



USDA, NASS, Hawaii Field Office

# Annual Hawaii Vegetables

In cooperation with:



Agricultural Development Division

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## Farm value sets new record high

The farm value of Hawaii's vegetables and melons is estimated at a record high \$60.2 million in 2006, up 11 percent from the previous record high set in 2005. Production was up fractionally, but an overall increase in farm prices ensured 2006's record revenues.

### Improved weather during second half benefits production

Weather conditions were mixed during 2006. The year began dry, but quickly turned wet for an extended period of time. Much of the rest of the year had a mixture of wet and dry periods, before the year ended on a dry note. A series of unstable weather conditions produced periods of heavy rainfall between February 19 and April 2. This was the result of a blocking weather pattern which formed in place south of Alaska that helped to keep a series of low pressure systems anchored to the northwest of the State producing the unstable conditions and subsequent heavy precipitation. Although the wet weather slowed crop progress and hampered farm activities during this period and for at least a month afterwards, most vegetable and melon growers benefited from the more ideal weather conditions which followed. Because of the nearly 6 weeks of rainfall earlier in the year, cumulative year-to-date rainfall totals for most areas of the State were at near to above normal levels. ■

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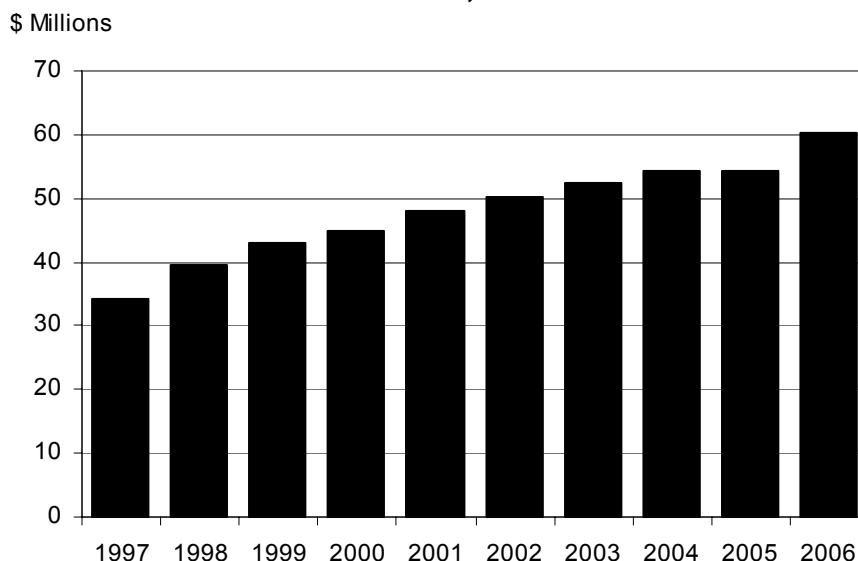
### Monthly production and farm prices ..... page 7

2006 monthly production and farm price estimates for selected crops.

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Area harvested, production, price per cwt., and total value for 2005 and 2006.

**Farm Value of Vegetables and Melons  
State of Hawaii, 1997 - 2006**



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## Tomatoes account for 19 percent of total farm revenues

Hawaii's tomato farmers (field and greenhouse types) experienced a 16-percent increase in farm revenues during 2006, and continued to lead all other vegetable and melon growers with \$11.3 million in farm revenues or 19 percent of the overall total. The increase in revenue was due to a 4-percent increase in production coupled with a 12-percent increase in farm prices. In second place were sweetpotatoes which posted \$4.4 million in farm revenues during 2006, up 16 percent from 2005. A 21-percent increase in farm prices more than offset the 5-percent decrease in production. Watermelons were in third place with farm revenues totaling \$2.9 million. This was a 5-percent drop from 2005 caused by a decrease in production (-8%) and farm price (-4%). Head cabbage at \$2.7 million (-1%), and cucumbers with \$2.7 million (-2%) rounded out the top five revenue-producing vegetables and melons in 2006.

Other crops that surpassed the \$1-million mark in revenue for 2006 were: Chinese cabbage (+3%), sweet corn (+27%), dry onions (-33%), green onions (-11%), green peppers (4%) and watercress (+22%).

