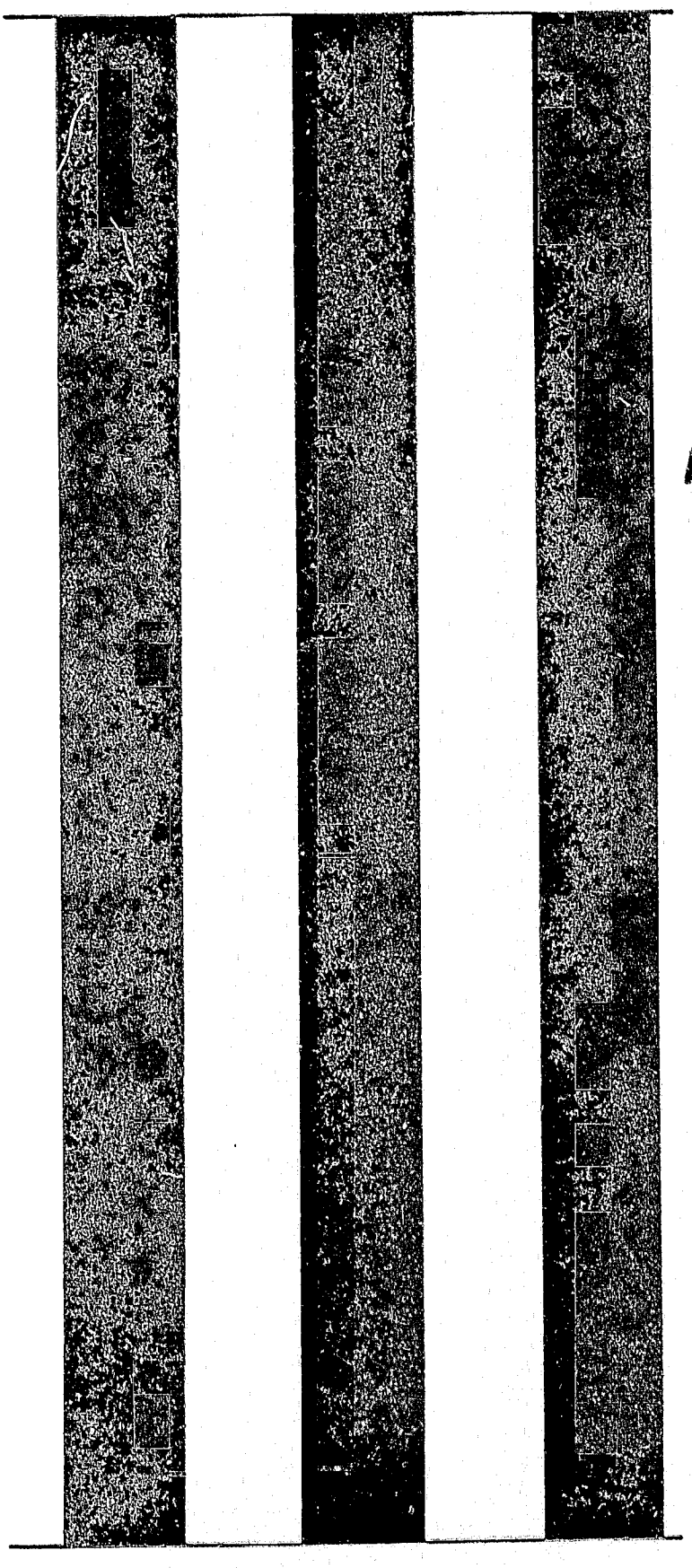
California Department of Food and Agriculture

Agricultural Commissioners' Crop Reports

Ventura County

1954-1955



1954

VENTURA COUNTY

ANNUAL REPORT

AND

CROP STATISTICS

1954

AGRICULTURAL COMMISSIONER

A G R I C U L T U R A L C O M M I S S I O N E R

COUNTY OF VENTURA, CALIFORNIA

A N N U A L R E P O R T
YEAR ENDING DECEMBER 31, 1954

BOARD OF SUPERVISORS

Lester A. Price - Chairman

A. C. Ax	C. H. Andrews
E. L. Carty	R. W. Lefever

DEPARTMENT PERSONNEL

COMMISSIONER	C. J. BARRETT
Deputy Commissioner	John L. Schall
Deputy Commissioner	John C. Allee
Supervisor--Standardization	Paul B. Travis
Supervisor--Pest Control	Harry Bronson
Nursery & Seed Inspector	Verner E. Holmer
Vacuum Fumigation	Murl Boren
District Inspector, Ventura	Albert Bicker
District Inspector, Ventura	Dan Fraser
District Inspector, Oxnard	W. M. Dunning
District Inspector, Oxnard	Clyde W. May
District Inspector, Moorpark--Simi	I. L. Clements
District Inspector, Santa Paula	Wm. E. Simonds
District Inspector, Ojai	Fred Lewis
District Inspector, Fillmore--Piru	Harry Michel
District Inspector, Fillmore--Piru	Omar Myers
District Inspector, Camarillo	W. M. Jones
Inspector--Weeds & Rodent, Santa Paula	C. C. Burleson
Inspector--Weeds & Rodent, Santa Paula	Floyd Ward
Inspector--Weeds & Rodent, Moorpark--Simi	Bruce Burns
Inspector--Weeds & Rodent, Camarillo	Oscar Olsen
Account Clerk	Shirley Carter
Record Clerk (Part of year)	Maxine Walton
Record Clerk (Part of year)	Mary Simpson

C O N T E N T S

ANNUAL REPORT TO THE BOARD OF SUPERVISORS

COUNTY OF VENTURA

AND

THE DIRECTOR

STATE DEPARTMENT OF AGRICULTURE

1954

We submit to you the Annual Report of the activities of the Agricultural Commissioner's office for the calendar year 1954.

While the Commissioner's office is primarily charged with enforcement of state laws pertaining to the agricultural industry of the state, we have tried to be of service to the many persons who make up the agricultural industry of our county.

The principal activities of our office, included in this report, are Quarantine, Nursery Inspection, Plant Disease Inspection, Field and Orchard Inspection, Port Inspection, Seed Inspection, Standardization, Weed Control, Rodent Control, Surveys, Apiary Inspection, and the compiling of statistics.

QUARANTINE

Because of the increased movement of plant material, due to increased building in subdivisions, and because of the danger of importing serious pests and diseases through the rapid movement of materials, quarantine has continued to be one of the best means of protecting and safeguarding our area from becoming infested. Certain quarantine restrictions are necessary to protect the state from insects and diseases that are not yet found within our borders. We are charged with the enforcement of state quarantine laws within Ventura County.

Inspections of all incoming shipments of plant material are made daily at all post offices, express offices, truck terminals and railroad depots. All shipments of plant material to nurseries are inspected upon delivery.

All lots of citrus fruits are inspected for scale insects before being offered for sale in retail channels.

Infested or infected shipments of plant material, and those failing to meet the requirements of State and Federal quarantines, were properly handled to insure protection.

The following is a summary of the quarantine work during the year 1954:

INTERSTATE QUARANTINE

No. of shipments inspected	1,661
No. of plants inspected	2,708,260
No. of shipments rejected	31
No. of plants rejected	35,071
No. of shipments passed	1,630
No. of plants passed	2,673,189
No. of shipments passed hay and grain	80
No. of tons passed hay and grain	1,723

INTRASTATE QUARANTINE

No. of shipments inspected	10,088
No. of plants inspected	19,352,547
No. of shipments rejected	[illegible]
No. of plants rejected	4,501
No. of shipments passed	9,981
No. of plants passed	19,348,046
No. of shipments passed hay and grain	113
No. of tons passed hay and grain	4,244

The following were rejected until fumigation treatment was applied:

No. of shipments	1,038
No. of plants	451,623

Number of hours spent on quarantine inspection 9,547½

TREATMENTS

Ventura County is equipped to treat, in various manners, most shipments of material that are infested with insect pests. Two vacuum fumigators, one atmospheric fumigation chamber, and dipping vats are installed in the county agricultural building, thus affording ample facilities for cleansing the material of pests, rather than returning it to point of origin. During the past few years, shippers have made good use of our facilities to insure clean plant material.

The following is a summary of the treatment work done by the Commissioner's office during the year:

VACUUM FUMIGATION (HCN)

Citrus Fruit (boxes)	23 lots	318
Ornamentals	11 "	3,100
Citrus Trees	846 "	182,817
Walnut Trees	44 "	4,120
Citrus Seedlings	17 "	175,300
Citrus Budwood (bundles)	20 "	85
Deciduous Trees	1 "	40
Plants	4 "	4,564

METHYL BROMIDE - ATMOSPHERIC

Citrus Budwood (bundles)	40 Lots	63
Ornamentals	2 "	120
Citrus Seedlings	15 "	77,900
Citrus Trees	1 "	9,045

Number of hours spent on fumigation 1,878

NURSERY INSPECTION

To insure as far as possible the maintenance of clean nurseries, regular pericdic inspections are made. Inspection of all incoming nursery stock is made at the time of entry, and quarterly nursery inspections are made during the year. Neighboring yards are inspected regularly and if found infested with serious pests, are required to clean up.

