

CITRUS BUDWOOD

Annual Report 2018-2019



Florida Department of Agriculture and Consumer Services

Bureau of Citrus Budwood Registration
Ben Rosson, Chief

We are now entering the 66th year of the Citrus Budwood Registration Program. A lot has changed over the past year with the addition of new employees, shifts in production, department-wide changes in processes and procedures, while still remaining the same in quality, controls and distribution. Our program has started a major shift toward moving operations north to the Florida Citrus Repository in LaCrosse, which is now in full operation. All new in-state varieties will still be delivered to Winter Haven, with the clean STG's being brought up to LaCrosse to grow them out for delivery to Chiefland and the breeders.

This past year, Bureau staff had the opportunity to take a trip to California for the International HLB conference and to tour California citrus groves. Wow, it takes me back to what our groves looked like before HLB reared its head. The trip also allowed us to network with our colleagues from other programs to discuss ways to speed up introductions and streamline the process.

Also during this past year, both labs in LaCrosse have fully come online and have been processing all scion tree registration samples as well as all seed tree samples for certification. With the advances and streamlining of the collection and extraction process, we have been able to “stay ahead of the game” with providing timely results to the industry while still maintaining the cleanup process for the multiple new introductions from within and outside of the State. The Florida program has made thousands of parent tree selections over the years. Our Winter Haven location maintains the Florida Citrus Arboretum which currently showcases over 200 trees including unique and historical varieties. Budwood for distribution to growers is kept at Chiefland in protected greenhouses outside the geographic bounds of commercially grown citrus.

Finally, this year brought expansion of the Chiefland Foundation Greenhouses to allow for an additional 630 tree spaces to be planted. While this is a huge help, it is already filled with a massive number of new selections that are coming into the program.

Chiefland Foundation by the Numbers

- 13th year of operation
- 371,016 bud eyes cut and distributed in 2018-2019
- Over 4.3 million bud eyes dispensed since 2008
- 3.5 acres of greenhouses contain 2,240 citrus trees
- Over 900 different clonal selections representing over 700 different varieties are maintained
- 51 customers received budwood this year
- Budwood was cut on 137 different days to fill 210 individual orders
- 36 Florida commercial citrus nurseries which represent 80 percent of the commercial Florida citrus nurseries received budwood this year

Bureau of Citrus Budwood Registration Staff Members			28 Full time employees (FTE), 5 OPS positions	
			Chiefland	3 FTE, 2 OPS
			Winter Haven	15 FTE, 2 OPS
			LaCrosse	12 FTE, 1 OPS
Name		Position Title		
LACROSSE - CITRUS GERMPLASM INTRODUCTION PROGRAM			Area of Responsibility	Phone
Ben Rosson		Bureau Chief	Chief of Citrus Budwood Registration – DACS 001347	352-395-4993
Elizabeth Parrish		Administrative Secretary	Assistant to the Bureau Chief 001352	352-395-4986
Kristen Helseth		Biological Administrator III – SES	Program Manager 001348	352-395-4992
James Coleman		Biological Scientist IV - SES	Phase I Lab Manager 001331	352-395-4994
Rinu Kooliyottil		Biological Scientist IV	Laboratory Testing 001582	352-395-4987
Regina Fairbanks		Biological Scientist III	CGIP Lab 001922	352-395-4994
Meril Mathew		Biological Scientist IV – SES	Phase II Lab Manager 001389	352-395-4989
Kin-Kwan Lai		Biological Scientist III	Laboratory Testing 001244	352-395-4989
Charles “Garrett” Dudley		Agriculture & Consumer Prot Spec Supv - SES	Greenhouse Manager 001371	352-395-4990
Diego Posada		Agriculture & Consumer Prot Spec	Greenhouse Caretaking 001346	352-395-4738
Anne Schwartz		OPS Laboratory Technician IV	Greenhouse Caretaking & Lab Assistant 913165	
Sherri Ashby		Laboratory Technician IV	Greenhouse Caretaking 003772	352-395-4996
Vester Coggins		Maintenance Mechanic	Phase I & II 001625	352-395-4990
WINTER HAVEN – CITRUS BUDWOOD & CITRUS NURSERY INSPECTION				
Justin Ezell		Operations & Mgmt Consultant Mgr - SES	Program Administration Winter Haven 004328	863-298-3042
Karen Ouellette		Management Analyst II – SES	Source Tree Records 001353	863-298-3045
Randall Dean		Environmental Supervisor I - SES	Citrus Nursery Inspection Supervisor 004458	863-298-3039
Johnny Yates		Environmental Specialist II	Citrus Nursery Inspection 004350	863-298-3037
Donald Taylor		Environmental Specialist II	Citrus Nursery Inspection 004464	863-298-3037
Ana Lebron-Rivera		Environmental Specialist II	Citrus Nursery Inspection 001435	863-298-3043
Ajia Paolillo		Environmental Specialist II	Citrus Nursery Inspection 004439	863-298-3036
Ashley Nolen		Environmental Specialist II	Citrus Nursery Inspection 004342	863-314-5904
Craig Landress		Environmental Specialist II	Citrus Nursery Inspection 004444	863-314-5904
Peter Carbon		Environmental Specialist II	Citrus Nursery Inspection 000260	352-395-4705
Louisa Litten		Biological Scientist III	Shoot-tip Grafting 001252	863-298-3044
Kaleigh Walker		Biological Scientist II	Parent Tree Cleanup	863-298-3052
Kacie Gmitter		OPS Laboratory Technician I	Lab Assistant 900395	863-298-3047
Meta Roth		Agricultural Technician III	Greenhouse Caretaking 001414	863-298-3051
Mercedes Jusino		Laboratory Technician II	Greenhouse Caretaking 001350	863-298-3051
Joe Hanus		Grounds keeping Supervisor II – SES	Arboretum Caretaking 001948	863-298-3045
James Bouie		OPS Agricultural Technician II	Part-time Arboretum Caretaking 901151	863-298-3045
CHIEFLAND – CITRUS BUDWOOD FOUNDATION				
Marc McCaskill		Operations & Mgmt Consultant Mgr - SES	Chiefland Foundation Budwood Distribution	352-493-6801
Shelby Sheppard		OPS Senior Clerk	Receptionist & Budwood Orders	352-493-6801
Robert Brady		Environmental Specialist I	Greenhouse Caretaking & Budwood Cutting	352-493-6801
George Miller		Agriculture & Consumer Protection Specialist	Greenhouse Caretaking & Budwood Cutting	352-493-6801
Dakota Horlocker		OPS Agricultural Technician II	Part-time Budwood Cutting	352-493-6801
Citrus Budwood Technical Advisory Committee Members				
Representative				
Grower	Nursery	Regulatory	Research	
Bryan Belcher	Michael Monroe	Dr. Susan Halbert	Dr. Kim Bowman	
Peter Chaires	John Gose	Kristen Helseth	Dr. Fred Gmitter	
Tom Hammond	Nate Jameson	Ben Rosson	Dr. Mark Hilf	
Peter McClure	*Phillip Rucks	Justin Ezell	Dr. Bill Dawson	
Michael Stewart	Tommy Thayer			
*Committee Chairman Last Committee meeting 10/31/2018				
The Citrus Budwood Technical Advisory Committee provides oversight to the Citrus Nursery Stock Certification Program.				

Florida Citrus Nursery Participants

Forty-One Florida citrus nurseries and three research agencies reported making propagations in the 2018-2019 fiscal year.

The data table closed July 17, 2019. Any budwood cutting reports submitted after that date were not recorded. It is imperative to submit budwood cutting reports as soon as propagations have been made in order for the information to be as accurate as possible.

PART#	PARTICIPANT NAME	Nursery Type	PART#	PARTICIPANT NAME	Nursery Type
0970	Agri Masters Citrus Nursery, LLC	C	0738	Joshua Citrus Nursery	C
0968	Agromillora Florida, Inc.	TC	0199	Lykes Citrus Division	C
0888	James H. Albritton	OU	0882	McGill Citrus Nursery, Inc.	C
0821	Robert J. Barben, Inc.	C	0952	Murphy Citrus Nursery, Inc.	C
0955	Blue Heron Nurseries, LLC	C	0965	North Florida Citrus	C
0805	Brewer Citrus Nursery	C	0817	Petteway Growers	C
0876	Brite Leaf Citrus Nursery, LLC	C	0384	Philmon Citrus Nursery	C
0969	Citrific Holdings, Inc.	C	0974	Propagations Unlimited, Inc.	C
0960	CitriSun Nurseries, LLC	C	0625	Rasnake Citrus Nursery	C
0913	Cutrale Farms, Inc.	C	0778	Reclamation Trees	C
0961	Dilley Citrus Nursery, Inc.	C	0832	Record Buck Farms, Inc.	DY, WHSL
0799	K & C Farmer Citrus Nursery, Inc.	C	0721	Phillip Rucks Citrus Nursery, Inc.	C
0801	Fiddler's Ridge Farms, Inc.	C	0962	Sawmill Citrus Nursery, LLC	C
0728	Flood Clinch Lake Nursery	C	0753	South Ridge Citrus Nursery, Inc.	C
0702	Floyd & Associates, Inc.	C	0033	Southern Citrus Nurseries, LLC	C
0929	Gose Growers, Inc.	C	0700	Southern Gardens Citrus Nursery, LLC	C
0522	W. E. Green & Sons Citrus Nursery	C	0948	Sun Ag LLC	C
0519	Ben Hill Griffin, Inc.	C	0823	Carl M. Wilburn, Inc.	C
0773	Harris Citrus Nursery	C, DY	0920	W.W. Citrus Nursery	C
0433	Himrod Citrus Nursery, Inc.	C	0001	Wards Nursery, Inc.	C
0355	Holmberg Farms, Inc.	C, DY			

Nursery Type

C = Commercial

OU = Own use

DY = Dooryard

WHSL = Wholesale

RE = Research

ST = Source trees only

TC = Tissue culture or micro-propagation

Research Agencies Propagating

1004	UF - CREC	RE
1008	USDA - FT. Pierce	RE
1012	UF-Mid-Florida REC-Apopka	RE

7,575 propagations were reported by research agencies.

