

Macadamia Nuts: Production Lower, Price Higher

Hawaii's 2010-11 utilized production of macadamia nuts is estimated at 40.0 million pounds net, wet-in-shell according to the USDA, National Agricultural Statistics Service, Hawaii Field Office. This season's estimate represents a 2.0 million pound or 5 percent decline from the previous season and the lowest since the 1984-85 season.

Season Overview

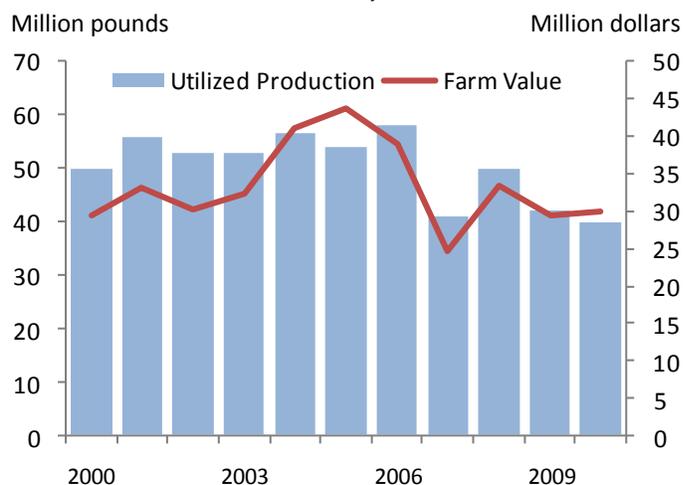
Dry weather contributed to the 2010-11 lower output. Some growers noted it had been the driest year on record. More rainfall should improve orchards and the next season's crop. Other factors contributing to the smaller crop were economics, insects, diseases, feral pigs, and volcanic fog damage on flowers. The average farm prices have begun to improve after recent years of low returns, providing some incentive for growers to maintain their orchards.

Acreage Unchanged, Yields Down

For the 2010-11 season, growers harvested an estimated 15,000 acres, unchanged for the past five seasons. Statewide, there were 17,000 acres in crop and an estimated 1.2 million macadamia nut trees.

Yields averaged 2,670 pounds per acre (net, wet-in-shell basis) for the 2010-11 season, or

MACADAMIA NUTS: Utilized Production and Farm Value, (net, wet-in-shell basis) State of Hawaii, 2000-2010



130 pounds less per acre than the 2009-10 season. Average moisture content for this season's entire crop was 20.3 percent compared with 20.1 percent for the 2009-10 crop.

Farm Price Higher

The farm price for macadamia nuts averaged 75.0 cents per pound on a net, wet-in-shell basis for the 2010-11 crop season, 5.0 cents more than the 2009-10 average and increasing for the third consecutive year. Higher price contributed to the 2 percent rise in farm value from last season to \$30.0 million this season. ■

MACADAMIA NUTS: Number of Farms, Acreage, Yield, Production, Moisture, Price, and Value, State of Hawaii, 2005-06 to 2009-10 Crop Years

| Crop year ¹ | Farms | Acreage | | Yield per Acre ² | Utilized Production ³ | | Average Moisture | | Farm Prices ³ | | Farm Value ⁶ |
|------------------------|--------|---------|-----------|-----------------------------|----------------------------------|------------------|------------------|----------------|--------------------------|-------------|-------------------------|
| | | In Crop | Harvested | | Gross | Net ⁴ | Entire Crop | Purchases Only | Gross ⁵ | Net | |
| | Number | Acres | | | 1,000 pounds | | Percent | | Cents per pound | | \$1,000 |
| 2006-07 | 570 | 17,000 | 15,000 | 3.9 | 65,000 | 58,000 | 21.2 | 22.1 | 59.8 | 67.0 | 38,860 |
| 2007-08 | 570 | 17,000 | 15,000 | 2.7 | 48,000 | 41,000 | 21.3 | 21.5 | 51.3 | 60.0 | 24,600 |
| 2008-09 | 570 | 17,000 | 15,000 | 3.3 | 60,000 | 50,000 | 20.5 | 21.4 | 55.8 | 67.0 | 33,500 |
| 2009-10 | 570 | 17,000 | 15,000 | 2.8 | 50,000 | 42,000 | 20.1 | 20.8 | 58.8 | 70.0 | 29,400 |
| 2010-11 | 570 | 17,000 | 15,000 | 2.7 | 47,000 | 40,000 | 20.3 | 20.6 | 63.8 | 75.0 | 30,000 |

