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California Department of Food and Agriculture

Agricultural Commissioners' Crop Reports

# Merced County

2007-2009

# Merced County

## Annual Report on Agriculture



2007





## Almonds In Merced County



Almonds are Merced County's largest tree crop in total dollar value and acreage. They rank at number three in production value for all crops grown in Merced County. California is the only state in the United States that commercially produces almonds. Almonds are the largest U.S. horticultural export. Nearly 80 countries import almonds produced in Merced County.

Almonds originated in ancient China and Central Asia. They were first introduced to California by Franciscan Padres in the mid 1700's. Unfortunately the cool weather of the coastal climate hampered the growth of the almond trees and the crop failed. A century went by before anyone else tried to produce almonds in California. Fortunately, this second attempt succeeded and almonds began to flourish in California's Central Valley. By the 1870's, research and crossbreeding introduced many of the almond varieties that we know today.



Our 1939 Crop Report lists almond acreage at 3,108 with a total value of \$360,340. Production was reported at 1,720 tons resulting in an approximate price of \$0.10 lb. Over the past 20 years almond acreage has increased over 36% from 64,532 to 87,881 acres. Prices have fluctuated over the years with a high of \$2.85 per pound in 2005. The 2007 crop brought an average price of \$1.80 per pound for a total production value of \$311,310,000.



Producing almonds is a year round endeavor. Trees are pruned and orchards are cleaned in the winter. The first blossoms appear in January or February depending on the temperatures. Because the almond tree is not self-pollinating, each almond orchard has at least two varieties of almonds planted within its rows to allow honey bees to pollinate the crop during the early spring bloom. After the petals drop and the trees have leafed out, the first signs of a hull appear around mid-March. In early July, the hulls split open slightly. Between late July and late October,



the split widens, exposing the almond's shell. The whole nut and stem separate, and shortly before harvest, the hull opens completely. To prepare for harvest, orchard floors are swept and cleared. Mechanical tree "shakers" knock unshelled nuts to the ground, where they are allowed to dry before they are swept into rows and picked up by machine.



Almonds are the most nutrient dense tree nut. One ounce of almonds (about 23) contains 160 calories and only 1 gram of saturated fat. The same handful is also an excellent source of vitamin E and magnesium, a good source of protein and potassium and has no cholesterol.





## Almond Blossoms

Sir Edwin Arnold (1832-1904)

Blossom of the almond-trees,  
 April's gift to April's bees,  
 Birthday ornament of spring,  
 Flora's fairest daughterling;—  
 Coming when no flow'rets dare  
 Trust the cruel outer air;  
 When the royal king-cup bold  
 Dares not don his coat of gold;  
 And the sturdy blackthorn spray  
 Keeps his silver for the May;—  
 Coming when no flow'rets would,  
 Save thy lowly sisterhood  
 Early violets, blue and white,  
 Dying for their love of light.  
 Almond blossom, sent to teach us  
 That the spring-days soon will reach us,  
 Lest, with longing over tried,  
 We die as the violets died.  
 Blossom, clouding all the tree  
 With thy crimson broidery,  
 Long before a leaf of green  
 On the bravest bough is seen;  
 Ah! when winter winds are swinging  
 All thy red bells into ringing,  
 With a bee in every bell,  
 Almond bloom, we greet thee well.



*Our thanks go to Milford Esau and Mel Machado for the almond photographs that appear on the cover, with our summary of almond crops in Merced County and elsewhere throughout this report.*

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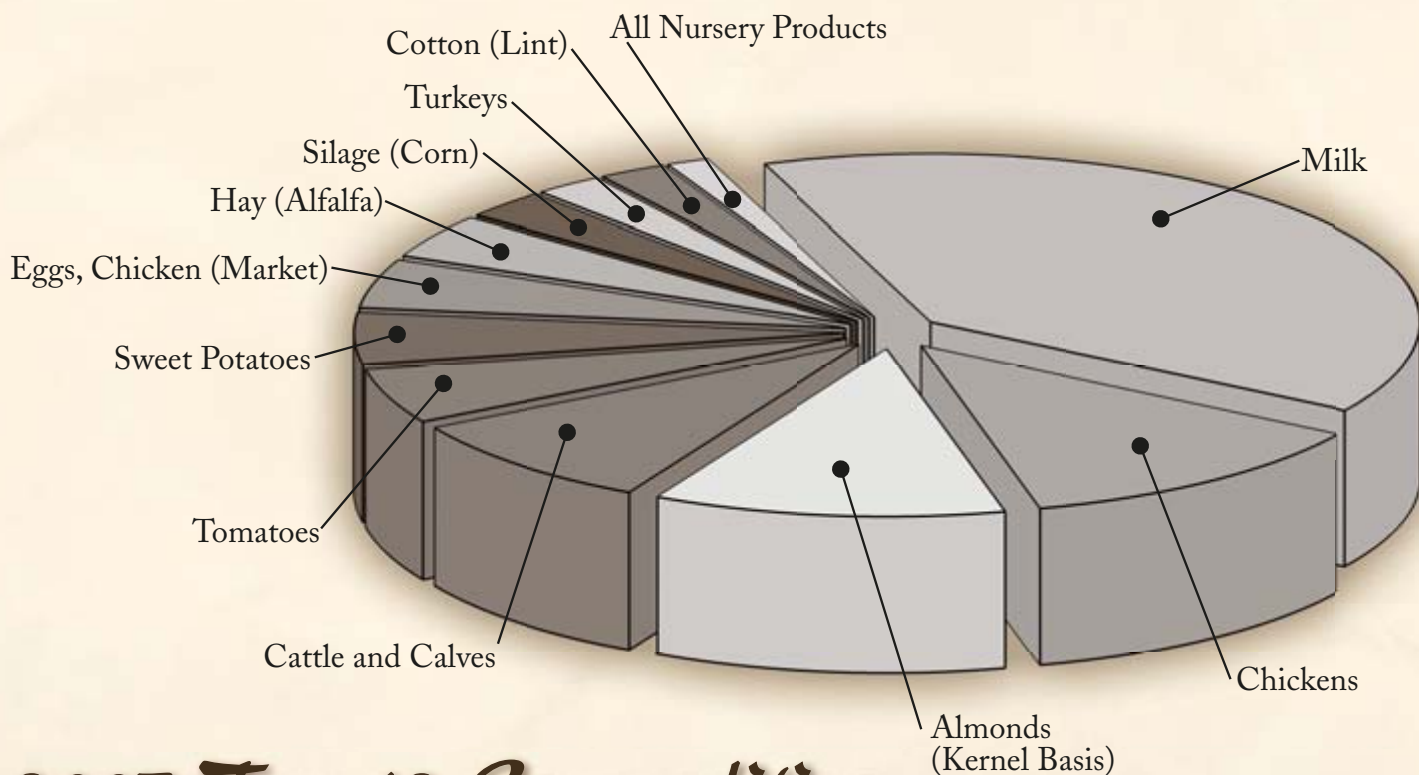
## Top Twelve Leading Farm Commodities 2007

Rank	Crop	Value	2006 Rank
1	Milk <sup>1</sup>	\$1,049,052,000	1
2	Chickens <sup>2</sup>	\$326,046,000	2
3	Almonds (Kernel Basis)	\$311,310,000	3
4	Cattle and Calves	\$236,339,000	4
5	Tomatoes <sup>3</sup>	\$144,050,000	5
6	Sweet Potatoes	\$130,110,000	6
7	Eggs, Chicken (Market)	\$124,998,000	7
8	Hay (Alfalfa)	\$110,822,000	8
9	Silage (Corn)	\$76,951,000	9
10	Turkeys	\$62,451,000	11
11	Cotton (Lint)	\$62,245,000	10
12	All Nursery Products	\$29,629,000	12

<sup>1</sup> Includes Market and Manufacturing.

<sup>2</sup> Includes Fryers and Other Chickens.

<sup>3</sup> Includes Market and Processing Tomatoes.



## 2007 Top 12 Commodities





A. G. Kawamura, *Secretary*  
*California Department of Food and Agriculture*

And

**The Honorable Board of Supervisors County of Merced**

Kathleen Crookham, *Chairman*  
John Pedrozo                      Deidre Kelsey  
Jerry O'Banion                      Mike Nelson

Demitrios O. Tatum  
*County Executive Officer*

**DEPARTMENT OF AGRICULTURE**

David A. Robinson  
*Agricultural Commissioner*  
*Director of Weights and Measures*  
*Director of Animal Control*

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In accordance with the provisions of Sections 2272 and 2279 of the California Food and Agricultural Code, I am pleased to submit the 2007 Merced County Report of Agriculture. This report summarizes the acreage, production, and gross value of Merced County's agricultural commodities.

Last year Merced County agriculture for the first time in history surpassed the 3 billion dollar mark in gross production value of agricultural commodities. With a gross production value of \$3,001,666,000 in 2007, Merced County agricultural commodities increased \$717,206,000 (31.39%) over 2006 production values. These figures represent gross returns to the producer and do not take into account the costs of production, marketing, or transportation. Net income of the producer is not reflected in this report.

Significant events of the 2007 crop year:

Milk accounted for more than 59.5% of the overall increase in value in 2007, increasing \$427,096,000 (68.7%) in value, and once again milk remains the county's number one commodity with an overall value of \$1,049,052,000.

Chickens remain the number two commodity, with a total value of \$326,046,000, up 13.7% due mainly to a rise in price and a slight increase in production.

Almonds again came in at number three in 2007, with a value of \$311,310,000. Although the price was down \$720/ton and acreage remained about the same, the increase in production topped last year's value of \$268,626,000 by 15.9%.

Merced County requested and received disaster declarations for two weather related events in 2007.

Between January 12th and 17th daily low temperatures fell below 20°F primarily affecting winter radichio. Other reported losses were in seedling alfalfa and mature sugar beets.

Lack of rainfall at critical times resulted in an accumulated rainfall below 50% of normal causing considerable losses to rangeland forage and other small grain crops such as oats, wheat and barley that are dry farmed without the benefit of irrigation. Losses estimated at 71% contributed to the demand and increased prices for hay and grain products.

I wish to express my sincere thanks to our growers and ranchers, the staff of the University of California Cooperative Extension, industry representatives and the members of my staff who assisted in the gathering of data for this report

Respectfully submitted,

David A. Robinson  
Agricultural Commissioner



## Field Crops

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Barley	2007	3,514	2.48	8,730	Ton	\$143.44	\$1,252,000
	2006	3,035	2.44	7,394		\$109.51	\$810,000
Beans (Dry Lima)	2007	2,670	1.34	3,590	Ton	\$1,082.09	\$3,884,000
	2006	876	1.08	942		\$1,203.73	\$1,134,000
Beans (Dry Other)	2007	505	1.21	612	Ton	\$766.12	\$469,000
	2006	1,570	1.41	2,216		\$945.31	\$2,095,000
Corn (Grain) <sup>1</sup>	2007	10,674	5.78	61,748	Ton	\$180.21	\$11,127,000
	2006	4,228	5.44	23,008		\$152.81	\$3,516,000
Cotton (Lint)	2007	49,190	3.35	165,004	500 Lb Bale	\$377.23	\$62,245,000
	2006	56,575	2.60	147,165		\$370.40	\$54,510,000
Cotton (Seed)	2007	---	1.72	84,409	Ton	\$234.31	\$19,778,000
	2006	---	1.01	56,892		\$160.00	\$9,103,000
Hay (Alfalfa)	2007	84,056	7.44	625,491	Ton	\$177.18	\$110,822,000
	2006	83,508	6.62	552,663		\$131.93	\$72,912,000
Hay (Grain) <sup>1</sup>	2007	33,302	4.53	150,756	Ton	\$127.24	\$19,182,000
	2006	34,991	3.57	124,868		\$81.89	\$10,226,000
Hay (Sudan)	2007	6,555	3.51	23,003	Ton	\$122.33	\$2,814,000
	2006	4,843	3.11	15,043		\$85.93	\$1,293,000
Misc. Field Crops <sup>3</sup>	2007	2,563	---	---	---	---	\$4,450,000
	2006	2,238	---	---		---	\$1,044,000
Pasture (Irrigated)	2007	38,961	---	38,961	Acre	\$179.00	\$6,974,000
	2006	59,000	---	59,000		\$145.00	\$8,555,000
Pasture (Other)	2007	569,615	---	569,615	Acre	\$22.00	\$12,532,000
	2006	560,000	---	560,000		\$22.00	\$12,320,000
Rice	2007	2,858	3.70	10,577	Ton	\$263.70	\$2,789,000
	2006	2,544	3.47	8,825		\$230.73	\$2,036,000
Silage (Alfalfa)	2007	---	0.75	63,311	Ton	\$51.50	\$3,261,000
	2006	---	1.00	83,508		\$54.50	\$4,551,000
Silage (Corn)	2007	85,160	27.76	2,363,946	Ton	\$32.55	\$76,951,000
	2006	83,868	26.41	2,214,548		\$26.73	\$59,197,000
Silage (Other) <sup>4</sup>	2007	62,257	13.06	813,297	Ton	\$23.18	\$18,855,000
	2006	64,715	14.06	909,755		\$20.79	\$18,910,000
Straw <sup>5</sup>	2007	---	---	3,953	Ton	\$37.02	\$146,000
	2006	---	---	4,800		\$43.13	\$207,000
Stubble (Pasture)	2007	---	---	16,811	Acre	\$29.13	\$490,000
	2006	---	---	16,761		\$20.00	\$335,000
Sugar Beets	2007	2,300	33.00	75,900	Ton	\$41.60	\$3,157,000
	2006	2,477	30.00	74,310		\$40.00	\$2,972,000
Wheat	2007	6,094	2.51	15,324	Ton	\$166.00	\$2,544,000
	2006	9,217	1.81	16,683		\$125.16	\$2,088,000
<b>Total</b>	<b>2007</b>	<b>960,274</b>					<b>\$363,722,000</b>
	<b>2006</b>	<b>973,685</b>					<b>\$267,813,000</b>

<sup>1</sup> For 2007, 2006: Includes Human Consumption Corn (but not Fresh Market Corn).

<sup>2</sup> For 2007, 2006: Includes Barley, Forage, Oat, and Wheat Hay.

<sup>3</sup> For 2007: Includes Corn Stalks, Cotton Mote, Milo, Oat Grain, and Safflower.  
For 2006: Includes Cotton Mote, Oat Grain, and Safflower.

<sup>4</sup> For 2007, 2006: Includes Oat, Rye, Sorghum, Sudan, Wheat, and Winter Forage.

<sup>5</sup> For 2007, 2006: Includes Straw from Barley, Bean (Dry), Oat, Rice and Wheat.

Disclaimer: Numbers will not compute exactly due to computer rounding of production and value rates.





## Vegetable Crops

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Beans, Lima (Freezer)	2007	2,308	1.70	3,913	Ton	\$497.67	\$1,947,000
	2006	2,805	1.52	4,259		\$474.74	\$2,022,000
Melons (Cantaloupe)	2007	3,997	822.41	3,287,170	40lb Ctn	\$6.05	\$19,894,000
	2006	3,601	675.18	2,431,310		\$5.50	\$13,372,000
Melons (Other) <sup>1</sup>	2007	1,483	30.72	45,560	Ton	\$182.06	\$8,295,000
	2006	1,458	29.36	42,803		\$197.49	\$8,453,000
Misc. Vegetables <sup>2</sup>	2007	3,614	---	---	---	---	\$15,442,000
	2006	3,362	---	---		---	\$15,494,000
Sweet Potatoes	2007	12,183	16.67	203,091	Ton	\$640.65	\$130,110,000
	2006	12,028	15.23	183,186		\$610.68	\$111,868,000
Tomatoes (Market)	2007	9,761	1,260.37	12,302,476	25lb Ctn	\$7.96	\$97,957,000
	2006	9,999	1,156.21	11,560,959		\$7.01	\$81,097,000
Tomatoes (Processing)	2007	18,200	39.53	719,516	Ton	\$64.06	\$46,093,000
	2006	17,300	31.85	551,000		\$57.41	\$31,633,000
<b>Total</b>	<b>2007</b>	<b>51,546</b>					<b>\$319,737,000</b>
	<b>2006</b>	<b>50,553</b>					<b>\$263,939,000</b>

<sup>1</sup> For 2007, 2006: Includes Honeydew, Korean Melon, Mixed Melons, and Watermelon.

