National Agricultural Statistics Service

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Hawaii Vegetables

Annual report of harvested acreage, production, and farm value

Farm Output and Revenue Increase

The Hawaii Agricultural Statistics Service estimates total production of vegetables and melons for 1998 at 90.7 million pounds, up 4 percent from 1997. Total farm value rose 10 percent to $37.5 million on the combined strength of higher farm prices and the increase in production.

El Niño comes to an end

The strong El Niño episode that spawned dry conditions since early 1997 finally came to an end in 1998. But while rainfall gradually returned to near-or above-normal levels for many parts of the State, some vegetable and melon growers were hampered by the continued use of water restrictions during the first half of 1998. In general, weather conditions were a favorable mixture of sunshine and showers for the northern islands of Kauai and Oahu. Farmers there were not subjected to water restrictions and, as a result, most crops enjoyed good growing conditions. The southern half of the State, on the other hand, was generally drier. Farmers on Maui, Molokai, and the Big Island had to contend with water restrictions, both mandatory and voluntary, and a lack of natural rainfall. The overall effect that the dry weather had on vegetable and melon growers depended on the availability of irrigation water.

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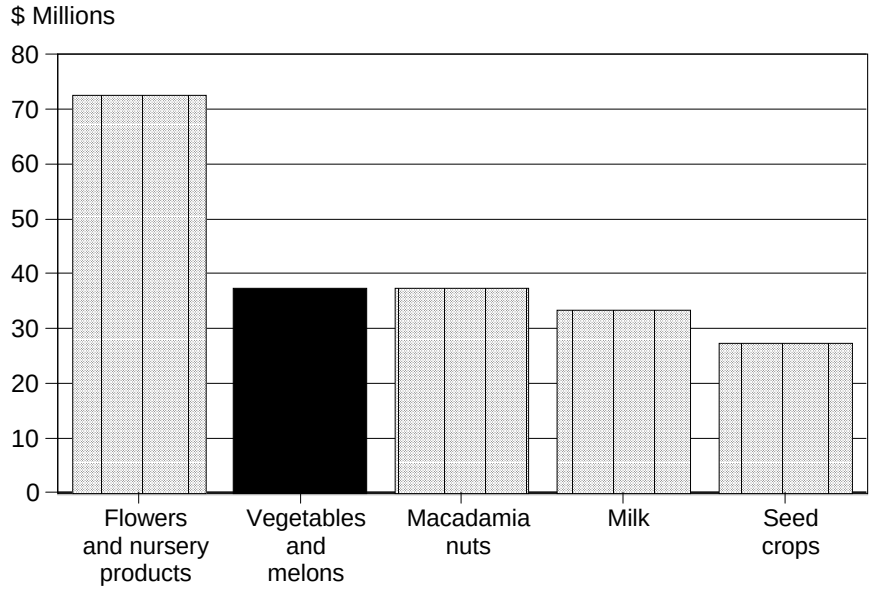
Top 5 diversified agricultural commodities by value
State of Hawaii, 1998



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Farm revenues highest for tomatoes

Vegetables and melons rang up farm revenues totaling $37.5 million in 1998, up 10 percent from 1997. Of the 26 vegetables and melons listed individually for 1998, 11 experienced an increase in farm revenues, 13 showed a decline, and 2 remained unchanged from 1997.

The overall gain in farm revenues was largely due to increases registered by each of the top five crops which accounted for 45 percent of the total. Tomato growers once again led all others with $5.6 million in farm income during 1998, up 2 percent from 1997. Watermelons were a distant second at $3.3 million, up 10 percent from 1997. Head cabbage was third with $2.8 million, up 3 percent from 1997. In a change from 1997, dry onions moved from fifth to fourth place by posting a 53-percent increase in farm revenues to $2.6 million. The relatively large increase in farm income was due to a record-high harvest of 3.5 million pounds in 1998. Lower farm prices, however, offset some of the large gain in production. Cucumbers rounded-out the top five with sales of $2.5 million, up 15 percent from 1997.

