

A close-up photograph of olive tree branches. The branches are covered with small, elongated green leaves and clusters of olives. The olives are in various stages of ripening, with some being bright green, others a pale yellow-green, and some a deep purple. The lighting is bright, creating strong highlights and shadows on the leaves and fruit.

# 2009 Agricultural Report SAN JOAQUIN COUNTY

A stylized logo featuring a branch with several green leaves and a single olive fruit. The branch is curved, and the leaves are simple, elongated shapes. The olive fruit is a small circle with a short stem.

Olives Come of Age  
in San Joaquin





## **OLIVE OIL**

### **CALIFORNIA'S NEW GOLD RUSH**

Homer, the legendary Greek epic poet, called olive oil “liquid gold” and for good reason because olive oil was more than mere food to the ancient peoples of the Mediterranean region. It was medicinal, used in religious ceremonies, and signified great wealth and power. Olive branches, a symbol of abundance, glory and peace, crowned the victorious in games and wars.

The olive, a native to Asia Minor, spread from Iran, Syria, Palestine, and to the rest of the Mediterranean basin 6,000 years ago. Olive cultivation is one of man’s first agricultural developments. Olives first arrived in California from Mexico during the late 1700s as seeds or seedlings and were planted in each of the 21 missions by Spanish missionaries. A thriving olive oil industry was established by the mid 19<sup>th</sup> century. However, the 20<sup>th</sup> century saw little growth in the industry until a health-conscious American population rediscovered the healthy benefits and flavor of olive oil in recent years.

California produces the majority of olive oil made in the U.S. but only about 1% of the olive oil consumed in this country comes from California. Even though the U.S. is the world’s fourth-largest consumer of olive oil, we only annually consume an average of 25 ounces of olive oil per person. As a comparison, in Greece, each person annually consumes an average of 32 to 35 bottles of olive oil. Needless to say, this leaves a tremendous amount of growth potential in the United States.

Until recently, olive harvest was done almost exclusively by hand at an average cost of \$300 per ton or about ½ of the grower’s total production cost. In recent years, the new super high density growing and harvesting system has cut production costs to about \$50 per ton. Under this system, dwarf olive varieties are planted five feet apart and thirteen feet between rows. The three primary olive varieties used for high density plantings are Arbequina (78%), Arbosana (16%), and Koroneiki (6%). The trees are then trained to grow on trellises and trimmed at a height of seven feet. Harvesting is done mechanically by a modified grape harvester during the fall.

Almost all of the olives grown in the U.S. come from California. However, only 2% or 21,000 acres of California’s total olive acreage is for oil production. San Joaquin County ranks second in the state in the number of acres planted to olive oil producing trees (35% of state total). Through the next decade, it is estimated that approximately 10,000 trees each year will be added to California’s olive orchards.

The olive industry in San Joaquin County is a growing market. The number of olive oil producers is increasing with several growers investing in their own oil presses. Some local growers are specializing in boutique style establishments with varied flavors of olive oil available. Local wineries are increasingly offering olive oil at their tasting facilities. Gold once again is flowing in California!

**SAN JOAQUIN COUNTY  
AGRICULTURAL COMMISSIONER'S OFFICE**

**2009 ANNUAL CROP REPORT**

Scott Hudson  
Agricultural Commissioner/Sealer

Compiled By  
Rick Schwieger

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Deputy Agricultural Commissioner  
Deputy Agricultural Commissioner  
Deputy Agricultural Commissioner**

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**Agricultural Biologist II, Simms Station  
Senior Agricultural Biologist  
Senior Agricultural Biologist  
Agricultural Biologist II, Simms Station  
Agricultural Biologist II, Simms Station  
Senior Agricultural Biologist, Lodi  
Senior Agricultural Biologist  
Agricultural Biologist I  
Agricultural Biologist II  
Agricultural Biologist II, Lodi  
Agricultural Biologist II  
Agricultural Biologist I  
Senior Agricultural Biologist  
Senior Agricultural Biologist  
Senior Agricultural Biologist  
Senior Agricultural Biologist**

**Ferdinand Pura**

**Department Information Systems Analyst I**

**Mary Jo Avagliano  
Jo Aring-Tengonciang  
Hazel Gallego  
Carol Giuffre  
Share Hawkins  
Hiromi Hernandez  
Cynthia King  
Terry King  
Jamise Miller  
Laura Rocha**

**Administrative Secretary  
Senior Office Assistant, Lodi  
Office Assistant Specialist  
Senior Office Assistant  
Accounting Technician I  
Senior Office Assistant  
Senior Office Assistant  
Accounting Technician II  
Senior Office Assistant  
Senior Office Assistant, Simms Station**

All staff are based in Stockton unless otherwise noted.





**SAN JOAQUIN COUNTY**  
**OFFICE OF THE**  
**AGRICULTURAL COMMISSIONER**

MAIN OFFICE  
2101 E. EARHART AVENUE, Suite 100  
STOCKTON, CALIFORNIA 95206-3924  
PHONE: (209) 953-6000 FAX: (209) 953-6022

**SCOTT HUDSON**  
AGRICULTURAL COMMISSIONER  
SEALER OF WEIGHTS AND MEASURES  
ANIMAL CONTROL

**GARY STOCKEL**  
ASST. AGRICULTURAL COMMISSIONER  
ASST. SEALER OF WEIGHTS AND MEASURES

LODI OFFICE  
210 N. SACRAMENTO ST.  
(209) 331-7287

SIMMS STATION – RIPON  
17620 E. HWY 120  
(209) 838-2276

A.G. KAWAMURA, SECRETARY  
CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE  
AND  
THE HONORABLE BOARD OF SUPERVISORS  
SAN JOAQUIN COUNTY

Dear Secretary and Board Members:

In accordance with Section 2279 of the California Food and Agriculture Code, I am pleased to present the seventy-sixth annual report of Agricultural Production in San Joaquin County.

