

2008
County of Ventura
Agricultural Commissioner's
Annual Crop and Livestock Report



Office of the
AGRICULTURAL COMMISSIONER

AGRICULTURAL COMMISSIONER

Henry S. Gonzales

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Susan L. Johnson

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AGRICULTURAL BIOLOGISTS

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Blanca Enriquez-Pratt, Tim Fritch, Brady Gergovich, Freddi Hermann,
Ellen Kragh, Dexter McDonald, George Mendoza, Louis Ortali,
Meredith Shepard, Michael Silverman, Carl Waite

INSECT DETECTION SPECIALISTS

Clifford Ball, Linda Bellamy, Michael Bellamy, Douglas Crissman,
Francisco Hernandez, Barbara Miller, Jose Muñoz, Connie Ratner,
Ingus Richters, Meredith Torres

Front cover photo: Bob Brown, insect production manager for Associates Insectary, releasing *Cryptolaemus spp.* for biological control of citrus mealybug in the late 1940's.



Office of
AGRICULTURAL COMMISSIONER

P.O. Box 889, Santa Paula, CA 93061
815 East Santa Barbara Street
Telephone: (805) 933-2926
FAX: (805) 525-8922

Agricultural Commissioner
Henry S. Gonzales

Chief Deputy
Susan L. Johnson

July 21, 2009

TO: The Honorable Board of Supervisors of Ventura County

Steve Bennett, 1st District, Chair
Linda Parks, 2nd District
Kathy Long, 3rd District
Peter C. Foy, 4th District
John C. Zaragoza, 5th District
and
A.G. Kawamura, Secretary
California Department of Food & Agriculture

Pursuant to Section 2279 of the California Food and Agricultural Code, I hereby submit the Ventura County Annual Crop and Livestock Report. The estimated gross value for Ventura County agriculture for calendar year 2008 is \$1,613,247,000. This is an overall increase of 4% from 2007.

Strawberries are, once again, the leading commodity, with a value of \$393,507,000. This is an increase of 7% over 2007. Nursery stock remained the second leading crop, with a value of \$298,690,000; an increase of 2% from 2007. Lemons, again in third, increased 7% to \$250,713,000. Raspberries moved from sixth to fifth place, increasing 22% to \$84,594,000. Avocados retained their seventh place ranking, with a 20% increase to \$63,376,000. Celery retained its fourth place ranking, but with a 5% decrease to \$160,650,000, and tomatoes are down from fifth to sixth place, dropping 10% to \$77,505,000. Other crops experienced similar increases and decreases, respectively.

Overall, 2008 was another remarkable year for agriculture in Ventura County, especially considering the downturn in most other industries. It should be noted that this report reflects gross values only and does not represent the net return to farmers. For some farmers, 2008 was not a "good" year, with prices for petroleum products such as fertilizer and fuel reaching record highs. Nonetheless, agriculture continues to be a mainstay for Ventura County's economy and should remain so for the foreseeable future.

Ventura County's long history of innovative use of biological control agents on pests is featured in this year's Crop Report to show local farming's commitment to sustainable practices in the past, present, and undoubtedly in the future. The following persons generously shared historical information on Ventura County insectaries: Monte Carpenter, Fillmore Insectary (closed); Brett Chandler & Michelle Haase, Associates Insectary; Ron Whitehouse, Rincon-Vitova; and Dan Cahn, Syngenta Bioline.

Special thanks go to Kerry Dufrain for compiling the data in this report and to the industry members that provided her with their individual information.

Respectfully submitted,

Agricultural Commissioner
County of Ventura

Saluting Ventura County Insectaries, Past and Present

Ventura County agriculture today continues its long time commitment to integrated pest management (IPM) in citrus, avocado, and berry production. The use of beneficial insects and mites for biological control of injurious pests helps contribute to keeping all three fruit crops in the county's top ten. This important component of **IPM in the county relies on the active support of three local insectaries: Associates Insectary, Rincon-Vitova, and Syngenta Bioline.**

