

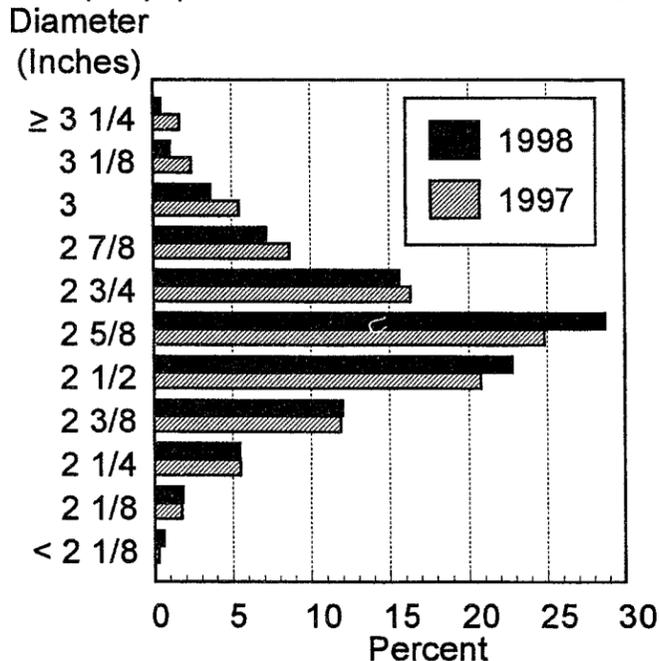
**FRUIT SIZE COMPARISONS BY TYPES TO PREVIOUS SEASONS**

Size frequency distributions are from the November size survey conducted in sample groves during the period of November 2 through 25, 1998. The distributions are by percent from fruit within the size range of each 4/5 bushel container. These percents relate only to fruit from spring bloom and exclude summer bloom fruit in all seasons.

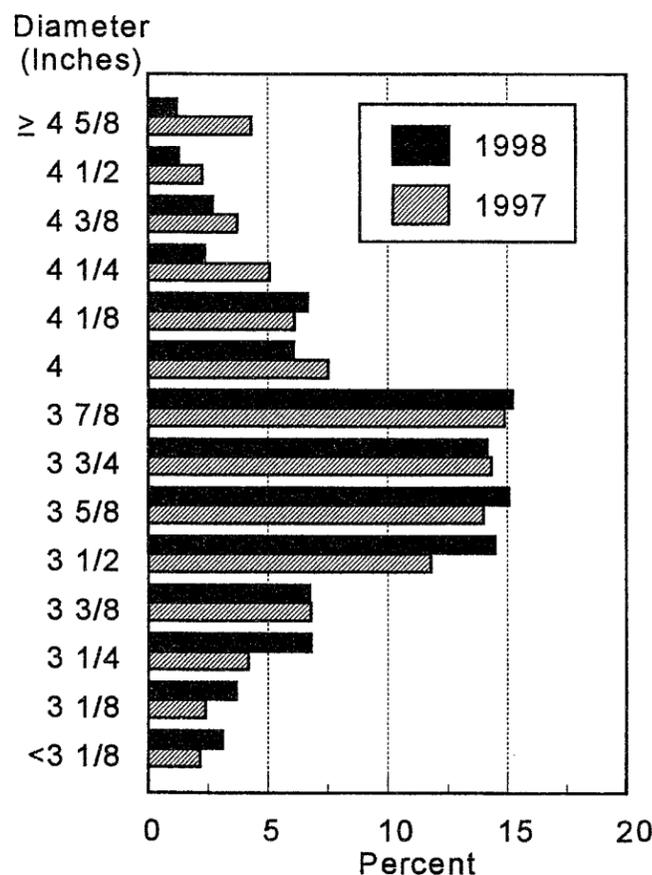
**FLORIDA CITRUS:** Size frequency distributions from November measurements