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

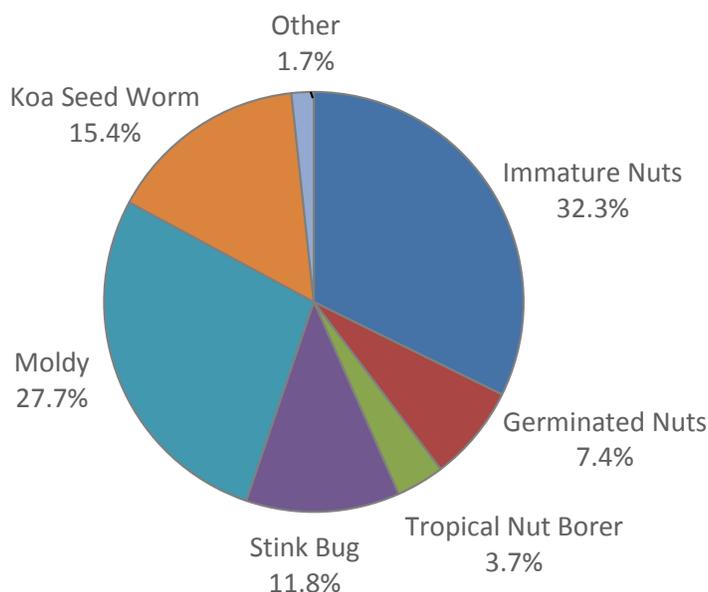
Macadamia Nuts: 2010-11 Crop Loss Assessment

Crop Losses Smaller

Growers delivered an estimated 47.0 million pounds of macadamia nuts, wet-in-shell, to processors during the 2010-11 season. About 15 percent of the harvest was culled, resulting in 40.0 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 10.6 million pounds.

Immature and moldy, rotten nuts accounted for more than half of the crop losses. Damage from insects, Koa Seed Worm, Stink Bug, and Tropical Nut Borer was another contributing cause. 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, 2010-11



MACADAMIA NUTS: Loss by Cause, State of Hawaii, 2008-09 and 2009-10

| Type of Loss | Estimated Loss ¹ | | Percent of Losses | | Percent of Delivered Crop | |
|----------------------------|-----------------------------|---------------|-------------------|--------------|---------------------------|-------------|
| | 2009-10 | 2010-11 | 2009-10 | 2010-11 | 2009-10 | 2010-11 |
| | 1,000 pounds | | Percent | | | |
| Immature nuts ² | 3,690 | 3,440 | 29.2 | 32.3 | 7.4 | 7.3 |
| Moldy, rotten | 2,845 | 2,950 | 22.5 | 27.7 | 5.7 | 6.3 |
| Koa seed worm | 2,085 | 1,640 | 16.5 | 15.4 | 4.2 | 3.5 |
| Stink bug | 1,650 | 1,255 | 13.0 | 11.8 | 3.3 | 2.7 |
| Germinated nuts | 515 | 785 | 4.1 | 7.4 | 1.0 | 1.7 |
| Tropical nut borer | 1,855 | 395 | 14.7 | 3.7 | 3.7 | .8 |
| Other causes | 5 | 180 | * | 1.7 | * | .4 |
| Total | 12,645 | 10,645 | 100.0 | 100.0 | 25.3 | 22.7 |

* = less than .1 percent. ¹ 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. ² Includes naturally occurring premature drop.

Macadamia Nuts: Hawaii State Historical Data

MACADAMIA NUTS: Acreage, Yield, Production, Price, and Value State of Hawaii, 1946-2010

| Year | Acreage | | Yield per Acre | Production | | Farm Price | | Farm Value |
|---------|-----------|---------|----------------|------------------|--------|---------------------|------|------------|
| | Total | Bearing | | Gross | Net | Gross | Net | |
| | — Acres — | | 1,000 pounds | — 1,000 pounds — | | — Cents per pound — | | \$1,000 |
| 1946-47 | 950 | 860 | 0.7 | NA | 630 | NA | 15.2 | 96 |
| 1947-48 | 1,340 | 860 | 0.8 | NA | 680 | NA | 16.9 | 115 |
| 1948-49 | 1,530 | 860 | 0.8 | NA | 700 | NA | 17.0 | 119 |
| 1949-50 | 1,710 | 860 | 0.8 | NA | 680 | NA | 16.9 | 115 |
| 1950-51 | 2,150 | 860 | 0.9 | 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 | 0.9 | NA | 930 | NA | 17.1 | 159 |
| 1955-56 | 3,030 | 1,300 | 0.7 | NA | 903 | NA | 17.9 | 162 |
| 1956-57 | 3,200 | 1,470 | 0.7 | NA | 1,027 | NA | 18.4 | 189 |
| 1957-58 | 3,120 | 1,680 | 0.8 | 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 |

