



# Hawaii Macadamia Nuts

## Final Season Estimates

National  
Agricultural  
Statistics  
Service

July 13, 2009

In Cooperation with the Hawaii Department of Agriculture  
Hawaii Field Office · 1428 South King Street · Honolulu, HI 96814-2512 · 1-(800)-804-9514 · [www.nass.usda.gov](http://www.nass.usda.gov)

### 2008-09 Macadamia Nut Production and Price Increase

Utilized production from Hawaii's 2008-09 macadamia nut harvest is estimated at 50.0 million pounds (net, wet-in-shell basis) according to the USDA National Agricultural Statistics Service, Hawaii Field Office. The estimate for 2008-09 represents a 9.0 million pound or 22 percent increase from last season.

#### Season Overview

Timely showers and an increased demand for in-shell nuts contributed to this season's higher output. Processors noted some improvement in the quality of nuts delivered this season. On the other hand, growers did report the prolonged dry conditions, pests, pigs, and volcanic haze adversely affected orchards and harvesting. Others mentioned it was economically unfeasible to pick their crop and may switch to other commodities or temporarily stop farming.

#### Harvested Acreage Unchanged, Yields Up

For the 2008-09 season, growers harvested an estimated 15,000 acres and remained unchanged for the past three seasons. Statewide, there were 17,000 acres in crop and an estimated 1.2 million macadamia nut trees.

#### In this Issue:

- 2008-09 Summary ..... 1-2
- 2008-09 Crop Loss Assessment..... 3
- 1946-08 Historical Data ..... 4-5
- U.S. Tree Nut Report ..... 5
- U.S. Imports ..... 6-7
- U.S. Exports..... 8

Continued on page 2

**MACADAMIA NUTS: Number of farms, acreage, yield, production, moisture, price, and value, State of Hawaii, 2004-2008 crop years**

Crop year <sup>1</sup>	Farms	Acreage		Yield per acre <sup>2</sup>	Utilized Production <sup>3</sup>		Average moisture		Farm prices <sup>3</sup>		Farm value <sup>6</sup>
		In crop	Harvested		Gross	Net <sup>4</sup>	Entire crop	Purchases only	Gross <sup>5</sup>	Net	
	<i>Number</i>	<i>Acres</i>			<i>1,000 pounds</i>		<i>Percent</i>		<i>Cents per pound</i>		<i>1,000 dollars</i>
2004-05	650	18,0	17,800	3.2	63,000	56,500	20.7	21.0	65.5	73.0	41,245
2005-06	650	18,3	18,000	3.0	62,000	54,000	20.7	20.4	70.5	81.0	43,740
2006-07	570	17,0	15,000	3.9	65,000	58,000	21.2	22.1	59.8	67.0	38,860
2007-08	525	17,0	15,000	2.7	48,000	41,000	21.3	21.5	51.3	60.0	24,600
<b>2008-09</b>	<b>570</b>	<b>17,0</b>	<b>15,000</b>	<b>3.3</b>	<b>60,000</b>	<b>50,000</b>	<b>20.5</b>	<b>21.4</b>	<b>55.8</b>	<b>67.0</b>	<b>33,500</b>

<sup>1</sup> Season begins July 1<sup>st</sup> and ends June 30<sup>th</sup> of the following year. <sup>2</sup> Net production divided by acreage harvested. <sup>3</sup> Wet in-shell basis. <sup>4</sup> Gross pounds less total spoilage. <sup>5</sup> Farm value divided by gross production. <sup>6</sup> Net production multiplied by net farm price.

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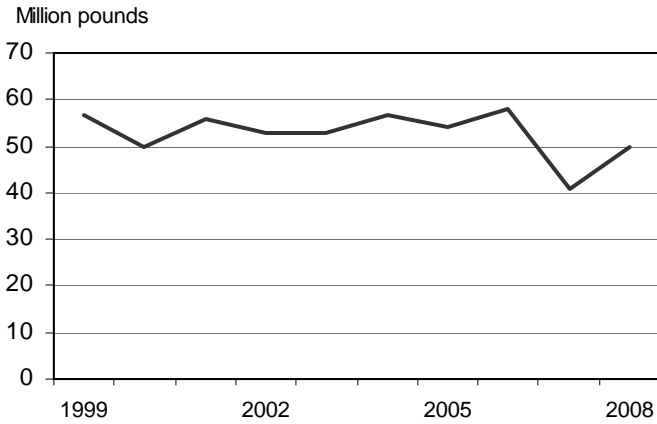
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NASDA ENUMERATORS