Biological pest control took root in Ventura County over eighty years ago. The local Mediterranean climate made it possible, but it was the hard work and vision of pioneers in rearing and releasing beneficial predators and parasites like Howard Lorbeer, Howard Sheldon, W.C. Beckley, and Everett Dietrick that helped bring it to maturity. In 1922 growers in Fillmore and Piru formed a cooperative pest control district called the Fillmore Citrus Protective District (FCPD). Howard Lorbeer, was to lead the FCPD as manager from 1926 until 1974. FCPD became a successful bio-control district using the Fillmore Insectary built in 1926. Overtime, it was used to raise 20 different species of beneficial insect and mites for use on over 9000 acres. Important citrus pests and the beneficials used to reduce their numbers included: Citorphilus mealy bug and the lady bird beetle *Cryptolaemus montrouzieri*; black scale and the parasite *Metaphycus helvolus* in the late 30's; and red scale and the parasite *Aphytis melinus*, introduced in Fillmore and Piru orchards in 1960. Avocados had been relatively pest free until the Persea mite arrived in the 90's. The insectary began raising the predatory mite *Gaendromus helveolus* as part of a new IPM program in avocados. Monte Carpenter worked at the insectary forty-two years, thirteen as its manager. He would see **the Fillmore Insectary close in October 2005 after seventy-nine years of operation.** Its legacy of pest management by natural enemies with timed releases of key beneficials, supported by ant control, still continues in the county.

In 1928 a group of growers in Santa Paula formed a cooperative to rear *Cryptolaemus* called, Associates Insectary (AI). U.C. Berkley trained W.C. Beckley shepherded AI from 1933 until 1969. In 1937 AI expanded services, adding a spray division. By 1957 AI responsible for the IPM on over 9000 acres with the Mupu, Santa Paula Citrus Fruit, Ventura Citrus, and Saticoy Lemon Associations and Rancho Sespe. In 1965 Limoneira Company & Affiliates joined AI to participate in the red scale program. Today in addition to *Cryptolaemus* beetles, AI rears *Aphytis melinus* and Decollate snails. Almost 3,000 acres of avocado groves have now joined AI. More than 500 million beneficials were reared and liberated in member groves last year. **In February 2009 Associates Insectary conducted its 81st annual meeting.** It is now led by President/General Manager, Brett Chandler and is the county's longest operating insectary.

The oldest commercial, free-enterprise insectary called the Rincon Insectary (RI) was started in 1951 by entomologist entrepreneurs, Ernest "Stubby" Green, Douglas Green, and Everett Dietrick. The production facility was located in Faria Beach and was used to rear *C. montrouzieri*, known as the mealy bug destroyer. In 1958 RI began to rear *Trichogramma spp*, important egg parasites of cotton boll worm. The insectary incorporated in 1959 and continued to diversify its operations. It produced the red scale parasite *Aphytis spp*. for the FCPD until the district started its own program. Everett Dietrick became president of RI in 1961. He was a biological control researcher affiliated with the University of California and a great proponent of applied insect ecology. Growers contracted with RI entomologists to monitor orchards for pests and beneficial insects to make pest control recommendations. In 1972 Rincon Insectary merged with Vitova of Fontana to become Rincon-Vitova Insectaries. **Rincon Vitova will celebrate its 50th anniversary in July 2009** with Jan Dietrick, as the general manager.

Ventura County's newest insectary is Syngenta Bioline. It is a wholly owned subsidiary of Syngenta AG, Basle, Switzerland. The company produces beneficial insects and mites for use in "Integrated Crop Management programmes" in Europe, Japan, and the United States. **The Syngenta Bioline insectary in Oxnard is the company's sole production site in the United States** and is under the direction of Dan Cahn, President. The insectary specializes in rearing the predatory mite, *Phytoseiulus persimilis*, used on important Ventura County crops: strawberry, raspberry, and greenhouse ornamentals.