See footnotes at end of table.

continued

MACADAMIA NUTS: Acreage, Yield, Production, Price, and Value
State of Hawaii, 1946-2010

| Year | Acreage | | Yield per Acre | Production | | Farm Price | | Farm Value |
|---------|-----------|---------|----------------|------------------|--------|---------------------|------|------------|
| | Total | Bearing | | Gross | Net | Gross | Net | |
| | — Acres — | | 1,000 pounds | — 1,000 pounds — | | — Cents per pound — | | \$1,000 |
| 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 |
| 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 |
| 2008-09 | 17,000 | 16,000 | 3.3 | 60,000 | 50,000 | 55.8 | 67.0 | 33,500 |
| 2009-10 | 17,000 | 15,000 | 2.8 | 50,000 | 42,000 | 58.8 | 70.0 | 29,400 |
| 2010-11 | 17,000 | 15,000 | 2.7 | 47,000 | 40,000 | 63.8 | 75.0 | 30,000 |

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

Macadamia Nuts: U.S. Imports

MACADAMIA NUTS: International Imports by Type, 2010

| Country of Origin | Type | | | | | | | |
|--------------------|----------------------------------|--------------------|--|--------------------|---------------------------------|--------------------|---------------------|-------------------|
| | Shelled or Blanched ¹ | | Pickled or Otherwise Prepared or Preserved | | Not Shelled ² | | Total | |
| | Harmonized number: 0802.60.8000 | | Harmonized number: 2008.19.9010 | | Harmonized number: 0802.60.4000 | | | |
| 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 | 1,364 | 11,946,742 | 548 | 3,145,590 | 46 | 517,186 | 1,958 | 15,609,518 |
| Brazil | 248 | 2,495,836 | | | 2 | 25,845 | 250 | 2,521,681 |
| Canada | 4 | 11,832 | | | | | 4 | 11,832 |
| China | 155 | 1,440,738 | | | 205 | 312,603 | 360 | 1,753,341 |
| Costa Rica | 60 | 715,550 | | | | | 60 | 715,550 |
| Guatemala | 849 | 9,449,149 | 10 | 120,396 | | | 859 | 9,569,545 |
| Japan | 7 | 18,962 | * | 2,025 | | | 7 | 20,987 |
| Kenya | 1,498 | 16,504,865 | 203 | 1,928,664 | | | 1,701 | 18,433,529 |
| Malawi | 612 | 5,759,409 | 34 | 393,450 | | | 646 | 6,152,859 |
| Mexico | 9 | 92,869 | | | | | 9 | 92,869 |
| Mozambique | 16 | 183,600 | 16 | 108,301 | | | 32 | 291,901 |
| Netherlands | 13 | 91,200 | | | | | 13 | 91,200 |
| South Africa | 2,336 | 22,634,112 | 91 | 799,106 | 16 | 24,590 | 2,443 | 23,457,808 |
| Swaziland | 34 | 120,468 | | | | | 34 | 120,468 |
| Switzerland | 11 | 123,099 | | | | | 11 | 123,099 |
| Thailand | | | 113 | 447,136 | | | 113 | 447,136 |
| Vietnam | 15 | 173,719 | | | | | 15 | 173,719 |
| Total | 7,231 | 71,762,150 | 1,015 | 6,944,668 | 269 | 880,224 | 8,515 | 79,587,042 |

* = Less than 1 metric ton. The conversion for 1 metric ton = 2,204.6 pounds. ¹ Beginning 2007, harmonized number 0802.90.9810 was changed to 0802.60.8000. ² Beginning 2007, harmonized number 0802.90.8010 was changed to 0802.60.4000. Source: U.S. Department of Commerce.

MACADAMIA NUTS: U.S Imports, by Type, 2001-2010

| Year | Type | | |
|-------------|---------------------|--|-------------|
| | Shelled or Blanched | Pickled or Otherwise Prepared or preserved | Not Shelled |
| | <i>Metric tons</i> | | |
| 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 |
| 2008 | 6,789 | 503 | 45 |
| 2009 | 6,871 | 425 | 183 |
| 2010 | 7,231 | 1,015 | 269 |

Source: U.S. Department of Commerce.

