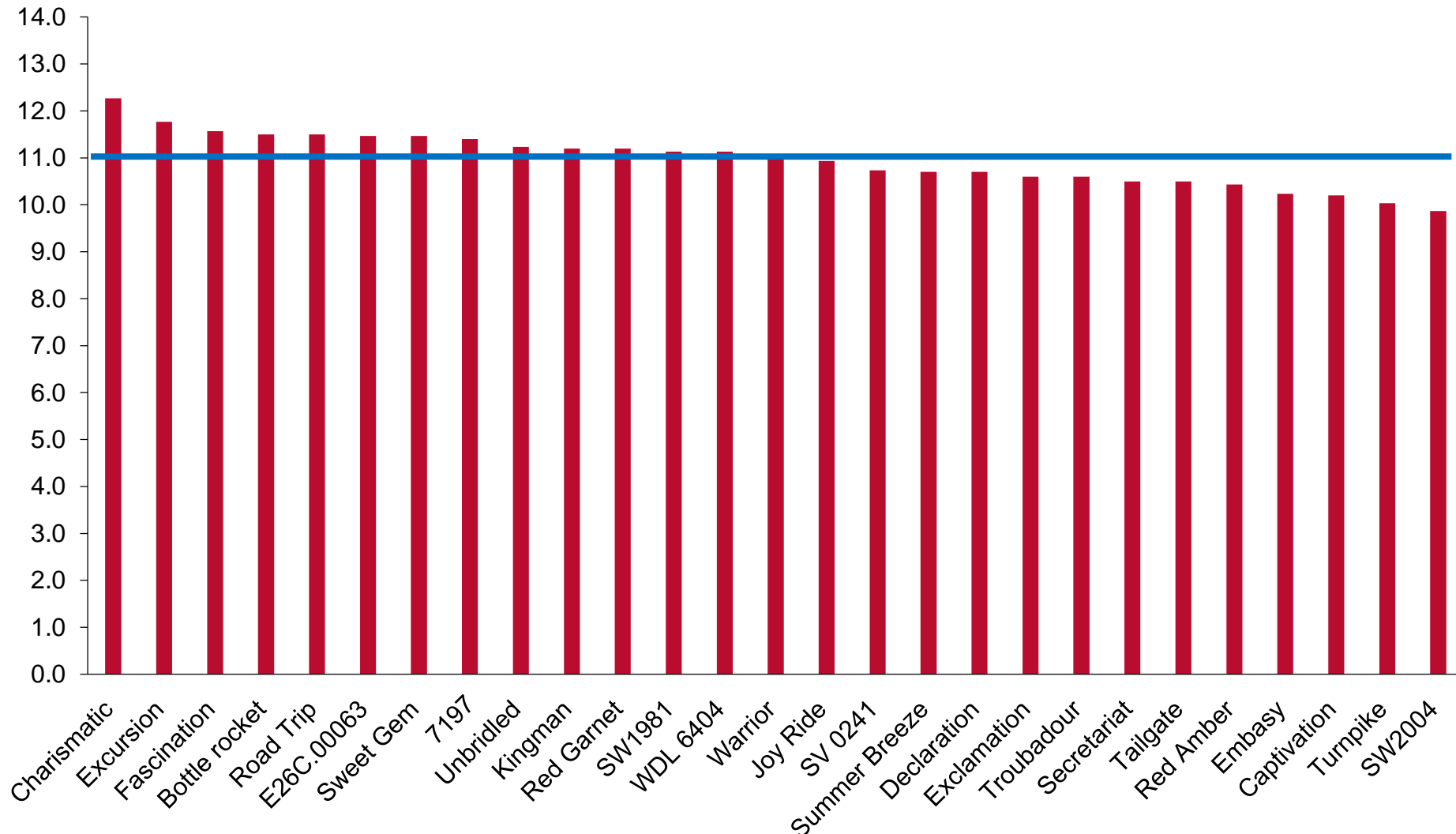
Brix (%) – NS with average of 11%

Firmness – NS with average of 3.13 lb.