The gross value of production for 2009 is estimated to be \$2,000,474,000. This represents a 6.49% decrease from 2008's all time high production of \$ 2,129,725,000.

Some highlights of the 2009 crop year production are:

- Historically, milk production is San Joaquin County's leading commodity. In 2009, because of low milk prices, grape values surpassed milk and grapes became the County's leading commodity.
- Field crops had a large decrease in values. Factors contributing were a large drop in hay and corn prices caused by a decrease in the number of dairy cows and beef cattle in the County.
- Seed crop production is down. Asparagus seed crops were down by half due to adverse weather condition during the growing season.
- Vegetable crops had a large increase in production, up 32.9%. This is largely attributed to increases in asparagus and sweet corn crops.
- Livestock prices were down. Cattle and calves prices were down 33.8%. A positive note is an increase in the County's turkey production.
- Nursery Stock numbers continue to decline. The continual decline in housing starts, decreased home purchases, and the ongoing economic conditions attributed to lower values.

The values shown are estimates based on the most common method of sale for the individual commodity, except for fresh fruits and vegetable where the value is based on the F.O.B. packed price at the shipping point. The figures contained in this report are gross values rather than net return to the grower.

I wish to express my sincere appreciation to all who assisted my biologists and deputies by furnishing the necessary information that made this report possible.

Respectfully submitted,

Scott Hudson  
Agricultural Commissioner/Sealer

# FIELD CROPS

CROP	YEAR	PRODUCTION				GROSS VALUE		
		HARVESTED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	SUBTOTAL	TOTAL
BEANS, DRY, ALL	2009	9,304	0.87	8,100	TON	\$1,009.00		\$8,172,000
	2008	6,300	1.38	8,700	TON	\$989.00		\$8,608,000
LIMA	2009	4,900	1.20	5,900	TON	\$1,083.00	\$6,390,000	
	2008	4,300	1.40	6,000	TON	\$1,000.00	\$6,000,000	
BEANS, OTHER*	2009	2,880	0.78	2,246	TON	\$1,033.00	\$1,782,000	
	2008	1,980	1.37	2,713	TON	\$962.00	\$2,608,888	
CORN, GRAIN	2009	48,100	5.19	250,000	TON	\$177.00		\$44,250,000
	2008	71,800	5.18	372,000	TON	\$187.00		\$69,564,000
HAY, ALL	2009	95,000	6.20	589,000	TON	\$113.00		\$66,498,000
	2008	97,000	5.93	575,000	TON	\$190.00		\$108,970,000
ALFALFA	2009	68,300	6.82	466,000	TON	\$120.00	\$55,920,000	
	2008	68,500	6.90	473,000	TON	\$201.00	\$95,073,000	
OTHER	2009	26,700	4.61	123,000	TON	\$86.00	\$10,578,000	
	2008	28,500	3.30	93,900	TON	\$148.00	\$13,897,000	
PASTURE & RANGE	2009	134,500			ACRE	\$45.00		\$5,993,000
	2008	134,500			ACRE	\$37.00		\$5,033,000
IRRIGATED	2009	14,500			ACRE	\$165.00	\$2,393,000	
	2008	14,500			ACRE	\$165.00	\$2,393,000	
OTHER	2009	120,000			ACRE	\$30.00	\$3,600,000	
	2008	120,000			ACRE	\$22.00	\$2,640,000	
RICE	2009	5,830	3.90	22,700	TON	\$334.00		\$7,582,000
	2008	5,320	4.21	21,800	TON	\$300.00		\$6,540,000
SAFFLOWER	2009	3,060	1.50	4,590	TON	\$325.00		\$1,492,000
	2008	5,520	1.40	7,730	TON	\$500.00		\$3,865,000
SILAGE, CORN	2009	35,500	26.37	936,000	TON	\$24.00		\$22,464,000
	2008	40,500	27.77	1,125,000	TON	\$37.00		\$41,625,000
SILAGE, OTHER INCLUDES GREEN CHOP	2009	76,600	6.52	499,000	TON	\$37.00		\$18,463,000
	2008	82,200	5.86	482,000	TON	\$44.00		\$21,208,000
WHEAT	2009	30,700	2.93	90,100	TON	\$223.00		\$20,125,000
	2008	31,300	2.80	87,700	TON	\$218.00		\$19,148,000
OTHER	2009	94,900						\$7,833,000
	2008	123,300						\$10,192,000
TOTAL	2009	533,000						\$202,872,000
	2008	598,000						\$294,753,000