When infestations of pests are found in the nurseries, these infestations must be properly controlled or eradicated before the stock is allowed to move.

Infestations of Clavaspis herculeana, an armored scale, and Furcaspis biformis, an orchid scale, were found in one nursery. Eradication of both these scales is mandatory. All hosts were fumigated at the county fumatorium at the rate of 2½lbs. Methyl Bromide per 1,000 cu. ft. at 80 degrees for a period of two hours. All remaining plants in the vicinity received a malathion treatment.

Diseases of minor importance were found in several nurseries infecting numerous varieties of ornamentals. Diagnosis in each case was made or confirmed by the Bureau of Plant Pathology, California Department of Agriculture, and control programs were outlined for the nurserymen.

The following is a summary of nursery inspection work for the year 1954:

Number of nursery inspections	141
Number of reinspections	28
Number of nurseries with "A" pests (Eradication mandatory)	1
Number of nurseries with "B" pests (Control required)	4
Number of nurseries with "C" pests (Of common occurrence)	74
Number of nurseries required to clean up	79
Number of hours spent on nursery inspection	669

PLANT DISEASE INSPECTION

Plant disease inspection is carried on in commercial fields and orchards, and in residential properties. An increase in the number of calls relating to disease problems was noted during 1954. The problems were varied and included inspections for fungus, bacterial, virus and nematode infections.

A small percentage of the troubles were attributable to minor element deficiencies or to excess salts, fertilizers, pest control material, etc.

We wish to acknowledge the fine cooperation of the Bureau of Plant Pathology, State Department of Agriculture and Dr. Alex French who aided county personnel in the plant disease inspections which we summarize below.

Commodity	No. of Inspections
Avocados	19
Deciduous (Fruits & Grapes)	20
Ornamental shrubs & trees	59
Bulbs and flowers	11
Vegetables	23
Miscellaneous	7
Total inspections	168

Number of hours spent on plant disease problems 290

FIELD AND ORCHARD INSPECTION

Inspections of orchards and field crops are a regular part of our duties. These inspections give us a knowledge of pest conditions and aid us in making proper recommendations for their control.

We are constantly on the alert for new pests and are anxious to know of their presence so that proper control measures can be taken. In some cases, certain pests require regular yearly control measures, while in other cases the degree of the infestation varies from year to year.

A summary of the pest conditions follows:

CITRUS

Black Scale: General distribution over most of the citrus acreage, but degree of infestation lighter than in the past year. Treatments were made using oil, oil and rotenone, HCN fumigation, and kerosene-DDT.

Citrus Aphids: General distribution with varying degrees of intensity. General treatments over most of the acreage, especially on oranges. Materials used were nicotine, oil, TEPP, etc.

Citrus Mites: General over all citrus acreage. Degree of intensity varies in different districts.

Citrus red spider--Infestation general and much heavier than in past years. Some treatments did not give satisfactory control and additional treatments were necessary in many instances. Materials used were oil, aramite and ovotran. Some experiment work was done using new materials.

Lewis mite--Distribution mainly in Santa Paula. Infestations were light. Very little treatment necessary.

Silver rust mite--Became more widely spread with isolated infestations in most of the county. Degrees of intensity varied, but all infestations received treatment. Sulfur was used exclusively.

Six-spotted mite--Lighter infestations than in the past. Combination treatment for other mites took care of control.

Two-spotted mite--This mite has attacked citrus for the second year, and in most cases it was heavier than last year. Treatments were necessary in many cases.

Bud mite--Heavier than in past years. Control measures necessary over most of the acreage.

Mealybug: Infestation normal in most cases, with some groves reporting heavy buildup. Good ant control is necessary to keep infestation under control. Parasites were released over most groves.

Orange Tortrix: In some cases, tortrix infestations were heavier than in 1953, especially in oranges. Lemon infestations were normal, with some treating.

Greenhouse Thrip: Normal infestation, but spread to interior valleys was noted.

Citrus Thrip: Infestations heavier than in 1953, and more widely spread.

Red Scale: All infestations received treatment as soon as found. Treatments generally with two HCN fumigations. Some areas received treatments of parathion or malathion in oil.

Yellow Scale: Infestation normal.

Dictyospermum Scale: Several groves in Santa Paula area were found infested. These areas were treated with fumigation.

Brown Rot of Citrus: Most groves received treatment with copper or bordeau spray to control brown rot.

AVOCADO

Brown Mite: This pest is on the increase and was heavier than in 1953. Treatments were necessary in many cases.

WALNUTS

Husk Fly: This pest is spread over most of the county and generally treatments were necessary. Parathion was widely used.

Codling Moth: Control measures were applied over most of the walnut acreage. DDT was widely used. A few growers applied lead arsenate spray

Walnut Aphids: General treatment was necessary over most of the acreage. Systox was used in some areas for the first time, with fair control.

European Red Mite: Infestations were normal with general treatment necessary. Treatments were made with parathion, aramite, ovotran and systox.

FIELD CROPS

The wide variety of field and vegetable crops now grown in this county often allows a carry-over of insect pests from one crop to another. Organic insecticides, in many cases, have reduced the normal population of parasites and predators to a level that has allowed very rapid build-up to large numbers of the usual insect pests.

Spider Mites: Infestations in general were about the same as during the previous year. Sulfur, aramite, ovotran, TEPP and parathion were the most important materials used.

Lygus: Populations did not vary significantly from those of previous years. Treatment was necessary on most seed crops and beans. DDT, toxaphene, metacide and parathion were applied in treatments.

Aphids: The insect is always generally present in field crops and usually requires treatment. Dieldrin, lindane, malathion, metacide, and parathion were used.

Leaf Hoppers: Very little damage to plantings of tomatoes due to beet leafhoppers spreading western yellow blight was noted, and the populations of the insect were unusually low.

Worms: Cabbage and lettuce were the crops most affected by these pests. Cut-worms were more numerous than usual and required treatment in several locations. The corn ear worm caused damage in beans, and required treatment. DDT, aldrin, dieldrin, endrin, metacide, parathion, perthane and toxaphene were the materials used in treatments.

Flies: Drosophila sp or so called fruit flies, were noted as causing economic damage to field-ripe tomatoes for canning. TEPP was used in controlling this new pest.

BIOLOGICAL CONTROL OF INSECTS

Ventura County has four insectaries which produce parasites in large numbers. These insectaries are owned by citrus packing organizations and the parasites are released for their respective growers.

Citrus growers are becoming more aware of the value of biological control for certain serious insect pests. Many of our serious pests can best be controlled by natural parasites and it is toward this end that the insectaries are working by rearing and releasing these parasites and predators. Cost of production and release of parasites is very low when compared to treatment by chemical means.

Following is a summary of the kinds and number of parasites reared and released in the county during the year 1954 by the citrus association insectaries:

Parasite	Host	Number
Cryptoleamus montrouzieri	Mealybug	40,777,470
Leptomastix sp.	Mealybug	37,018,000
Pauridea sp.	Mealybug	1,291,000
Metaphycus helvolus	Black Scale	4,949,600
Hyperaspis spp.	Black Scale (Predator)	1,692
Pseudophycus perdignus	Mealybug	699,500
Bothriocreara bicolor	Mealybug	10,000
Allotropa sp.	Mealybug	4,000
Anagyrus pseudococci	Mealybug	5,000
		84,756,262

SEED INSPECTION

California Seed Law enforcement work during the year included inspection of all seed entering or offered for sale within the county.

This is done to insure proper labeling as to germination, purity and weed seed count.

Following is a summary of the work performed during the year 1954:

Number of dealers' lots inspected	896
Number of consumers' lots inspected	4
Number of interstate lots inspected	169
Number of intrastate lots inspected	921
Total number of lots inspected	1,990
Number of lots in violation	91
Number of official samples drawn	2
Number of stop sales orders issued	29
Number of lots released for destruction	44
Number of quarantine samples drawn	3
Number of grade samples drawn	108

In cooperation with the California Crop Improvement Association, the cleaning of threshers and seed cleaning machinery was supervised.

Crop seed was inspected and sampled and the identity was maintained for those lots of seed eligible for certification.

Number of hours spent on seed inspection 713

PEST CONTROL ENFORCEMENT

To comply with state laws governing the use of certain chemical insecticides and herbicides, it was necessary to issue permits for their use. Many hours were spent in the inspection of localities and premises before issuing the permits. Inspections were made of spray operations, dusting operations, and fumigation practices during the season. Regulations were drawn up and checked for compliance.