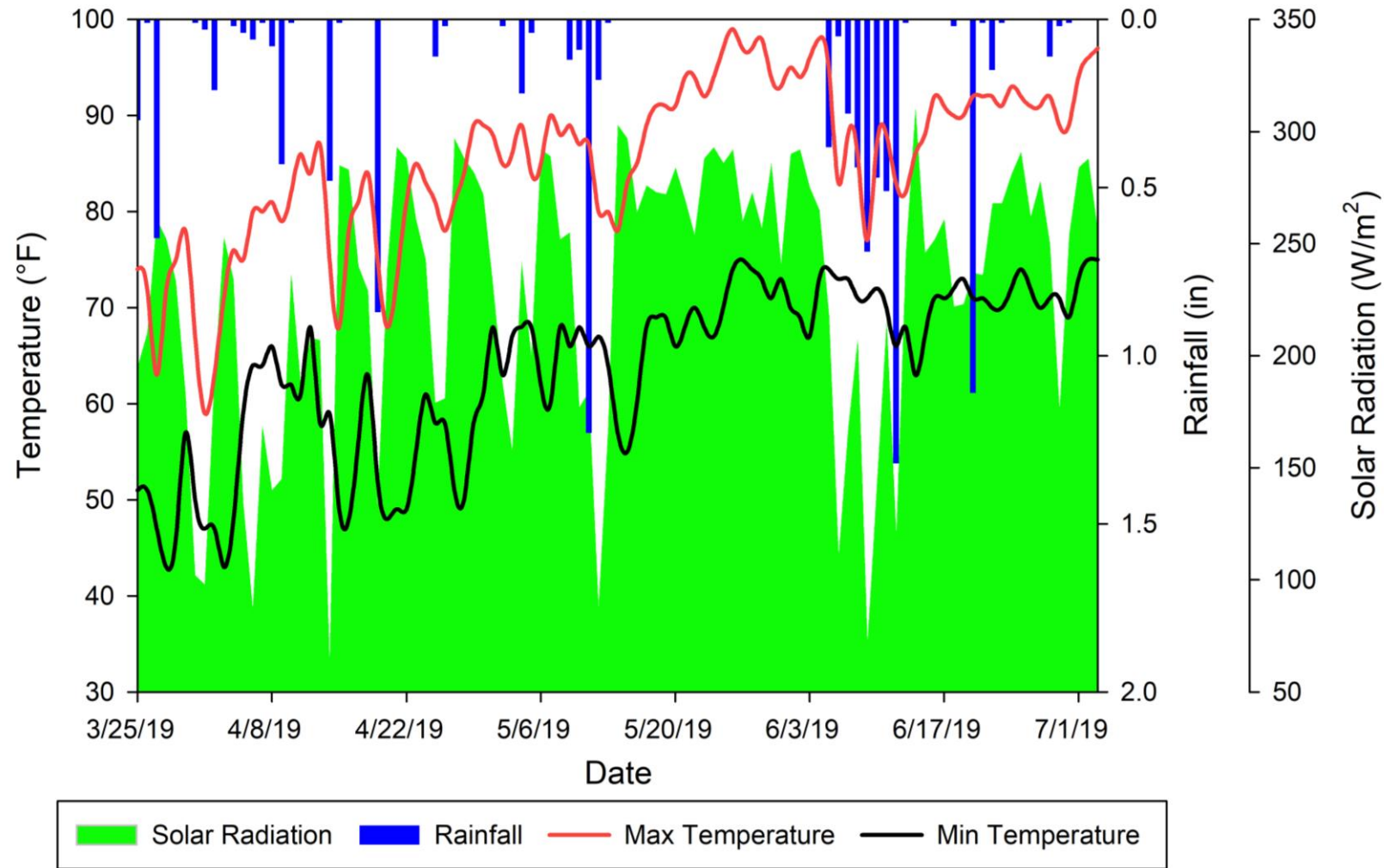
Hollow Heart – NS with no HH



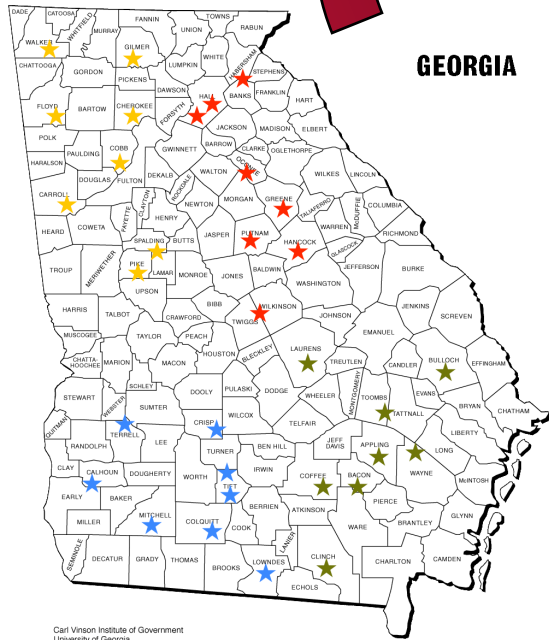
Watermelon Brix



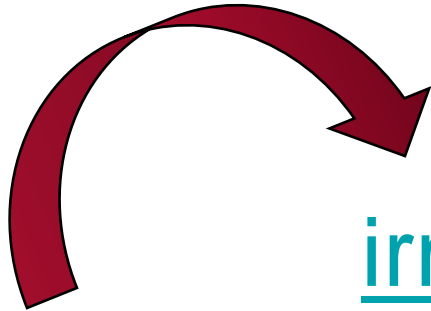
Effect of the weather condition



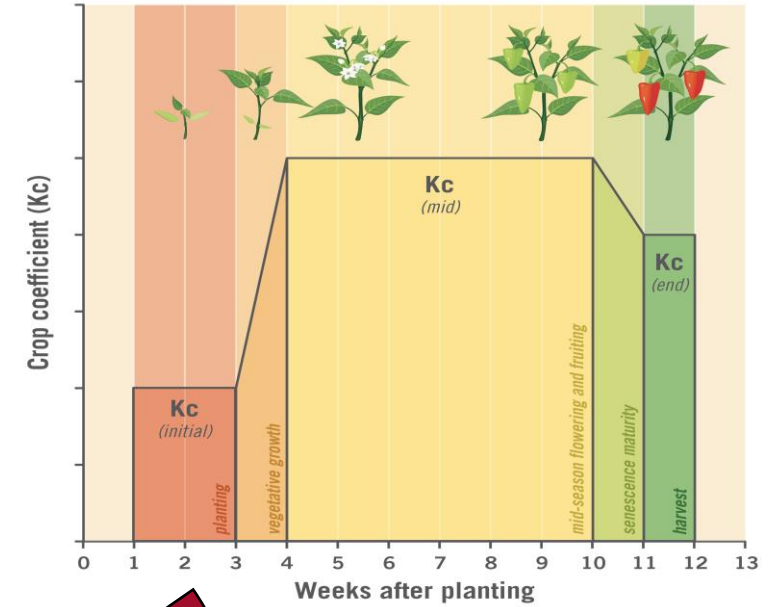
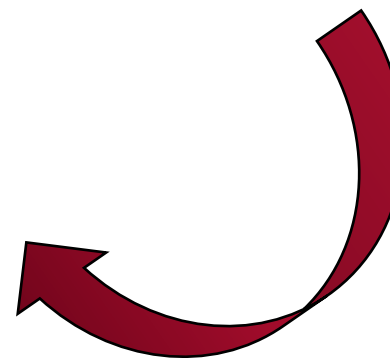
Irrigating tool