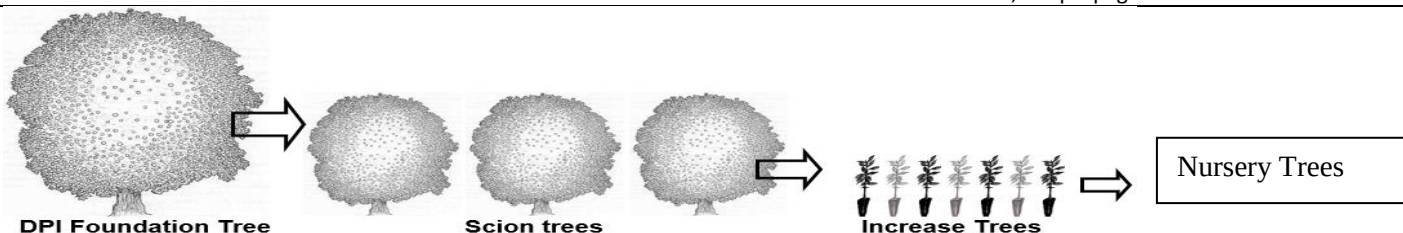
12,299 bud eyes were distributed out of the state.

126,872 bud eyes were reported for top-working commercial groves.

Citrus Nursery Activity				The 2018-2019 annual report was based on information from 56 registered citrus nurseries. Nursery propagations were obtained from the amount budded on the budwood cutting reports, not including research facilities and out of state. Fifteen of the 56 citrus nurseries did not submit budwood cutting reports and were recorded as nurseries not propagating.				
3,971,662* nursery propagations in 2018-2019 from 41 active citrus nurseries (of 56 registered citrus nurseries) *based on information reported								
	# of Propagations	2018	2017	2016	2015	2014	2013	
	<1,000	1	3	4	3	3	3	
	1,000-10,000	10	10	18	11	9	7	
	10,000-25,000	2	9	6	9	9	8	
	25,000-50,000	8	7	6	10	8	7	
	50,000-75,000	4	3	3	5	5	5	
	75,000-100,000	3	0	4	4	5	5	
	100,000-200,000	7	6	8	6	6	6	
	200,000-400,000	5	4	3	4	5	4	
	400,000-600,000	1	2	1	1	2	3	
	>600,000	0	0	1	1	0	0	
		41	44	54	54	52	48	
		2018	2017	2016	2015	2014	2013	
	Number Propagations Reported	3,971,662	3,572,797	4,344,446	4,438,128	4,712,439	4,700,728	
	Propagations Change by	398,865	(771,649)	(93,682)	(274,311)	11,711	759,679	
	Percent Change (increase or decrease)	11.16%	(21.6) %	(2.11) %	(5.8) %	.3%	19.3%	
	Nurseries Increasing Production	21	15	25	15	25	18	
	Nurseries Decreasing Production	13	28	24	33	21	24	
	New or Resumed Production	7	1	3	6	5	6	
	Nurseries Not Reporting Propagations	15	10	2	4	1	4	
by County		#Propagations	<u>Top Variety Clone</u> Valencia SPB-1-14-19 1,465,751 budded		<u>Top Rootstock</u> US-942 846,608 propagations			
1	Polk	2,019,681	159 different varieties were propagated		<u>Rootstock Types</u> Tissue Culture R/S 15 different rootstocks 648,918 propagations Rooted Cuttings 22 different rootstocks 262,925 propagations Seed 51 different rootstocks 3,059,819 propagations			
2	Sumter	566,438						
3	Gilchrist	302,231						
4	Hillsborough	209,108	256 different clones were propagated					
5	Highlands	194,899						
6	Hardee	165,315						
7	Desoto	150,120	Propagative material can only be taken from Registered or Certified Source Trees of the following categories: Foundation Tree - Scion Tree - Increase Block Tree - Seed Source Tree (seed only)		<u>Top Tissue Culture Rootstock</u> US-942 593,948 propagations			
8	Lake	132,571						
9	Orange	78,840						
10	Charlotte	76,697						
11	Taylor	39,476						
12	Pasco	33,476						
13	Indian River	2,371						
	Total	3,971,662						
Mandatory Registration since 1997 Mandatory Greenhouse Production since 2007								

Budwood can only be sold to registered citrus nurseries or citrus research agencies. Some varieties are unavailable as they are not yet released, and others may only be available to nurseries with license agreements.

Budwood Source Trees							
Scion Trees							
New Scion trees must originate from Chiefland foundation budwood							
		#Trees		(Not including Research participants or out of State)			
Category		2018	2017		Scion Blocks	2018	2017
Seed Source		8,557	10,203		Participants with Scion Blocks	24	30
Budwood Scion		2,527	3,054		Number of Scion Blocks (Budwood)	35	42
	Sweet Orange	1,864	2,239		Participants with Seed Source Blocks	23	21
	Grapefruit	104	169		Number of Seed Source Blocks	44	37
	Mandarin	356	413		#Bud eyes cut	2018	2017
	Lemon/Lime	123	131		Foundation *	333,337	319,697
	Pummelo	11	19		Scion	1,599,732	1,054,939
	Kumquat	25	34		Increase	2,125,112	2,445,744
	Other	44	49		Total	4,058,181	3,820,380
	Total	11,084	13,257		* The figure from the database may be lower or higher than the figure actually cut from Chiefland.		

Increase Trees		
<u>Label Increase Trees with the Originating BCR Number</u> Use the BCR-number of the original Source Tree Bud Cutting Report that established the block to identify the origin of the propagations every time the increase block is cut. Increase trees can only originate from scion trees or Chiefland Foundation budwood.		
2018-2019		Approved increase blocks shall be used as a source of propagation material for a period of up to 36 months from budding or extended to a maximum of 60 months with composite diagnostic testing prior to the 36-month expiration date.
Total bud eyes cut from Increase Blocks (IB)	2,125,112	
% of all B/W originating from IB	52.36%	
# Nurseries reported cutting IB	20	
Valencia SPB-1-14-19 was the most popular variety-clone cut from increase blocks at 1,495,001 budeyes cut.		
Valencia SPB-1-14-19 on SWG rootstock was the combination most budded from increase blocks at 426,430 propagations.		
 DPI Foundation Tree Scion trees Increase Trees Nursery Trees		

Top Clones Propagated 2018-2019			
	Variety Clone	# Budded	Description
1	Valencia SPB-1-14-19	1,465,751	A Hughes nucellar line, entered budwood program in 1955. These SPB-1 trees are the first selections from open pollinated Valencia seedlings in a grove planted by Dr. and Mrs. Ausker Hughes near Plymouth in Orange County in 1941. The nucellar characteristics made them more cold hardy than the old-line selections. Fruit production is better than the old-line selections. They have become the most popular Valencia selections in Florida. Similar to SPB-1-14-31, and SPB-1-12-7.
2	Hamlin 1-4-1	568,093	Is an old-line selection entered into the budwood program by Ward's Nursery in Avon Park. This was the first Hamlin selection entered into the budwood parent tree program in 1953 and still remains the most widely propagated early orange. It has typical Hamlin traits and excellent yields. Hamlin originated in Florida as a chance seedling near Glenwood in 1879. Named after citrus culturist Arthur George Hamlin who was DeLand's first attorney and a legal advisor to Henry Flagler.
3	Vernia UF 35-15	461,988	This is Dr. Bill Castle's nucellar selection planted at Orie Lee's, St. Cloud. Entered in to the budwood program 5/15/1996. The seed for the DPI-441 clone originated from the Coca Cola, Hodgson Grove, Indian Town, same as the Vernia-3 clone. Vernia is a Spanish variety; fruit medium-small, egg shaped, well colored, very prolific, fruit holds well, inclined to produce off bloom fruit, smaller than Valencia. The season is several weeks earlier than Valencia.
4	Valencia F-55-4	229,299	The "55 series" are DPI nucellar lines. These selections are young nucellar lines from seedlings of fruit collected from the Hughes grove in Orange County. Fruit characteristics are typical of Valencia oranges. Trees are a little more vigorous than old line and Hughes nucellar selections. Fruit production has been slightly better than the Hughes selections and significantly better than the old lines. Similar to F-55-4, F-55-1, S-F-55-28, and F-55-23. Originally assigned SPB-5A, planted in 1/4 Foundation Grove in 1961.
5	Bearss Le SPB-341-95-33	141,682	Entered into budwood program, 11/1/1966 from the Coca Cola Hodgson grove at Indiantown. The Minute Maid trees were established from budwood from the original Bearss seedling trees at Lutz, FL. The two main clones propagated were 95-33 and 134-3; 95-33 is the selection propagated today. Bearss is the major lemon selection grown in Florida. Similar to Lisbon, vigorous, less thorny than normal, 1-6 seeds, scab susceptible, peel oil 14.12+ lbs./ton. Season: July-December, summer bearing.
6	Hamlin 8-1-4	63,825	Parent tree entered into the program from the Story Property in Winter Garden in 1953. A top yielding clone in the Budwood Foundation Grove. This clone has typical Hamlin traits and excellent yields.
7	Sweet Orange UF OLL8	54,540	Restricted propagation - proprietary - Description will be provided by IFAS upon release.
8	Ruby Red Gft F-58-39	53,728	Originated from Dr. Mort Cohen's closed pollination selections made from the grove near the Century Tower on the campus of UF. This was the first Ruby Red grapefruit free of exocortis. Excellent fruit yields with typical fruit shape and color of the Ruby variety. Origin: Limb sport of Thompson, McAllen, Texas 1929. Description: Deeper flesh coloration than Thompson, blush in peel, flesh fades to pink later in the season. Season: November-May.
9	Valencia SPB-1-14-31	53,450	Hughes nucellar line, entered budwood program in 1955. These SPB-1 trees are the first selections from open pollinated Valencia seedlings in a grove planted by Dr. and Mrs. Ausker Hughes near Plymouth in Orange County in 1941. The nucellar characteristics made them more cold hardy than the old-line selections. Fruit production is better than the old-line selections. They have become the most popular Valencia selections in Florida. Similar to SPB-1-14-19, and SPB-1-12-7.
10	Flame Gft US 1-26-71	52,765	Originated from seedlings planted in Florida from the Henderson variety which came from Texas. Seed collected by Dr. Wutscher in Texas and planted by Dr. Hearn in 1973. Entered into program by Jack Hearn 7/17/1981 and released by the USDA in 1987. Early evaluation block planted at DPI WHIP. The fruit color is nearly as good as Star Ruby and has a decent blush. Holds flesh color well into season.
11	WG Man 911-C-37	46,200	Private (proprietary) selection.
12	Star Ruby Gft DPI-60	38,771	One of the first new citrus varieties approved to bring into Florida for release to growers. The variety was requested by Dr. Bill Cooper, USDA in a letter dated 4/13/1970. The 10 budsticks were dispatched from the original Texas tree identified as 61-3 on 6/24/1971. Star Ruby was indexed by Dr. Garnsey, USDA before DPI had its germplasm introduction program and testing facilities up and running. Indexing began in the fall of 1971. Originated from Texas A&M from irradiated seed of Hudson grapefruit variety 1959 and released to Texas growers 1970. The principal advantages are the deep red internal color and the exterior red blush. Leaves blotchy, chlorotic areas. Problems: Sensitive to some herbicides, foot rot, and cold. Fruit quality is not as good as Ruby Red with slightly smaller fruit size. Released 4/21/1977.
13	Valencia UF B9-65	38,496	Restricted propagation - proprietary -A high yield, high solids selection with typical Valencia maturity, best of 30 selections in trial at Conserve II.
14	Tango CGIP-168	37,821	Developed by the University of California Riverside citrus breeding program (patented). This is a seedless version of the W Murcott achieved by irradiating budwood. Budwood from CCPP was tested by CGIP in 2007. The selection was planted at Chiefland in 2009. Propagation is restricted, must have license agreement with the New Varieties Development & Management Corp.
15	Hamlin 8-1-5	36,630	Parent tree entered into the program from the Story Property in Winter Garden in 1953. A top yielding clone in the Budwood Foundation Grove. This clone has typical Hamlin traits and excellent yields.
16	Minneola F-60-5	32,914	This nucellar honeybell selection originated from open pollinated seedlings at the Glen St. Mary Nursery in Dundee (Polk County), 3/25/1957. Seedlings planted at WHIP and planted at the Haines city foundation in rows 56 and 58 in 1963. Typical traits generally associated with Minneola tangelos. Origin: Florida, Duncan x Dancy, USDA release 1931. Description: Pronounced neck at stem end, deep orange-red color, needs pollinator (Temple, Sunburst, Fallglo), 7-12 seeds, susceptible to alternaria, brown spot and scab. Mid-late.
17	WG Man 911-17	31,770	Mandarin selection entered in 2007 by W. G. Roe. Restricted
18	Valencia F-55-23	26,394	The "55 series" are DPI nucellar lines. These selections are young nucellar lines from seedlings of fruit collected from the Hughes grove in Orange County. Fruit characteristics are typical of Valencia oranges. Trees are a little more vigorous than old line and Hughes nucellar selections. Fruit production has been slightly better than the Hughes selections and significantly better than the old lines. Similar to F-55-4, F-55-1, S-F-55-28, and F-55-23. Originally assigned SPB-5A, planted in 1/4 Foundation Grove in 1961.
19	Meyer Le US	25,280	Received budwood from the USDA 1/26/1996 for this selection. It is a typical Meyer lemon type popular with homeowners. The fruit is round, yellow and more cold hardy than typical lemons. Originally brought into the USA by Frank Meyer in 1908 who was a USDA plant explorer. Origin: China, also known as Peking lemon. Description: Ever flowering mainly in spring, large size, smooth skin, lower acidity, more cold tolerant than lemons, dooryard, fruit tender and juicy, moderately seedy (10), low spreading growth habit. Season: Fruit throughout the year, mainly winter, November-March.
20	Glen Navel F-56-11	24,775	This is a nucellar selection originating from Glen St. Mary's Nursery. Found as a group of trees in a Washington navel grove of W. G. Roe of Winter Haven. It was named and introduced by the Glen St. Mary Nurseries of Glen St. Mary, Florida. The 56 clonal selections are seedlings of the Glen navel. The DPI released clones originated as seed from flowers pollinated in March 1955. The seed were planted at the University of Florida horticultural greenhouses in December 1955. The seedlings were received in Winter Haven from the Gainesville laboratory 9/4/1957 and assigned the SPB number 43. These seedlings were moved to the original DPI foundation planting north of Haines City. The original 56-11 & 56-12 trees were planted 3/7/1960 in row 56 of the foundation grove in tree spaces 11 & 12 respectively. Glen fruit is typically large with an open non-protruding navel; yields are good with average brix/acid ratios.