Six other vegetable crops had farm sales of more than $1 million. These crops were led by Chinese cabbage at $1.5 million in sales. Most notable, was the first ever $1-million year for Romaine growers.

The combined category of Other Vegetable and Melons had a farm value of $5.9 million, up 29 percent from 1997. Major crops in this category were specialty and ethnic-type vegetables or melons such as green leaf lettuce, long beans, choy sum, taro leaves, and honeydew melons.

Watermelon remains top volume producer

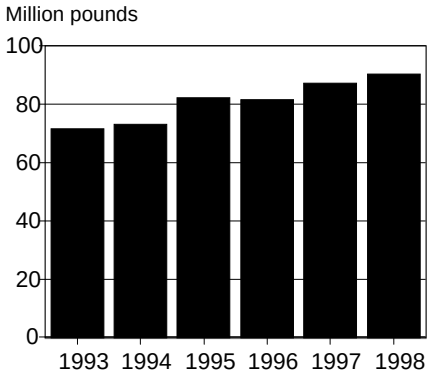
Production of all vegetables and melons totaled 90.7 million pounds in 1998, up 4 percent from 1997. Changes in production were almost evenly split among the crops with 12 showing an increase, 12 a decrease, and 2 recording the same output as a year ago.

Watermelon production surpassed all other vegetables and melons with 15.8 million pounds in 1998, down 6 percent from 1997 due to a matching drop in harvested acreage. Improved yields helped head cabbage growers boost production to 15.3 million pounds, up 18 percent from 1997 and second only to the 1989 record high harvest of 15.6 million pounds. Higher yields also helped tomato farmers hold production steady at 10.2 million pounds in 1998.

Among the remaining crops, five produced a record-high harvest in 1998. These were led by cucumbers which had a total volume of 6 million pounds, up 9 percent. Dry onion growers achieved their record harvest by more than doubling production to 3.5 million pounds in 1998. Romaine growers also posted a relatively large percentage increase in production with 3.3 million pounds, up 74 percent from 1997 and surpassing the previous record high set in 1983 by 26 percent. Two other vegetables that set record highs in 1998 were green peppers at 3 million pounds and Italian squash (zucchini) at 1.5 million pounds.

Production of vegetables and melons

State of Hawaii, 1993-1998



Vegetables with the largest percentage change in farm value *

State of Hawaii, 1998

Commodity	1997	1998	Change
	- - - - - - - - - $1,000	- - - - - - - - - -	Percent
Largest increases			
Romaine	741	1,254	69
Dry Onions	1,666	2,555	53
Green peppers	980	1,500	53
Largest decreases			
Sweet potatoes	1,248	1,001	-20
Chinese cabbage	1,771	1,501	-15
Eggplant	1,185	1,053	-11

* $1 million minimum.

Vegetable and melons: Acreage, production, and value
State of Hawaii, 1997 and 1998 [1]