Number of hours spent on pest control enforcement 927

MATERIALS USED IN PEST CONTROL

Pest control is a big business in Ventura County and is essential to production of paying agricultural crops. To give some idea as to the types of materials used, and the amount, we offer this summary of materials reported by commercial pest control operators only. These figures do not include those materials used by persons on their own property and applied with their own equipment.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
Aldrin 2#/gal.	16	Bareland	Cut worms	40 gal.		40 gal.
Ammonium Molybdate	64	Citrus	Deficiency	67 lbs.		67 lbs.
Aramite 3%	6,816	Avoc., Vegt., Walnuts	Mites	51,539 lbs.	221,572 lbs.	273,111 lbs.
Aramite 15%W	11,417	Avoc., Citrus, Walnuts	Mites	63,400 lbs.		63,400 lbs.
Aramite 2#/gal.	23	Vegetables	Mites		1 gal.	1 gal.
B.H.C. 2%	203	Vegt.(Seedlings) Seed Crops	Aphis	500 lbs.	6,650 lbs.	7,150 lbs.
B.H.C. 1#/gal.	61	Bareland, Flowers	Aphis, Seed Corn Maggot		20 gal.	20 gal.
Calcium cyanimide	139	Peppers, Celery	Defoliant, Pink Rot		7,700 lbs.	7,700 lbs.
Captan 5%	1,581	Flowers, Vegt.	Mildew	18,655 lbs.	53,500 lbs.	72,155 lbs.
Captan 50%W	107	Bareland, Flowers, Vegt.	Mildew	669 lbs.		669 lbs.
Chlordane 40%E	51	Bareland, Vegt.	Beetles, Wire worms		79 gal.	79 gal.
Chlordane 40%W	2,483	Bareland, Citrus	Wireworm, Seed Corn Maggot, Ants	11,179 lbs.		11,179 lbs.
Chlordane 45%E	7	Bareland	Seed Corn Maggot	2 gal.		2 gal.
Chlordane 50%W	40	Citrus	Ants	800 lbs.		800 lbs.
Chlorobenzilate 25% W	106	Citrus	Bud Mite	5,030 lbs.		5,030 lbs.
Chlorothion	Unknown	Citrus	Mites	9 lbs.		9 lbs.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
C.M.U. 80%	Unknown	Annual Weeds	R.R. Rights of Way, Roadways, Ditches	3,290 lbs.		3,290 lbs.
Copper 5%	382	Vegetables	Blight, Mildew	600 lbs.	14,850 lbs.	15,450 lbs.
Copper 6%	874	Vegetables	Blight		32,700 lbs.	32,700 lbs.
Copper 7%	424	Vegt., Flowers	Mildew		19,750 lbs.	19,750 lbs.
Copper 10%	2,804	Vegetables	Mildew	35,350 lbs.	115,550 lbs.	150,900 lbs.
Copper 15%	159	Vegetables	Mildew		700 lbs.	700 lbs.
Copper 22%	1,293	Citrus, Decid.	Brown Rot	35,647 lbs.		35,647 lbs.
Copper 42%	63	Vegt., Citrus	Brown Rot, Mildew	153 lbs.		153 lbs.
Copper 53%	13,814	Citrus, Decid., Vegt., Walnuts	Brown Rot, Blight, Mildew	103,326 lbs.		103,326 lbs.
Cryolite	1,490	Citrus, Walnuts	Husk Fly, Thrips, Tortrix	32,756 lbs.		32,756 lbs.
DD	1,079	Citrus, Bareland, Vegt., Walnuts	Nematodes	288,757 lbs.		288,757 lbs.
DDT 4%	875	Vegt., Flowers, Seed Crops	Mites	43,650 lbs.	550 lbs.	44,200 lbs.
DDT 5%	10,207	Vegt., Flowers, Seed Crops	Worms	71,100 lbs.	337,575 lbs.	408,675 lbs.
DDT 10%	14,318	Vegt., Walnuts, Seed Crops, Bareland, Flowers	Worms, Wireworms	75,530 lbs.	269,850 lbs.	345,380 lbs.
DDT 25%E (2#/gal)	5,514	Vegt., Flowers	Lygus, Worms	295 gal.	5,061 gal.	5,356 gal.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
DDT 3#/gal.	402	Vegt., Flowers	Worms		291 gal.	291 gal.
DDT 50%W	3,799	Bareland, Citrus, Vegt., Walnuts, Flowers	Scale, Wireworms, Worms, Leafrollers	44,740 lbs.		44,740 lbs.
Dieldrin 1%	2,679	Vegt., Citrus	Aphis, Worms	47,150 lbs.	43,800 lbs.	90,950 lbs.
Dieldrin 1.5#/gal.	941	Bareland, Citrus	Seed Corn Maggot, Thrips	84 gal.	58 gal.	142 gal.
Dieldrin 50%W	32	Citrus	Thrips	100 lbs.		100 lbs.
Dinitro Compounds	198	Bareland	Weeds	155 gal.		155 gal.
DN-111 20%W	4,530	Citrus	Mites	26,590 lbs.		26,590 lbs.
E.D.B. 38%	748	Bareland	Nematode	8,945 gal.		8,945 gal.
E.D.B. 83%	7,647	Bareland	Nematode	28,898 gal.		28,898 gal.
Endrin 1.25%	402	Vegetables	Worms	11,150 lbs.		11,150 lbs.
Endrin 2%	10	Vegetables	Worms	600 lbs.		600 lbs.
Endrin 1.6#/gal.	15	Vegetables	Worms		5 gal.	5 gal.
Ferbam 11%	39	Flowers, Vegt.	Mildew, Rust	62 lbs.		62 lbs.
HCN	196,100 trees	Citrus, Walnuts	Scale	64,525 lbs.		64,525 lbs.
Kerosene	620	Citrus	Scale	11,367 gal.		11,367 gal.
Lead Arsenate (Basic)	247	Walnuts	Worms	4,197 lbs.		4,197 lbs.
Lindane 1 & 1½%	1,282	Vegt., Flowers	Aphis	40,600 lbs.	5,850 lbs.	46,450 lbs.
Lindane 20%E	38	Vegt., Bareland	Aphis, Seed Corn Maggot	5 gal.	1 gal.	6 gal.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
Malathion 4 & 5%	83	Vegetables	Aphis	1,150 lbs.	1,900 lbs.	3,050 lbs.
Malathion 25%W	656	Citrus	Mealybug, Scale	6,159 lbs.		6,159 lbs.
Malathion 5#/gal.	Unknown	Flowers, Vegt.	Aphis, Worms	4 gal.		4 gal.
Manganese	9,735	Avoc., Citrus	Deficiency	29,156 lbs.	100 lbs.	29,256 lbs.
Manzate	32	Vegetables	Mildew		125 lbs.	125 lbs.
Metacide 50%E	59	Vegetables	Aphis, Lygus, Mites, Worms	1 gal.	6 gal.	7 gal.
Methyl Bromide	5,950 Sq. ft.	Bareland	Weeds	59 lbs.		59 lbs.
Monocalcium arsenite	130	Deciduous	Brown Rot	365 lbs.		365 lbs.
Neotran 40%W	1,396	Citrus, Walnuts	Mites	4,275 lbs.		4,275 lbs.
Nicotine 1.8% (No.5)	3,277	Citrus, Walnuts	Aphis	89,850 lbs.	17,550 lbs.	107,400 lbs.
Nicotine 3.6% (No.10)	966	Vegt., Citrus, Walnuts	Aphis	19,650 lbs.	29,700 lbs.	49,350 lbs.
Nicotine 14%(BL-155)	114	Citrus	Aphis	222 lbs.		222 lbs.
Nicotine 40%(BL-40)	1,403	Citrus, Walnuts	Aphis	1,133 gal.		1,133 gal.
Oil	29,086	Citrus	Mites, Scale	439,437 gal.		439,437 gal.
Oil (Weed)	122	Misc.	Weeds	6,714 gal.	82 gal.	6,796 gal.
Oil (Rotenized)	2,138	Citrus	Aphis, Scale	17,718 gal.		17,718 gal.
OMPA	20	Walnuts	Aphis, Mites	10 gal.		10 gal.
Ovotran 50%W	20,822	Avoc., Citrus, Vegt., Walnuts	Mites	109,029 lbs.		109,029 lbs.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
Parathion 1% & 2%	11,020	Flowers, Walnuts, Vegt., Seed Crops	Aphis, Mites, Worms	266,880 lbs.	172,450 lbs.	439,330 lbs.
Parathion 2#/gal.	488	Vegetables	Aphis, Mites, Worms	89 gal.	63 gal.	152 gal.
Parathion 25%W	7,730	Vegt., Citrus, Walnuts	Aphis, Husk Fly, Scale, Worms	68,210 lbs.		68,210 lbs.
Parathion 4#/gal.	1,441	Vegt., Flowers	Aphis, Lygus, Worms	34 gal.	199 gal.	233 gal.
Pentachloronitrobenzene	1	Bareland	Pink rot of celery	350 lbs.		350 lbs.
Perthane 25%E	6	Vegetables	Aphis, Worms	1 gal.		1 gal.
Potassium Phosphate	64	Citrus	Deficiency	252 lbs.		252 lbs.
Pyrethrum	171	Citrus	Aphis	14 gal.		14 gal.
Rotenone 2.5%E	635	Citrus	Aphis	454 gal.		454 gal.
Rotenone 3-4-5%	5,395	Citrus	Scale	28,940 lbs.		28,940 lbs.
Sugar	154	Citrus	Thrips	385 lbs.		385 lbs.
Sulfur 15%	2,311	Vegetables	Mildew	11,250 lbs.	96,400 lbs.	107,650 lbs.
Sulfur 25%	1,120	Vegt., Flowers	Mildew	22,350 lbs.	16,350 lbs.	38,700 lbs.
Sulfur 50%	14,401	Vegt., Flowers, Seed Crops	Mildew, Mites	70,270 lbs.	385,452 lbs.	455,722 lbs.
Sulfur 70—80%	1,518	Vegt., Citrus	Scale, Mites	30,158 lbs.	27,100 lbs.	57,258 lbs.
Sulfur 90—100%	34	Citrus, Grapes, Vegetables	Mildew, Rust, Mites		1,300 lbs.	1,300 lbs.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
Systox (Demeton)	3,457	Citrus, Flowers, Seed Crops, Walnuts	Aphis, Stemborers, Mites	8,246 gal.	5 gal.	8,251 gal.
Tartar Emetic	153	Citrus	Thrips, Slugs	385 lbs.		385 lbs.
TEPP 1 & 2%	1,748	Vegt., Citrus, Walnuts	Aphis	15,250 lbs.	56,650 lbs.	71,900 lbs.
TEPP 20%E	2,589	Vegt., Citrus, Flowers, Seed Crops	Aphis, Mites	964 gal.	415 gal.	1,379 gal.
TEPP 40%E	100	Vegetables	Aphis	11 gal.	14 gal.	25 gal.
Thane 1%	224	Vegetables	Mildew		9,550 lbs.	9,550 lbs.
Thane 3%	154	Vegt., Citrus, Flowers	Mildew		6,000 lbs.	6,000 lbs.
Toxaphene 2%	15	Vegt., Flowers	Worms		300 lbs.	300 lbs.
Toxaphene 5%	18	Citrus	Worms	650 lbs.		650 lbs.
Toxaphene 10%	3,299	Vegt., Flowers, Seed Crops	Lygus, Worms	22,350 lbs.	98,750 lbs.	121,100 lbs.
Toxaphene 15%	134	Vegetables	Lygus	1,200 lbs.	4,300 lbs.	5,500 lbs.
Toxaphene 20%	107	Vegetables, Seed Crops	Lygus, Worms	900 lbs.	1,958 lbs.	2,858 lbs.
Toxaphene 4#/gal.	1,263	Vegetables, Seed Crops	Corn Seed Maggot, Lygus, Leaf Miner, Worms		1,392 gal.	1,392 gal.
Toxaphene 6#/gal.	6,961	Vegetables	Worms		4,493 gal.	4,493 gal.
Toxaphene 8#/gal.	2,408	Vegetables	Worms	200 gal.	1,054 gal.	1,254 gal.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
Zinc	15,071	Avoc., Citrus	Deficiency	81,302 lbs.	100 lbs.	81,402 lbs.
Zinc-Copper	35	Vegetables	Blight		1,400 lbs.	1,400 lbs.
Zinc Manganese Combinations	3,466	Avoc., Citrus	Deficiency	25,827 lbs.		25,827 lbs.
Zinc, Manganese, Copper	11,003	Citrus	Deficiency, Silver Mite	116,572 lbs.		116,572 lbs.
Zinc 4%, Manganese 4%) Copper 3%, Sulfur 30%)	224	Citrus	Deficiency, Silver Mite	3,449 lbs.		3,449 lbs.
Zineb 3.25%	1,299	Vegt., Flowers	Mildew	21,400 lbs.	27,000 lbs.	48,400 lbs.
Zineb 6%	376	Vegt., Flowers	Mildew	5,650 lbs.	8,550 lbs.	14,200 lbs.
Zineb 25%W	43	Citrus, Vegt.	Mildew	951 lbs.		951 lbs.
Zineb 65%W	330	Vegt., Flowers	Mildew	833 lbs.		833 lbs.
Zineb 65%E	8	Vegetables	Mildew		5 gal.	5 gal.
Ziram	3	Citrus	Mold	22 lbs.		22 lbs.
2,4-D	12,443	Misc., Bareland	Weeds	274 gal.	2,961 gal.	3,235 gal.
2,4-D; 2,4,5-T	4,750	Citrus	Tree Conditioner	240 gal.		240 gal.

