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FLORIDA AGRICULTURE

CITRUS

DECEMBER FORECAST
MATURITY TEST RESULTS AND FRUIT SIZE

December 10, 1999

ORANGES 214.0 MILLION BOXES

The December forecast of utilization of all oranges for the 1999-2000 season is increased 3.0 million to 214.0 million boxes in the report released today by the USDA Agricultural Statistics Board. If realized, this will be 15 percent more than the 185.7 million boxes produced last season. The increase is in the late season (Valencia) portion of the oranges. In the past 10 non-freeze seasons, the December forecast has deviated from final utilization by an average of 3.0 percent. Five seasons were above and five below the final recorded utilization.

Hurricane Irene in mid October appears to have had minimal impact on the statewide level of oranges available for harvest. Some fruit, primarily Hamlins and Navels, were blown off trees in Hendry and Collier counties and in areas of the East Coast. Brown Rot from high moisture levels also caused some loss. There appears to be no loss of Valencias from the storm.

EARLY AND MIDSEASONS UNCHANGED AT 124.0 MILLION BOXES

Objective surveys conducted in November indicate that at the statewide level fruit sizes will be slightly larger than projected in October. Although average droppage has increased in the areas affected by the storm, it remains very low in other areas. At the statewide level, it is slightly less than was anticipated in October. Although some Navels were lost in the storm, statewide droppage rates are near what was projected in October. The forecast for **Navels** is unchanged at 5.4 million boxes.

Citrus production, December 1, 1999
forecasts by varieties and states, with comparisons

Crop and State	Production		Forecast	
	1997-98	1998-99	Nov 10,1999	Dec 10, 1999
Early, Midseason, and Navel Oranges:	- - - 1,000 boxes - - -			
FLORIDA	**140,000**	**112,000**	**124,000**	**124,000**
California	44,000	21,000	40,000	40,000
Texas	1,350	1,250	1,300	1,300
Arizona	350	550	400	400
Total Above Varieties	185,700	134,800	165,700	165,700
Valencias:				
FLORIDA	**104,000**	**73,700**	**87,000**	**90,000**
California	25,000	17,000	27,000	27,000
Texas	175	180	300	300
Arizona	650	600	500	500
Total Valencias	129,825	91,480	114,800	117,800
All Oranges:				
FLORIDA	**244,000**	**185,700**	**211,000**	**214,000**
California	69,000	38,000	67,000	67,000
Texas	1,525	1,430	1,600	1,600
Arizona	1,000	1,150	900	900
Total All Oranges	315,525	226,280	280,500	283,500

FORECAST DATES 1999-00 SEASON

January 11, 2000

February 11, 2000

March 10, 2000

April 11, 2000

May 12, 2000

June 9, 2000

July 12, 2000

Loss from Hurricane Irene was primarily in the East Coast area which has only an estimated eight percent of the early and midseason crop this season and in the extreme lower portions of Hendry and Collier counties. No loss occurred in the interior counties which have an estimated 65 percent of the crop.

With the lagging maturity levels, volume harvest of early and midseason fruit is just beginning. Most of Florida's processing plants are now open and accepting field run oranges.

VALENCIAS NOW 90.0 MILLION BOXES

The Valencia forecast is increased 3.0 million to 90.0 million boxes. With the near ideal growing conditions since the mid-October storm, Valencias have increased in average size more than anticipated. Droppage has been very low, the lowest in many seasons and is now anticipated to be near record low for the season. The projected larger sizes and lower droppage are the primary reasons for the increase in the forecast.

FCOJ REMAINS 1.60 GALLONS PER BOX

The all orange FCOJ yield projection is unchanged at 1.60 gallons per box of 42.0 degrees Brix concentrate. The final all orange yield for 1998-99 as reported by the Florida Citrus Processors Association was a record high 1.63381. Separate projections for early-midseason and Valencia categories will be made in the January crop report. All projections of yield assume that the processing relationships this year will be similar to those of the past several years. The results of orange and grapefruit maturity testing are found on page 3 of this report.