<sup>2</sup> For 2007: Includes Asparagus, Basil (Sweet), Cabbage (Napa), Chinese Greens, Cilantro, Cucumber, Cucumber (Pickle), Eggplant, Garbanzo Beans, Garlic, Long Chile, Mustard, Onion (Dry Bulb, Green), Parsley, Pepper (Market Bell, Processed Chile Powder, Spice), Pumpkin, Radicchio (Winter), Radish (Daikon), Spice/Herb, Sorrel, Spinach (Fresh), Squash, Squash (Winter, Zucchini), Sunflower, Tomatillo, Tomato (Pole), and Turnip.

For 2006: Includes Asparagus, Basil (Sweet), Broccoli (Processing), Cabbage, Cauliflower (Processing), Cucumber, Cucumber (Pickle), Eggplant, Garlic, Leafy Lettuce, Onion, Oriental Vegetables, Pea (Processing), Pepper (Market Bell and Chile, Processed Bell and Chile), Pumpkin, Radish, Spinach, Squash, Sunflower, and Tomatillo.

## Bee Industry

<i>Crop</i>	<i>Year</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Beeswax	2007	41,540	Lb	\$2.11	\$88,000
	2006	35,268		\$2.00	\$71,000
Bulk Bees <sup>1</sup>	2007	64,300	Lb	\$10.86	\$698,000
	2006	84,366		\$9.93	\$838,000
Honey <sup>2</sup>	2007	2,700,126	Lb	\$0.90	\$2,430,000
	2006	2,292,400		\$0.91	\$2,086,000
Pollination <sup>3</sup>	2007	138,317	Colony	\$129.41	\$17,900,000
	2006	137,325		\$130.72	\$17,951,000
Queens <sup>4</sup>	2007	28,775	Each	\$10.27	\$296,000
	2006	29,154		\$14.17	\$413,000
<b>Total</b>	<b>2007</b>				<b>\$21,411,000</b>
	<b>2006</b>				<b>\$21,359,000</b>

<sup>1</sup> For 2007, 2006: Includes Bees Sold as Bulk Bees, Nuclei, and Packaged Bees.

<sup>2</sup> For 2007: Honey produced by 42,900 resident colonies.  
For 2006: Honey produced by 44,000 resident colonies.

<sup>3</sup> For 2007, 2006: Pollination colonies include all required to pollinate crops grown in Merced County.

<sup>4</sup> For 2007, 2006: Includes Mated Queens and Queen Cells.

## Seed Crops

Crop	Year	Acres Harvested	Production per Acre	Total Production	Production Unit	Value per Unit	Total Value
Seed Crops <sup>1</sup>	2007	2,920	---	---	---	---	\$1,938,000
	2006	2,196	---	---	---	---	\$875,000
<b>Total</b>	<b>2007</b>	<b>2,920</b>					<b>\$1,938,000</b>
	<b>2006</b>	<b>2,196</b>					<b>\$875,000</b>

<sup>1</sup> For 2007: Includes Certified, Common, and Phytosanitary Seed from Barley, Bean (Garbanzo and Lima), Cauliflower, Cucumber, Mizuna, Oat, Pumpkin, Squash, and Wheat.

For 2006: Includes Certified, Common, and Phytosanitary Seed from Artichoke, Bean (Lima), Carrot, Cucumber, Lettuce, Oat, Onion, Pepper (Chile), Pumpkin, Rye, Squash, Tomato, and Wheat.

## Fruit and Nut Crops

Crop	Year	Acres Harvested	Production per Acre	Total Production	Production Unit	Value per Unit	Total Value
Almonds (Hulls)	2007	---	---	179,047	Ton	\$121.17	\$21,695,000
	2006	---	---	130,598		\$95.11	\$12,421,000
Almonds (Kernel Basis)	2007	87,881	0.98	86,475	Ton	\$3,600.00	\$311,310,000
	2006	87,771	0.71	62,182		\$4,320.00	\$268,626,000
Apricots	2007	1,123	8.39	9,422	Ton	\$338.99	\$3,194,000
	2006	1,195	6.75	8,065		\$315.45	\$2,544,000
Figs (Dry)	2007	1,729	1.20	2,073	Ton	\$1,630.31	\$3,380,000
	2006	2,239	1.00	2,240		\$1,233.34	\$2,763,000
Grapes (Raisin)	2007	640	1.93	1,237	Ton	\$1,023.04	\$1,265,000
	2006	660	0.86	566		\$1,210.00	\$684,000
Grapes (Wine)	2007	9,819	6.69	65,702	Ton	\$274.08	\$18,008,000
	2006	11,397	9.93	113,138		\$237.65	\$26,887,000
Miscellaneous <sup>1</sup>	2007	2,729	---	---	---	---	\$24,209,000
	2006	2,303	---	---		---	\$12,007,000
Peaches (Clingstone)	2007	3,248	14.95	48,572	Ton	\$285.41	\$13,863,000
	2006	3,275	16.23	53,162		\$273.68	\$14,549,000
Peaches (Freestone)	2007	1,786	21.79	38,914	Ton	\$250.79	\$9,759,000
	2006	1,830	15.98	29,247		\$228.12	\$6,672,000
Pistachios	2007	3,967	0.85	3,369	Ton	\$2,984.79	\$10,055,000
	2006	4,301	1.30	5,589		\$4,327.14	\$24,184,000
Plums, Dried	2007	1,737	1.87	3,241	Ton	\$1,525.14	\$4,943,000
	2006	1,853	1.62	3,000		\$1,518.69	\$4,557,000
Strawberries	2007	97	9.38	910	Ton	\$797.81	\$726,000
	2006	104	10.22	1,063		\$756.26	\$804,000
Walnuts (English)	2007	5,773	1.32	7,644	Ton	\$2,010.78	\$15,371,000
	2006	5,877	1.24	7,311		\$1,649.09	\$12,056,000
<b>Total</b>	<b>2007</b>	<b>120,529</b>					<b>\$437,778,000</b>
	<b>2006</b>	<b>122,805</b>					<b>\$388,756,000</b>

<sup>1</sup> For 2007, 2006: Includes Apple, Blueberry, Cherry, Citrus, Fig (Cannery, Freezer and Fresh Market), Fruit Juice, Grape (Raisin to Wine), Jujube, Kiwi, Nectarine, Olive (Processed), Organic Fruit and Nut, Peach (Juice), Pear (Asian), Pecan, Persimmon, Plum, Pluot, and Pomegranate.





## Fruit and Nut Acreage Planting

<i>Crop</i>	<i>Bearing 2006</i>	<i>Non-Bearing 2006</i>	<i>Bearing 2001</i>	<i>Non Bearing 2001</i>
Almonds	88,131	3,616	83,535	4,575
Apples	121	0	348	25
Apricots	1,124	0	1,740	1
Berries	145	0	325	20
Cherries	458	3	357	18
Figs	2,177	0	3,775	49
Grapes (Raisin)	711	1	1,164	0
Grapes (Table)	124	0	149	0
Grapes (Wine)	9,818	0	11,428	0
Jujube	20	0	0	0
Kiwi	33	0	33	0
Mandarins	9	0	8	0
Nectarines	124	3	178	35
Olives	2	0	12	0
Oranges	6	0	49	0
Peaches (Clingstone)	3,248	10	3,647	350
Peaches (Freestone)	1,821	154	2,019	159
Pears	6	0	13	0
Pecans	37	0	41	10
Persimmon	17	0	0	0
Pistachios	4,527	229	4,614	462
Plums	90	0	40	42
Plums (Dried)	1,737	49	2,274	56
Pluot	71	0	0	0
Pomegranate	12	0	0	0
Walnuts (English)	5,773	329	5,726	488
<b>Total</b>	<b>120,342</b>	<b>4,394</b>	<b>121,475</b>	<b>6,290</b>

## Nursery Products

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
All Nursery Products <sup>1</sup>	2007	1,495	---	---	---	---	\$29,629,000
	2006	1,510	---	---	---	---	\$35,421,000
<b>Total</b>	<b>2007</b>	<b>1,495</b>					<b>\$29,629,000</b>
	<b>2006</b>	<b>1,510</b>					<b>\$35,421,000</b>

<sup>1</sup> For 2007, 2006: Includes Bud Wood, Cane Berries, Christmas Trees, Crowns and Cuttings, Deciduous Fruit and Nut Trees, Decorative Plants, Dried Flowers, Grapevines, Greenhouse Plants, Ornamental Plants, Ornamental and Shade Trees, Transplants (Strawberry and Vegetable), and Turf. The separate production and value are not shown to avoid disclosing individual operations.



## Livestock and Poultry Production

<i>Crop</i>	<i>Year</i>	<i>Number of Head</i>	<i>Production per Head</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Cattle and Calves <sup>1</sup>	2007	309,643	8.44	2,613,213	Cwt	\$90.44	\$236,339,000
	2006	301,655	8.53	2,573,129		\$94.55	\$243,289,000
Chickens (Fryers and Broilers)	2007	91,606,435	5.51	504,714,814	Lb	\$0.65	\$326,046,000
	2006	90,438,363	5.29	477,974,601		\$0.60	\$286,785,000
Livestock (Miscellaneous) <sup>2</sup>	2007	37,492	---	---	---	---	\$4,124,000
	2006	35,507	---	---		---	\$4,052,000
Poultry (Miscellaneous) <sup>3</sup>	2007	231,000	---	---	---	---	\$1,652,000
	2006	140,000	---	---		---	\$1,054,000
Sheep and Lambs	2007	32,850	1.54	50,619	Cwt	\$77.53	\$3,924,000
	2006	36,918	1.54	57,025		\$77.09	\$4,396,000
Turkeys	2007	2,791,439	32.76	91,436,064	Lb	\$0.68	\$62,451,000
	2006	3,077,798	29.85	91,858,583		\$0.49	\$45,194,000
<b>Total</b>	<b>2007</b>	<b>95,008,859</b>					<b>\$634,535,000</b>
	<b>2006</b>	<b>94,030,241</b>					<b>\$584,771,000</b>

<sup>1</sup> For 2007, 2006: Includes Calves, Cull Bulls (Dairy and Beef), Cull Cows (Dairy and Beef), Replacement Heifers (Dairy and Beef) and Stocker Cattle.

<sup>2</sup> For 2007, 2006: Includes Goats, Hogs, and Pigs.

<sup>3</sup> For 2007, 2006: Includes Chukar, Pheasant, Pullets, and Squab.

## Livestock and Poultry Products

<i>Crop</i>	<i>Year</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Eggs (Other) <sup>1</sup>	2007	2,497,960	Each	\$0.64	\$1,608,000
	2006	3,516,921		\$0.53	\$1,864,000
Eggs, Chicken (Market)	2007	161,288,340	Dozn	\$0.78	\$124,998,000
	2006	156,341,058		\$0.52	\$81,297,000
Milk (Goat)	2007	54,660	Cwt	\$34.00	\$1,858,000
	2006	71,941		\$32.17	\$2,314,000
Milk (Manufacturing)	2007	3,593,496	Cwt	\$18.97	\$68,169,000
	2006	2,620,364		\$12.58	\$32,964,000
Milk (Market)	2007	53,983,671	Cwt	\$18.17	\$980,883,000
	2006	50,775,182		\$11.60	\$588,992,000
Wool	2007	159,081	Lb	\$0.85	\$135,000
	2006	167,076		\$0.90	\$150,000
<b>Total</b>	<b>2007</b>				<b>\$1,177,652,000</b>
	<b>2006</b>				<b>\$707,582,000</b>

<sup>1</sup> For 2007, 2006: Includes Eggs other than Chicken Eggs.





## Aquaculture

<i>Crop</i>	<i>Year</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Fish <sup>1</sup>	2007	1,600,000	Lb	\$2.07	\$3,312,000
	2006	1,318,750		\$2.30	\$3,031,000
<b>Total</b>	<b>2007</b>				<b>\$3,312,000</b>
	<b>2006</b>				<b>\$3,031,000</b>

<sup>1</sup> For 2007, 2006: Includes Black Bass, Bluegill, Catfish, Silver Carp, Striped Bass, Sturgeon, and Trout.

## Other Agriculture

<i>Crop</i>	<i>Year</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Almond (Shells) <sup>1</sup>	2007	52,848	Ton	\$22.56	\$1,192,000
	2006	42,419		\$21.99	\$933,000
Firewood <sup>2</sup>	2007	22,194	Cord	\$158.36	\$3,515,000
	2006	20,591		\$155.81	\$3,208,000
Fuel (Cogeneration) <sup>3</sup>	2007	55,125	Ton	\$40.00	\$2,205,000
	2006	47,350		\$38.00	\$1,799,000
Manure <sup>4</sup>	2007	1,112,415	Ton	\$4.53	\$5,039,000
	2006	1,090,504		\$4.56	\$4,973,000
<b>Total</b>	<b>2007</b>				<b>\$11,951,000</b>
	<b>2006</b>				<b>\$10,913,000</b>

<sup>1</sup> For 2007, 2006: For Animal Bedding.

<sup>2</sup> For 2007, 2006: Includes Orchard Prunings and Removal for Firewood. (Recorded in Cords).

<sup>3</sup> For 2007, 2006: Includes Orchard Prunings and Orchard Removal for Fuel (Recorded in Dry Tons).

<sup>4</sup> For 2007, 2006: Includes Livestock and Poultry Manure.





## Merced County Global

### Exports go to these countries:

Algeria	Luxembourg
Argentina	Malaysia
Armenia	Malta
Australia	Mauritius
Austria	Melilla
Azerbaijan	Mexico
Bahrain	Monaco
Belarus	Morocco
Belgium	Nepal
Brazil	Netherlands
Bulgaria	New Zealand
Canada	Norway
Canary Islands	Oman
Chile	Pakistan
China	Philippines
Colombia	Poland
Costa Rica	Portugal
Cyprus	Qatar
Czech Republic	Romania
Denmark	Russian Federation
Ecuador	San Marino
Egypt	Saudi Arabia
El Salvador	Singapore
Estonia	Slovakia
Finland	Slovenia
France	South Africa
Georgia	Spain
Germany	Sweden
Greece	Switzerland
Guatemala	Syria
Honduras	Taiwan
Hong Kong	Tajikistan
India	Thailand
Indonesia	Trinidad & Tobago
Israel	Tunisia
Italy	Turkey
Japan	Ukraine
Jordan	United Arab Emirates
Kazakhstan	United Kingdom
Korea, Republic of	Uruguay
Kuwait	Uzbekistan
Latvia	Vatican City State
Lebanon	Venezuela
Liechtenstein	Vietnam
Lithuania	







# Agricultural Exports



## Exported Commodities

Alfalfa Hay	Onion Seed	Rye Hay
Almonds	Pecans	Strawberry Nursery Stock
Cantaloupe	Pistachios	Sudan Hay
Fig	Propagative Stock	Sweet Potato
Garlic	Prunes	Tomatoes
Honeydew	Radicchio	Walnut Burls
Oat Hay	Raspberry Nursery Stock	Walnuts



## 2007 Sustainable Agriculture Report

### Pest Prevention

The California Food and Agricultural Code mandates pest prevention programs to prevent the introduction and spread of pests in California. Pest prevention involves Pest Exclusion, Pest Detection, Pierce's Disease Control, and the Federal Phytosanitary Certification Program.

### *Pest Exclusion Program:*

Pest Exclusion is the first line of defense to prevent the introduction of pests, injurious to agriculture, that are not of common occurrence in Merced County.

A total of 7,535 shipments of incoming plant material were inspected in 2007. Shipments are inspected at United Parcel Service, United States Post Offices, Federal Express and trucking terminals. Thirteen shipments were rejected. The 13 rejections were for live pests, material not properly certified, or improper container markings. Of these one "Q" Rated pest (*Osmia cornifrons*) was intercepted and rejected.

Seed inspection during 2005 detected the presence of "B" Rated Jointed Goatgrass (*Aegilops cylindrica*) seed contamination in forage crop seed mixture, which had been planted in four fields totaling 312 acres in Merced County. Jointed Goatgrass is a potential major pest of small grain crops, primarily wheat. "B" Rating indicates a pest with limited distribution in the State with eradication at the discretion of the county agricultural commissioner. Since there is no known establishment of Jointed Goatgrass in Merced County, the planted fields were placed under compliance agreement to control any potential movement of seed from the planted fields. With the assistance of the California Department of Food and Agriculture, the 4 fields were visually surveyed three times in 2005 and again in 2006 with no Jointed Goatgrass plants discovered. In 2007 these fields were surveyed again to verify that the Jointed Goatgrass did not become established in Merced County. The results of these surveys were negative. Another survey is planned in 2008 to verify the continued absence of Jointed Goatgrass in Merced County.