AGRICULTURAL CROP REPORT

Recapitulation and Index

2007 – 2008

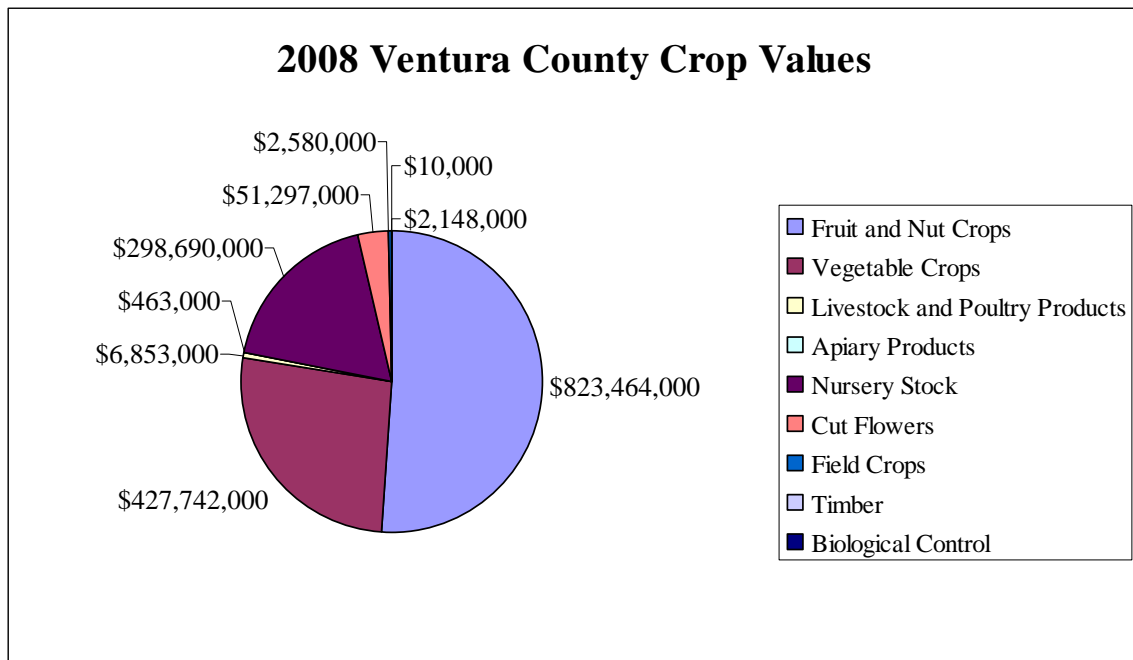
CROP GROUPING	YEAR	\$ VALUE ¹
1. FRUIT AND NUT CROPS	2008	\$823,464,000
Page #4	2007	\$752,138,000
2. VEGETABLE CROPS	2008	427,742,000
Page #5-6	2007	442,220,000
3. NURSERY STOCK ²	2008	298,690,000
Page #7	2007	292,989,000
4. CUT FLOWERS	2008	51,297,000
Page #8	2007	48,646,000
5. FIELD CROPS	2008	2,580,000
Page #8	2007	1,624,000
6. LIVESTOCK AND POULTRY	2008	6,853,000
Page #9	2007	9,006,000
7. APIARY PRODUCTS	2008	463,000
Page #9	2007	640,000
8. TIMBER	2008	10,000
Page #9	2007	17,000
9. SUSTAINABLE AGRICULTURE	2008	2,148,000
Page #10	2007	2,718,000
GRAND TOTAL	2008	\$1,613,247,000
	2007	1,549,998,000

¹ Figures are rounded off to nearest \$1000

² Includes Cut Christmas Trees

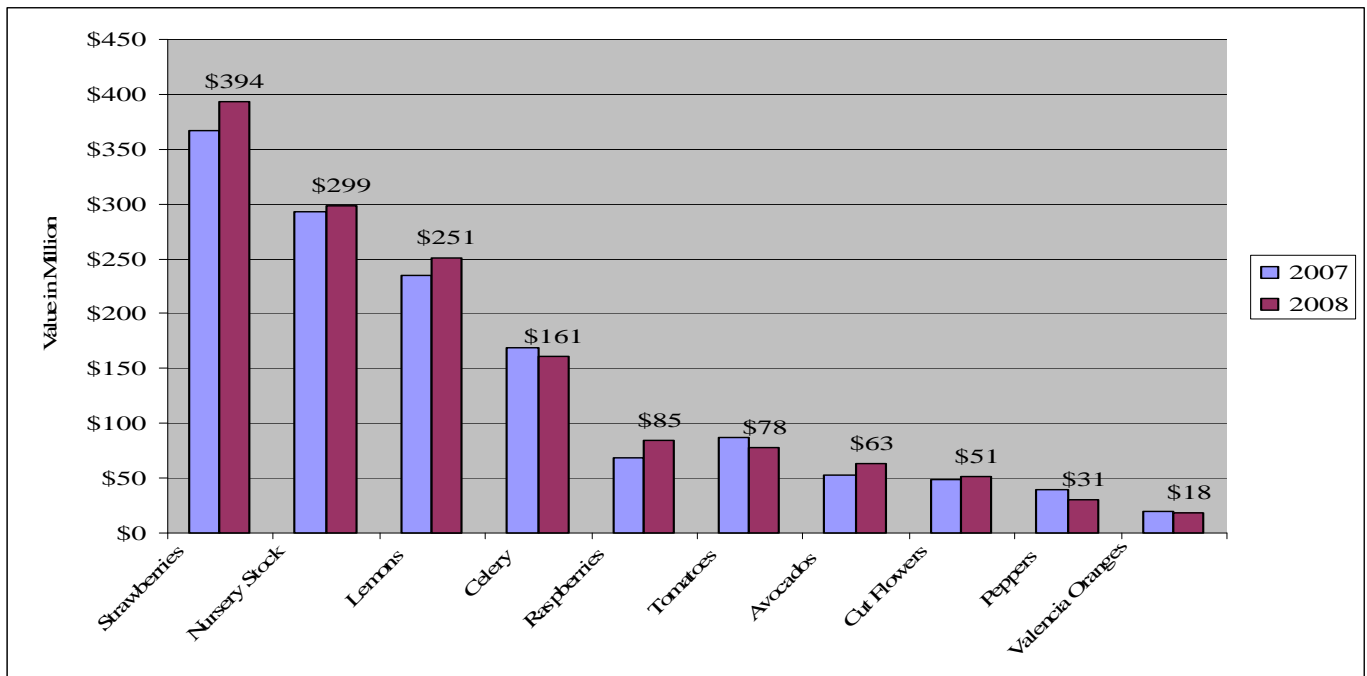
Five Year Comparison Of Ventura County Crop Values