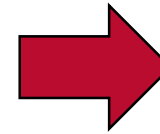
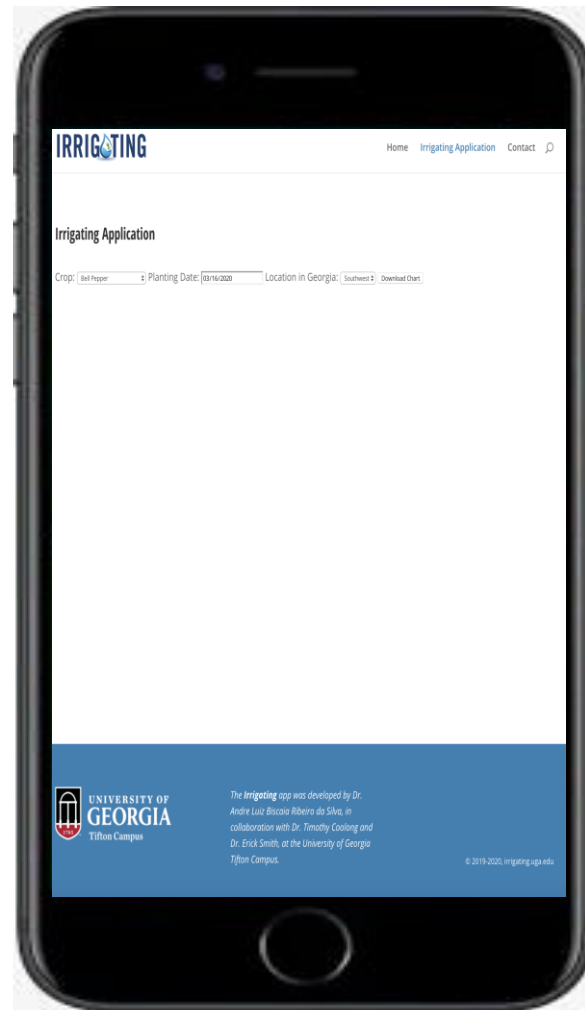
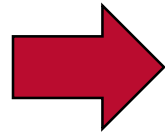
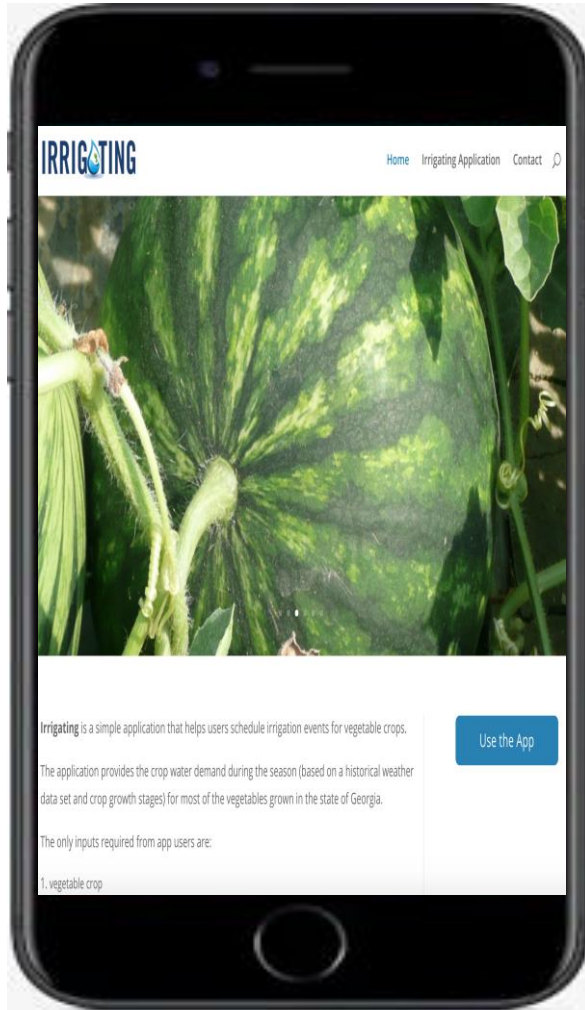
Carl Vinson Institute of Government
University of Georgia