### *Pierce's Disease Control Program*

To prevent the introduction of the Glassy-winged Sharpshooter (GWSS) into Merced County, all shipments of nursery stock from infested counties are inspected. GWSS has the ability to spread Pierce's Disease rapidly among grape vines with devastating results. 935 shipments of nursery stock from infested counties were inspected in 2007.

In addition, all nurseries receiving nursery stock from GWSS infested areas and 1,763 residential yards were visually inspected for GWSS presence during 2007. No GWSS was detected.







## Federal Phytosanitary Certification Program:

This program prevents the spread of injurious pests from Merced County to foreign countries through inspection and certification of exported plants and plant commodities. In 2007, 4,755 export shipments were inspected and issued Phytosanitary Certificates.

## Pest Detection Program

Pest Detection uses visual inspection and insect traps that target specific exotic insects of high agricultural and economic importance.

### The trapping program in Merced County targeted the following pests:

Apple Maggot ( <i>Rhagoletis pomonella</i> )	Light Brown Apple Moth ( <i>Epiphyas postvittana</i> )
European Corn Borer ( <i>Ostrinia nubilalis</i> )	Mediterranean Fruit Fly ( <i>Ceratitis capitata</i> )
European Pine Shoot Moth ( <i>Rhyacionia buoliana</i> )	Melon Fly ( <i>Dacus cucurbitae</i> )
Glassy-winged Sharpshooter ( <i>Homalodisca coagulate</i> )	Mexican Fruit Fly ( <i>Anastrepha ludens</i> )
Gypsy Moth ( <i>Lymantria dispar</i> )	Oriental Fruit Fly ( <i>Dacus dorsalis</i> )
Japanese Beetle ( <i>Popillia japonica</i> )	Sweet Potato Weevil ( <i>Cylas formicarius elegantulus</i> )
Khapra Beetle ( <i>Trogoderma granarium</i> )	Vine Mealy Bug ( <i>Planococcus ficus</i> )

A total of 2,093 pest detection traps were placed in Merced County and inspected a total of 21,614 times during the 2007 trapping season.

## Pest Eradication

The Pest Eradication Program endeavors to eliminate infestations of significant agricultural pests with limited distribution before they are able to cause ongoing economic cost to California agriculture.

In 2006 an exotic, potentially invasive parasitic vine known as Japanese dodder was detected at six locations in Merced County. These locations were eradicated in 2007 along with two new locations that were discovered. Surveys for Japanese dodder will continue in 2008.

New invasive weed pests found in 2007 include South American Sponge Plant ("A" Rated) and Purple Loosestrife ("B" Rated). Eradication efforts are scheduled to begin in 2008.

Ongoing detection and eradication efforts continued during 2007 for Pink Bollworm, Red Imported Fire Ant, and Purple Mustard.

Ongoing detection efforts continue for Camelthorn, Carolina Horse Nettle, and Hydrilla.

Successful eradication projects include Sweet Potato Weevil and Banana Waterlily. None have been detected since the end of their respective eradication projects.

The Pink Bollworm is a significant cotton pest with eradication efforts consisting of a State operated detection trapping program in conjunction with County enforcement of the host-free period from January 1 through March 10. In 2007, 48,190 acres were trapped for Pink Bollworm. No Merced County growers were found to be in violation of the host-free period requirement during 2007.

Merced County's Red Imported Fire Ant (RIFA) eradication program started in November 2001. During 2007 there were additional finds made in several areas of the county. By the end of 2007, 3,634 acres were still under treatment, 3,573 acres under intensive post treatment survey, and 326 acres were declared eradicated. County personnel surveyed and trapped in conjunction with CDFA personnel.



## Biological Control

The Biological Control (Biocontrol) Program uses natural enemies to suppress pest populations to economically and environmentally acceptable levels. Once the biocontrol agent becomes established it is self-perpetuating, reducing the need to use pesticides. The following are pests found in Merced County and their Biocontrol Agents.

<i>Pest</i>	<i>Organism</i>
Ash Whitefly ( <i>Siphoninus phillyreae</i> )	Parasitoid Wasp ( <i>Encarsia inaron</i> )
Grapeleaf Skeletonizer ( <i>Harrisina brillians</i> )	Parasitic Fly ( <i>Ametadoria misella</i> )
	Parasitic Wasp ( <i>Apanteles harrisinae</i> )
	Virus ( <i>WGLS Granulosis</i> )
Italian Thistle ( <i>Carduus sp.</i> )	Seed-Head Weevil ( <i>Rhinocyllus conicus</i> )
Klamath Weed ( <i>Hypericum perforatum</i> )	Leaf Beetle ( <i>Chrysolina quadrigemina</i> )
Milk Thistle ( <i>Silybum marianum</i> )	Seed-Head Weevil ( <i>Rhinocyllus conicus</i> )
Puncture Vine ( <i>Tribulus terrestris</i> )	Seed Weevil ( <i>Microlarinus lareynii</i> )
	Stem Weevil ( <i>Microlarinus hypriiformis</i> )
Red Gum Lerp Psyllid ( <i>Glycaspis brimblecombei</i> )	Parasitoid Wasp ( <i>Psyllaephagus bliteus</i> )
Russian Thistle ( <i>Salsola sp.</i> )	Case-bearer Moth ( <i>Coleophora klimeschiella</i> )
	Russian Thistle Borer ( <i>Coleophora parthenica</i> )
Yellowstar Thistle ( <i>Centaurea solstitialis</i> )	False Peacock Fly ( <i>Chaetorellia succinea</i> )
	Hairy Weevil ( <i>Eustenopus villosus</i> )
	Rust Fungus ( <i>Puccinia jaceae var. solstitialis</i> )
	Seed-Head Gall Fly ( <i>Urophora sirunaseva</i> )
	Seed-Head Weevil ( <i>Bangasternus orientalis</i> )

## Organic Farming

Merced County has 13 organic handlers and 6 organic dairies. There were 44 growers of organic commodities in 2007. These growers farmed a total of 6,179 acres to produce assorted organic field crops, berries, fruits, nuts, and vegetables. Organic eggs, livestock, milk, and poultry were also produced. There were also 5 growers who farmed 17,810 acres of irrigated and non-irrigated organic pastureland.



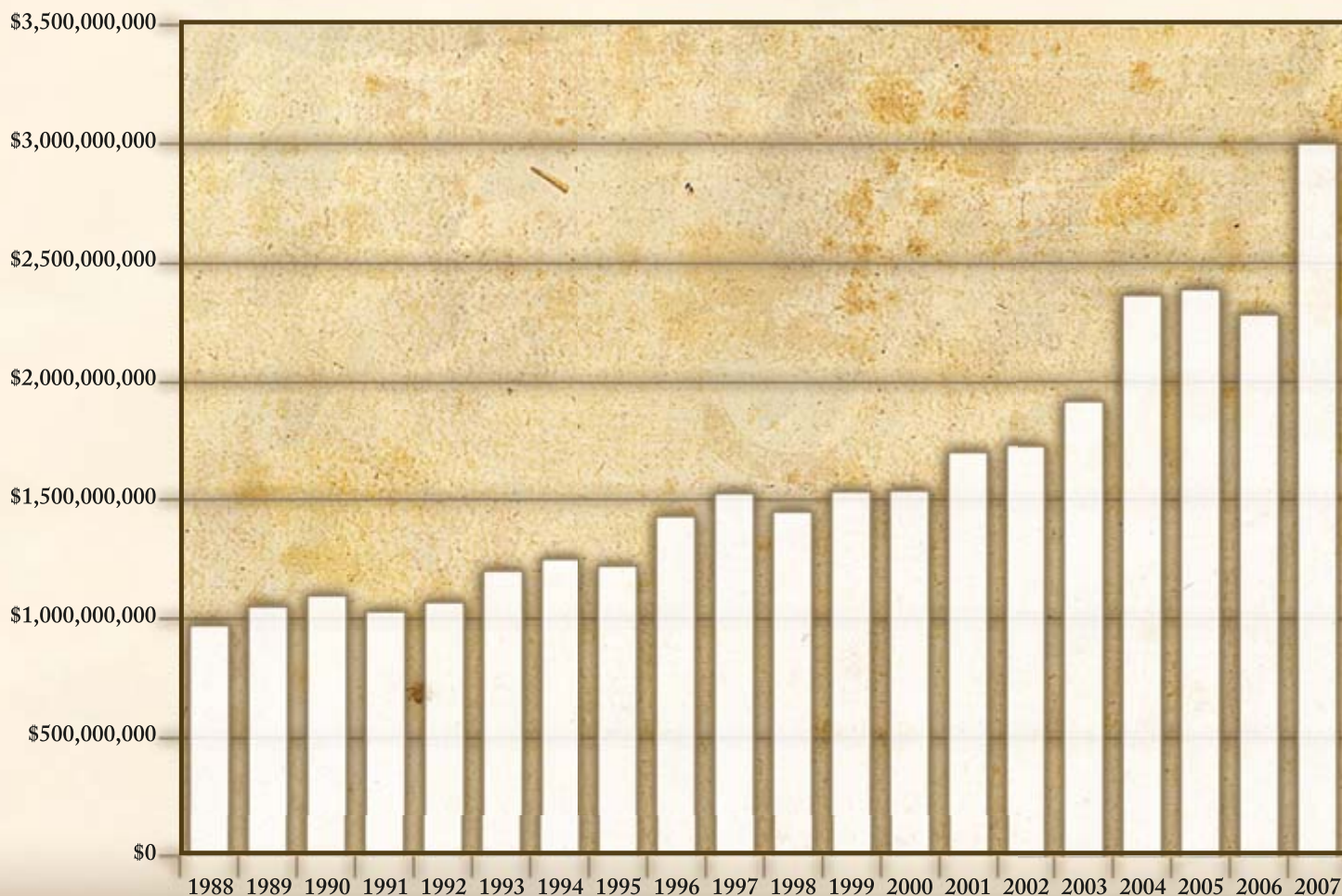




## Commodity Value Crop Comparison

Commodities	2007	1997	1987	1977
Aquaculture	\$3,312,000	\$1,280,000	---	---
Bee Industry	\$21,411,000	\$8,033,000	\$3,385,000	\$1,600,000
Field Crops	\$363,722,000	\$284,482,000	\$174,576,000	\$111,042,000
Fruit and Nut Crops	\$437,778,000	\$337,350,000	\$209,000,000	\$100,482,000
Livestock and Poultry Production	\$634,535,000	\$239,294,000	\$206,816,000	\$119,295,000
Livestock and Poultry Products	\$1,177,652,000	\$492,633,000	\$256,988,000	\$104,096,000
Nursery Products	\$29,629,000	\$15,833,000	\$8,244,000	\$6,430,000
Other Agriculture	\$11,951,000	\$11,429,000	---	---
Seed Crops	\$1,938,000	\$1,295,000	\$1,985,000	\$3,683,000
Vegetable Crops	\$319,737,000	\$135,208,000	\$81,488,000	\$60,743,000
<b>Total</b>	<b>\$3,001,666,000</b>	<b>\$1,526,837,000</b>	<b>\$942,482,000</b>	<b>\$507,369,000</b>

## Merced County Agricultural Commodity Values 1988 To 2007





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# Merced County 1992-2006 Land Use Summary

Farmland Mapping and Monitoring Program

California Department Of Conservation

Land Use Category	Acerage By Category <sup>1</sup>								1992-2006 Net Acerage Changed	Average Annual Acerage Change
	1992	1994	1996	1998	2000	2002 <sup>2</sup>	2004	2006 <sup>3</sup>		
Prime Farmland	288,920	288,477	288,415	289,057	287,160	283,158	276,575	272,096	-16,824	-1,202
Farmland of Statewide Importance	161,792	161,189	159,788	160,066	157,936	159,022	155,856	153,249	-8,543	-610
Unique Farmland	95,096	94,370	93,580	96,593	96,355	103,008	103,133	104,419	9,323	666
Farmland of Local Importance	52,782	49,786	51,241	47,929	47,621	42,818	53,762	59,851	7,069	505
<b>Important Farmland Subtotal</b>	<b>598,590</b>	<b>593,822</b>	<b>593,024</b>	<b>593,645</b>	<b>589,072</b>	<b>588,006</b>	<b>589,326</b>	<b>589,615</b>	<b>-8,975</b>	<b>-641</b>
Grazing Land	581,798	585,110	583,709	580,934	581,729	578,026	573,629	569,828	-11,970	-855
<b>Agricultural Land Subtotal</b>	<b>1,180,388</b>	<b>1,178,932</b>	<b>1,176,733</b>	<b>1,174,579</b>	<b>1,170,801</b>	<b>1,166,032</b>	<b>1,162,955</b>	<b>1,159,443</b>	<b>-20,945</b>	<b>-1,496</b>
Urban and Built-Up Land	28,326	29,309	30,183	30,559	31,817	33,091	34,944	36,767	8,441	603
Other Land	35,759	36,264	37,526	39,304	41,832	45,321	46,548	48,348	12,589	899
Water Area	16,946	16,914	16,978	16,978	16,970	16,970	16,970	16,859	-87	-6
<b>Total Area Inventoried</b>	<b>1,261,419</b>	<b>1,261,419</b>	<b>1,261,420</b>	<b>1,261,420</b>	<b>1,261,420</b>	<b>1,261,414</b>	<b>1,261,417</b>	<b>1,261,417</b>	<b>-2</b>	<b>0</b>

<sup>1</sup> Figures are generated from the most current version of the GIS data. Files dating from 1984 through 1992 were reprocessed with a standardized county line in the Albers Equal Area projection, and other boundary improvements.

<sup>2</sup> Due to the incorporation of digital soil survey data (SSURGO) during this update, acreages for farmland, grazing and other land use categories may differ from those published in the 2000-2002 California Farmland Conversion Report.

<sup>3</sup> Water acreage decreased in 2006 due to two water bodies being dry for multiple update cycles.

**Percentage Of County Inventoried: 100%**

## Merced County Land Use Conversion Synopsis

Over the past fifteen years Merced County has undergone some major changes in both cropping patterns and land use changes. Some of the most notable changes in crops have been a substantial decline in the cotton acreage and a large increase in the almond acreage. Much of these acreage fluctuations are accounted for by shifts into or out of other crops. However, most of the changes in the overall amount of farmed acres in the county are due to land use conversions. Most notable are the amounts converted from irrigated pastureland and other pastureland (rangeland) to irrigated crops such as almonds, and from agriculture land to urban uses. Since most of the irrigated pastureland and other pastureland acres are not captured by the pesticide permit system it is difficult to track their acreage fluctuations. In an effort to more correctly reflect the actual acreage farmed in Merced County, data from the Farmland Mapping and Monitoring Program within the California Department of Conservation was used to adjust the acres reported for irrigated pastureland and other pastureland in the 2007 Crop Report. The result was an overall decrease in farmed acres of 14,214 acres over the past one and a half decades. The table above shows the Merced County summary and change by land use category from 1992 to 2006 as determined by the California Department of Conservation.



*Merced County*  
*Department of Agriculture*  
2139 Wardrobe Avenue  
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# MERCED COUNTY

## 2008 Annual Report on Agriculture







## Figs In Merced County

Compared to the 92,000 acres of almonds in Merced County, the modest 2,000 acres of figs seems insignificant. But that acreage makes Merced County the second most important fig county in North America – second only to Madera. The mild Mediterranean climate of the San Joaquin Valley and the availability of water during summer make this the perfect area to grow figs. Figs have a history in Merced County reaching back probably 100 years. At one time, one of the unofficial slogans for Merced County was “Home of the Fig”.

Most common fig variety in the County is the **Calimyrna**, which is used for drying and for paste. The best fruits are sold whole and the rest are processed into paste for a variety of products – the most famous of which is the fig “Newton”. The (black) **Mission** fig is harvested mostly for dried and paste, but some fruit is hand picked from the tree and marketed fresh – some to far away places. The light green **Kadota** fruit is dried, shipped fresh and sometimes canned. The only fig cannery in the country is here in Planada – Oasis Foods.

Figs are interesting botanically. With very soft wood, morphologically, figs are somewhat similar to grapes. They can be damaged by very cold winter temperatures. The Kadota trees are trained very close to the ground and sometimes can be confused as very large head-trained grapevines. The Kadota orchards around Planada are a favorite subject for photographers, especially when the mustard is in bloom.



