



# **Breeding Updates: A New Selection in the Pipeline**

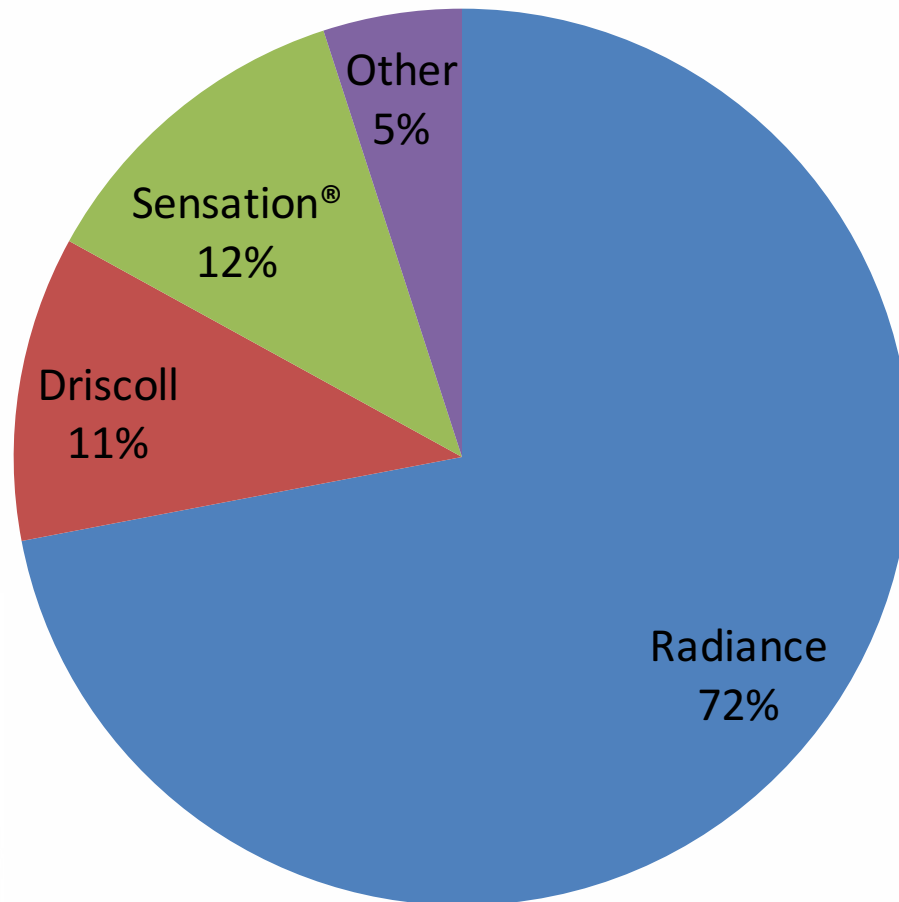
Agritech Conference, Plant City, FL

April 19, 2016

Vance M. Whitaker

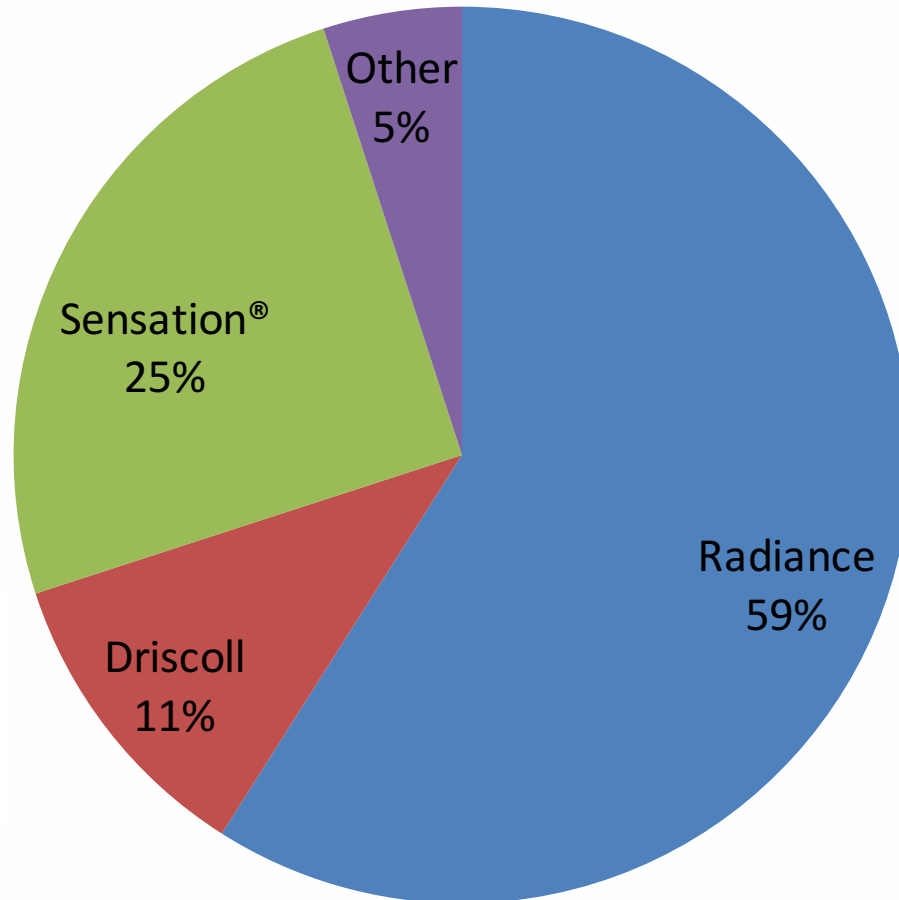


# Acreage Estimate for 2015-16





# Projected Acreage for 2016-17 ???





## Sweet Sensation® 'Florida127'

**Flavor and Aroma**

**Excellent Shelf Life**

**Fruit Size**





## My Management Recommendations for Sweet Sensation® ‘Florida127’

- #1 Oct 1<sup>st</sup> – 15<sup>th</sup> planting
- #2 16” in-row spacing
- #3 Don’t fertilize like ‘Radiance’ (Plant Size!)
- #4 Phytophthora – Powdery Mildew – Botrytis
- #5 Let it color



# FL 12.121-5

AU 2010-119 x 'Florida Radiance'