Type of fruit and size in 4/5-bushel containers	1996	1997	1998
--- Percent ---			
<b>Early and midseason oranges: (excluding Navels)</b>			
64 and larger	2.4	2.5	0.8
80	13.4	11.0	7.2
100	35.3	31.2	30.8
125	33.9	35.7	40.9
163 and smaller	15.0	19.6	20.3
<b>Navel oranges:</b>			
64 and larger	62.8	60.0	47.8
80	25.5	28.0	34.2
100	9.2	10.3	14.5
125	2.2	1.6	3.2
163 and smaller	0.3	0.1	0.3
<b>White seedless grapefruit:</b>			
32 and larger	12.8	18.1	10.6
36	20.0	18.9	17.5
40	18.8	21.5	21.9
48	19.6	19.0	21.0
56	12.3	9.9	11.8
63 and smaller	16.5	12.6	17.2
<b>Colored seedless grapefruit:</b>			
32 and larger	8.2	10.9	7.1
36	15.9	16.5	16.3
40	20.4	21.0	20.9
48	20.0	21.0	22.3
56	14.5	14.0	13.1
63 and smaller	21.0	16.6	20.3
<b>Sunburst tangerines:</b>			
150 and larger	52.3	72.4	67.4
176	22.1	13.8	16.0
210	13.2	9.3	10.9
246	9.5	2.5	4.0
294 and smaller	2.9	2.0	1.7
<b>Dancy tangerines:</b>			
150 and larger	42.4	37.7	32.3
176	14.7	13.2	13.2
210	15.9	21.8	20.0
246	11.9	13.7	17.7
294 and smaller	15.1	13.6	16.8
<b>Honey tangerines:</b>			
150 and larger	63.9	74.5	73.2
176	16.4	12.2	15.7
210	11.3	8.0	7.1
246	6.3	4.0	3.2
294 and smaller	2.1	1.3	0.8
<b>Tangelos:</b>			
80 and larger	22.6	42.9	26.1
100	29.3	36.0	33.0
120	27.5	13.2	25.7
156 and smaller	20.6	7.9	15.2

**CHART 1:** Early and midseason oranges (excluding Navels) size frequency by diameter from November measurements.



**CHART 2:** White seedless grapefruit size frequency by diameter from November measurements.



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**FLORIDA AGRICULTURE**



**CITRUS**

**DECEMBER FORECAST MATURITY TEST RESULTS AND FRUIT SIZE**

December 11, 1998

**ORANGES 190.0 MILLION BOXES**

The December 1998-99 all orange forecast (excluding Temples), released today by the USDA Agriculture Statistics Board, remains at 190.0 million boxes. If realized, this forecast will be 22 percent lower than the 1997-98 record harvest of 244.0 million boxes. In the past 10 non-freeze seasons the December all orange forecast has deviated from the final production by an average of 3.3 percent. Four years were above and six years were below the final recorded utilization.

Objective counts and measurements taken in sample groves during October and November were used to monitor fruit sizing and droppage since the initial October forecast. These data are used to update projections to harvest for the current season. Observations to date continue to support earlier projections of smaller fruit sizes and about average to slightly more than average loss from droppage.

**EARLY AND MIDSEASONS UNCHANGED AT 112.0 MILLION BOXES**

The early and midseason orange production is forecast at 112.0 million boxes, unchanged from the initial forecast. This forecast, if realized, will be 20 percent less than last season's record crop of 140.0 million boxes. This includes a projection of 4.5 million boxes of Navels, also unchanged from October. If realized, the Navel crop will be 29 percent less than the 6.3 million boxes harvested last season.

Citrus production, December 1, 1998 forecasts by varieties and states, with comparisons

Crop and State	Production		Forecast	
	1996-97	1997-98	Nov 10, 1998	Dec 11, 1998
--- 1,000 boxes ---				
<b>Early, Midseason, and Navel Oranges:</b>				
<b>FLORIDA</b>	134,200	140,000	112,000	112,000
California	40,000	44,000	34,000	34,000
Texas	1,300	1,350	1,300	1,300
Arizona	400	350	400	400
<b>Total Above Varieties</b>	<b>175,900</b>	<b>185,700</b>	<b>147,700</b>	<b>147,700</b>
<b>Valencias:</b>				
<b>FLORIDA</b>	92,000	104,000	78,000	78,000
California	24,000	30,000	28,000	28,000
Texas	120	175	140	140
Arizona	600	650	600	600
<b>Total Valencias</b>	<b>116,720</b>	<b>134,825</b>	<b>106,740</b>	<b>106,740</b>
<b>All Oranges:</b>				
<b>FLORIDA</b>	226,200	244,000	190,000	190,000
California	64,000	74,000	62,000	62,000
Texas	1,420	1,525	1,440	1,440
Arizona	1,000	1,000	1,000	1,000
<b>Total All Oranges</b>	<b>292,620</b>	<b>320,525</b>	<b>254,440</b>	<b>254,440</b>