Top Clones Propagated 2018-2019

	Variety Clone	# Budded	Description
21	Cara Cara Navel CGIP-104	22,233	This red fleshed navel was believed to originate from a limb sport on a Washington navel orange tree on the property of Mr. Domingas. It was brought to the attention of E. P. Du Charme during a visit to the Hacienda Cara Cara in Venezuela. Dr. Al Krezdon, University of Florida, requested introduction of the Cara Cara in August 1975. Dr. Al Krezdon brought 5 sticks of budwood back from Venezuela in early July 1977. The budwood tested positive for exocortis viroid by CGIP and was shoot-tip grafted before being released to the budwood office 8/9/1983 for evaluation. Cara Cara was released to the citrus growers June 1, 1987. The Cara Cara name is interpreted as beloved in Italian. Trees tend toward variegation and variegated flushes are common.
22	Bingo UF 7-6-27	20,259	A completely seedless mandarin, very easy to peel fruit, small to medium size, red-orange external color, excellent flavor with high Brix and adequate acid to balance. November maturity. Tree is only moderately vigorous. The original tree shows substantially greater tolerance of HLB than most of the other seedlings in this family.
23	Sweet Orange UF OLL4	19,430	Entered by Dr. Jude Grosser CREC, High quality processing sweet orange, also attractive for fresh market. Trees are more cold hardy and drought tolerant than Valencia, also has higher juice %, solids, and color than standard Valencia. This clone is repeating for exceptional yield and large fruit size.
24	Key Lime SPB-51-12	18,947	Most likely collected from Avon Park Bombing Range around 1957. This is the main Key Lime clone utilized in nursery industry. Origin: W. Indies. Description: Very small fruit, thin rind, smooth, moderately seedy 3-5, greenish yellow. Season: Ever bearing, mainly winter.
25	Brown Select Sat 61-0-1	18,510	Brown Select 61-1 originated at the Louisiana Citrus Research Station from a group of open-pollinated Kimbrough seedlings. Reported to be more cold hardy than Owari and ripens 1 or 2 weeks earlier than Owari. Original seed from LSU, DPI-50-29, 12/2/1994.
26	Florida EV1 UF B7-70	18,390	Somaclone of Valencia (derived from tissue culture), matures in January/February with typical Valencia quality and characteristics. Less thorny than Valquarius. Previously cleaned up by CGIP via thermotherapy (Lisa Williams).
27	Sugar Belle UF LB8-9	18,064	Released in 2009 by Dr. Fred Gmitter, IFAS. It is a seedy variety resembling Mineola tangelo although smaller in size and having a late November maturity. Fruit color, flavor, tolerance to alternaria and earlier maturity are its main attributes. Florida Foundation Seed Producers, Inc. granted the New Varieties Development & Management Corp. the exclusive USA licensee for this variety. Must have license agreement with the New Varieties Development & Management Corp to propagate.
28	Early Pride US 1-62-122	17,824	A USDA selection released for evaluation in 2009. Originates from Fallglo budwood that Dr. Jack Hearn had irradiated in 1991. Identical to Fallglo except seedless (0-4 seeds) and slightly smaller sized fruit. Mid-October maturity thru mid-November. Origin: USDA FF-10B-8-29. Must have contract with NVDMC to propagate. First patented USDA citrus scion variety. Needs pollinator.
29	Ray Ruby Gft CGIP-103	15,868	Originated from a Ruby Red grapefruit mutation in Texas. Discovered in a Weslaco, Texas Ruby Red grove 1970 by Robert Ray, identical or similar to Henderson? Flesh color and exterior blush is more red than Ruby Red but not as intense as Star Ruby. Good internal red fruit color slightly less than Flame. Good fruit size and shape. Excellent quality, comparable to Ruby Red. Good yields. Released in 1986.
30	Persian Lime SPB-7	15,654	The original tree was entered into the budwood program in 1954 by Coral Reef Nursery as Li-38-1-1-X. This tree was owned by E. J. Norman of Homestead said to be one of the oldest in Dade county, and propagated by a man named English from one of the first five lime trees known to exist in the area. The current clone is a shoot-tip graft of the original clone. The first commercial Persian Lime planting in central Florida was in 1897 about 2 miles southeast of Lake Placid, planted by a grower whose Marion county trees were killed by the big freeze of 1895. The variety is also known as a Tahiti lime. Origin: Unknown, introduced to California from Tahiti. Description: Normally seedless with a high degree of monoembryony, most likely a hybrid, fruit medium small, smooth, thin rind, juicy. Season: Everbearing, mainly winter, June-September.

Top Rootstocks

2018		# Budded	2017	2016	2015	2014
1	US-942	846,608	Swingle	Kuharske	Kuharske	Swingle
2	Swingle	650,479	US-942	X-639	X-639	Kuharske
3	Kuharske	581,493	X-639	S/O	Swingle	Sour Orange
4	X-639	575,249	Kuharske	US-897	Sour Orange	X-639
5	Sour Orange	407,715	Sour Orange	SWG	Cleopatra	US-802
6	US-802	259,336	US-802	US-942	US-802	US-812
7	Volkamer	146,724	US-897	US-802	US-897	US-897
8	US-812	125,317	UFR-04	US-812	US-942	Cleopatra
9	US-897	92,148	US-812	Cleopatra	US-812	Carrizo
10	Rough Lemon	51,729	C-35	UFR-04	C-35 Citrange	Volkamer
11	C-35	44,180	Cleopatra	Volkamer	Carrizo	US-942
12	UFR-04	30,089	Volkamer	Kinkoji	Volkamer	C-35 Citrange
13	UFR-17	21,747	UFR-03	UFR-03	Own Root	Research Stock
14	Poncirus trifoliata	21,255	C-22	Carrizo	UFR-04	Unknown
15	US-1516	13,261	Carrizo	Rough Lemon	Kinkoji	Rough Lemon
16	Carrizo	12,440	Rough Lemon	Research	Rough Lemon	Kinkoji
17	Cleopatra	12,355	UFR-17	UFR-02	Unknown	Flying Dragon
18	Orange 14	9,963	Kinkoji	UFR-17	UFR-03	Poncirus trifoliata
19	C-54	9,255	UFR-01	UFR-16	Benton	Sun Chu Sha
20	C-22	7,097	Flying Dragon	Sun Chu Sha	Poncirus trifoliata	UF-02

