



National Agricultural Statistics Service

Hawaii Agricultural Statistics Service  
Hawaii Department of Agriculture

# Hawaii Vegetables

Donald A. Martin, State Agricultural Statistician

November 2003

## Kauai continues to get most of the rain

Hawaii's rainy season got off to a promising start in October with the westerly approach of a cold front on October 1. Unfortunately, Kauai was the only island to receive showers as the front stalled and dissipated before reaching Oahu. Weather conditions during the remainder of the first-half of the month were dominated by moderate trade winds which produced mostly light showers in windward areas. The breezy conditions departed the State in the second-half of the month and were replaced by warm, humid weather. Relief came in the form of another cold front that generated light to heavy showers in the western end of the State during the final week of the month. Kauai remains the only island in the State with year-to-date rainfall totals that were near or above normal levels. Hawaii's wet season normally extends from October through April.

### Harvested acreage charts ..... page 2

Year-ago, month-ago, current,  
and upcoming harvested  
acreage.

### October review ..... page 3

Production statistics and  
comments on selected crops.

### U.S. fresh spinach market ..... page 4

Brief overview by the  
USDA's Economic Research  
Service.

Changes in harvested acreage will be mixed in November. Vegetables expected to show increases in harvested acreage are: **snap beans** (+20%), **Chinese cabbage** (+5%), **head cabbage** (+30%), **dry onions** (+260%), and **romaine** (+9%). Declines in harvested acreage are forecast for **mustard cabbage** (-24%), **sweet corn** (-12%), and **head lettuce** (-14%). Most vegetable crops were in fair to good condition at the beginning of the month. Regular irrigation was offsetting some of the dry conditions.