Commodity	Harvested acreage [2]		Production		Farm value	
	1997	1998	1997	1998	1997	1998
	Acres		*1,000 pounds*		*1,000 dollars*	
Beans, snap	130	200	700	900	693	738
Bittermelon	20	35	180	350	171	280
Broccoli	140	110	450	350	243	175
Burdock	15	15	220	200	319	320
Cabbage, Chinese	390	380	7,700	7,900	1,771	1,501
Cabbage, head	650	600	13,000	15,300	2,665	2,754
Cabbage, mustard	150	140	1,500	1,500	690	600
Cauliflower	15	10	200	130	90	78
Celery	50	50	1,250	1,300	375	364
Corn, sweet	420	400	1,300	1,100	702	627
Cucumbers	440	480	5,500	6,000	2,200	2,520
Daikon	290	300	3,300	3,000	941	945
Dasheen	5	[3]	95	[3]	94	[3]
Eggplant	80	60	1,500	1,300	1,185	1,053
Lettuce	145	170	1,600	1,700	736	816
Onions, dry	185	270	1,700	3,500	1,666	2,555
Onions, green	155	180	1,400	1,500	1,344	1,290
Peas, Chinese	5	[3]	25	[3]	43	[3]
Peppers, green	200	170	2,000	3,000	980	1,500
Pumpkins	65	50	450	550	131	110
Radish	15	15	160	150	91	89
Romaine	165	220	1,900	3,300	741	1,254
Squash, Italian	200	170	1,400	1,500	701	735
Squash, oriental	25	15	300	240	126	89
Sweet potatoes	240	190	2,400	1,900	1,248	1,064
Tomatoes	340	300	10,200	10,200	5,508	5,610
Watercress	35	35	1,020	980	1,173	1,127
Watermelon	840	790	16,800	15,800	3,024	3,318
Other vegetables and melons	860	900	9,200	7,000	4,508	5,950
Total vegetables and melons	6,270	6,255	87,450	90,650	34,159	37,462

[1] Sum of island estimates may not add to State total due to rounding. Only selected crops are shown separately. All other vegetables and melons are included in the "Other vegetables and melons" category. Does not include ginger root and herbs.

[2] Vegetables and melons: Acreage harvested (e.g., 1 acre planted and harvested 3 times during the year = 3 harvested acres). Watercress: Average acreage during the year.

[3] Included with *Other vegetables and melons* beginning in 1998.

County Summaries

Hawaii county

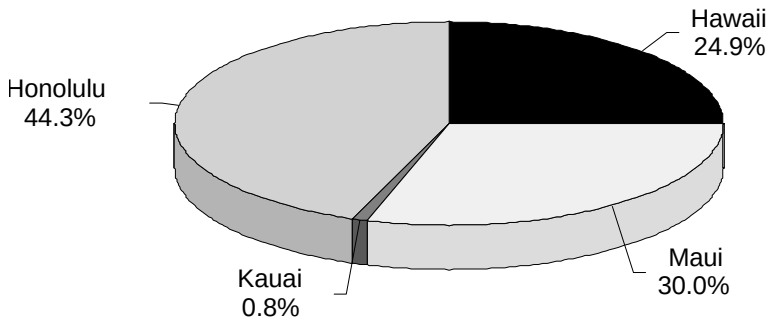
Big Island farmers produced 22.6 million pounds of vegetables and melons during 1998, down 3 percent from 1997. Most of the decline was due to a 27-percent decline in the production of sweet potatoes. The island's top vegetable crop was Chinese cabbage with 5.6 million pounds, up 4 percent from 1997. Farm revenues from the sale of vegetables and melons totaled $9.1 million in 1998, down 2 percent from 1997. Chinese cabbage was the only crop to post revenues exceeding the $1-million mark at $1.1 million for 1998, down 14 percent from 1997.

Maui county

The islands of Maui and Molokai combined to produce 27.2 million pounds of vegetables and melons during 1998, up 3 percent from 1997. Total farm value is pegged at $11.0 million, down fractionally from 1997. Head cabbage was the most widely-grown vegetable in the county with 7.3 million pounds harvested from 280 acres. Tomato production was second with 5.8 million pounds, down 28 percent from 1997 as some acreage was shifted out of Maui county to Oahu. In terms of farm value, tomatoes led all vegetables with farm revenues of $2.9 million, down 28 percent from 1997. Dry onions were second with farm revenues of $2.4 million, up 43 percent from 1997 due to a record harvest of 3 million pounds.

