



CITRUS MATURITY TEST RESULTS AND FRUIT SIZE

OCTOBER FORECAST

Cooperating with the Florida Department of Agriculture & Consumer Services
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October 12, 2011

All Orange Production Up 5 Percent
Non-Valencia Orange Production Up 5 Percent
Valencia Orange Production Up 4 Percent
All Grapefruit Production Up 2 Percent
All Tangerine Production Up 1 Percent
Tangelo Production Down 4 Percent

2011 FORECAST DATES
2011-2012 SEASON
November 9, 2011
December 9, 2011

Citrus Production by Type and State – United States

Crop and State	Production			Forecasted Production
	2008-2009 (1,000 boxes)	2009-2010 (1,000 boxes)	2010-2011 (1,000 boxes)	2011-2012 (1,000 boxes)
Non-Valencia Oranges ¹				
Florida	84,600	68,600	70,300	74,000
California	34,500	42,500	48,000	44,000
Texas	1,300	1,360	1,700	1,380
Arizona ²	150			
United States.....	120,550	112,460	120,000	119,380
Valencia Oranges				
Florida	77,900	65,100	70,000	73,000
California	12,000	15,000	13,500	13,500
Texas	159	275	249	329
Arizona ²	100			
United States.....	90,159	80,375	83,749	86,829
All Oranges				
Florida	162,500	133,700	140,300	147,000
California	46,500	57,500	61,500	57,500
Texas	1,459	1,635	1,949	1,709
Arizona ²	250			
United States.....	210,709	192,835	203,749	206,209
Grapefruit				
Florida-All	21,700	20,300	19,750	20,100
White	6,600	6,000	5,850	5,600
Colored	15,100	14,300	13,900	14,500
California	4,800	4,500	4,100	3,400
Texas	5,500	5,600	6,300	5,100
Arizona ²	25			
United States.....	32,025	30,400	30,150	28,600
Lemons				
California	21,000	21,000	21,000	20,000
Arizona	3,000	2,200	2,500	800
United States.....	24,000	23,200	23,500	20,800
Tangelos				
Florida	1,150	900	1,150	1,100
Tangerines				
Florida-All	3,850	4,450	4,650	4,700
Early ³	2,550	2,250	2,600	2,500
Honey	1,300	2,200	2,050	2,200
California ⁴	6,700	9,900	9,900	10,300
Arizona ⁴	250	350	300	200
United States.....	10,800	14,700	14,850	15,200

¹ Early, midseason, Navel, and Temple varieties.

³ Fallglo and Sunburst varieties.

² Estimates discontinued beginning with the 2009-2010 crop year.

⁴ Includes tangelos and tangors.

All Oranges 147.0 Million Boxes

The 2011-2012 Florida all orange forecast released today by the USDA Agricultural Statistics Board is 147.0 million boxes, 5 percent more than last season's production. The total is comprised of 74.0 million boxes of non-Valencia oranges (early, midseason, Navel, and Temple varieties) and 73.0 million boxes of Valencia oranges. The Navel orange forecast is 2.7 million boxes, 4 percent of the non-Valencia total.

The hurricane seasons of 2004-2005 and 2005-2006 have been excluded from the usual 10-year regression analysis and from comparisons of the current season to previous seasons. For those previous 8 seasons, average actual production is 176.9 million boxes. The October forecast has deviated from final production by an average of 3 percent with 6 seasons above and 2 below, with differences ranging from 3 percent below to 5 percent above.

The estimated number of bearing trees for all oranges is 57.4 million, down 1 percent from the previous season. Trees planted in 2008 and earlier are considered bearing this season. Field work for the latest Commercial Citrus Inventory was completed in July 2011. Attrition rates were applied to the results to determine the number of bearing trees which are used to weight and expand objective count data in the forecast model.

The estimated fruit per tree for all oranges is 711, a decrease of 3 percent from last season. Average fruit per tree includes regular bloom and the first late bloom. Limb Count survey records indicate 2 fruit per tree considered first late bloom. Second late bloom fruit is measured to be 1 fruit per tree this season and is not included in the forecast.