irrigating.uga.edu

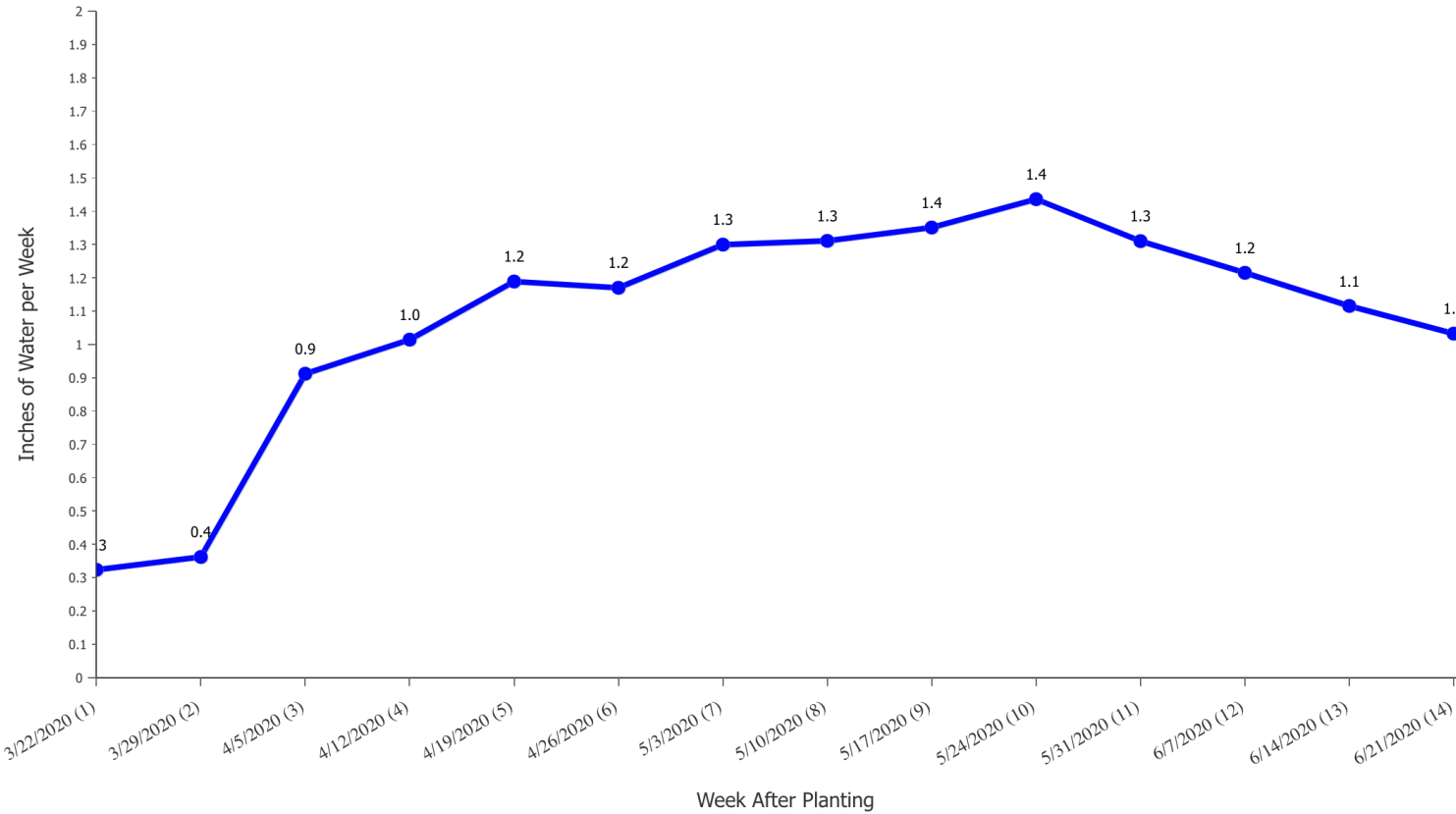


Using the irrigating app



Irrigating Application

Crop: Planting Date: Location in Georgia: [Download Chart](#)



Volume of water per season : 15.04 Inches

Pollinizer selection app

<https://vegetables.caes.uga.edu/>

<https://watermelon.uga.edu/>



WATERMELON

[Home](#) [Watermelon Application](#) [Contact](#) 