# MORE ON THE 2008-09 SEASON

Yields averaged 3,330 pounds per acre (net, wet-in-shell basis) for the 2008-09 season, or 600 pounds more per acre than the previous season. Average moisture content for this season's entire crop was 20.5 percent compared with 21.3 percent for the 2007-08 crop.

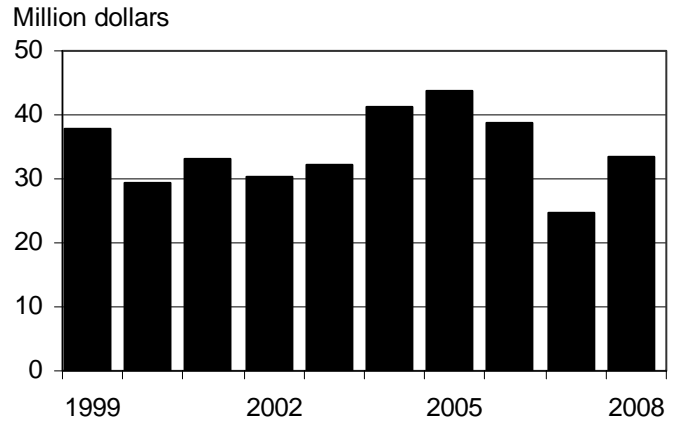
**MACADAMIA NUTS: Utilized Production**  
(Net, wet in-shell basis)  
State of Hawaii, 1999-2008 Seasons



## Farm Value Increases

The farm price for macadamia nuts averaged 67.0 cents per pound (net, wet-in-shell basis) for 2008-09 season, up 7.0 cents from the 2007-08 average. Farm value is estimated at \$33.5 million (net, wet-in-shell basis) for this crop season, a 36 percent increase from last season due to a larger harvest and higher farm price.

**MACADAMIA NUTS: Farm Value**  
(Net, wet in-shell basis)  
State of Hawaii, 1999-2008 Seasons

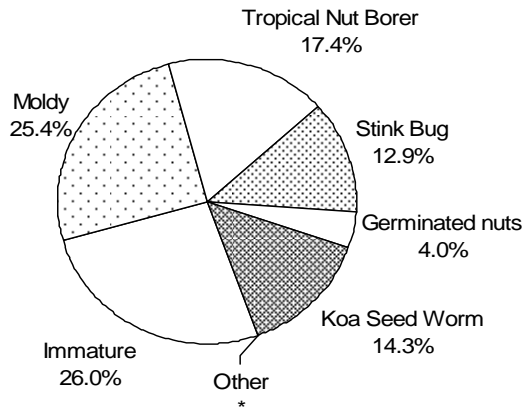


## Crop Losses Higher

Growers delivered an estimated 60.0 million pounds of macadamia nuts, wet-in-shell, to processors during the 2008-09 season. About 17 percent of the harvest was culled, resulting in 50.0 million pounds net, wet in-shell. The equivalent gross weight of losses, after adjusting for what would be the expected weight before the damage, was 15.8 million pounds.

Losses from immature and moldy, rotten nuts accounted for more than half of the losses. Damage from insects, Tropical Nut Borer, Koa Seed Worm, and Stink Bug, was another cause being reported. This season nuts were being left on the ground longer than usual. Macadamia nut losses shown in this report include only those culled by processors and do not include losses that occurred at the farm before delivery.

**MACADAMIA NUTS: Loss By Cause State of Hawaii, 2008-09 Season**



\* = less than .1 percent.

