

**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)

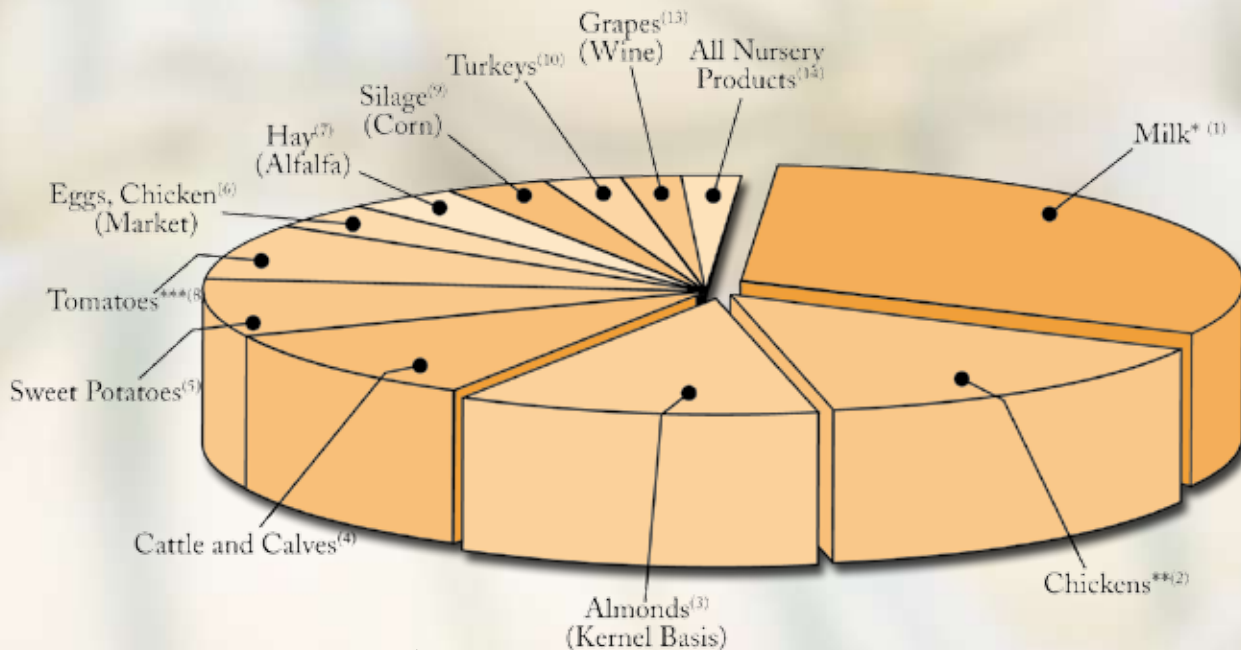
(The number in parenthesis denotes the 2008 ranking)

* 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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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

Crop	Year	Acres Harvested	Production per Acre	Total Production	Production Unit	Value per Unit	Total Value
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) ⁽¹⁾	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) ⁽²⁾	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 ⁽³⁾	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) ⁽⁴⁾	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 ⁽⁵⁾	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
Total	2009	974,421					\$268,019,000
	2008	978,504					\$431,869,000

⁽¹⁾ 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).

⁽²⁾ For 2009: Includes Forage, Oat, and Wheat Hay.

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

⁽³⁾ 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.

⁽⁴⁾ For 2009: Includes Oat, Sorghum, Sudan, Wheat, and Winter Forage

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

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



Vegetable Crops

Crop	Year	Acres Harvested	Production per Acre	Total Production	Production Unit	Value per Unit	Total Value
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) ⁽¹⁾	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) ⁽²⁾	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 ⁽³⁾	2009	3,615	---	---	---	---	\$20,014,000
	2008	3,015	---	---		---	\$16,524,000
Sweet Potatoes ⁽⁴⁾	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) ⁽⁵⁾	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
Total	2009	61,204					\$395,809,000
	2008	50,390					\$318,276,000

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

⁽²⁾ For 2009: Includes Honeydew, Mixed Melons, and Watermelon.

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

⁽³⁾ 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).

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

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

Bee Industry

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

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

⁽²⁾ For 2009: Honey produced by 42,076 resident colonies.

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

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

⁽⁴⁾ For 2009, 2008: 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 ⁽¹⁾	2009	5,626	---	---	---	---	\$3,746,000
	2008	3,323	---	---	---	---	\$1,448,000
Total	2009	5,626					\$3,746,000
	2008	3,323					\$1,448,000

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

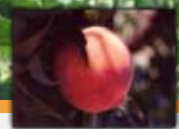
For 2008: Includes Certified, Common, and Phytosanitary Seed from Bean (Garbanzo), Lettuce, Oat, and Wheat.

Fruit and Nut Crops

Crop	Year	Acres Harvested	Production per Acre	Total Production	Production Unit	Value per Unit	Total Value
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 ⁽¹⁾	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
Total	2009	127,289					\$388,459,000
	2008	126,094					\$401,502,000

⁽¹⁾ 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
Total	127,151	6,055	122,147	8,970

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 ⁽¹⁾	2009	1,428	---	---	---	---	\$38,661,000
	2008	1,616	---	---	---	---	\$30,006,000
Total	2009	1,428					\$38,661,000
	2008	1,616					\$30,006,000

⁽¹⁾ 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 ⁽¹⁾	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) ⁽²⁾	2009	30,771	---	---	---	---	\$4,029,000
	2008	29,563	---	---		---	\$3,951,000
Poultry (Miscellaneous) ⁽³⁾	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
Total	2009	85,536,215					\$581,766,000
	2008	89,400,659					\$643,657,000

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

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

⁽³⁾ 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) ⁽¹⁾	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
Total	2009				\$746,247,000
	2008				\$1,134,432,000

⁽¹⁾ For 2009, 2008: Includes Eggs other than Chicken Eggs.



Aquaculture

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

⁽¹⁾ 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

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

⁽¹⁾ For 2009, 2008: For Animal Bedding.

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

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

⁽⁴⁾ 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 laerynii</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
Total	\$2,460,475,000	\$1,534,026,000	\$1,053,108,000	\$700,957,000

Merced County Agricultural Commodity Values 1990 - 2009





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