Some varieties have more than one crop. The first crop is borne on fruit wood that developed last year. A second crop will be borne on the current season's wood. If conditions are just right, the Mission for instance may have a small third crop. Depending on variety, typically one crop is much larger than the others, and that is the one used for drying. Kadota are different in that they can keep ripening throughout the fall months and can be picked each week. Fresh market figs may be harvested from every crop, depending on market conditions. Their interesting bearing habit and their delicate flavor make figs a popular fruit for gardens.



Figs have an excellent nutritional profile. They have become increasingly popular with restaurants and amateur chefs alike. I recommend trying the recipes at: [CaliforniaFigs.com](http://CaliforniaFigs.com).



*Our thanks go to the University of California, Cooperative Extension Farm Advisor, Maxwell Norton, for his generous contribution of this article on fig production in Merced County.*





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## Top Twelve Leading Farm Commodities 2008

Rank	Crop	Value	2007 Rank
1	Milk *	\$994,306,000	(1)
2	Chickens **	\$321,807,000	(2)
3	Almonds (Kernel Basis)	\$254,901,000	(3)
4	Cattle and Calves	\$246,088,000	(4)
5	Sweet Potatoes	\$161,562,000	(6)
6	Eggs, Chicken (Market)	\$136,158,000	(7)
7	Hay (Alfalfa)	\$129,889,000	(8)
8	Tomatoes ***	\$114,014,000	(5)
9	Silage (Corn)	\$113,875,000	(9)
10	Turkeys	\$66,554,000	(10)
11	Cotton (Lint)	\$41,367,000	(11)
12	Silage (Other)	\$37,290,000	(18)

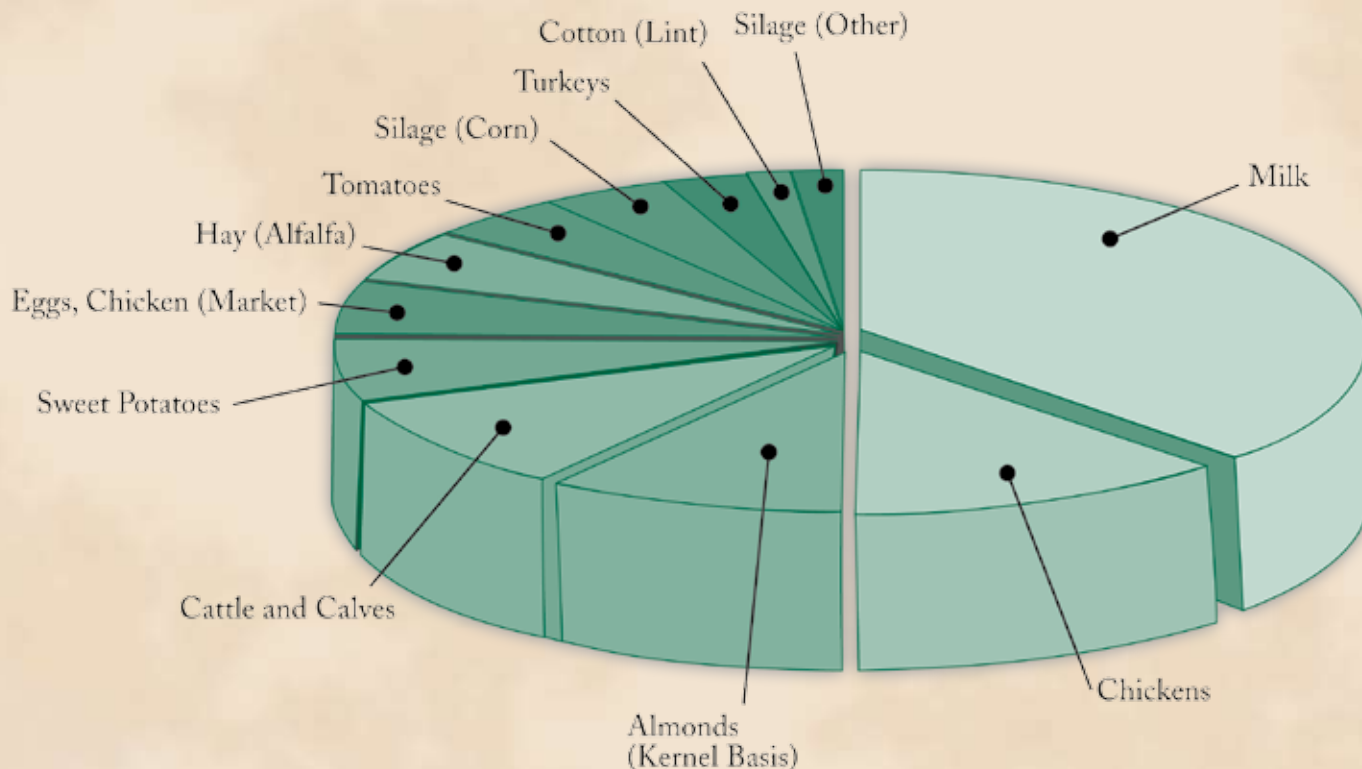
(The number in parenthesis denotes the 2007 ranking)

\* Includes Market and Manufacturing.

\*\* Includes Fryers and Other Chickens.

\*\*\* Includes Market and Processing Tomatoes.

### 2008 Top 12 Commodities



Numbers in report will not compute exactly due to computer rounding of production and value rates.





A. G. Kawamura, *Secretary*  
*California Department of Food and Agriculture*

And

**The Honorable Board of Supervisors County of Merced**

Deidre F. Kelsey, *Chairman*

Mike Nelson

John Pedrozo

Jerry O'Banion

Hubert "Hub" Walsh

Demitrios O. Tatum

*County Executive Officer*

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*Equal Opportunity Employer*

In accordance with the provisions of Sections 2272 and 2279 of the California Food and Agricultural Code, I am pleased to submit the 2008 Merced County Report of Agriculture. This report summarizes the acreage, production, and gross value of Merced County's agricultural commodities.

Last year Merced County agriculture neared the 3 billion dollar mark in gross production value of agricultural commodities with a gross production value of \$2,999,701,000 in 2008. Merced County agricultural commodities decreased slightly by \$1,965,000 (0.065%) from the 2007 record breaking production values. These figures represent gross returns to the producer and do not take into account the costs of production, marketing, or transportation. Net income of the producer is not reflected in this report.

Significant events of the 2008 crop year:

Milk remains the county's number one commodity with an overall value of \$994,306,000. While production was up, the price of milk dropped notably (5.22%) in 2008 resulting in a reduction in value of \$54,746,000.

Chickens remain the number two commodity, with a total value of \$321,807,000, down 1.3% due mainly to a reduction in flock size.

Almonds came in at number three again in 2008, with a value of \$254,901,000; substantially down then last year's value of \$311,310,000 due to a \$0.40/lb drop in price. An overall almond production increase of 5% with 4,781 more acres coming into production was not enough to offset the price cut.

Cattle & calves, the fourth leading commodity, posted an increase in value of 4.13% for a total of \$246,088,000 in 2008.

Egg production in Merced County dropped dramatically, due to a voluntary industry decision to reduce the number of layers per cage, however eggs still managed to increase 8.93% in value due to a 22.5 cent increase in the price per dozen eggs.

Sweet potato acreage increased by 1,528 acres in 2008. The production per acre was down slightly, however the price was up mainly due to crop losses suffered in the southeastern US from hurricane Ike. The added production coupled with a higher price increased the overall value by 24.17 % to \$161,562,000.

Overall, the 2008 growing season was quite good for most crops. There was some frost early in the season that caused some minor damage to almonds at the beginning of bloom, but nothing significant. Most notable were the effects of the drought on the rangeland, and the water rationing imposed by some of the water districts. For the second year in a row, Merced County requested and received a disaster declaration for the rangeland, which experienced a 68% reduction of normal grass growth, due to the drought.

I wish to express my sincere thanks to our growers and ranchers, the staff of the University of California Cooperative Extension, industry representatives and the members of my staff who assisted in the gathering of data for this report.

Respectfully submitted,

David A. Robinson

Agricultural Commissioner



## Field Crops

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Barley	2008	2,380	2.47	5,889	Ton	\$196.80	\$1,159,000
	2007	3,514	2.48	8,730		\$143.44	\$1,252,000
Beans (Dry Lima)	2008	1,878	1.28	2,396	Ton	\$1,123.37	\$2,692,000
	2007	2,670	1.34	3,590		\$1,082.09	\$3,884,000
Beans (Dry Other)	2008	---	---	---	Ton	---	---
	2007	505	1.21	612		\$766.12	\$469,000
Corn (Grain) <sup>(1)</sup>	2008	12,294	5.92	72,790	Ton	\$221.70	\$16,137,000
	2007	10,674	5.78	61,748		\$180.21	\$11,127,000
Cotton (Lint)	2008	35,010	3.06	107,132	500 Lb Bale	\$386.13	\$41,367,000
	2007	49,190	3.35	165,004		\$377.23	\$62,245,000
Cotton (Seed)	2008	---	1.15	40,416	Ton	\$378.25	\$15,288,000
	2007	---	1.72	84,409		\$234.31	\$19,778,000
Hay (Alfalfa)	2008	84,523	7.25	612,776	Ton	\$211.97	\$129,889,000
	2007	84,056	7.44	625,491		\$177.18	\$110,822,000
Hay (Grain) <sup>(2)</sup>	2008	38,820	4.02	156,011	Ton	\$167.42	\$26,119,000
	2007	33,302	4.53	150,756		\$127.24	\$19,182,000
Hay (Sudan)	2008	8,626	4.14	35,695	Ton	\$141.85	\$5,063,000
	2007	6,555	3.51	23,003		\$122.33	\$2,814,000
Misc. Field Crops <sup>(3)</sup>	2008	2,562	---	---	---	---	\$1,480,000
	2007	2,563	---	---		---	\$4,450,000
Pasture (Irrigated)	2008	37,864	---	37,864	Acre	\$168.00	\$6,361,000
	2007	38,961	---	38,961		\$179.00	\$6,974,000
Pasture (Other)	2008	569,615	---	569,615	Acre	\$18.12	\$10,321,000
	2007	569,615	---	569,615		\$22.00	\$12,532,000
Rice	2008	2,529	3.66	9,268	Ton	\$534.24	\$4,951,000
	2007	2,858	3.70	10,577		\$263.70	\$2,789,000
Silage (Alfalfa)	2008	---	0.93	78,979	Ton	\$55.97	\$4,421,000
	2007	---	0.75	63,311		\$51.50	\$3,261,000
Silage (Corn)	2008	94,423	28.29	2,670,935	Ton	\$42.63	\$113,875,000
	2007	85,160	27.76	2,363,946		\$32.55	\$76,951,000
Silage (Other) <sup>(4)</sup>	2008	74,324	15.46	1,149,015	Ton	\$32.45	\$37,290,000
	2007	62,257	13.06	813,297		\$23.18	\$18,855,000
Straw <sup>(5)</sup>	2008	---	---	4,955	Ton	\$49.76	\$247,000
	2007	---	---	3,953		\$37.02	\$146,000
Stubble (Pasture)	2008	---	---	14,369	Acre	\$20.00	\$287,000
	2007	---	---	16,811		\$29.13	\$490,000
Sugar Beets	2008	3,701	33.52	124,041	Ton	\$43.65	\$5,415,000
	2007	2,300	33.00	75,900		\$41.60	\$3,157,000
Wheat	2008	9,954	3.49	34,709	Ton	\$273.89	\$9,506,000
	2007	6,094	2.51	15,324		\$166.00	\$2,544,000
<b>Total</b>	<b>2008</b>	<b>978,503</b>					<b>\$431,869,000</b>
	<b>2007</b>	<b>960,274</b>					<b>\$363,722,000</b>

<sup>(1)</sup> For 2008, 2007: Includes Human Consumption Corn (but not Fresh Market Corn).

<sup>(2)</sup> For 2008, 2007: Includes Barley, Forage, Oat, and Wheat Hay.

<sup>(3)</sup> For 2008: Includes Corn Stalks, Cotton Mote, Oat Grain, and Safflower.

For 2007: Includes Corn Stalks, Cotton Mote, Milo, Oat Grain, and Safflower.

<sup>(4)</sup> For 2008, 2007: Includes Oat, Rye, Sorghum, Sudan, Wheat, and Winter Forage.

<sup>(5)</sup> For 2008, 2007: Includes Straw from Barley, Bean (Dry), Oat, Rice and Wheat.





## Vegetable Crops

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Beans, Lima (Freezer)	2008	1,659	1.68	2,791	Ton	\$599.28	\$1,672,000
	2007	2,308	1.70	3,913		\$497.67	\$1,947,000
Melons (Cantaloupe) <sup>(1)</sup>	2008	4,633	630.47	2,920,973	40lb Ctn	\$5.89	\$17,202,000
	2007	3,997	822.41	3,287,170		\$6.05	\$19,894,000
Melons (Other) <sup>(2)</sup>	2008	981	35.36	34,678	Ton	\$210.58	\$7,302,000
	2007	1,483	30.72	45,560		\$182.06	\$8,295,000
Misc. Vegetables <sup>(3)</sup>	2008	3,015	---	---	---	---	\$16,524,000
	2007	3,614	---	---		---	\$15,442,000
Sweet Potatoes <sup>(4)</sup>	2008	13,711	13.08	179,340	Ton	\$900.87	\$161,562,000
	2007	12,183	16.67	203,091		\$640.65	\$130,110,000
Tomatoes (Market) <sup>(5)</sup>	2008	10,177	1,147.52	11,678,576	25lb Ctn	\$5.58	\$65,216,000
	2007	9,761	1,260.37	12,302,476		\$7.96	\$97,957,000
Tomatoes (Processing)	2008	16,214	42.42	687,821	Ton	\$70.95	\$48,798,000
	2007	18,200	39.53	719,516		\$64.06	\$46,093,000
<b>Total</b>	<b>2008</b>	<b>50,390</b>					<b>\$318,276,000</b>
	<b>2007</b>	<b>51,546</b>					<b>\$319,737,000</b>

<sup>(1)</sup> For 2008: Price reflects wholesale after packing and shipping.

<sup>(2)</sup> For 2008, 2007: Includes Honeydew, Korean Melon, Mixed Melons, and Watermelon.

<sup>(3)</sup> For 2008: Includes Asparagus, Basil, Cantaloupe (Organic), Cabbage (Napa), Chinese Cabbage, Cilantro, Cucumber, Cucumber (Pickled), Garlic, Honeydew (Organic), Long Chile, Mustard, Onion (Dry Bulb, Green), Pepper (Market Bell, Spice), Pumpkin, Radicchio (Organic, Spring, Winter), Radish, Spice/Herb, Squash, Squash (Winter, Zucchini), Sunflower, Tomatillo, and Tomato (Pole). For 2007: Includes Asparagus, Basil (Sweet), Cabbage (Napa), Chinese Greens, Cilantro, Cucumber, Cucumber (Pickled), Eggplant, Garbanzo Beans, Garlic, Long Chile, Mustard, Onion (Dry Bulb and Green), Parsley, Pepper (Market Bell, Processed Chile Powder, Spice), Pumpkin, Radicchio (Winter), Radish (Daikon), Spice/Herb, Sorrel, Spinach (Fresh), Squash, Squash (Winter and Zucchini), Sunflower, Tomatillo, Tomato (Pole), and Turnip.

<sup>(4)</sup> For 2008: Price reflects wholesale after packing and shipping.

<sup>(5)</sup> For 2008: Price reflects wholesale after packing and shipping.

## Bee Industry

<i>Crop</i>	<i>Year</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Beeswax	2008	34,924	Lb	\$1.89	\$66,000
	2007	41,540		\$2.11	\$88,000
Bulk Bees <sup>(1)</sup>	2008	63,306	Lb	\$12.33	\$781,000
	2007	64,300		\$10.86	\$698,000
Honey <sup>(2)</sup>	2008	2,270,048	Lb	\$1.14	\$2,588,000
	2007	2,700,126		\$0.90	\$2,430,000
Pollination <sup>(3)</sup>	2008	148,254	Colony	\$133.29	\$19,761,000
	2007	138,317		\$129.41	\$17,900,000
Queens <sup>(4)</sup>	2008	15,327	Each	\$14.42	\$221,000
	2007	28,775		\$10.27	\$296,000
<b>Total</b>	<b>2008</b>				<b>\$23,416,000</b>
	<b>2007</b>				<b>\$21,411,000</b>

<sup>(1)</sup> For 2008, 2007: Includes Bees Sold as Bulk Bees, Nuclei, and Packaged Bees.

<sup>(2)</sup> For 2008: Honey produced by 41,906 resident colonies.

For 2007: Honey produced by 42,900 resident colonies.