Propagations by Season or Type					
SWEET ORANGES		PROPAGATIONS	% of Type	% Sweet Oranges	
Early	Hamlin 1-4-1	568,093	82.24	17.95	Early-Season (not including navel) 690,755 21.79% of Oranges
	Hamlin 8-1-4	63,825	9.23	2.01	
	Hamlin 8-1-5	36,630	5.3	1.15	
	Westin UF 47-2	7,600	1.1	<1	
	Parson Brown F-56-2	5,313	<1		
	Earlygold UF 33-4	4,666			
	Hamlin UF N13-32	2,487			
	Westin UF 47-13	1,900			
	US Sundragon	141			
	Salustiana 3-1-71	100			
	Totals Early Season	690,755			
Navel	Glen Navel F-56-11	24,775	38.76	<1	Navel 63,910 2.01% of Sweet Oranges
	Cara Cara Navel CGIP-104	22,233	34.78		
	Summerfield Navel DPI-70-4-9	10,877	17.01		
	Wash Navel F-60-19	3,504	5.48		
	Wash Navel F-60-18	1,578	2.46		
	M-7 Early Navel CGIP-194	690	1.07		
	Glen Navel F-56-12	253	<1		
	Totals Navel	63,910			
Midseason	Vernia UF 35-15	461,988	90.44	14.59	Midseason (not including blood oranges) 510,820 16.11% of Sweet Oranges
	Florida EV1 UF B7-70	18,390	3.6	<1	
	Midsweet US 6-9	14,552	2.84		
	Valquarius LT UF SF14W-62	5,445	1.06		
	Valencia UF SF14W-65 NP	3,484	<1		
	Pineapple SL US 10B-6-30	2,242			
	Florida EV2 UF SF14W-65	2,054			
	Pineapple 53-10-10	1,623			
	Pineapple F-60-3	869			
	Orange Hyb US 1-74-52	173			
	Totals Midseason	510,820			
Blood	Moro B/O DPI-50-19	2588	57.88	<1	Blood Orange 4,471 .14% of Sweet Oranges
	Moro B/O DPI-82	907	20.28		
	Sanguinelli B/O US 10-5-17	724	16.19		
	Moro B/O 3-3-11	252	5.63		
	Totals Blood Orange	4,471			
Late	Valencia SPB-1-14-19	1,465,751	77.17	46.31	Late-Season 1,899,233 59.92% of Sweet Oranges
	Valencia F-55-4	229,299	12.07	7.24	
	Sweet Orange UF OLL8	54,540	2.87	1.72	
	Valencia SPB-1-14-31	53,450	2.81	1.69	
	Valencia UF B9-65	38,496	2.02	1.21	
	Valencia F-55-23	26,394	1.38	<1	
	Sweet Orange UF OLL4	19,430	1.02		
	Rohde Red 472-11-43	7881	<1		
	Valencia F-55-28	1,962			
	Valencia Navel 522-15-14	1,080			
	Rhode Red 472-11-43	950			
	Totals Late Season	1,899,233			
Total Sweet Oranges		3,169,189			

Propagations by Type				Propagations by Type			
	Mandarin	# Budded	% Type		Lemon	# Budded	% Type
	WG Man 911-C-37	46,200	13.89		Bearss Le SPB-341-95-33	141,682	68.72
	Tango CGIP-168	37,821	11.37		Meyer Le US	25,280	12.26
	Minneola F-60-5	32,914	9.89		Harvey Le F-41-39	14,639	7.10
	WG Man 911-17	31,770	9.55		Eureka Le DPI -	14,145	6.86
	Bingo UF 7-6-27	20,259	6.09		Variegated Pink Le US	4,936	2.39
	Brown Select Sat 61-0-1	18,510	5.56		Ponderosa Le DPI-203-8	2,636	1.27
	Sugar Belle UF LB8-9	18,064	5.43		Eureka Le SL CGIP-223	1,261	<1
	Early Pride US 1-62-122	17,824	5.35		Lisbon Le UF 3-9	704	
	Owari Sat 874	15,466	4.65		Eureka Le SL #2 CGIP-226	420	
	Owari Sat F-60-23	10,555	3.17		Lemon UF 1-9-42	100	
	Orri CGIP-134	9,472	2.84		Lemon UF 1-6-18	80	
	Mandarin UFGlow 10-02	8,289	2.49		Lemon Hyb UF C4-8-3	75	
	Ponkan DPI-50-6	6,758	2.03		Lemon UF 2-3-33	56	
	Owari Sat F-60-25B	6,244	1.87		Lemon UF 1-20-31	44	
	Calamondin DPI-555	5,775	1.73		Lemon UF 1-1-55	42	
	W Murcott CGIP-122	5,549	1.66		Ice Tea Le UF C4-6-49	30	
	WG Man 911-B-37	5,000	1.50		Lemon UF 1-20-6	18	
	Kimbrough Sat CGIP-108	4,572	1.37		Nine Pound Le DPI-201-21	4	
	Sunburst US 5	4,567	1.37		Total Lemon	206,152	
	Nules Clem CGIP-125	4,175	1.25		Lime	# Budded	% Type
	Dancy F-59-8	2,902	<1		Key Lime SPB-51-12	18,947	40.86
	Mandarin UF 950	2,645			Persian Lime SPB-7	15,654	33.76
	Temple 33-6-15	2,164			Kaffir Lime UF	5,626	12.13
	Gold Nugget CGIP-139	1,732			Red Lime 899	4,968	10.71
	WG Man 911-B-26	1,700			Key Lime Thornless F-59-39	600	1.29
	Finger Lime DPI-205-1(not yet fruited)	1,272			Lime Hyb UF C4-10-11	264	<1
	Shiranui CGIP-132	1,079			Lime SL Hyb UF C4-4-26	75	
	Xie Shan Sat CGIP-163	890			Lime Hyb UF C4-6-52	75	
	Page US 2-58	822			Lime Hyb UF C4-9-33	72	
	Robinson US 3-56	720			Lime Hyb UF C4-10-8	45	
	Fallglo US 10-61-3	650			Lime Hyb UF C4-8-14	42	
	Murcott 130-1-1S	630			Total Lime	46,368	
	Finger Lime Giant DPI-205-4	567			Grapefruit	# Budded	% Type
	Temple LS DPI-75	500			Ruby Red Gft F-58-39	53,728	30.92
	Finger Lime DPI-50-36 Trial	441			Flame Gft US 1-26-71	52,765	30.36
	Orlando F-57-5	414			Star Ruby Gft DPI-60	38,771	22.31
	Mandarin LS US 1-22-79	393			Ray Ruby Gft CGIP-103	15,868	9.13
	Lee US 2-56	381			Marsh Gft 74-1-1	2,656	1.52
	Silver Hill Sat US	380			Thompson Gft 25-3-6	1,976	1.13
	Mandarin UF 1420	355			Rio Red Gft CGIP-110	1,676	<1
	Man X Org LT UF RBB-7-34	334			Red Gft UF 16-11-17	1,065	
	Mandarin SL US 1-35-21	253			Duncan Gft F-57-19	996	
	Pixie Man CGIP-181	180			Red Gft UF N40-16-11-7	946	
	Mandarin UF 3-13-51	169			Duncan Gft F-56-33	724	
	Mandarin LS US 4-13-31	138			Marsh Gft F-58-6	650	
	Mandarin LS US 4-13-7	127			Grapefruit UF N40-16-11-11	519	
	Mandarin UF BB4-8-20	119			Jackson Gft DPI-16	457	
	Mandarin UFSunrise 09-04	96			Marsh Gft F-57-4	448	
	Nova US 7-41	92			Red Gft UF N40-16-11-3	156	
	Mandarin LS US 4-13-39	81			Summer Gold Gft UF N2-28	84	
	Mandarin SL UF C4-15-21 (19)	80			Red Gft UF N11-29	78	
	Mandarin UF 1424	58			Red Gft UF N40-16-11-15	66	
	Clementine US	48			Seedless Surprise Gft US 1-77-19	48	
	Mandarin UF 13-17	48			Pink Gft US 1-26-51	36	
	Seedless Snack UF N40W-6-3	47			Grapefruit Hyb US 1-83-179	36	
	Kishu SL CGIP-137	36			Royal Gft US 4-39	6	
	Keraji DPI-50-38-3	36			Total Grapefruit	173,755	
	Murcott LS UF N40-18A-10-09	31			Kumquat	# Budded	% Type
	Murcott LS UF LB2-19	30			Meiwa Kum F-27-29	11,986	73.13
	Mandarin UF RES-19-56	25			Nagami Kum SPB-323-1-1	54,95	33.52
	Mandarin UF RES-19-22	25			Long Fruit Kum DPI-603-20-50	2,592	15.81
	Mandarin UFDawn 09-13	24			Centennial Kum US	1,811	11.05
	Mandarin Mid UF 711	18			Total Kumquat	16,389	
	Furr LS UF 18A-10-11	17					
	Man X Org LT UF RBB-7-34	17					
	Total Mandarin	332,550					