	2004	2005	2006	2007	2008
Fruit and Nut Crops	740,039,000	652,777,000	755,700,000	752,138,000	823,464,000
Vegetable Crops	354,514,000	330,269,000	426,659,000	442,220,000	427,742,000
Livestock and Poultry Products	1,942,000	2,150,000	4,775,000	9,006,000	6,853,000
Apiary Products	362,000	509,000	431,000	640,000	463,000
Nursery Stock	222,514,000	213,661,000	263,890,000	292,989,000	298,690,000
Cut Flowers	65,663,000	51,751,000	52,456,000	48,646,000	51,297,000
Field Crops	2,270,000	1,193,000	1,677,000	1,624,000	2,580,000
Timber	71,000	62,000	16,000	17,000	10,000
Biological Control	2,337,000	1,999,000	2,570,000	2,718,000	2,148,000
GRAND TOTAL	\$1,389,452,000	\$1,225,109,000	\$1,508,174,000	\$1,549,988,000	\$1,613,247,000



TEN LEADING CROPS FOR 2008

RANK	CROP	VALUE
1 st	Strawberries	\$393,507,000
2 nd	Nursery Stock	298,690,000
3 rd	Lemons	250,713,000
4 th	Celery	160,650,000
5 th	Raspberries	84,594,000
6 th	Tomatoes	77,505,000
7 th	Avocados	63,376,000
8 th	Cut Flowers	51,297,000
9 th	Peppers	30,773,000
10 th	Valencia Oranges	18,227,000



OTHER MILLION DOLLAR CROPS

Greens	18,191,000	Beans (all)	4,584,000
Cabbage	16,627,000	Oriental Vegetables	4,380,000
Cilantro	12,599,000	Kale	4,199,000
Veg. Transplants*	10,385,000	Orchids*	4,024,000
Spinach	9,504,000	Beet	3,978,000
Lettuce	8,893,000	Carrots	3,053,000
Livestock	6,853,000	Cucumber	3,042,000
Broccoli	6,643,000	Onions (all)	1,926,000
Radishes	5,962,000	Naval Oranges	1,830,000
Parsley	5,013,000	Poinsettia*	1,646,000