**Dry onion** (+53%) is the only vegetable anticipated to show an increase in harvested acreage during December. ■



### Acreage

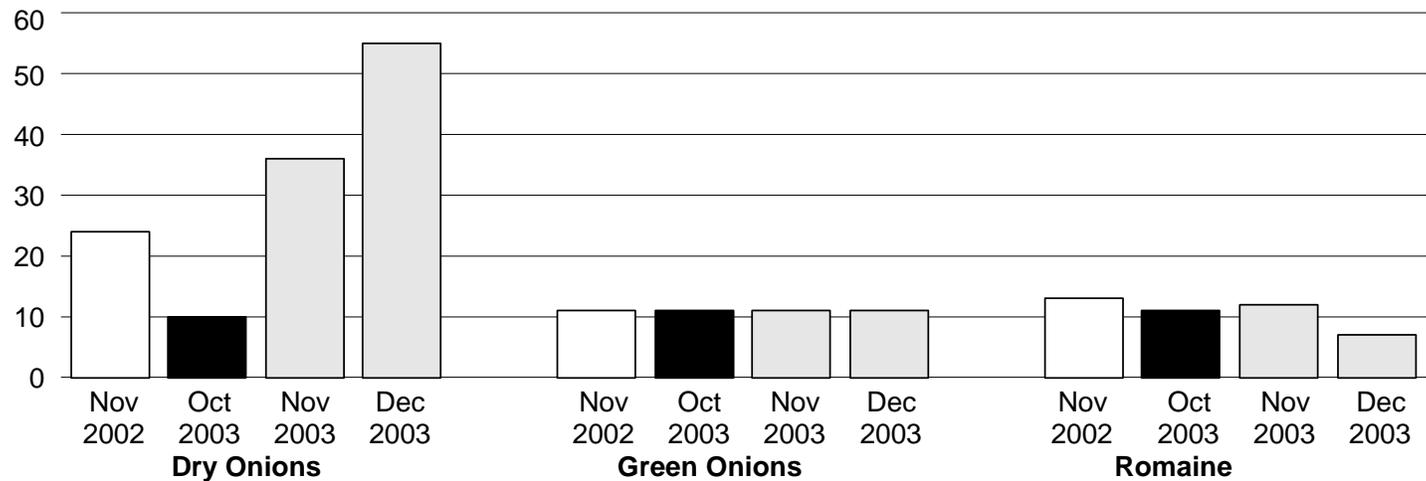
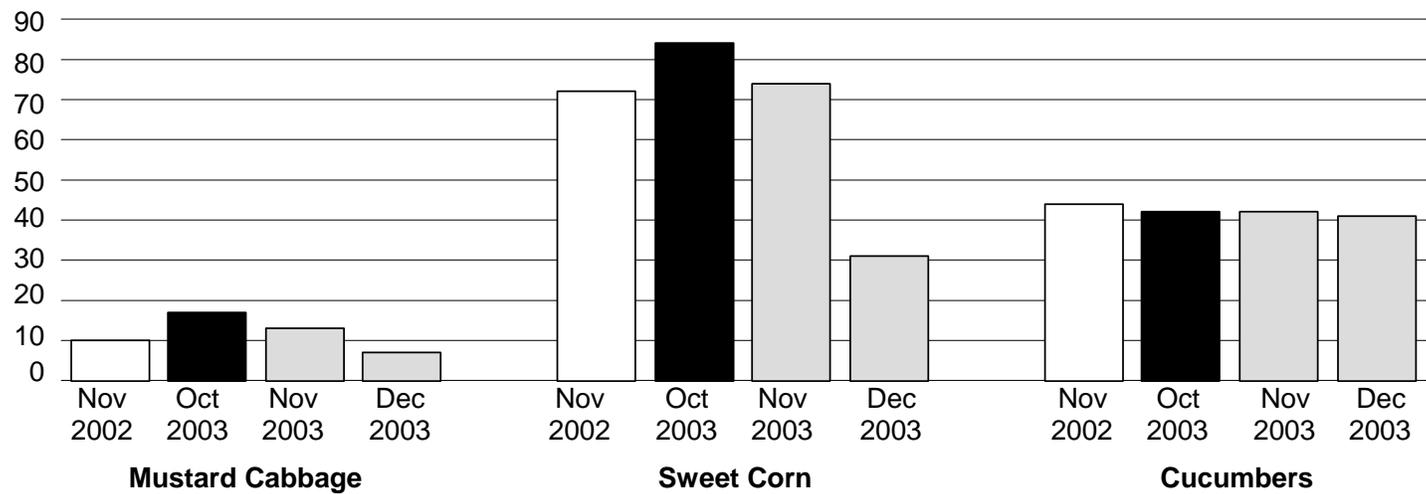
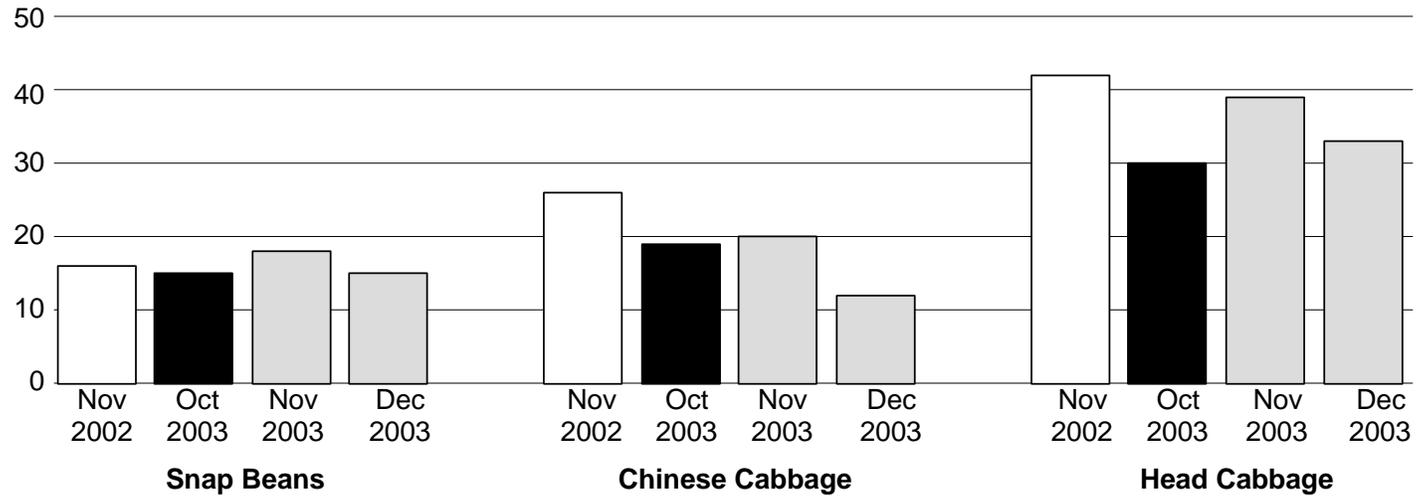
Acres planted, harvested, and for harvest for 11 selected  
vegetables, State of Hawaii.