Weather patterns during early 2011 were very dry with drought conditions covering the majority of the citrus producing region. Steady irrigation helped maintain adequate moisture in most areas. Seasonal showers in August and September brought relief to the drought in the Northern, Western and Southern citrus production areas. Overall trees and fruit are in good condition in well cared for groves. Heavy and widespread citrus bloom covered the citrus region in late February and early March.

The procedures used in this forecast are the same as used in past seasons. The methodology is described on page 5 of this report. All references to "average" refer to the average of the previous 8 non-hurricane seasons.

Non-Valencia Oranges 74.0 Million Boxes

The **non-Valencia** forecast of 74.0 million boxes is 5 percent higher than last season's production. The estimated number of bearing trees (excluding Navels) is 23.9 million, down 1 percent from the previous season. The estimated fruit per tree for early-midseason oranges is 919, a decrease of 1 percent from last season. Projected fruit size is above average, requiring an estimated 239 pieces of fruit to fill a 90-pound box. Projected droppage is above average at 10 percent.

The prorated forecast shows an increase of 600 thousand boxes in the Southern area compared to last season. The Indian River area shows a decrease of 400 thousand boxes and all other areas show a combined increase of 3.5 million boxes when compared to 2010-2011.

The **Navel** forecast of 2.7 million boxes is 2 percent higher than last season's production. The estimated number of bearing trees is 1.0 million, down 4 percent from the previous season. The estimated fruit per tree is 481, a decrease of 1 percent from last season. Projected fruit size is below average, requiring an estimated 136 pieces of fruit to fill a 90-pound box. Projected droppage is above average at 11 percent.

Valencia Oranges 73.0 Million Boxes

The **Valencia** forecast of 73.0 million boxes is 4 percent higher than last season's production. The estimated number of bearing trees is 32.5 million, down 1 percent from the previous season. The estimated fruit per tree is 567, a decrease of 5 percent from last season. Projected fruit size is just above average, requiring an estimated 207 pieces of fruit to fill a 90-pound box. Projected droppage is just above average at 15 percent.

The prorated forecast shows an increase in production across all production areas compared to last year. The Southern area shows the largest increase of 1.9 million boxes, a 9 percent increase from last season. The Indian River area shows an increase of 800 thousand boxes and all other areas show a combined increase of 300 thousand boxes when compared to 2010-2011.

FCOJ Yield 1.60 Gallons per Box

The projection for frozen concentrated orange juice (FCOJ) is 1.60 gallons per box of 42° Brix concentrate. Last season's final yield for all oranges was 1.586081 gallons per box, as reported by the Florida Department of Citrus. Projections for the components will be published in January. Record yields are 1.597195 gallons per box for the early-midseason variety in 2008-2009, and 1.790343 gallons per box for Valencias which occurred in 2007-2008. The record yield for all oranges is 1.672737, set in 2007-2008.

Forecast Components, by Variety — Florida: October 2011

[Survey data is considered final in December for Navels, January for early-midseason oranges, February for grapefruit, and April for Valencias]

Type	Bearing trees (1,000 trees)	Fruit per tree (number)	Droppage (percent)	Fruit per box (number)
ORANGES				
Early-midseason.....	23,909	919	10	239
Navel.....	1,046	481	11	136
Valencia.....	32,467	567	15	207
GRAPEFRUIT				
White.....	1,377	443	15	95
Colored.....	3,486	430	13	100

Citrus Production and Prorated Forecast, by Production Area – 2010-2011 and 2011-2012

[Forecasts based on fruit populations. The possible differences between growing areas, concerning average fruit size, loss from droppage, and harvest patterns, can alter the prorated estimates]

Production Area	Oranges				Grapefruit			
	Non-Valencia		Valencia		White		Colored	
	2010-2011 (1,000 boxes)	2011-2012 (1,000 boxes)	2010-2011 (1,000 boxes)	2011-2012 (1,000 boxes)	2010-2011 (1,000 boxes)	2011-2012 (1,000 boxes)	2010-2011 (1,000 boxes)	2011-2012 (1,000 boxes)
Indian River.....	2,900	2,500	3,100	3,900	4,200	4,500	9,800	10,500
Southern.....	17,100	17,700	21,200	23,100	300	300	1,600	1,600
Other.....	50,300	53,800	45,700	46,000	1,350	800	2,500	2,400
Florida Total.....	70,300	74,000	70,000	73,000	5,850	5,600	13,900	14,500

