What's New for the Old Indian River Region?

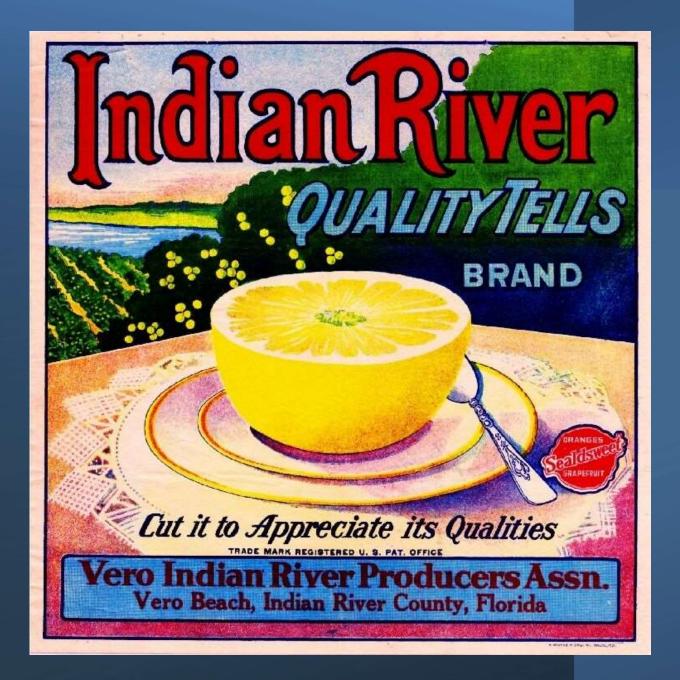


Fred G. Gmitter Jr. and Jude W. Grosser



Florida Citrus Show 2021 Ft. Pierce, FL





- Captain Douglas Dummitt settled on Merritt Island in 1807 and planted the first citrus grove
- Industry expansion throughout the 1800s
- Count Odet Philippe introduces grapefruit to Florida, 1823
- Indian River Citrus became synonymous with QUALITY
- 1930: FTC issued cease and desist order on using the name Indian River except for true Indian River Citrus
- 1931-1948: The Indian River Citrus League evolved

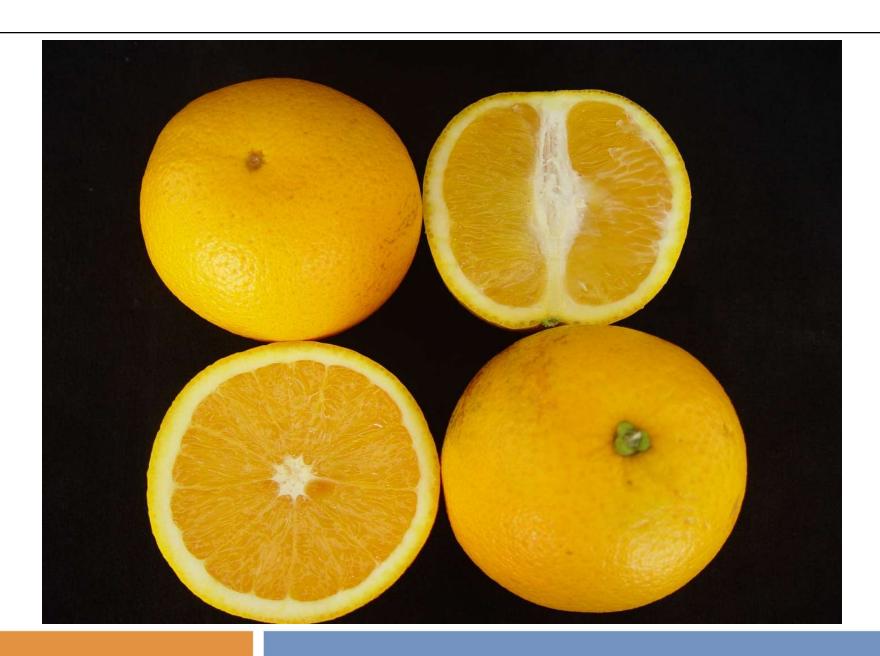
Historical Perspective





EV 1 and EV 2





Valquarius™





ValenfreshTM



ORANGES

'OLL-8'

- Key attributes: Excellent color and quality, extends harvest window of 'Valencia' quality juice
- Produces round oranges with internal and external color similar to 'Rhode Red Valencia'
- Holds on the tree exceptionally well, and maintains quality into the summer
- Trees appear to yield better than standard 'Valencia'
- High juice content and good pounds solids
- Peels easier than a standard 'Valencia'
- With its added color, could also be a valuable addition to the Florida fresh market portfolio
- Most precocious bearing clone among the OLL somaclones