The combined category of other vegetables and melons had a farm value of \$20.7 million in 2006, up 34 percent from 2005. Vegetables and melons that were major revenue contributors to this category are: green leaf lettuce, sprouts, mushrooms, specialty tomatoes, and specialty melons. ■

## Production changes evenly mixed among crops

Production of all vegetables and melons totaled 88.4 million pounds in 2006, up fractionally from a year ago.

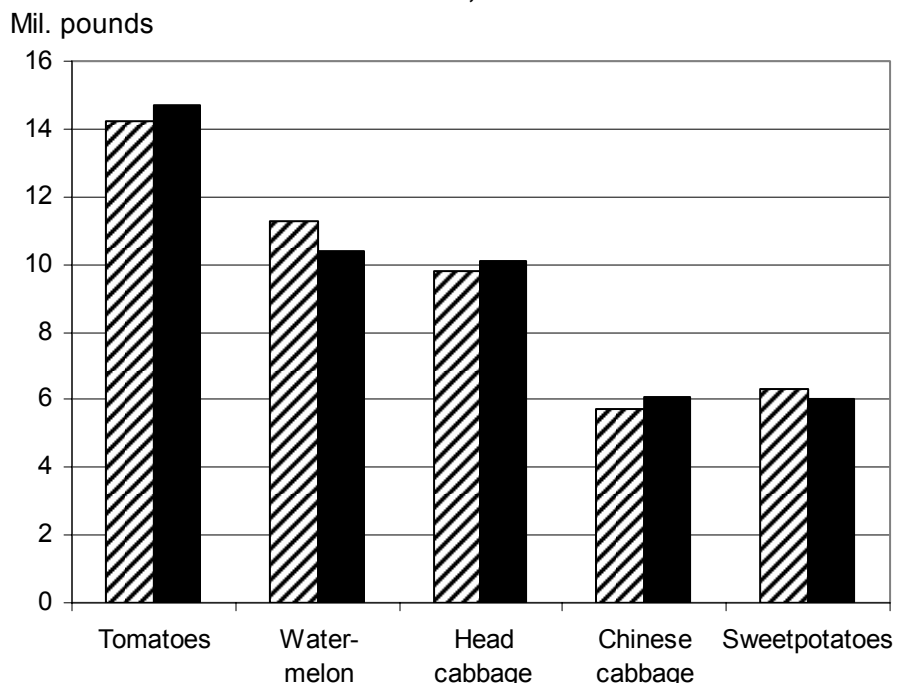
Among the top five volume-producing crops, three registered an increase in production. Tomato production (field and greenhouse types) increased 4 percent from 2005 and remained the top volume crop for the eighth straight year with 14.7 million pounds in 2006. Watermelons remained in second place at 10.4 million pounds, down 8 percent from 2005. Head cabbage was third highest registering a 3-percent increase for 2006 at 10.1 million pounds. Chinese cabbage and sweetpotatoes rounded out the top five with 6.1 million and 6.0 million pounds, respectively. These five crops accounted for 54 percent of 2006's total vegetable and melon production.

Other vegetables that recorded

double-digit percentage changes in production during 2006 were: cucumbers (-10%), green onions (-12%), dry onions (-39%), romaine (-24%), Italian squash (-27%), eggplant (-17%), celery (-19%), snap beans (-14%), oriental squash (-11%), broccoli (-45%), pumpkins (+263%), bittermelon (-28%).

Production from the combined category of other vegetables totaled 18.95 million pounds in 2006, up 22 percent from 2005. This category which includes over 60 individual crops accounted for 21 percent of the total production of vegetables and melons in 2006. Specialty lettuces, sprouts, taro leaves, ethnic vegetables, and melons were some of the major volume crops in this combined category. ■