<sup>(3)</sup> For 2008, 2007: Pollination colonies include all required to pollinate crops grown in Merced County.

<sup>(4)</sup> For 2008, 2007: Includes Mated Queens and Queen Cells.



## Seed Crops

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Seed Crops <sup>(1)</sup>	2008	3,323	---	---	---	---	\$1,448,000
	2007	2,920	---	---	---	---	\$1,938,000
<b>Total</b>	<b>2008</b>	<b>3,323</b>					<b>\$1,448,000</b>
	<b>2007</b>	<b>2,920</b>					<b>\$1,938,000</b>

<sup>(1)</sup> For 2008: Includes Certified, Common, and Phytosanitary Seed from Bean (Garbanzo), Lettuce, Oat, and Wheat.

For 2007: Includes Certified, Common, and Phytosanitary Seed from Barley, Bean (Garbanzo and Lima), Cauliflower, Cucumber, Mizuna, Oat, Pumpkin, Squash, and Wheat.

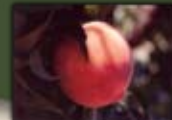
## Fruit and Nut Crops

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Almonds (Hulls)	2008	---	---	184,803	Ton	\$128.70	\$23,784,000
	2007	---	---	179,047		\$121.17	\$21,695,000
Almonds (Kernel Basis)	2008	92,662	0.98	91,036	Ton	\$2,800.00	\$254,901,000
	2007	87,881	0.98	86,475		\$3,600.00	\$311,310,000
Apricots	2008	1,019	5.85	5,958	Ton	\$266.81	\$1,590,000
	2007	1,123	8.39	9,422		\$338.99	\$3,194,000
Figs (Dry)	2008	1,542	1.56	2,413	Ton	\$1,525.18	\$3,680,000
	2007	1,729	1.20	2,073		\$1,630.31	\$3,380,000
Grapes (Raisin)	2008	607	2.00	1,214	Ton	\$972.10	\$1,180,000
	2007	640	1.93	1,237		\$1,023.04	\$1,265,000
Grapes (Wine)	2008	11,075	9.73	107,757	Ton	\$315.40	\$33,987,000
	2007	9,819	6.69	65,702		\$274.08	\$18,008,000
Miscellaneous <sup>(1)</sup>	2008	2,489	---	---	---	---	\$17,741,000
	2007	2,729	---	---		---	\$24,209,000
Peaches (Clingstone)	2008	3,036	19.28	58,527	Ton	\$318.55	\$18,644,000
	2007	3,248	14.95	48,572		\$285.41	\$13,863,000
Peaches (Freestone)	2008	1,864	17.71	33,008	Ton	\$266.90	\$8,810,000
	2007	1,786	21.79	38,914		\$250.79	\$9,759,000
Pistachios	2008	4,256	1.12	4,762	Ton	\$4,193.23	\$19,967,000
	2007	3,967	0.85	3,369		\$2,984.79	\$10,055,000
Plums, Dried	2008	1,753	1.66	2,912	Ton	\$1,411.31	\$4,110,000
	2007	1,737	1.87	3,241		\$1,525.14	\$4,943,000
Strawberries	2008	93	8.20	762	Ton	\$877.93	\$669,000
	2007	97	9.38	910		\$797.81	\$726,000
Walnuts (English)	2008	5,699	1.40	7,983	Ton	\$1,558.18	\$12,439,000
	2007	5,773	1.32	7,644		\$2,010.78	\$15,371,000
<b>Total</b>	<b>2008</b>	<b>126,094</b>					<b>\$401,502,000</b>
	<b>2007</b>	<b>120,529</b>					<b>\$437,778,000</b>

<sup>(1)</sup> For 2008: Includes Apple, Blueberry, Cherry, Citrus, Fig (Cannery, Freezer, and Fresh Market), Fruit Juice, Grape (Raisin to Wine), Jujube, Kiwi, Nectarine, Olive (Processed), Organic Fruit and Nut, Pecan, Persimmon, Plum, Pluot, and Pomegranate.

For 2007: Includes Apple, Blueberry, Cherry, Citrus, Fig (Cannery, Freezer and Fresh Market), Fruit Juice, Grape (Raisin to Wine), Jujube, Kiwi, Nectarine, Olive (Processed), Organic Fruit and Nut, Peach (Juice), Pear (Asian), Pecan, Persimmon, Plum, Pluot, and Pomegranate.





## Fruit and Nut Acreage Planting

<i>Crops</i>	<i>Bearing 2008</i>	<i>Non-Bearing 2008</i>	<i>Bearing 2003</i>	<i>Non-Bearing 2003</i>
Almonds	92,612	5,998	85,476	3,075
Apples	14	0	298	25
Apricots	1,019	0	1,709	0
Berries	135	0	320	0
Cherries	457	1	329	18
Figs	1,802	0	3,758	10
Grapes (Raisin)	675	1	1,092	0
Grapes (Table)	99	0	149	0
Grapes (Wine)	11,075	385	11,366	0
Jujube	20	0	0	0
Kiwi	29	0	33	0
Mandarins	9	0	8	0
Nectarines	121	3	173	16
Olives	2	0	12	0
Oranges	6	2	49	0
Peaches (Clingstone)	3,036	15	3,730	229
Peaches (Freestone)	1,864	158	2,038	89
Pears	6	0	13	0
Pecans	37	0	42	9
Persimmon	17	0	2	0
Pistachios	4,816	2,192	4,582	280
Plums	86	0	40	42
Plums (Dried)	1,753	88	2,064	50
Pluot	95	0	0	0
Pomegranate	12	202	12	0
Walnuts (English)	5,699	357	6,050	460
<b>Total</b>	<b>125,496</b>	<b>9,402</b>	<b>123,345</b>	<b>4,303</b>

## Nursery Products

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
All Nursery Products <sup>(1)</sup>	2008	1,616	---	---	---	---	\$30,006,000
	2007	1,495	---	---	---	---	\$29,629,000
<b>Total</b>	<b>2008</b>	<b>1,616</b>					<b>\$30,006,000</b>
	<b>2007</b>	<b>1,495</b>					<b>\$29,629,000</b>

<sup>(1)</sup> For 2008, 2007: Includes Bud Wood, Cane Berries, Christmas Trees, Crowns and Cuttings, Deciduous Fruit and Nut Trees, Decorative Plants, Dried Flowers, Grapevines, Greenhouse Plants, Ornamental Plants, Ornamental and Shade Trees, Transplants (Strawberry and Vegetable), and Turf. The separate production and value are not shown to avoid disclosing individual operations



## Livestock and Poultry Production

<i>Crop</i>	<i>Year</i>	<i>Number of Head</i>	<i>Production per Head</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Cattle and Calves <sup>(1)</sup>	2008	330,954	8.46	2,798,995	Cwt	\$87.92	\$246,088,000
	2007	309,643	8.44	2,613,213		\$90.44	\$236,339,000
Chickens (Fryers and Broilers)	2008	85,837,412	5.60	480,309,507	Lb	\$0.67	\$321,807,000
	2007	91,606,435	5.51	504,714,814		\$0.65	\$326,046,000
Livestock (Miscellaneous) <sup>(2)</sup>	2008	29,563	---	---	---	---	\$3,951,000
	2007	37,492	---	---		---	\$4,124,000
Poultry (Miscellaneous) <sup>(3)</sup>	2008	214,000	---	---	---	---	\$1,480,000
	2007	231,000	---	---		---	\$1,652,000
Sheep and Lambs	2008	31,597	1.54	48,704	Cwt	\$77.53	\$3,776,000
	2007	32,850	1.54	50,619		\$77.53	\$3,924,000
Turkeys	2008	2,957,133	31.83	94,135,402	Lb	\$0.71	\$66,554,000
	2007	2,791,439	32.76	91,436,064		\$0.68	\$62,451,000
<b>Total</b>	<b>2008</b>	<b>89,400,659</b>					<b>\$643,657,000</b>
	<b>2007</b>	<b>95,008,859</b>					<b>\$634,535,000</b>

<sup>(1)</sup> For 2008, 2007: Includes Calves, Cull Bulls (Dairy and Beef), Cull Cows (Dairy and Beef), Replacement Heifers (Dairy and Beef) and Stocker Cattle.

<sup>(2)</sup> For 2008, 2007: Includes Dairy and Meat Goats sold for meat.

<sup>(3)</sup> For 2008, 2007: Includes Chukar, Pheasant, Pullets, and Squab.

## Livestock and Poultry Products

<i>Crop</i>	<i>Year</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Eggs (Other) <sup>(1)</sup>	2008	2,478,460	Each	\$0.70	\$1,735,000
	2007	2,497,960		\$0.64	\$1,608,000
Eggs, Chicken (Market)	2008	136,157,820	Doz	\$1.00	\$136,158,000
	2007	161,288,340		\$0.78	\$124,998,000
Milk (Goat)	2008	60,126	Cwt	\$35.00	\$2,104,000
	2007	54,660		\$34.00	\$1,858,000
Milk (Manufacturing)	2008	2,399,295	Cwt	\$18.57	\$44,555,000
	2007	3,593,496		\$18.97	\$68,169,000
Milk (Market)	2008	56,365,070	Cwt	\$16.85	\$949,751,000
	2007	53,983,671		\$18.17	\$980,883,000
Wool	2008	153,000	Lb	\$0.84	\$129,000
	2007	159,081		\$0.85	\$135,000
<b>Total</b>	<b>2008</b>				<b>\$1,134,432,000</b>
	<b>2007</b>				<b>\$1,177,651,000</b>

<sup>(1)</sup> For 2008, 2007: Includes Eggs other than Chicken Eggs.





## Aquaculture

<i>Crop</i>	<i>Year</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Fish <sup>(1)</sup>	2008	989,500	Lb	\$2.57	\$2,542,000
	2007	1,600,000		\$2.07	\$3,312,000
<b>Total</b>	<b>2008</b>				<b>\$2,542,000</b>
	<b>2007</b>				<b>\$3,312,000</b>

<sup>(1)</sup> For 2008, 2007: Includes Black Bass, Bluegill, Catfish, Silver Carp, Striped Bass, Sturgeon, and Trout.

## Other Agriculture

<i>Crop</i>	<i>Year</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Almond (Shells) <sup>(1)</sup>	2008	58,829	Ton	\$26.23	\$1,543,000
	2007	52,848		\$22.56	\$1,192,000
Firewood <sup>(2)</sup>	2008	21,235	Cord	\$161.68	\$3,433,000
	2007	22,194		\$158.36	\$3,515,000
Fuel (Cogeneration) <sup>(3)</sup>	2008	51,175	Ton	\$40.00	\$2,047,000
	2007	55,125		\$40.00	\$2,205,000
Manure <sup>(4)</sup>	2008	1,096,824	Ton	\$5.04	\$5,528,000
	2007	1,112,415		\$4.53	\$5,039,000
<b>Total</b>	<b>2008</b>				<b>\$12,551,000</b>
	<b>2007</b>				<b>\$11,951,000</b>

<sup>(1)</sup> For 2008, 2007: For Animal Bedding.

<sup>(2)</sup> For 2008, 2007: Includes Orchard Prunings and Removal for Firewood. (Recorded in Cords).

<sup>(3)</sup> For 2008, 2007: Includes Orchard Prunings and Orchard Removal for Fuel (Recorded in Dry Tons).

<sup>(4)</sup> For 2008, 2007: Includes Livestock and Poultry Manure.





## Merced County Global

### Exports go to these countries:

Algeria	Luxembourg
Argentina	Malaysia
Armenia	Malta
Australia	Mauritius
Austria	Melilla
Azerbaijan	Mexico
Bahrain	Monaco
Belarus	Morocco
Belgium	Nepal
Brazil	Netherlands
Bulgaria	New Zealand
Canada	Norway
Canary Islands	Oman
Chile	Pakistan
China	Philippines
Colombia	Poland
Costa Rica	Portugal
Cyprus	Qatar
Czech Republic	Romania
Denmark	Russian Federation
Ecuador	San Marino
Egypt	Saudi Arabia
El Salvador	Singapore
Estonia	Slovakia
Finland	Slovenia
France	South Africa
Georgia	Spain
Germany	Sweden
Greece	Switzerland
Guatemala	Syria
Honduras	Taiwan
Hong Kong	Tajikistan
India	Thailand
Indonesia	Trinidad & Tobago
Israel	Tunisia
Italy	Turkey
Japan	Ukraine
Jordan	United Arab Emirates
Kazakhstan	United Kingdom
Korea, Republic of	Uruguay
Kuwait	Uzbekistan
Latvia	Vatican City State
Lebanon	Venezuela
Liechtenstein	Vietnam
Lithuania	







# Agricultural Exports



## Exported Commodities

Alfalfa Hay	Onion Seed	Rye Hay
Almonds	Pecans	Strawberry Nursery Stock
Cantaloupe	Pistachios	Sudan Hay
Fig	Propagative Stock	Sweet Potato
Garlic	Prunes	Tomatoes
Honeydew	Radicchio	Walnut Burls
Oat Hay	Raspberry Nursery Stock	Walnuts



## 2008 Sustainable Agriculture Report

### Pest Prevention

The California Food and Agricultural Code mandates pest prevention programs to prevent the introduction and spread of pests in California. Pest prevention involves Pest Exclusion, Pest Detection, Pierce's Disease Control, and the Federal Phytosanitary Certification Program.

### Pest Exclusion Program:

Pest Exclusion is the first line of defense to prevent the introduction of pests, injurious to agriculture, that are not of common occurrence in Merced County.

A total of 7,658 shipments of incoming plant material were inspected in 2008. Shipments are inspected at United Parcel Service, United States Post Offices, Federal Express and trucking terminals. Thirty-six shipments were rejected. The 36 rejections were for live pests, material not properly certified, or improper container markings. Six of these shipments were intercepted and rejected for an "A" Rated pest called Red Imported Fire Ant (RIFA), the scientific name of which is *Solenopsis invicta*.

Seed inspection during 2005 detected the presence of "B" Rated Jointed Goatgrass (*Aegilops cylindrica*) seed contamination in forage crop seed mixture, which had been planted in four fields totaling 312 acres in Merced County. Jointed Goatgrass is a potential major pest of small grain crops, primarily wheat. "B" Rating indicates a pest with limited distribution in the State with eradication at the discretion of the county agricultural commissioner. Since there is no known establishment of Jointed Goatgrass in Merced County, the planted fields were placed under a compliance agreement to control any potential movement of seed from the planted fields. With the assistance of the California Department of Food and Agriculture, the 4 fields were visually surveyed three times in 2005, 2006, and again in 2007 with no Jointed Goatgrass plants discovered. In 2008, these fields were surveyed again to verify that the Jointed Goatgrass did not become established in Merced County. The results of these surveys were negative. Another survey is planned in 2009 to verify the continued absence of Jointed Goatgrass in Merced County.

### Pierce's Disease Control Program:

To prevent the introduction of the Glassy-winged Sharpshooter (GWSS) into Merced County, all shipments of nursery stock from infested counties are inspected. GWSS has the ability to spread Pierce's Disease rapidly among grape vines with devastating results. 679 shipments of nursery stock from infested counties were inspected in 2008.

In addition, all nurseries receiving nursery stock from GWSS infested areas and 1,784 residential yards were visually inspected for GWSS presence during 2008. No GWSS was detected.

### Federal Phytosanitary Certification Program:

This program prevents the spread of injurious pests from Merced County to foreign countries through inspection and certification of exported plants and plant commodities. In 2008, 4,857 export shipments were inspected and issued Phytosanitary Certificates.







## Pest Detection Program:

Pest Detection uses visual inspection and insect traps that target specific exotic insects of high agricultural and economic importance.

### The trapping program in Merced County targeted the following pests:

Apple Maggot ( <i>Rhagoletis pomonella</i> )	Vine Mealy Bug ( <i>Planococcus ficus</i> )
European Pine Shoot Moth ( <i>Rhyacionia buoliana</i> )	European Corn Borer ( <i>Ostrinia nubilalis</i> )
Glassy-winged Sharpshooter ( <i>Homalodisca coagulate</i> )	Gypsy Moth ( <i>Lymantria dispar</i> )
Light Brown Apple Moth ( <i>Epiphyas postvittana</i> )	Japanese Beetle ( <i>Popillia japonica</i> )
Khapra Beetle ( <i>Trogoderma granarium</i> )	Mediterranean Fruit Fly ( <i>Ceratitidis capitata</i> )
Melon Fly ( <i>Dacus cucurbitae</i> )	Mexican Fruit Fly ( <i>Anastrepha ludens</i> )
Oriental Fruit Fly ( <i>Dacus dorsalis</i> )	Sweet Potato Weevil ( <i>Cylas formicarius elegantulus</i> )

A total of 1,874 pest detection traps were placed in Merced County and inspected a total of 17,295 times during the 2008 trapping season.