Propagations by Type			
	Pummelo & Hyb	# Budded	% Type
	Hirado Pum US 1-65	9,139	90.70
	Pummelo Hyb UF 914	192	1.90
	Red Pum UF KW-1-50	125	1.24
	Pummelo UF N7-4	78	<1
	Pummelo UF N40-16-12-7	65	
	Pummelette UF 5-1-99-2	54	
	Pummelo Hyb US 6-17-48	52	
	Pink Pum Hyb US 10-1-1	52	
	Red Pum UF C4-2-8	46	
	Pummelo Hyb US 6-17-16	36	
	Pummelo Hyb US 6-16-172	36	
	Pummelo Hyb UF C2-5-03	8	
	Pummelo Hyb UF NB19-28-0218	8	
	Thong Dee Pum UF 5-8A	8	
	Pummelo DPI-203-2	8	
	Pink Sensation Pum 884	8	
	Pummelo Hyb US 6-16-29	8	
	Large Pink Pum US 6-57	8	
	Pummelo Hyb UF NB17-4-0219	8	
	Le Pum 748-29	8	
	Red Java Pum UF 6-4A	8	
	Pandan Wangi Pum US	8	
	Pummelo Hyb US 10A-1-21	4	
	Liang Ping Pum UF 8811	4	
	Pummelo DPI-203-3	4	
	Nakon Pum US	4	
	Pummelo DPI-203-4	4	
	Kao Phuang Pum UF 5-2	4	
	Oval Pink Pum DPI-212	4	
	Pummelo Hyb UF C4-10-36	4	
	Pummelo 61-12	4	
	Pummelo Hyb US LP-36-39	4	
	Sun Hing Pum DPI-203-7	4	
	Siamese Swt Pum DPI-203-16	4	
	Siamese Pink Pum UF 6-12A	4	
	Shatian Pum CGIP-126	4	
	Red Shaddock UF 5-4A	4	
	Red Pum UF UKP-1	4	
	Red Pum UF C4-11-19	4	
	Pummelo Hyb UF NRB15-43	4	
	Red Pum UF 5-1-99-5	4	
	Pummelo Hyb UF NB19-17-0218	4	
	Pummelo HYB US 6-17-28	4	
	Pummelo Hyb US 6-16-43	4	
	Pummelo Hyb US 5-93-42	4	
	Pummelo HYB US 4-3-168	4	
	Pummelo Hyb UF P2	4	
	Chinese Pum UF 5-17	4	
	Pummelo Hyb UF NB19-18-0218	4	
	Red Pum UF C2-5-12	4	
	Total Pummelo	10,075	
	Other Citrus	# Budded	% Type
	Lakeland Lqt F-55-26	5,373	55.72
	Sanbokan US 7-55	1,512	15.68
	Finger Lime DPI-205-1(not yet fruited)	1,272	13.19
	Finger Lime Giant DPI-205-4	567	5.88
	Finger Lime DPI-50-36 Trial only	441	4.57
	Yuzu F-9-15	207	2.14
	Acid Fruit Hyb UF C4-5-20	90	<1
	Lemon Hyb UF C4-8-34	75	
	Eustis Lqt US 16-6-12	60	
	Acid Fruit Hyb UF C4-8-40	45	
	Total Other	9,642	

Budwood Availability

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
6058x2071-02-2	1	18		®
A+FD UF 19-11-10			2	®
A+Volk UF 19-11-31			2	®
Abers S/O US 8-35	1	8	1	
Acid Fruit Hyb UF C4-15-8			1	®
Acid Fruit Hyb UF C4-3-35			1	®
Acid Fruit Hyb UF C4-5-20			1	®
Acid Fruit Hyb UF C4-8-40			1	®
Akcay Sekeri 3-3-10			1	
Ambersweet US 10-14-65	1	1	3	
Ambersweet US 10-5-65	1	1		
Ann Satsuma 911	1	1		
Atalantia US 11-8-76			1	
Atwood Navel CGIP-201			2	
Australian Finger Lime 67 CGIP-233			2	
Avana 4N CGIP-189			2	
Baboon Le US 2-25			1	
Bahianinha Navel US 9-6-47			9	
Barao UF 135			1	®
Bearss Le SPB-341-95-33	4	8	7	
Benton UF	1	5	1	
Bergamot US 9-12-15			1	
Bigaradier Apepu S/O US 13-39			1	
Bingo UF 7-6-27	8	73	5	®
Bittersweet F-21-14	2	16		
Bloomsweet Gft DPI-50-38-1			1	
Blue Lake Orange 956-2			1	®
Bouquet De Fleurs UF 18			1	
Brazilian Le US 3-18			1	
Brown Select Sat 61-0-1	1	4	3	
Budd B/O DPI-82	1	1	3	
Buddhas Hand F-8-7	1	2	1	
Burgundy Gft 416-7-1			1	
C excelsa US 60-169-502			1	
C Iyo Tangor US 9-1-23			1	
C macrophylla DPI-226			1	
C micrantha UF			1	
C moi F-11-8W			1	
C neoaurantium DPI-50-46			1	
C tachibana US 1-67			1	
C-146 UF	2	70	2	
C-22 Bitters UF	3	54	2	
C5282 CGIP-153			2	®
C-54 Carpenter UF	2	97	2	
C-57 Furr UF	2	80	2	®
Cadenera US 5-15			1	
Calamandarin F-9-14			1	
Calamondin DPI-555	3	19	4	
Cambria Navel CGIP-179			2	
Cameron Le US			1	
Cara Cara Navel CGIP-104	4	11	14	

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
Carney Orange DPI-229-2	1	1	2	
Carney Orange DPI-229-3	2	7	2	
Carrizo F-52-16	2	30	3	
Carrizo SPB-330	3	24		
Carvalhal 3-3-37			1	
Centennial Kum US	1	2	2	
Changsha + Benton UF 18-9-6	1	30	1	®
Changsha US 9-12-9			1	
Chinese Pum UF 5-17			1	
Chinotto S/O US 8-41	1	2	1	
Chislett Late Navel CGIP-190			2	
Cipo US 10A-7-10			1	
Citranderin CGIP-222			1	
Citrangle C-32 US	1	34	1	
Citrangle C-35 F-24-10	7	158	1	
Citranglequat Hyb US 10-3-4			1	
Citron DPI-201			2	
Citrum F-80-6			1	
Citrum F-80-8			1	
Citrum F-W-4			1	
Clem X Yuzu DPI-50-38-2			1	
Clementine Haploid CGIP-180			1	®
Clementine US			1	
Cleopatra F-1-7	8	129	2	
Cleopatra F-47-2	4	42		
Cocktail Gft DPI-50-38-5			1	
Crassifolia Kum CGIP-105			1	
Crisafulli Navel DPI-221-1			1	
Cybrid Dancy KW-5-7			3	®
Daisy CGIP-120	1	1	5	
Daisy LS CGIP-191			1	
Dancy F-59-8	4	6	3	
Dancy UF 12-32			1	®
Delta CGIP-118			2	
Dickinson 595	2	59	1	
Disticha DPI-50-24			1	
Dobashi Sat DPI-50-28			1	
Dream Navel DPI-58			5	
Duncan Gft F-56-33	1	2	3	
Duncan Gft F-57-19	3	6	2	
Dweet Tangor F-8-18			1	
Early Pride US 1-62-122	4	11	6	®
Earlygold UF 33-4	2	2	2	
Ellendale DPI-84-11-32			1	
Eloise CGIP-155			1	®
Enterprise 609-14-17			1	
Erem X Shek US 3-67			1	
Eremocitrus US			1	
Escondido Le UF			1	
Etrog Citron DPI-223-861	1	3	1	
Eureka Le DPI-	3	14	2	

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
Eureka Le SL #2 CGIP-226	2	12	1	
Eureka Le SL CGIP-223	1	5	2	
Eureka Le UF 3-27			1	
Eureka Le UF C4-9-30			2	®
Eustis Lqt US 16-6-12			1	
Everbearing Le US 9-1-64			1	
Fairchild US 6-8			4	
Fallglo US 10-61-3	3	8	3	
Fastrimedin DPI-205-3			1	
Fertic Te DPI-216			3	
FG-1731 UF			2	®
Fina Sodea Clem CGIP-123			5	
Finger Lime DPI-205-1(not yet	1	1	2	
Finger Lime DPI-50-36 Trial only	1	1	3	
Finger Lime Giant DPI-205-4	2	2	3	
Fisher Navel CGIP-135			2	
Flame Gft US 1-26-71	4	10	7	
Florida EV1 UF B7-70	11	69	2	®
Florida EV2 UF SF14W-65	11	51	2	®
Flying Dragon US	4	53	3	
Folha Murcha UF 211			1	®
Fortune US 9E-10-23			1	
Foster Gft 65-1-8-27			1	
Fremont US 6-49			1	
Fukumoto Navel CGIP-133			2	
Furr LS UF 18A-10-11			1	®
Furr LS UF B-A-32.5			1	®
Furr ST 61-1-25			5	
Gardner US 6-16			3	
Gillets UF			1	
Glen Navel F-56-11	8	32	29	
Glen Navel F-56-12	1	1		
Gold Nugget CGIP-139	1	2	4	®
Goutou US-3	2	24	1	
Grapefruit Hyb UF P1			1	®
Grapefruit Hyb US 1-83-179			2	®
Grapefruit Hyb US 1-83-227			2	®
Grapefruit Hyb US 4-4-1			3	®
Grapefruit Hyb US 6-20-151			3	®
Grapefruit UF 00-02			2	®
Grapefruit UF 12-04			1	®
Grapefruit UF 14-09			2	®
Grapefruit UF 9-5-16			2	®
Grapefruit UF N40-16-11-11			1	®
Green 3	1	39		
Hadas CGIP-221	1	1	2	®
Hamlin 1-4-1	17	401	47	
Hamlin 8-1-4	5	52	24	
Hamlin 8-1-5	3	11	15	
Hamlin UF N13-32			4	
Hamlin US 1262			1	®
Hamlin US 1266			1	®
Hamlin US 1612			1	®
Harvey Le F-41-39	4	12	3	

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
Hesperethusa UF			1	
Hirado Pum US 1-65	3	8	5	
Homosassa 56-10-28			1	
Hong Kong Kum US 10-2			4	
Hudson Gft US			1	
Hyuganatsu US 12-43			1	
Iapar 73 UF 217			1	®
Ice Tea Lemon UF C4-6-49			1	®
Ichang Le US 2-33			1	
Imperial Gft CGIP-151			1	
Isle O Pine Gft US			1	
Itaborai UF 31-5	1	1		
Itaborai UF 31-6			2	
Jackson Gft DPI-16			5	
Jaffa F-53-38			1	
Jincheng UF 175			1	®
K X R UF			1	
Kaffir Lime UF	2	3	2	
Kao Phuang Pum UF 5-2			1	
Kara US 9E-9-21			1	
Karna US			1	
Kedem CGIP-147	1	1	5	®
Keraji DPI-50-38-3			1	
Key Lime Giant US	1	1	1	
Key Lime SPB-51-12	6	12	4	
Key Lime Thornless F-59-39	2	2	1	
Khalily US 2-29			1	
Kiella Calusa S/O DPI-666-4	1	4	2	
Kimbrough Sat CGIP-108			2	
King 18-1-1	1	2	3	
Kinkoji DPI-50-44	6	154	1	
Kinnow LS CGIP-193			1	
Kinnow US 9E-9-27			2	
Kinokuni US 11-65			1	
Kishu SL CGIP-137	2	5	3	
Kiyomi Tangor CGIP-136			1	
Kuharske 100-1-10	13	529	3	
Kuharske 100-1-18	3	89		
Kunembo US 3-10-3			2	
Lakeland Lqt F-55-26	1	5	3	
Lane Navel CGIP-121	2	4	6	
Large Pink Pum US 6-57			1	
Le Pum 748-29			2	
Le Pum 748-32			1	
Lee US 2-56			3	
Lemon Hyb UF C4-3-4			1	
Lemon Hyb UF C4-4-16			1	®
Lemon Hyb UF C4-8-3			1	®
Lemon Hyb UF C4-8-34			1	®
Lemon Hyb UF LB-6-17			1	®
Lemon UF 1-10-56			1	®
Lemon UF 1-14-10			1	®
Lemon UF 1-1-42			1	®
Lemon UF 1-14-24			1	®