**FORECAST DATES 1998-99 SEASON**

- January 11, 1999
- February 10, 1999
- March 11, 1999
- April 9, 1999
- May 12, 1999
- June 11, 1999
- July 12, 1999

Fruit growth for early and midseason oranges increased during the month but continues to be less than average to date. Loss from droppage is projected to be slightly above average and the objective count indicators continue to support the current forecast.

Lagging maturity the first part of this season delayed volume harvesting of the early and mid oranges. Most of Florida's citrus processing plants are open and running field run oranges.

**VALENCIAS HELD AT 78.0 MILLION BOXES**

The late type (Valencia) orange forecast is unchanged at 78.0 million boxes. This forecast is 25 percent less than last year's record production of 104.0 million boxes. Fruit sizes are projected to be less than average while loss from droppage continues above average for the the past seven years. There are no new indicators to support a change in the current forecast.

**FCOJ REMAINS AT 1.57 GALLONS PER BOX**

The all orange FCOJ yield projection is unchanged at 1.57 gallons per box of 42.0 degrees Brix concentrate. The final all orange yield for 1997-98 as reported by the Florida Citrus Processors Association was 1.57731 gallons per box. Projections for the early-midseason and Valencia categories will be made in January. All projections of yield assume processing relationships of the past several seasons. Results of all orange and grapefruit testing are found on page 3.

**SEEDLESS GRAPEF** UNCHANGED

The total seedless grapefruit forecast is maintained at 49.5 million boxes. The white seedless forecast is continued at 18.0 million boxes and the colored at 31.5 million boxes. If realized, the white forecast will be the lowest certifications of any season since 1969-70. The colored forecast is a record high indicator of utilization, exceeding the certification of 1996-97 by 0.1 million boxes.

White seedless fruit sizes are now at the average of the past eight seasons, following an improved growth rate last month. The colored seedless growth rate also increased and is now only slightly below the average size for November. It is probable that the increased moisture from Hurricane "Mitch" contributed to the improved fruit sizing. Also the unseasonably warm weather along with improved maturity were undoubtedly positive factors.

Fruit loss from droppage through the November survey period for total seedless is at the eight season average. White seedless is slightly less and colored slightly more than their individual averages.

These forecasts are based on objective fruit count and measurement surveys in relationship to the harvest patterns and utilization of the past six seasons. All citrus forecasts project certified utilization and include a preseason allocation of less than two percent for unrecorded usage. Certifications include only fruit actually shipped in fresh pack or recorded at a processing plant.

Estimated certification of total seedless grapefruit through November 29, 1998, total 6.3 million boxes, about 0.5 million boxes less than last season to the same date. White seedless estimated certifications are over 300,000 boxes, more than each of the preceding two seasons to the same time.

Citrus production, December 1, 1998  
forecasts by varieties and states, with comparisons