SEEDLESS GRAPEFRUIT MAINTAINED

The total seedless grapefruit forecast, reduced to 45.5 million boxes last month is continued. The November reduction of 4.0 million boxes from the initial October 1999 forecast was indicated from surveys conducted to reflect loss from Hurricane Irene. The forecast is 1.0 million boxes less than recorded last season and the smallest indication since the 41.2 million boxes utilized in the 1991-92 season. The varietal division forecasts are maintained, with white seedless at 18.5 million boxes and the colored varieties at 27.0 million boxes.

The current fruit size and droppage survey results support the November projections. The monthly growth rate for both varieties is progressing normally, as mean sizes remain below average. The monthly fruit droppage increased several percent above the normal monthly loss rate. This increase had been anticipated because of historic post-hurricane effects. There was nothing significant from the monthly surveys to indicate any change in the forecast.

Estimated certifications to December 6, 1999, total 5.8 million boxes as compared with 7.1 million boxes last season to the same date. Whites are only 0.2 million boxes less but colored varieties lag by 1.1 million boxes.

These forecasts are based on objective fruit count and measurement surveys in relationship to the harvest patterns and utilization of the past nine 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.

Citrus production, December 1, 1999
forecasts by varieties and states, with comparisons

Crop and State	Production		Forecast	
	1997-98 [1/]	1998-99	Nov 10, 1999	Dec 10, 1999
	- - - 1,000 boxes - - -			
Grapefruit:				
FLORIDA-All	**49,550**	**47,050**	**46,000**	**46,000**
Seedless	**48,900**	**46,500**	**45,500**	**45,500**
White	**18,300**	**17,800**	**18,500**	**18,500**
Colored	**30,600**	**28,700**	**27,000**	**27,000**
Seedy (Other)	**650**	**550**	**500**	**500**
Texas	4,800	6,100	5,500	5,500
Arizona	800	750	650	650
California	8,000	7,500	8,000	8,000
Total Grapefruit	63,150	61,400	60,150	60,150
Lemons:				
California	21,000	16,200	20,500	20,500
Arizona	2,600	3,450	3,900	3,900
Total Lemons	23,600	19,650	24,400	24,400
Limes: **Florida**	**440**	**500**	**600**	**600**
Temples: **Florida**	**2,250**	**1,800**	**2,100**	**2,100**
Tangelos: **Florida**	**2,850**	**2,550**	**2,600**	**2,600**
K-Early: **Florida**	**40**	**80**	**70**	**90**
Tangerines:				
FLORIDA-All	**5,200**	**4,950**	**6,400**	**6,400**
Early [2/]	**3,200**	**3,050**	**4,200**	**4,200**
Honey	**2,000**	**1,900**	**2,200**	**2,200**
California [3/]	2,400	1,500	2,300	2,300
Arizona [3/]	600	950	700	700
Total Tangerines	8,200	7,400	9,400	9,400

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

SEEDY GRAPEFRUIT HELD

The seedy (Duncan) grapefruit forecast is continued at 500,000 boxes. This would constitute a record low certification. Last season 550,000 boxes was accepted as a final estimate of use. Hurricane Irene did not affect the seedy grapefruit production area.

ALL TANGERINES 6.4 MILLION BOXES

The all tangerine forecast is held at 6.4 million boxes. The early portion, comprised of **Robinson**, **Fallglo**, **Sunburst**, and **Dancy** varieties stays at 4.2 million boxes. The Robinson and Fallglo varieties are complete. Robinson average fruit size was the largest on record and Fallglo the smallest. Both varieties had loss from droppage below average. The combined utilizations total is at the projected forecast level.

Both Sunburst average size and loss percent are slightly below the seasonal means. The increased crop size is the result of the average fruit per tree. About 1.1 million boxes of this variety have been used to December 6, 1999. The extremely small Dancy crop has yet to be harvested. A major factor in this crop is the large percent of the fruit that will not make size 210 or larger per carton.

The later maturing **Honey** tangerine forecast is also held at 2.2 million boxes. Fruit growth has been seasonal but the average size is still well below the mean. A major factor in the final utilization of this crop is loss from droppage.

TEMPLES STAY AT 2.1 MILLION BOXES

The Temple forecast of 2.1 million boxes is continued. Last season only 1.8 million boxes were recorded, which was the least amount utilized in non-freeze seasons. Fruit sizes continue to be below average for December 1. Loss from droppage is at the average percent for November. No harvest has started.