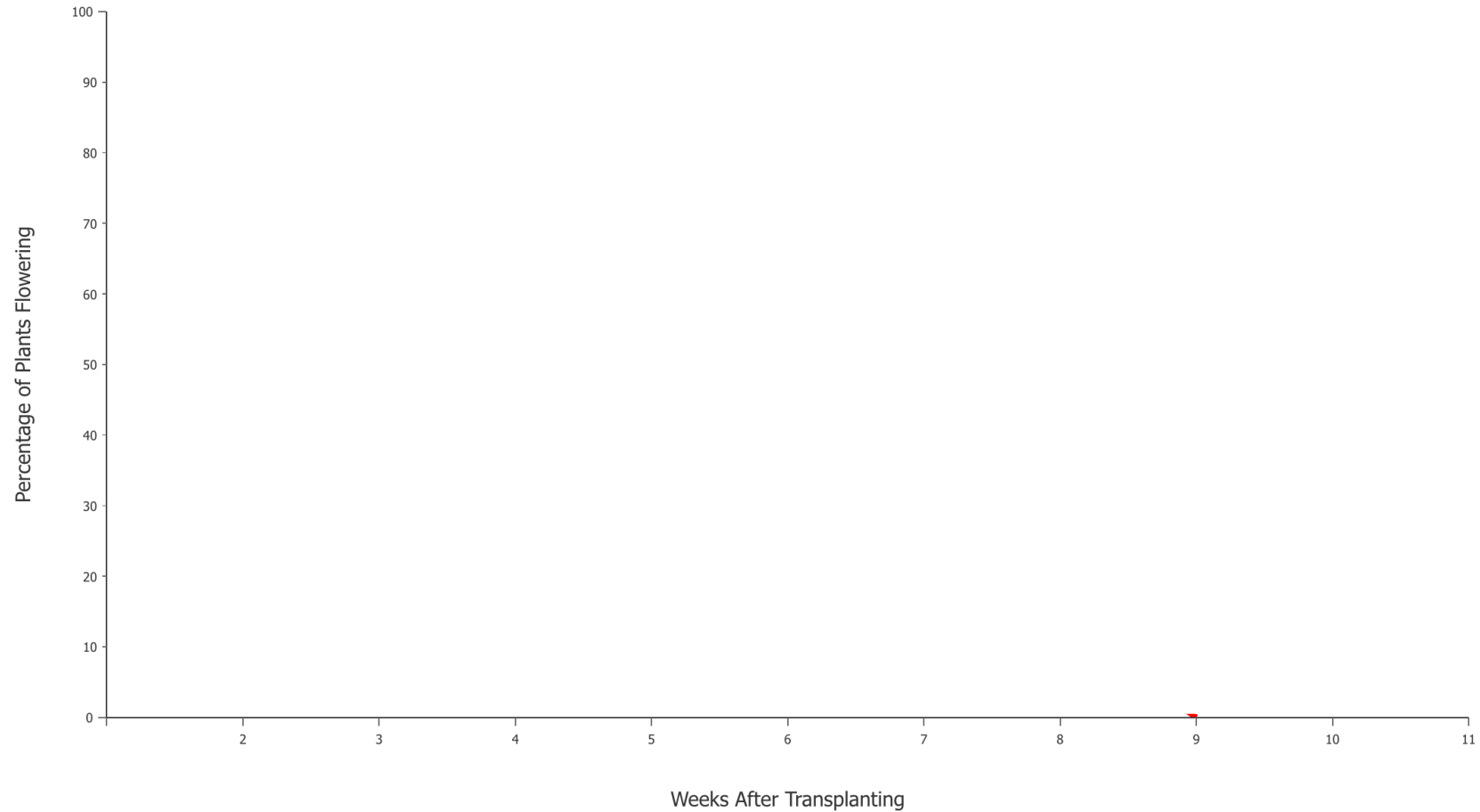
Watermelon is a simple application that ...

Use the App





Variety: Pollinizer: [Download Chart](#)