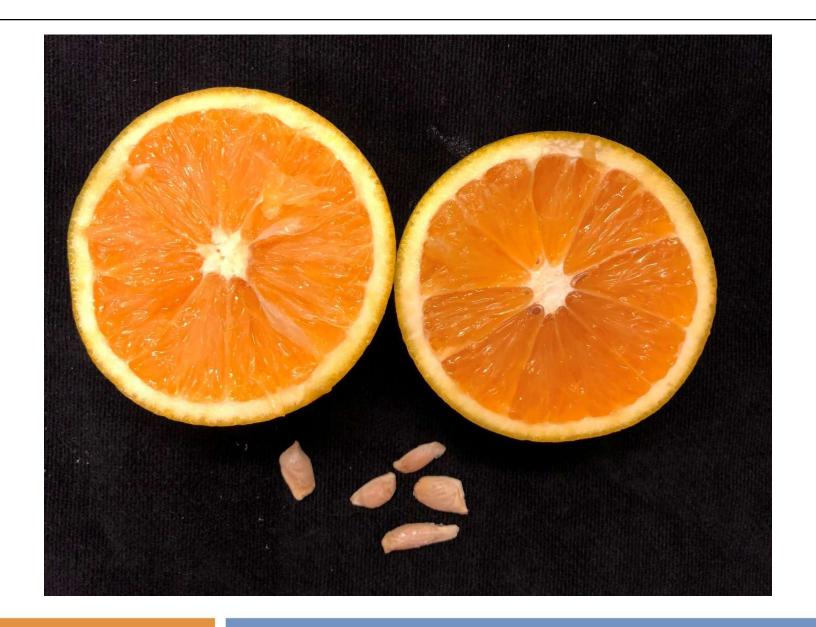




<u>'OLL-4'</u>

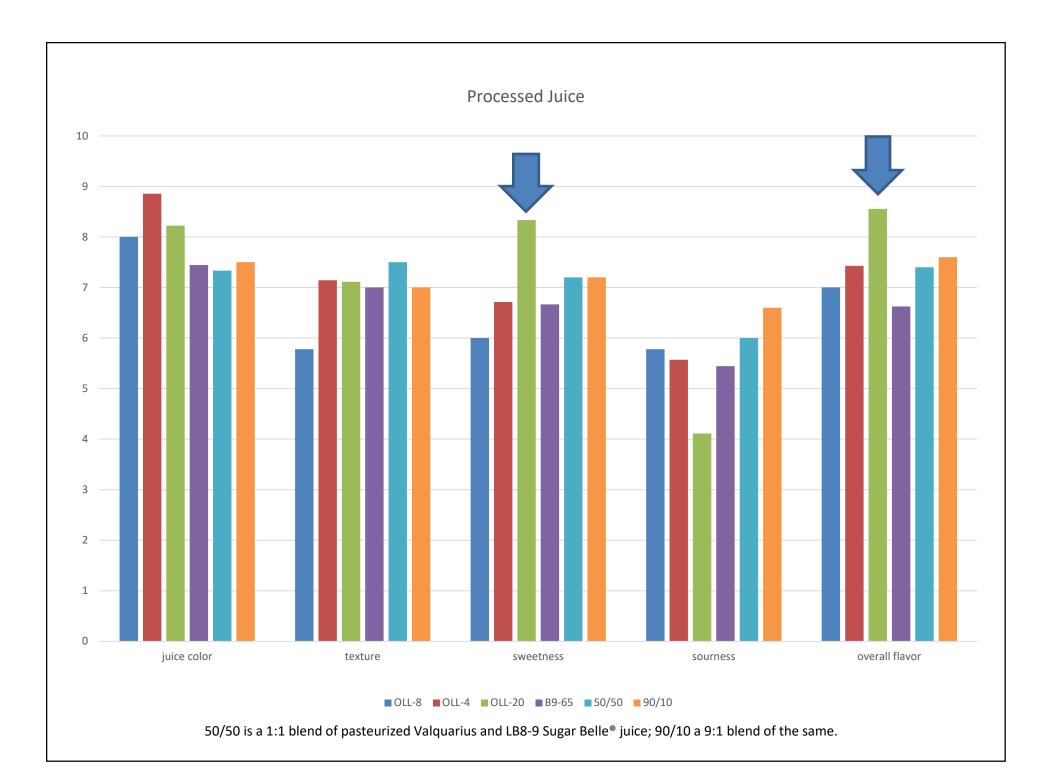
- Key attributes: excellent color and quality, extends harvest window of 'Valencia' quality juice; also believed to be higher yielding than 'Valencia'
- Produces fruit with excellent internal and external quality with exceptional juice color scores, juice content and soluble solids
- Holds on the tree exceptionally well
- Maintains quality into the summer; however, it matured earlier, and with better ratios than 'Valencia' in 2014
- Has been the highest yielding tree among the OLL somaclones



