



USDA, NASS, Hawaii Field Office

# Annual Hawaii Vegetables

In cooperation with:



Agricultural Development Division

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## Farm value at record high \$54 million

The farm value of Hawaii's vegetables and melons is estimated at a record high \$54.3 million in 2004, up 3 percent from the previous record high set in 2003. Higher farm prices enabled vegetable and melon growers to post the record revenues as overall production declined 11 percent.

### Wet winters hamper production

Vegetable and melon production during 2004 was hampered by wet conditions at the start, and end, of the year. Hawaii's winter, or rainy period, extends from October to April and the National Weather Service reported that the 2003/04 season was the wettest since 1996/97. Heavy downpours during this period caused minor flooding and ponding in low lying areas. The wet, cloudy weather delayed plantings, hampered spraying, and generally slowed crop development. The summer of 2004, on the other hand, was relatively dry and beneficial for crops with most areas receiving below-normal rainfall. Conditions were especially dry in July with some areas receiving no rainfall during the month. The 2004/05 rainy season started early when heavy showers pelted the windward areas of the northern half of the State in August. While many areas experienced normal to above normal rainfall during the closing months of the year, most of the rainfall was concentrated on Kauai and Oahu. ■

### Vegetable and melon statistics ..... page 3

Acreage, production, and farm value by crops, State of Hawaii, 2003 and 2004

### County Summaries ..... page 4-5

Narrative and statistical summary by county.

### Lettuce review ..... page 6

Total lettuce production and farm value, State of Hawaii, 2000-2004.

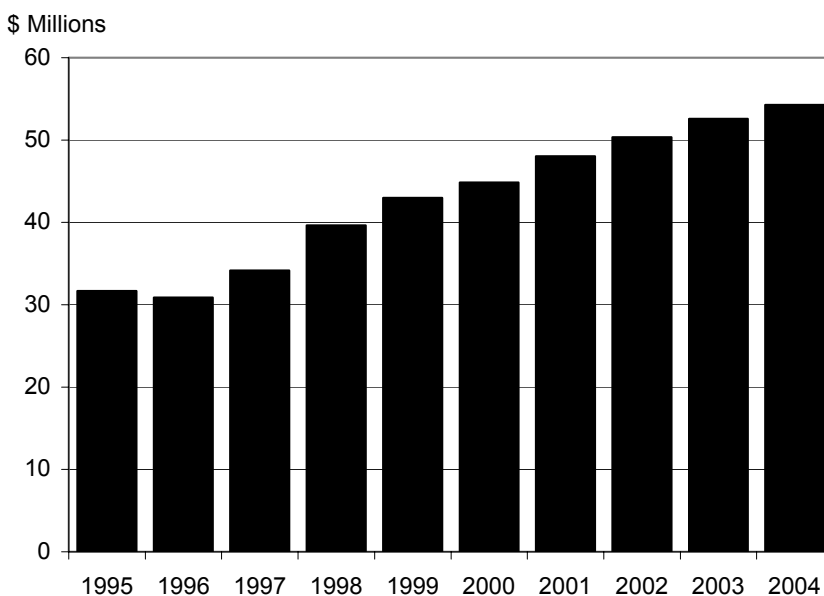
### Monthly production and farm prices ..... page 7

2005 monthly production and farm price estimates for selected crops.

### California fresh vegetable statistics ..... page 8

Area harvested, production, price per cwt., and total value for 2003 and 2004.

Farm Value of Vegetables and Melons  
State of Hawaii, 1995-2004



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## Tomatoes account for 20 percent of total farm revenues

Hawaii tomato growers (field and greenhouse) posted a record high farm revenue of \$11.1 million in 2004, up 9 percent from 2003. The record high return was the result of higher farm prices as total production declined 4 percent in 2004. A distant second were cucumbers with \$3.1 million in farm revenues for 2004, up 10 percent from 2003. Rounding out the top five were three crops that experienced decreased revenues during 2004: head cabbage (-3%), watermelons (-15%), and dry onions (-14%). All the individually listed vegetables and melons recorded an increase in average farm prices during 2004, so changes in farm value were tied directly to swings in production.

Other crops that surpassed the \$1-million in revenue mark in 2004 were: green peppers (+10%), sweet potatoes (+151%), Chinese cabbage (+7%), green onions (+8%), watercress (+33%), sweet corn (-18%), and snap beans (+7%).