**Table 2. MACADAMIA NUTS: Loss by cause, State of Hawaii, 2007-08 and 2008-09**

Type of loss	Estimated loss <sup>1</sup>		Percent of losses		Percent of delivered crop	
	2007-08	2008-09	2007-08	2008-09	2007-08	2008-09
	----- 1,000 pounds -----		----- Percent -----			
Immature nuts <sup>2</sup>	4,000	4,115	37.4	26.0	8.4	6.9
Moldy, rotten	1,880	4,020	17.6	25.4	3.9	6.7
Tropical nut borer	580	2,740	5.4	17.4	1.2	4.6
Koa seed worm	1,975	2,260	18.5	14.3	4.1	3.8
Stink bug	1,140	2,040	10.7	12.9	2.4	3.4
Germinated nuts	755	630	7.1	4.0	1.6	1.0
Other causes	350	5	3.3	*	.7	*
<b>Total</b>	<b>10,680</b>	<b>15,810</b>	<b>100.0</b>	<b>100.0</b>	<b>22.3</b>	<b>26.4</b>

\* = less than .1 percent.

<sup>1</sup> Includes only losses for nuts completely rejected for processing. Does not include nuts with some damage but still utilized. Adjustments were made to reported weights to account for damage that would lower kernel weights and have the effect of underestimating the actual amount of loss. The adjustment factors were provided by Dr. H. C. Bittenbender and Dr. Vince Jones, CTAHR, University of Hawaii and were applied to both crop years. Excludes losses in the field or culled before delivery.

<sup>2</sup> Includes naturally occurring premature drop.

# HISTORICAL DATA

**Table 3. MACADAMIA NUTS: Acreage, yield, production, price, and value, State of Hawaii, 1946-08**

Crop year <sup>1</sup>	Acreage		Yield per acre <sup>2</sup>	Production <sup>3</sup>		Farm Price <sup>3</sup>		Farm value <sup>6</sup>
	In crop	Harvested		Gross	Net <sup>4</sup>	Gross <sup>5</sup>	Net	
	----- Acres -----		----- 1,000 pounds -----		---- Cents per pound ----		1,000 dollars	
1946-47	950	860	.7	NA	630	NA	15.2	96
1947-48	1,340	860	.8	NA	680	NA	16.9	115
1948-49	1,530	860	.8	NA	700	NA	17.0	119
1949-50	1,710	860	.8	NA	680	NA	16.9	115
1950-51	2,150	860	.9	NA	755	NA	17.0	128
1951-52	2,300	840	1.0	NA	850	NA	16.9	144
1952-53	2,770	840	1.1	NA	965	NA	17.1	165
1953-54	2,900	830	1.2	NA	970	NA	17.0	165
1954-55	3,030	1,080	.9	NA	930	NA	17.1	159
1955-56	3,030	1,300	.7	NA	903	NA	17.9	162
1956-57	3,200	1,470	.7	NA	1,027	NA	18.4	189
1957-58	3,120	1,680	.8	NA	1,329	NA	18.7	248
1958-59	3,290	1,750	1.0	NA	1,832	NA	18.5	339
1959-60	3,840	2,220	1.0	NA	2,102	NA	18.2	382
1960-61	3,820	2,300	1.1	NA	2,569	NA	18.4	472
1961-62	3,880	2,430	1.6	NA	3,751	NA	18.5	693
1962-63	4,100	2,460	2.1	NA	5,182	NA	18.4	954
1963-64	4,110	2,390	2.5	NA	6,003	NA	17.7	1,061
1964-65	4,510	2,520	3.1	NA	7,639	NA	15.6	1,192
1965-66	5,410	2,780	3.1	NA	8,522	NA	19.4	1,651
1966-67	6,700	2,950	3.0	NA	8,715	NA	21.0	1,830
1967-68	7,980	3,340	2.4	NA	7,966	NA	24.6	1,960
1968-69	8,520	3,680	2.8	NA	10,436	NA	22.8	2,379
1969-70	8,690	4,030	2.5	NA	10,049	NA	24.6	2,472
1970-71	8,735	4,115	3.2	NA	13,216	NA	21.7	2,868
1971-72	9,170	4,900	2.9	NA	14,448	NA	24.7	3,569
1972-73	9,250	5,000	2.6	NA	13,110	NA	23.3	3,055
1973-74	10,450	5,080	2.4	NA	12,124	NA	25.5	3,092
1974-75	9,890	5,760	2.8	NA	16,370	NA	32.0	5,238
1975-76	10,400	6,080	3.0	NA	18,210	NA	31.6	5,754
1976-77	10,250	6,300	3.0	NA	18,990	NA	36.9	7,007
1977-78	9,895	6,300	3.1	NA	19,680	NA	40.8	8,030
1978-79	10,200	9,200	2.3	NA	20,980	NA	53.8	11,287
1979-80	11,400	9,600	2.8	NA	26,660	NA	62.9	16,769
1980-81	13,300	10,000	3.3	NA	33,390	NA	72.4	24,174
1981-82	14,000	10,000	3.3	NA	33,360	NA	79.3	26,454
1982-83	15,600	10,200	3.6	NA	36,720	NA	73.9	27,136
1983-84	16,400	10,600	3.4	38,500	36,420	62.2	65.7	23,928
1984-85	17,500	12,000	3.1	40,500	37,700	64.4	69.2	26,088
1985-86	20,900	13,500	3.1	44,700	42,000	68.1	72.5	30,450
1986-87	21,200	14,400	3.1	46,600	44,000	75.5	80.0	35,200
1987-88	21,500	15,600	2.7	45,600	42,700	78.7	84.0	35,868
1988-89	21,900	16,600	2.7	49,000	45,500	83.6	90.0	40,950
1989-90	22,300	18,200	2.8	54,000	50,500	83.2	89.0	44,945