**Top Five Vegetables and Melons by Volume  
State of Hawaii, 2005 and 2006**



# Vegetable and Melon Statistics

## Vegetables and Melons: Acreage, Production, and Farm Value State of Hawaii, 2005 and 2006 <sup>1/</sup>

Name of Commodity	Harvested Acreage <sup>2/</sup>		Production		Farm Value	
	2005	2006	2005	2006	2005	2006
	----- acres -----		----- 1,000 pounds -----		----- \$1,000 -----	
Beans, snap	130	120	700	600	763	630
Bittermelon	30	25	250	180	233	144
Broccoli	125	60	600	330	438	277
Cabbage, Chinese	260	250	5,700	6,100	1,710	1,769
Cabbage, head	430	450	9,800	10,100	2,744	2,727
Cabbage, mustard	110	115	1,400	1,400	784	812
Celery	25	25	830	670	307	248
Corn, sweet	410	350	1,700	1,800	935	1,188
Cucumbers	440	330	6,000	5,400	2,760	2,700
Eggplant	80	70	1,200	1,000	972	840
Lettuce <sup>3/</sup>	110	120	1,100	1,200	748	840
Onions, dry	220	140	2,300	1,400	3,036	2,030
Onions, green	155	130	1,700	1,500	1,683	1,500
Peppers, green	230	260	3,000	2,800	1,920	1,988
Pumpkins	35	25	80	290	50	174
Romaine	140	110	1,700	1,300	1,003	819
Squash, Italian	200	175	1,500	1,100	840	704
Squash, oriental	40	40	450	400	247	184
Sweetpotatoes	410	360	6,300	6,000	3,843	4,440
Tomatoes	660	700	14,200	14,700	9,798	11,319
Watercress	35	35	700	750	981	1,201
Watermelons	450	590	11,300	10,400	3,051	2,912
Other vegetables and melons	1,440	1,120	15,500	18,950	15,500	20,747
<b>Total</b>	<b>6,165</b>	<b>5,600</b>	<b>88,010</b>	<b>88,370</b>	<b>54,346</b>	<b>60,193</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 with 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 equals 3 harvested acres.

<sup>3/</sup> Includes head and semi-head (Manoa) lettuce. Leaf lettuce and salad greens included in "Other vegetables and melons" category. Also see lettuce feature on page 6.

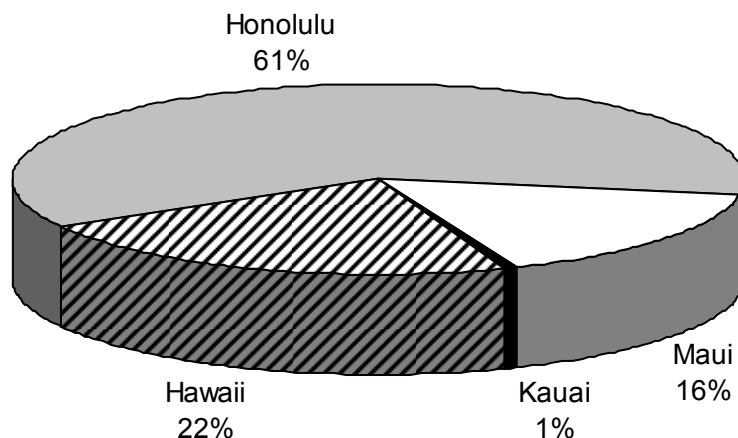
## Honolulu continues to lead all counties

### Hawaii County

Big Island growers produced 19.8 million pounds of vegetables and melons in 2006, down 6 percent from 2005. Hawaii was the second leading county in vegetable and melon production with a 22-percent share of the State's total, down from a 24-percent share in 2005. Sweetpotatoes, Chinese cabbage, head cabbage, tomatoes, and romaine were the top five volume crops on the Big Island for 2006.

Total farm value of vegetables and melons in Hawaii County was \$15.4 million in 2006, up 15 percent from 2005. Leading all vegetables in farm revenues were sweetpotatoes, Chinese cabbage, and tomatoes. These 3 crops accounted for 44 percent of Hawaii County's vegetable and melon farm revenues. The combined category of other vegetables and melons registered farm revenues of \$5.5 million in 2006, up 26 percent from 2005. Some of the major crops in this category were specialty

**Distribution of vegetables and melons production by county, State of Hawaii, 2006**



lettuces, mushrooms, and sprouts.

Harvested acreage of all vegetables and melons totaled 1,158 acres in 2006, down 20 percent from 2005. Head cabbage was the only crop to post an increase in harvested acreage.