For vegetable crops under the \$1-million mark, some notable changes occurred for oriental squash (+275%), bittermelon (+30%), eggplant (+29%), pumpkins (-64%), and broccoli (-26%).

The combined category of other vegetables and melons had a farm value of \$16.4 million in 2004, up 1 percent from 2003. Daikon was included in this category for the first time in 2004 to avoid the disclosure of an individual operation. Some vegetables and melons that are major contributors to this category are: green leaf lettuce, Jack-O-lantern pumpkins, long beans, sprouts, mushrooms, and specialty tomatoes. ■

## Production declines for most crops

Production of all vegetables and melons totaled 87.2 million pounds in 2004, down 11 percent from 2003.

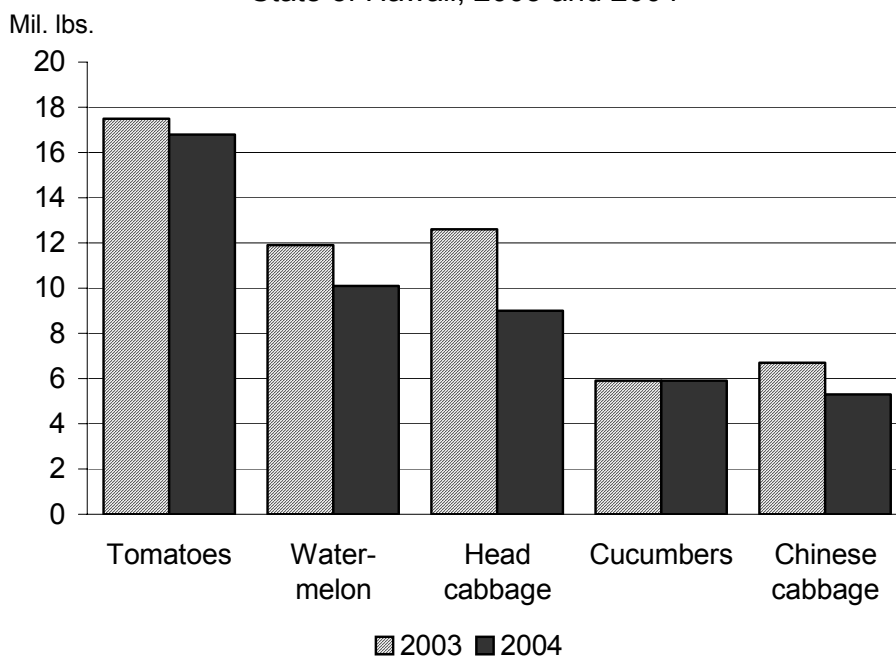
Of the 22 vegetables and melons listed separately, 13 experienced a decline in production during 2004 including four of the top five crops. Tomatoes (field and greenhouse) remained the top volume crop for the sixth straight year with 16.8 million pounds in 2004, down 4 percent from 2003. Watermelons were second at 10.1 million pounds, down 15 percent from 2003 and the lowest total in 12 years. Head cabbage dropped from second to third in 2004 with 9.0 million pounds, down 29 percent from 2003 and the smallest harvest since 1963. Cucumbers stayed even at 5.9 million pounds while Chinese cabbage production decreased to a 32-year low of 5.3 million pounds in 2004. These five crops account for 54 percent of 2004's total vegetable and melon production.

Other vegetables that recorded double-digit percentage declines in production during 2004 were: broccoli (-33%), celery (-25%), dry onions (-52%), pumpkins (-71%), romaine (-21%), snap beans (-10%), and sweet corn (-28%).

Seven vegetable crops recorded increases in production from 2003. Bittermelon (+14%), eggplant (+24%), Oriental squash (+225%), sweetpotatoes (+119%), and watercress (+31%) were vegetable crops that recorded the largest percentage gains in 2004.

