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I am pleased to submit the 2002 Fresno County Agricultural Crop and Livestock Report. This annual compilation presents statistical data pertaining to the acreage, yield, and gross value of Fresno County agricultural products.

The total gross production value of Fresno County agricultural commodities in 2002 was \$3,419,087,000. This represents a 6.18 percent increase from the 2001 production value. It must be emphasized that the values presented in this report reflect gross values only, and do not in any manner reflect net income or loss to producers. The agricultural economy remains depressed. Growers continue to have difficulty meeting financial obligations and obtaining operating capital. Growers are still being adversely impacted by low commodity prices and increased production costs, particularly in the areas of labor, water, fuel and energy.

Agriculture continues as the major industry in Fresno County, and is a driving force in the county's economy. Every dollar received by Fresno County producers results in the economic extension benefit of three and one-half dollars to the total economy of the county.

I sincerely appreciate the professional and dedicated work performed by Deputy Agricultural Commissioner/Sealer Dennis C. Plann; Supervising Agricultural/Standards Specialist Bruce Clayton; Agricultural/Standards Specialists Scotti Walker, Jennifer Fulbright and Brice Gross; and Seasonal Agricultural/Standards Specialists Cézarne Baker and Royann Delgado, as well as the rest of my staff at the Department of Agriculture for the preparation of this report.

My thanks to the many individuals, related agencies, and members of the agricultural industry for their contributions to the compilation of this report.

Sincerely,

Jerry Prieto, Jr.
Agricultural Commissioner/Sealer

"We understood the rhythms of farming. Spring meant work, summer meant harvest, fall a time for gratitude, and winter a pause for reflection."

*"Epitaph for a Peach
Four Seasons on My Family Farm"*

David Mas Masumoto

Table of Contents

	Page
Fresno County's 10 Leading Crops	iv
2002 Highlights in Retrospect	v
Field Crops	1
Seed Crops	3
Vegetable Crops	4
Fruit and Nut Crops	7
Nursery Products	11
Livestock and Poultry	12
Livestock and Poultry Products	14
Apiary Products and Pollination Services	15
Industrial Crops	16
Statistical Comparisons and Summaries	17
Sustainable Agriculture	18

This report is also available at our internet site:
<http://www.fresno.ca.gov/4010/agwelcm.htm>

FRESNO COUNTY'S 10 LEADING CROPS

Crop	2002 Rank	2002 Dollar Value	2001 Rank	1992 Rank	1982 Rank
GRAPES	1	\$ 400,255,000	2	1*	1
COTTON	2	345,189,000	1	2	2
POULTRY	3	270,851,000	3	+	+
TOMATOES	4	265,887,000	5	3	4
MILK	5	199,937,000	4	4	5
ALMONDS	6	196,565,000	7	11	15
CATTLE AND CALVES	7	177,445,000	6	5	3
ORANGES	8	138,654,000	8	7	8
GARLIC	9	131,004,000	9	16	17
PLUMS	10	<u>111,500,000</u>	12	12	7
TOP TEN TOTAL		\$2,237,287,000			

+ Not previously combined for ranking purposes

* Revised

2002 Highlights in Retrospect

January:

Mild temperatures and ample soil moisture contributed to vigorous growth in grain, vegetable, and forage crops. Wet conditions restricted most field work until late in the month. Grapevines were pruned and tied; nut and tree fruit orchards were pruned and treated for dormant season pest control. Vineyards and orchards were pulled out and new ones were planted; fresh varieties of tree fruit and grapes were grafted onto existing rootstocks. Fields were prepared for planting of summer vegetables. Navel oranges, Satsuma tangerines, and tangelos were picked.

February:

Cold temperatures early in the month helped with chilling requirements for tree fruit, followed by warmer conditions that spurred good progress in spring crops. Tomato planting began in the west side districts. Pruning, tying, brush shredding, discing, and herbicide applications were in progress in grape vineyards. Nut and tree fruit growers applied dormant sprays and herbicides. Bloom began in almond and tree fruit orchards later in the month. Strawberry plants showed new growth. Rangeland grasses grew vigorously. Beehives were placed in almond and tree fruit orchards. Navel oranges were harvested.

March:

Harvesting of winter forage began. Cotton and rice planting started as soil temperatures warmed. Cutting, windrowing, and drying of alfalfa hay began. Fields were prepared for planting of summer vegetables; tomato, onion, and garlic plantings were thriving. Lettuce, broccoli, and asparagus were harvested. Sugar beets and corn were planted; sprouted plants were visible by the end of the month. Strawberries and blueberries began to bloom; fields were weeded and treated to control mildew. Bloom was widespread in almond and tree fruit orchards. Bud break began in grape vineyards. Grape, nut, and tree fruit growers made applications of insecticides and fungicides.

April:

Grain fields were irrigated and seedhead development was good. Cotton planting was in full swing; many cotton growers incorporated insecticides during planting. Hay and seed alfalfa plantings were treated to control insect pests and weeds. Sugar beet fields were irrigated, cultivated, and treated to control insect pests. Fruit set in tree fruit orchards appeared good and fruit thinning began; some tree fruit varieties were girdled to improve fruit size. Strawberries were picked and sold at roadside stands. Vegetable and melon plantings were thriving, and planting of new fields continued. Bees were active in blooming citrus and apple orchards. Valencia oranges were picked and packed.

May:

Rain and hail on May 20 damaged tree fruit, citrus, grapes, vegetables, and hay in the Clovis, Sanger and Reedley districts. Grain plantings matured well; wheat, oat hay, and winter forage were harvested. Cotton growth was slowed by erratic weather early in the month but improved as conditions stabilized. Alfalfa hay was cut, windrowed, and baled; bloom began in seed alfalfa. Rice, field corn, and sweet corn were planted; emerged stands showed good growth. Safflower fields were in bloom. Lettuce, broccoli, asparagus, garlic, and onions were harvested. Vegetable crops were thinned, irrigated and treated to control insect pests. Sweet corn and silage corn were harvested. Boysenberry and raspberry vines bloomed and had good fruit set; strawberries and blueberries were harvested. Cherries, apricots, nectarines, and peaches were picked and packed. Tender new grape leaves were harvested for food use. Leaf and shoot thinning, and applications of growth hormones were in progress in table grape vineyards. Almonds, walnuts, pistachios, and pecans developed well and were irrigated. Pomegranates bloomed and set fruit; apple orchards were treated to control disease and insect pests. Valencia oranges were harvested; lemons and oranges were brought in from other counties for packing and shipping. Sheep were treated to their spring shearing.