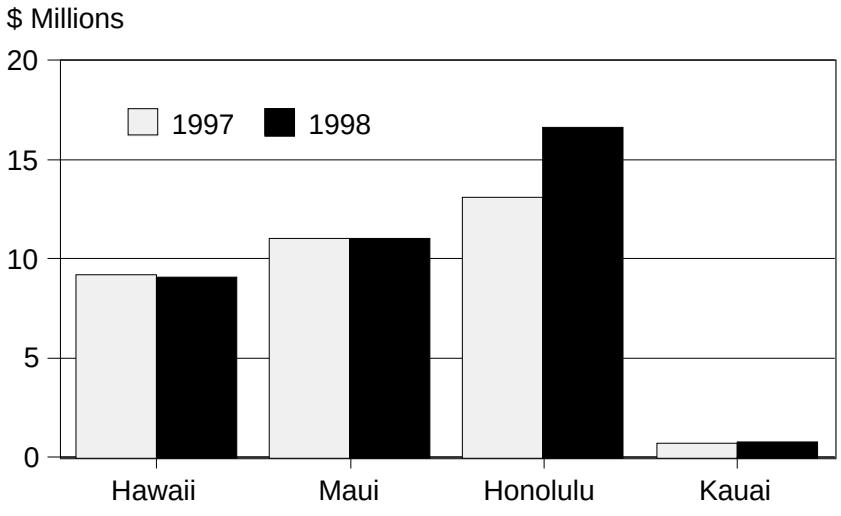
Production of vegetables and melons

Percent distribution by county
State of Hawaii - 1998



Farm value of vegetables and melons by county

State of Hawaii, 1997 and 1998



Honolulu county

Vegetable and melon farmers on the island of Oahu led all other counties with harvested acreage of 2,820 acres, production of 40.1 million pounds, and farm revenues of $16.6 million during 1998. Watermelons dominated all other vegetable crops on Oahu with 15.6 million pounds of production and $3.3 million in farm sales. Five other crops grown on Oahu had 1998 farm revenues of more than $1 million; these were cucumbers, green onions, green peppers, tomatoes, and watercress.

Kauai county

Total production of all vegetables and melons is estimated at 765,000 pounds for 1998, down 17 percent from 1997. Farm value is estimated at $760,000 for 1998, up 3 percent from 1997. Some of the important vegetables grown on Kauai were tomatoes, sweet corn, and eggplant.

County Statistics

Acreage, production, and farm value of selected vegetables and melons By County, State of Hawaii, 1997-1998. [1]

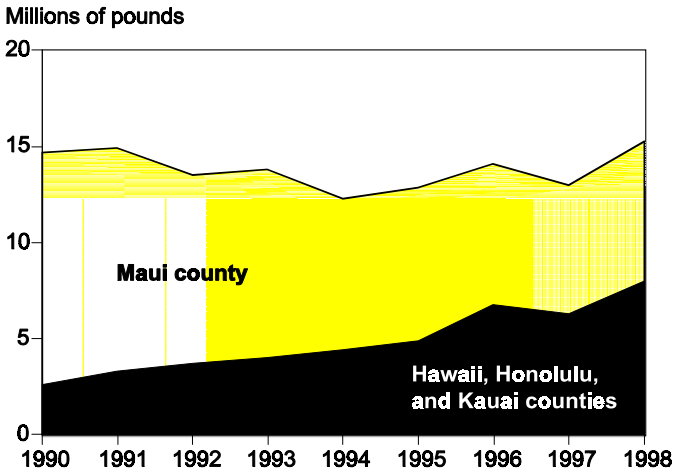
County and commodity	Harvested acreage [2]		Production		Farm value	
	1997	1998	1997	1998	1997	1998
	----------Acres----------		----------1,000 pounds----------		----------1,000 dollars----------	
Hawaii						
Cabbage, Chinese	270	270	5,400	5,600	1,242	1,064
Celery	30	30	880	830	273	244
Daikon	190	200	2,000	1,700	550	510
Lettuce	90	110	1,130	1,240	503	558
All other vegetables and melons	1,250	1,150	13,860	13,185	6,643	6,681
Island total	1,830	1,760	23,270	22,555	9,211	9,057
Maui						
Beans, snap	45	95	350	500	359	416
Cabbage, Head	300	280	6,700	7,300	1,380	1,314
Celery	20	20	370	470	102	120
Corn, sweet	25	40	130	170	98	117
Cucumbers	155	170	2,600	2,900	832	1,018
Lettuce	15	15	100	55	41	24
Onions, dry	180	235	1,690	3,000	1,658	2,367
Onions, green	10	15	105	125	111	121
Romaine	90	110	1,150	1,900	414	646
Squash, Italian	40	50	350	470	179	235
Sweet potatoes	70	65	800	750	432	426
Tomatoes	245	155	8,070	5,800	4,064	2,917
Watermelons	5	10	95	140	18	29
All other vegetables and melons	255	280	3,790	3,620	1,381	1,290
Island total	1,455	1,540	26,300	27,200	11,069	11,040
Honolulu						
Beans, snap	15	20	130	150	132	122
Corn, sweet	240	240	560	520	314	307
Cucumbers	230	260	2,100	2,400	1,061	1,224
Eggplant	50	45	750	850	645	715
Onions, green	120	140	1,180	1,250	1,126	1,056
Watermelons	825	775	16,600	15,590	2,971	3,274
All other vegetables and melons	1,385	1,340	15,640	19,370	6,892	9,907
Island total	2,865	2,820	36,960	40,130	13,141	16,605
Kauai						
Island total	120	135	920	765	738	760