See footnotes at end of table

Continued

# HISTORICAL DATA CONTINUED

**Table 3. MACADAMIA NUTS: Acreage yield, production, price, and value, State of Hawaii -- Continued**

Crop year <sup>1</sup>	Acreage		Yield per acre <sup>2</sup>	Production <sup>3</sup>		Farm Price <sup>3</sup>		Farm Value <sup>6</sup>
	In crop	Harvested		Gross	Net <sup>4</sup>	Gross <sup>5</sup>	Net	
	----- Acres -----		----- 1,000 pounds -----		----- Cents per pound -----		1,000 dollars	
1990-91	22,600	18,400	2.7	54,300	50,000	75.5	82.0	41,000
1991-92	22,500	18,200	2.7	53,900	49,500	64.3	70.0	34,650
1992-93	20,500	17,500	2.7	53,000	48,000	61.6	68.0	32,640
1993-94	20,100	18,500	2.6	53,000	48,500	62.2	68.0	32,980
1994-95	20,200	18,500	2.8	58,000	52,500	62.5	69.0	36,225
1995-96	20,300	19,300	2.6	57,000	51,000	66.2	74.0	37,740
1996-97	20,200	19,200	2.9	63,000	56,500	70.0	78.0	44,070
1997-98	20,200	19,200	3.0	65,000	58,000	66.9	75.0	43,500
1998-99	20,200	19,200	3.0	66,000	57,500	57.0	65.0	37,375
1999-00	19,900	18,900	3.0	64,000	56,500	59.1	67.0	37,855
2000-01	18,400	17,700	2.8	56,000	50,000	52.7	59.0	29,500
2001-02	18,000	17,800	3.1	62,000	56,000	53.3	59.0	33,040
2002-03	18,000	17,800	3.0	60,000	53,000	50.4	57.0	30,210
2003-04	18,000	17,800	3.0	60,000	53,000	53.9	61.0	32,330
2004-05	18,000	17,800	3.2	63,000	56,500	65.5	73.0	41,245
2005-06	18,300	18,000	3.0	62,000	54,000	70.5	81.0	43,740
2006-07	17,000	15,000	3.9	65,000	58,000	59.8	67.0	38,860
2007-08	17,000	15,000	2.7	48,000	41,000	51.3	60.0	24,600
<b>2008-09</b>	<b>17,000</b>	<b>15,000</b>	<b>3.3</b>	<b>60,000</b>	<b>50,000</b>	<b>55.8</b>	<b>67.0</b>	<b>33,500</b>

<sup>1</sup> Season begins July 1<sup>st</sup> and ends June 30<sup>th</sup> of the following year.

<sup>2</sup> Net production divided by acreage harvested.

<sup>3</sup> Wet in-shell basis.

<sup>4</sup> Gross pounds less total spoilage.

<sup>5</sup> Farm value divided by gross production.

<sup>6</sup> Net production multiplied by net farm price.