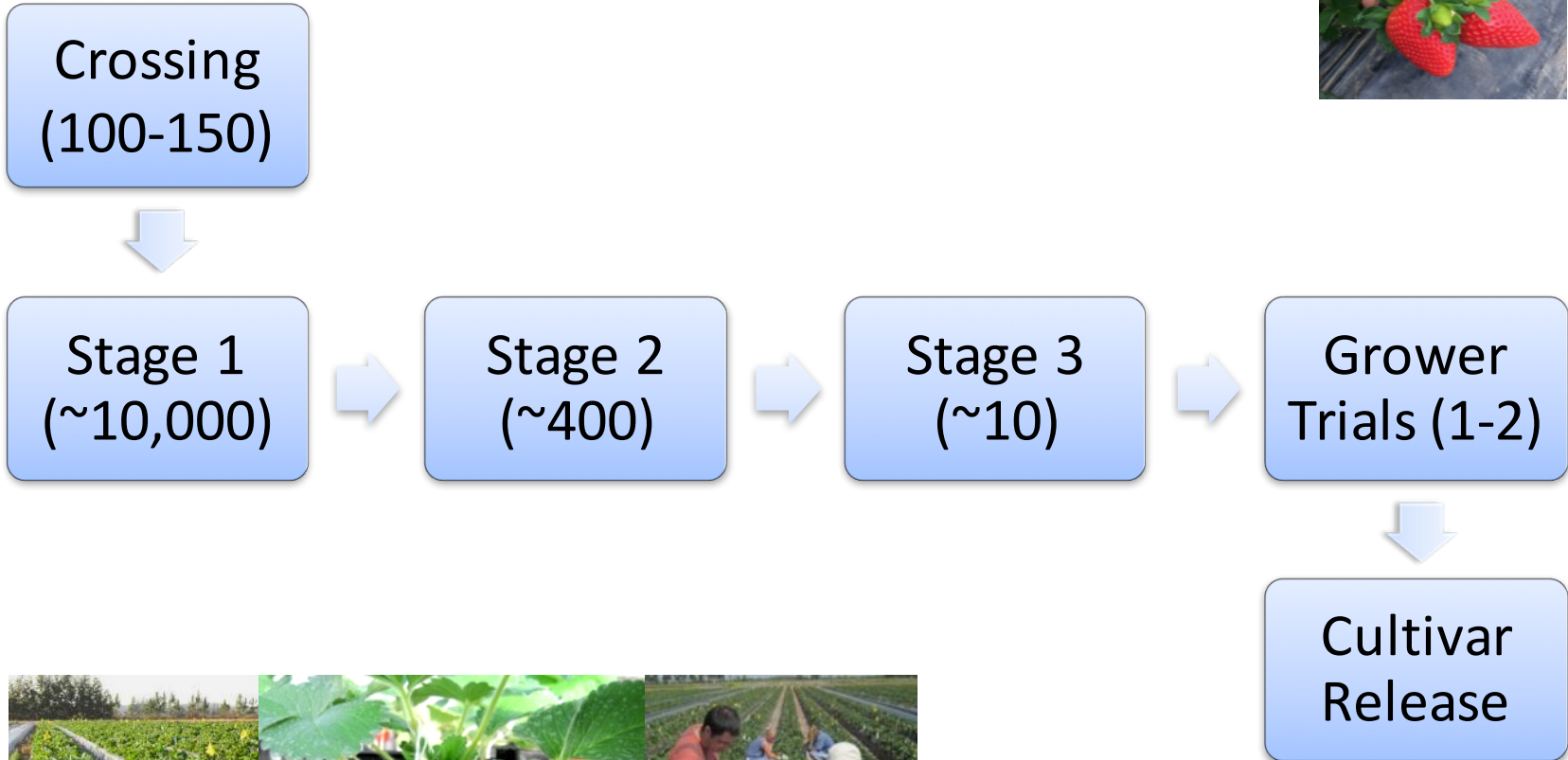
Adapted to Early Planting Dates



# FL 12.121-5 Performance Data

- Agronomic Traits
- Fruit Quality and Flavor
- Disease Resistance
- Management Recommendations