NUMBERS MAY NOT COMPUTE EXACTLY DUE TO ROUNDING

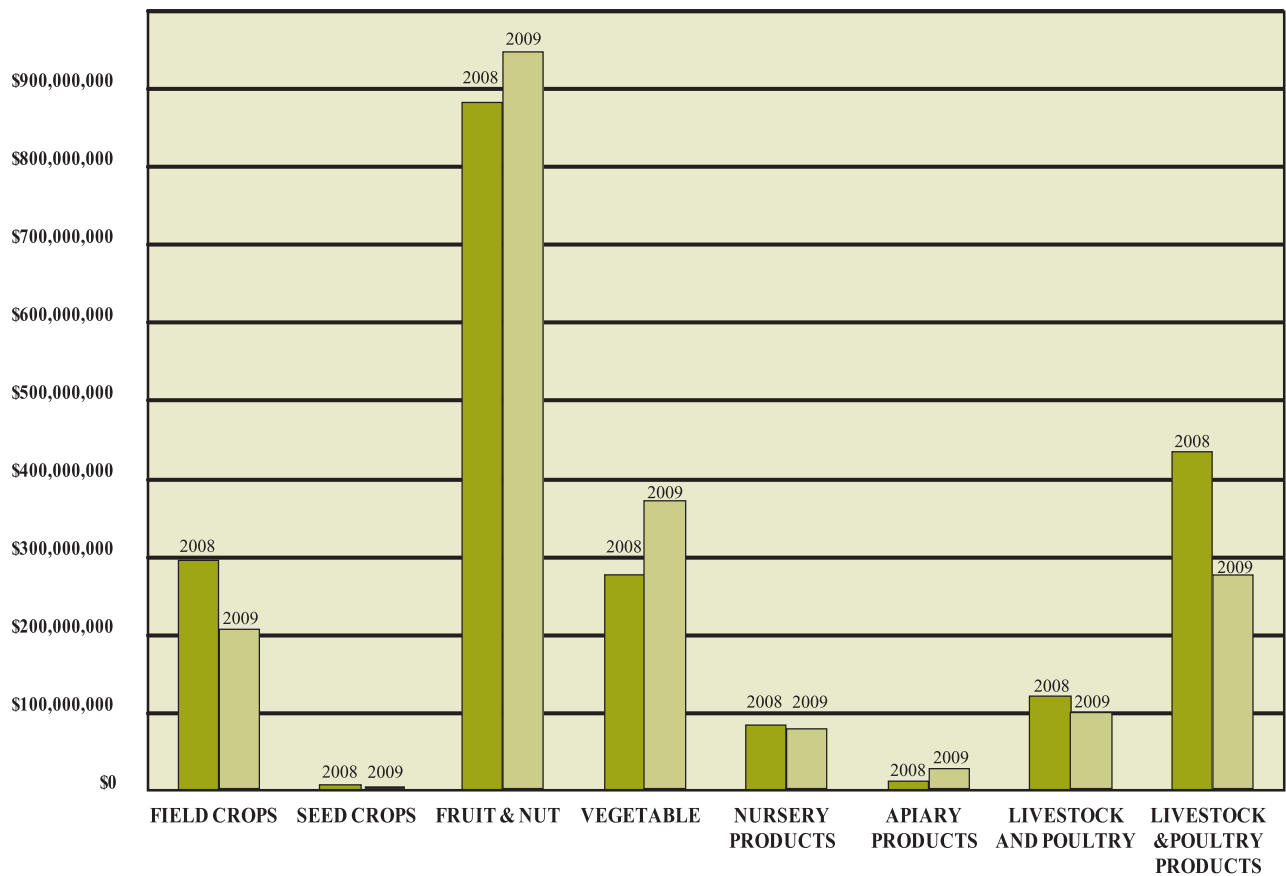
\*BEANS OTHER WILL NOW INCLUDE BLACK EYE, KIDNEY, GARBANZO AND ALL OTHER BEANS NOT LISTED

# SEED CROPS

CROP	YEAR	PRODUCTION			UNIT	GROSS VALUE	
		HARVESTED ACREAGE	PER ACRE	TOTAL		PER UNIT	TOTAL
KIDNEY BEAN	2009	507	17.40	8,800	CWT	\$46.00	\$405,000
	2008	205	27.80	5,700	CWT	\$45.00	\$257,000
BEANS, OTHER	2009	423	20.02	8,470	CWT	\$44.00	\$376,572
	2008	55	27.23	1,500	CWT	\$60.00	\$90,000
VEGETABLE SEED	2009	471					\$3,666,000
	2008	426					\$6,331,000
MISCELLANEOUS	2009	1,190					\$365,000
	2008	350					\$52,000
TOTAL	2009	2,591					\$4,812,572
	2008	1,036					\$6,730,000

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## COMPARISON OF VALUES FOR EACH CROP COMMODITY





# FRUIT AND NUT CROPS

CROP	YEAR	PRODUCTION			GROSS VALUE			
		BEARING ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	SUBTOTAL	TOTAL
ALMOND, MEATS	2009	47,800	0.99	47,300	TON	\$2,840.00		\$134,332,000
	2008	47,500	1.23	58,400	TON	\$3,000.00		\$175,200,000
ALMOND, HULLS	2009			106,400	TON	\$104.00		\$11,066,000
	2008			131,400	TON	\$135.00		\$17,739,000
APPLES, ALL	2009	2,900	25.63	74,334	TON	\$632.00		\$54,469,000
	2008	3,030	25.48	77,200	TON	\$634.00		\$48,455,000
FRESH	2009			49,556	TON	\$953.66	\$47,260,000	
	2008			51,478	TON	\$812.27	\$41,814,000	
PROCESSING	2009			24,778	TON	\$290.93	\$7,209,000	
	2008			25,739	TON	\$257.69	\$6,633,000	
APRICOTS	2009	624	13.13	8,200	TON	\$336.00		\$2,755,000
	2008	625	12.47	7,800	TON	\$325.00		\$2,535,000
BLUEBERRIES	2009	1,313	3.98	5,226	TON	\$5,873.87		\$30,695,000
	2008	1,070	4.20	4,500	TON	\$5,480.00		\$24,660,000
CHERRIES, ALL	2009	17,853	2.84	50,727	TON	\$4,194.00		\$212,735,000
	2008	17,700	2.98	52,642	TON	\$3,342.00		\$175,922,000
FRESH	2009			50,700	TON	\$4,084.00	\$207,059,000	
	2008			43,900	TON	\$3,890.00	\$170,771,000	
PROCESSING	2009			9,200	TON	\$617.00	\$5,676,000	
	2008			8,760	TON	\$544.00	\$5,151,000	
GRAPES, ALL	2009	91,800	7.42	681,000	TON	\$418.00		\$284,981,000
	2008	90,000	5.28	475,000	TON	\$467.00		\$221,807,000
TABLE, CRUSHED	2009	251	5.62	1,410	TON	\$184.00	\$259,000	
	2008	201	5.27	1,060	TON	\$201.00	\$213,000	
WINE, ALL	2009	91,500	7.42	679,000	TON	\$419.00	\$284,722,000	
	2008	89,800	5.28	474,000	TON	\$468.00	\$221,595,000	
FRESH	2009			4,310	TON	\$289.00	\$1,246,000	
	2008			4,310	TON	\$289.00	\$1,246,000	
CRUSHED	2009			675,000	TON	\$420.00	\$283,500,000	
	2008			469,000	TON	\$470.00	\$220,430,000	