1 Sum of island estimates may not add to State total due to rounding. Only selected crops are shown separately to avoid disclosure. All vegetables and melons that are not shown separately are included in each island's "All other vegetables and melons" total. Does not include ginger root and herbs.

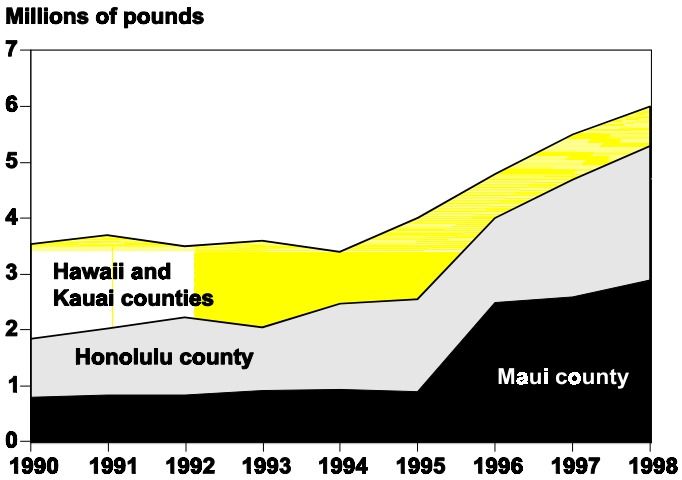
2 Reflects the number of times an area was planted and harvested; e.g., 1 acre planted and harvested 3 times during the year = 3 harvested acres.

Production Charts of Selected Vegetables and Melons

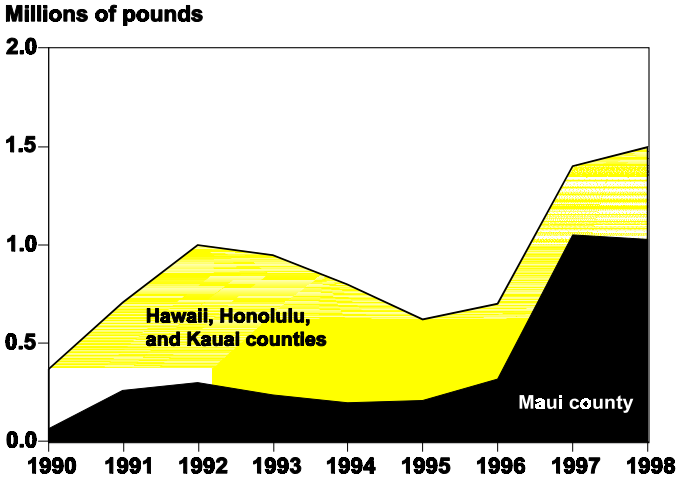
Head Cabbage
Production by County
State of Hawaii, 1990-98