## Pest Eradication

The Pest Eradication Program endeavors to eliminate infestations of significant agricultural pests with limited distribution before they are able to cause ongoing economic cost to California agriculture.

In 2006, an exotic potentially invasive parasitic vine, known as Japanese dodder, was detected at six locations in Merced County. These locations were eradicated in 2007 along with two new locations that were discovered. No new locations were discovered in 2008, however surveys continued in 2008, and are scheduled to continue in 2009.

New invasive weed pests found in 2007 include South American Sponge Plant ("A" Rated) and Purple Loosestrife ("B" Rated). Eradication efforts began in 2007, continued in 2008, and are scheduled to continue in 2009.

A new invasive weed pest known as Capeweed ("A" Rated) was discovered in 2008, eradication efforts were begun, and further surveys and eradication are scheduled for 2009.

Ongoing detection and eradication efforts continued during 2008 for Pink Bollworm, Red Imported Fire Ant, and Purple Mustard.

Ongoing detection efforts continue for Camelthorn, Carolina Horse Nettle, and Hydrilla.

Successful eradication projects include Sweet Potato Weevil and Banana Waterlily. None have been detected since the end of their respective eradication projects.

The Pink Bollworm is a significant cotton pest with eradication efforts consisting of a State operated detection trapping program in conjunction with County enforcement of the host-free period from January 1 through March 10. In 2008, 35,010 acres were trapped for Pink Bollworm. No Merced County growers were found to be in violation of the host-free period requirement during 2008.



# Merced County

Merced County's Red Imported Fire Ant (RIFA) eradication program started in November 2001. Since that time 41,018 acres have been surveyed for RIFA, 7,825 acres, of which, have been found to be infested with RIFA. During 2008 there were additional finds made in several areas of the county. At the end of 2008, 4,139 acres were still under treatment, 534 acres have been declared eradicated, and 3,152 acres are being monitored for re-infestations of RIFA with Post Treatment Surveys. County personnel surveyed and trapped in conjunction with CDFA personnel.

## Biological Control

The Biological Control (Biocontrol) Program uses natural enemies to suppress pest populations to economically and environmentally acceptable levels. Once the biocontrol agent becomes established it is self-perpetuating, reducing the need to use pesticides. The following are pests found in Merced County and their Biocontrol Agents.

<i>Pest</i>	<i>Organism</i>
Ash Whitefly ( <i>Siphoninus phillyreae</i> )	Parasitoid Wasp ( <i>Encarsia inaron</i> )
Grapeleaf Skeletonizer ( <i>Harrisina brillians</i> )	Parasitic Fly ( <i>Ametadoria misella</i> )
	Virus (WGLS Granulosis)
	Parasitic Wasp ( <i>Apanteles harrisinae</i> )
Italian Thistle ( <i>Carduus</i> sp.)	Seed-Head Weevil ( <i>Rhinoclytus conicus</i> )
Klamath Weed ( <i>Hypericum perforatum</i> )	Leaf Beetle ( <i>Chrysolina quadrigemina</i> )
Milk Thistle ( <i>Silybum marianum</i> )	Seed-Head Weevil ( <i>Rhinocyllus conicus</i> )
Puncture Vine ( <i>Tribulus terrestris</i> )	Seed Weevil ( <i>Microlarinus lareynii</i> )
	Stem Weevil ( <i>Microlarinus lypriformis</i> )
Red Gum Lerp Psyllid ( <i>Glycaspis brimblecombei</i> )	Parasitoid Wasp ( <i>Psyllaephagus bliteus</i> )
Russian Thistle ( <i>Salsola</i> sp.)	Case-bearer Moth ( <i>Coleophora klimeschiella</i> )
	Russian Thistle Borer ( <i>Coleoptera parthenica</i> )
Yellowstar Thistle ( <i>Centaurea solstitialis</i> )	Seed-Head Weevil ( <i>Bangasternus orientalis</i> )
	Seed-Head Gall Fly ( <i>Urophora sirunaseva</i> )
	Hairy Weevil ( <i>Eustenopus villosus</i> )
	False Peacock Fly ( <i>Chaetorellia succinea</i> )
	Rust Fungus ( <i>Puccinia jaceae</i> var. <i>solstitialis</i> )







## Organic Farming

Merced County has 4 organic handlers and 3 organic dairies. There were 50 growers of organic commodities in 2008. These growers farmed a total of 8,016 acres to produce assorted organic field crops, berries, fruits, nuts, and vegetables. Organic eggs, livestock, milk, and poultry were also produced. There were also 5 growers who farmed 18,195 acres of irrigated and non-irrigated organic pastureland.

## What Is Red Imported Fire Ant?

*Solenopsis invicta* or Red Imported Fire Ant (RIFA) is a small very aggressive red ant that has a very painful bite and sting. They are native to Central South America, and it is believed that they came to the United States aboard cargo ships that docked in Mobile, Alabama, in the 1930s. Today, RIFA infest over 300 million acres in twelve southern states and Puerto Rico. In recent years their range has extended into New Mexico, Arizona, and California.

The California infestations were first discovered in 1998 on commercial nursery stock shipments from Orange County. This discovery triggered a massive survey, which led to the detection of RIFA in five Southern California counties, and isolated agricultural areas in five Central California counties, including Merced County, as well. It is believed that the Southern California County infestations stem from the shipment of infested nursery stock from the southeastern states. The infestations in the San Joaquin Valley, however, have been traced back to RIFA colonies that hitchhiked on beehives shipped to California from Texas. This was definitely the mode of infestation for Merced County. Statistics for the County's program are in the eradication section of this report.



In Merced County RIFA was first discovered in an almond orchard near Snelling, Ca. in late 2000. Since then, the Merced County Agriculture Dept. in conjunction with the Ca. Dept. of Food and Agriculture, have been engaged in an ongoing eradication program to eliminate RIFA from the county. It is extremely important to the county's agriculture industry that the eradication program be successful. Otherwise, we will be placed under a RIFA quarantine, as is the case in Orange, Los Angeles, and Riverside counties. This would severely hamper industry's ability to ship products from Merced County to other counties within California, other states, and other countries.



## Commodity Value Crop Comparison

<i>Commodities</i>	<i>2008</i>	<i>1998</i>	<i>1988</i>	<i>1978</i>
Aquaculture	\$2,542,000	\$1,490,000	\$3,147,000	---
Bee Industry	\$23,416,000	\$8,281,000	\$3,521,000	\$2,021,000
Field Crops	\$431,869,000	\$226,150,000	\$183,339,000	\$96,344,000
Fruit and Nut Crops	\$401,502,000	\$220,821,000	\$199,829,000	\$86,243,000
Livestock and Poultry Production	\$643,657,000	\$242,564,000	\$234,465,000	\$132,959,000
Livestock and Poultry Products	\$1,134,432,000	\$569,016,000	\$240,497,000	\$118,519,000
Nursery Products	\$30,006,000	\$19,007,000	\$13,248,000	\$7,336,000
Other Agriculture	\$12,551,000	\$12,240,000	\$8,731,000	---
Seed Crops	\$1,448,000	\$820,000	\$1,663,000	\$2,643,000
Vegetable Crops	\$318,276,000	\$149,373,000	\$84,737,000	\$50,828,000
<b>Total</b>	<b>\$2,999,701,000</b>	<b>\$1,449,762,000</b>	<b>\$973,177,000</b>	<b>\$496,893,000</b>

## Merced County Agricultural Commodity Values 1989 To 2008







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# MERCED COUNTY 2009

## Annual Report On Agriculture







## Cantaloupes In Merced County

California ranks first in the nation in the production of cantaloupes and Merced County is the third largest producer in the State, behind Fresno and Imperial counties respectively. In Merced's first crop report (1939), there was listed 1,030 acres of cantaloupes with a value of \$174,690. In 2009, seventy years later, the cantaloupe acreage was counted at 5,678 and had a value of \$21,875,000. This value places cantaloupes at 15th in commodity value in this report.

Cantaloupes are primarily grown in the southwestern portion of the county in the Dos Palos and Los Banos areas. Our "Westside" cantaloupes prefer loam or clay-loam soils and are planted on beds that are raised so when irrigation water is applied, only the plants roots get the water and the surface of the bed remains dry. This keeps the cantaloupes from contact with moist soil, which can result in cosmetic damage to the melon. Merced's plantings usually start after the last freeze in mid April and go through early summer. The plantings are timed to provide a continuous supply of melons from July through October.

Cantaloupes are normally hand-harvested and packed, inspected and graded in the field. They are then transported to a cold storage facility, where they are cooled to 36 to 40 degrees Fahrenheit. Fields are harvested 8 to 10 times over a 10 to 14 day period. Cantaloupes grown in California are shipped throughout the US market. The need for refrigeration after harvest has prevented growers from shipping cantaloupes overseas.

Cantaloupes are an excellent source of both vitamin A and Vitamin C. A six-ounce serving, or roughly a quarter of a melon, provides 100 percent of the recommended daily allowance of each vitamin. Cantaloupes are also high in dietary fiber as well as folacin, a nutrient needed for growth and the development of hemoglobin.

Much of the cantaloupe information contained in this article was taken from the California Foundation for Agriculture in the Classroom, Commodity Fact Sheet – Cantaloupe. For more Commodity facts, please visit their website at <http://www.cfaitc.org/Commodity/Commodity.php>.







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# Top Twelve Leading Farm Commodities 2009

Rank	Crop	Value	Previous Rank
1	Milk *	\$661,040,000	(1)
2	Chickens **	\$306,200,000	(2)
3	Almonds (Kernel Basis)	\$245,217,000	(3)
4	Cattle and Calves	\$214,832,000	(4)
5	Sweet Potatoes	\$171,928,000	(5)
6	Tomatoes ***	\$159,180,000	(8)
7	Eggs, Chicken (Market)	\$80,885,000	(6)
8	Hay (Alfalfa)	\$74,306,000	(7)
9	Silage (Corn)	\$69,528,000	(9)
10	Turkeys	\$53,408,000	(10)
11	Grapes (Wine)	\$41,821,000	(13)
12	All Nursery Products	\$38,661,000	(14)

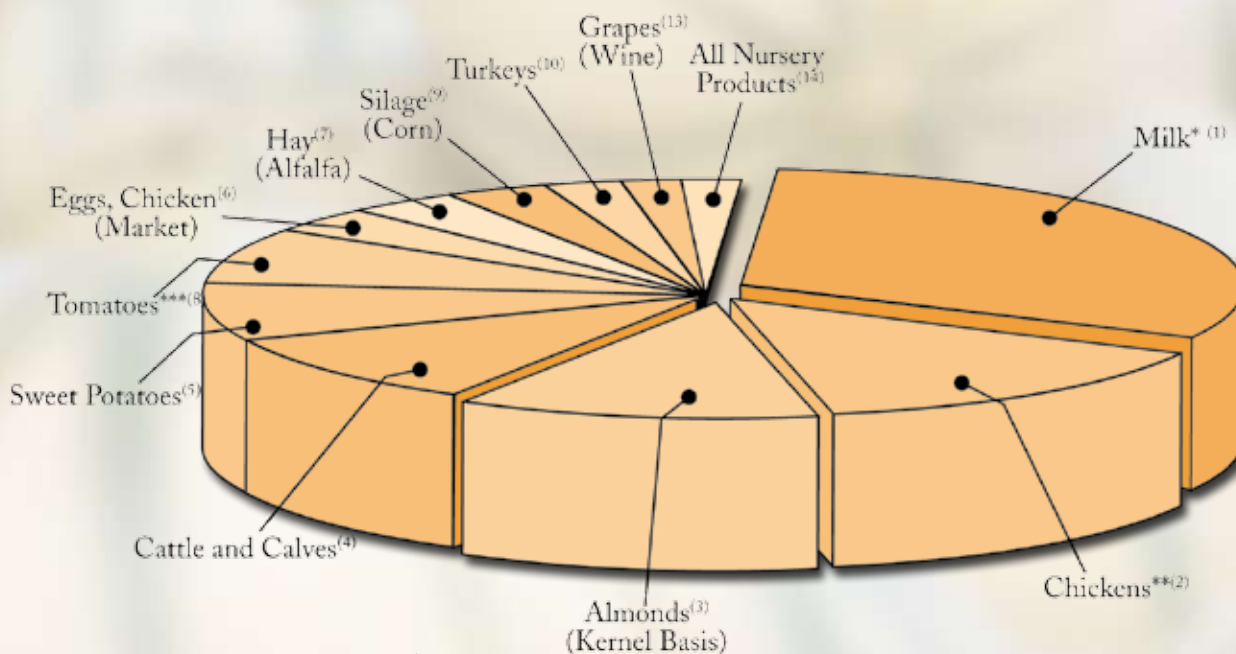
(The number in parenthesis denotes the 2008 ranking)

\* Includes Market and Manufacturing.

\*\* Includes Fryers and Other Chickens.

\*\*\* Includes Market and Processing Tomatoes.

## 2009 Top 12 Commodities



(The number in parenthesis denotes the 2008 ranking)

\* Includes Market and Manufacturing.

\*\* Includes Fryers and Other Chickens.

\*\*\* Includes Market and Processing Tomatoes.





A. G. Kawamura, *Secretary*  
*California Department of Food and Agriculture*

and

**The Honorable Board of Supervisors County of Merced**

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Deidre F. Kelsey

Mike Nelson

John Pedrozo

Hubert "Hub" Walsh

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*County Executive Officer*

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In accordance with the provisions of Sections 2272 and 2279 of the California Food and Agricultural Code, I am pleased to submit the 2009 Merced County Report of Agriculture. This report summarizes the acreage, production, and gross value of Merced County's agricultural commodities.

Despite an 18% decline Merced County, for the fifth consecutive year, surpassed a 2 billion dollar mark in gross production value of agriculture commodities with a gross production value of \$2,460,475,000 in 2009. Merced County's agriculture decreased \$539,226,000 primarily due to the falling price of milk and livestock feed products. These figures represent gross returns to the producer and do not take into account the costs of production, marketing, or transportation. Net income of the producer is not reflected in this report.

**Significant events of the 2009 crop year:**

Milk remains the county's number one commodity with an overall value of \$661,040,000, down \$333,266,000 (33.5%) due to a significant drop in price. Prices for market milk dropped \$5.36 per hundred weight (CWT) and \$6.47 per CWT for milk used in manufacturing.

Chickens remain the number two commodity, with a total value of \$306,200,000, down 4.8% due to a decrease in both production and price.

Almonds came in at number three again in 2009, with a value of \$245,217,000, a slight drop from last year's value of \$254,901,000. Although acreage and prices were up, production was lower due to some freeze damage and poor conditions during pollination.

Cattle and calves, again the fourth leading commodity, posted a slight decrease in value of 4.13% for a total of \$214,832,000 in 2009. While cattle numbers remained steady, prices were lower.

Sweet potatoes remained the number five commodity with a slight increase despite the significant drop in price. Acreage increased by 2,650 acres as well as the production per acre. Total production value was \$171,928,000.

Tomatoes, both market and processing, experienced an increase in acreage, production and price jumping to our sixth leading commodity.

Egg production in Merced County has continued to drop, due to the reduction of the number of layers per cage. The price per dozen of eggs also dropped from \$1.00 in 2008 to \$0.72 in 2009.

Overall, the 2009 growing season was quite good for most crops. For the third consecutive year Merced County suffered the effects of the drought on rangeland and the water rationing imposed by some of the water districts.

I wish to express my sincere thanks to our growers and ranchers, industry representatives and the members of my staff who assisted in the gathering of data for this report.