Crop and State	Production		Forecast	
	1996-97 <sup>1/</sup>	1997-98 <sup>2/</sup>	Nov 10, 1998	Dec 11, 1998
--- 1,000 boxes ---				
<b>Grapefruit:</b>				
<b>FLORIDA-All</b>	<b>55,800</b>	<b>49,550</b>	<b>50,000</b>	<b>50,000</b>
Seedless	54,900	48,900	49,500	49,500
White	23,500	18,300	18,000	18,000
Colored	31,400	30,600	31,500	31,500
Seedy (Other)	900	650	500	500
Texas	5,300	4,800	5,000	5,000
Arizona	900	800	700	700
California	8,200	9,000	8,400	8,400
<b>Total Grapefruit</b>	<b>70,200</b>	<b>64,150</b>	<b>64,100</b>	<b>64,100</b>
<b>Lemons:</b>				
California	22,600	22,000	21,000	21,000
Arizona	2,600	2,600	2,700	2,700
<b>Total Lemons</b>	<b>25,200</b>	<b>24,600</b>	<b>23,700</b>	<b>23,700</b>
<b>Limes: Florida</b>	<b>320</b>	<b>440</b>	<b>575</b>	<b>450</b>
<b>Temples: Florida</b>	<b>2,400</b>	<b>2,250</b>	<b>2,000</b>	<b>2,000</b>
<b>Tangelos: Florida</b>	<b>3,950</b>	<b>2,850</b>	<b>2,500</b>	<b>2,500</b>
<b>K-Early: Florida</b>	<b>150</b>	<b>40</b>	<b>60</b>	<b>60</b>
<b>Tangerines:</b>				
<b>FLORIDA-All</b>	<b>6,300</b>	<b>5,200</b>	<b>4,200</b>	<b>4,200</b>
Early <sup>3/</sup>	4,500	3,200	2,600	2,600
Honey	1,800	2,000	1,600	1,600
California <sup>4/</sup>	2,600	2,400	2,500	2,500
Arizona <sup>4/</sup>	550	600	650	650
<b>Total Tangerines</b>	<b>9,450</b>	<b>8,200</b>	<b>7,350</b>	<b>7,350</b>

<sup>1/</sup> Excludes 6 million boxes of economic abandonment in Fl.: 3 million white seedless and 3 million colored. <sup>2/</sup> Excludes 6 million boxes of economic abandonment in Fl: 5 million white seedless and 1 million colored. <sup>3/</sup> Robinson, Fallglo, Sunburst, and Dancy. <sup>4/</sup> Includes tangelos.

**SEEDY GRAPEFRUIT HELD**

The seedy (Duncan) grapefruit forecast is continued at 500,000 boxes. This would provide a record low certification. Average fruit sizes continue to be the smallest in the series, and loss from droppage continues to be greater than average. All seedy grapefruit is certified in processed form and records are dependent on load tickets.

**ALL TANGERINES STAY AT 4.2 MILLION BOXES**

The all tangerine forecast remains at 4.2 million boxes. The early portion, comprised of Robinson, Fallglo, Sunburst, and Dancy varieties is maintained at 2.6 million boxes. The Robinson and Fallglo varieties are close to completion. Robinson average fruit size is above the mean and Fallglo the smallest of the series. Both Robinson and Fallglo loss from droppage were below average. The combined utilization to date is close to the forecast projections. Sunburst average size is close to the smallest on record. However, loss from droppage has been minimal. Only about 700,000 boxes of this variety have been used through November 29, 1998. Harvest of the record low Dancy crop has just started. Both average fruit size and loss from droppage are below the mean.

The late maturing Honey tangerine forecast is held at 1.6 million boxes. The average fruit size is at the series mean. However, as projected in October, loss from droppage is already at 45 percent of the amount counted in August and is at the highest percent on record for November.

**TEMPLES REMAIN 2.0 MILLION BOXES**

The Temple forecast of 2.0 million boxes is the smallest non-freeze season indication since the series began in 1954-55. Growth rate is approaching the eight season average but still below the mean. Loss from droppage has been minimal, about two percent below average. The crop appears to be lagging in maturity and these relationships could change.

**TANGELOS STAY AT 2.5 MILLION BOXES**

The relatively small tangelo crop forecast at 2.5 million boxes is maintained. Average fruit size indicates that it will take 39 more fruit than last season to make a full 1-3/5 bushel box. Loss from droppage is five percent greater to date. Both of these relationships were anticipated in October.

**K-EARLY CITRUS AT 60,000 BOXES**

No change is made in the 60,000 box K-Early Citrus Fruit forecast. Estimated utilization through November 29, 1998, is 40,000 boxes. There are still some fruit that can be used for processing.