The combined category of other vegetables and melons had production of 16.0 million pounds in 2004, or 18 percent of the overall total. Daikon was included in this category for the first time in 2004 to avoid disclosure of an individual operation. In all, this collective category contained over 60 different vegetables and melons. ■

**Top Five Vegetables and Melons by Volume**  
State of Hawaii, 2003 and 2004



# Vegetable and Melon Statistics

## Vegetable and Melons: Acreage, Production, and Farm Value State of Hawaii, 2003 and 2004 <sup>1/</sup>

Name of Commodity	Harvested Acreage <sup>2/</sup>		Production		Farm Value	
	2003	2004	2003	2004	2003	2004
	----- acres -----		----- 1,000 pounds -----		----- \$1,000 -----	
Beans, snap	200	170	1,000	900	960	1,026
Bittermelon	15	20	220	250	154	200
Broccoli	170	125	750	500	450	335
Cabbage, Chinese	310	260	6,700	5,300	1,541	1,643
Cabbage, head	500	360	12,600	9,000	2,772	2,700
Cabbage, mustard	130	155	1,300	1,400	676	812
Celery	45	30	1,200	900	384	306
Corn, sweet	830	540	2,500	1,800	1,275	1,044
Cucumbers	410	400	5,900	5,900	2,832	3,127
Daikon	220	<sup>3/</sup>	2,300	<sup>3/</sup>	713	<sup>3/</sup>
Eggplant	60	100	850	1,050	629	809
Lettuce <sup>4/</sup>	120	110	1,200	1,300	696	793
Onions, dry	330	180	3,300	1,600	2,772	2,384
Onions, green	130	130	1,600	1,600	1,440	1,552
Peppers, green	220	240	3,300	3,200	2,013	2,208
Pumpkins	70	40	850	250	408	145
Romaine	160	140	1,900	1,500	836	750
Squash, Italian	150	230	1,800	1,700	936	918
Squash, oriental	10	50	200	650	92	345
Sweetpotatoes	210	400	2,100	4,600	861	2,162
Tomatoes	560	600	17,500	16,800	10,150	11,088
Watercress	30	30	650	850	812	1,080
Watermelons	450	510	11,900	10,100	2,856	2,424
Other vegetables and melons	870	1,720	16,300	16,000	16,300	16,430
<b>Totals and Averages</b>	<b>6,200</b>	<b>6,540</b>	<b>97,920</b>	<b>87,150</b>	<b>52,558</b>	<b>54,281</b>

<sup>1/</sup> 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, herbs, and medicinal crops.

<sup>2/</sup> 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.

<sup>3/</sup> 2004 daikon estimates included in "Other vegetables and melons" category.

<sup>4/</sup> Includes head and semi-head (Manoa) lettuce. Leaf lettuce and salad greens included in "Other vegetables and melons". See lettuce feature on page 6.

## Production Down In Most Counties

### Hawaii County

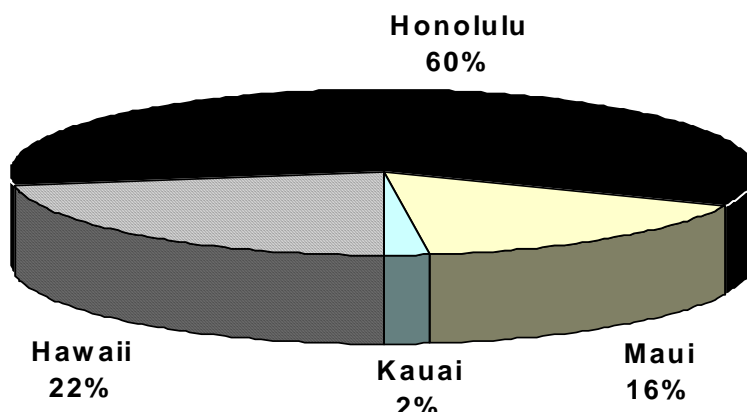
Big Island growers produced 19.2 million pounds of vegetables and melons in 2004, down 3 percent from 2003. Hawaii was the second leading county in vegetable and melon production with a 22 percent share of the State's total, up from a 20 percent share in 2003. Chinese cabbage production declined 9 percent, but remained the top volume vegetable on the island. Sweetpotatoes overtook head cabbage to claim the second spot. Rounding out the top five volume crops were head cabbage, romaine, and tomatoes.

Total farm value of vegetables and melons in Hawaii County was \$12.5 million, up 22 percent from 2003. Leading all vegetables in farm revenues and accounting for most of the increase was sweetpotatoes. The only other vegetable to generate \$1-million or more in farm revenue was Chinese cabbage.

Harvested acreage of all vegetables and melons totaled

### Distribution of vegetables and melon production by county

State of Hawaii - 2004



1,520 acres, up 9 percent from 2003. Sweetpotatoes and the combined category of other vegetables and melons were the only two to post an increase in harvested acreage as all other vegetable crops registered a decrease during 2004.