Respectfully submitted,

David A. Robinson  
Agricultural Commissioner



## Field Crops

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Barley	2009	3,185	2.77	8,823	Ton	\$153.75	\$1,357,000
	2008	2,380	2.47	5,889		\$196.80	\$1,159,000
Beans (Dry Lima)	2009	2,259	1.19	2,697	Ton	\$1,122.12	\$3,027,000
	2008	1,878	1.28	2,396		\$1,123.37	\$2,692,000
Corn (Grain) <sup>(1)</sup>	2009	10,826	5.94	64,338	Ton	\$186.09	\$11,973,000
	2008	12,294	5.92	72,790		\$221.70	\$16,137,000
Cotton (Acala)	2009	14,467	2.98	43,099	500 Lb Bale	\$387.80	\$16,714,000
	2008	---	---	---		---	---
Cotton (Lint)	2009	---	---	---	500 Lb Bale	---	---
	2008	35,010	3.06	107,132		\$386.13	\$41,367,000
Cotton (Pima)	2009	8,918	2.74	24,401	500 Lb Bale	\$587.09	\$14,326,000
	2008	---	---	---		---	---
Cotton (Seed)	2009	---	0.99	23,262	Ton	\$270.00	\$6,281,000
	2008	---	1.15	40,416		\$378.25	\$15,288,000
Hay (Alfalfa)	2009	90,551	6.90	625,204	Ton	\$118.85	\$74,306,000
	2008	84,523	7.25	612,776		\$211.97	\$129,889,000
Hay (Grain) <sup>(2)</sup>	2009	40,461	3.62	146,430	Ton	\$70.26	\$10,288,000
	2008	38,820	4.02	156,011		\$167.42	\$26,119,000
Hay (Sudan)	2009	10,104	2.29	23,123	Ton	\$82.60	\$1,910,000
	2008	8,626	4.14	35,695		\$141.85	\$5,063,000
Misc. Field Crops <sup>(3)</sup>	2009	3,040	---	---	---	---	\$1,326,000
	2008	2,562	---	---		---	\$1,480,000
Pasture (Irrigated)	2009	30,719	---	30,719	Acre	\$157.50	\$4,838,000
	2008	37,864	---	37,864		\$168.00	\$6,361,000
Pasture (Other)	2009	569,828	---	569,828	Acre	\$21.00	\$11,966,000
	2008	569,615	---	569,615		\$18.12	\$10,321,000
Rice	2009	2,455	3.84	9,432	Ton	\$364.63	\$3,439,000
	2008	2,529	3.66	9,268		\$534.24	\$4,951,000
Silage (Alfalfa)	2009	---	1.94	175,271	Ton	\$35.83	\$6,279,000
	2008	---	0.93	78,979		\$55.97	\$4,421,000
Silage (Corn)	2009	97,880	26.27	2,571,215	Ton	\$27.04	\$69,528,000
	2008	94,423	28.29	2,670,935		\$42.63	\$113,875,000
Silage (Other) <sup>(4)</sup>	2009	78,311	12.85	1,006,109	Ton	\$19.20	\$19,315,000
	2008	74,324	15.46	1,149,015		\$32.45	\$37,290,000
Straw <sup>(5)</sup>	2009	---	---	4,410	Ton	\$33.68	\$149,000
	2008	---	---	4,955		\$49.76	\$247,000
Stubble (Pasture)	2009	---	---	14,488	Acre	\$18.00	\$261,000
	2008	---	---	14,369		\$20.00	\$287,000
Sugar Beets	2009	---	---	---	Ton	---	---
	2008	3,701	33.52	124,041		\$43.65	\$5,415,000
Wheat	2009	11,420	3.50	39,996	Ton	\$268.46	\$10,737,000
	2008	9,954	3.49	34,709		\$273.89	\$9,506,000
<b>Total</b>	<b>2009</b>	<b>974,421</b>					<b>\$268,019,000</b>
	<b>2008</b>	<b>978,504</b>					<b>\$431,869,000</b>

<sup>(1)</sup> For 2009: Includes Human Consumption Corn (but not Fresh Market Corn), and grain for Feed.

For 2008: Includes Human Consumption Corn (but not Fresh Market Corn).

<sup>(2)</sup> For 2009: Includes Forage, Oat, and Wheat Hay.

For 2008: Includes Barley, Forage, Oat, and Wheat Hay.

<sup>(3)</sup> For 2009: Includes Beans (Dry Other), Cotton Mote, Oat Grain, Milo, and Safflower.

For 2008: Includes Beans (Dry Other), Corn Stalks, Cotton Mote, Oat Grain, and Safflower.

<sup>(4)</sup> For 2009: Includes Oat, Sorghum, Sudan, Wheat, and Winter Forage

For 2008: Includes Oat, Rye, Sorghum, Sudan, Wheat, and Winter Forage.

<sup>(5)</sup> For 2009, 2008: Includes Straw from Barley, Bean (Dry), Oat, Rice and Wheat.





## Vegetable Crops

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Beans, Lima (Freezer)	2009	1,479	1.80	2,659	Ton	\$601.90	\$1,600,000
	2008	1,659	1.68	2,791		\$599.28	\$1,672,000
Melons (Cantaloupe) <sup>(1)</sup>	2009	5,678	678.27	3,851,234	40lb Ctn	\$5.68	\$21,875,000
	2008	4,633	630.47	2,920,973		\$5.89	\$17,202,000
Melons (Other) <sup>(2)</sup>	2009	2,084	39.37	82,043	Ton	\$258.54	\$21,211,000
	2008	981	35.36	34,678		\$210.58	\$7,302,000
Misc. Vegetables <sup>(3)</sup>	2009	3,615	---	---	---	---	\$20,014,000
	2008	3,015	---	---		---	\$16,524,000
Sweet Potatoes <sup>(4)</sup>	2009	16,361	16.28	266,357	Ton	\$645.48	\$171,928,000
	2008	13,711	13.08	179,340		\$900.87	\$161,562,000
Tomatoes (Market) <sup>(5)</sup>	2009	10,987	1,282.63	14,092,000	25lb Ctn	\$5.81	\$81,862,000
	2008	10,177	1,147.52	11,678,576		\$5.58	\$65,216,000
Tomatoes (Processing)	2009	21,000	45.51	955,807	Ton	\$80.89	\$77,318,000
	2008	16,214	42.42	687,821		\$70.95	\$48,798,000
<b>Total</b>	<b>2009</b>	<b>61,204</b>					<b>\$395,809,000</b>
	<b>2008</b>	<b>50,390</b>					<b>\$318,276,000</b>

<sup>(1)</sup> For 2009, 2008: Price reflects wholesale after packing and shipping.

<sup>(2)</sup> For 2009: Includes Honeydew, Mixed Melons, and Watermelon.

For 2008: Includes Honeydew, Korean Melon, Mixed Melons, and Watermelon.

<sup>(3)</sup> For 2009: Includes Asparagus, Arrugula, Basil, Broccoli, Cabbage (Napa), Cantaloupe (Organic & Processing), Cilantro, Corn (Sweet), Cucumber, Cucumber (Pickle), Dill, Garlic, Honeydew (Organic), Leek, Onion (Dry, Fresh, Green), Oregano, Pepper (Bell, Chili Dried, Spice), Pumpkin, Radicchio (Organic, Spring, Winter), Radish, Sage, Squash, Squash (Winter, Summer), Sunflower, Tomatillo, and Tomato (Processing Organic).

For 2008: Includes Asparagus, Basil, Cantaloupe (Organic), Cabbage (Napa), Chinese Cabbage, Cilantro, Cucumber, Cucumber (Pickle), Garlic, Honeydew (Organic), Long Chili, Mustard, Onion (Dry Bulb, Green), Pepper (Market Bell, Spice), Pumpkin, Radicchio (Organic, Spring, Winter), Radish, Spice/Herb, Squash, Squash (Winter, Zucchini), Sunflower, Tomatillo, and Tomato (Pole).

<sup>(4)</sup> For 2009, 2008: Price reflects wholesale after packing and shipping.

<sup>(5)</sup> For 2009, 2008: Price reflects wholesale after packing and shipping.

## Bee Industry

<i>Crop</i>	<i>Year</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Beeswax	2009	22,203	Lb	\$2.06	\$46,000
	2008	34,924		\$1.89	\$66,000
Bulk Bees <sup>(1)</sup>	2009	69,586	Lb	\$11.00	\$765,000
	2008	63,306		\$12.33	\$781,000
Honey <sup>(2)</sup>	2009	1,443,207	Lb	\$1.37	\$1,977,000
	2008	2,270,048		\$1.14	\$2,588,000
Pollination <sup>(3)</sup>	2009	151,242	Colony	\$133.59	\$20,205,000
	2008	148,254		\$133.29	\$19,761,000
Queens <sup>(4)</sup>	2009	37,147	Each	\$10.53	\$391,000
	2008	15,327		\$14.42	\$221,000
<b>Total</b>	<b>2009</b>				<b>\$23,384,000</b>
	<b>2008</b>				<b>\$23,416,000</b>

<sup>(1)</sup> For 2009, 2008: Includes Bees Sold as Bulk Bees, Nuclei, and Packaged Bees.

<sup>(2)</sup> For 2009: Honey produced by 42,076 resident colonies.

For 2008: Honey produced by 41,906 resident colonies.

<sup>(3)</sup> For 2009, 2008: Pollination colonies include all required to pollinate crops grown in Merced County.

<sup>(4)</sup> For 2009, 2008: Includes Mated Queens and Queen Cells.

## Seed Crops

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Seed Crops <sup>(1)</sup>	2009	5,626	---	---	---	---	\$3,746,000
	2008	3,323	---	---	---	---	\$1,448,000
<b>Total</b>	<b>2009</b>	<b>5,626</b>					<b>\$3,746,000</b>
	<b>2008</b>	<b>3,323</b>					<b>\$1,448,000</b>

<sup>(1)</sup> For 2009: Includes Certified, Common, and Phytosanitary Seed from Barley, Bean (Lima), Cauliflower, Lettuce, Mustard, Oat, Rye, Turnip, and Wheat.

For 2008: Includes Certified, Common, and Phytosanitary Seed from Bean (Garbanzo), Lettuce, Oat, and Wheat.

## Fruit and Nut Crops

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Almonds (Hulls)	2009	---	---	157,245	Ton	\$84.37	\$13,267,000
	2008	---	---	184,803		\$128.70	\$23,784,000
Almonds (Kernel Basis)	2009	94,635	0.82	77,600	Ton	\$3,160.00	\$245,217,000
	2008	92,662	0.98	91,036		\$2,800.00	\$254,901,000
Apricots	2009	807	5.71	4,611	Ton	\$316.30	\$1,458,000
	2008	1,019	5.85	5,958		\$266.81	\$1,590,000
Figs (Dried)	2009	1,572	1.25	1,972	Ton	\$1,487.98	\$2,934,000
	2008	1,542	1.56	2,413		\$1,525.18	\$3,680,000
Grapes (Raisin)	2009	569	2.53	1,439	Ton	\$978.71	\$1,408,000
	2008	607	2.00	1,214		\$972.10	\$1,180,000
Grapes (Wine)	2009	11,317	11.36	128,596	Ton	\$325.21	\$41,821,000
	2008	11,075	9.73	107,757		\$315.40	\$33,987,000
Miscellaneous <sup>(1)</sup>	2009	1,959	---	---	---	---	\$23,253,000
	2008	2,489	---	---		---	\$17,741,000
Peaches (Clingstone)	2009	2,749	19.75	54,281	Ton	\$317.14	\$17,215,000
	2008	3,036	19.28	58,527		\$318.55	\$18,644,000
Peaches (Freestone)	2009	1,836	18.13	33,283	Ton	\$268.55	\$8,938,000
	2008	1,864	17.71	33,008		\$266.90	\$8,810,000
Pistachios	2009	4,411	0.87	3,841	Ton	\$3,474.60	\$13,345,000
	2008	4,256	1.12	4,762		\$4,193.23	\$19,967,000
Plums (Dried)	2009	1,753	1.56	2,743	Ton	\$1,399.81	\$3,839,000
	2008	1,753	1.66	2,912		\$1,411.31	\$4,110,000
Strawberries	2009	70	8.10	563	Ton	\$868.69	\$489,000
	2008	93	8.20	762		\$877.93	\$669,000
Walnuts (English)	2009	5,612	1.58	8,858	Ton	\$1,724.37	\$15,275,000
	2008	5,699	1.40	7,983		\$1,558.18	\$12,439,000
<b>Total</b>	<b>2009</b>	<b>127,289</b>					<b>\$388,459,000</b>
	<b>2008</b>	<b>126,094</b>					<b>\$401,502,000</b>

<sup>(1)</sup> For 2009: Includes Apple, Apricot (Fresh), Blueberry, Cherry, Fig (Fresh), Fruit Juice, Grape (Raisin to Wine), Kiwi, Nectarine, Olives (Processed), Orange (Madarin), Organic Fruit and Nut, Pear (Asian), Pecan, Persimmon, Plum, Pluot, and Pomegranate.

For 2008: Includes Apple, Blueberry, Cherry, Citrus, Fig (Cannery, Freezer, and Fresh Market), Fruit Juice, Grape (Raisin to Wine), Jujube, Kiwi, Nectarine, Olive (Processed), Organic Fruit and Nut, Pecan, Persimmon, Plum, Pluot, and Pomegranate.





## Fruit and Nut Acreage Planting

<i>Crops</i>	<i>Bearing 2009</i>	<i>Non-Bearing 2009</i>	<i>Bearing 2004</i>	<i>Non-Bearing 2004</i>
Almonds	94,670	4,815	86,382	7,666
Apples	2	0	203	0
Apricots	856	0	1,352	0
Berries	135	0	273	0
Cherries	466	55	335	3
Figs	1,702	0	3,446	0
Grapes (Raisin)	633	0	834	0
Grapes (Table)	0	0	124	0
Grapes (Wine)	11,317	4	10,729	314
Jujubes	0	0	10	10
Kiwis	26	0	33	0
Mandarins	5	11	9	0
Nectarines	129	0	139	15
Olives	7	60	12	0
Oranges	6	2	50	2
Peaches (Clingstone)	2,749	0	3,685	143
Peaches (Freestone)	1,886	74	1,827	161
Pears	7	0	13	0
Pecans	26	0	37	5
Persimmons	16	0	2	0
Pistachios	4,971	454	4,628	76
Plums	86	0	74	17
Plums (Dried)	1,732	88	1,947	50
Pluots	94	0	72	0
Pomegranates	18	221	12	0
Walnuts (English)	5,612	271	5,919	508
<b>Total</b>	<b>127,151</b>	<b>6,055</b>	<b>122,147</b>	<b>8,970</b>

## Nursery Products

<i>Crop</i>	<i>Year</i>	<i>Acres Harvested</i>	<i>Production per Acre</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
All Nursery Products <sup>(1)</sup>	2009	1,428	---	---	---	---	\$38,661,000
	2008	1,616	---	---	---	---	\$30,006,000
<b>Total</b>	<b>2009</b>	<b>1,428</b>					<b>\$38,661,000</b>
	<b>2008</b>	<b>1,616</b>					<b>\$30,006,000</b>

<sup>(1)</sup> For 2009: Includes Bud Wood, Cane Berries, Christmas Trees, Crowns and Cuttings, Deciduous Fruit and Nut Trees, Decorative Plants, Dried Flowers, Greenhouse Plants, Ornamental Plants, Ornamental and Shade Trees, Transplants (Strawberry and Vegetable), and Turf. The separate production and value are not shown to avoid disclosing individual operations.

For 2008: Includes Bud Wood, Cane Berries, Christmas Trees, Crowns and Cuttings, Deciduous Fruit and Nut Trees, Decorative Plants, Dried Flowers, Grapevines, Greenhouse Plants, Ornamental Plants, Ornamental and Shade Trees, Transplants (Strawberry and Vegetable), and Turf. The separate production and value are not shown to avoid disclosing individual operations.



## Livestock and Poultry Production

<i>Crop</i>	<i>Year</i>	<i>Number of Head</i>	<i>Production per Head</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Cattle and Calves <sup>(1)</sup>	2009	367,080	8.13	2,982,947	Cwt	\$72.02	\$214,832,000
	2008	330,954	8.46	2,798,995		\$87.92	\$246,088,000
Chickens (Fryers and Broilers)	2009	82,354,694	5.65	465,304,021	Lb	\$0.66	\$306,200,000
	2008	85,837,412	5.60	480,309,507		\$0.67	\$321,807,000
Livestock (Miscellaneous) <sup>(2)</sup>	2009	30,771	---	---	---	---	\$4,029,000
	2008	29,563	---	---		---	\$3,951,000
Poultry (Miscellaneous) <sup>(3)</sup>	2009	61,000	---	---	---	---	\$583,000
	2008	214,000	---	---		---	\$1,480,000
Sheep and Lambs	2009	21,474	1.60	34,318	Cwt	\$79.09	\$2,714,000
	2008	31,597	1.54	48,704		\$77.53	\$3,776,000
Turkeys	2009	2,701,196	29.98	80,981,856	Lb	\$0.66	\$53,408,000
	2008	2,957,133	31.83	94,135,402		\$0.71	\$66,554,000
<b>Total</b>	<b>2009</b>	<b>85,536,215</b>					<b>\$581,766,000</b>
	<b>2008</b>	<b>89,400,659</b>					<b>\$643,657,000</b>

<sup>(1)</sup> For 2008, 2009: Includes Calves, Cull Bulls (Dairy and Beef), Cull Cows (Dairy and Beef), Replacement Heifers (Dairy and Beef) and Stocker Cattle.