* Included in Nursery Stock total above

FRUIT AND NUT CROPS

ACREAGE, PRODUCTION AND VALUES 2007-08

CROP	YEAR	PRODUCTION		TOTAL	UNIT	\$ VALUE	
		HARVESTED ACREAGE	PER ACRE			PER UNIT	TOTAL
AVOCADOS							
	2008	17,608	1.69	29,701	Tons	\$2,133.80	\$63,376,000
	2007	16,050	1.63	26,160	“	2,022.59	52,911,000
GRAPEFRUIT							
	2008	106	8.49	900	“	273.33	246,000
	2007	83	8.25	685	“	672.99	461,000
LEMONS							
	2008	18,541	16.82	311,874	“	803.89	250,713,000
	2007	18,892	16.67	320,592	“	733.41	235,124,000
ORANGES (Navel)							
	2008	450	11.00	4,949	“	369.77	1,830,000
	2007	394	9.52	3,752	“	485.61	1,822,000
ORANGES (Valencia)							
	2008	4,464	15.44	68,946	“	264.37	18,227,000
	2007	4,273	9.25	39,522	“	490.69	19,393,000
RASPBERRIES							
	2008	2,370	6.42	15,212	“	5,561.00	84,594,000
	2007	1,592	7.50	11,940	“	5,801.34	69,268,000
STRAWBERRIES							
Total	2008	11,721	25.01	293,087	“	1,342.63	393,507,000
	2007	12,048	24.17	291,227	“	1,258.22	366,428,000
Fresh	2008			214,963	“	1,582.98	340,282,000
	2007			183,559	“	1,604.02	294,432,000
Processed	2008			78,124	“	681.29	53,225,000
	2007			107,668	“	668.69	71,996,000
TANGERINES & TANGELOS							
	2008	461	3.76	1,732	“	1,429.56	2,476,000
	2007	349	3.88	1,355	“	1,608.12	2,179,000
MISC. FRUITS AND NUTS ³							
	2008	936			“		8,495,000
	2007	733			“		4,552,000
TOTAL							
	2008	56,657					\$823,464,000
	2007	54,414					752,138,000

³ MISC. FRUITS AND NUTS include Apples, Apricots, Asian Pears, Bushberries, Cherimoya, Grapes, Guavas, Kiwi, Limes, Olives, Persimmons, Macadamias, Walnuts; and miscellaneous citrus, deciduous, and subtropical fruit

VEGETABLE CROPS

ACREAGE, PRODUCTION AND VALUES 2007-08

PRODUCTION					\$ VALUE		
CROP	YEAR	HARVESTED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
BEANS							
Green and Dry Limas,	2008	1,756	2.94	5,167	Tons	887.17	\$4,584,000
Green Snap	2007	1,458	2.52	3,673	“	787.91	2,894,000
BEETS	2008	390	11.53	4,495	“	884.94	3,978,000
	2007	385	11.66	4,490	“	695.99	3,125,000
BROCCOLI							
Fresh and	2008	1,504	7.33	11,031	“	602.21	6,643,000
Processed	2007	1,059	8.91	9,431	“	594.85	5,610,000
CABBAGE	2008	2,857	26.94	76,970	“	216.02	16,627,000
	2007	2,420	18.83	45,577	“	232.62	10,602,000
CARROTS	2008	408	17.86	7,288	“	418.91	3,053,000
	2007	963	25.19	24,260	“	207.87	5,043,000
CELERY	2008	11,918	34.96	416,661	“	385.57	160,650,000
	2007	11,585	36.34	421,026	“	402.62	169,512,000
CILANTRO	2008	3,702	8.58	31,753	“	396.78	12,599,000
	2007	3,037	8.56	25,988	“	516.39	13,420,000
CUCUMBERS ⁴	2008	79	23.85	1,884	“	1,614.65	3,042,000
	2007	60	29.43	1,766	“	1,680.07	2,967,000
GREENS ⁵	2008	1,073	7.05	7,560	“	2,406.22	18,191,000
	2007	1,459	6.76	9,867	“	1,670.01	16,478,000
KALE	2008	393	12.35	4,853	“	865.24	4,199,000
	2007	270	12.51	3,378	“	911.19	3,078,000
LETTUCE	2008	1,573	11.25	17,693	“	506.53	8,962,000
Total	2007	1,782	11.45	20,412	“	473.25	9,660,000
Head	2008	123	7.99	983	“	661.24	650,000
	2007	198	17.63	3,490	“	226.07	789,000
Romaine	2008	649	13.90	9,024	“	356.38	3,216,000
	2007	861	12.42	10,697	“	402.54	4,306,000
Leaf	2008	801	9.60	7,686	“	663.02	5,096,000
	2007	723	8.61	6,225	“	733.33	4,565,000

⁴ Includes hydroponics

⁵ Includes: chard, collard, mustard, turnip and watercress.