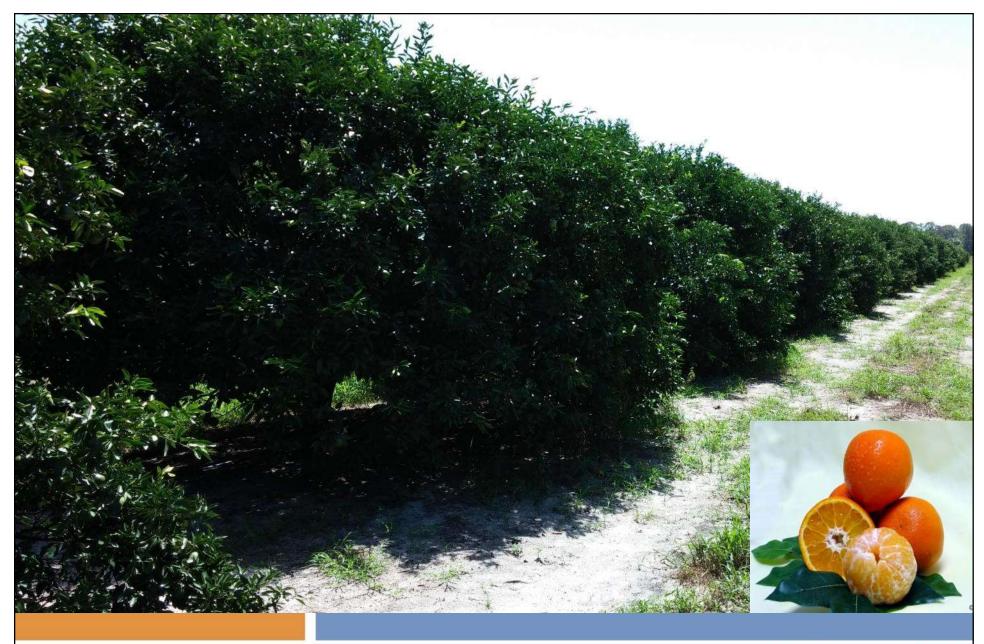


New Release OLL-20



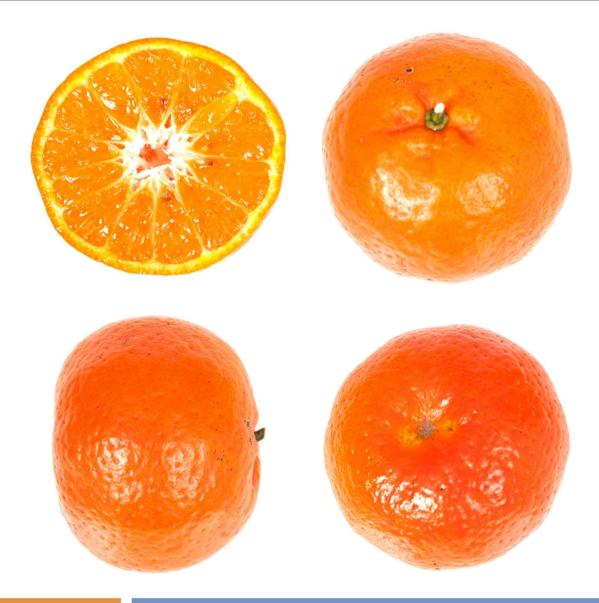






Sugar Belle® near Vero Beach, HLB+ >8 years!





'BINGO'





