

# HAWAII PAPAYAS



National Agricultural Statistics Service

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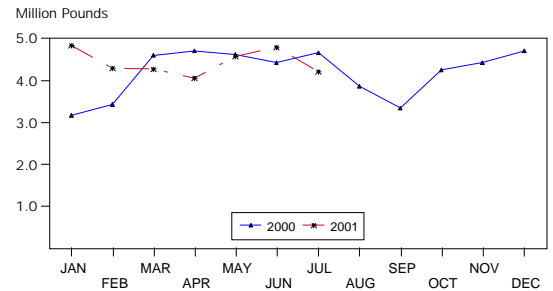
## JULY FRESH PAPAYA PRODUCTION ESTIMATED AT 4.2 MILLION POUNDS

Hawaii fresh papaya production is estimated at 4.2 million pounds for July, 12 percent lower than June and 10 percent lower than July 2000.

July weather conditions were variable with a mix of sunshine and showers over major papaya producing orchards. Soil moisture has been adequate in non-irrigated areas.

Papaya growers are expected to receive an estimated 33.0 cents per pound for fresh fruit in July, 3 percent (1.0 cent) more than June, but 9 percent (3.3 cents) lower than July 2000.

FRESH PAPAYA UTILIZATION  
STATE OF HAWAII, 2000-2001<sup>1</sup>



<sup>1</sup>2001 Preliminary.

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### Fresh papaya utilization, State of Hawaii, month of: July 2001

Island	Sales				Year ago	Year-to-date	
	Local <sup>1</sup>	Intrastate	Out-of-State	Total fresh		2000	2001
	<i>1,000 pounds</i>						
Hawaii.....	117	1,013	1,900	3,030	3,335	19,280	23,145
Kauai.....	49	41	40	130	240	2,945	1,150
Maui/Molokai/Oahu <sup>2</sup> .....	686	9	355	1,050	1,090	7,415	6,750
State.....	852	1,063	2,295	4,210	4,665	29,640	31,045

<sup>1</sup> On island of production.

<sup>2</sup> Combined to avoid disclosure of individual operations.

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### Papaya acreage, State of Hawaii, 2001 with comparisons

Island	Total acreage in crop							
	March		June		September		December	
	2000	2001	2000	2001	2000	2001	2000	2001
Hawaii.....	2,100	2,270	1,600	3,000	2,050		2,040	
Kauai.....	325	120	340	105	235		185	
Maui/Molokai/Oahu.....	665	470	645	430	470		470	
State.....	3,090	2,860	2,585	3,535	2,755		2,695	
	Total bearing acres							
Hawaii.....	1,010	1,660	950	1,670	1,190		1,495	
Kauai.....	185	85	200	80	160		125	
Maui/Molokai/Oahu.....	460	280	435	285	260		255	
State.....	1,655	2,025	1,585	2,035	1,610		1,875	

### Fresh papaya farm price, State of Hawaii, 2000-2001

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Average
2000	44.9	44.8	38.8	39.6	26.7	25.7	36.3	34.5	30.2	22.7	21.0	21.0	31.6
2001 <sup>1</sup>	21.0	28.0	32.0	37.0	35.0	32.0	33.0						

<sup>1</sup> Preliminary.

## 2000 Papaya Output Continues Rebound

Hawaii's papaya industry recorded its third straight year of increased output in 2000. This comes after yearly declines from 1993 through 1997. Total output of 54.5 million pounds was 29 percent higher than 1999 and the first time in five years output has gone over the 50 million pound mark.

Very dry conditions in non-irrigated orchards during June and July 1999 and again in February and March 2000 reduced flowering. The reduction in flowering resulted in fruiting gaps and consequently reduced output during the beginning of 2000 and again during October and November, preventing an even greater year-to-year increase in output.

The State's harvested papaya acreage was estimated at 1,650 acres for 2000, 15 percent lower than 1999. In recent years, papaya plantings have increased in areas outside the Island of Hawaii. The result has been an increase in the amount of fresh fruit produced from Kauai and Oahu.

Fresh output from the Island of Hawaii represented 68 percent of the State's total in 2000. In comparison, the Island of Hawaii accounted for over 90 percent of the State's fresh papaya production from 1986 through 1996.