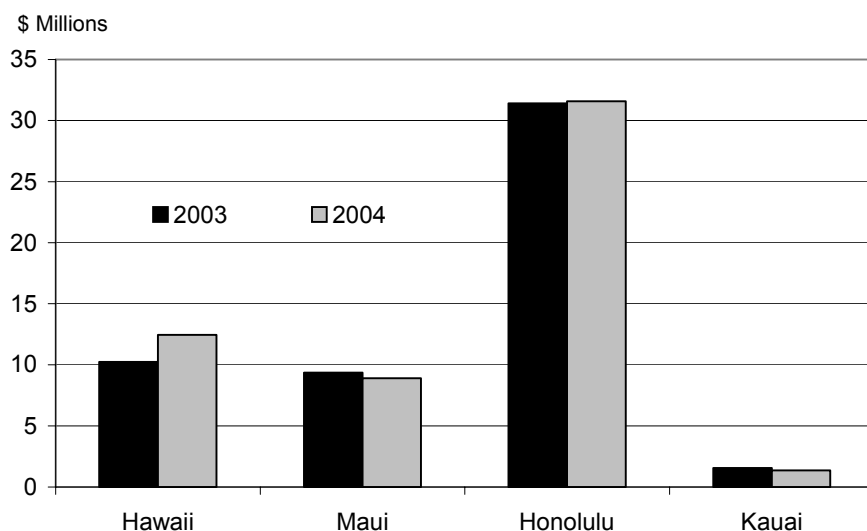
### Maui County

Maui County (the islands of Maui, Molokai, and Lanai combined) produced 14.1 million pounds of vegetables and melons during 2004, down 13 percent from 2003. The top two vegetables in the county, head cabbage (+4%) and cucumbers (+16%), registered increases in production, but they were more than offset by declines for most other vegetables. Notable production declines were made by Chinese cabbage (-53%), dry onions (-46%), and Italian squash (-30%).

Farm revenues from the sale of vegetables and melons totaled \$8.9 million in 2004, down 5 percent from 2003. The overall decline in farm revenues is a reflection of lower output for most crops as farm prices were generally higher. Crops with \$1-million plus in farm revenue were head cabbage (+42%), cucumbers (+40%), and dry onions (-4%).

### Farm value of vegetables and melons by county

State of Hawaii, 2003 and 2004



# 2004 County Summaries

Harvested acreage of vegetables and melons is estimated at 945 acres in 2004, down 14 percent from 2003. Most vegetables experienced a decline in harvested acreage, but double-digit percentage gains were made by sweet corn (+14%) and tomatoes (+67%).

## Honolulu County

Growers on the island of Oahu produced 52.1 million pounds of vegetables and melons in 2004, down 14 percent from 2003. Oahu accounted for 60 percent of the State's total output of vegetables and melons, down from a 62 percent share in 2003. The top 3 vegetables: tomatoes (-2%), cucumbers (-8%), and green peppers (-3%) all registered declines in production. In addition, watermelon production was down 19 percent in 2004.

The farm value of all vegetables and melons on Oahu totaled \$31.6 million in 2004, up 1 percent from 2003. Changes from a year ago were mixed for the \$1-million plus crops: cucumbers (-3%), green onions (+9%), green peppers (+10%), tomatoes (+11%), watercress (+37%), and watermelons (-18%).

## Kauai County

Kauai County produced a record 1.8 million pounds of vegetables and melons in 2004, up 17 percent from 2003. Major crops on Kauai were watermelons, sweet corn, and cucumbers.

Farm value of all vegetables and melons totaled \$1.4 million in 2004, down 13 percent from 2003. Most crops recorded an increase in farm revenues, but these were more than offset by decreases for sweet corn and the combined category of other vegetables and melons. ■

## Vegetables and Melons By Counties, State of Hawaii, 2000-2004

County	Harvested Acreage	Production (000 lbs.)	Farm Value (\$1,000)
<b>State</b>			
2000	6,090	97,010	44,863
2001	6,130	94,610	48,034
2002	6,430	96,450	50,363
2003	6,200	97,920	52,558
2004	6,540	87,150	54,281
<b>Hawaii</b>			
2000	1,560	20,575	9,097
2001	1,580	19,600	9,759
2002	1,460	19,160	9,699
2003	1,400	19,675	10,245
2004	1,520	19,180	12,450
<b>Maui</b>			
2000	1,315	20,525	8,983
2001	1,210	18,425	9,042
2002	1,115	15,795	8,852
2003	1,105	16,190	9,357
2004	945	14,120	8,897
<b>Honolulu</b>			
2000	3,070	54,740	25,534
2001	3,220	55,610	28,175
2002	3,615	60,225	30,609
2003	3,435	60,540	31,398
2004	3,745	52,080	31,579
<b>Kauai</b>			
2000	145	1,170	1,249
2001	120	975	1,058
2002	240	1,270	1,203
2003	260	1,515	1,558
2004	330	1,770	1,355