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
Lemon UF 1-1-55			1	®
Lemon UF 1-15-50			1	®
Lemon UF 1-19-55			1	®
Lemon UF 1-20-31			1	®
Lemon UF 1-20-6			1	®
Lemon UF 1-2-8			1	®
Lemon UF 1-3-17			1	®
Lemon UF 1-6-18			1	®
Lemon UF 1-9-42			1	®
Lemon UF 2-0-19			1	®
Lemon UF 2-21-5			1	®
Lemon UF 2-23-39			1	®
Lemon UF 2-2-48			1	®
Lemon UF 2-3-28			2	®
Lemon UF 2-3-33			3	®
Lemonquat US 2-31	1	1	1	
Lemorlime UF C4-5-27			1	®
Leo X Te US 5-8-122			1	®
Liang Ping Pum UF 8811			3	
Lime Hyb UF C4-10-11			1	®
Lime Hyb UF C4-10-8			1	®
Lime Hyb UF C4-6-52			1	®
Lime Hyb UF C4-8-14			1	®
Lime Hyb UF C4-9-33			1	®
Lime SL Hyb UF C4-4-26			1	®
Lime SL Hyb UF C4-6-35			1	®
Limeberry DPI-50-43			1	
Limonia UF			1	
Lisbon Le UF 3-9	2	3	2	
Long Ft Kum DPI-603-20-50	1	5	2	
Loretto Lime 874-1	1	1	2	
Lue Gim Gong F-53-18			1	
M-7 Early Navel CGIP-194	2	22	2	®
Madam Vinous UF 13			1	
Malayan Kum UF 10			1	
Man Hyb UF VNB-40-4			3	®
Man X Org LT UF RBB-7-34			3	®
Man X Org UF RBB-6-25			2	®
Man X Org UF RBB-7-34			2	®
Mandalate CGIP-154			1	®
Mandalime UF 13-08			2	®
Mandarange UF 4-71			2	®
Mandarange UF SB-7-13			2	®
Mandarange UF SB-8-17			2	®
Mandarange UF SB-8-70			2	®
Mandared CGIP-166			3	®
Mandarin 4x Cybrid 304 UF			2	®
Mandarin DPI-50-34			1	
Mandarin LS UF N40W-5-1			1	®
Mandarin LS US 1-22-79			3	
Mandarin LS US 4-13-31			2	
Mandarin LS US 4-13-39			2	
Mandarin LS US 4-13-7			2	
Mandarin Mid UF 711			3	®

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
Mandarin Mid UF 711 Mixup			2	®
Mandarin SL UF C4-15-21 (19)			4	®
Mandarin SL US 1-35-21			2	
Mandarin SL US 6-1-41			3	®
Mandarin UF 09-02			1	®
Mandarin UF 09-05			1	®
Mandarin UF 09-07			1	®
Mandarin UF 09-08			1	®
Mandarin UF 10-04			1	®
Mandarin UF 11-01			1	®
Mandarin UF 11-02			1	®
Mandarin UF 11-08			1	®
Mandarin UF 11-10			1	®
Mandarin UF 12-01			2	®
Mandarin UF 12-02			2	®
Mandarin UF 12-03			1	®
Mandarin UF 12-06			2	®
Mandarin UF 12-07			1	®
Mandarin UF 12-08			2	®
Mandarin UF 13-12			2	®
Mandarin UF 13-14			2	®
Mandarin UF 13-17			3	®
Mandarin UF 14-04			2	®
Mandarin UF 14-06			1	®
Mandarin UF 14-08			2	®
Mandarin UF 1420	1	2	2	®
Mandarin UF 1424			2	®
Mandarin UF 1425			2	®
Mandarin UF 15-05a			2	®
Mandarin UF 15-07			2	®
Mandarin UF 15-08			2	®
Mandarin UF 15-09			2	®
Mandarin UF 18A-2-14			1	®
Mandarin UF 18A-8-25			2	®
Mandarin UF 18A-8-42			2	®
Mandarin UF 18A-9-27			2	®
Mandarin UF 18A-9-43			1	®
Mandarin UF 304			2	®
Mandarin UF 3-13-51			1	®
Mandarin UF 3-13-86			1	®
Mandarin UF 3-14-45			1	®
Mandarin UF 3-7-92			1	®
Mandarin UF 411			4	®
Mandarin UF 6-13-30			2	®
Mandarin UF 7-8-55			2	®
Mandarin UF 900			4	®
Mandarin UF 9-10-28			2	®
Mandarin UF 916			2	®
Mandarin UF 950			4	®
Mandarin UF 9-8-20			2	®
Mandarin UF B3-18-2			2	®
Mandarin UF B7-2-59			2	®
Mandarin UF BB4-8-20			2	®
Mandarin UF C4-14-15			1	®

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
Mandarin UF C4-14-3			1	®
Mandarin UF C4-15-43			1	®
Mandarin UF C7-10-50			2	
Mandarin UF C7-12-19			2	
Mandarin UF E20-42-13			2	®
Mandarin UF E20-45-14			2	®
Mandarin UF E20-45-19			2	®
Mandarin UF KW5-12			1	®
Mandarin UF LB3-11			2	®
Mandarin UF LB5-3			2	®
Mandarin UFLB7-11			2	®
Mandarin UFLB8-10			2	®
Mandarin UF N18A-8-17			1	®
Mandarin UF N18A-9-39			1	®
Mandarin UF NB-17-25			2	®
Mandarin UF RBS-13-8			2	®
Mandarin UF RES-10-39			1	®
Mandarin UF RES-19-22			2	®
Mandarin UF RES-19-56			2	®
Mandarin UF SB-2-48			1	®
Mandarin UFDawn 09-13			2	
Mandarin UFGlow 10-02			2	
Mandarin UFSunrise 09-04			2	
Mandarin US 1-20-68			2	®
Mandarin US 1-23-130			2	
Mandarin US 1-24-48			2	®
Mandarin US 1-26-52			2	®
Mandarin US 1-30-52			2	®
Mandarin US 1-34-11			2	®
Mandarin US 1-57-105			2	®
Mandarin US 1-63-77			2	®
Mandarin US 1-63-85			2	®
Mandarin US 1-78-62			2	®
Mandarin US 1-84-2			1	®
Mandarin US 1-8-70			2	
Mandarin US 1-8-96			2	®
Mandarin US 6-32-43			2	®
Mandarin US 6-32-67			2	®
Mandarin US 6-34-45			2	®
Mandarin US 6-35-90			2	
Mandarin US C54-4			2	®
Marisol Clem CGIP-124	1	1	3	
Marsh Gft 74-1-1			5	
Marsh Gft F-57-4	3	7	5	
Marsh Gft F-58-6	1	10		
Marumi Kum DPI-50-47	1	3	2	
Mayaca Navel 63-18-2			3	
McCarty Gft F-53-11			1	
Mediterranean Swt F-58-38			1	
Meiwa Kum F-27-29	5	11	6	
Melogold CGIP-112			4	
Merav CGIP-146	1	1		
Meravit CGIP-220	1	1	2	®
Meyer Le US	6	18	3	

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
Microrocitrus Inodor US 80-527A			1	
Microcitrus Papuana US			1	
Midknight CGIP-119	1	2	4	
Midsweet LS UF SF11-2-31			2	
Midsweet LS UF 12-2-33			2	®
Midsweet LS UF 2-23			1	®
Midsweet LS UF SF11-1-24			4	®
Midsweet LS UF SF11-2-31			2	®
Midsweet US 6-9	5	11	5	
Milam UF A			1	
Miller B/O UF			2	®
Mini-Mandarin UF N18A-10-18			1	®
Minneola F-60-5	5	18	5	
Monreal Clem CGIP-109			1	
Moria CGIP-164	1	1	3	®
Moro B/O 3-3-11			3	
Moro B/O DPI-50-19	1	4		
Moro X TAR B/O 3-2-66			1	
Morton US 1-3	1	33	1	
Mott Gft DPI-45			1	
Murcott 130-1-1S	9	16	7	
Murcott LS UF LB-2-19			2	®
Murcott LS UF N40-18A-10-09			2	
Murcott UF 18A-10-47			2	®
Murcott UF 18A-3-16			2	®
Nagami Kum SPB-323-1-1	3	4	4	®
Nakon Pum US			3	
Nansho Daidai DPI-50-45			1	
Nasnaran DPI-50-49			1	
Natsumikan DPI-50-48			1	
Naugle Le DPI-206-1			1	
Navel Gft US 4-1			2	
Navel US 2-C			2	®
Navel US 3-S			2	®
Navel US1-N			2	®
Navelo 81-16-15			1	
Nectar CGIP-148	1	1	4	®
Nine Pound Le DPI-201-21			3	
Nocatee F-25-26			1	
Nordmann Kum DPI-203-1			2	
Norton SPB-306			1	
Nour CGIP-149			4	
Nova LS CGIP-200			2	
Nova US 7-41	2	2	3	
Nules Clem CGIP-125	3	6	3	
Odem CGIP-219	1	2	2	®
Orange 13	1	39		
Orange Hyb LT US 1-76-52			2	®
Orange Hyb US 1-10-1			2	®
Orange Hyb US 1-46-15			2	®
Orange Hyb US 1-5-213			2	
Orange Hyb US 1-5-35			2	®
Orange Hyb US 1-65-55			2	®
Orange Hyb US 1-74-52			2	