### Maui County

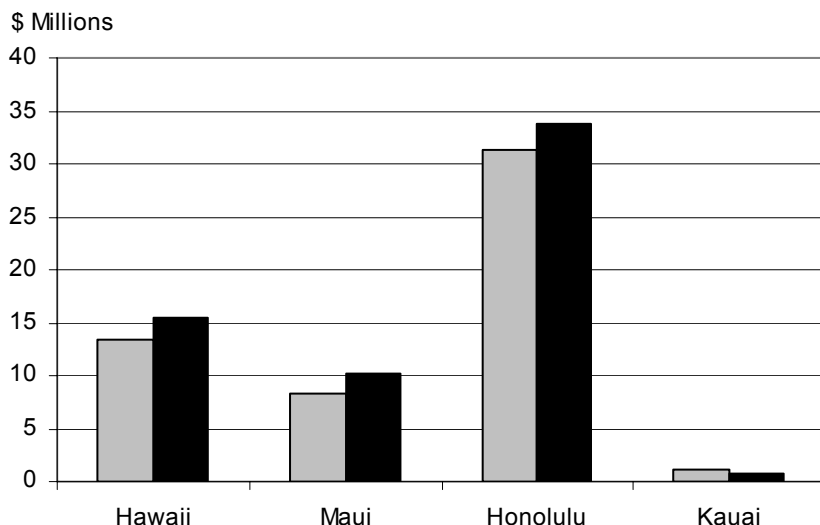
Maui County (the islands of Maui, Molokai, and Lanai combined) produced 14.2 million pounds of vegetables and melons during 2006, up 4 percent from 2005. The top five crops in terms of 2006 production were: head cabbage, cucumbers, dry onions, Italian squash, and sweetpotatoes.

Farm revenues from the sale of vegetables and melons totaled \$10.2 million in 2006, up 21 percent from 2005. The only crops that produced over \$1 million in revenues were cucumbers and dry onions. The combined category of other vegetables and melons had farm revenues of \$3.7 million in 2006, more than triple the revenue of the previous year.

Harvested acreage of vegetables and melons is estimated at 820 acres in 2006, down 17 percent from 2005

### Farm value of vegetables and melons by county

State of Hawaii, 2005 and 2006



# 2006 County Summaries

## Honolulu County

Vegetable and melon growers on the island of Oahu produced 53.9 million pounds in 2006, up 3 percent from 2005. Honolulu County accounted for 61 percent of the State's total output of vegetables and melons. The top 3 volume crops in the county were tomatoes, watermelons, and head cabbage. These 3 crops accounted for over half of the vegetable and melon production in the county. The combined category of other vegetables and melons totaled 12.9 million pounds in 2006, up 19 percent from 2005.

The farm value of all vegetables and melons on Oahu totaled \$33.8 million in 2006, up 8 percent from 2005. Crops with more than \$1-million in farm revenues were head cabbage, green onions, green peppers, tomatoes, and watermelon.

Oahu farmers harvested 3,556 acres of vegetables and melons in 2006, up fractionally from the previous year.

## Kauai County

Kauai County produced 497,000 pounds of vegetables and melons in 2006, down 49 percent from 2005. Major crops on Kauai were sweet corn, eggplant, tomatoes, and watermelons.

Farm value of all vegetables and melons totaled \$805,000 in 2006, down 30 percent from 2005. The combined category of other vegetables and melons had total revenues of \$576,000 in 2006, down 29 percent from the 2005.

Harvested acreage totaled 66 acres in 2006, down 66 percent from 2005. Reductions in sweet corn and watermelon acreage accounted for the dramatic decrease in 2006 ■

## Vegetables and Melons By Counties, State of Hawaii, 2002-2006

County and Year	Harvested Acreage	Production (1,000 lbs.)	Farm Value (\$1,000)
State			
2002	6,430	96,450	50,363
2003	6,000	97,920	52,558
2004	6,540	87,150	54,281
2005	6,165	88,010	54,346
2006	5,600	88,370	60,193
Hawaii			
2002	1,460	19,160	9,699
2003	1,400	19,675	10,245
2004	1,520	19,180	12,450
2005	1,440	21,125	13,403
2006	1,158	19,759	15,419
Maui			
2002	1,115	15,795	8,852
2003	1,105	16,190	9,357
2004	945	14,120	8,897
2005	990	13,655	8,390
2006	820	14,187	10,160
Honolulu			
2002	3,615	60,225	30,609
2003	3,435	60,540	31,398
2004	3,745	52,080	31,579
2005	3,540	52,255	31,403
2006	3,556	53,927	33,809
Kauai			
2002	240	1,270	1,203
2003	260	1,515	1,558
2004	330	1,770	1,355
2005	195	975	1,150
2006	66	497	805

# Hawaii Lettuces

## Farm revenues increase

Farm revenues from the sale of all types of lettuces totaled a record-high \$6.6 million in 2006, up 38 percent from 2005. Production in 2006 is estimated at 4.1 million pounds, down 5 percent from 2005. Romaine was the only lettuce to show a decrease in production and farm revenue during 2006.