June:

Ideal growing conditions prevailed; wheat, barley, oats, summer vegetables, melons, stone fruit, and a wide variety of specialty vegetables were harvested. Cotton plants bloomed and were weeded by hand crews. Harvesting of alfalfa hay and feed silage continued; alfalfa seed fields were in bloom and full of bees aiding in pollination. Sugar beet harvesting started in the west side districts. Safflower fields began to bloom. Fields of rice grew vigorously and were treated to control weeds. Field corn, silage corn, corn for chips and snacks, and sweet corn for human consumption were harvested. Blackeyed beans were planted. Table grape clusters were thinned and tipped to improve fruit quality. Raisin, wine, and table grape vineyards were irrigated and treated to control diseases and insect pests. Pomegranates were sizing well and developing color. Fresh figs, strawberries, blackberries, boysenberries, and blueberries were harvested. Valencia oranges were harvested; citrus orchards were irrigated, fertilized, and treated to control insect pests. Olive orchards were treated to control olive fruit fly. Bees were active in seed alfalfa and melon fields. Hot, dry conditions were the norm in rangeland; dairy cattle were cooled by fans and misters as temperatures rose.

July:

Harvesting of wheat, oats, and barley was complete; straw was cut, baled, and stacked. Harvested grain fields were left fallow, grazed by sheep, or disced and leveled to prepare for the next crop. Cotton bloom was widespread and good boll development was reported. Plant growth regulator was applied in some cotton fields to advance boll maturity. Alfalfa hay and alfalfa seed fields showed strong growth; alfalfa seed fields were in bloom. Safflower fields were drying in the heat. Field corn, silage corn, and sweet corn were harvested. Dry beans were growing well and being irrigated. Sugar beets and sweet potatoes developed rapidly; sugar beet harvesting continued in mature fields. Table grape harvesting began and expanded as the month progressed. Grape vineyards were irrigated and treated to control mildew, mites, and vine mealybug. Peaches, plums, nectarines, apricots, and pluots were harvested and shipped to consumers around the world. Good fruit development continued in pomegranate, apple, and persimmon orchards; Gala apples were harvested. Melons and summer vegetables were harvested throughout the county. Citrus orchards were irrigated and fruit development was steady. Almonds began to show hull split; growers prepared orchard floors for harvest. A gypsy moth was found in a trap in the Tarpey Village area of Fresno County, but a followup trapping program produced no subsequent finds.

August:

Harvested grain fields were left fallow or prepared for their next crop. Wheat was planted for winter forage. Good seed set took place in alfalfa seed fields; alfalfa hay and Sudan grass hay were cut, windrowed, and baled. Boll set and development progressed in cotton fields; open bolls were evident at month's end. Sugar beets, safflower, and dry beans were harvested. Rice fields were allowed to dry and mature. Stone fruit, pears, apples, pomegranates, figs, and Asian pears were picked, packed, and shipped from county orchards. Table, wine, and raisin grape harvesting was in full swing; canes were cut in DOV (dried on the vine) raisin vineyards to start fruit drying. Melons, tomatoes, onions, garlic, squash, eggplant, cucumbers, peppers, and sweet corn were harvested. Vegetable fields were planted to broccoli, lettuce, and cabbage. Steady fruit development continued in citrus orchards; irrigation, insect control treatments, and summer pruning were underway. Almond harvesting began; walnuts, pecans, and pistachios made good progress. Sheep grazed in some harvested grain and melon fields; rangeland was dry with little forage available.

September:

Light rain showers fell early in the month but no crop damage was reported. Harvesting of melons and summer vegetables slowed as weather cooled. Lettuce, broccoli, and cabbage plantings had emerged and were growing well. Cotton maturity advanced; defoliant was applied to prepare for harvest. Pima cotton was irrigated and treated to control insect pests. Alfalfa seed harvesting was completed; mowing, windrowing, drying, and baling of alfalfa hay and Sudan grass hay continued. Rice, dry beans, sugar beets, field corn and silage corn

September (continued):

harvesting continued throughout the month. Grains planted for winter forage showed good germination; preparation of new fields for winter forage planting continued. Harvesting of DOV (dried on the vine) raisins began at month's end. Raisins and excess table grapes were hauled to dehydrators for processing. Stone fruit orchards and table grape vineyards continued to produce a large variety of fruit but production slowed somewhat in response to cooler weather. Almonds, walnuts, pecans, and pistachios were shaken, raked, picked up and hauled to processors. Pomegranates, apples, figs, Asian pears, and pineapple quince were picked and packed. Valencia oranges were picked in a few orchards; some unharvested orchards were treated with growth regulators to help fruit remain on the trees. Beekeepers removed hives from the field, extracted honey, and prepared them for the dormant season.

October:

Cotton harvesting started with good yields reported. Fields were prepared for planting of winter grains; winter forage planted earlier was growing well. Broccoli, lettuce, cabbage, and cauliflower harvesting began, marking the start of the fall vegetable season; lettuce seed was also harvested. Melon and summer vegetable harvesting continued but was nearly complete by month's end; harvested fields were prepared for planting of garlic, onion, and other spring vegetables. Rice, sugar beets, sweet potatoes, dry beans, field corn, seed corn, and silage corn were harvested. Harvesting of alfalfa hay continued; new fields of alfalfa hay were planted. Late season table grapes were picked and packed; some vineyards were covered with plastic tarps to protect fruit from potential rain damage. Raisin harvesting was almost complete for the season; a few wine and juice grape vineyards were still being picked. Stone fruit picking was over by the end of the month; orchards were cultivated, pruned, and irrigated. A number of harvested raisin vineyards and stone fruit orchards were pulled out. Harvested almond orchards were pruned and irrigated. Strawberries were picked and sold at roadside stands. Olive harvesting began. Navel oranges, mandarins, pummelos, and lemons were harvested and packed.

November:

Rainfall early in the month slowed cotton harvesting; growers shredded and disced harvested fields to comply with pink bollworm plowdown requirements. New fields of winter grains and forage were planted; emerged fields grew vigorously. Alfalfa hay was cut for baled hay and green chopped for feed. Rice and sugar beet harvesting finished for the season. Table grape harvesting was essentially complete by the end of the month; pruning, cultivation, and herbicide treatments were in progress in harvested vineyards. Pruning, brush shredding, and cultivation were underway in stone fruit orchards. Orchard and vineyard removal continued; piled trees and vines were evident throughout the county. Walnuts, kiwifruit, and persimmons were harvested. Strawberries were picked for commercial packing and sales at roadside stands. Harvesting of lettuce, broccoli, cabbage, and cauliflower continued, along with sweet corn and cantaloupes in the few remaining fields. Harvested fields were prepared for planting of spring vegetables. Navel oranges, mandarins, pummelos, grapefruit, and lemons were picked and packed; new navel orange and Clementine mandarin orchards were planted.

December:

Cotton harvesting was complete by the end of the month with most fields shredded and disced to comply with pink bollworm plowdown requirements. Aircraft were used to plant new grain fields and apply fertilizer to emerged fields. New broccoli fields were planted while harvesting continued in existing fields. Open fields were ripped, disced, and leveled to prepare for planting of new crops. New fields of alfalfa hay, sugar beets, winter forage, onions, garlic, and lettuce were planted. Jerusalem artichokes, a native American root crop, were harvested. Dormant spray applications were underway in tree fruit orchards. Pruning, brush shredding, and cultivation were in progress in grape vineyards and tree fruit orchards. Removal of orchards and vineyards continued throughout the county. Commercial plantings of daikon, you choy, and gailon were harvested. Persimmons were picked and packed. Navel oranges, mandarins, pummelos, grapefruit, and lemons were picked, packed, and shipped. Beehives were in protected locations for overwintering.