Original Seedling Tree 7-6-27 UF FLORIDA





Typical Fruiting Habit





Bingo 3rd Year Pruned Trees





Bingo 3rd Year Pruned Tree





'Bingo' at Harvest 30 Sept. 2015





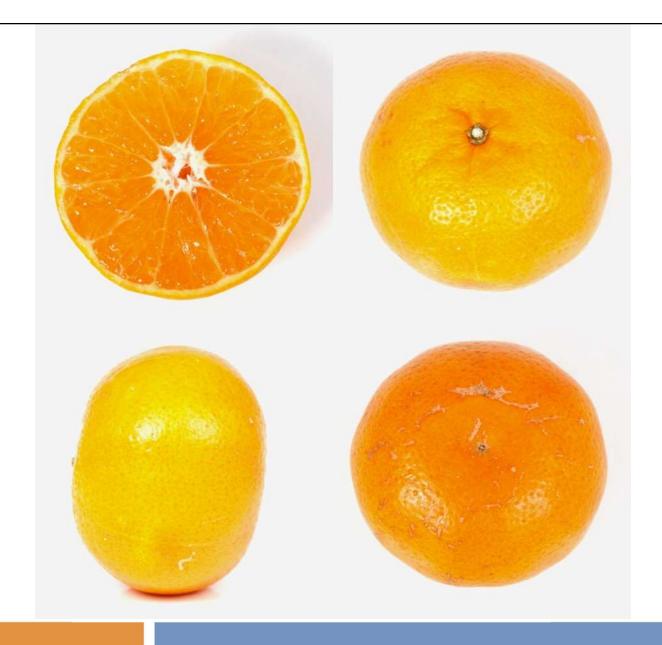
'Bingo' 2 weeks after Degreening (L) UF FLORIDA **16 October 2015**



Selection	Degreening	6 weeks of storage	8 weeks of storage		
		Healthy Fruit (%)	Healthy Fruit (%)	Total Decay (%)	Total Peel Breakdown (%)
BB-4-8-20	yes	100.00	62.50	25.00	12.50
	No	100.00	75.00	12.50	12.50
Bingo	yes	100.00	92.30	7.70	0.00
	No	100.00	92.85	0.00	7.15
1420	Yes	100.00	100.00	0.00	0.00
	No	100.00	100.00	0.00	0.00
Fallglo	Yes	100.00	66.66	33.33	0.00
	No	100.00	83.33	16.66	0.00

Post-Harvest Performance





Marathon





Marathon/Sour Orange 4 yr







Harvest: 30 Sept 2015 2 weeks post-degreening, top rows treated

1420: Response to Ethylene





Marathon



UF 950

- EZ to peel, seedless
- Clementine size
- Convenient to eat
- Crisp texture
- Better color and flavor than Clementine
- December maturity
- Alternaria resistant
- HLB tolerant
- Moved into commercial plantings



UF 914

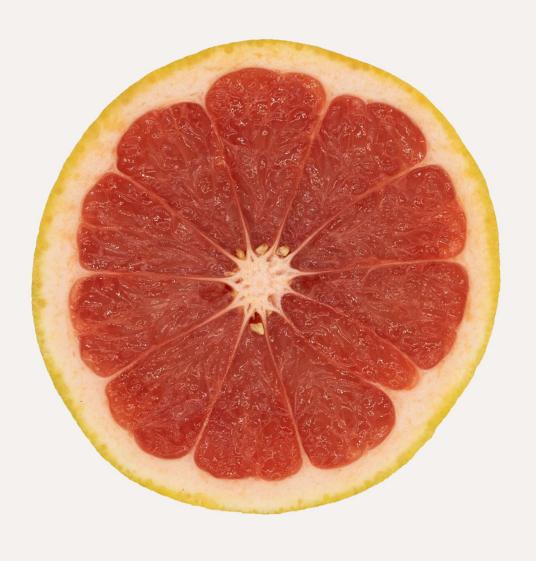
- Red flesh color
- Attractive peel blush
- Grapefruit size (+)
- Grapefruit flavor and aroma
- Tender and juicy flesh
- Very low in FC's (GJE)
- Seedless
- Good brix, lower acid
- SWEETER!



- There is a potential medical claim to make, to recapture the Senior Statin Market
- Focus group showed it is distinguishable from grapefruit to ordinary consumers
- Is there a reason to market UF 914 other than the counter to the drug interaction?
- South Korea, what they buy, and how they use it
 - Red grapefruit, to mix with sugar and tea or "shojiu"
 - White fleshed "Sweeties" for fresh, but red is BETTER!

What to think about UF 914?





UF 914 CUPS Fruit
January 2021





Pummelette



N2-28 Summer Gold Grapefruit

Table 1. Comparison between summer N2-28 'Summer Gold Grapefruit' and controls 'Ruby Red' and 'Pink Marsh" for the Brix, color and titrable acidity value (average of 20 fruit per selection, test conducted July, 2013).

	Brix°	Color	Titrable Acidity (ml)
Summer Gold N2-28	11.6	34	0.98
'Ruby Red' grapefruit	9.4	34.5	0.85
'Pink Marsh' grapefruit	8.2	34.3	1.2

- Cybrid with 'Dancy' cytoplasm
- Sweeter than Ruby Grapefruit
- Harvest from December to August!
- No granulation or seed germination



Dark Red Cybrid Flame (non-GMO) showing recovery from HLB!