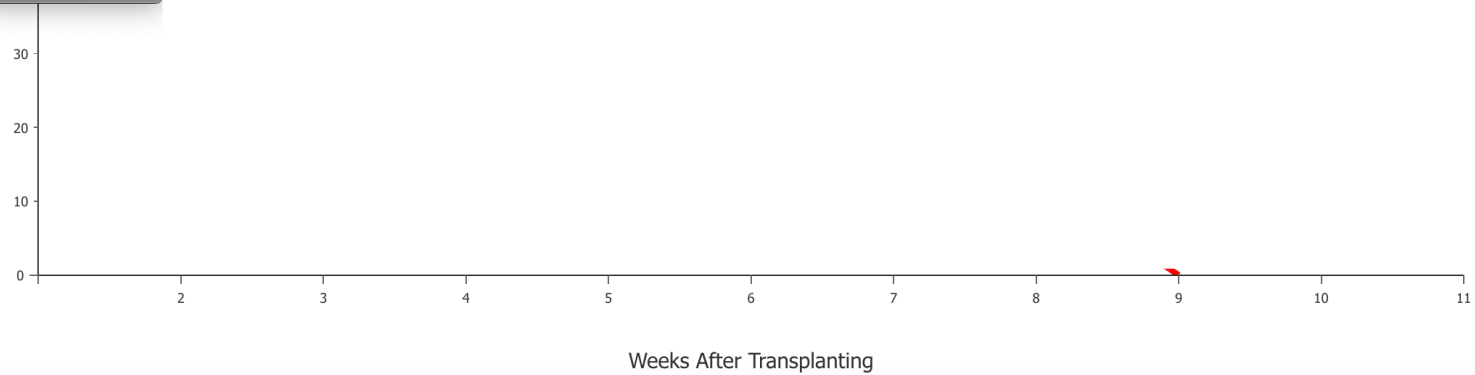


 Pollin

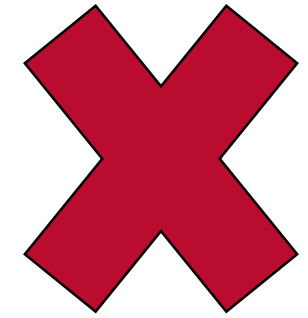
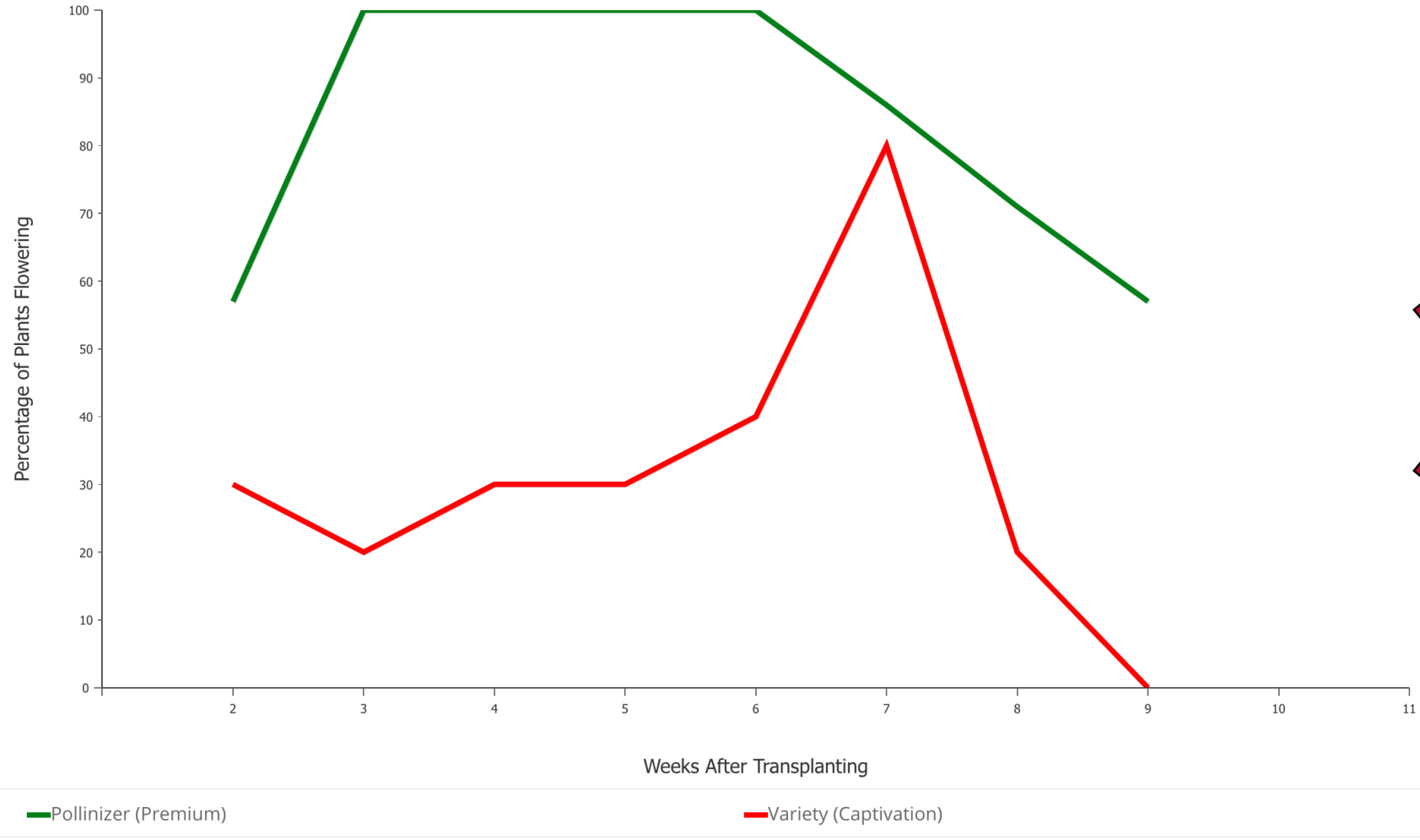
Variety: 50027 Pollinizer:

- ✓ 50027
- 50029
- 7187
- 7197
- 9601
- 9651
- Bottle Rocket
- Captivation
- Declaration
- Embassy
- Exclamation
- Excursion
- Extazy
- Fascination
- Joy Ride
- Ladybelle
- Revolution
- Summer Breeze
- Sweet Dawn
- Sweet Gem
- Turnpike
- Warrior