FIELD CROPS: The total gross returns for field crops decreased by \$1,718,000 from \$515,807,000 to \$514,089,000. The harvested acreage of barley was up 1,500 acres and the value of the crop increased \$496,000. Cotton, last year's number one crop, fell to the number two position for 2002, decreasing in value \$22,932,000. This was down 6.23 percent from 2001. Returns for alfalfa hay increased \$10,026,000, due in part to an 8,900 acre increase from 2001. Field stubble, which includes alfalfa hay, barley, beans, broccoli, lettuce, melons, oats, tomatoes, and wheat, increased by \$211,000, up from \$1,490,000 to \$1,701,000. Sugar beet acreage increased for the first time in four years. Total production climbed 3.03 percent from 429,000 tons in 2001, resulting in a \$910,000 increase in total value.

SEED CROPS: Total gross returns for all seed crops increased by \$18,125,000, from a total value of \$42,880,000 to \$61,005,000. The returns for alfalfa seed were down 38.77 percent; cotton seed increased in value by \$457,000. Vegetable seed plantings were down 16.28 percent, or 140 acres. The other category of seed crops was up \$22,916,000 in value.

VEGETABLE CROPS: The total gross returns for vegetable crops increased \$127,460,000, from \$737,992,000 to \$865,452,000. Bell peppers decreased in value by \$9,470,000 and asparagus was up \$2,492,000. The garlic crop was up in value by \$7,150,000. Fresh garlic decreased in value 16.15 percent; processed increased 31.95 percent. The value of the head lettuce crop was down \$12,394,000 despite an increase in fall lettuce of \$4,392,000. Cantaloupes increased in both the yield per acre and price per ton, but the value of the crop dropped \$82,000, due to a reduction of 1,400 harvested acres. Gross returns for honeydew melons were up 31.97 percent. The fresh onion crop increased in value by \$27,918,000. Total gross returns for standard tomatoes increased by 38.67 percent and the processed tomato crop was up in value \$50,133,000.

FRUIT AND NUT CROPS: The total gross returns for fruit and nut crops increased by \$166,195,000, from a 2001 value of \$1,069,231,000 to \$1,235,426,000. The value of the almond crop increased \$46,894,000 which resulted in a move from seventh place in 2001 to sixth place in 2002 on the county's top ten crop ranking. The total value for cherries increased 74.68 percent, from \$15,764,000 in 2001 to \$27,536,000 in 2002. The value of the orange crop dropped to \$138,654,000, down 5.12 percent from last year. Grapes, previously ranked second in 2001, were reinstated as Fresno County's number one crop for 2002. The value of the grape crop was \$400,255,000, up \$57,120,000 from the 2001 value of \$343,135,000. It was a good year for nectarines, the crop increased in value \$6,867,000. Peaches were down \$2,346,000 and plums increased in value \$16,062,000. The total value of both pistachios and prunes increased; pistachios climbed 42.16 percent and prunes 7.67 percent in value. Walnut plantings increased by 342 acres, but the value of the crop was down \$777,000.

NURSERY: The gross returns from sales of nursery products increased by \$392,000, from \$32,013,900 to \$32,406,600. The production of Christmas trees, up by 116.67 percent, had a value of \$54,600. The returns for other nursery products, which include bareroot fruit trees, citrus (budwood and trees), grape (rootings and cuttings), vegetable transplants, and turf, decreased from \$20,383,000 to \$19,786,000.

LIVESTOCK AND POULTRY: The total gross returns for livestock and poultry decreased 13.69 percent from the value of \$537,148,000 to \$463,635,000. For the second straight year, cattle and calves were the seventh most valuable crop in the county at \$177,445,000. The value of hogs and pigs decreased by 16.90 percent, or \$1,056,000, from the 2001 value. Total lamb production was up 2.68 percent, but decreased in total value by \$485,000, from \$4,444,000 to \$3,959,000.

LIVESTOCK AND POULTRY PRODUCTS: The total value of livestock and poultry products decreased \$41,387,000, from \$268,185,000 to \$226,798,000. The price of manure was down \$0.05 a ton and production was down 10,000 tons. Manufacturing milk production was down by 13,700 hundredweight in part because of a decrease of \$2.48 per hundredweight paid to dairymen. The value of market milk was down 19.50 percent. Wool production remained the same, but was up in value \$6,000. The value of chicken, duck, and turkey eggs was up \$7,297,000.

APIARY PRODUCTS AND POLLINATION SERVICES: Gross returns for apiary and pollination services increased by \$1,380,500, from \$9,798,900 to \$11,179,400. The total value of honey increased \$1,405,000 in 2002, while beeswax was down 19.10 percent, from \$75,900 to \$61,400. The value of pollination services for alfalfa seed fell \$485,000 as a result of a 55.81 percent reduction in the number of colonies used.

INDUSTRIAL CROPS: The total value of industrial crops increased 29.09 percent or \$2,050,000. Timber production was down \$4,086,000 board feet and its value fell \$1,421,000. Firewood was up 3,000 cords and increased in value \$219,000.

FRESNO COUNTY

FIELD CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Barley	2002	8,600	2.66	22,900	ton	\$ 96.00	\$ 2,198,000
	2001	7,100	2.61	18,500	ton	\$ 92.00	\$ 1,702,000
Beans, dry ^a	2002	12,500	1.20	15,000	ton	533.00	7,995,000
	2001	11,500	.88	10,100	ton	647.00	6,535,000
Corn							
Grain	2002	1,790	4.24	7,590	ton	112.00	850,000
	2001	1,830	4.17	7,630	ton	104.00	794,000
Silage	2002	24,000	25.75	618,000	ton	22.00 ^b	13,596,000
	2001	21,200	23.30	494,000	ton	23.00 ^b	11,362,000
Cotton							
Upland (Acala) Lint	2002	145,000	1,748 ^c	507,000 ^d	bale	.73 ^e	186,535,000
	2001	171,000	1,538 ^c	526,000 ^d	bale	.70 ^e	185,573,000
Seed	2002			188,000	ton	167.00	31,396,000
	2001			181,000	ton	157.00	28,417,000
Upland (Non-Acala) Lint	2002	5,240	1,670 ^c	17,500 ^d	bale	.65 ^e	5,733,000
	2001	6,230	1,172 ^c	14,600 ^d	bale	.50 ^e	3,679,000
Seed	2002			6,490	ton	167.00	1,084,000
	2001			5,020	ton	157.00	788,000
Pima Lint	2002	82,400	1,493 ^c	246,000 ^d	bale	.86 ^e	106,626,000
	2001	109,400	1,440 ^c	315,000 ^d	bale	.84 ^e	133,358,000
Seed	2002			100,000	ton	128.00	12,800,000
	2001			124,000	ton	127.00	15,748,000
Cotton Total ^f	2002	232,640					344,174,000
	2001	286,630					367,563,000
Hay							
Alfalfa	2002	76,300	8.23	628,000	ton	115.00	72,220,000
	2001	67,400	7.63	514,000	ton	121.00	62,194,000
Other ^g	2002	26,100	2.30	60,000	ton	85.00	5,100,000
	2001	12,500	2.96	37,000	ton	82.00	3,034,000