Distribution of Estimated Fruit Population, by Type, Area, and Age Groups — Florida: September

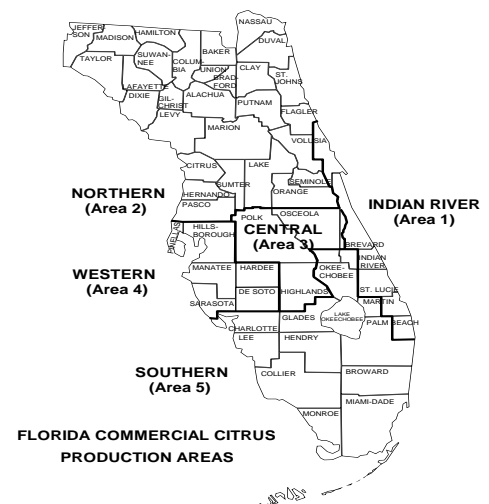
[Distribution of fruit population in September as determined by multiplying average fruit per tree from the Limb Count Survey by bearing age trees]

Areas and age groups	Oranges				Grapefruit			
	Non-Valencia		Valencia		White		Colored	
	2010-2011 (percent)	2011-2012 (percent)	2010-2011 (percent)	2011-2012 (percent)	2010-2011 (percent)	2011-2012 (percent)	2010-2011 (percent)	2011-2012 (percent)
Indian River.....	3	3	6	5	76	80	70	73
Northern.....	7	7	3	2	1	1	4	3
Central.....	33	33	36	37	15	12	11	11
Western.....	31	33	23	24	1	1	2	2
Southern.....	26	24	32	32	7	6	13	11
3 - 5 years.....	2	3	2	2	(Z)	(Z)	2	2
6 - 8 years.....	5	5	4	4	3	2	3	4
9 - 13 years.....	11	14	16	15	4	5	5	5
14 - 23 years.....	50	42	55	51	49	50	48	44
24 yrs & over.....	32	36	23	28	44	43	42	45

(Z) Less than half of the unit shown.

Expected Gift Fruit Shipments Under the 6-R Program and Non-Certified Usage, by Type — Florida: 2011-2012

Type	1,000 boxes
Non-Valencia Oranges.....	1,000
Valencia Oranges.....	500
White Grapefruit.....	200
Colored Grapefruit.....	500
Tangelos.....	100
Tangerines.....	300



Maturity

Regular bloom fruit samples were collected from groves on established routes in Florida's five major citrus producing areas and tested in the Florida Agricultural Statistics Service (FASS) laboratory September 28-30, 2011. The orange sample size is 325 and the grapefruit sample size is 100. Compared to October of last season, acid levels are lower for all fruit types, and solids (Brix) higher for early and midseason oranges. The result is higher ratios for all varieties. Unfinished juice per box and solids per box are higher for all fruit types.

Citrus Unadjusted Maturity Tests — Florida: 2010-2011 and 2011-2012

[Averages of regular bloom fruit from sample groves. Juice and solids per box are unadjusted and not comparable to juice processing plant test results. All samples were run through an FMC 091 machine using mechanical pressure only. This machine utilizes a .040 short strainer and standard 5/8 inch orifice tube. The beam settings are also identical to past tests and no restrictors are used]

Fruit type (number of groves) test date	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2010-2011	2011-2012	2010-2011	2011-2012	2010-2011	2011-2012	2010-2011	2011-2012	2010-2011	2011-2012
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
ORANGES										
Early (120-120)										
Sep 1.....	1.67	1.38	9.19	9.58	5.55	7.02	41.62	44.96	3.82	4.31
Oct 1.....	1.25	0.97	9.51	9.91	7.70	10.35	46.02	49.56	4.37	4.91
Midseason (55-55)										
Sep 1.....	1.99	1.54	9.34	9.38	4.91	6.21	40.86	45.85	3.81	4.30
Oct 1.....	1.57	1.11	9.42	9.84	6.11	9.00	45.81	49.90	4.32	4.91
Late (150-150)										
Sep 1.....	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)	(NA)
Oct 1.....	2.56	2.09	8.95	8.92	3.52	4.32	43.91	48.57	3.93	4.33
GRAPEFRUIT										
White Seedless (50-50)										
Sep 1.....	1.88	1.64	10.19	10.17	5.45	6.27	31.82	33.91	3.24	3.45
Oct 1.....	1.72	1.36	10.38	9.90	6.05	7.30	35.51	38.68	3.68	3.83
Colored Seedless (50-50)										
Sep 1.....	1.82	1.62	10.33	10.17	5.80	6.29	31.99	35.68	3.30	3.63
Oct 1.....	1.68	1.38	10.54	10.16	6.32	7.41	36.31	39.26	3.83	3.99