Production of **head and semi-head (Manoa) lettuce** totaled 1.2 million pounds in 2006, up 9 percent from 2005. The combined farm price for head and semi-head lettuce averaged 70.0 cents per pound in 2006, 3 percent higher than in 2005. Farm revenues totaled an estimated \$840,000 for 2006, up 12 percent from 2005.

Hawaii **romaine lettuce** growers produced 1.3 million pounds in 2006, down 24 percent from 2005. The farm price of romaine lettuce

## Production (1,000 pounds)

Type of lettuce	2002	2003	2004	2005	2006
Head and semi-head	1,200	1,200	1,300	1,100	1,200
Romaine	1,800	1,900	1,500	1,700	1,300
Other <sup>1/</sup>	1,600	2,400	2,100	1,500	1,600
<b>Total</b>	<b>4,600</b>	<b>5,500</b>	<b>4,900</b>	<b>4,300</b>	<b>4,100</b>

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

## Farm Value (\$1,000)

Type of lettuce	2002	2003	2004	2005	2006
Head and semi-head	684	696	793	748	840
Romaine	846	836	750	1,003	819
Other <sup>1/</sup>	3,200	4,000	4,300	3,000	4,900
<b>Total</b>	<b>4,730</b>	<b>5,532</b>	<b>5,843</b>	<b>4,751</b>	<b>6,559</b>

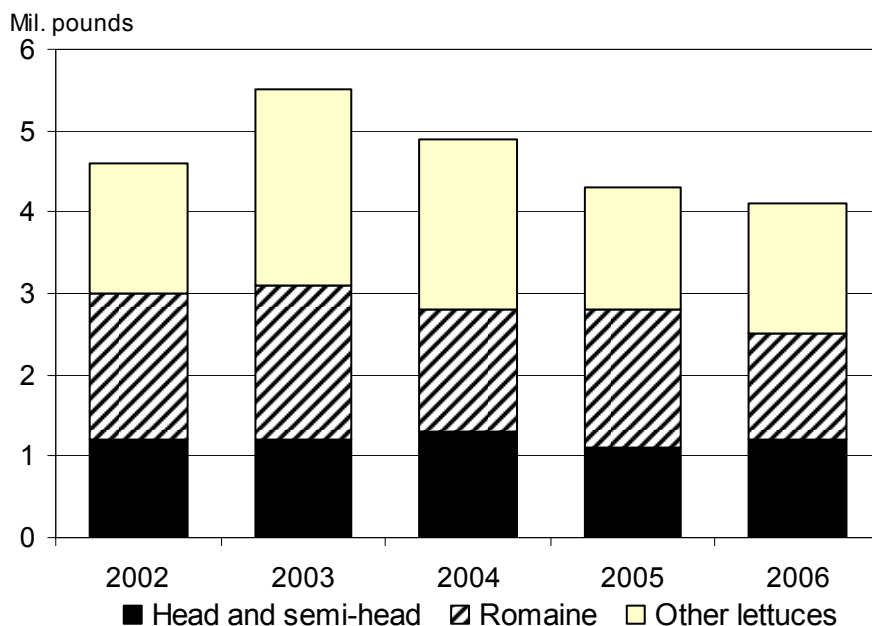
<sup>1/</sup> Includes all other lettuce and "salad mix" greens.

increased to a record-high average of 63.0 cents per pound in 2006, 7 percent higher than the previous record high set in 2005. Farm

revenues registered an 18-percent decrease from last year to total \$819,000 in 2006.