Cybrid Flame/Swingle tree showing good recovery from HLB when treated with CRF + extra polycoated manganese sulfate. Fruit had 11-12 brix this year.







HLB-tolerant hybrid 1924





HLB-tolerant hybrid 1862





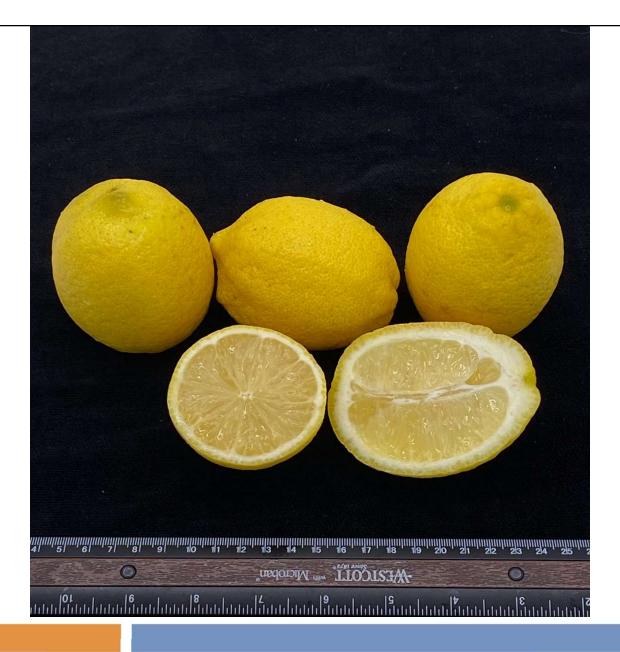
Lemons for Processing



- Lemon improvement project since 1998
- Objective was to increase yields of peel oil
- Top 50 of more than 3000 lemon trees
- Large scale replicated trial for industry in SA
- Smaller trials and plantings in Florida
- Several "seedless" clones identified

Upcoming Lemon Releases





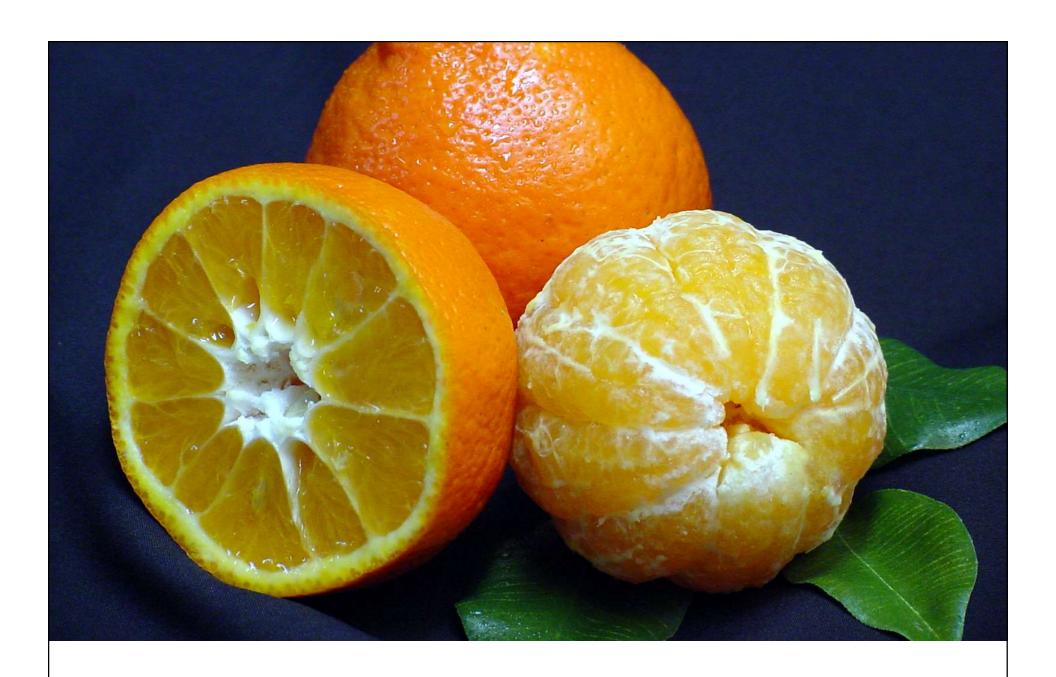
Seedless Lemons





What's new, 2031?





THANK YOU!