Crop	Acres planted		Acres harvested		Acres for harvest	
	Sep 2003	Oct 2003	Sep 2003	Oct 2003	Nov 2003	Dec 2003
Beans, snap	17	17	17	15	18	15
Cabbage, Chinese	19	23	23	19	20	12
Cabbage, head	39	38	41	30	39	33
Cabbage, mustard	16	14	10	17	13	7
Corn, sweet	97	32	71	84	74	31
Cucumbers	42	40	42	42	42	41
Lettuce, head	8	6	6	7	6	3
Lettuce, semi-head	4	4	4	4	4	4
Onions, dry	56	53	13	10	36	55
Onions, green	11	12	10	11	11	11
Romaine	11	14	8	11	12	7

# Harvested acreage charts

Acres harvested a year ago
  Acres harvested last month
  Acres intended for harvest

Acres



# October review

## Head Cabbage Production Down 22 Percent

**CHINESE CABBAGE** production is estimated at 425,000 pounds for October, down 10 percent from the previous month and down 26 percent from a year ago. Crop quality was generally good. Some plantings at the lower elevations experienced a higher incidence of disease.

**HEAD CABBAGE** production totaled 666,000 pounds in October, down 22 percent from September and 37 percent less than a year ago. Yields have been uneven due to the unusually warm weather.

**SWEET CORN** production is estimated at 203,000 pounds, up 11 percent from last month and 15 percent higher than a year ago. Oahu production has been hampered by insect damage, water shortages, and theft problems.

**CUCUMBER** production is estimated at 474,000 pounds for October, up 23 percent from last month and 20 percent more than a year ago. Crop conditions varied from fair to good. In

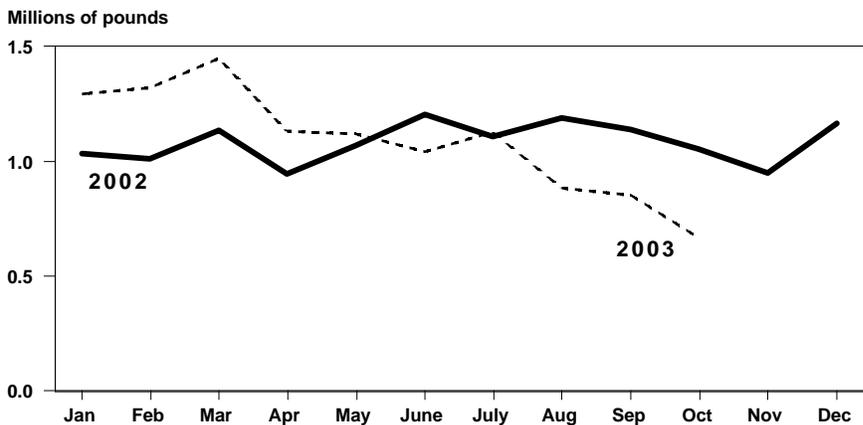
some areas, the hot and humid weather has adversely affected crop progress.

**DRY ONION** production is pegged at 135,000 pounds for October, down 21 percent from last month and 28 percent less than a year ago. This year's dry conditions have benefitted the crop with total production through October estimated at 3.0 million

pounds, slightly more than double the 1.5 million pounds for the same period a year ago.