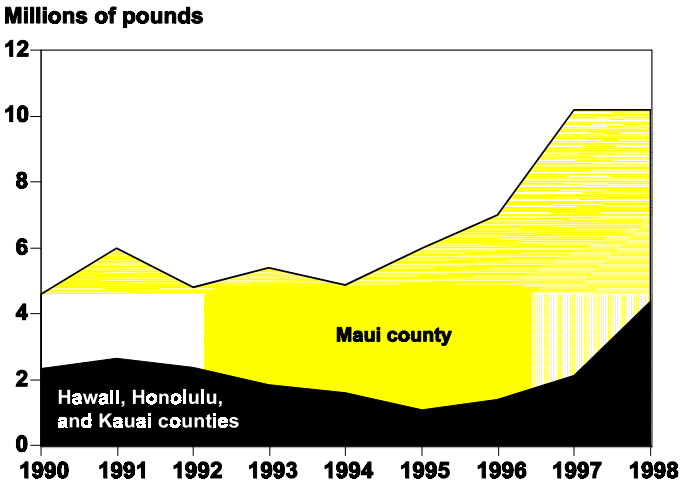
Cucumbers
Production by County
State of Hawaii, 1990-98



Italian Squash
Production by County
State of Hawaii, 1990-98



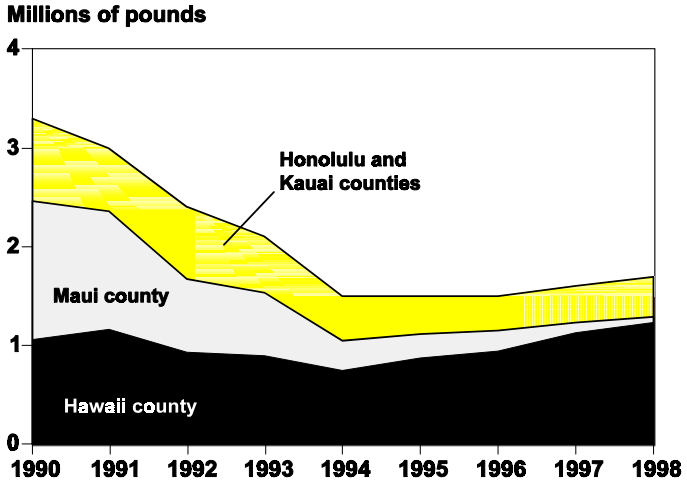
Tomatoes
Production by County
State of Hawaii, 1990-98



Production Charts of Selected Vegetables and Melons

Lettuces [1]

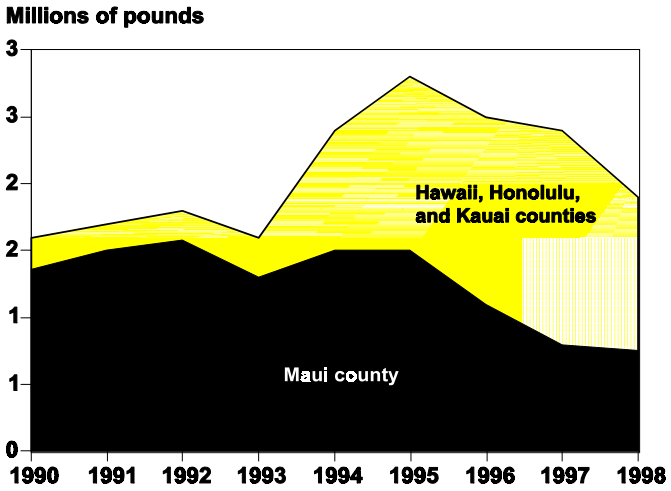
Production by County
State of Hawaii, 1990-98



[1] Includes head and semi-head (Manoa) lettuce.