FRESNO COUNTY

FIELD CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Pasture and Range							
Field	2002	36,800			acre	\$ 46.22	\$ 1,701,000
Stubble ^h	2001	33,400			acre	\$ 44.61	\$ 1,490,000
Irrigated	2002	40,000			acre	125.00	5,000,000
Pasture	2001	40,000			acre	125.00	5,000,000
Grazing	2002	850,000			acre	8.00	6,800,000
Range	2001	850,000			acre	8.00	6,800,000
Rice	2002	5,790	3.09	17,900	ton	178.00	3,186,000
	2001	5,620	3.90	21,900	ton	177.00	3,876,000
Safflower	2002	5,160	1.63	8,410	ton	252.00	2,119,000
	2001	4,500	1.11	5,000	ton	245.00	1,225,000
Sugar Beets	2002	11,900	37.14	442,000	ton	37.00	16,354,000
	2001	11,000	39.00	429,000	ton	36.00	15,444,000
Wheat	2002	61,000	3.21	196,000	ton	126.00	24,696,000
	2001	59,600	3.05	182,000	ton	115.00	20,930,000
Other ⁱ	2002	10,500					8,100,000
	2001	<u>10,800</u>					<u>7,858,000</u>
Total	2002	1,366,280					\$514,089,000
	2001	1,389,680					\$515,807,000

a Includes blackeyed, garbanzo, baby lima, and pinto beans

b Field price

c Pounds of lint per acre

d 500 pounds lint per bale

e Price per pound, 504 pounds gross weight per bale

f Not used for top 10 ranking; does not include cotton seed for planting

g Includes hay from alfalfa seed, oats, pasture grass, sudan, winter forage, and wheat

h Not included in total field crop acreage; includes acreage from alfalfa hay (conventional and organic), barley, beans, broccoli, lettuce, melons, oats, tomatoes, and wheat

i Includes canola, oats (grain and silage), sorghum, soybean, straw, sugar beet pulp, sugarcane, wheat silage, and winter forage; **organic:** alfalfa, cotton (non-acala), and wheat

FRESNO COUNTY

SEED CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Alfalfa	2002	5,960	816	4,863,000	lb.	\$ 1.33	\$ 6,468,000
Certified	2001	10,060	750	7,545,000	lb.	\$ 1.40	\$10,563,000
Cotton ^a	2002	6,440		12,687,000	lb.	.08	1,015,000
Certified	2001	6,980		5,584,000	lb.	.10	558,000
Vegetable ^b	2002	720					2,178,000
	2001	860					3,331,000
Other ^c	2002	6,280					51,344,000
	2001	<u>2,680</u>					<u>28,428,000</u>
Total	2002	12,960					\$61,005,000
	2001	13,600					\$42,880,000

a Included in field crop acreage

b Arugula, carrot, cauliflower, lettuce, mustard (red), mizuna, and onions

c Alfalfa (non-certified), beans (blackeyed and garbanzo), corn, oats, rice, grain sorghum, triticale, turf grass, wheat (certified and non-certified); **flowers:** zinnias; **organic:** lettuce

FRESNO COUNTY

VEGETABLE CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Asparagus	2002	2,200	3.45	7,590	ton	\$ 1,575.00	\$ 11,954,000
	2001	2,240	2.70	6,050	ton	\$ 1,564.00	\$ 9,462,000
Bell Peppers^a	2002	1,500	22.67	34,000	ton	505.00	17,170,000
	2001	1,640	21.95	36,000	ton	740.00	26,640,000
Broccoli^a	2002	6,700	7.78	52,100	ton	442.00	23,028,000
	2001	8,450	6.62	55,900	ton	419.00	23,422,000
Eggplant^b	2002	759	11.41	8,660	ton	525.00	4,547,000
	2001	845	11.74	9,920	ton	445.00	4,414,000
Garlic							
Fresh	2002	5,210	7.47	38,900	ton	1,453.00	56,522,000
	2001	6,280	7.36	46,200	ton	1,459.00	67,406,000
Processed	2002	22,000	10.14	223,000	ton	334.00	74,482,000
	2001	18,800	8.94	168,000	ton	336.00	56,448,000
Head Lettuce							
Naked				29,200	ton		
Wrapped				76,600	ton		
Bulk				29,800	ton		
Spring	2002	10,600	12.79	135,600	ton	267.00	36,205,000
Season Total	2001	9,840	18.51	182,100	ton	291.00	52,991,000
Naked				37,900	ton		
Wrapped				80,000	ton		
Bulk				61,200	ton		
Fall	2002	10,280	17.42	179,100	ton	221.00	39,581,000
Season Total	2001	10,300	15.32	157,800	ton	223.00	35,189,000
Head Lettuce	2002	20,880		314,700			75,786,000
Totals	2001	20,140		339,900			88,180,000

FRESNO COUNTY

VEGETABLE CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Leaf Lettuce ^c	2002	7,220	15.65	113,000	ton	\$ 451.00	\$ 50,963,000
	2001	5,730	9.35	53,600	ton	\$ 610.00	\$ 32,696,000
Melons							
Cantaloupe ^a	2002	24,200	14.50	351,000	ton	230.00	80,730,000
	2001	25,600	13.91	356,000	ton	227.00	80,812,000
Honeydew	2002	5,070	14.34	72,700	ton	291.00	21,156,000
	2001	5,200	13.35	69,400	ton	231.00	16,031,000
Mixed Melons ^d	2002	3,370	10.39	35,000	ton	338.00	11,830,000
	2001	1,540	11.75	18,100	ton	350.00	6,335,000
Watermelon	2002	2,000	34.25	68,500	ton	192.00	13,152,000
	2001	2,040	33.53	68,400	ton	198.00	13,543,000
Onions							
Fresh	2002	4,960	32.46	161,000	ton	385.00	61,985,000
	2001	5,880	27.72	163,000	ton	209.00	34,067,000
Processed	2002	9,560	18.00	172,000	ton	170.00	29,240,000
	2001	10,500	16.00	168,000	ton	83.00	13,944,000
Oriental Vegetables ^e	2002	1,250	11.60	14,500	ton	504.00	7,308,000
	2001	1,350	8.52	11,500	ton	449.00	5,164,000
Squash ^f	2002	915	8.70	7,960	ton	534.00	4,251,000
	2001	795	6.78	5,390	ton	437.00	2,355,000
Sweet Corn	2002	8,100	12.47	101,000	ton	232.00	23,432,000
	2001	6,310	11.62	73,300	ton	252.00	18,472,000
Tomatoes							
Cherry	2002	170	11.35	1,930	ton	711.00	1,372,000
	2001	210	19.14	4,020	ton	706.00	2,838,000