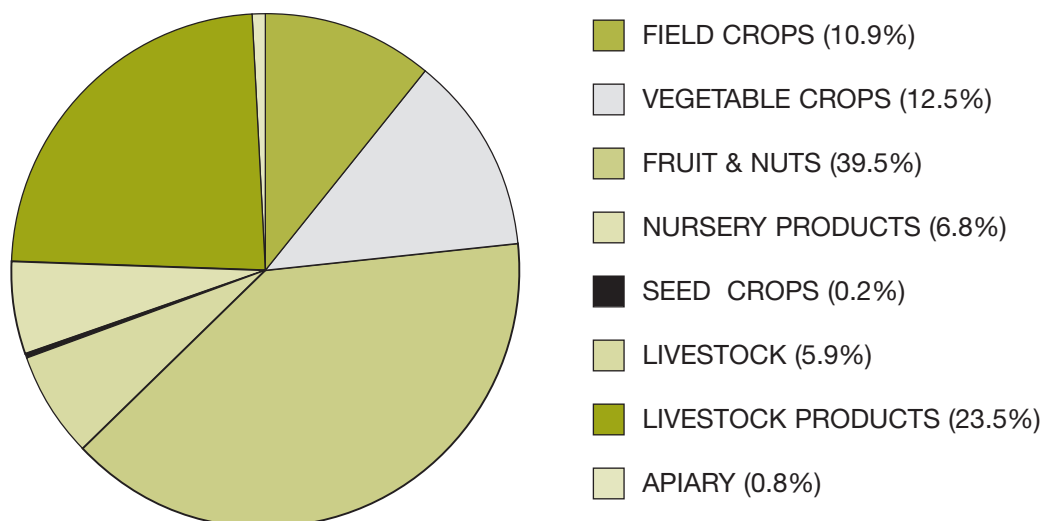
NUMBERS MAY NOT COMPUTE EXACTLY DUE TO ROUNDING

# FRUIT AND NUT CROPS

CROP	YEAR	PRODUCTION			GROSS VALUE			
		BEARING ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	SUBTOTAL	TOTAL
OLIVES, PROCESSING	2009	3,585	4.30	15,416	TON	\$475.00		\$7,322,000
	2008	3,300	4.20	13,900	TON	\$700.00		\$9,730,000
PEACHES, ALL	2009	2,140	21.82	46,700	TON	\$292.00		\$13,617,000
	2008	2,260	25.18	56,900	TON	\$289.00		\$16,424,000
CLINGSTONE	2009	980	18.30	17,900	TON	\$315.00	\$5,639,000	
	2008	1,040	22.90	23,800	TON	\$316.00	\$7,521,000	
FREESTONE	2009	1,160	24.79	28,800	TON	\$277.00	\$7,978,000	
	2008	1,220	27.11	33,100	TON	\$269.00	\$8,904,000	
PEARS	2009	489	18.00	8,800	TON	\$287.50		\$2,530,000
	2008	488	20.00	9,760	TON	\$250.00		\$2,440,000
WALNUTS, ENGLISH	2009	48,700	1.96	95,500	TON	\$1,681.00		\$160,536,000
	2008	45,500	2.30	105,000	TON	\$1,700.00		\$178,500,000
MISCELLANEOUS	2009	730						\$35,684,000
	2008	710						\$19,745,000
BIOMASS	2009							\$282,000
	2008							\$328,000
TOTAL	2009	213,000						\$951,004,000
	2008	208,000						\$893,485,000

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## Percentage of Each Category to Total



# VEGETABLE CROPS

CROP	YEAR	PRODUCTION			UNIT	PER UNIT	GROSS VALUE	
		HARVESTED ACREAGE	PER ACRE	TOTAL			SUBTOTAL	TOTAL
ASPARAGUS	2009	7,400	2.77	20,600	TON	\$2,530.00		\$52,118,000
	2008	9,400	1.52	14,300	TON	\$2,320.00		\$36,322,000
CORN, SWEET	2009	3,290	7.26	26,400	TON	\$598.00		\$15,787,000
	2008	2,780	5.04	14,000	TON	\$218.00		\$3,052,000
CUCUMBERS	2009	1,080	9.93	10,700	TON	\$190.00		\$2,033,000
	2008	1,630	7.79	12,700	TON	\$170.00		\$2,159,000
MELONS, ALL	2009	1,520	34.28	52,100	TON	\$239.00		\$12,475,000
	2008	2,370	36.62	86,800	TON	\$261.00		\$22,626,000
WATERMELON	2009	1,460	35.00	51,100	TON	\$239.00	\$12,213,000	
	2008	2,330	37.00	86,200	TON	\$260.00	\$22,412,000	
OTHER	2009	60	16.25	975	TON	\$269.00	\$262,000	
	2008	40	15.67	627	TON	\$342.00	\$214,000	
ONIONS, DRY	2009	1,710	22.50	38,500	TON	\$311.00		\$11,974,000
	2008	2,090	14.53	30,400	TON	\$208.00		\$6,323,000
PEPPERS	2009	1,310	29.72	38,900	TON	\$562.00		\$21,862,000
	2008	1,140	25.80	29,400	TON	\$441.00		\$12,965,000
POTATOES	2009	2,600	17.86	45,700	TON	\$519.00		\$23,718,000
	2008	2,300	16.50	37,700	TON	\$640.00		\$24,128,000
PUMPKINS	2009	3,480	15.81	55,000	TON	\$285.00		\$15,675,000
	2008	3,110	14.60	45,400	TON	\$240.00		\$10,896,000
TOMATOES, ALL	2009	45,500	35.43	1,612,000	TON	\$125.00		\$201,528,000
	2008	40,700	36.04	1,467,000	TON	\$99.00		\$145,506,000
SHIPPING	2009	6,730	26.15	176,000	TON	\$476.00	\$83,776,000	
	2008	7,500	16.25	122,000	TON	\$443.00	\$54,046,000	
PROCESSING	2009	38,800	37.00	1,436,000	TON	\$82.00	\$117,752,000	
	2008	33,200	40.50	1,345,000	TON	\$68.00	\$91,460,000	
MISCELLANEOUS VEGETABLES	2009	4,690						\$11,157,000
	2008	3,380						\$13,159,000
TOTAL	2009	72,600						\$368,327,000
	2008	68,900						\$277,136,000