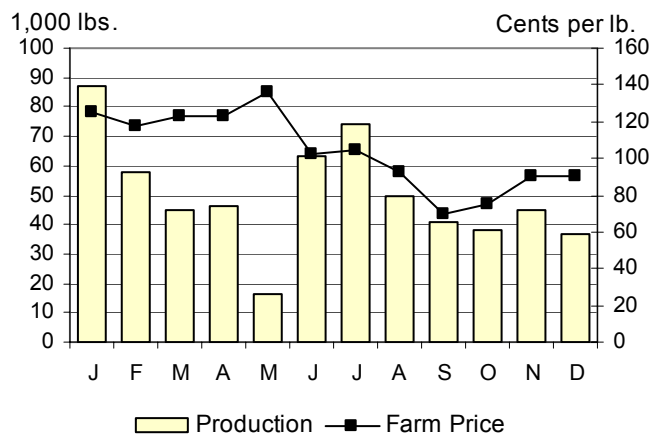
Production of all **other lettuces** totaled 1.6 million pounds in 2006, up 7 percent from 2005. Farm revenues totaled \$4.9 million in 2006, up 63 percent from the previous year beating the previous record high set in 2004. This combined category of other lettuces accounted for 39 percent of 2006's total lettuce production and 75 percent of total farm revenue. The relatively high value for this combined category is due to the mix of higher-priced lettuces such as green leaf, red leaf, and salad greens that make up the bulk of this group. In addition, some lettuces in this category are grown organically and command a higher farm price. ■

**Hawaii Lettuce Production**  
State of Hawaii, 2002 - 2006

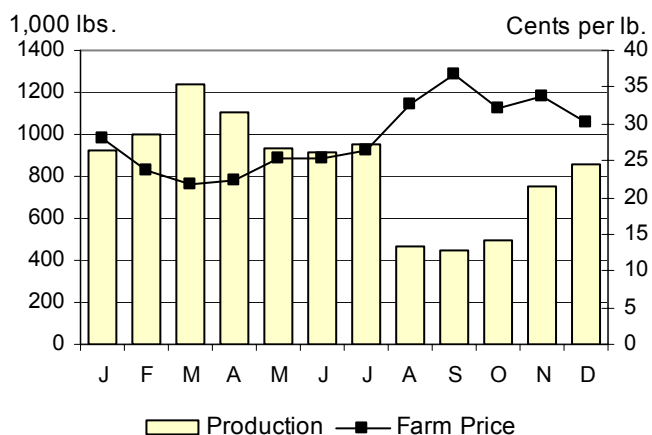


# Monthly 2006 Production and Farm Price

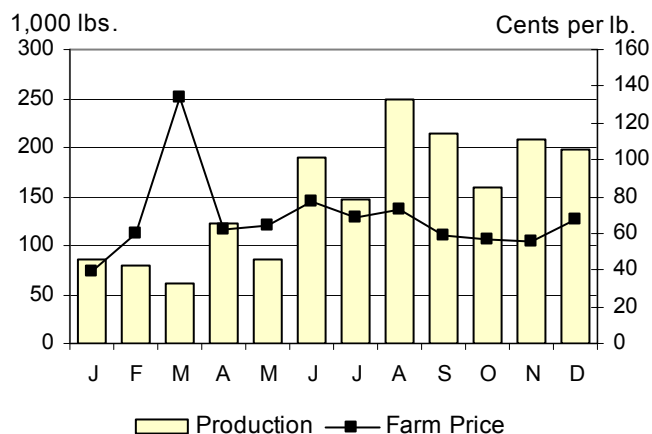
**Hawaii Snap Beans:**  
Monthly Production and Farm Price, 2006



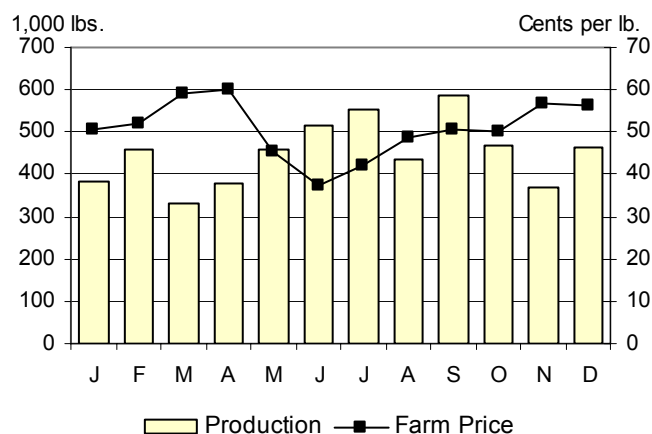
**Hawaii Head Cabbage:**  
Monthly Production and Farm Price, 2006