<sup>(2)</sup> For 2009, 2008: Includes Dairy and Meat Goats sold for meat.

<sup>(3)</sup> For 2009: Includes Chukar, Pheasant, and Squab.

For 2008: Includes Chukar, Pheasant, Pullets, and Squab.

## Livestock and Poultry Products

<i>Crop</i>	<i>Year</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Eggs (Other) <sup>(1)</sup>	2009	2,390,363	Each	\$1.01	\$2,407,000
	2008	2,478,460		\$0.70	\$1,735,000
Eggs, Chicken (Market)	2009	112,184,190	Dozn	\$0.72	\$80,885,000
	2008	136,157,820		\$1.00	\$136,158,000
Milk (Goat)	2009	48,987	Cwt	\$36.00	\$1,764,000
	2008	60,126		\$35.00	\$2,104,000
Milk (Manufacturing)	2009	7,858,120	Cwt	\$12.10	\$95,083,000
	2008	2,399,295		\$18.57	\$44,555,000
Milk (Market)	2009	49,249,930	Cwt	\$11.49	\$565,957,000
	2008	56,365,070		\$16.85	\$949,751,000
Wool	2009	178,050	Lb	\$0.85	\$151,000
	2008	153,000		\$0.84	\$129,000
<b>Total</b>	<b>2009</b>				<b>\$746,247,000</b>
	<b>2008</b>				<b>\$1,134,432,000</b>

<sup>(1)</sup> For 2009, 2008: Includes Eggs other than Chicken Eggs.





## Aquaculture

<i>Crop</i>	<i>Year</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Fish <sup>(1)</sup>	2009	831,500	Lb	\$2.63	\$2,183,000
	2008	989,500		\$2.57	\$2,542,000
<b>Total</b>	<b>2009</b>				<b>\$2,183,000</b>
	<b>2008</b>				<b>\$2,542,000</b>

<sup>(1)</sup> For 2009: Includes Black Bass, Bluegill, Catfish, Perch, Silver Carp, Sturgeon, and Trout.

For 2008: Includes Black Bass, Bluegill, Catfish, Silver Carp, Striped Bass, Sturgeon, and Trout.

## Other Agriculture

<i>Crop</i>	<i>Year</i>	<i>Total Production</i>	<i>Production Unit</i>	<i>Value per Unit</i>	<i>Total Value</i>
Almond (Shells) <sup>(1)</sup>	2009	65,174	Ton	\$12.10	\$788,000
	2008	58,829		\$26.23	\$1,543,000
Firewood <sup>(2)</sup>	2009	20,796	Cord	\$163.32	\$3,396,000
	2008	21,235		\$161.68	\$3,433,000
Fuel (Cogeneration) <sup>(3)</sup>	2009	43,900	Ton	\$40.00	\$1,756,000
	2008	51,175		\$40.00	\$2,047,000
Manure <sup>(4)</sup>	2009	992,019	Ton	\$6.31	\$6,260,000
	2008	1,096,824		\$5.04	\$5,528,000
<b>Total</b>	<b>2009</b>				<b>\$12,201,000</b>
	<b>2008</b>				<b>\$12,551,000</b>

<sup>(1)</sup> For 2009, 2008: For Animal Bedding.

<sup>(2)</sup> For 2008, 2009: Includes Orchard Prunings and Removal for Firewood (Recorded in Cords).

<sup>(3)</sup> For 2008, 2009: Includes Orchard Prunings and Orchard Removal for Fuel (Recorded in Dry Tons).

<sup>(4)</sup> For 2009, 2008: Includes Livestock and Poultry Manure.





## Merced County Global

### Exports go to these countries:

Algeria	Luxembourg
Argentina	Malaysia
Armenia	Malta
Australia	Mauritius
Austria	Melilla
Azerbaijan	Mexico
Bahrain	Monaco
Belarus	Morocco
Belgium	Nepal
Brazil	Netherlands
Bulgaria	New Zealand
Canada	Norway
Canary Islands	Oman
Chile	Pakistan
China	Philippines
Colombia	Poland
Costa Rica	Portugal
Cyprus	Qatar
Czech Republic	Romania
Denmark	Russian Federation
Ecuador	San Marino
Egypt	Saudi Arabia
El Salvador	Singapore
Estonia	Slovakia
Finland	Slovenia
France	South Africa
Georgia	Spain
Germany	Sweden
Greece	Switzerland
Guatemala	Syria
Honduras	Taiwan
Hong Kong	Tajikistan
India	Thailand
Indonesia	Trinidad & Tobago
Israel	Tunisia
Italy	Turkey
Japan	Ukraine
Jordan	United Arab Emirates
Kazakhstan	United Kingdom
Korea, Republic of	Uruguay
Kuwait	Uzbekistan
Latvia	Vatican City State
Lebanon	Venezuela
Liechtenstein	Vietnam
Lithuania	







# Agricultural Exports



## Exported Commodities

Alfalfa Hay	Onion Seed	Rye Hay
Almonds	Pecans	Strawberry Nursery Stock
Cantaloupe	Pistachios	Sudan Hay
Fig	Propagative Stock	Sweet Potato
Garlic	Prunes	Tomatoes
Honeydew	Radicchio	Walnut Burls
Oat Hay	Raspberry Nursery Stock	Walnuts



## 2009 Sustainable Agriculture Report

### Pest Prevention

The California Food and Agricultural Code mandates pest prevention programs to prevent the introduction and spread of pests in California. Pest prevention involves Pest Exclusion, Pest Detection, Pierce's Disease Control, and the Federal Phytosanitary Certification Program.

### Pest Exclusion Program

Pest Exclusion is the first line of defense to prevent the introduction of pests, injurious to agriculture, that are not of common occurrence in Merced County.

A total of 8,005 shipments of incoming plant material were inspected in 2009. Shipments are inspected at United Parcel Service, United States Post Offices, Federal Express and trucking terminals. Thirty-four shipments were rejected. The 34 rejections were for live pests, material not properly certified, or improper container markings. Four of these shipments were intercepted and rejected for an "A" Rated pest called Red Imported Fire Ant (RIFA) the scientific name of which is *Solenopsis invicta*.

Due to negative survey results for the past three years verifying the continued absence of Jointed Goatgrass, it has been determined that Jointed Goatgrass has not become established in Merced County, and no further surveys are planned. Jointed Goatgrass, a "B" rated weed, is a potential major pest of small grain crops, primarily wheat. A "B" Rating indicates a pest with limited distribution in the State with eradication at the discretion of the County Agricultural Commissioner. It was first detected during a seed inspection of a forage crop seed mixture in 2005. Visual surveys had been conducted annually.



### Pierce's Disease Control Program

To prevent the introduction of the Glassy-winged Sharpshooter (GWSS) into Merced County, all shipments of nursery stock from infested counties are inspected. GWSS has the ability to spread Pierce's Disease rapidly among grape vines with devastating results. Five hundred eighty-two shipments of nursery stock from infested counties were inspected in 2009.

In addition, all nurseries receiving nursery stock from GWSS infested areas and 1,933 residential yards were visually inspected for GWSS presence during 2009. No GWSS were detected.

### Federal Phytosanitary Certification Program

This program ensures that plants and plant commodities exported to foreign countries from Merced County are free from injurious pests. 5,583 export shipments were inspected and issued Phytosanitary Certificates in 2009.





## Pest Detection Program

Pest Detection uses visual inspection and insect traps that target specific exotic insects of high agricultural and economic importance.

The trapping program in Merced County targeted the following pests:

Apple Maggot ( <i>Rhagoletis pomonella</i> )	Vine Mealy Bug ( <i>Planococcus ficus</i> )
European Pine Shoot Moth ( <i>Rhyacionia buoliana</i> )	European Corn Borer ( <i>Ostrinia nubilalis</i> )
Glassy-winged Sharpshooter ( <i>Homalodisca coagulate</i> )	Gypsy Moth ( <i>Lymantria dispar</i> )
Light Brown Apple Moth ( <i>Epiphyas postvittana</i> )	Japanese Beetle ( <i>Popillia japonica</i> )
Khapra Beetle ( <i>Trogoderma granarium</i> )	Mediterranean Fruit Fly ( <i>Ceratitis capitata</i> )
Melon Fly ( <i>Dacus cucurbitae</i> )	Mexican Fruit Fly ( <i>Anastrepha ludens</i> )
Oriental Fruit Fly ( <i>Dacus dorsalis</i> )	Sweet Potato Weevil ( <i>Cylas formicarius elegantulus</i> )

*A total of 1,568 pest detection traps were placed in Merced County and inspected a total of 18,066 times during the 2009 trapping season.*

## Pest Eradication Program

The Pest Eradication Program endeavors to eliminate infestations of significant agricultural pests with limited distribution before they are able to cause an ongoing economic cost to California agriculture.

Successful eradication projects include Sweet Potato Weevil and Banana Waterlily.

Since 2006, Japanese Dodder, an exotic potentially invasive parasitic vine had been detected in nine locations in Merced County. In 2009, five sites were declared eradicated. The ongoing survey will continue in 2010.

Detection and eradication efforts for the invasive weeds South American Sponge Plant ("A" Rated), Capeweed ("A" Rated), Purple Loosestrife ("B Rated"), and Purple Mustard ("B Rated") were conducted during 2009 and will be continued in 2010.

Detection efforts for Camelthorn, Carolina Horse Nettle, and Hydrilla are continuing.

Detection and eradication efforts for insect pests Pink Bollworm and Red Imported Fire Ant are continuing.

Beginning in May of 2009, native Pink Bollworm moths were detected on the Westside of Merced County. They were trapped in the same field where natives were detected in 2008. Fortunately, this field is no longer being planted to cotton. In August 2009, five native moths were detected east of Merced. The Pink Bollworm is a major cotton pest. Eradication efforts included a State operated trapping program of 23,385 acres in conjunction with County enforcement of the host-free period from January 1 through March 10, also known as cotton plowdown. Treatment is accomplished by mating disruption utilizing pheromones and sterile moths.

Merced County's Red Imported Fire Ant (RIFA) eradication program started in November 2001. Since that time 41,000 plus acres have been surveyed for RIFA; 10,248 acres have been found to be infested with RIFA. During 2009 there were additional finds made in several areas of the County. At the end of 2009, 3845 acres were under treatment, 557 acres were declared eradicated, and 5846 acres are being monitored for re-infestations of RIFA with post treatment surveys. CDFA personnel in conjunction with County personnel conducted these surveys.







## Biological Control

The Biological Control (Biocontrol) Program uses natural enemies to suppress pest populations to economically and environmentally acceptable levels. Once the Biocontrol agent becomes established it is self-perpetuating, reducing the need to use pesticides. The following are pests found in Merced County and their Biocontrol Agents.

PEST	ORGANISM
Ash Whitefly ( <i>Siphoninus phillyreae</i> )	Parasitoid Wasp ( <i>Encarsia inaron</i> )
Grapeleaf Skeletonizer ( <i>Harrisina brillians</i> )	Parasitic Fly ( <i>Ametadoria misella</i> )
	Virus (WGLS Granulosis)
	Parasitic Wasp ( <i>Apanteles harrisinae</i> )
Italian Thistle ( <i>Carduus</i> sp.)	Seed-Head Weevil ( <i>Rhinoclytus conicus</i> )
Klamath Weed ( <i>Hypericum perforatum</i> )	Leaf Beetle ( <i>Chrysolina quadrigemina</i> )
Milk Thistle ( <i>Silybum marianum</i> )	Seed-Head Weevil ( <i>Rhinocyllus conicus</i> )
Puncture Vine ( <i>Tribulus terrestris</i> )	Seed Weevil ( <i>Microlarinus lareynii</i> )
	Stem Weevil ( <i>Microlarinus lypriformis</i> )
Red Gum Lerp Psyllid ( <i>Glycaspis brimblecombei</i> )	Parasitoid Wasp ( <i>Psyllaephagus bliteus</i> )
Russian Thistle ( <i>Salsola</i> sp.)	Case-bearer Moth ( <i>Coleophora klimeschiella</i> )
	Russian Thistle Borer ( <i>Coleophora parthenica</i> )
Yellowstar Thistle ( <i>Centaurea solstitialis</i> )	Seed-Head Weevil ( <i>Bangasternus orientalis</i> )
	Seed-Head Gall Fly ( <i>Urophora sirunaseva</i> )
	Hairy Weevil ( <i>Eustenopus villosus</i> )
	False Peacock Fly ( <i>Chaetorellia succinea</i> )
	Rust Fungus ( <i>Puccinia jaceae</i> var. <i>solstitialis</i> )

## Organic Farming

In 2009, Merced County saw a rise in organic farming. There were 51 growers of organic commodities. These growers farmed a total of 8,282 acres to produce assorted organic field crops, berries, fruits, nuts, and vegetables. In addition to field crops, organic eggs, livestock, milk, and poultry were also produced. Organic dairies doubled from three in 2008 to six in 2009 and there were also seven growers who farmed 18,606 acres of irrigated and non-irrigated organic pastureland. The number of organic handlers rose from four to thirteen.







## SPOTTED WING DROSOPHILA, DROSOPHILA SUZUKII:

### A New Pest In California

The spotted wing drosophila, *Drosophila suzukii* (SWD), a native of Southeast Asia, is a pest of berry and stone fruits. Its first detected North American invasion was in August 2008 in Santa Cruz County, California on strawberries and cane berries. In May 2009, additional infestations were detected in cherry orchards along the Central Coast, in the Santa Clara Valley, and from Yolo to Stanislaus Counties. SWD was first detected in Merced County on cherries in early June of 2009. Although it is an invasive pest, by the time of its detection SWD had established itself to such an extent that the California Department of Food and Agriculture (CDFA) deemed eradication impossible.

Adults and maggots closely resemble the common vinegar fly, *Drosophila melanogaster*, and other *Drosophila* species that primarily attack rotting or fermenting fruit. The SPD, however, readily attacks undamaged fruit. Adults are small (2-3 mm) flies with red eyes and a pale brown thorax and abdomen with black stripes on the abdomen. The most distinguishable trait of the adult is that the males have a black spot towards the tip of the wing. Larvae are tiny (up to 3.5 mm) maggots that are found feeding in fruit. One to many larvae may be found feeding in a single fruit.

SWD attacks healthy ripening fruit, as well as damaged or rotting fruit. Because it can quickly develop large populations, up to 10 generations per year, it can inflict severe damage to a crop. The University of California's yield loss estimates from 2009 observations range from negligible to 80%, depending on location and crop. In order to minimize losses, commercial growers and backyard fruit tree owners will have to treat susceptible crops prior to eggs being deposited under the skin of the fruit. For information on available treatments and their timing contact your local University of California Cooperative Extension Office.



*Adult Male*



*Adult Female*



*SWD Damaged Fruit*



## Commodity Value Crop Comparison

<i>Commodities</i>	<i>2009</i>	<i>1999</i>	<i>1989</i>	<i>1979</i>
Aquaculture	\$2,183,000	\$2,380,000	\$2,617,000	---
Bee Industry	\$23,384,000	\$8,797,000	\$4,179,000	\$2,006,000
Field Crops	\$268,019,000	\$245,647,000	\$200,242,000	\$157,795,000
Fruit and Nut Crops	\$388,459,000	\$247,472,000	\$171,317,000	\$155,830,000
Livestock and Poultry Production	\$581,766,000	\$266,270,000	\$255,720,000	\$182,653,000
Livestock and Poultry Products	\$746,247,000	\$551,995,000	\$286,865,000	\$136,015,000
Nursery Products	\$38,661,000	\$23,747,000	\$11,905,000	\$12,011,000
Other Agriculture	\$12,201,000	\$12,312,000	\$9,883,000	---
Seed Crops	\$3,746,000	\$1,768,000	\$2,211,000	\$3,228,000
Vegetable Crops	\$395,809,000	\$173,638,000	\$108,169,000	\$51,419,000
<b>Total</b>	<b>\$2,460,475,000</b>	<b>\$1,534,026,000</b>	<b>\$1,053,108,000</b>	<b>\$700,957,000</b>

## Merced County Agricultural Commodity Values 1990 - 2009







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