PORT INSPECTION

State and Federal quarantines restrict the movement of certain materials likely to introduce serious insect or plant disease pests. Ships stores, crews quarters, cargo, passengers baggage, etc., are carefully inspected by staff personnel.

In case any material is discovered which does not comply with these restrictions, it is placed under a hold order or sealed to prevent it from coming ashore. The disposal of ship's garbage is under our supervision to prevent the introduction of foot and mouth disease, or insect or plant disease pests by this means.

Number of ship inspections 15

Number of hours spent on inspections 51

TOMATO SEED CERTIFICATION

In collaboration with the Bureau of Plant Pathology and under authority of the Director of Agriculture, county personnel inspected plantings of seed tomatoes for three seed houses. The program calls for three inspections during the growing season of all these acreages.

Harvesting and processing are under our direct supervision, including sterilization of all equipment used in the production of seed.

Inspections are for the purpose of determining the presence or absence of bacterial canker (Corynebacterium michiganense) a seed born disease.

In the event of discovery of the disease in a field, no seed tomatoes intended for certification may be grown in the field for the succeeding four years.

No evidence of the disease was found during the 1954 season.

Number of acres inspected 138

Number of hours spent on certification inspection 96

INSPECTION OF CITRUS FRUIT SHIPPED TO FLORIDA

Each lot of citrus fruit consigned to Florida must be inspected and certified. The certificate shows that the fruit contained in the boxes meets the requirements of Florida as to cleanliness from insect pests and diseases.

Number of cars inspected and certified 182
Number of containers inspected and certified . . . 160,118
Number of hours spent on inspections 149

STANDARDIZATION

Standardization inspections are made to insure the packaging and sale of products conforming with minimum state standards of quality, pack, labeling, etc.

Ventura County has thirty citrus packing plants and fourteen vegetable packers. These require constant inspection for minimum standards as well as inspection for out of state certification. Several of our vegetable packers pack in the field and this makes for extra inspection visits.

One supervising inspector is in charge of this work and is assisted by the district inspectors. The supervising inspector is also in charge of egg standardization.

Avocado plantings have increased, with over half of the acreage not yet bearing. Shipments are made to market by one cooperative association and several independent shippers. During the month of May, laboratory equipment was installed to make maturity tests on avocados. A total of 196 tests were made, and 56 lots failed to pass the maturity requirement of 8% oil content by weight.

No difficulties were encountered in the enforcement of standardization regulations, and fine cooperation was shown by all shippers.

Following is a summary of the work done on standardization for 1954:

Number of containers inspected	1,925,728
Number of containers rejected	4,022
Number of shipments certified	5,941
Number of containers certified	1,765,134
Number of violations issued	49

Eggs:

Number of premises visited	150
Number of lots inspected	456
Number of dozens inspected	60,198
Number of dozens rejected	625
Number of violations issued	6

Number of hours spent on standardization . . . 3,736

RODENT CONTROL

SQUIRRELS

Ventura County is recorded as a bubonic plague area and therefore considerable attention was paid to control of ground squirrels to reduce the population. Squirrels are not only a problem as disease carriers, but heavy

economic losses to agricultural crops result if the squirrel population is heavy.

Extra men were hired during the squirrel poisoning campaign to assist our staff personnel to secure a complete coverage of our area at the most opportune time. Staff members continued to answer calls and assist in squirrel control during most of the year.

GOPHERS

Gophers continue to be a serious threat to trees. Many trees, especially those of the citrus variety, are lost each year due to gopher damage. Control is essential in all areas to safeguard uninfested areas and reduce the number of trees annually damaged.

Demonstrations were held and assistance given to all interested parties. Poison baits were sold at cost.

FIELD MICE

This rodent is definitely on the increase, and severe cases of damage was recorded in many areas on young citrus trees. Poison baits, consisting of strychnine treated rolled barley, were sold at cost to growers.