## U.S. TREE NUT REPORT

### U.S. Tree Nut Production Up 7 Percent, Value Down 14 Percent

U.S. tree nut production for crop year 2008 is 2.14 million tons (in-shell basis), 7 percent above a year earlier. Almond crop production, at 1.41 million tons is up 16 percent from 2007. Walnut production in 2008, at 436,000 tons, is up 33 percent from the previous year. Pistachio production, at 139,000 tons is 33 percent less than 2007. Pecan production in 2008 totals 96,900 tons, a 50 percent decrease from 2007. The hazelnut crop, at 32,000 tons, is 14 percent smaller than the previous year. Macadamia nut production is 25,000 tons, up 22 percent.

Value of U.S. utilized nut production in 2008 is 3.69 billion dollars, down 14 percent from the 2007 value. The 2008 utilized almond crop is

valued at 2.26 billion dollars, 6 percent less than the previous year. Pistachio utilized crop value for 2008, at 550 million dollars, is 6 percent less than 2007. The value of the 2008 utilized pecan crop decreased 40 percent to 260 million dollars. Hazelnut utilized crop value, at 51.8 million dollars, is 31 percent below last year. The 2008 utilized macadamia nut crop is valued at 33.5 million dollars, up 36 percent from 2007. The value of utilized walnut production is 528 million dollars, down 30 percent from 2007.

For the complete report see:

<http://www.usda.gov/nass/PUBS/TODAYRPT/ncit0709.pdf>

# U.S IMPORTS

**Table 4. U.S. Macadamia nut imports, by type, 2008**

Port of entry	Type							
	Shelled or blanched <sup>1</sup> Harmonized number: 0802.60.8000		Pickled or otherwise prepared or preserved Harmonized number: 2008.19.9010		Not shelled <sup>2</sup> Harmonized number: 0802.60.4000		Total	
	Quantity	Custom value	Quantity	Custom value	Quantity	Custom value	Quantity	Custom value
	<i>Metric tons</i>	<i>U.S. dollars</i>	<i>Metric tons</i>	<i>U.S. dollars</i>	<i>Metric tons</i>	<i>U.S. dollars</i>	<i>Metric tons</i>	<i>U.S. Dollars</i>
Baltimore	72	265,494	159	875,673			231	1,141,167
Buffalo	7	34,500					7	34,500
Charleston	27	108,420					27	108,420
Chicago	110	627,170	51	157,550			161	784,720
Columbia-Snake	158	1,036,506					158	1,036,506
Detroit	7	43,313					7	43,313
El Paso	14	81,000					14	81,000
Honolulu	28	228,713					28	228,713
Houston	1,188	6,565,305	14	49,500			1,202	6,614,805
Laredo	7	62,102					7	62,102
Los Angeles	1,751	14,803,483	225	2,180,359	16	108,086	1,992	17,091,928
Miami					*	2,093	*	2,093
New York City	1,299	8,443,821	2	15,549	22	104,799	1,323	8,564,169
Norfolk	460	2,868,995					460	2,868,995
Pembina	23	153,510					23	153,510
Philadelphia	207	1,397,979					207	1,397,979
San Francisco	561	3,021,827	45	358,686	7	16,129	613	3,396,642
San Juan			7	28,063			7	28,063
Savannah	649	4,217,083					649	4,217,083
Seattle	221	1,454,354	*	3,800			221	1,458,154
St. Louis			*	6,837				6,837
<b>Total</b>	<b>6,789</b>	<b>45,413,575</b>	<b>503</b>	<b>3,676,017</b>	<b>45</b>	<b>231,107</b>	<b>7,337</b>	<b>49,320,699</b>

\* = Less than 1 metric ton.

The conversion for 1 metric ton = 2,204.6 pounds.

<sup>1</sup> Beginning 2007, harmonized number 0802.90.9810 was changed to 0802.60.8000.

<sup>2</sup> Beginning 2007, harmonized number 0802.90.8010 was changed to 0802.60.4000.

Source: U.S. Department of Commerce.