(NA) Not available.

Citrus Maturity Test Averages, by Areas — Florida: October, 2010-2011 and 2011-2012

Fruit type (number of groves) test date	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	2010-2011	2011-2012	2010-2011	2011-2012	2010-2011	2011-2012	2010-2011	2011-2012	2010-2011	2011-2012
	(percent)	(percent)	(percent)	(percent)			(pounds)	(pounds)	(pounds)	(pounds)
ORANGES										
Early										
Indian River (9-9).....	1.26	1.02	9.83	10.08	7.89	9.93	43.16	51.17	4.24	5.16
Other Areas (111-111).....	1.25	0.97	9.48	9.89	7.68	10.39	46.25	49.43	4.38	4.89
Midseason										
Indian River (11-11).....	1.73	1.20	9.65	10.02	5.63	8.38	41.77	50.10	4.04	5.02
Other Areas (44-44).....	1.53	1.09	9.37	9.80	6.23	9.16	46.81	49.85	4.39	4.88
Late										
Indian River (27-27).....	2.79	2.25	9.53	9.10	3.44	4.07	42.58	48.60	4.05	4.42
Other Areas (123-123).....	2.51	2.06	8.83	8.88	3.54	4.37	44.20	48.56	3.90	4.31
GRAPEFRUIT										
White Seedless										
Indian River (38-38).....	1.76	1.39	10.53	10.00	6.01	7.22	34.64	39.09	3.65	3.91
Other Areas (12-12).....	1.61	1.27	9.89	9.59	6.15	7.58	38.27	37.40	3.79	3.58
Colored Seedless										
Indian River (40-40).....	1.70	1.39	10.60	10.26	6.26	7.41	35.99	39.34	3.81	4.04
Other Areas (10-10).....	1.59	1.32	10.34	9.77	6.54	7.41	37.61	38.97	3.89	3.81

All Grapefruit 20.1 Million Boxes

The forecast of grapefruit production is 20.1 million boxes, nearly 2 percent higher than last season's production. The total is comprised of 5.6 million boxes of white grapefruit and 14.5 million boxes of colored grapefruit. All grapefruit bearing trees are estimated to be 4.9 million, down 3 percent from last season.

The **white** grapefruit forecast of 5.6 million boxes is 4 percent lower than last season's production. The estimated number of bearing trees is down 4 percent from the previous season. The estimated fruit per tree is 443, a decrease of 7 percent from last season. Projected fruit size is below average, requiring an estimated 95 pieces of fruit to fill an 85-pound box. Projected droppage is above average at nearly 15 percent.

The **colored** grapefruit forecast of 14.5 million boxes is 4 percent higher than last season's final production. The estimated number of bearing trees is down 3 percent from the previous season. The estimated fruit per tree is 430, a decrease of 4 percent from last season. Projected fruit size is slightly above average, requiring an estimated 100 pieces of fruit to fill an 85-pound box. Projected droppage is above average at 13 percent.

All Tangerines 4.7 Million Boxes

The forecast of all tangerines is 4.7 million boxes, 1 percent more than last season's production but below the average of post-hurricane seasons. The total is comprised of 2.5 million boxes of the early varieties (Fallglo and Sunburst) and 2.2 million boxes of the late maturing Honey variety. All tangerine bearing trees are estimated to be 1.8 million, down 4 percent from last season.