# UF Breeding Process







FL 12.121-5

# AGRONOMIC TRAITS



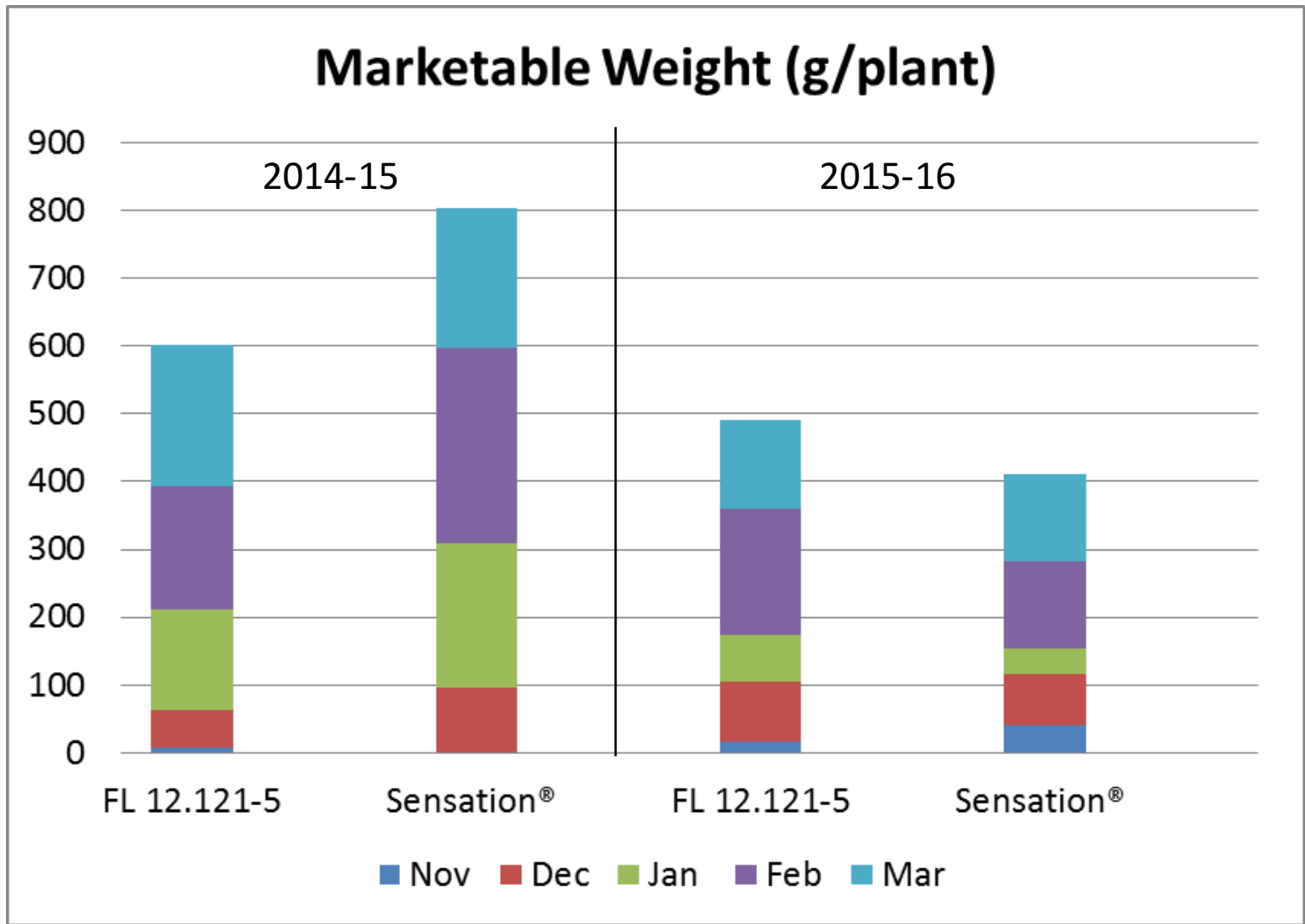
# Description

- Compact Plant
- Ideal for Early Planting
- Day Neutral Tendencies
- Med Fruit Size
- Excellent Shape
- Vivid Red Color
- Tough Skin, Water Resistant