TANGELOS 2.6 MILLION BOXES

The tangelo forecast of 2.6 million boxes is maintained. Last season the final estimate of utilization was 2.550. Fruit size continued to be average with fruit droppage below average. By December 6, 1999 slightly over 300,000 boxes were estimated to be certified as compared with 500,00 boxes last season.

K-EARLY CITRUS NOW 90,000 BOXES

Recorded utilization indicated an increase to 90,000 boxes from the original projection of 70,000 boxes. In 1998-99, 80,000 boxes were recorded but only 40,000 boxes were utilized in 1997-98.

Unadjusted Maturity Tests: Average of regular bloom fruit from sample groves, 1998-99 and 1999-00 seasons

Fruit type (No. groves) test date	Acid		Solids (Brix)		Ratio		Unfinished juice per box		Solids per box	
	1998-99	1999-00	1998-99	1999-00	1998-99	1999-00	1998-99	1999-00	1998-99	1999-00
	Percent		Percent				Pounds		Pounds	
Juice and solids per box are unadjusted and not comparable to plant test results.										
ORANGES:										
Early (94-102)										
Sep 1	1.74	1.75	9.54	9.35	5.61	5.45	42.19	40.81	4.02	3.81
Oct 1	1.15	1.22	9.31	9.33	8.19	7.80	47.76	46.18	4.44	4.30
Nov 1	0.91	0.95	10.07	9.69	11.21	10.41	50.90	49.85	5.12	4.83
Dec 1	0.73	0.81	11.08	10.80	15.40	13.42	51.61	50.78	5.72	5.48
Mid (53-51)										
Sep 1	1.94	2.01	9.42	9.13	4.96	4.63	42.53	39.35	4.01	3.59
Oct 1	1.30	1.42	9.15	9.08	7.18	6.51	48.37	46.89	4.43	4.26
Nov 1	1.06	1.11	10.02	9.53	9.59	8.75	52.94	51.14	5.30	4.88
Dec 1	0.84	0.93	11.21	10.91	13.54	11.91	54.16	52.15	6.08	5.69
Late (150-150)										
Sep 1	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Oct 1	2.44	2.51	8.65	8.55	3.60	3.45	45.68	43.36	3.95	3.71
Nov 1	2.02	2.06	8.98	8.72	4.51	4.30	50.66	47.53	4.55	4.15
Dec 1	1.58	1.70	9.91	9.81	6.34	5.85	53.31	51.38	5.28	5.04
GRAPEFRUIT:										
Seedless										
White (45-48)										
Sep 1	1.81	1.85	10.10	10.29	5.59	5.60	30.67	28.77	3.09	2.96
Oct 1	1.56	1.63	9.76	9.82	6.32	6.07	35.95	34.37	3.50	3.37
Nov 1	1.48	1.45	10.10	9.60	6.86	6.67	38.65	37.92	3.90	3.64
Dec 1	1.36	1.42	10.33	10.07	7.64	7.16	42.99	42.31	4.44	4.25
Colored (39-41)										
Sep 1	1.79	1.77	10.01	10.17	5.60	5.77	31.30	28.29	3.13	2.88
Oct 1	1.49	1.57	9.64	9.78	6.50	6.29	34.88	35.08	3.36	3.43
Nov 1	1.38	1.38	10.04	9.72	7.30	7.06	40.27	37.58	4.04	3.65
Dec 1	1.29	1.36	10.42	10.20	8.09	7.60	43.24	45.34	4.50	4.63

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, 1999

Fruit type	Groves sampled	Acid	Solids (Brix)	Ratio	Unfinished juice per box	Solids per box
	Number	Percent	Percent		Pounds	Pounds
ORANGES:						
Early						
Indian River Dist.	10	0.81	10.92	13.70	49.78	5.43
Other Areas	92	0.82	10.78	13.39	50.89	5.49
Midseason						
Indian River Dist.	11	0.97	10.94	11.43	52.13	5.71
Other Areas	40	0.91	10.91	12.05	52.15	5.69
Late						
Indian River Dist.	25	1.75	10.18	5.90	52.77	5.37
Other Areas	125	1.69	9.73	5.84	51.10	4.98
GRAPEFRUIT:						
White Seedless						
Indian River Dist.	35	1.43	10.16	7.19	42.46	4.31
Other Areas	13	1.40	9.82	7.09	41.91	4.10
Colored Seedless						
Indian River Dist.	37	1.37	10.27	7.59	45.46	4.67
Other Areas	4	1.26	9.58	7.66	44.23	4.23