FRESNO COUNTY

VEGETABLE CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Tomatoes, continued							
Standard	2002	4,500	20.89	94,000	ton	\$ 401.00	\$ 37,694,000
	2001	6,160	13.13	80,900	ton	\$ 336.00	\$ 27,182,000
Processed	2002	115,000	40.25	4,629,000	ton	49.00	226,821,000
	2001	106,000	34.73	3,681,000	ton	48.00	176,688,000
Tomatoes Total	2002	119,670					265,887,000
	2001	112,370					206,708,000
Other^g	2002	10,100					32,029,000
	2001	<u>8,190</u>					<u>31,893,000</u>
Total	2002	255,664					\$ 865,452,000
	2001	243,900					\$ 737,992,000

a Includes fresh and processed

b Includes Chinese, Globe, Italian, and Japanese varieties

c Includes Red, Green, Butter, and Romaine varieties

d Includes Casaba, Crenshaw, Galia, Juan Canary, Orange Flesh, Persian, Santa Claus, and Sharlyn varieties

e Includes bittermelon, bok choy (baby, regular, and Shanghai), napa cabbage, chayote, daikon, donqua, gai choy, gailon, lemon grass, lo bok, long beans, mattea/mora, ong choy, moqua, opo, sinqua/patola, sour leaves, sugar peas, taro root, yam leaves, and you choy

f Includes summer and winter varieties

g Includes artichokes, arugula, beans (fava, Indian, and pinto), beans snap (green, Italian, and yellow), beets, cabbage (fresh and processed), carrots (fresh and processed), cauliflower (fresh and processed), celery, Swiss chard, chicory/radicchio, collards, corn (cornuts, masa, and tortilla chips), cucumbers (fresh and processed), dandelion greens, endive/escarole, jicama, kale, kohlrabi, leeks, mushrooms, mustard greens, okra, green onions (fresh and processed), parsnips, English peas, peanuts, chili peppers (fresh and processed), pumpkins, radishes, rutabagas, spinach, sunchokes/Jerusalem artichokes, sweet potatoes/yams, tomatillos, and turnips; **herbs:** basil, cilantro, dill, fennel, ginger, mint, oregano, parsley (dry and fresh), rosemary, sage, spice mix, and tarragon; **organic:** beans (green and snap), broccoli, cantaloupe, sweet corn, garlic (fresh), lettuce (leaf and romaine), mustard greens (baby), spinach, squash (winter and zucchini), tomatoes (cherry, processed and specialty), and watermelon; **organic herbs:** basil and cilantro

FRESNO COUNTY

FRUIT AND NUT CROPS

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Almonds ^a	2002	63,450	1.24	78,700	ton	\$ 2,300.00	\$ 181,010,000
	2001	61,896	1.06	65,610	ton	\$ 2,120.00	\$ 139,093,000
Almond Hulls	2002			168,000	ton	85.00	14,280,000
	2001			123,000	ton	86.00	10,578,000
Apples ^a	2002	2,259	11.72				
	2001	3,113	8.45				
Fresh	2002			17,000	ton	722.00	12,274,000
	2001			20,000	ton	565.00	11,300,000
Processed	2002			9,470	ton	82.00	777,000
	2001			6,320	ton	80.00	506,000
Apricots ^a	2002	1,349	6.43	8,670	ton	896.00	7,768,000
	2001	1,340	6.00	8,040	ton	887.00	7,131,000
Cherries	2002	1,825	3.06	5,590	ton	4,926.00	27,536,000
	2001	1,550	2.49	3,860	ton	4,084.00	15,764,000
Citrus							
Lemons	2002	873	18.09				
	2001	828	21.81				
Fresh	2002			8,220	ton	603.00	4,957,000
	2001			10,400	ton	476.00	4,950,000
Processed	2002			7,570	ton	40.00	303,000
	2001			7,660	ton	40.00	306,000
Citrus, other ^b	2002	1,384	13.44				
	2001	1,578	13.17				
Fresh ^a	2002			12,500	ton	899.00	11,238,000
	2001			16,900	ton	497.00	8,399,000
Processed	2002			6,100	ton	20.00	122,000
	2001			3,880	ton	29.00	113,000

FRESNO COUNTY

FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Oranges							
Navel ^a	2002	21,921	12.14				
	2001	21,353	12.63				
Fresh	2002			219,000	ton	\$ 481.00	\$ 105,339,000
	2001			225,000	ton	\$ 513.00	\$ 115,425,000
Processed	2002			47,100	ton	20.00	942,000
	2001			44,600	ton	15.00	669,000
Valencia	2002	5,345	15.83				
	2001	5,292	15.61				
Fresh	2002			66,300	ton	480.00	31,824,000
	2001			68,700	ton	434.00	29,816,000
Processed	2002			18,300	ton	30.00	549,000
	2001			13,900	ton	16.00	222,000
Oranges Total	2002	27,266					138,654,000
	2001	26,645					146,132,000
Grapes							
Raisin Varieties ^a	2002	169,783	11.24				
	2001	171,900	6.93				
Canned	2002			27,500	ton	249.00	6,848,000
	2001			24,500	ton	376.00	9,212,000
Crushed	2002			397,000	ton	76.00	30,172,000
	2001			165,000	ton	86.00	14,190,000
Dried	2002			316,000	ton	433.00	136,828,000
	2001			233,000	ton	525.00	122,325,000
Fresh	2002			58,000	ton	865.00	50,170,000
	2001			45,000	ton	926.00	41,670,000
Juice	2002			4,700	ton	446.00	2,096,000
	2001			1,510	ton	467.00	705,000