RAT CONTROL

Rats are not only a nuisance, but do considerable damage to stored materials and to growing crops. Many avocado trees were severely damaged by rats. Warfarin treated baits were used with good success.

MISCELLANEOUS

As an additional service, many calls were answered and assistance given in especially difficult cases. Birds that were actually damaging agricultural crops were controlled to prevent further loss. Assistance and advice were given in many cases where opossums were damaging avocados; in controlling skunks which had invaded school buildings or were otherwise a menace; and in reducing coyote populations.

Following is a summary of the rodent control program:

Squirrels (Plague Area)

No. of acres treated in plague area	258,147
No. of pounds of strychnine-treated grain	2,625
No. of pounds of thallium-treated grain	5,862
No. of pounds of warfarin-treated grain (squirrels & rats)	1,337
No. of pounds of 1080-treated grain	95
No. of pounds of methyl bromide	4,204
No. of gallons of carbon bisulfide	319
No. of waste balls (used with carbon bisulfide)	17,376
No. of hours spent on rodent control, plague area	6,458

Other Rodents (Non-Plague Area)

No. of acres treated	30,656
No. of acres treated for squirrels	5,120
No. of pounds bait material for squirrels	495
No. of acres treated for gophers	15,005
No. of pounds bait material for gophers	3,644
No. of acres treated for field mice	38
No. of pounds bait material for field mice	35
No. of acres treated for rabbits	10,493
No. of pounds bait material for rabbits	2,888
No. of baits for coyote control	234
No. of properties treated for rats	1
No. of pounds baits for rats (warfarin)	5
No. of hours spent on rodent control, non-plague area	1,154

APIARY INSPECTION

Inspection of apiaries for diseases detrimental to bees is carried out by members of the Commissioner's staff. An increase in American Foulbrood was noted during the year. All diseased colonies were burned.

Following is a summary of the work carried on during 1954:

	No. Apiaries	No. Colonies
Registered	144	6,022
Entering county	73	10,593
Leaving county	87	8,994
Leaving California	2	655
Moving within the county	28	1,387
Inspected	78	3,105
Infected with American Foulbrood	32	655
Infected with European Foulbrood	8	35
Burned--American Foulbrood	21	619
No. of hours spent on inspection		658

WEED CONTROL

Weeds have long been a major problem with agriculture. They compete with food crops for moisture and soil elements, as well as acting as a harbor for insect pests and diseases. Growers have become more conscious of weeds and their control since the development of new herbicides.

We have controlled weeds along county roads and county properties. Contracts for weed control have been entered into with the State Division of Highways and with the Southern Pacific Railway.

Our chief concern is the control or eradication of primary noxious weeds. Surveys are conducted to determine the presence of new species not established in our county. Poison oak was treated in county parks and other properties controlled by the county.

The following is a summary of the Weed Control Program and the materials used in 1954:

Materials Used (Actual)

No. of gallons of weed oil	3,696
No. of gallons 2,4-D (Amine salts)	2,775
No. of gallons brush killer (2,4-D & 2,4,5-T)	1,075
No. of gallons of ammate	475
No. of gallons of Polybor-chlorate	370
No. of sq. ft. cut and burned	11,300

Principal Weeds Treated

Puncture Vine	Gaura
Johnson Grass	Hoary Cress
Russian Knapweed	Milk Thistle
Spiney Clotbur	Morning Glory
Yellow Star Thistle	Poison Oak
White Horse Nettle	Wild Artichoke
Tar Weed	Dog Bane

SURVEYS--1954

With the occurrence in California of such economically important pests as the Mexican Fruit Fly and Khapra Beetle, county surveys this year assumed an important role in the work of the County Department of Agriculture. Although surveys for the above mentioned insect pests were very important and received considerable publicity, other surveys, also important, were carried on by county personnel to determine the possible presence of agricultural pests dangerous to the county.

The following surveys were made during 1954:

General Pest Survey	Wheat Sawfly
Mexican Bean Beetle	Fan Leaf of Grape
Quick Decline of Citrus	Burrowing Nematode
Mexican Fruit Fly	Camellia Flower Blight
Khapra Beetle	Epitrimerus Mite
Red Scale	Sugar Beet Leafhopper
Spring Dwarf Nematode	Bacterial Canker of Tomato

GENERAL PEST SURVEY

The annual survey of yards within the county to determine the presence of pests new to or dangerous to the agricultural industry of the county, was again made this year. Particular emphasis was placed on the inspection for scale insects not of common occurrence within the county. Survey inspectors spent a total of 2824 man hours in this type of inspection. Following is a summary of the work done:

District	Yards Insp.	Host Plts. Inspected	Yards Infest.	Scale Insects				Treatment		
				Red	Chaff	Purple	Dicto.	Host Fumig.	S.	Host Rem.
Ventura	1,340	14,740	3	2	0	1	0	19	19	2
Oxnard	3,800	41,800	24	24	0	0	0	228	274	46
Santa Paula	650	7,150	0	0	0	0	0	0	0	0
Moorpark	1,100	12,100	37	37	0	0	0	435	4175	0
Ojai	1,325	14,575	1	1	0	0	0	8	0	0
Camarillo	3,400	37,400	20	20	0	0	0	222	223	1
Fillmore	1,200	13,200	12	12	0	0	0	122	125	3

* All yards in Simi and Santa Susana districts sprayed with oil and malathion as a precautionary measure.

RED SCALE SURVEY

A survey of citrus growers, not affiliated with any protective league, was made by county inspectors whenever there was any reason to believe that they

might be infested with red scale. Whenever red scale was found, the grove was given the recommended treatment for eradication of the pest. Following is a summary of work done in this survey:

Man-Hours	Acres Inspected	Acres Infested
2,282	382	334

MEXICAN BEAN BEETLE

The Mexican Bean Beetle survey was again carried out in cooperation with the State Department of Agriculture.

County personnel consisting of ten survey men, one supervising inspector and one Deputy Commissioner, assisted state men in the inspection of the entire bean acreage of Ventura County. The county crews were responsible for inspection of small garden plantings of beans, which are grown in or near the areas formerly infested with the bean beetle. In addition, they assisted state crews in the inspection of commercial plantings of beans within the county.

Again this year, no infestation of the Mexican Bean Beetle was found.

Following is a summary of work done during the 1954 season:

Man Hours		Properties	Acres	Number of
County	State	Surveyed	Surveyed	Infestations
4,596	13,572	2,269	87,438	0

QUICK DECLINE OF CITRUS

A survey of orange plantings within the county was again made this year to determine the status of Quick Decline of Citrus within Ventura County. This work was done in cooperation with the Bureau of Plant Pathology of the State Department of Agriculture.

The program was changed from preceeding surveys, in that no tree by tree inspection was made within the areas of known infection. Certain orchards in this area were plotted and a comparison made of the number of infected trees found in 1954 with those occurring in 1953. These spot checks indicated the disease was spreading within the infected areas of both Bardsdale and Sespe Canyon at about the same rate, or slightly faster, than the spread during 1953.

The most significant finding of this years survey was the indication that the disease is now generally spread in the Santa Clara Valley from the Sespe Canyon-Bardsdale infected areas eastward to the Los Angeles County line. Definite transmissions have been made on properties east of, and on

one property southwest of Piru. Trees on several properties between Fillmore and Piru showed typical field symptoms of Quick Decline. Transmission tests are being run by the State Department, but these have not yet been completed.

A few typical suspects were also found between the east city limits of Santa Paula and the junction of Highway 126 and Sycamore Road. This is the first time that any suspects have been found in this area.

Following is a summary of the work done:

Man Hours		Acres	Samples Taken for Microscopic	Budwood Samples for
County	State	Surveyed	Analysis	Transmission tests
1,164	884	17,997	46	15

MEXICAN FRUIT FLY

With the establishment of infestations of Mexican Fruit Fly in the Tia Juana area of Baja California, and subsequently the finding of an infested property in San Diego County, agricultural inspectors have been instructed to be on the alert for this pest. In addition, in order to assist in a statewide survey, bait trap lures have been distributed throughout the county on properties in which preferred host plants of the fruit fly are planted.

These traps are serviced weekly by the district agricultural inspectors. Any fly resembling the Mexican Fruit Fly is sent to the Bureau of Entomology, State Department of Agriculture for positive identification. To date, all findings have been negative.

Survey of Mexican Fruit Fly Bait Trap Survey:

Man Hours	No. Traps in County	Host Plants	No. Mexican Fruit Flies Trapped
110	28	Grapefruit, Orange, Avocado, Misc. Deciduous Fruits, Misc. Sub-Tropical Fruits	0

KHAPRA BEETLE

With the seriousness of the Khapra Beetle as a storage pest within California becoming more apparent, Ventura County has increased its vigilance against this insect during the past year. In cooperation with the United States Department of Agriculture, a survey of the county was made of all establishments where there were chances of an infestation becoming established.