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
Orange Hyb US 1-75-113			2	®
Orange Hyb US 1-75-55			1	®
Orange Hyb US 6-9-96			2	®
Orange Hyb US 7650			2	®
Orange Hyb US 7651			2	®
Orange Hyb US 7652			2	®
Orange Jasmine F-			1	
Orangequat Hyb DPI-203-5			1	
Orlando F-57-5	5	6	3	
Oroblanco CGIP-111	1	2	4	
Orri CGIP-134	2	16	9	®
Ortanique F-24-26	1	1	5	
Ortanique LS US 6-15-89			2	®
Osceola US 3-58			2	
Oval Pink Pum DPI-212			1	
Owari Sat 874	1	4	5	
Owari Sat F-60-23	2	6		
Owari Sat F-60-25B	1	2	1	
P Tri DPI-50-7			2	
P Tri Rubidoux F-16-20	2	13	1	
P Tri Wacissa F-18-1	4	78	1	
Page US 2-58	1	2	3	
Pandan Wangi Pum US			1	
Parana Gft CGIP-167			1	
Parson Brown F-56-2	1	1	3	
Parson Special US			1	
Pera 3-3-85			1	
Pera US 18-11			1	
Pera US 7-39			1	
Persian Lime SPB-7	4	19	5	
Pineapple 53-10-10	1	4	5	
Pineapple F-60-3	2	4	3	
Pineapple SL US 10B-6-30	2	4	5	
Pineapple SPB-150-	1	2		
Pink Gft US 1-26-51			2	®
Pink Gft US FF-1-26-51-BS			3	®
Pink Pum Hyb US 10-1-1			1	
Pink Sensation Pum 884			1	
Pixie Man CGIP-181			3	
Ponderosa Le DPI-203-8	3	6	3	
Ponkan DPI-50-6	3	4	5	
Pope F-53-28			1	
Procimequat UF			1	
Pum X Gft UF 4-1			2	®
Pummelette UF 5-1-99-2			2	®
Pummelette UF KWP-1-1			2	®
Pummelo 61-12-			1	
Pummelo DPI-203-2			1	
Pummelo DPI-203-3			2	
Pummelo DPI-203-4			2	
Pummelo Hyb UF 914			5	®
Pummelo Hyb UF C2-5-03			1	®
Pummelo Hyb UF C4-10-36			1	®
Pummelo Hyb UF NB17-4-0219			1	®
Pummelo Hyb UF NB19-17-0218			1	®

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
Pummelo Hyb UF NB19-18-0218			1	®
Pummelo Hyb UF NB19-22-0218			1	®
Pummelo Hyb UF NB19-28-0218			1	®
Pummelo Hyb UF NRB15-43			1	®
Pummelo Hyb UF P2			1	®
Pummelo Hyb US 10A-1-21			3	®
Pummelo Hyb US 4-3-168			1	®
Pummelo Hyb US 5-93-42			2	®
Pummelo Hyb US 6-16-172			2	®
Pummelo Hyb US 6-16-29			1	®
Pummelo Hyb US 6-16-43			1	®
Pummelo Hyb US 6-17-16			2	®
Pummelo Hyb US 6-17-28			2	®
Pummelo Hyb US 6-17-48			2	®
Pummelo Hyb US LP-36-39			2	®
Pummelo UF N40-16-12-7			3	®
Pummelo UF N7-4			1	®
Pummelo US 10a-7-15			2	
Pummelo US 145 NE			3	
Pummelo US NW			3	
Queen 25-2-15			3	
Rangpur Li F-3-8			1	
Rasnake Tangelo 625	1	1		
Ray Ruby Gft CGIP-103	6	18	10	
Red Grapefruit UF 16-11-17			2	®
Red Grapefruit UF N11-29			2	®
Red Gft UF N40-16-11-15			2	®
Red Gft UF N40-16-11-3			2	®
Red Gft UF N40-16-11-7			2	®
Red Java Pum UF 6-4A			1	
Red Lime 899	2	4	1	
Red Pummelo UF 5-1-99-5			2	®
Red Pummelo UF C2-5-12			1	®
Red Pummelo UF C4-11-19			1	®
Red Pum UF C4-2-8			3	®
Red Pum UF KW-1-50			3	®
Red Pummelo UF UKP-1			1	
Red Shaddock UF 5-4A			1	
Ridge Pi SPB-602-36			1	
Rio Red Gft CGIP-110	5	20	7	
Robinson US 3-56	1	2	4	
Roble 502-4-12			6	
Rohde Red 472-11-43	5	16	9	
Rohde Red DPI-50-3-1			1	
Rohde Red DPI-50-3-2			1	
Rohde Red DPI-50-3-8			1	
Rohde Red DPI-50-3-9			1	
Rohde Red UF B3-42			1	®
Rosa UF 156			1	®
Rough Le 199	1	23		
Rough Lemon Red UF 8-7	1	10	2	
Round Lime DPI-205-2			1	
Royal Gft US 4-39			1	
RS UF 16-11			3	®

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
RS UF 16-5-28 Orange16			1	®
RS UF 16-5-5 Orange14	1	39	2	®
RS UF 18-2-19 White-1	1	16	2	®
RS UF 18-2-8 Green-7	1	39	2	®
RS UF 2247x1571-00-3 White-3	1	13	2	
RS UF 2247x2075-01-2			2	®
RS UF 2247x2075-02-26			3	®
RS UF 2247x6070-02-2			3	®
RS UF 46x20-04-32			2	®
RS UF 46x20-04-48			2	®
RS UF 46x20-04-S13			2	®
RS UF 46x43-05-SDLG-51			2	®
RS UF A+HBJL-1-OP-09-36			3	®
RS UF A+HBPxOrange 19-08-2			2	®
RS UF A+Volk x Orange 19-11-8			3	®
RS UF B21-R1-T2-11-2			2	®
RS UF B21-R1-T25-11-6			2	®
RS UF Blue 1			2	®
RS UF Cleo+Carrizo			2	®
RS UF Gft + 50-7	1	38	3	®
RS UF Milam+HBP x Orange 14-			3	®
RS UF Milam+HBPxOrange 14-			2	®
RS UF Murcott+Rubidoux			2	®
RS UF Purple 4			2	®
RS UF SG-50-6			2	®
RS UF SO + 50-7			3	®
RS UF SO + FDT			2	®
Ruby Red Gft F-58-39	5	23	10	
Ruby Sweet (35) UF 30-24	1	1		
Ruby Sweet (35) UF 32-10			2	
Ruby Valencia CGIP-195	1	6	2	®
Ryan Navel CGIP-186	1	4	2	
Salustiana 3-1-71			1	
Sampson UF 9-1A			1	
Sanboka US 7-55	1	2	1	
Sanguinelli B/O US 10-5-17	2	5	4	
Sanguinello Riccio UF 200			1	®
Santa Cat Navel US 1			1	
Scott Red Gft #3 DPI-666-6			2	®
Scott Red Gft #5 DPI-666-7			2	®
Scott Red Gft #6 DPI-666-8			2	®
Scott Red Gft #79 DPI-666-11			2	®
Seedless Snack UF N40W-6-3	1	1	4	®
Seedless Surprise Gft US 1-77-19			6	®
Seleta Agrocitros UF 132			1	®
Seleta Branca UF 166			1	®
Seminole SPB-342-3-3			1	
Serra D Agua UF 210			1	®
Setoka CGIP-187	1	3	2	
Sexton F-47-24			1	
Shambar Gft US 3-63			1	
Shasta Gold CGIP-159	1	1	4	®
Shatian Pum CGIP-126			3	
Shekwasha US 9-1-27			1	

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
Shiranui CGIP-132	1	1	4	
Siamese Pink Pum UF 6-12A			3	
Siamese Pum UF 6-9A			1	
Siamese Swt Pum DPI-203-16	1	1	3	
Silver Hill Sat US			3	
Sinton Citrquat US			1	
Smooth Flat Sev US 2-2-14	1	1	1	
Sour Orange DPI-50-9	2	6		
Sour Orange F-49-7	7	138	2	
Star Ruby Gft DPI-60	3	5	4	
Succari US 7-21			1	
Sugar Belle LS UF 1-3			2	®
Sugar Belle UF LB8-9	6	40	11	®
Sukega Gft CGIP-182			1	
Summer Gold Gft UF N2-28			2	®
Summerfield Navel DPI-70-4-9	1	6	2	
Sun Chu Sha US 9-12-12	4	42	1	
Sun Hing Pum DPI-203-7			3	
Sunburst US 5	6	15	8	
Sundiatgo US 5-17			1	
Sunki DPI-50-50			1	
Sunquat DPI-50-27			1	
Sunshine US 10-13			1	
Sunstar US 6-6			5	
Sweet Lime F-10-10	2	12	1	
Sweet Orange SL UF C4-16-12			2	®
Sweet Orange UF 12-05			2	®
Sweet Orange UF 99-01			4	®
Sweet Orange UF C1-41-B			2	®
Sweet Orange UF N10-25			2	®
Sweet Orange UF OLL10			2	®
Sweet Orange UF OLL23			2	®
Sweet Orange UF OLL4	10	123	9	
Sweet Orange UF OLL6			2	®
Sweet Orange UF OLL7			2	®
Sweet Orange UF OLL8	10	126	6	®
Swingle DPI-227	2	105		
Swingle US 22-55	13	1041	3	
Sydney Hyb US			2	
Tahoe Gold CGIP-140	1	1	3	®
Tami CGIP-145	1	1	6	®
Tango CGIP-168	6	16	11	®
Tangor UF 11-07			2	®
Tangor UF 13-07			2	®
Tangor UF 13-15			2	®
Tangor UF 15-01			3	®
Tankan US 2E-4-25			1	®
Tarocco B/O UF 30-37			1	
Tavares Lqt US 9-4-48			3	
Taylor Lee LS CGIP-185	1	6	2	
TDE-1 CGIP-158			3	®
Te X Or US 10-15-67			1	®
Temple 33-6-15	3	5	3	
Temple SL DPI-75			3	

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
Thomasville Citrqt US 1-20			1	
Thompson Gft 25-3-6	3	5	4	
Thomson Navel US 6-6			1	®
Thong Dee Pum UF 5-8A			1	
Tresca US 10C-2-4			5	®
Triumph Gft DPI-32-4			1	
UFR-01 Orange3	3	81	1	®
UFR-02 Orange4	4	56	2	®
UFR-03 Orange15	7	122	2	®
UFR-04 Orange19	9	288	2	®
UFR-05 White4	5	91	2	®
UFR-06	3	108	2	®
UFR-07			3	®
UFR-08			1	®
UFR-09			3	®
UFR-10			3	®
UFR-11			2	®
UFR-12			2	®
UFR-14			2	®
UFR-15	5	57	2	®
UFR-16	4	56	2	®
UFR-17 Green2	5	88	2	®
Ugli DPI-74	1	1	1	
US Sundragon			2	®
US Superna			2	®
US-1102			3	®
US-1103			1	®
US-1104			2	®
US-1105			2	®
US-1130			3	®
US-1137			3	®
US-119			1	®
US-1271			2	®
US-1279	3	78	2	®
US-1280			2	®
US-1281	1	34	3	
US-1282	1	42	3	
US-1283	1	6	3	
US-1284	1	1	3	
US-1287			3	®
US-1293			3	®
US-1297			3	®
US-1305			2	®
US-1317			3	®
US-1318			2	®
US-1319			3	®
US-1321			3	®
US-1460			3	®
US-1473			3	®
US-1481			3	®
US-1516	1	18	2	
US-1627			2	®
US-1645			3	®
US-1649			3	®