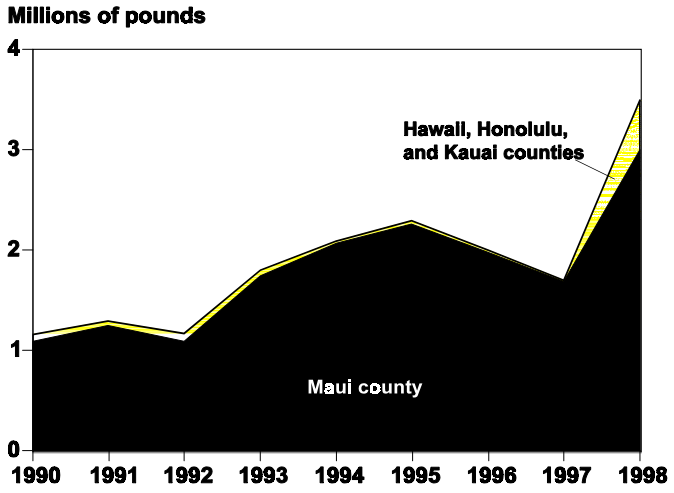
Sweet Potatoes

Production by County
State of Hawaii, 1990-98



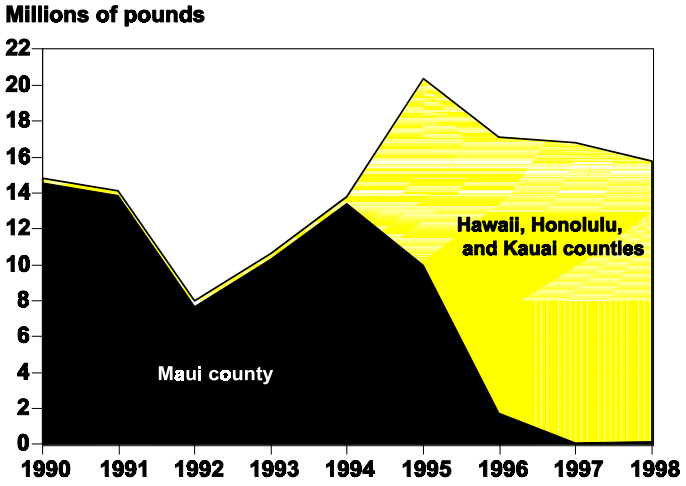
Dry Onions

Production by County
State of Hawaii, 1990-98



Watermelons

Production by County
State of Hawaii, 1990-98



California Vegetable Summary

California Fresh Market Vegetable Crops, 1998 and 1999

Crop	Area Harvested		Production		Price Per Cwt. [1]		Total Value	
	1998	1999	1998	1999	1998	1999	1998	1999
	Acres		*1,000 cwt.*		*Dollars*		*$1,000*	
Asparagus	9,700	9,800	873	1,125	70.60	56.60	61,633	63,673
Snap Beans	4,700	5,100	447	408	67.80	57.20	30,307	23,338
Bell Peppers	22,000	21,000	6,270	6,300	27.20	29.10	170,374	183,617
Cabbage	14,000	12,500	4,620	4,125	16.50	13.50	76,230	55,688
Carrots	86,500	87,000	29,843	31,320	11.40	17.30	340,210	541,836
Celery	24,500	25,000	16,666	17,500	12.20	11.70	203,126	204,863
Cucumbers	6,000	6,500	1,920	2,015	30.90	27.20	59,328	54,808
Head Lettuce	135,000	147,500	42,525	56,050	16.30	13.70	693,158	767,885
Romaine	26,000	26,500	7,280	7,420	21.60	17.80	157,248	132,076
Watermelons	15,000	14,700	6,750	6,321	12.30	9.90	83,025	62,578

[1] Price is on a packed and loaded basis, f.o.b. shipping point.
Source: California Agricultural Statistics Service