FRESNO COUNTY

FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Grapes (continued)							
Table Varieties	2002	11,456	8.13				
	2001	11,586	6.90				
Crushed	2002			9,100	ton	\$ 71.00	\$ 646,000
	2001			12,000	ton	\$ 76.00	\$ 912,000
Fresh ^a	2002			84,000	ton	977.00	82,068,000
	2001			68,000	ton	1,062.00	72,216,000
Wine Varieties	2002	46,397	10.56				
	2001	47,091	9.26				
Crushed ^a	2002			480,000	ton	180.00	86,400,000
	2001			432,000	ton	185.00	79,920,000
Juice	2002			9,800	ton	513.00	5,027,000
	2001			4,170	ton	476.00	1,985,000
Grapes Total	2002	227,636					400,255,000
	2001	230,577					343,135,000
Kiwifruit ^a	2002	455	3.74	1,700	ton	1,640.00	2,788,000
	2001	466	6.50	3,030	ton	714.00	2,163,000
Nectarines ^a	2002	15,150	9.11	138,000	ton	794.00	109,572,000
	2001	14,808	8.31	123,000	ton	835.00	102,705,000
Olives, canned ^a	2002	938	2.65	2,490	ton	625.00	1,556,000
	2001	954	3.65	3,480	ton	690.00	2,401,000
Peaches							
Cling	2002	1,284	19.31	24,800	ton	234.00	5,803,000
	2001	1,294	17.93	23,200	ton	237.00	5,498,000
Freestone ^a	2002	11,908	8.73	104,000	ton	847.00	88,088,000
	2001	13,246	8.53	113,000	ton	803.00	90,739,000
Peaches Total	2002	13,192					93,891,000
	2001	14,540					96,237,000
Pears, Asian and European	2002	962	14.45	13,900	ton	1,262.00	17,542,000
	2001	898	11.47	10,300	ton	1,015.00	10,455,000

FRESNO COUNTY

FRUIT AND NUT CROPS (continued)

CROP	YEAR	HARVESTED ACREAGE	PRODUCTION		UNIT	VALUE	
			PER ACRE	TOTAL		PER UNIT	TOTAL
Persimmons	2002	431	6.54	2,820	ton	\$1,032.00	\$ 2,910,000
	2001	439	8.50	3,730	ton	\$ 550.00	\$ 2,052,000
Pistachios	2002	7,824	1.50	11,700	ton	2,460.00	28,782,000
	2001	7,047	1.26	8,880	ton	2,280.00	20,246,000
Plums ^a	2002	14,894	8.39	125,000	ton	892.00	111,500,000
	2001	14,774	8.05	119,000	ton	802.00	95,438,000
Pomegranates	2002	1,527	3.19	4,870	ton	1,200.00	5,844,000
	2001	1,480	6.42	9,500	ton	751.00	7,135,000
Prunes, dried ^a	2002	4,031	2.75	11,100	ton	744.00	8,258,000
	2001	4,412	2.67	11,800	ton	650.00	7,670,000
Walnuts ^a	2002	3,639	1.78	6,480	ton	1,180.00	7,646,000
	2001	3,297	2.17	7,150	ton	1,178.00	8,423,000
Other ^d	2002	6,860					45,963,000
	2001	<u>4,440</u>					<u>23,290,000</u>
Total	2002	395,945					\$1,235,426,000
	2001	395,292					\$1,069,231,000

a Acreage, production, and value are included in other fruit and nut crops: 110 acres olive oil, 85 acres prunes (juice), and 1,408 acres freestone peaches (processed); **organic:** 118 acres almonds, 32 acres apples, 2 acres apricots (processed), 1,429 acres grapes (raisin, table, and wine), 11 acres kiwifruit, 39 acres nectarines, 57 acres navel oranges (fresh and processed), 51 acres freestone peaches, 2 acres persimmons, and 30 acres plums

b Includes blood oranges, grapefruit, mandarin tangerines, minneola tangelos, and pummelos

c Includes fresh and processed

d Includes almond (shells), apricots (dried and processed), apriums, avocados, blackberries, blueberries, boysenberries, chestnuts, figs (fresh, dried, and substandard), grapes (leaves, compost and raisin by-products), jujubes, nectarines (dried and processed), olive oil, peaches (dried and processed), pecans, plumcots/pluots, prunes (processed), and strawberries (fresh and processed); **organic:** almonds, apples (fresh), apricots (processed), figs (dried, fresh and substandard), grapes (raisin, juice, table, and wine), kiwifruit, nectarines, navel oranges (fresh and processed), peaches (fresh and processed), plumcots/pluots, persimmons, plums, and quince

FRESNO COUNTY

NURSERY PRODUCTS

ITEM	YEAR	ACRES	QUANTITY	UNIT	VALUE
Christmas Trees	2002	20	1,300	trees	\$ 54,600
	2001	35	600	trees	\$ 10,900
Herbaceous Ornamentals ^a	2002	70	7,161,000	b	3,987,000
	2001	20	977,000	b	3,792,000
Ornamental Trees and Shrubs	2002	79	1,032,000	plants	8,579,000
	2001	85	1,028,000	plants	7,828,000
Other ^c	2002	757	232,518,000	plants	19,786,000
	2001	<u>622</u>	181,019,000	plants	<u>20,383,000</u>
Total	2002	926			\$32,406,600
	2001	762			\$32,013,900

a Includes potted plants, bedding plants, flats, and perennials

b Includes flats, dozens, cans, and single plants

c Includes bareroot fruit trees, citrus (budwood and trees), grape (rootings and cuttings), vegetable transplants, and turf

FRESNO COUNTY

LIVESTOCK AND POULTRY

ITEM	YEAR	PRODUCTION		UNIT	VALUE	
		NO. OF HEAD	TOTAL LIVEWEIGHT		PER UNIT	TOTAL
Cattle and Calves						
Beef						
Breeding Stock						
Common	2002	1,240		head	\$ 742.00	\$ 920,000
	2001	1,280		head	\$ 732.00	\$ 937,000
Registered	2002	310		head	2,500.00	775,000
	2001	320		head	2,800.00	896,000
Feeders	2002	130,000	259,000	cwt.	73.00	18,907,000
	2001	155,000	309,000	cwt.	80.47	24,865,000
Calves	2002	21,700	65,200	cwt.	88.34	5,760,000
	2001	22,400	67,200	cwt.	100.43	6,749,000
Slaughter Stock	2002	254,000	1,324,000 ^a	cwt.	67.13	88,880,000
	2001	262,000	1,325,000 ^a	cwt.	71.43	94,645,000
Dairy						
Breeding Stock	2002	13,100		head	1,840.00	24,104,000
	2001	12,400		head	1,760.00	21,824,000
Cull Stock	2002	28,400	370,000	cwt.	40.54	15,000,000
	2001	26,900	350,000	cwt.	44.06	15,421,000
Calves	2002	54,400	163,000	cwt.	141.71	23,099,000
	2001	46,900	141,000	cwt.	143.00	20,163,000
Cattle and Calves Total	2002					177,445,000
	2001					185,500,000
Hogs and Pigs						
Feeder Pigs and Slaughter Stock	2002	53,800	117,000	cwt.	44.38	5,193,000
	2001	51,200	104,000	cwt.	60.09	6,249,000

FRESNO COUNTY

LIVESTOCK AND POULTRY (continued)