The **Fallglo** tangerine forecast of 650 thousand boxes is equal to last season's final production. The estimated number of bearing trees is down 1 percent from the previous season. The estimated fruit per tree is 841, a decrease of 11 percent from last season. Projected fruit size is slightly above average, requiring an estimated 257 pieces of fruit to fill a 95-pound box. Projected droppage is above average at 18 percent.

The **Sunburst** tangerine forecast of 1.85 million boxes is 5 percent lower than last season's final production. The estimated number of bearing trees is down 5 percent from the previous season. The estimated fruit per tree is 904, a 21 percent decrease from last season. Projected fruit size is above average, requiring an estimated 301 pieces of fruit to fill a 95-pound box. Projected droppage is slightly above average at 12 percent.

The **Honey** tangerine forecast of 2.2 million boxes is 7 percent higher than last season's final production. The estimated number of bearing trees is down 3 percent from last season. The estimated fruit per tree is 1,098, an increase of 16 percent from last season and greater than all but the 2007-2008 value used in the regressions. Projected fruit size is slightly below average, requiring an estimated 264 pieces of fruit to fill a 95-pound box. Projected droppage is above average at 39 percent.

Tangelos 1.1 Million Boxes

The tangelo forecast of 1.10 million boxes is 4 percent lower than last season's final production. The estimated number of bearing trees is down 6 percent from the previous season. The estimated fruit per tree is 687, a decrease of 13 percent from last season. Projected fruit size is above average, requiring an estimated 236 pieces of fruit to fill a 90-pound box. Projected droppage is above average at 10 percent.

Forecast Procedures

All citrus forecasts are based on actual fruit counts and measurements. The objective count method uses four components:

- (1) bearing age trees provided from the latest Commercial Citrus Inventory;
- (2) average fruit per tree obtained from the Limb Count survey using randomly selected trees and limbs;
- (3) fruit size from the fruit measurement survey and
- (4) fruit loss from the drop survey.

These measurements are used in the forecast models, which use data from the 2001-2002 through 2010-2011 seasons, excluding the hurricane seasons of 2004-2005 and 2005-2006.

The latest tree inventory is used to determine estimated tree numbers. All trees planted in 2008 and earlier are included for the current season. An attrition factor was applied to these tree numbers (by age and area) to account for losses since the inventory period.

Statistically valid procedures are used to provide unbiased estimates of fruit count. Samples are drawn with known probabilities from the Commercial Citrus Inventory, taking into account the variability in fruit per tree. Limbs are randomly selected from sample trees. Fruit on these limbs are counted in the mid-July to mid-September period.

Fruit size and loss surveys were conducted in August and September. Results of these surveys are used in the models to project the fruit size at harvest and the fruit population expected to be available for harvest.