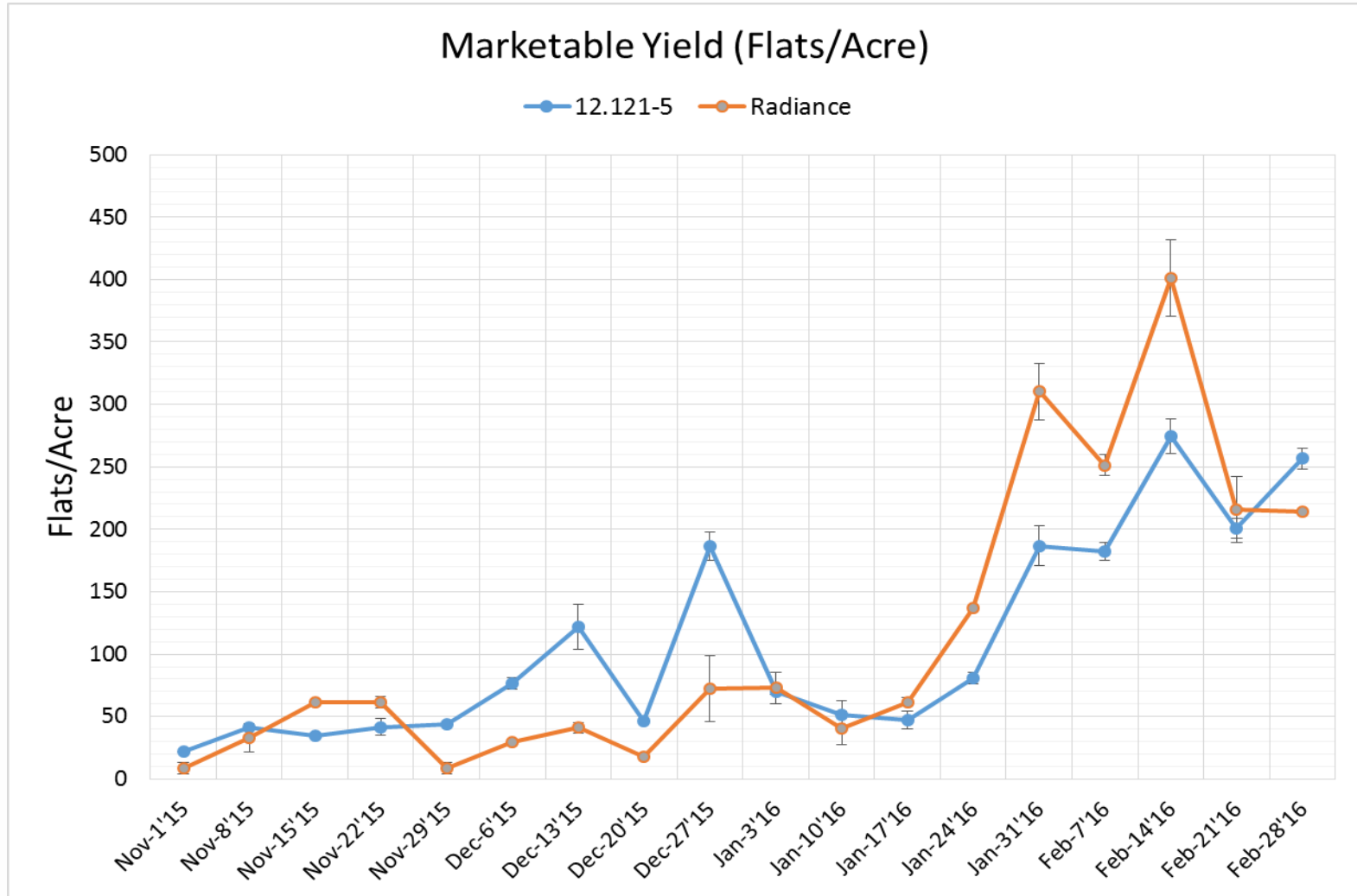


# Stage 3 (Mid-Oct Planting)





# Astin Ranch: Planted Sept 25<sup>th</sup>, 2015





# Other Traits

Variety	2014-15		2015-16	
	FL 12.121-5	Sensation®	FL 12.121-5	Sensation®
Fruit Size (g/fruit)	21 b	31 a	19 b	22 a
Water Damage (%)	10 a	12 a	12 a	25 b
Misshapen (%)	5 a	7 a	9 b	10 a