# Hawaii Lettuces

## Farm revenues at record high \$5.8 million

Farm revenues from the sale of all types of lettuce totaled a record high \$5.8 million in 2004, up 6 percent from 2003. The record high farm revenue was achieved through higher farm prices as overall production declined 11 percent.

Production of **head and semi-head (Manoa) lettuce** totaled 1.3 million pounds in 2004, up 8 percent from 2003 and the highest total in four years. The combined farm price for head and semi-head lettuce averaged 61.0 cents per pound in 2004, up 5 percent from 2003. The boost in production and farm prices increased total farm revenues by 14 percent to \$793,000 in 2004, the highest total since 1998.

Hawaii **romaine lettuce** growers produced 1.5 million pounds in 2004, down 21 percent from 2003 and the lowest total in 12 years. The farm price of romaine lettuce

## Production

Type of lettuce	2000	2001	2002	2003	2004
<i>1,000 pounds</i>					
Head and semi-head	1,300	1,200	1,200	1,200	1,300
Romaine	2,000	2,000	1,800	1,900	1,500
Other <sup>1</sup>	1,600	1,800	1,600	2,400	2,100
<b>Total</b>	<b>4,900</b>	<b>5,000</b>	<b>4,600</b>	<b>5,500</b>	<b>4,900</b>

<sup>1</sup> Includes all other lettuce and "salad mix" greens.

## Farm Value

Type of lettuce	2000	2001	2002	2003	2004
<i>\$1,000</i>					
Head and semi-head	650	600	684	696	793
Romaine	860	900	846	836	750
Other <sup>1</sup>	2,900	3,000	3,200	4,000	4,300
<b>Total</b>	<b>4,410</b>	<b>4,500</b>	<b>4,730</b>	<b>5,532</b>	<b>5,843</b>

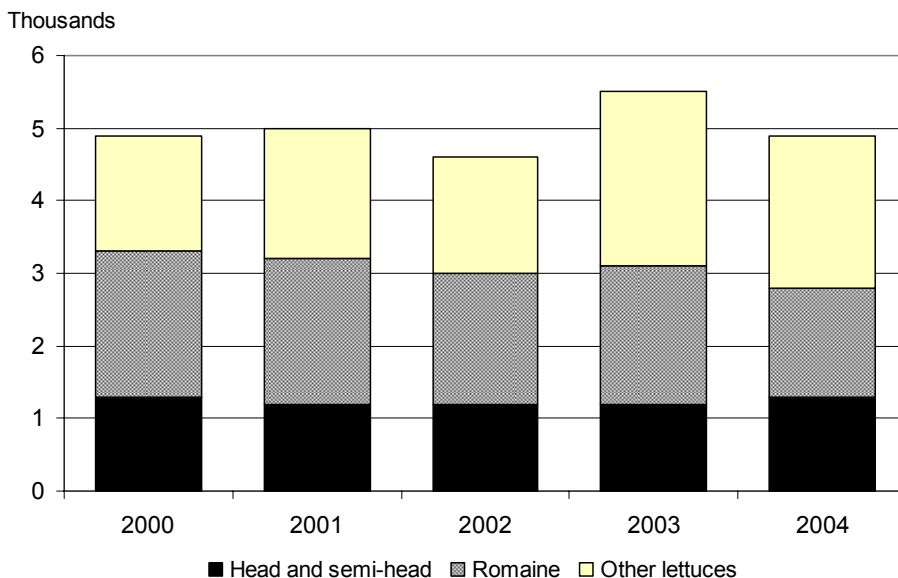
<sup>1</sup> Includes all other lettuce and "salad mix" greens.

increased 14 percent to a record high average of 50.0 cents per pound in 2004. The drop in production, however, resulted in total farm revenues dipping to a 7-year low of \$750,000 in 2004.