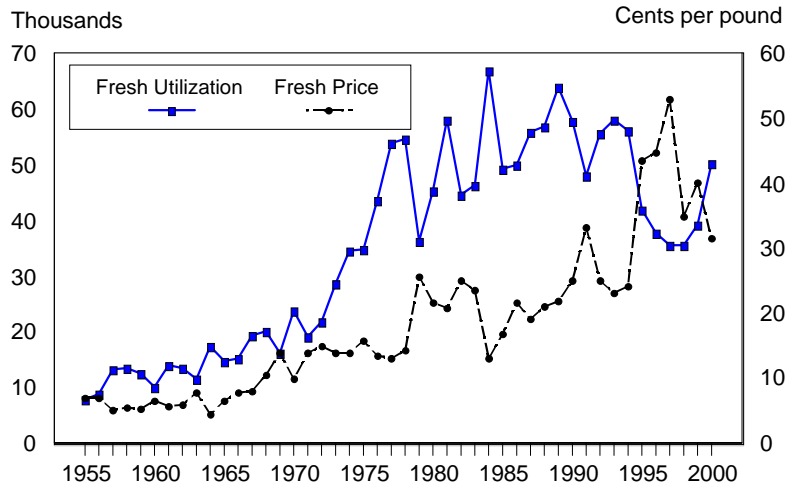
Papaya ringspot virus has surely contributed to the expansion of orchards outside the Island of Hawaii, but this could only come with the increased availability of agricultural land after the closure of sugarcane plantations.

Transgenic seed for the new Rainbow variety, resistant to papaya ringspot virus, had limited distribution starting May 1998. An increase in the quantity of fruit of the Rainbow variety became noticeable toward the end of summer 1999 as fields matured. Overall, yields increased over the previous year as production increased in virus free areas and more virus resistant orchards began to bear fruit.

An inventory of acreage planted to different papaya varieties was conducted in August 2000. At that time, the Kapoho variety made up 40 percent of the State's total papaya acreage. Another 40 percent of the total papaya acreage was planted to the Rainbow and Sunup varieties, which are resistant to papaya ringspot virus. Sunrise comprised 15 percent of total papaya acreage.

Value of utilization (fresh and processed) was pegged at \$16.0 million, relatively unchanged from 1999. Papaya price of 29.4 cents per pound declined 22 percent from 1999 due to sharply improved yields.

**FRESH PAPAYA UTILIZATION & PRICE, STATE OF HAWAII, 1955-2000**



**Papayas: Acreage, utilization, farm price and value, State of Hawaii, 1946-2000**

Year	Farms	Production area	Utilization			Farm Price			Value of sales
			Processed	Fresh Mkt	All	Processed	Fresh Mkt	All	
		<i>Acres</i>	<i>----- 1,000 pounds -----</i>			<i>----- Cents per pound -----</i>			<i>\$1,000</i>
1946		360			7,565			3.2	241
1947		330			5,525			5.4	296
1948		400			7,100			4.3	303
1949		360			5,885			6.0	351
1950		460			6,450			4.2	270
1951		370			5,740			4.8	273
1952		320			7,005			5.7	397
1953		410			9,155			4.7	431
1954		470			10,785			5.2	556
1955		410	1,259	8,076	9,335	2.0	7.1	6.4	601
1956		430	1,746	8,989	10,735	2.1	7.0	6.2	661
1957		540	1,081	13,247	14,328	3.1	5.1	5.0	714
1958	226	610	1,300	13,682	14,982	2.3	5.6	5.3	797
1959	189	570	1,715	12,525	14,243	2.2	5.4	5.0	714
1960	176	500	1,815	10,130	11,945	2.4	6.7	6.0	719
1961	185	570	1,538	13,956	15,494	2.5	5.8	5.5	849
1962	161	540	738	13,472	14,210	2.5	6.0	5.8	826
1963	181	460	2,350	11,725	14,075	6.0	7.8	7.5	1,053
1964	197	750	4,266	17,614	21,880	5.8	4.5	4.7	1,032
1965	200	790	3,237	14,698	17,935	5.3	6.7	6.2	1,120
1966	139	600	3,455	15,225	18,680	3.7	7.9	7.1	1,334
1967	125	760	3,452	19,394	22,846	4.2	8.0	7.4	1,691
1968	120	830	3,465	20,085	23,550	3.9	10.6	9.6	2,260
1969	132	850	2,898	16,337	19,235	3.6	14.0	12.4	2,385
1970	139	1,040	1,022	23,938	24,960	3.9	10.0	9.8	2,436
1971	153	970	1,553	19,172	20,725	3.3	14.0	13.2	2,736
1972	179	985	3,776	21,959	25,735	2.9	15.1	13.3	3,423
1973	176	1,430	3,976	28,848	32,824	3.5	14.0	12.7	4,180
1974	181	1,690	2,695	34,529	37,224	3.1	13.9	13.1	4,871
1975	173	1,840	4,944	34,952	39,896	3.0	15.8	14.2	5,668
1976	178	1,930	6,449	43,588	50,037	3.8	13.5	12.3	6,134
1977	186	2,155	9,561	53,987	63,548	4.7	13.2	11.9	7,565
1978	183	2,190	9,376	54,624	64,000	4.6	14.4	13.0	8,304
1979	194	2,210	4,569	36,446	41,015	4.0	25.6	23.2	9,515