NUMBERS MAY NOT COMPUTE EXACTLY DUE TO ROUNDING



# NURSERY PRODUCTS

ITEM	YEAR	QUANTITY SOLD	UNIT	GROSS VALUE	
				TOTAL	
GRAPEVINES, STRAWBERRY PLANTS, FRUIT & NUT TREES	2009	70,170,000	PLANT	\$6,895,000	
	2008	78,465,000	PLANT	\$6,959,000	
VEGETABLE PLANTS	2009	363,423,000	PLANT	\$15,736,000	
	2008	314,848,000	PLANT	\$12,487,000	
FLOWERING POTTED PLANTS	2009	486,000	EACH	\$1,622,000	
	2008	304,000	EACH	\$1,147,000	
FOLIAGE PLANTS	2009	1,124,000	EACH	\$3,863,000	
	2008	2,078,000	EACH	\$4,791,000	
BEDDING PLANTS	2009	226,290,000	PLANT	\$13,594,000	
	2008	225,363,000	PLANT	\$13,323,000	
WOODY ORNAMENTALS	2009	5,268,000	EACH	\$21,969,000	
	2008	6,110,000	EACH	\$29,756,000	
BULBS, RHIZOMES, TURF, CACTUS, CHRISTMAS TREES, ETC.	2009			\$12,165,000	
	2008			\$17,076,000	
TOTAL	2009			\$75,844,000	
	2008			\$85,539,000	

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# APIARY PRODUCTS

ITEM	YEAR	PRODUCTION	UNIT	GROSS VALUE	
				PER UNIT	TOTAL
HONEY	2009	177,000	LBS	\$1.15	\$203,000
	2008	124,000	LBS	\$0.83	\$103,000
POLLINATION	2009	187,700	HIVE	\$116.00	\$21,687,000
	2008	131,900	HIVE	\$115.00	\$15,181,000
OTHER APIARY *	2009				\$3,169,000
	2008				\$506,000
TOTAL	2009				\$25,059,000
	2008				\$15,790,000

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\*OTHER APIARY INCLUDES POLLEN, BEES, QUEENS, NUCLEUS COLONIES & BEESWAX

# LIVESTOCK AND POULTRY

ITEM	YEAR	NO. HEAD	LIVE WEIGHT	UNIT	GROSS VALUE	
					PER UNIT	TOTAL
CATTLE & CALVES	2009	139,000	1,031,000	CWT	\$63.00	\$64,711,000
	2008	130,000	959,000	CWT	\$102.00	\$97,788,000
SHEEP & LAMBS	2009	12,700	16,000	CWT	\$93.00	\$1,490,000
	2008	10,200	13,000	CWT	\$70.00	\$904,000
BROILERS	2009	2,095,000	11,564,400	LBS	\$0.66	\$7,599,838
	2008	1,867,000	10,829,000	LBS	\$0.41	\$4,471,011
TURKEYS	2009	468,000	15,792,000	LBS	\$0.66	\$10,422,000
	2008	253,000	4,704,000	LBS	\$0.71	\$3,324,000
OTHER LIVESTOCK**	2009					\$14,125,000
	2007					\$14,060,000
TOTAL	2009					\$98,348,000
	2008					\$120,547,000

\*\*OTHER LIVESTOCK INCLUDES HOGS, GOATS, SQUAB, DUCKS, AND OTHER FOWL













# LIVESTOCK AND POULTRY PRODUCTS

ITEM	YEAR	PRODUCTION	UNIT	PER UNIT	GROSS VALUE	
					SUBTOTAL	TOTAL
MILK, ALL	2009	22,152,000	CWT	\$12.00		\$257,715,000
	2008	24,604,000	CWT	\$17.00		\$412,643,000
MARKET	2009	21,159,000	CWT	\$12.00	\$245,652,000	
	2008	24,588,000	CWT	\$17.00	\$412,344,000	
MANUFACTURING	2009	993,000	CWT	\$12.00	\$11,916,000	
	2008	16,000	CWT	\$19.00	\$304,000	
WOOL	2009	68,000	LBS	\$0.93		\$62,000
	2008	62,000	LBS	\$1.02		\$63,000
EGGS, CHICKEN	2009	21,907,000	DOZ	\$0.72		\$15,773,000
	2008	26,127,000	DOZ	\$0.87		\$22,664,000
MANURE	2009	564,000	TON	\$1.00		\$657,000
	2008	407,000	TON	\$1.00		\$355,000
TOTAL	2009					\$274,207,000
	2008					\$435,725,000

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# Olives and Olive Oil Facts and Figures