Production of all **other lettuces** totaled 2.1 million pounds in 2004, down 13 percent from 2003's record output of 2.4 million pounds. Farm revenues climbed to a new record high of \$4.3 million in 2004, up 8 percent from the previous record high set in 2003. This combined category of lettuces now accounts for 43 percent of all lettuce production and 74 percent of total farm revenue. The relatively high value is due to the mix of higher priced lettuces such as butterhead, green leaf, red leaf and salad greens that make up the bulk of this combined category. The cultivation of lettuces other than head, semi-head, and romaine has grown in the past five years. In 2000, production of **other lettuces** totaled 1.6 million pounds with a farm value of \$2.9 million. By 2004, production increased 31 percent to 2.1 million pounds and farm revenues grew by 48 percent to 4.3 million pounds. ■

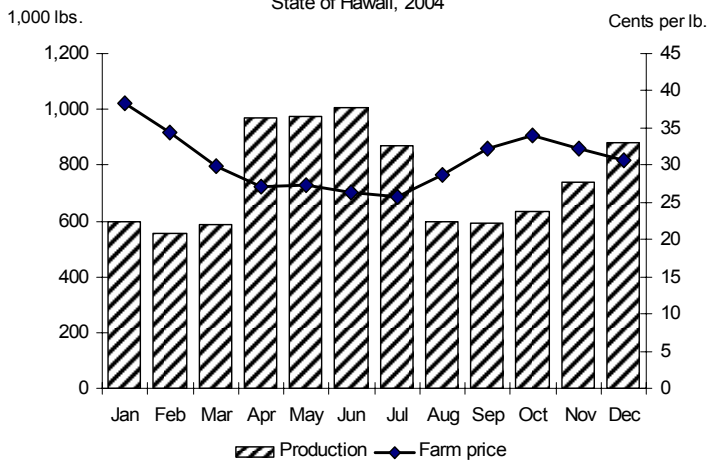
## Hawaii Lettuce Production

State of Hawaii, 2000-2004

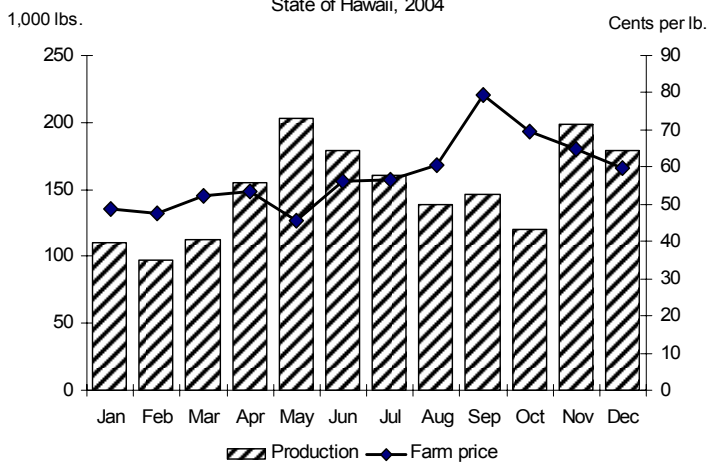


# Monthly 2005 Production and Farm Prices

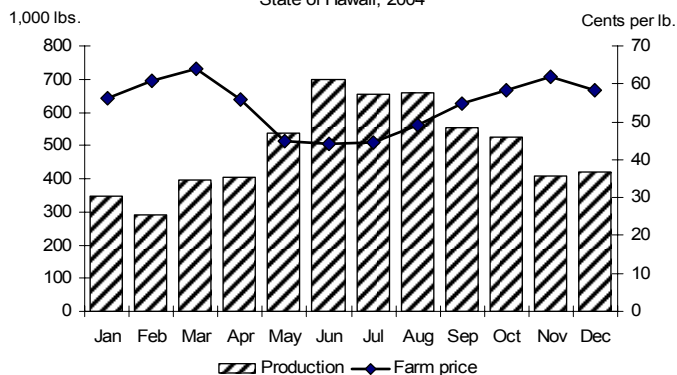
**Hawaii Head Cabbage:**  
Monthly Production and Farm Price  
State of Hawaii, 2004