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**Papayas: Acreage, utilization, farm price and value, State of Hawaii, 1946-2000 – Continued**

Year	Farms	Production area	Utilization			Farm Price			Value of sales
			Processed	Fresh Mkt	All	Processed	Fresh Mkt	All	
		<i>Acres</i>	<i>----- 1,000 pounds -----</i>			<i>----- Cents per pound -----</i>			<i>\$1,000</i>
1980	197	1,950	3,556	45,360	48,916	3.4	21.7	20.4	9,964
1981	211	2,110	8,220	58,170	66,390	3.1	20.9	18.7	12,413
1982	214	2,170	7,980	44,770	52,750	3.1	25.1	21.8	11,484
1983	227	2,120	15,100	46,300	61,400	4.4	23.6	18.9	11,591
1984	306	2,590	13,500	67,000	80,500	3.1	13.1	11.4	9,196
1985	315	2,650	11,150	49,250	60,400	2.3	16.9	14.2	8,579
1986	311	2,355	10,900	50,100	61,000	2.3	21.7	18.2	11,123
1987	293	2,350	11,000	56,000	67,000	2.2	19.3	16.5	11,050
1988	305	2,300	12,000	57,000	69,000	3.2	21.0	17.9	12,354
1989	325	2,500	10,000	64,000	74,000	3.0	22.0	19.4	14,380
1990	311	2,400	10,500	58,000	68,500	2.9	25.0	21.6	14,805
1991	271	2,025	7,200	48,150	55,350	2.7	33.3	29.3	16,228
1992	259	2,415	15,500	55,800	71,300	3.0	25.0	20.2	14,415
1993	256	2,555	5,500	58,200	63,700	3.1	23.2	21.5	13,673
1994	256	2,200	5,800	56,200	62,000	3.0	24.3	22.3	13,831
1995	244	2,435	8,900	41,900	50,800	3.0	43.5	36.4	18,494
1996	281	1,835	4,000	37,800	41,800	3.0	44.8	40.8	17,054
1997	241	1,985	3,100	35,700	38,800	3.0	52.9	48.9	18,978
1998	262	2,120	4,300	35,600	39,900	3.0	35.0	31.6	12,589
1999	222	1,940	3,000	39,400	42,400	3.0	40.2	37.6	15,929
2000	236	1,650	4,250	50,250	54,500	3.0	31.6	29.4	16,007

NA = Not available.

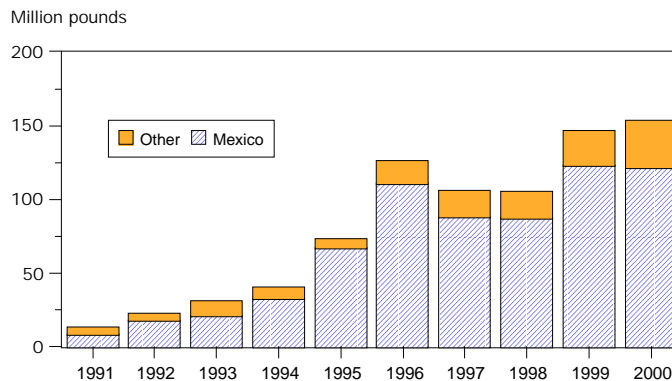
## U.S. Papaya Imports

U.S. imports of papaya totaled 164.4 million pounds in 2000, according to Department of Commerce data. Fresh fruit imports of 154.1 million pounds made up the bulk of papaya imports and accounted for 94 percent of the total.