ITEM	YEAR	PRODUCTION		UNIT	VALUE	
		NO. OF HEAD	TOTAL LIVEWEIGHT		PER UNIT	TOTAL
Sheep and Lambs						
Slaughter Stock						
Lambs	2002	51,200	57,500	cwt.	\$ 68.85	\$ 3,959,000
	2001	49,800	56,000	cwt.	\$ 79.36	\$ 4,444,000
Sheep	2002	11,200	15,600	cwt.	28.08	438,000
	2001	11,200	15,600	cwt.	31.22	487,000
Turkeys	2002	4,858,000	114,212,000	lb.	.38	43,401,000
	2001	5,431,000	124,587,000	lb.	.40	49,835,000
Other^b	2002					233,199,000
	2001					<u>290,633,000</u>
Total	2002					\$463,635,000
	2001					\$537,148,000

a Net gain

b Includes buffalo; chickens (broilers, chicks, fryers, old breeder birds, and roasters); ducks (meat and ducklings); fish (bass, carp, and channel cat); game birds (chukar, pheasants and quail); goats (cull milk, kid, and meat); insects (beneficial); rabbits (meat); squab; turkeys (old breeder birds and poults); vermiculture; and Zebu cattle

FRESNO COUNTY

LIVESTOCK AND POULTRY PRODUCTS

ITEM	YEAR	PRODUCTION	UNIT	VALUE	
				PER UNIT	TOTAL
Manure ^a	2002	554,000	ton	\$ 4.45	\$ 2,465,000
	2001	564,000	ton	\$ 4.50	\$ 2,538,000
Milk					
Manufacturing	2002	18,300	cwt.	10.27	188,000
	2001	32,000	cwt.	12.75	408,000
Market ^b	2002	18,444,000	cwt.	10.83	199,749,000
	2001	18,047,000	cwt.	13.75	248,146,000
Wool	2002	558,000	lb.	.41	229,000
	2001	558,000	lb.	.40	223,000
Eggs					
Chicken, Duck & Turkey ^c	2002	11,789,000	dozen	2.05	24,167,000
	2001	7,703,000	dozen	2.19	<u>16,870,000</u>
	2002				\$226,798,000
	2001				\$268,185,000

a Includes cow and poultry manure

b Includes cow milk (conventional and organic) and goat milk

c Includes balut, market, hatching, and excess eggs

FRESNO COUNTY

APIARY PRODUCTS AND POLLINATION SERVICES

ITEM	YEAR	PRODUCTION TOTAL	UNIT	VALUE	
				PER UNIT	TOTAL
Apiary Products ^a					
Honey	2002	2,282,000	lb.	\$ 1.26	\$ 2,875,000
	2001	2,334,000	lb.	\$.63	\$ 1,470,000
Beeswax	2002	53,400	lb.	1.15	61,400
	2001	62,700	lb.	1.21	75,900
Pollination ^b					
Alfalfa Seed	2002	13,700	colony	24.00	329,000
	2001	31,000	colony	26.26	814,000
Trees, Fruit and Nut ^c	2002	160,000	colony	46.42	7,427,000
	2001	156,000	colony	44.52	6,945,000
Melon	2002	27,900	colony	17.45	487,000
	2001	30,900	colony	16.00	<u>494,000</u>
Total	2002				\$11,179,400
	2001				\$ 9,798,900

a Reflects bee colonies registered in Fresno County by commercial and semi-commercial beekeepers: 2002- 52,302 colonies; 2001- 47,892 colonies

b Reflects value of pollination by all bee colonies located in Fresno County for pollination services during 2002. Estimated total colonies: 49,831

c Almonds, cherries, and plums

FRESNO COUNTY

INDUSTRIAL CROPS

CROP	YEAR	PRODUCTION	UNIT	VALUE
Timber^a	2002	12,215,000	board feet	\$ 3,496,000
	2001	16,301,000	board feet	\$ 4,917,000
Firewood	2002	18,200	CORDS	1,770,000
	2001	15,200	CORDS	1,551,000
Other^b	2002			3,830,000
	2001			<u>578,000</u>
Total	2002			\$ 9,096,000
	2001			\$ 7,046,000

a Includes government and non-government properties

b Includes walnut stumps (burl wood), walnut trees (hardwood lumber), and woodchips (biomass and landscaping)

**GROWTH IN FRESNO COUNTY AGRICULTURE AS INDICATED BY GROSS
PRODUCTION VALUE OF AGRICULTURAL PRODUCTS OVER A TWENTY-ONE YEAR SPAN**

1982 - 1,855,733,500	1993 - 3,022,311,100*
1983 - 1,727,319,500	1994 - 3,084,870,800
1984 - 1,921,020,840*	1995 - 3,142,878,300*
1985 - 2,054,060,400*	1996 - 3,324,885,800
1986 - 2,125,721,200*	1997 - 3,436,443,500*
1987 - 2,264,044,000*	1998 - 3,257,712,600*
1988 - 2,444,732,600*	1999 - 3,570,027,600*
1989 - 2,607,648,800*	2000 - 3,281,285,400*
1990 - 2,949,484,000*	2001 - 3,220,101,800
1991 - 2,552,305,040*	2002 - 3,419,087,000
1992 - 2,635,447,400*	

SIX-YEAR COMPARISON OF GROSS PRODUCTION VALUE IN FRESNO COUNTY

CROPS	1982	1992	1999	2000	2001	2002
Field	\$ 510,565,000	\$ 549,162,000	\$ 485,640,000	\$ 507,952,000	\$ 515,807,000	\$ 514,089,000
Seed	40,420,000	31,035,000	43,332,000	60,916,000*	42,880,000	61,005,000
Vegetable	268,132,000	453,325,000	882,648,000	791,607,000	737,992,000	865,452,000
Fruit & Nut	650,412,500	932,394,000*	1,191,094,000	1,093,432,800*	1,069,231,000	1,235,426,000
Nursery	5,360,000	16,747,000	32,530,600	28,904,600	32,013,900	32,406,600
Livestock	368,995,000	642,060,000*	917,722,000*	780,324,000*	805,333,000	690,433,000
Apiary	6,539,000	5,303,000	10,874,000	9,209,000	9,798,900	11,179,400
Industrial	<u>5,310,000</u>	<u>5,421,200</u>	<u>6,187,000</u>	<u>8,940,000</u>	<u>7,046,000</u>	<u>9,096,000</u>
TOTAL	\$ 1,855,733,500	\$2,635,447,200*	\$3,570,027,600*	\$3,281,285,400*	\$3,220,101,800	\$3,419,087,000

*Revised

SUSTAINABLE AGRICULTURE

2002 BIOLOGICAL CONTROL ACTIVITIES

PEST	B. C. AGENT/MECHANISM	ACTIVITY
Puncture Vine	Puncture Vine Weevils	Collected adults for release in foothills.
Yellow Starthistle	Peacock Fly	Released 300 flies at ranch in Miramonte.
Yellow Starthistle	Hairy Weevil	Released 50 pupae at ranch in Miramonte.
Various	Various	Attended Bio Control conference at U.C. Davis on August 15 and 16.