Macadamia Nuts: U.S. Imports

MACADAMIA NUTS: U.S. Imports, by Type, 2010

| Port of Entry | Type | | | | | | | |
|----------------|---|---------------------|---|---------------------|---|---------------------|--------------------|---------------------|
| | Shelled or Blanched ¹ Harmonized number: 0802.60.8000 | | Pickled or Otherwise Prepared or Preserved Harmonized number: 2008.19.9010 | | Not Shelled ² 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 | 54 | 491,976 | 13 | 106,800 | | | 67 | 598,776 |
| Buffalo | 17 | 57,226 | | | 18 | 50,435 | 35 | 107,661 |
| Charleston | 133 | 877,075 | | | | | 133 | 877,075 |
| Chicago | 56 | 458,243 | 90 | 241,270 | 183 | 282,000 | 329 | 981,513 |
| Columbia-Snake | 16 | 187,200 | | | | | 16 | 187,200 |
| Detroit | 5 | 51,990 | 1 | 4,586 | | | 6 | 56,576 |
| Honolulu | 50 | 641,658 | | | 33 | 425,826 | 83 | 1,067,484 |
| Houston | 1,503 | 14,445,871 | 16 | 108,301 | | | 1,519 | 14,554,172 |
| Laredo | 1 | 8,344 | | | | | 1 | 8,344 |
| Los Angeles | 1,159 | 12,625,990 | 436 | 4,831,095 | | | 1,595 | 17,457,085 |
| Miami | 9 | 112,743 | | | | | 9 | 112,743 |
| New York City | 1,100 | 11,827,263 | 24 | 169,788 | | | 1,124 | 11,997,051 |
| Norfolk | 983 | 9,551,523 | | | | | 983 | 9,551,523 |
| Philadelphia | 172 | 1,504,454 | 358 | 932,207 | | | 530 | 2,436,661 |
| San Francisco | 1,246 | 12,967,242 | | | 22 | 30,603 | 1,268 | 12,997,845 |
| Savannah | 410 | 3,300,924 | | | | | 410 | 3,300,924 |
| Seattle | 317 | 2,652,428 | 77 | 550,621 | 13 | 91,360 | 407 | 3,294,409 |
| Total | 7,231 | 71,762,150 | 1,015 | 6,944,668 | 269 | 880,224 | 8,515 | 79,587,042 |

The conversion for 1 metric ton = 2,204.6 pounds. ¹ Beginning 2007, harmonized number 0802.90.9810 was changed to 0802.60.8000. ² Beginning 2007, harmonized number 0802.90.8010 was changed to 0802.60.4000. Source: U.S. Department of Commerce.

Macadamia Nuts: U.S. Exports

MACADAMIA NUTS: U.S Exports, by Country of Destination, 2009-2010 Harmonized Number: 2008.19.9010

| Country of Destination | 2009 | | 2010 | |
|-------------------------|--------------------|---------------------|--------------------|---------------------|
| | 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> |
| Australia | 1 | 20,010 | * | 6,670 |
| Bahrain | 1 | 6,549 | | |
| Canada | 304 | 1,996,813 | 158 | 1,190,875 |
| China | 11 | 190,570 | 5 | 72,447 |
| Costa Rica | | | 1 | 11,800 |
| France | 45 | 637,803 | 62 | 958,830 |
| French Polynesia | * | 4,632 | 1 | 5,296 |
| Guatemala | 1 | 7,829 | | |
| Hong Kong | 46 | 540,110 | 72 | 904,943 |
| Ireland | 1 | 13,418 | | |
| Israel | 12 | 122,880 | 12 | 146,400 |
| Japan | 158 | 2,150,805 | 250 | 3,380,097 |
| Korea, South | 19 | 283,032 | 40 | 565,754 |
| Malaysia | * | 3,542 | | |
| Mexico | 24 | 245,359 | 44 | 476,160 |
| Netherlands | 5 | 54,384 | 7 | 89,678 |
| Paraguay | | | 1 | 3,597 |
| Republic of Philippines | 5 | 78,169 | 6 | 107,499 |
| Singapore | 12 | 145,634 | * | 4,099 |
| Switzerland | | | 2 | 9,713 |
| Taiwan | 101 | 1,533,498 | 67 | 1,090,322 |
| Thailand | 3 | 55,530 | 5 | 79,561 |
| United Arab Emirates | 1 | 8,445 | | |
| United Kingdom | 16 | 118,958 | | |
| Total | 766 | 8,217,970 | 733 | 9,103,741 |

* = less than 1 metric ton. F.A.S. = Free Along Side. Source: U.S. Department of Commerce.