

## **Merced County**



## **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 "New-

ton". 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.



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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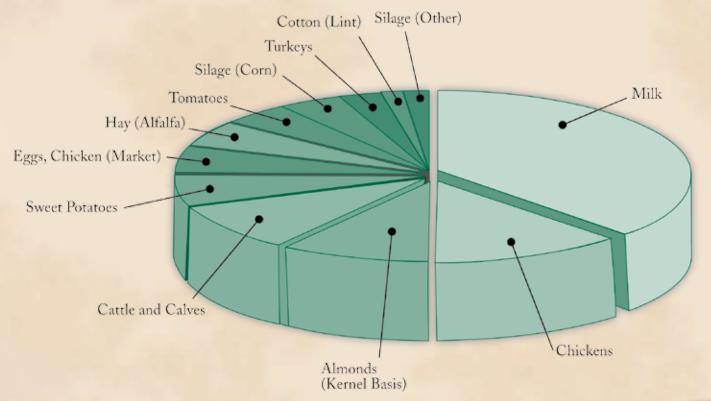


# **Top Twelve Leading Farm Commodities 2008**

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)

# 2008 Top 12 Commodities



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

<sup>\*</sup> Includes Market and Manufacturing.

<sup>\*\*</sup> Includes Fryers and Other Chickens.

<sup>\*\*\*</sup> 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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Mike Nelson
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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**

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

<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**

Crop	Year	Acres Harvested	Production per Acre	Total Production	Production Unit	Value per Unit	Total Value
Beans, Lima (Freezer)	2008 2007	1,659 2,308	1.68 1.70	2,791 3,913	Ton	\$599.28 \$497.67	\$1,672,000 \$1,947,000
Melons (Cantaloupe) (1)	2008 2007	4,633 3,997	630.47 822.41	2,920,973 3,287,170	40lb Ctn	\$5.89 \$6.05	\$17,202,000 \$19,894,000
Melons (Other) (2)	2008 2007	981 1,483	35.36 30.72	34,678 45,560	Ton	\$210.58 \$182.06	\$7,302,000 \$8,295,000
Misc. Vegetables (3)	2008 2007	3,015 3,614					\$16,524,000 \$15,442,000
Sweet Potatoes (4)	2008 2007	13,711 12,183	13.08 16.67	179,340 203,091	Ton	\$900.87 \$640.65	\$161,562,000 \$130,110,000
Tomatoes (Market) (5)	2008 2007	10,177 9,761	1,147.52 1,260.37	11,678,576 12,302,476	251b Ctn	\$5.58 \$7.96	\$65,216,000 \$97,957,000
Tomatoes (Processing)	2008 2007	16,214 18,200	42.42 39.53	687,821 719,516	Ton	\$70.95 \$64.06	\$48,798,000 \$46,093,000
Total	2008 2007	50,390 51,546		ALC: Y			\$318,276,000 \$319,737,000

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

## **Bee Industry**

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

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

<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 (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). For 2007: Includes Asparagus, Basil (Sweet), Cabbage (Napa), Chinese Greens, Cilantro, Cucumber, Cucumber (Pickle), 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.

<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**

Сгор	Year	Acres Harvested	Production per Acre	Total Production	Production Unit	Value per Unit	Total Value
Seed Crops (1)	2008 2007	3,323 2,920					\$1,448,000 \$1,938,000
Total	2008 2007	3,323 2,920					\$1,448,000 \$1,938,000

<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**

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

<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

Crops	Bearing 2008	Non-Bearing 2008	Bearing 2003	Non-Bearing 2003
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
Total	125,496	9,402	123,345	4,303

# **Nursery Products**

Crop	Year	Acres Harvested	Production per Acre	Total Production	Production Unit	Value per Unit	Total Value
All Nursery Products (1)	2008	1,616					\$30,006,000
	2007	1,495					\$29,629,000
Total	2008 2007	1,616 1,495		L-TA			\$30,006,000 \$29,629,000

<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**

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

<sup>(4)</sup> For 2008, 2007: Includes Calves, Cull Bulls (Dairy and Beef), Cull Cows (Dairy and Beef), Replacement Heifers (Dairy and Beef) and Stocker Cattle.

# **Livestock and Poultry Products**

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

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

<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.



# Aquaculture

Crop	Year	Total Production	Production Unit	Value per Unit	Total Value
Fish (1)	2008 2007	989,500 1,600,000	Lb	\$2.57 \$2.07	\$2,542,000 \$3,312,000
Total	2008 2007	2,000,000		¥2.07	\$2,542,000 \$3,312,000

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

# Other Agriculture

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

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

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





<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).



### 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

IsraelTunisiaItalyTurkeyJapanUkraine

Jordan United Arab Emirates
Kazakhstan United Kingdom

Korea, Republic of Uruguay

Kuwait Uzbekistan

Latvia Vatican City State

Lebanon Venezuela
Liechtenstein Vietnam

Lithuania

**Merced County Global** 



# **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				

## **Merced County**



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

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.

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







## 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 lead 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



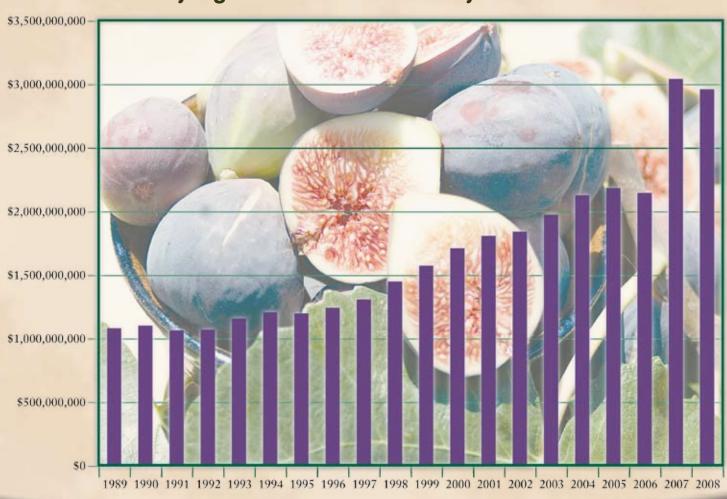
then, the Merced County Agriculture Dept. in conjunction with the Ca. Dept. of Food and Agriculture, have been engaged in an ongoing eradication program to eliminate RIFA from the county. It is extremely important to the county's agriculture industry that the eradication program be successful. Otherwise, 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**

Commodities	2008	1998	1988	1978
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
Total	\$2,999,701,000	\$1,449,762,000	\$973,177,000	\$496,893,000

# Merced County Agricultural Commodity Values 1989 To 2008





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