2002 DETECTION ACTIVITIES

INSECT	TRAPS DEPLOYED	RESULTS
Medfly	873	Two sterile flies trapped
Mexican Fruit Fly, other Anastrepha, Bactrocera and Ceratitis sp.	533	None captured
Oriental Fruit Fly	315	None captured
Melon Fly	307	None captured
Gypsy Moth	509	One trapped in Japanese Beetle trap
Japanese Beetle	320	None captured
Glassy-Winged Sharpshooter	1,411	Two nurseries and numerous residences positive

SUSTAINABLE AGRICULTURE

PEST ERADICATION

RED IMPORTED FIRE ANT: In early January, another RIFA infestation was found. A call from a homeowner/almond farmer alerted us to the infestation around his home at Thompson and Ashlan. The home was bordered by citrus on the south and east sides and by almonds on the north side. The infestations were found in the yard of the home and around some of the citrus trees. Nothing was found near the almonds. It is still not clear how they were introduced. The state is still in the process of eradicating the colonies.

GLASSY-WINGED SHARPSHOOTER: GWSS continued to be eradicated/controlled by Fresno County. The overall number of positive properties was way up this year as opposed to 2001. As these properties were found, they were treated with *Merit*. The general distribution though has stayed approximately the same, except for one positive find in a citrus grove near Alta and Dinuba Avenues near Orange Cove. The owner promptly treated this grove but it is not yet known how successful the treatment was.

NEW AND UNUSUAL PEST OUTBREAKS IN 2002

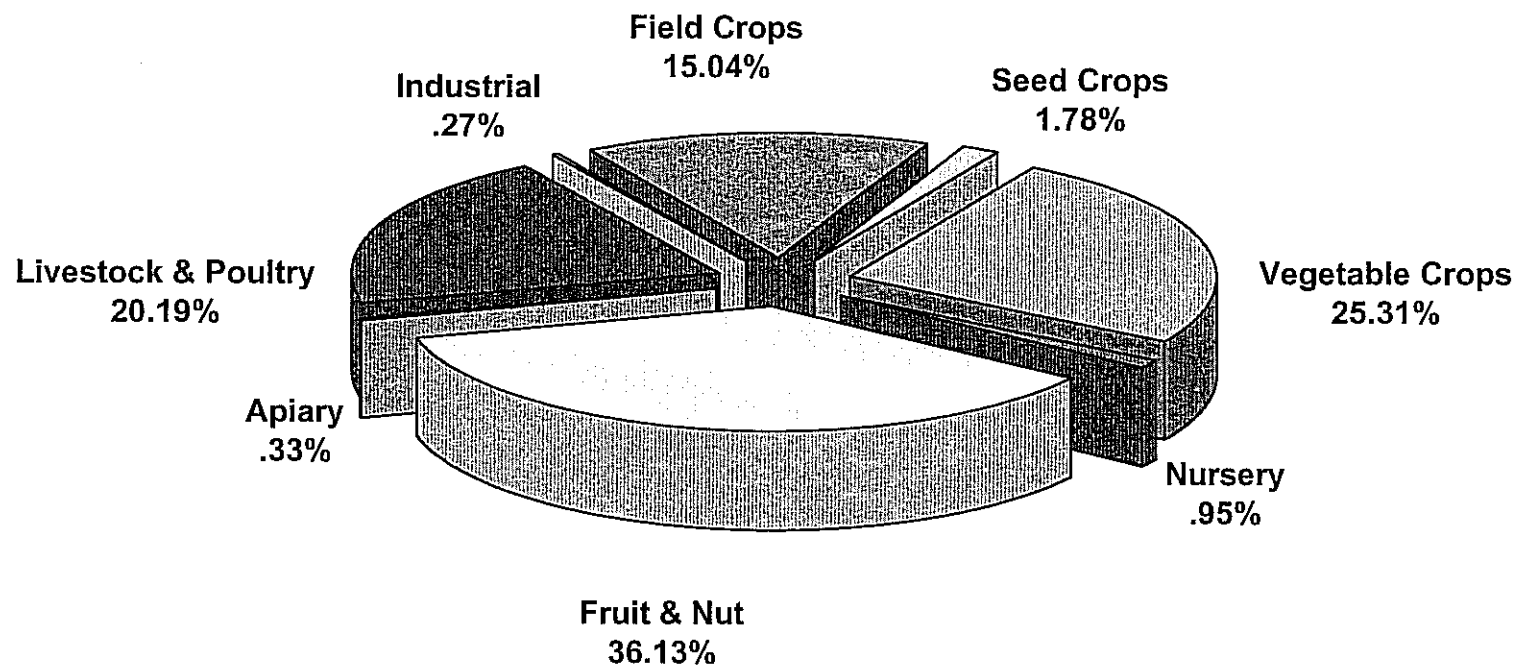
Two new pests were found in Fresno County this year. The first of these was a **whitefly**, called *Aleurotuberculatus aucubae*. It is native to Japan but was found here by Agricultural/Standards Specialist, Wayne Peregrin, while doing a delimitation survey for Glassy-Winged Sharpshooter. It was initially found in the Sunnyside area of Fresno, but has subsequently been found in various parts of Fresno and Clovis. The nymphal/pupal stage is tiny and black with some white waxy filaments on top of the body and along each side. Numbers per leaf are small and they don't appear to produce much honeydew. This is the only area in the Western Hemisphere where this whitefly has been found.

The second pest was an aphid that attacks Chinese Hackberry. Commonly called the **Asian Woolly Hackberry Aphid** (*Shivaphis celti*), it was first found on some recently planted Hackberry trees at the USDA facility in Parlier. It is now also being found on more mature trees in the Fresno area. Aphids are covered with copious amounts of wax and secrete large amounts of sticky honeydew. The wax and honeydew together make a huge mess on the tree and on objects beneath it. Hackberry was a relatively pest-free tree here in Fresno, but now that will no longer be true.

2002 ORGANIC FARMING

Gross returns for organic farming in 2002 totaled \$16,776,177. A large variety of crops were produced in compliance with current organic regulations. Over eighty farms totaling 8,960 acres and 21 handlers (shippers/packers) were registered organic in Fresno County in 2002. Crops grown, packed, and shipped include alfalfa, almonds, apples, apricots, arugula, artichokes, barley, basil, beans, beets, bell peppers, blueberries, broccoli, cabbage, cantaloupe, carrots, cattle, cauliflower, celery, chard, cherries, cilantro, corn, cotton, cucumbers, daikon, eggplant, endive, fennel, figs, garlic, grapes, grapefruit, kiwifruit, leeks, lemons, lettuce, milk, nectarines, nursery plants, okra, olives, onions, oranges, parsley, parsnips, peaches, peas, peppers, persimmons, pistachios, plums, pluots, pomegranates, potatoes, pummelos, radishes, raisins, shallots, spinach, squash, strawberries, tangerines, tomatoes, tomatillos, turkeys, walnuts, watermelon, and wheat.

RELATIONSHIP IN TERMS OF TOTAL VALUE
FOR 2002 CROP YEAR
\$3,419,087,000



GROWTH OF FRESNO COUNTY AGRICULTURE OVER A TWENTY-YEAR SPAN 1983 through 2002