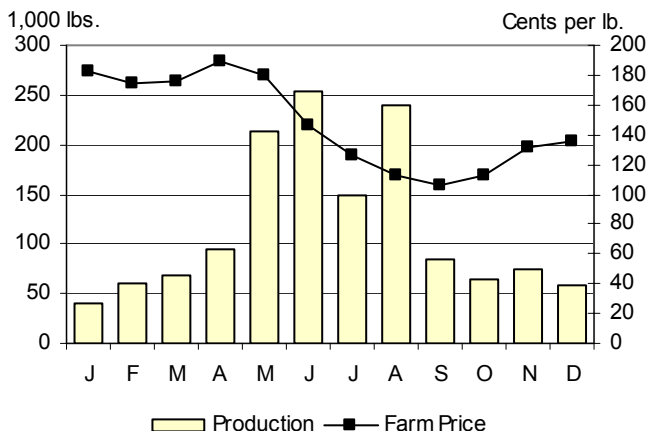
**Hawaii Sweet Corn:**  
Monthly Production and Farm Price, 2006



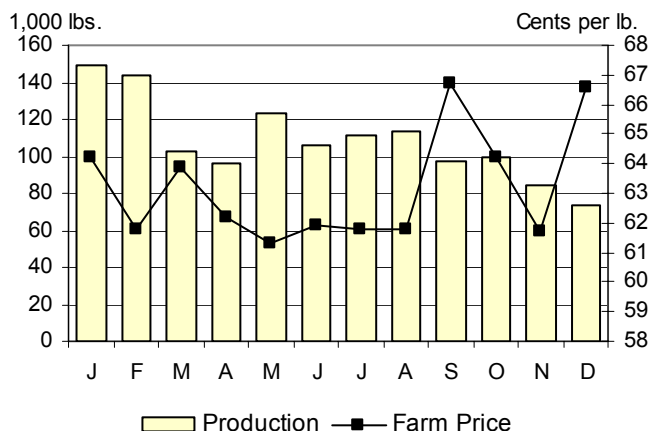
**Hawaii Cucumbers:**  
Monthly Production and Farm Price, 2006



**Hawaii Dry Onions:**  
Monthly Production and Farm Price, 2006



**Hawaii Romaine:**  
Monthly Production and Farm Price, 2006



# California Vegetable Summary

## California Fresh Market Vegetable Crops, 2005 and 2006

Crop	Area Harvested		Production		Price per cwt. 1/		Total Value	
	2005	2006	2005	2006	2005	2006	2005	2006
	----- Acres -----		----- 1,000 cwt. -----		----- Dollars -----		----- \$1,000 -----	
Asparagus	24,100	24,000	770	600	105.00	118.00	80,850	70,800
Beans, Snap	8,000	7,500	720	600	64.90	68.60	46,728	41,160
Broccoli 2/	123,000	127,000	18,450	18,415	28.20	32.60	519,788	599,436
Cabbage	13,300	13,800	4,655	6,072	15.10	14.50	70,291	88,044
Carrots	67,000	69,000	20,770	21,045	21.70	21.10	450,709	444,050
Cauliflower 2/	36,300	38,000	6,171	6,443	29.00	32.80	178,804	211,253
Celery	25,200	24,300	17,766	17,010	14.00	18.40	248,816	312,197
Corn, Sweet	25,300	26,900	4,681	4,573	22.20	19.10	103,918	87,344
Cucumbers	4,600	5,100	989	1,173	23.90	23.60	23,637	27,683
Lettuce, head	125,000	125,000	48,750	42,500	15.80	17.60	770,250	748,000
Lettuce, romaine	41,000	42,000	13,530	13,440	17.10	24.30	231,363	326,592
Peppers, bell 2/	23,000	28,000	8,515	9,250	28.20	30.90	239,715	286,203
Pumpkins	5,500	5,000	1,595	1,150	9.00	11.40	14,355	13,110
Tomatoes	40,000	41,000	11,200	11,480	31.00	44.00	347,200	505,120

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

2/ Fresh market and processing combined.