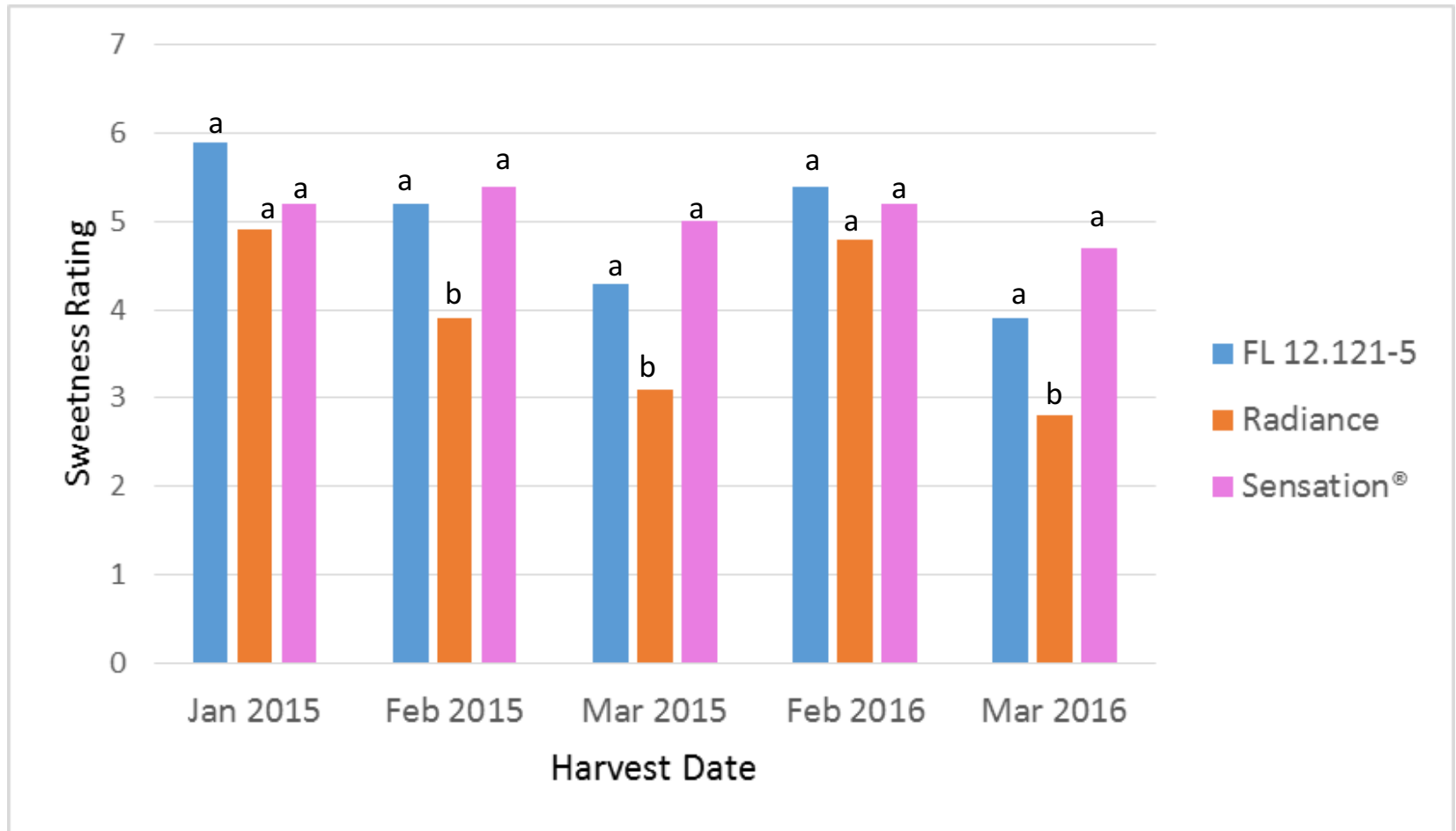


FL 12.121-5

# FRUIT QUALITY AND FLAVOR

# Trained Taste Panels

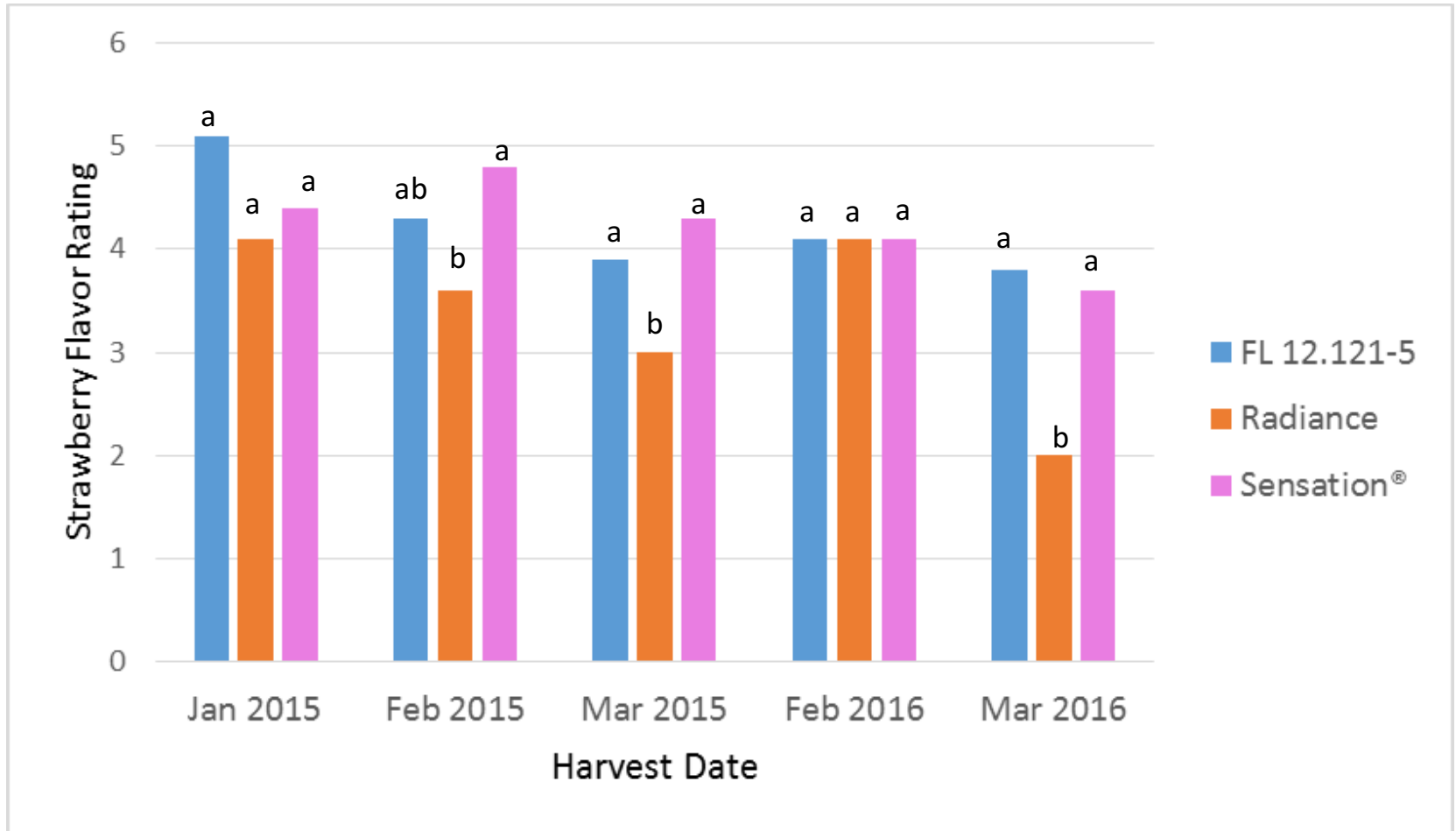
## Sweetness Ratings



Data in collaboration with A. Plotto (USDA Fort Pierce)

# Trained Taste Panels

## Strawberry Flavor Ratings



Data in collaboration with A. Plotto (USDA Fort Pierce)





# Postharvest Ratings

Grower Trials

- See Cecilia Nunes Presentation
- Intermediate Shelf Life to Sensation<sup>®</sup> and Radiance



FL 12.121-5

# DISEASE RESISTANCE



# Disease Resistance

N. Peres Trials

Disease	Causal Agent	Radiance	FL 12.121-5
Anthracnose fruit rot	<i>Colletotrichum acutatum</i>	R	MS
Angular leaf spot	<i>Xanthomonas fragariae</i>	MS	MS
Botrytis fruit rot	<i>Botrytis cinerea</i>	MS	MS
Charcoal rot	<i>Macrophomina phaseolina</i>	MR	?
Colletotrichum crown rot	<i>Colletotrichum gloeosporoides</i>	MS	?
Phytophthora root rot	<i>Phytophthora cactorum</i>	HS	MR
Powdery mildew	<i>Podosphaera aphanis</i>	MR	MS





# Preliminary Recommendations

- 1) Early Planting Dates (Sept 25 – Oct 1; not after 5<sup>th</sup>)
- 2) Manage Fertility Similar to Radiance
- 3) Focus on Powdery Mildew control
- 4) Could be marketed under the Sweet Sensation<sup>®</sup> brand





# What's Next?

## **FL 12.121-5**

- Clean stock in pipeline
- Release proposal August, 2016
- 2016-17: Larger grower trials
- 2017-18: Commercial availability



## **Newer Selections for grower trial**

**2016-17:** One 2013 selection

**2017-18:** One or more new selections

# Thank You!

- Students and Lab Members

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- Jozer Mangandi
- Yanina Perez
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- Tomas Hasing
- Catalina Moyer
- Luis Osorio
- David Moore
- Jim Sumler
- Angelita Arredondo
- Kelsey Cearley
- Sujeet Verma
- Zhen Fan
- Wantanee Prescott
- Claire Martin

- Key Collaborators

- Seonghee Lee
- Kevin Folta
- Natalia Peres
- Anne Plotto
- Cecilia Nunes

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