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
US-1659			2	®
US-1663			2	®
US-1664			2	®
US-1671			3	®
US-1672			2	®
US-1673			2	®
US-1678			3	®
US-1679			4	®
US-1681			4	®
US-1688			3	®
US-1690			3	®
US-1691			2	®
US-1692			2	®
US-1694			4	®
US-1695			2	®
US-1696			2	®
US-1701			6	®
US-1705			2	®
US-1721			1	®
US-1730			2	®
US-1740			2	®
US-1741			2	®
US-1742			2	®
US-1744			1	®
US-1750			3	®
US-1753			2	®
US-1756			2	®
US-1757			2	®
US-1777			2	®
US-1837			2	®
US-1845			2	®
US-1851			2	®
US-1859			2	®
US-1865			2	®
US-1867			2	®
US-2101			2	®
US-2102			2	®
US-2103			2	®
US-2104			2	®
US-2105			2	®
US-2106			2	®
US-2107			2	®
US-2108			2	®
US-2109			2	®
US-2110			2	®
US-2111			3	®
US-2132			2	®
US-2135			4	®
US-2152			3	®
US-2175			2	®
US-2195			2	®
US-2255			1	®
US-2259			2	®
US-2264			2	®

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
US-2290			1	®
US-2303			2	®
US-2315			2	®
US-2331			2	®
US-2345			2	®
US-2491			2	®
US-2492			2	®
US-2493			2	®
US-376-10			4	®
US-376-5			3	®
US-376-6			3	®
US-376-8			3	®
US-801			2	®
US-802	13	672	5	
US-812	12	646	2	
US-852	1	1	3	
US-896	1	69	1	®
US-897	15	793	5	
US-942	14	1060	5	
USDA 1-105-106			4	®
USDA 1-25-1			2	®
USDA 1-37-12			2	®
USDA 1-42-65			2	®
USDA 1-42-70			2	®
USDA 1-43-21			2	®
USDA 1-46-30			2	®
USDA 1-49-105			3	®
USDA 1936			2	®
USDA 5-51-2			3	®
USDA 6-15-150			2	®
USDA 6-2-53			2	®
Valencia -	1	1		
Valencia 10-12-7			1	
Valencia 51-3-3			1	
Valencia Appleby UF 11-71			1	®
Valencia F-55-1			1	
Valencia F-55-23	1	4	1	
Valencia F-55-28			1	
Valencia F-55-4	8	128	37	
Valencia Jenner UF 19-39			2	®
Valencia Late UF N10-13			3	®
Valencia Late UF N7-2			2	®
Valencia Mid UF OLL20			2	®
Valencia Navel 522-15-14	1	13		
Valencia SL UF 2-21			2	®
Valencia SPB-1-12-7			3	
Valencia SPB-1-14-19	19	459	111	
Valencia SPB-1-14-31	3	36	5	
Valencia UF 1-56			2	®
Valencia UF 1-62			2	®
Valencia UF B9-65	2	8	5	
Valencia UF BHG2-68			2	®
Valencia UF C2A-1-23			1	®
Valencia UF N40-16-7-11			1	®

Budwood Availability	Scion Trees		Foundation Trees	
Variety Clone	Part*	#Trees	#Trees	Restricted
Valencia UF N7-10			2	®
Valencia UF N9-12			2	®
Valencia UF SF14W-65 NP	1	2		
Valenfresh UF N7-3			4	®
Valquarius LT UF SF14W-62	4	10	7	®
Valquarius UF SF14W-62	3	5	2	®
Vangasay Le US 9-1-23			1	
Variegated Minneola F-2-4			1	
Variegated Pink Le US	3	6	4	
Variegated Rough Le US 10-6-11			1	
Var S/O US 18-4			1	
Varn Navel SPB-194-10-2			2	
Vernia UF 35-15	12	200	18	
Vernia UF 35-16	1	2		
Vernia UF C2-2-1			2	
Vernia UF C2A-1-10	1	1	4	®
Volkamer Le US 9-2-19	4	101	3	
W Murcott CGIP-122	4	10	5	
Wash Navel F-60-13	1	1		
Wash Navel F-60-18	1	3	2	
Wash Navel F-60-19	2	2	5	
Weeping Dragon			2	
Wekiwa US 11-7			3	
Westin UF 47-13	1	1		
Westin UF 47-2			2	
Wheeny Gft CGIP-183			2	
WG Mandarin 911-02	1	6		
WG Mandarin 911-03	1	3		
WG Mandarin 911-17	1	1		
WG Mandarin 911-32	1	2		
WG Mandarin 911-B-23	1	1		
WG Mandarin 911-B-24	1	1		
WG Mandarin 911-B-26	1	1		
WG Mandarin 911-B-37	1	1		
WG Mandarin 911-C-34	1	1		
WG Mandarin 911-C-37	1	1		
WG Mandarin 911-E-22	1	1		
WG Mandarin 911-E-26	1	1		
WG Mandarin 911-E-28	1	1		
White Man UF 6-16-116			2	®
White Orange DPI-203-18			2	
White Tangelo 956-1			1	
Wild Turkey Navel 941-11-30-1	1	1	1	
Willits US 12-8-19	1	41	1	
Willowleaf Man SPB-89-1-1			1	
Willowleaf S/O F-12-9			1	
Winola CGIP-165	1	2	1	®
X-639 DPI-50-8	14	806	3	
Xie Shan Sat CGIP-163	1	2	4	
Yellow Gft 345-1-15	1	1		
Yosemite Gold CGIP-141	1	1	3	®
Yuzu F-9-15	1	1	1	

New Florida Parent Candidates									
Parents Selected or Bred in Florida									
Year	Candidates Entered	Parents Released	Cultivars being Shoot-tip Grafted	Entries by Agency	2018	2017	2016	2015	2014
2018	88	96	91	IFAS CREC	36	31	22	24	48
2017	86	43	109	IFAS Gainesville	18	20	11	9	9
2016	56	89	100	USDA	32	25	17	43	51
2015	80	99	102	Bureau / Participant	0	1	4	2	1
2014	110	69	121	Private / Proprietary	2	9	2	2	1
2013	42	103	81	Total	88	86	56	80	110
2012	72	61	138						

Pathogen Testing (Florida's Budwood Program)

Scion/Foundation/Parent Source Tree testing							
		Tests run Winter Haven*					
Pathogen	Test Type	2018	*2017	2016	2015	2014	2013
HLB	qPCR	5,987	1,179	5,922	6,685	8,410	7,307
Tristeza	qPCR	5,008	1,305	6,541	7,365	7,657	7,727
Psorosis	Biological	106	122	57	95	104	122
Psorosis	qPCR	5,008	177	2,225	6,188	2,281	1,523
Tatter Leaf*	qPCR	5,008	3,042	2,165	3,429	6,599	1,501
Leaf Blotch*	qPCR	5,008	1,923	3,049	3,430	6,690	1,523
Viroid (Biological)	CEVd, CVd I, III, IV, V	106	77	72	103	159	87
Viroid (qPCR)	CVd I – V, CEVd	30,048	1,946	19,124	16,790	12,977	14,755
Total		56,279		9,771	39,155	39,155	44,085
*Lab test figures for 2017 are for the first two quarters only. Test material was sent to Gainesville for the last two quarters of the 2016-2017 fiscal year.							
Testing Frequency	HLB & CTV – PCR Annual; * Seed Source every 3 years Psorosis/Viroids/Leaf Blotch – every six years (PCR).						

Citrus Germplasm Introduction Program (CGIP)		
Introductions from Outside Florida		
Varieties undergoing pathogen indexing at Gainesville/LaCrosse		
Miho Wase Satsuma	Rosalina Navel Orange (awaiting indexing)	
Okitsu Wase Satsuma	Russian Satsuma (awaiting indexing)	
C1VAC		
Lenari mandarin		
Kirkwood Red Navel		
Joe's Early		
Sue Linda Temple		
Lange Rosy Red Valencia		
Varieties on list to introduce (Approved by the Citrus Budwood Technical Advisory Committee for Introduction)		
	Wendy Mandarin, Orit Mandarin, Ayelet Lemon, Galia Lemon, Sigal Mandarin, Lily Mandarin	
	Einav Mandarin, Byron Sunrise Finger Lime	

CITRUS NURSERY INSPECTION CONSOLIDATED QUARTERLY INSPECTION REPORT 7/1/2018-6/30/2019						
INSPECTOR	NURSERY	NEMATODE	SCION	SEED SOURCE	EXPORT	QUARTER
Randall Dean	52	0	4	0	0	1st
	58	4	8	0	6	2nd
	62	2	7	2	6	3rd
	58	2	0	12	4	4th
Donald Taylor	126	6	6	0	0	1st
	102	6	12	0	0	2nd
	112	6	14	0	0	3rd
	100	4	2	12	0	4th
Peter Carbon	112	2	4	0	12	1st
	104	4	0	0	8	2nd
	114	10	4	0	4	3rd
	110	4	0	0	6	4th
Ashley Nolen	120	4	0	0	0	1st
	108	2	12	0	0	2nd
	106	6	12	2	0	3rd
	112	4	4	14	0	4th
Johnny Yates	64	4	0	0	0	1st
	108	6	6	0	0	2nd
	104	6	6	0	0	3rd
	108	2	0	16	0	4th
Craig Landress	114	2	0	0	0	1st
	112	8	10	0	0	2nd
	108	8	6	0	0	3rd
	104	0	0	2	0	4th
Ajia Paolillo	114	2	6	0	0	1st
	108	12	14	0	0	2nd
	98	4	18	0	0	3rd
	100	2	12	6	0	4th
Ana Lebron-Rivera	60	2	24	18	0	1st
	70	0	22	8	0	2nd
	26	0	6	2	0	3rd
	22	0	6	30	0	4th
Yearly Total	2976	124	225	124	46	