-  A tablespoon of olive oil contains about 120 calories and 14 grams of fat.
-  “Light” olive oil refers to the light color and milder taste and is not lower in fat.
-  Extra Virgin Olive Oil is derived from the first pressing of the best olives and has an acidity of less than 1%.
-  Virgin Olive Oil is from the first pressing of top quality olives and has an acidity of less than 2%.
-  Over 90% of the world’s olive production is used to make olive oil.
-  Fresh picked olives are too bitter to be palatable. Before eating they must first be processed or cured to remove their bitter taste.
-  California is the only state where olives are grown commercially.
-  Olive branches were given to the Olympic Champions in Ancient Greece. The olive tree is a symbol of triumph, wisdom, and peace.
-  The Bible has more than 140 references to olive trees and olive oil.
-  Homemade lip balm may be made by mixing olive oil with bee’s wax.
-  There is no cholesterol in olive oil.
-  The colors of olives are green, purple, dark brown, black and pink.
-  Olive oil used on the scalp can reduce dandruff.
-  The olive was first harvested and recognized for its many valuable properties in ancient India, not in Greece or Egypt.
-  The olive tree is the healthiest tree known to man. It is not susceptible to destruction by fungus and bacteria
-  In Greece, the olive trees were so sacred that those who cut one down were condemned to death or exile.
-  Olive oil is reputed to be the oldest remedy known to man for the reduction of wrinkles and stretch marks.





# OLIVE OIL PROCESSING

## STEP 1: CLEANING

Olives are processed for oil within hours after harvesting. The first step is cleaning the olives. Stems, leaves, twigs, and other debris are removed and then olives are washed with water. Light contaminants are removed by a blower and heavy objects sink in the water bath.



## STEP 2: GRINDING INTO A PASTE

After washing, the olives are then ground into a paste. Grinding releases the oil for extraction. The primary machines used to grind olives are the hammermill and diskmill.

## STEP 3: MALAXING

After grinding, the paste undergoes a malaxing or mixing process for 20 to 45 minutes to allow small oil droplets to combine into larger ones. The mixing process optimizes the amount of oil extracted and allows the oil to fully absorb the flavor of the fruit.



## STEP 4: SEPARATING THE OIL

The oil is then separated from the paste by centrifugation. A decanter centrifuge spins the paste at high speeds to remove the water and solids. The first extraction is called the first or cold pressing. The term “pressing” is used because this process was previously done with presses. Extra virgin and virgin olive oils come from the first pressing and are named such because they are produced through purely mechanical means.



## STEP 5: OIL CLEANING

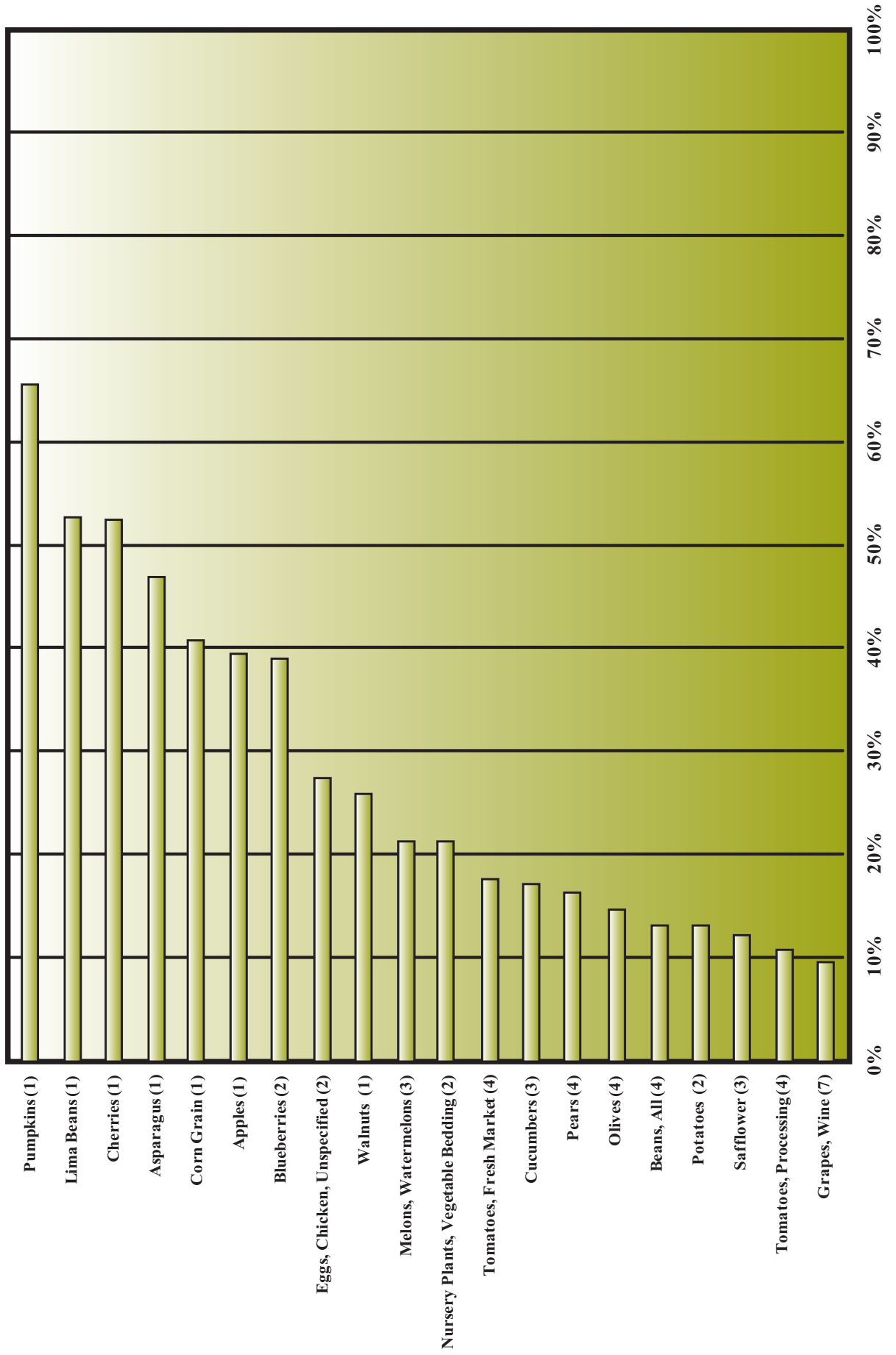
The oil from the first pressing is often centrifuged a second time at higher speed to eliminate any remaining water and solids.