Citrus Size Frequency Measurement Distributions, by Type — Florida: September

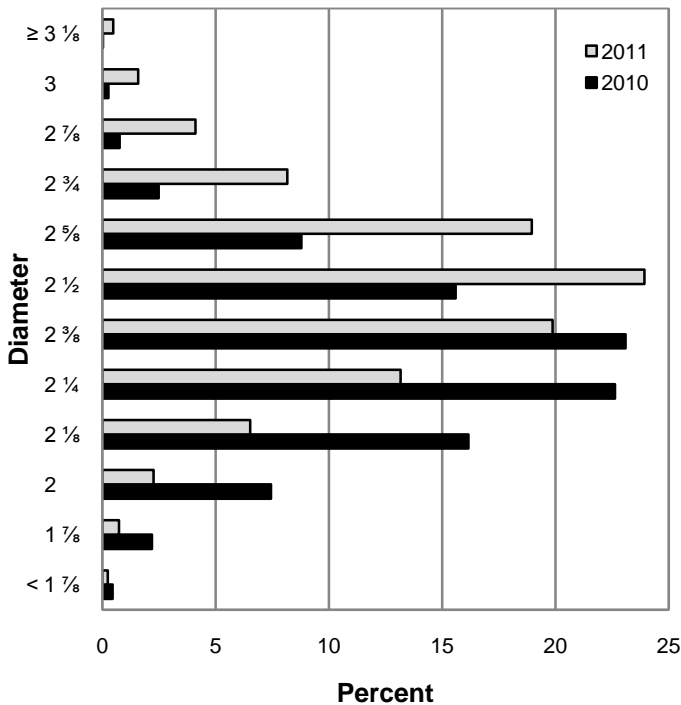
Type and number of fruit per 4/5 – bushel containers	2009	2010	2011	Type and number of fruit per 4/5 – bushel containers	2009	2010	2011
	(percent)	(percent)	(percent)		(percent)	(percent)	(percent)
NON-VALENCIA ORANGES ¹				WHITE GRAPEFRUIT ²			
64 or less	0.1	-	0.3	32 or less	2.7	0.8	2.0
80	1.2	0.6	3.5	36	5.2	2.3	6.0
100	11.4	5.8	18.1	40	8.6	5.1	11.4
125	30.1	21.5	35.3	48	18.4	13.4	16.5
163 or more	57.2	72.1	42.8	56	16.3	14.1	13.6
				63 or more	48.8	64.3	50.5
NAVEL ORANGES				COLORED GRAPEFRUIT			
64 or less	14.2	7.8	16.0	32 or less	0.6	0.2	2.1
80	30.5	22.5	36.2	36	2.7	0.7	6.2
100	36.4	37.3	33.5	40	5.7	3.5	11.9
125	14.0	23.0	10.0	48	9.6	11.8	15.6
163 or more	4.9	9.4	4.3	56	11.7	11.4	14.4
				63 or more	69.7	72.4	49.8
VALENCIA ORANGES				FALLGLO TANGERINES			
64 or less	-	0.1	0.2	80 or less	2.5	-	15.0
80	0.7	0.8	2.3	100	30.0	30.0	28.0
100	8.5	5.7	15.1	120	22.5	26.7	41.0
125	27.4	20.5	32.7	176	17.5	11.7	8.0
163 or more	63.4	72.9	49.7	210 or more	27.5	31.6	8.0
TANGELOS				SUNBURST TANGERINES			
80 or less	0.6	0.2	2.2	100 or less	0.3	1.9	2.6
100	6.6	2.4	16.1	120	2.2	1.3	9.8
120	20.4	7.8	26.7	176	8.3	4.4	12.6
156 or more	72.4	89.6	55.0	210 or more	89.2	92.4	75.0

- Represents zero.

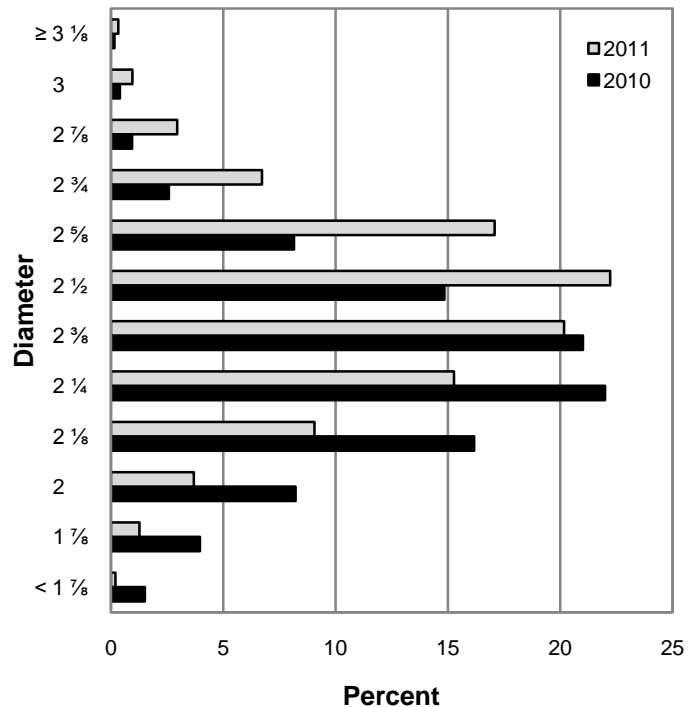
¹ Excludes Navel and Temple varieties.

² Excludes seedy.

Fruit Size Frequency Measurements, Non-Valencia Oranges ¹, by Diameter - Florida: September



Fruit Size Frequency Measurements, Valencia Oranges, by Diameter - Florida: September



¹ Excludes Navel and Temple varieties.