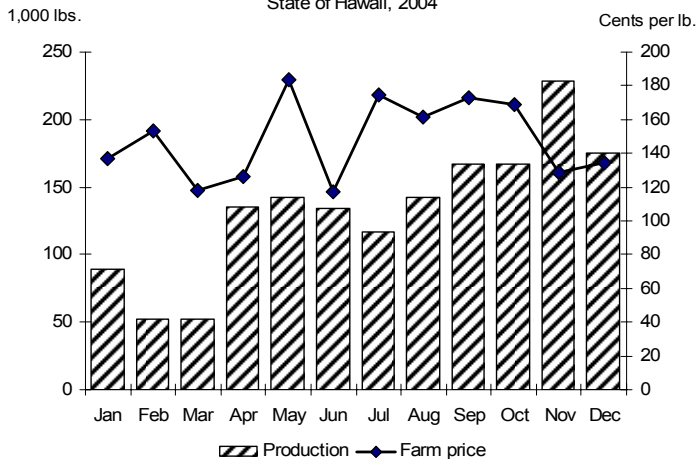
**Hawaii Sweet Corn:**  
Monthly Production and Farm Price  
State of Hawaii, 2004



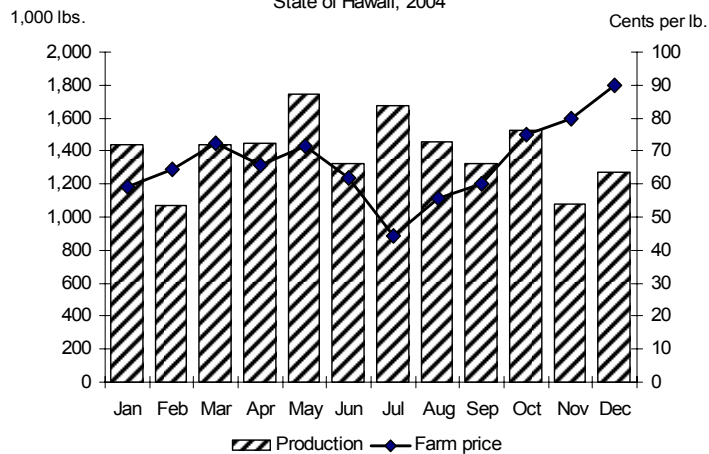
**Hawaii Cucumbers:**  
Monthly Production and Farm Price  
State of Hawaii, 2004



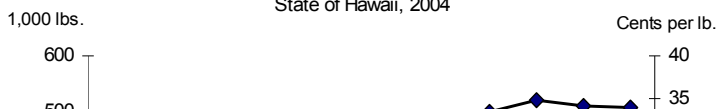
**Hawaii Dry Onions:**  
Monthly Production and Farm Price  
State of Hawaii, 2004



**Hawaii Tomatoes:**  
Monthly Production and Farm Price  
State of Hawaii, 2004



**Hawaii Chinese Cabbage:**  
Monthly Production and Farm Price  
State of Hawaii, 2004



# California Vegetable Summary

## California Fresh Market Vegetable Crops, 2003 and 2004

Crop	Area Harvested		Production		Price per cwt. <sup>1</sup>		Total Value	
	2003	2004	2003	2004	2003	2004	2003	2004
	----- Acres -----		----- Cwt. -----		----- Dollars -----		----- \$1,000 -----	
Asparagus	27,000	24,000	918	816	122.00	141.00	111,996	115,056
Beans, snap	5,800	7,000	580	770	55.70	66.80	32,306	51,436
Broccoli	120,000	128,000	18,000	19,200	32.00	32.60	575,224	625,721
Cabbage	13,500	13,600	5,265	5,576	16.00	18.20	84,240	101,483
Carrots	68,000	66,500	20,400	19,950	20.40	21.60	416,160	430,920
Cauliflower	34,000	36,000	5,440	5,940	35.30	31.90	192,210	189,675
Celery	25,300	25,100	18,090	17,570	13.20	15.10	239,554	265,081
Corn, sweet	28,500	28,000	5,415	5,880	21.80	29.50	118,047	173,460
Cucumbers	4,000	3,400	800	629	33.30	41.80	26,640	26,292
Lettuce, head	132,000	139,000	49,500	52,125	21.00	15.10	1,039,500	787,088
Lettuce, romaine	60,000	64,000	18,000	20,480	29.70	19.30	534,600	395,264
Peppers, bell	18,500	21,000	7,215	8,003	28.60	34.60	206,606	277,120
Pumpkins	4,900	4,400	1,225	1,100	12.40	15.30	15,190	16,830
Tomatoes	34,000	37,000	10,200	10,730	35.90	39.20	366,180	420,616

<sup>1</sup> Price is on a packed and loaded basis, f.o.b. shipping point.