The inspection included not only warehouses, but also seed houses, cattle feed yards, poultry ranches which import feed into the county, and manufacturing plants, such as sugar factories which bring used sacks or bagging into the county. The survey included poultry and feed yards in the Cuyama and Lockwood Valleys, which obtain a large percentage of their grain from the San Joaquin Valley where infestations of the Khapra Beetle are known to occur.

Surveys will continue during the coming year as this pest is potentially very dangerous to Ventura County.

All findings to date have been negative.

A summary of the work done follows:

Man Hours		Properties	Properties
County	USDA	Inspected	Infested
24	24	30	0

WHEAT SAWFLY

In 1953 a sawfly was found for the first time infesting wheat fields in the Cuyama Valley of Santa Barbara County. During 1954, the insect had extended its range in this area and treatment of the area was undertaken.

Ventura County personnel made a survey of that portion of Cuyama Valley within Ventura County to determine whether the insect had spread to this area. No infestations were found.

The following is a summary of the work done:

Man Hours	Properties Surveyed	Acres Surveyed	Infestation Found
24	5	150	0

EPITRIMERUS MITE

During 1954 a new mite was found working on avocados in the county. Specimens were collected for identification and were determined to be a species of Epitrimerus.

A survey by county inspectors was made to determine the extent of the infestation. The mite was found to be quite generally distributed in avocado groves inspected. Since little or no damage was in evidence, it is felt by state entomologists, that the mite is not of economic importance.

A summary of the work done follows:

Man Hours	Properties Inspected	Acres Inspected	Properties Infested
68	10	25	4

SUGAR BEET LEAFHOPPER

The investigation, started in 1953 to determine the status of the Sugar Beet Leafhopper in Ventura County, was carried on again this year. The purpose of these surveys was to determine whether control of the leafhopper within the county would be a practical method of controlling Western Yellow Blight of Tomatoes.

In cooperation with the State Department of Agriculture, surveys were made this year to determine the occurrence of the Sugar Beet Leafhopper in the county. With late rains causing good growth of vegetation in the foothills, conditions were unfavorable for a build up in population of the insect. Consequently, population counts were lower than those found in 1953.

In an investigation made by a State Department of Agriculture Entomologist, however, a flight of beet leafhoppers was traced from the Antelope Valley, through Mint Canyon and down the Santa Clara Valley from Castaic Junction to Ventura County. This migration from large breeding grounds of the insect indicates that local control of the pest would not be effective in control of the virus disease transmitted by them.

The following is a summary of the work done:

Man Hours		Properties Surveyed	Properties Infested	Acres Surveyed
County	State			
16	24	14	14	1,400

FAN LEAF OF GRAPE

In cooperation with the State Department of Agriculture, which is making a statewide survey of grape plantings, the county made a survey of vineyards within the county to determine whether a virus disease, known as Fan Leaf of Grapes, occurred in the county. Two county inspectors and one state plant pathologist made the inspection in this county. Only one property was found on which there were three vines which showed symptoms similar to fan leaf. No positive determinations have yet been made on these suspects.

A summary of the work done follows:

Man Hours		Properties Inspected	Properties Infested	Acres Inspected
County	State			
12	6	5	1 possible	80

SPRING DWARF NEMATODE

Spring Dwarf Nematode, a serious pest of strawberries, has recently been found in California. A statewide survey is being made to determine how extensive the infestation is in the state.

In cooperation with the State Department of Agriculture, a survey of the commercial strawberry plantings of Ventura County was made this year. No infestations were found.

A summary of the work done follows:

Man Hours		Properties	Properties	Acres
County	State	Inspected	Infested	Inspected
6	3	3	0	150

BURROWING NEMATODE

A survey was made in cooperation with the State Department of Agriculture to determine the possible presence of the Burrowing Nematode, a pest of certain tropical plants. Both nurseries and private collections of tropicals were inspected with Bananas, Anthuriums and Philodendrons being given particular attention.

Specimens of soil and roots were obtained and examined by state personnel. All examinations were negative.

A summary of the work done follows:

Man Hours		Properties	Specimens	Properties
County	State	Inspected	Taken	Infested
24	16	8	6	0

CAMELLIA FLOWER BLIGHT

A survey to determine the extent of Camellia Flower Blight within the county was made in cooperation with the State Department of Agriculture. Retail nurseries, as well as large private collections, were checked by state and county inspectors.

When infections were found in a nursery, the nursery was required to clean up the infection. In the case of private collections, the owner was notified of the infection and advised as to the best methods of control.

A summary of the work done follows:

Man Hours		Properties	Properties
County	State	Inspected	Infected
8	4	16	11

BACTERIAL CANKER OF TOMATOES

A survey of tomato fields grown for seed production was again made this year. This is a service to seed growers who may label as apparently free from bacterial canker, if three inspections during the growing season fail to show the presence of the disease. No infections were found this year within the county.

A summary of the work done follows:

Man Hours	Acres Inspected	Acres Infected
96	138	0

FINANCIAL STATEMENT
FOR FISCAL YEAR ENDING JUNE 30, 1954
VENTURA COUNTY DEPARTMENT OF AGRICULTURE

Salaries & Wages			
Commissioner, Deputy Commissioners, Inspectors and Office Help	$ 94,520.60		
Extra Help	26,608.51	$ 121,129.11	
Maintenance and Operation		25,172.00	
Capital Outlay		3,548.39	$ 149,849.50
Revenue			20,802.10

Classification of Estimated Expenditures by Functions:

Plant Quarantine (Interstate)	7,707.09	
Plant Quarantine (Intrastate)	15,414.19	
Standardization	12,651.42	
Field and Orchard Inspection	12,032.31	
Nursery Inspection	3,675.00	
Seed Inspection	3,093.33	
Rodent Control (County Expense)	11,254.23	
Plague Suppression (County Expense)	18,908.95	
Weed Control (County Expense)	6,717.78	
Apiary Inspection	2,877.07	
Crop Statistics	3,676.53	
Other Items*	48,293.21	146,301.11
Capital Outlay		3,548.39

* Functions Included in Other Items Include:

General Pest Survey -	$ 23,222.92
Vacuum Fumigation -	7,613.13
Miscellaneous -	17,457.16

VENTURA COUNTY
DEPARTMENT OF AGRICULTURE

Agricultural Building
Santa Barbara and Eighth Streets
Santa Paula, California

ANNUAL CROP PRODUCTION AND ACREAGE REPORT

COUNTY OF VENTURA

1954

Pursuant to Section 65.5 of the Agricultural Code, we submit the crop production, crop value and acreage report for the calendar year 1954.

This report is based only on the F.O.B. values of our agricultural production and in no way does it indicate net returns of growers. All costs of soil preparation, seeding or planting, cultural costs, pest control, harvesting and packaging are included in the F.O.B. values.

The F.O.B. values are the highest in the history of the county. The increase is accounted for by increased production of some of our principal crops, increased planting of certain crops due to late rainfall in March, and double plantings of vegetables on usable land.

Over 7,000 acres of fine agricultural land has been taken out of production since 1940. This land has been used for sub-divisions, schools, governmental holdings and state highways.

We are indebted to many individuals, firms, companies and corporations for their assistance in compiling such a report, and we hereby express our sincere thanks and acknowledgment to them for their fine cooperation.

C. J. Barrett

C. J. BARRETT
Agricultural Commissioner

CJB:ms

FOREWORD

The crop value for 1954 exceeds an all time high for Ventura County.

Lemons, which hold first place among the orchard crops, show the highest returns. This can be accounted for by increased production. The total lemon crop is the highest in production in the history of the county. Not only were the packed box shipments more than in 1953, but about 47% of our production was diverted to juice and concentrates. Price per box and price per ton was lower than in 1953.

Orange prices were higher than in 1953, yet production was down. Figures reveal about a 65% normal production. The packed box basis was high, but net returns per acre were below normal because of a small yield.

Walnut prices were down over the previous year, but production was almost twice as much. Acreage was also reduced due to tree removal.

Late rains made hay and grain produce almost a normal crop. Production and acreage was greatly increased over 1953.

There was an acreage increase in beans, but production was lower than in 1953. Prices on dry lima beans were lower than in 1953.

Sugar beet acreage was increased and production was normal.

The year 1954 was a bad year for vegetable growers. Prices were extremely low on most products. Cost of growing and harvesting left very little profit on some items. Acreage was also decreased over 1953.

Cut flowers showed an increase in acreage over 1953.

Egg production showed a large increase, with prices on eggs down.

Turkeys showed an increased production, with poor prices.

Milk was also lower in production, and thus, down in value.

All told, prices for farm products were below 1953, with net returns on some items below cost of growing and marketing.