After steadily climbing to 126.1 million pounds in 1996, fresh papaya imports took a dip the following two years before resuming its upward trend. Fresh imports in 2000 were 5 percent more than 1999.

The top three sources of fresh papaya imports were Mexico, Belize, and Brazil. Mexico accounted for 79 percent of fresh papaya imports in 2000, with 121.5 million pounds. While Mexico maintained the lions share of fresh papaya imports, its position eroded from a high of 92 percent in 1995. Imports of fresh papaya from Belize and Brazil increased 45 percent and 66 percent, respectively.

U.S. FRESH PAPAYA IMPORTS, 1991-2000



U.S. Imports of fresh papaya, by country, 1996-2000

Country	1996	1997	1998	1999	2000
<i>Million pounds</i>					
Mexico	110.6	88.2	87.4	123.3	121.5
Belize	5.3	8.0	9.4	8.5	12.3
Brazil	0	*	1.1	6.2	10.3
Jamaica	5.2	4.6	4.6	4.2	3.4
Dominican Republic	2.5	2.1	1.1	2.6	5.6
Other	2.5	3.4	2.0	1.8	1.0
<b>Total</b>	<b>126.1</b>	<b>106.3</b>	<b>105.6</b>	<b>146.6</b>	<b>154.1</b>

\* = Less than 100,000 pounds.

U.S. Imports of papaya, by type, 1996-2000

Product	1996	1997	1998	1999	2000
<i>Million pounds</i>					
Fresh	126.1	106.3	105.6	146.6	154.1
Frozen	1.2	1.2	1.0	1.0	1.5
Dried	1.7	1.3	1.8	2.2	2.1
Paste & Puree	.5	.4	.3	.9	.6
Pulp	1.2	.5	.6	.2	.4
Other	4.5	6.2	6.6	6.2	5.8
<b>Total<sup>1</sup></b>	<b>135.1</b>	<b>115.9</b>	<b>115.9</b>	<b>157.0</b>	<b>164.4</b>

<sup>1</sup> Sum of products may not add to total due to rounding.

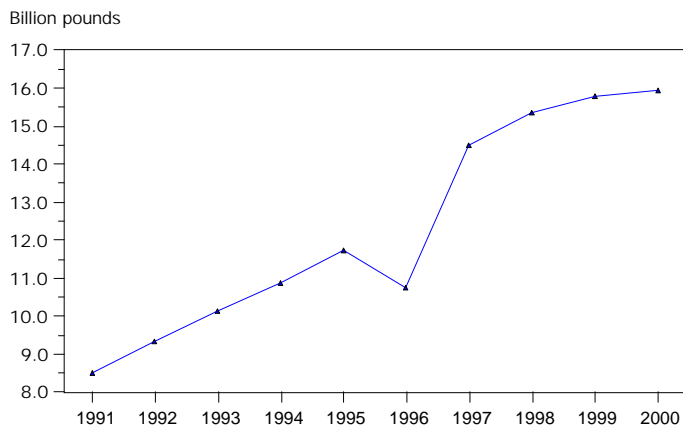
Source: U.S. Department of Commerce, Bureau of the Census.

## World Papaya Production

World papaya production for 2000 is estimated at 15.9 billion pounds, according to the Food and Agriculture Organization.

Brazil was the largest producer and its estimated 2000 production of 7.3 billion pounds accounted for 46 percent of the world's output. Nigeria was the second largest producer with 1.6 billion pounds followed by India with 1.4 billion pounds.

WORLD PAPAYA PRODUCTION, 1991-2000



World papaya production, by country, 1996-2000

Country	1996	1997	1998	1999	2000
	<i>Million pounds</i>				
Brazil	3,630	6,751	7,149	7,275	7,275
India	931	1,213	1,257	1,420	1,420
Indonesia	842	795	1,080	992	992
Mexico	1,095	1,310	1,269	1,012	1,402
Nigeria	1,459	1,488	1,656	1,649	1,649
Thailand	254	254	260	262	262
USA	42	39	40	42	55
Other	2,508	2,648	2,658	3,124	2,879
<b>Total</b>	<b>10,761</b>	<b>14,498</b>	<b>15,369</b>	<b>15,776</b>	<b>15,934</b>

Source: Food and Agriculture Organization (FAO).