VEGETABLE CROPS

ACREAGE, PRODUCTION AND VALUES 2007-08

CROP	YEAR	<u>PRODUCTION</u>		TOTAL	UNIT	<u>\$ VALUE</u>	
		HARVESTED ACREAGE	PER ACRE			PER UNIT	TOTAL
ONIONS	2008	339	17.68	5,992	Tons	\$478.81	\$2,869,000
Green & Dry	2007	395	20.53	8,111	"	441.25	3,579,000
ORIENTAL VEG.	2008	616	11.30	6,961	"	629.22	4,380,000
	2007	544	10.93	5,948	"	616.17	3,665,000
PARSLEY	2008	657	12.13	7,967	"	629.22	5,013,000
	2007	501	18.46	9,246	"	744.43	6,883,000
PEPPERS							
Bell and	2008	2,767	19.48	53,906	"	570.86	30,773,000
Chili	2007	3,029	23.65	71,630	"	553.90	39,676,000
PUMPKIN	2008	102	14.47	1,476	"	256.78	379,000
	2007	131	13.79	1,807	"	178.75	323,000
RADISHES	2008	1,265	13.53	17,115	"	348.35	5,962,000
	2007	984	12.68	12,476	"	475.39	5,931,000
SPINACH	2008	1,239	8.35	10,350	"	918.26	9,504,000
	2007	1,791	5.81	10,414	"	884.00	9,206,000
SWEET CORN	2008	197	6.13	1,207	"	367.85	444,000
	2007	272	6.88	1,872	"	520.03	974,000
TOMATOES ⁶	2008	1,853	46.21	85,629	"	905.13	77,505,000
	2007	1,540	54.34	83,685	"	1,033.47	86,486,000
VEGETABLES, MISC. ⁷	2008	1,353			"		48,385,000
Field, Indoor, and Processed	2007	1,539			"		43,108,000
TOTAL	2008	36,041					\$427,742,000
	2007	35,204					442,220,000

⁶ Includes hydroponics

⁷ Includes: artichokes, arugula, asparagus, baby vegetables, cauliflower, eggplant, endive, garlic, gourds, herbs, kohlrabi, leeks, melons, mushrooms, peas, radicchio, sprouts, squash, tomatillos, and turnips.

NURSERY STOCK PRODUCTION AND VALUES 2007-08

ITEM	YEAR	PRODUCTION		PRODUCTION AREA		Per Unit	TOTAL
				Greenhouse Square Feet	Field Acres		
NURSERY STOCK							
	2008			6,662,955	4,432		\$298,690,000
	2007			7,569,379	4,914		292,989,000
Fruit and Nut Trees	2008	908,377	Trees	18,900	209	17.16	15,588,000
	2007	711,392	Trees	-	93	14.29	10,166,000
Potted Plants	2008	2,328,660	Pots	2,007,743	24	4.14	9,644,000
	2007	3,445,402	Pots	2,928,135	48	4.08	14,073,000
Propagative Mat	2008	46,426,920	Cuttings	748,904	18	.12	5,541,000
	2007	51,407,075	Cuttings	724,320	15	.14	7,112,000
Herb. Perennials	2008	9,161,367	Containers	564,710	145	2.19	20,019,000
	2007	7,846,081	Containers	852,384	144	2.46	19,330,000
Woody Orn.*	2008	12,829,087	Tree/Shrubs	831,900	2,614	14.32	183,690,000
	2007	14,294,495	Tree/Shrubs	737,900	2,688	11.85	169,377,000
Bed. Plants	2008	30,244,344	Flats	635,336	1,414	1.78	53,823,000
Gr. Cover & Turf	2007	57,772,388	Flats	571,690	1,924	1.14	65,846,000
Veg. Transplants	2008	3,839,084	Flats	1,855,462	8	2.71	10,385,000
	2007	3,043,410	Flats	1,754,950	2	2.33	7,085,000
TOTAL	2008						\$298,690,000
	2007						292,989,000