**LIMES NOW 720,000 BUSHELS**

The forecast of limes for the 1998-99 season which began last April is reduced from 920,000 bushels (575,000 boxes) to 720,000 bushels (450,000 boxes). Four months remain in the marketing season. Packouts have been higher than average reducing the amount going to processors.

Unadjusted maturity tests: Average of regular bloom fruit groves, 1997-98 and 1998-99 seasons

Fruit type (No. groves) test date	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	1997-98	1998-99	1997-98	1998-99	1997-98	1998-99	1997-98	1998-99	1997-98	1998-99
	Percent		Percent				Pounds		Pounds	
Juice and solids per box are unadjusted and not comparable to plant test results.										
<b>ORANGES:</b>										
Early (83-94)										
Sep 1	1.32	1.74	9.32	9.54	7.16	5.61	45.55	42.19	4.25	4.02
Oct 1	1.02	1.15	9.77	9.31	9.90	8.19	47.40	47.76	4.62	4.44
Nov 1	0.87	0.91	10.54	10.07	12.38	11.21	50.02	50.90	5.27	5.12
Dec 1	0.77	0.73	11.33	11.08	14.80	15.40	50.99	51.61	5.78	5.72
Mids (54-53)										
Sep 1	1.56	1.94	9.10	9.42	5.99	4.96	45.25	42.53	4.12	4.01
Oct 1	1.15	1.30	9.45	9.15	8.46	7.18	50.06	48.37	4.73	4.43
Nov 1	1.00	1.06	10.36	10.02	10.68	9.59	52.09	52.94	5.40	5.30
Dec 1	0.89	0.84	11.38	11.21	13.09	13.54	51.97	54.16	5.92	6.08
Late (150-150)										
Sep 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct 1	2.10	2.44	8.84	8.65	4.30	3.60	47.87	45.68	4.23	3.95
Nov 1	1.80	2.02	9.44	8.98	5.34	4.51	51.05	50.66	4.82	4.55
Dec 1	1.44	1.58	10.23	9.91	7.21	6.34	53.23	53.31	5.45	5.28
<b>GRAPEFRUIT:</b>										
Seedless										
White (47-45)										
Sep 1	1.60	1.81	9.55	10.10	6.00	5.59	34.47	30.67	3.29	3.09
Oct 1	1.42	1.56	9.73	9.76	6.86	6.32	38.94	35.95	3.80	3.50
Nov 1	1.34	1.48	9.93	10.10	7.45	6.86	41.62	38.65	4.14	3.90
Dec 1	1.27	1.36	9.91	10.33	7.88	7.64	43.94	42.99	4.35	4.44
Colored (44-39)										
Sep 1	1.56	1.79	9.69	10.01	6.23	5.60	35.13	31.30	3.40	3.13
Oct 1	1.39	1.49	9.80	9.64	7.08	6.50	39.98	34.88	3.92	3.36
Nov 1	1.31	1.38	9.96	10.04	7.64	7.30	43.65	40.27	4.35	4.04
Dec 1	1.22	1.29	10.14	10.42	8.35	8.09	44.92	43.24	4.56	4.50

NOTICE: 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.

Maturity test averages by areas, December 1, 1998

Fruit type	Groves sampled	Acid	Solids (Brix)	Ratio	Unfinished juice per box	Solids per box
<b>ORANGES:</b>						
Early						
Indian River Dist.	10	0.69	11.21	16.28	51.45	5.76
Other Areas	84	0.73	11.07	15.29	51.63	5.71
Midseason						
Indian River Dist.	11	0.87	11.30	13.15	55.85	6.31
Other Areas	42	0.84	11.19	13.64	53.72	6.02
Late						
Indian River Dist.	25	1.73	10.34	6.09	54.06	5.59
Other Areas	125	1.56	9.82	6.39	53.17	5.22
<b>GRAPEFRUIT:</b>						
White Seedless						
Indian River Dist.	33	1.39	10.43	7.54	42.69	4.45
Other Areas	12	1.28	10.04	7.91	43.81	4.40
Colored Seedless						
Indian River Dist.	34	1.30	10.55	8.12	43.15	4.54
Other areas	5	1.23	9.58	7.85	43.86	4.19