Acres devoted to Agricultural Crops

A resurvey of orchard and vine crops was made during the year 1954. The following is the acreage figures as of December 31, 1954.

Crop	Bearing Acres	Non-Bearing Acres	Total
APRICOTS	765.9	.7	766.6
ALMONDS	84.8	.1	84.9
APPLES	69.7	4.4	74.1
AVOCADOS	738.0	1,298.0	2,036.0
BERRIES, BUSH	3.7	2.2	5.9
CHERIMOYAS	.3		.3
CITRON	2.2		2.2
GRAPEFRUIT	308.8	46.9	355.7
GRAPES	152.0		152.0
LEMONS, EUREKAS	16,749.6	4,936.3	21,685.9
LEMONS, LISBON	601.1	269.3	870.4
OLIVES	13.7		13.7
ORANGES, NAVEL	1,445.2	255.9	1,701.1
ORANGES, VALENCIA	15,827.8	471.8	16,299.6
PEARS	12.4		12.4
TANGERINES	7.4	6.2	13.6
WALNUTS	13,179.0	749.0	13,928.0
HAY & GRAIN			21,769.0
BEANS, DRY			31,514.0
BEANS, GREEN			8,576.0
VEGETABLES			10,900.0
SUGAR BEETS			3,701.7
SEEDS			1,005.0
CUT FLOWERS			572.0
			136,040.1

1954

VENTURA COUNTY CROP REPORT
Compiled by
VENTURA COUNTY DEPARTMENT OF AGRICULTURE
C. J. BARRETT, AGRICULTURAL COMMISSIONER

PRODUCT	PRODUCTION	UNIT	F.O.B. VALUE	BEARING ACREAGE
APRICOTS				766
Dried	250	Tons	$ 90,000.00	
Fresh	250	Tons	17,500.00	
			107,500.00	
ALMONDS	Crop Failure			84.9
AVOCADOS	1,714,040	Lbs.	325,383.00	807.2
BEANS				
Dry Limas	572,758	Bags	6,157,148.50	27,273
Blackeyes	6,220	Bags	57,105.00	630
Seed Beans	75,429	Bags	932,928.09	3,461
Misc. Varieties	1,302	Bags	13,072.50	150
	655,709		7,160,254.09	31,514
CITRUS:				
LEMONS				17,339.3
Pkd. Boxes	3,828,000	Boxes	22,632,263.05	
By-Products	122,452.62	Tons	5,339,392.00	
			27,971,655.05	
ORANGES - Valencia				15,826.9
Pkd. Boxes	2,551,781	Boxes	12,857,254.21	
By-Products	33,458.22	Tons	1,331,478.80	
			14,188,733.01	
ORANGES - Navels				1,444.6
Pkd. Boxes	287,770	Boxes	1,297,150.92	
By-Products	11,126.51	Tons	205,214.28	
			1,502,365.20	
GRAPEFRUIT				308
Pkd. Boxes	105,103	Boxes	381,865.70	
By-Products	1,429.47	Tons	17,361.00	
			399,226.70	
GRAIN				
Wheat	17,976	Bags	64,713.60	856
Barley	218,734	Bags	524,961.60	13,628
Oats	19,620	Bags	51,255.00	1,342
	256,330		640,930.20	15,826

PRODUCT	PRODUCTION	UNIT	F.O.B. VALUE	BEARING ACREAGE
HAY				
Alfalfa (Gr.)	37,452	Tons	187,260.00	1,237
Barley	1,404	Tons	30,888.00	881
Oats	5,949	Tons	160,523.00	3,825
	44,805		378,671.00	5,943
MISC. FRUITS				
Apples	25,000	Boxes-40#	50,000.00	69.7
Grapes	380	Ton	22,800.00	152
Olives	36	Ton	700.00	13.7
Peaches	8,828	Lugs	12,110.00	65.0
Strawberries	738.67	Ton	229,868.00	150
			315,478.00	450.4
SUGAR BEETS	71,593.7	Ton	699,470.45	3,701.7
Government Payment			174,688.63	
			874,159.08	
WALNUTS	10,167.03	Ton	4,327,614.08	13,368.9
VEGETABLES:				
Beans--Green	15,512.83	Ton	2,329,626.63	8,518
Beans--String	409.95	Ton	60,200.32	58
Broccoli	1,421.80	Ton	205,522.84	753
Broccoli	4,385	Crts.	14,628.50	36
Cabbage	61,838	Crts.	110,913.15	183
Carrots	349,316	Crts.	983,715.50	785
Cauliflower	49,203	Crts.	55,427.80	83
Celery	1,047,644	Crts.	1,760,821.73	1,147
Corn--Sweet	41,400	Doz.	12,420.00	46
Cucumbers	96,484	Lugs	118,291.71	117
Lettuce	346,325	Crts.	941,373.90	1,865
Lettuce--Romaine	66,962	Crts.	56,789.29	115
Onions	7,000	Sks.-50#	10,500.00	14
Misc. Mixed Veg'ts.	32,781	Crts.	80,852.00	145
Peas	369.2	Ton	40,511.50	395
Peppers:				
Bell	572.13	Ton	43,874.27	75
Chili--Green	2,327.8	Ton	142,061.04	315
Pimientos	6,614	Ton	429,385.00	715
Chili--Dried	798.6	Ton	294,684.68	469
Radishes	10,163	Crts.	7,216.35	26
Squash--Winter	1,805.44	Ton	16,530.25	152
Spinach	1,507.15	Ton	39,863.75	256
Tomatoes (Market)	330,069	Lugs	442,364.95	399
Tomatoes (Market)	8,070	Ton	549,908.42	616
Tomatoes (Canning)	50,418.86	Ton	1,144,823.96	2,145
Turnip Greens	399.83	Ton	9,995.75	52
Misc. Vegt. Dehydrated	4,024	Ton	193,940.00	318
			10,096,243.29	19,798

PRODUCT	PRODUCTION	UNIT	F.O.B. VALUE	BEARING ACREAGE
SEED				
Vegetable	253,249	Lbs.	206,553.73	741
Flower	49,155	Lbs.	110,385.96	264
	302,404		316,939.69	1,005
NURSERY STOCK				
Tomato Plants	19,380,000	Plants	115,980.00	108
Vegetable Plants	313,099	Flats	207,772.65	
Bedding Plants	2,300	Flats	900.00	
Bulbs	665,280	Bulbs	14,264.00	
Ornamentals	86,204	Pots	98,520.13	
Citrus Trees	180,918	Trees	407,065.50	
Avocado Trees	18,463	Trees	40,515.00	
Avocado Seed	110,000	Seed	11,000.00	
Walnut Trees	20,020	Trees	37,025.00	
			933,042.28	
CUT FLOWERS			1,132,091.27	572
LIVESTOCK				
Hogs	13,533	Head	665,440.00	
Cattle	17,101	Head	2,325,796.00	
Rabbits	385,000	Lbs.	84,700.00	
			3,075,936.00	
POULTRY				
Squabs	24,000	Birds	24,000.00	
Turkeys	362,000	Birds	1,976,520.00	
Chicken Meat	1,136,000	Lbs.	216,480.00	
Eggs	9,331,955	Doz.	3,919,421.10	
			6,136,421.10	
MILK				
Number of dairies	12			
Number of dairy cows	4,714			
Milk Production	5,734,735	Gallons		
Estimated Revenue			2,684,607.85	
GOAT MILK				
Number of goats	35			
Milk Production	3,469	Gallons		
Estimated Revenue			6,618.00	
GRAND TOTAL			$82,573,868.89	