**TOMATO** production is estimated at 1.5 million pounds in October, up 5 percent from September and 9 percent more than a year ago. ○

**Hawaii Head Cabbage:  
Monthly Production, 2002 - 2003**



### Acres, average yield, sales, and average farm price, October 2003, State of Hawaii.

Crop	Total acres on Nov 1 <sup>st</sup>	October 2003				January-to-date sales		
		Acres harvested	Average yield <sup>1/</sup>	Total sales	Average farm price	2002 <sup>2/</sup>	2003	Change
				----- 1,000 lbs. -----	Cents per lb.	----- 1,000 lbs -----		Percent
Beans, snap	30	15	4.1	61	89.7	750	706	-6
Cabbage, Chinese	31	19	20.2	425	29.3	5,584	5,599	0
Cabbage, head	77	30	14.8	666	27.2	10,886	10,880	0
Cabbage, mustard	17	17	6.8	116	56.7	1,158	1,054	-9
Corn, sweet	115	84	2.4	203	59.3	1,760	2,108	20
Cucumbers	68	42	11.3	474	51.3	4,441	4,919	11
Lettuce, head	8	7	11.4	80	52.7	746	707	-5
Lettuce, semi-head	7	4	4.0	16	71.8	283	254	-10
Onions, dry	144	10	12.3	135	104.6	1,471	3,006	104
Onions, green	28	11	9.8	108	87.8	1,211	1,204	-1
Peppers, green	3 <sup>/</sup>	20	13.6	271	57.0	2,685	2,721	1
Romaine	19	11	11.5	127	44.5	1,505	1,528	2
Tomatoes	3 <sup>/</sup>	68	25.6	1,511	60.9	14,658	14,594	0

<sup>1/</sup> Total sales divided by acres harvested. <sup>2/</sup> Revised. <sup>3/</sup> Not published to avoid disclosure of individual operations.

## U.S. Fresh-Market Spinach

Driven by fresh-market use, the consumption of spinach (*Spinacia oleracea*) has been on the rise in the United States. Per capita consumption of fresh-market spinach averaged 1.4 pounds during 2000-02--the highest since the early 1950s. The fresh market accounted for 60 percent of all U.S. spinach consumed during 2000-02. Much of the growth over the past decade has been due to sales of triple-washed cello-packed spinach and, more recently, baby spinach. These packaged products have been one of the fastest-growing segments of the packaged salad industry.

Since falling to historic lows in the early 1970s, fresh-market spinach consumption has been on an upward trend, peaking at a record 453 million pounds in 2000—more than 7 times greater than in 1970. At the same time, use of processed spinach has been trending lower as consumer demand has shifted toward fresh-market produce over the past 3 decades. In addition to use as a salad green and plate vegetable, this nutritious leafy green has also long enjoyed a reputation as a functional food packed with vitamins and minerals known to be beneficial to human health, such as vitamins C and A, the carotenoid lutein (may promote eye health), iron, folic acid, and magnesium.

The United States is the world's second-largest producer of spinach, with 4 percent of world output,

following China (PRC), which accounts for 76 percent of output.

The farm value of the U.S. spinach crop (fresh and processing) averaged \$162 million during 2000-02, with fresh market spinach accounting for 91 percent. The value of fresh market spinach has more than doubled over the past decade as stronger demand has boosted production and inflation-adjusted prices held constant. California accounts for about two-thirds of the value of both the fresh and processing spinach crops. Average grower cash receipts for spinach during 2000-02 exceed those for such crops as garlic, green peas, pumpkins, and artichokes.

Like other cool-season leafy crops, most (about 97 percent) of the fresh spinach consumed in the United States is produced domestically. Imports (largely from Mexico) totaled about 13 million pounds in 2002, compared with 2 million pounds in 1992. During the last 10 years, exports (largely to Canada) have nearly tripled to 63 million pounds, with much of the growth occurring over the past 5 years.

---

Source: *Vegetables and Melons Outlook* - October 23, 2003, Economic Research Service, USDA.