**Table 5. International macadamia nut imports by type, 2008**

Country of origin	Type							
	Shelled or blanched <sup>1</sup> Harmonized number: 0802.60.8000		Pickled or otherwise prepared or preserved Harmonized number: 2008.19.9010		Not shelled <sup>2</sup> Harmonized number: 0802.60.4000		Total	
	Quantity	Custom value	Quantity	Custom value	Quantity	Custom value	Quantity	Custom value
	<i>Metric tons</i>	<i>U.S. dollars</i>	<i>Metric tons</i>	<i>U.S. dollars</i>	<i>Metric tons</i>	<i>U.S. dollars</i>	<i>Metric tons</i>	<i>U.S. dollars</i>
Australia	1,820	12,354,252	273	2,144,666			2,093	14,498,918
Bolivia	29	166,294					29	166,294
Brazil	204	1,213,924					204	1,213,924
Canada	3	35,647	*	3,800			3	39,447
China	208	931,281			7	16,129	215	947,410
Colombia			7	34,900			7	34,900
Costa Rica	30	182,212			*	2,093	30	184,305
Guatemala	743	7,989,844			6	38,263	749	8,028,107
Hong Kong	442	3,429,057					442	3,429,057
Kenya	749	4,178,190	42	296,500	14	63,000	805	4,537,690
Malawi	509	3,137,144					509	3,137,144
Mexico	7	62,102					7	62,102
Mozambique	31	129,118					31	129,118
South Africa	1,990	11,373,935	159	875,673	18	111,622	2,167	12,361,230
Thailand			22	320,478			22	320,478
Vietnam	24	230,575					24	230,575
<b>Total</b>	<b>6,789</b>	<b>45,413,575</b>	<b>503</b>	<b>3,676,017</b>	<b>45</b>	<b>231,107</b>	<b>7,337</b>	<b>49,320,699</b>

\* = Less than 1 metric ton.

The conversion for 1 metric ton = 2,204.6 pounds.

<sup>1</sup> Beginning 2007, harmonized number 0802.90.9810 was changed to 0802.60.8000.

<sup>2</sup> Beginning 2007, harmonized number 0802.90.8010 was changed to 0802.60.4000.

Source: U.S. Department of Commerce.

**Table 6. U.S Macadamia nut imports, by type, 1999-2008**

Year	Type		
	Shelled or blanched	Pickled or otherwise prepared or preserved	Not shelled
	<i>Metric tons</i>		
1999	4,730	109	109
2000	5,546	195	114
2001	5,048	126	90
2002	4,256	59	162
2003	6,212	53	204
2004	8,108	163	338
2005	7,575	124	406
2006	6,345	282	127
2007	6,656	311	49
<b>2008</b>	<b>6,789</b>	<b>503</b>	<b>45</b>

Source: U.S. Department of Commerce.

# U.S. EXPORTS

**Table 7. U.S Macadamia nut exports, by country of destination, 2007-2008**  
**Harmonized number: 2008.19.9010**

Country of destination	2007		2008	
	Quantity	F.A.S. value	Quantity	F.A.S. value
	<i>Metric tons</i>	<i>U.S. dollars</i>	<i>Metric tons</i>	<i>U.S. dollars</i>
Belgium	2	20,180	2	24,375
Canada	135	983,252	502	3,468,350
China	44	561,187	30	387,148
Costa Rica	1	6,995	1	8,560
Cote d'Ivoire			4	76,576
Ecuador			*	2,542
Fed Rep of Germany	2	20,496	*	3,900
France	49	473,635	46	456,468
Georgia			1	10,248
Hong Kong	44	437,671	65	667,145
Japan	207	2,298,521	180	2,461,019
Kenya			*	2,655
Korea, South	63	780,880	46	593,943
Mexico	24	243,881	87	817,900
Panama	1	6,529	2	13,844
Republic of Philippines	10	158,475	9	122,750
Singapore	8	106,306	9	131,355
Switzerland	3	29,765		
Taiwan	74	1,073,930	100	1,397,322
Thailand	12	132,837	5	72,714
United Kingdom	3	30,933		
Zimbabwe	1	7,419		
<b>Total</b>	<b>683</b>	<b>7,372,892</b>	<b>1,089</b>	<b>10,718,814</b>

\* = less than 1 metric ton.

F.A.S. = Free Along Side.

Source: U.S. Department of Commerce.