*Includes cut Christmas Trees

CUT FLOWERS PRODUCTION AND VALUES 2007-08

ITEM	YEAR	ACRES	PRODUCTION	UNIT	TOTAL \$ VALUE
FLOWER BLOOMS & STEMS	2008	40	12,914,880	Blooms	\$3,063,000
	2007	30	13,887,547	Blooms	4,130,000
CUT GREENS & DRIED FLOWERS	2008	167	640,361	Bunches	1,745,000
	2007	152	498,546	Bunches	1,463,000
FLOWER BUNCHES Total	2008	767	14,884,354	Bunches	46,489,000
	2007	738	14,099,052	Bunches	43,053,000
Statice, Lace, Aster And Gypsophila	2008	126	1,472,219	"	3,614,000
	2007	104	1,619,489	"	3,917,000
Chrysanthemums and Sunflowers	2008	69	2,366,601	"	3,975,000
	2007	59	2,136,414	"	4,013,000
Lilies & Irises	2008	77	3,756,675	"	21,141,000
	2007	62	3,087,443	"	15,973,000
Lisianthus	2008	24	770,528	"	2,241,000
	2007	27	630,515	"	2,133,000
Delphinium, Larkspur, Stock & Snapdragons	2008	302	3,288,444	"	7,430,000
	2007	284	2,776,686	"	5,699,000
Miscellaneous	2008	169	3,229,887	"	8,088,000
	2007	202	3,848,505	"	11,318,000
TOTAL	2008	974			\$51,297,000
	2007	920			48,646,000

FIELD CROPS ACREAGE, PRODUCTION AND VALUE 2007-08

CROP	YEAR	HARVESTED ACREAGE	TOTAL \$ VALUE
ALFALFA AND PASTURE Irrigated and Non-Irrigated	2008	100,280	\$1,647,000
	2007	100,106	1,071,000
GRAIN ⁸ , HAY, & VEGETABLE SEED	2008	1,376	933,000
	2007	1,248	553,000
TOTAL	2008		\$2,580,000
	2007		1,624,000

⁸ Includes green barley

LIVESTOCK AND POULTRY PRODUCTION AND VALUES 2007-08

ITEM	YEAR	PRODUCTION	UNIT	\$ VALUE	
				PER UNIT	TOTAL
LIVESTOCK					
Cattle, Hogs	2008	28,461	cwt.	101.61	\$2,892,000
Sheep	2007	20,339	cwt.	108.41	2,205,000
POULTRY					
Chickens and	2008				\$3,794,000
Eggs	2007				6,531,000
OTHER LIVESTOCK					
	2008				167,000
Deer, Duck and Squab	2007				270,000
TOTAL					
	2008				\$6,853,000
	2007				9,006,000

APIARY PRODUCTS PRODUCTION AND VALUES 2007-08

CROP	YEAR	PRODUCTION	UNIT	\$ VALUE	
				PER UNIT	TOTAL
HONEY	2008	67,170	lbs	\$1.62	\$109,000
	2007	210,605	lbs	1.32	279,000
BEESWAX AND POLLEN	2008	6,176	“	3.24	20,000
	*2007	2,340	“	2.14	5,000
POLLINATION USE	2008				334,000
	2007				356,000
TOTAL					
	2008				\$463,000
	2007				640,000

* Beeswax only

TIMBER PRODUCTION AND VALUES 2007-08

CROP	YEAR	\$VALUE
TIMBER ⁹	2008	\$10,000
	2007	\$17,000

SUSTAINABLE AGRICULTURE

ITEM	PEST	AGENT	SCOPE OF PROGRAM
BIOLOGICAL CONTROL			
Commercial Insectaries	Red and black scale, Mealybug, snails, various aphids, mites and flies	<u>Aphytus melinus</u> , <u>Cryptolemus</u> , Decollate snails, various predators, parasitic wasps and nematodes	Estimate 530,717,5000 beneficials, released on 242 ranches. Valued at \$2,148,000
COLONIZATION OF BENEFICIAL ORGANISMS	Yellow Star Thistle	<u>Puccinia jacaeca</u>	1 site/1 release 100 mg spores/sq. meter
PEST ERADICATION	Dalmation Toadflax	Mechanical/ Digging	1 Site
	Scotch Thistle	Mechanical/ Digging	1 Site
	Spotted Knapweed	Mechanical/ Digging	1 Site
	Euphorbia terracina	Mechanical/Digging	1 Site
PEST EXCLUSION		<u>Incoming Shipments</u>	
	Various	Postal/UPS/Fed Express (Parcels)	5,679
		Truck/Air Freight	3,872
	Gypsy Moth	Household Goods (Inspections)	87
		Total	9,638
ORGANIC FARMING			
	Number of registered growers	82	
		Vegetables & Herbs	Acreage 1,485
		Fruits and Nuts	Acreage 2,967
		Field Crops	Acreage 339
		Flowers	Acreage 15
		Total Acreage	4,806