## STEP 6: OIL STORAGE

After processing, the oil is stored in tanks or barrels for 1 – 3 months to further settle out any remaining water and solids. Stainless steel tanks protect the oil from excessive oxygen levels and exposure to sunlight. If the oil is not protected correctly, it becomes rancid. Finally, if desired, the oil is filtered before bottling.

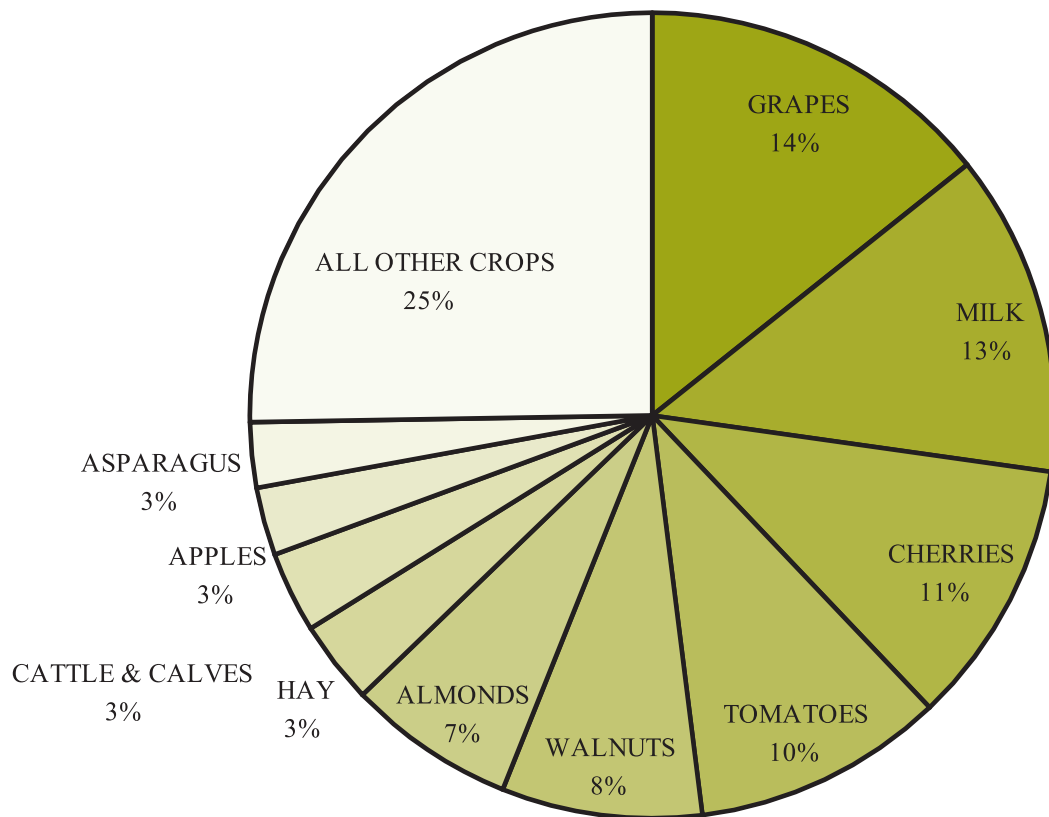
## SAN JOAQUIN COUNTY'S SHARE OF STATEWIDE PRODUCTION

Listed below are the top twenty crops which San Joaquin County produced in a large proportion compared to the State as a whole, based on gross value during the 2008 crop year. The bars represent San Joaquin County's percentage of the state's production value for the crop. The numbers in parenthesis next to the crop labels show San Joaquin County's Ranking for the production of that crop among the other counties of California.



# San Joaquin County's Top Ten Leading Crops for 2009

GRAPES	\$284,981,000
MILK	\$257,715,000
CHERRIES	\$212,735,000
TOMATOES	\$201,528,000
WALNUTS	\$160,536,000
ALMONDS	\$134,332,000
HAY	\$66,498,000
CATTLE & CALVES	\$64,711,000
APPLES	\$54,469,000
ASPARAGUS	\$52,118,000
ALL OTHER CROPS	\$510,851,000





# **Sustainable Agriculture**

## **Pest Exclusion/Detection**

Sustainable Agriculture is a system utilized by farmers to reach their goals of producing good yields and profits while following production practices that minimize negative short and long term impacts on the environment and the well-being of the community. In many ways San Joaquin County supports local agriculture in these goals. Most importantly, is our program to make certain invasive pests are kept out of the County. This is accomplished by the continual monitoring of local orchards, vineyards, nurseries, and residential areas for any sign of unwanted invasive pests.

Our office's Pest Exclusion/Detection branch monitors, identifies, and assists in the eradication and/or control of invasive pests. Five full-time and two part-time biologists daily inspect arriving plant material at postal and parcel facilities, nurseries, and private residences. There are thousands of inspections done annually for invasive pests. Additionally, many seasoned pest detection specialists work in trapping and monitoring programs geared to detect the arrival of invasive pests such as Light Brown Apple Moth, Glassy Winged Sharpshooter, Gypsy Moth, Mediterranean Fruit Fly and Apple Maggot, to name a few.