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 1 through 24, 1999. 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	1997	1998	1999
	- - - Percent - - -		
Early and midseason oranges: (excluding Navels)			
64 and larger	2.5	0.8	2.3
80	11.0	7.2	13.0
100	31.2	30.8	36.9
125	35.7	40.9	32.4
163 and smaller	19.6	20.3	15.4
Navel oranges:			
64 and larger	60.0	47.8	72.2
80	28.0	34.2	19.8
100	10.3	14.5	6.5
125	1.6	3.2	1.4
163 and smaller	0.1	0.3	0.1
White seedless grapefruit:			
32 and larger	18.1	10.6	11.7
36	18.9	17.5	17.3
40	21.5	21.9	19.9
48	19.0	21.0	18.3
56	9.9	11.8	11.5
63 and smaller	12.6	17.2	21.3
Colored seedless grapefruit:			
32 and larger	10.9	7.1	5.0
36	16.5	16.3	11.3
40	21.0	20.9	19.9
48	21.0	22.3	21.2
56	14.0	13.1	14.3
63 and smaller	16.6	20.3	28.3
Sunburst tangerines:			
150 and larger	72.4	67.4	71.7
176	13.8	16.0	13.9
210	9.3	10.9	9.2
246	2.5	4.0	4.2
294 and smaller	2.0	1.7	1.0
Dancy tangerines:			
150 and larger	37.7	32.3	12.8
176	13.2	13.2	14.9
210	21.8	20.0	27.7
246	13.7	17.7	19.8
294 and smaller	13.6	16.8	24.8
Honey tangerines:			
150 and larger	74.5	73.2	63.4
176	12.2	15.7	15.8
210	8.0	7.1	11.1
246	4.0	3.2	6.3
294 and smaller	1.3	0.8	3.4
Tangelos:			
80 and larger	42.9	26.1	40.4
100	36.0	33.0	31.3
120	13.2	25.7	18.4
156 and smaller	7.9	15.2	9.9

The charts below describe the relationships of the fruit size measurements with those taken in the previous year. The diameter measurements shown are the minimum values of each eighth inch range, except for the smallest values.

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

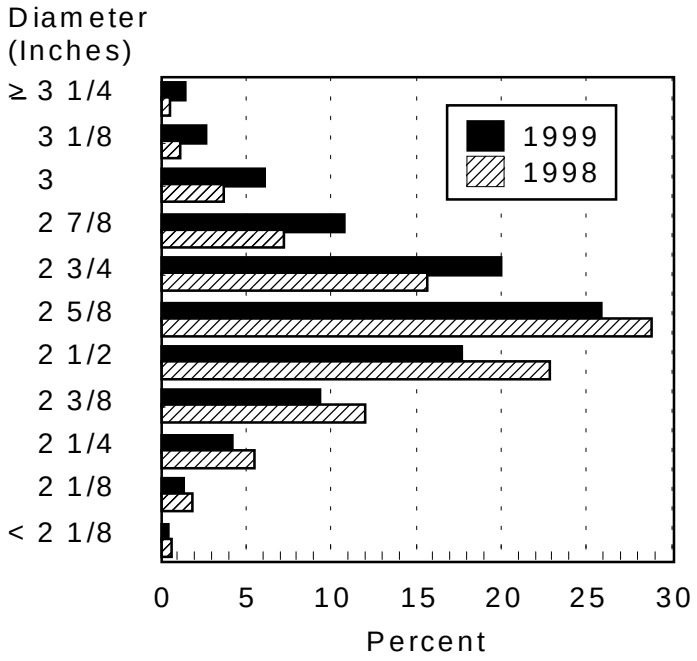

CHART 2: White seedless grapefruit size frequentcy by diameter from November measurements.