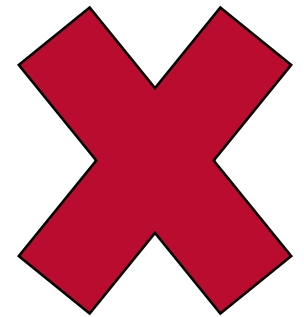
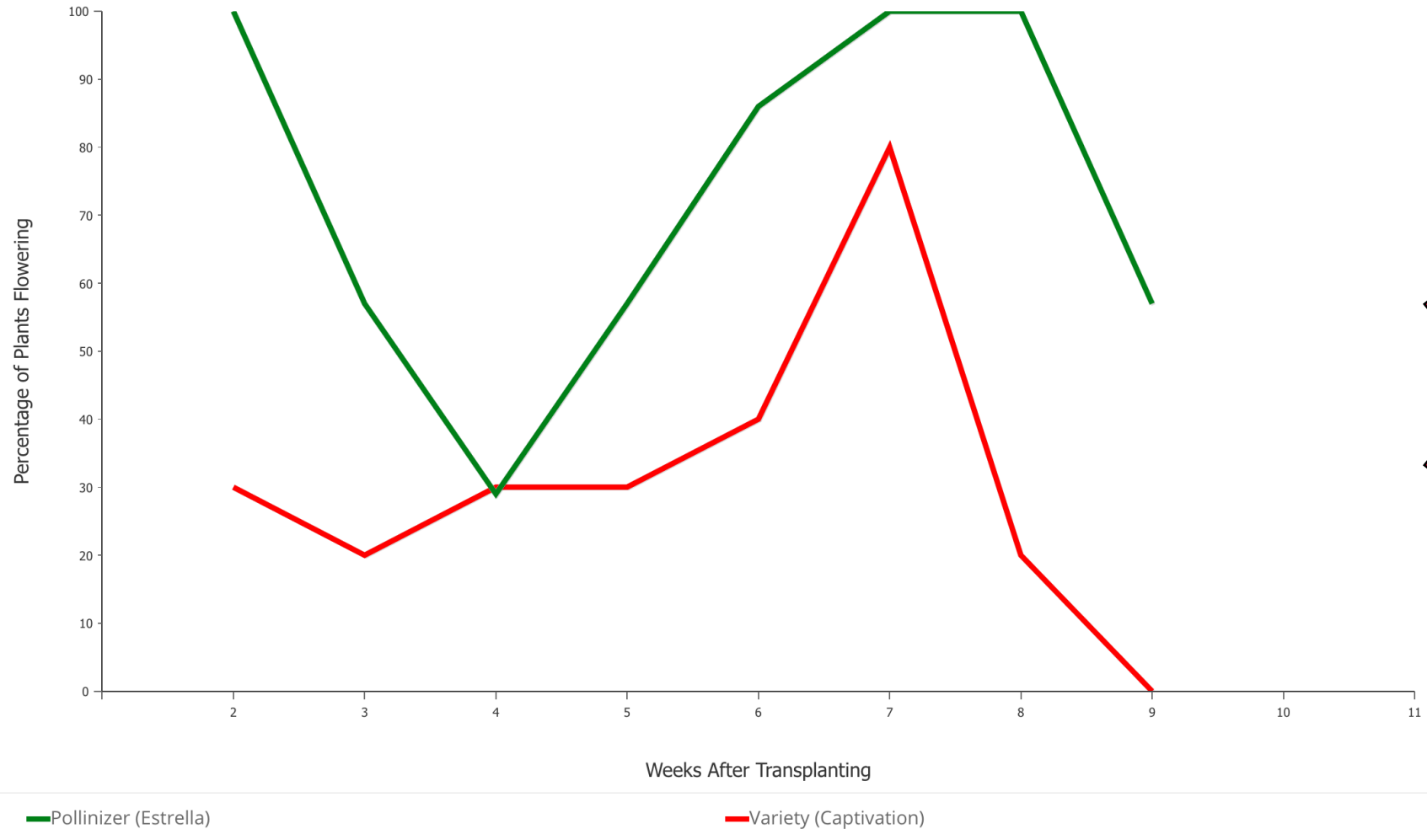
Percentage of Plants Flowering



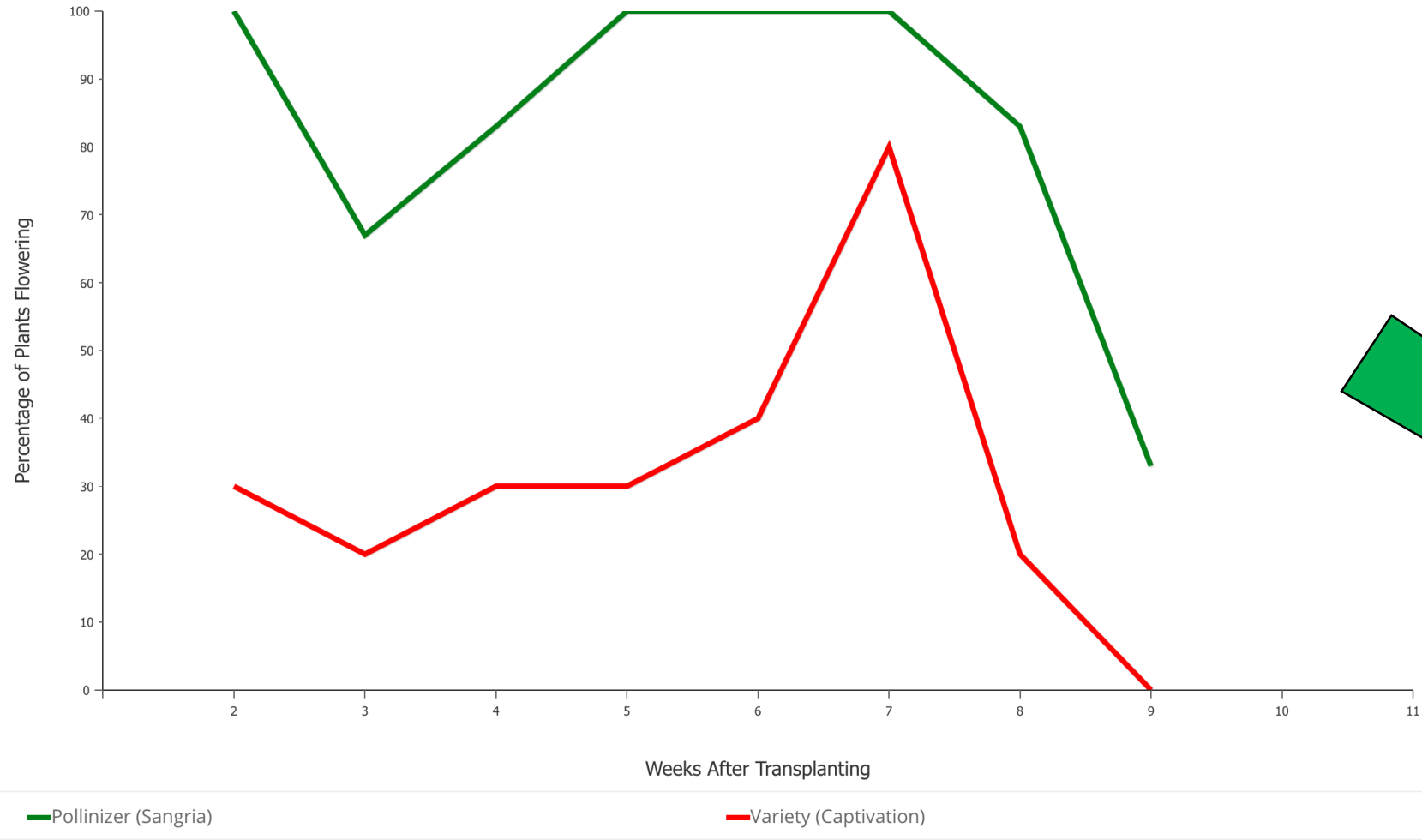
Variety: Pollinizer:



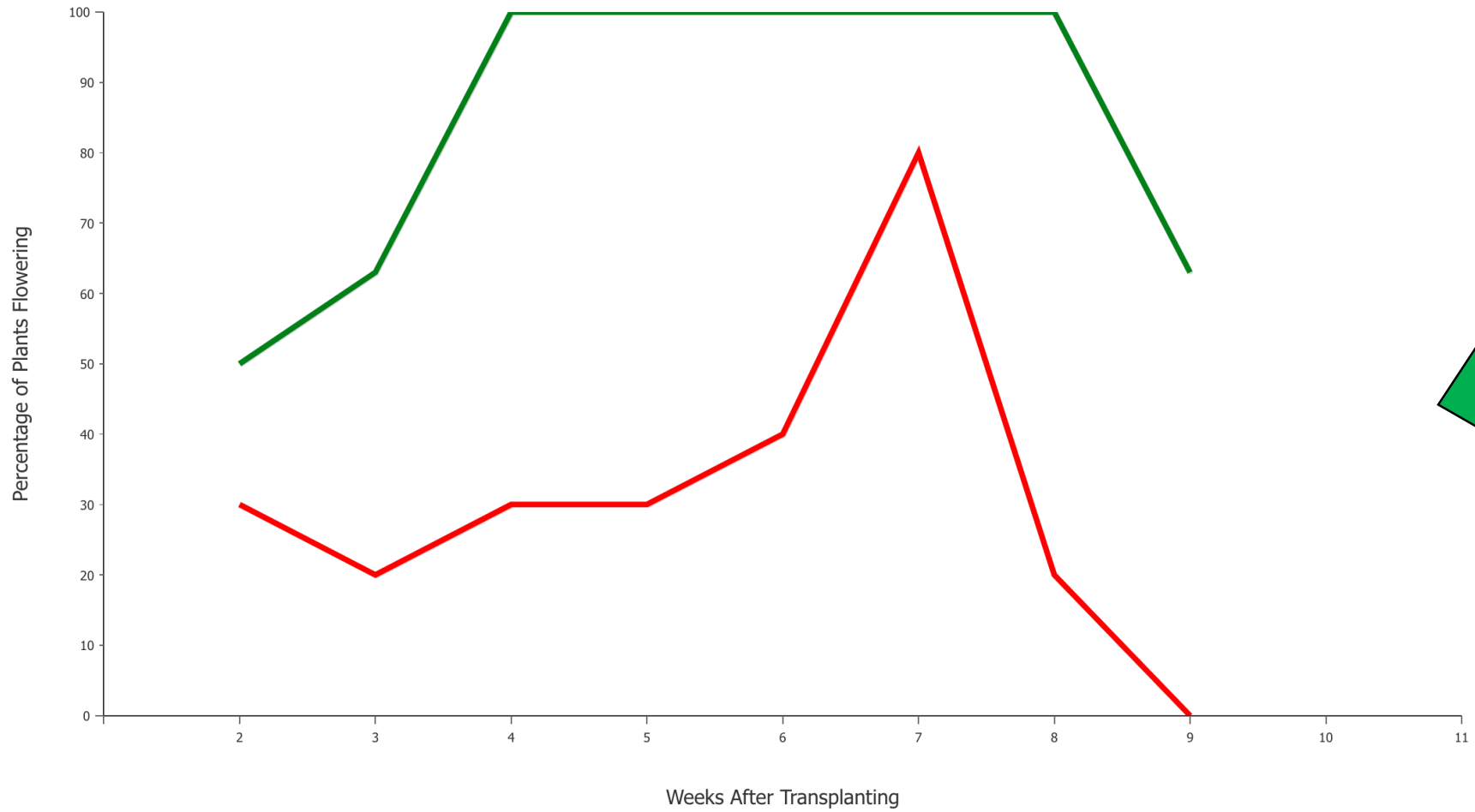
Variety: Pollinizer: [Download Chart](#)



Variety: Pollinizer: [Download Chart](#)

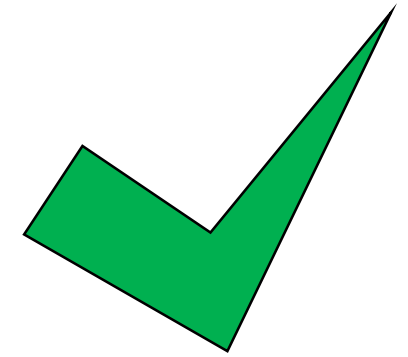


Variety: Pollinizer: [Download Chart](#)



— Pollinizer (800)

— Variety (Captivation)



Take home message

- Variety information is available in the UGA vegetable team website
- Tools and app will help you to better select your variety and pollinizer match
- Irrigation play a key role on fruit quality
- Let's use it, it is free



Thank you

Andre da Silva – adasilva@uga.edu