Several invasive pests are now presenting challenges to our County. They are:

Light Brown Apple Moth (LBAM): San Joaquin County experienced its first invasive pest quarantine in 29 years with the discovery of LBAM in the City of Manteca. Subsequent finds in Tracy and Stockton resulted in additional quarantines. Presently, LBAM is under eradication and survey and trapping continues throughout the County.

European Grape Vine Moth (EGVM): The discovery of EGVM in the Napa area during the fall of 2009 resulted in a statewide survey for the pest. EGVM is an invasive pest that has much potential to significantly damage grapes. Currently, our office is trapping the grape growing areas for EGVM.

Asian Citrus Psyllid (ACP): Asian Citrus Psyllid has been found in California and is under an intensive eradication and monitoring effort. ACP spreads Huanglongbing disease. This disease kills citrus trees and is the world's most devastating citrus disease. Our office is trapping and monitoring for ACP.

Glassy-winged Sharpshooter (GWSS): The County is in the 10<sup>th</sup> year of its GWSS prevention program. This pest spreads Pierce's disease in grapes. The disease kills grapes. The County continues to monitor, trap, and survey for this pest. After 10 years, the County still remains GWSS free.

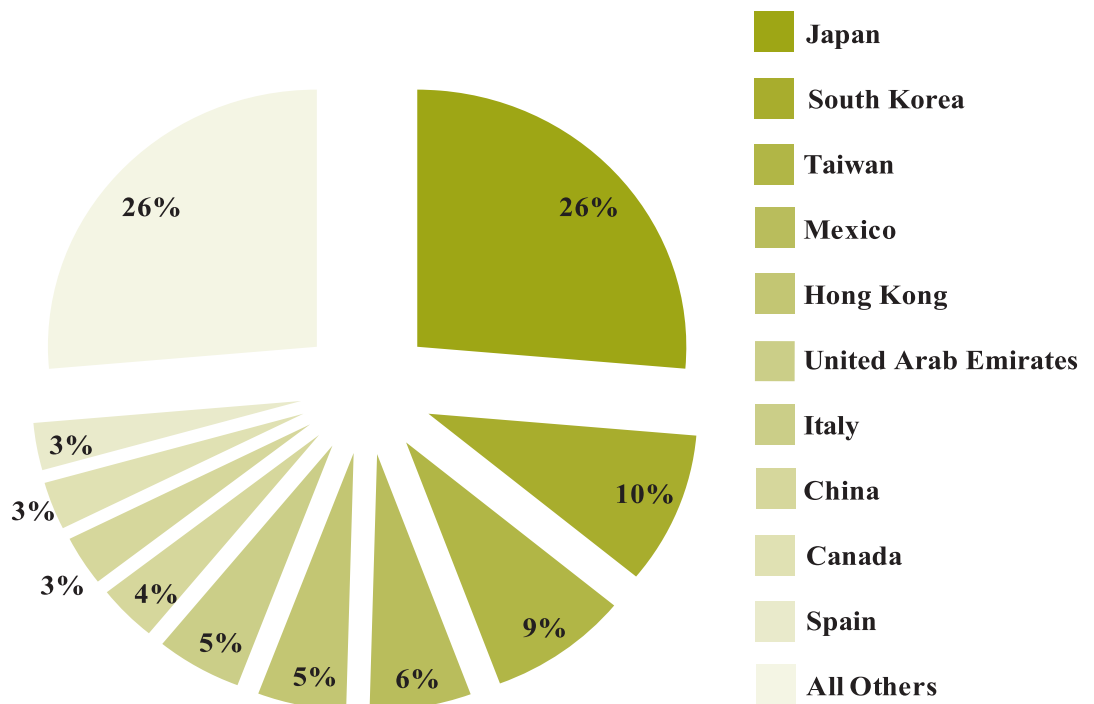
Sudden Oak Death (SOD): SOD is a disease of oaks that is also found in many nursery plants. This disease kills native oaks and damages nursery plants. Our office continues to monitor the County's nurseries for this deadly disease.

We ask for your help in our mission by obeying the quarantine laws and regulations. Avoid the temptation to bring produce and nursery products into our county from other states and countries without following existing rules, regulations and certifications. Together we will continue to keep agriculture safe and productive by keeping invasive pests out of our county.

# SAN JOAQUIN COUNTY TRADING PARTNERS 2009



## Export Shipments by Country Inspected in San Joaquin County



## General San Joaquin County Information

County Seat:	Stockton		
County Population (2008):	682,660		
Population per Square Mile:	489		
Incorporated Cities (7):	Escalon, Lathrop, Lodi, Manteca, Ripon, Stockton, Tracy		
Land Area (Square Miles):	1400		
Land Area in Farms (Acres-2007):	737,503		
Total Cropland (Acres-2007):	492,032		
Irrigated Cropland (Acres- 2007):	453,980		
Number of Farms (2007):	3,624		
Average Size of Farms (Acres-2007):	204		
Agricultural Work Force (Monthly Average-2007):	23,037		
Lowest Elevation in County (Delta Area):	12’ Below Sea Level		
Highest Elevation in County (Southwest Hills):	3065’ Above Sea Level		
Length of County (North to South):	75 Miles		
Length of County (East to West):	65 Miles		
Average January Temperature (F)	46		
Average July Temperature (F)	76		
Average Annual Rainfall:			
North County:	16 Inches	South County:	14 Inches
East County:	12 Inches	West County:	9 Inches

### A SPECIAL "THANK YOU"

The San Joaquin County Agricultural Commissioner's Office expresses its appreciation to the



and



for their contributions to the 2009 Crop Report. We would also like to thank the  
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AGRICULTURAL COMMISSIONER'S OFFICE  
SAN JOAQUIN COUNTY  
2101 East Earhart Avenue, Suite 100  
Stockton, CA 95206