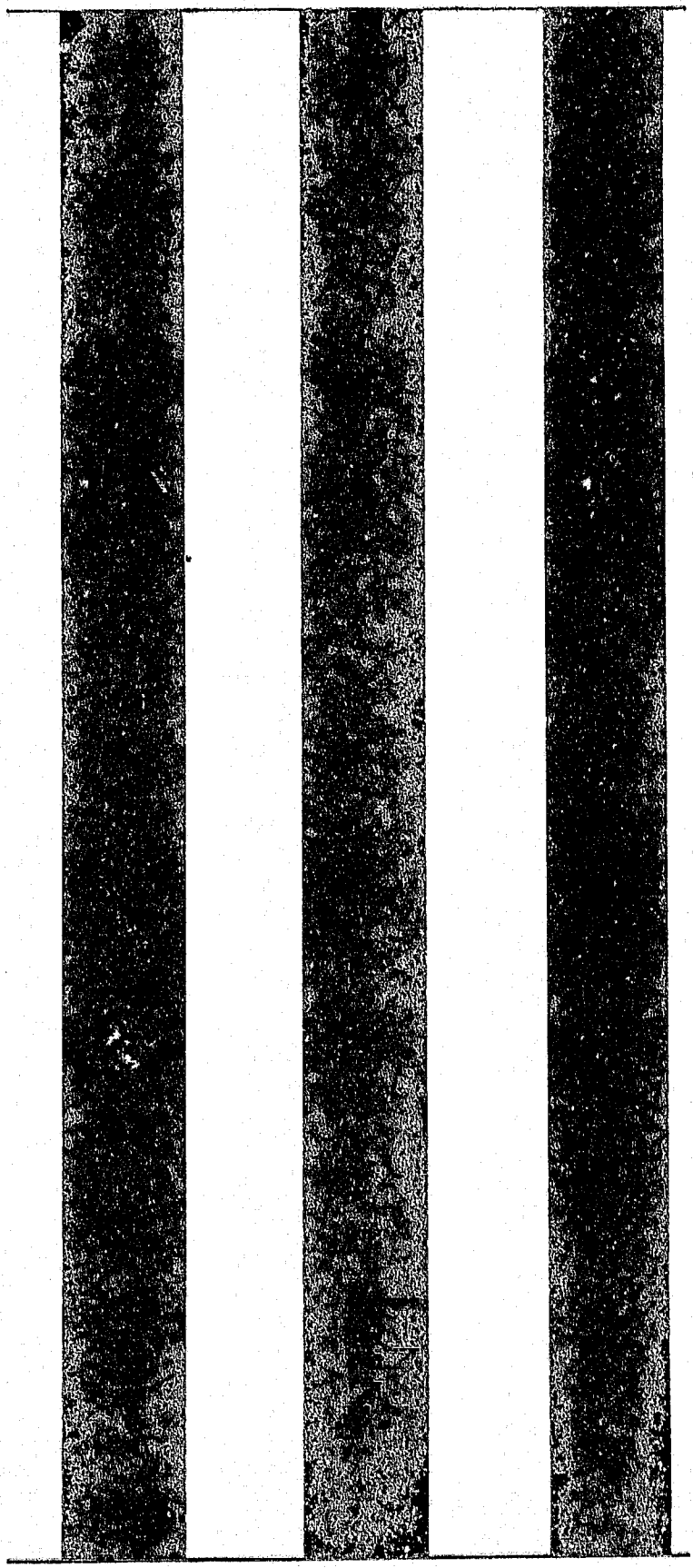
CJB:ms
700

C O M P A R I S O N

PRODUCT	1953 F.O.B. VALUE	1953 ACRES	1954 F.O.B. VALUE	1954 ACRES	INCREASE OR DECREASE
Apricots	$ 70,130.00	1,128	$ 107,500.00	766	$ 37,370.00 Inc.
Almonds	Crop Failure	157.5	Crop Failure	84.9	
Avocados	376,937.42	700	325,383.00	807.2	51,554.42 Dec.
Beans	7,338,841.74	29,225	7,160,254.09	31,514	178,587.65 Dec.
Lemons	25,676,532.58	17,631	27,971,655.05	17,339.3	2,295,122.47 Inc.
Valencias	13,073,586.30	17,532	14,188,733.01	15,826.9	1,115,146.71 Inc.
Navels	1,365,147.79	1,581	1,502,365.20	1,444.6	137,217.41 Inc.
Grapefruit	319,677.42	350	399,226.70	308	79,549.28 Inc.
Grain	182,125.90	6,811	640,930.20	15,826	458,804.30 Inc.
Hay	351,735.00	5,113	378,671.00	5,943	26,936.00 Inc.
Misc. Fruit	216,895.00	444	315,478.00	450.4	98,583.00 Inc.
Sugar Beets	594,526.24	2,088.6	874,159.08	3,701.7	279,632.84 Inc.
Walnuts	2,413,016.72	16,770	4,327,614.08	13,368.9	1,914,597.36 Inc.
Vegetables	10,174,254.71	21,428	10,096,243.29	19,798	78,011.42 Dec.
Seed	428,787.32	990.2	316,939.69	1,005	111,847.63 Dec.
Nursery Stock	829,458.89	-	933,042.28	-	103,583.39 Inc.
Cut Flowers	400,000.00	200	1,132,091.27	572	732,091.27 Inc.
Livestock	2,822,324.00	-	3,075,936.00	-	253,612.00 Inc.
Poultry	5,616,257.00	-	6,136,421.10	-	520,164.10 Inc.
Milk	3,589,913.90	-	2,684,607.85	-	905,306.05 Dec.
Goat Milk	6,500.00	-	6,618.00	-	118.00 Inc.
Totals	$75,846,647.93		$82,573,868.89		$6,727,220.96

AGRICULTURAL COMMISSIONER
BOX 889
SANTA PAULA, CALIFORNIA

Louise B. Wheeler, Reference Librarian,
University of California, Library,
College of Agriculture,
Davis, Calif.



1955

VENTURA COUNTY

ANNUAL REPORT

AND

CROP STATISTICS

1955

AGRICULTURAL COMMISSIONER

A G R I C U L T U R A L C O M M I S S I O N E R

COUNTY OF VENTURA, CALIFORNIA

A N N U A L R E P O R T
YEAR ENDING DECEMBER 31, 1955

BOARD OF SUPERVISORS

Lester A. Price - Chairman

A. C. Ax	C. H. Andrews
E. L. Carty	J. N. Appleton

DEPARTMENT PERSONNEL

COMMISSIONER	C. J. BARRETT
Deputy Commissioner	John L. Schall
Deputy Commissioner	John C. Allee
Deputy Commissioner	Harry E. Bronson
Supervisor - Standardization	Paul B. Travis
Nursery & Seed Inspector	Verner E. Holmer
Vacuum Fumigation	Murl Boren
District Inspector, Ventura	Albert Bicker
District Inspector, Oxnard	W. M. Dunning
District Inspector, Oxnard	Clyde W. May
District Inspector, Moorpark--Simi	I. L. Clements
District Inspector, Santa Paula	Wm. E. Simonds
District Inspector, Ojai	Fred Lewis
District Inspector, Fillmore--Piru	Harry Michel
District Inspector, Bardsdale (Part of Year)	Omar Myers
District Inspector, Camarillo	W. M. Jones
Inspector--Weeds & Rodent, Santa Paula	C. C. Burleson
Inspector--Weeds & Rodent, Santa Paula	Floyd Ward
Inspector--Weeds & Rodent, Ventura (Part of Year)	Marvin Paregin
Inspector--Weeds & Rodent, Moorpark--Simi	Bruce Burns
Inspector--Weeds & Rodent, Camarillo	Oscar Olsen
Account Clerk	Shirley Carter
Record Clerk	Mary Simpson

C O N T E N T S

ANNUAL REPORT TO THE BOARD OF SUPERVISORS

COUNTY OF VENTURA

AND

THE DIRECTOR

STATE DEPARTMENT OF AGRICULTURE

1955

We submit the Annual Report of the activities of the Agricultural Commissioner's office for the calendar year of 1955.

While the Commissioner's office is charged primarily with enforcement of state laws pertaining to the agricultural industry, we have endeavored not only to fulfill these requirements but to be of additional service to the people of our county.

Our duties are varied and not only do they tend to regulate, by state law, certain practices carried on by the grower, but also give protection to the public in general and to the people who pay the taxes.

The principal activities included in this report are Quarantine, Nursery Inspection, Plant Disease Inspection, Field and Orchard Inspection, Port Inspection, Seed Inspection, Standardization of Fruits, Nuts, Vegetables, Eggs and Honey, Weed Control, Rodent Control, Surveys for new pests, Apiary Inspection, and the compiling of agricultural statistics.

QUARANTINE

One of the important phases of the work of the Ventura County Department of Agriculture is the enforcement of plant quarantine laws. In the past decade, movement of plant material into the county has greatly increased. Landscaping of homes in new subdivisions has resulted in the importation of plants in ever increasing numbers. The danger of introducing economic pests, both insects and plant diseases, into the county also becomes greater as the amount of plant material entering the county increases.

Inspection of all plant material entering the county, both from other states and from other counties, is required by law. Inspection of all shipments arriving by mail, express, freight and other common carriers is made daily by county agricultural inspectors. Any plant material entering Ventura County, which is found to be infested or infected with a serious pest or which arrives in violation to State or Federal Quarantines, is properly handled to insure protection.

All lots of citrus which are offered for retail sale are inspected for serious pests of citrus.

Shipments of nursery stock arriving at retail nurseries are held for inspection by agricultural inspectors before being released for sale.

Shipments of seeds also are subject to inspection to determine the possible presence of seeds of weeds not of common occurrence in the county.

The following is a summary of the quarantine work during the year 1955:

INTERSTATE QUARANTINE

No. of shipments inspected	1,472
No. of plants inspected	407,569
No. of shipments rejected	23
No. of plants rejected	290
No. of shipments passed	1,449
No. of plants passed	407,279
No. of shipments of grain passed	291
No. of tons of grain passed	5,788

INTRASTATE QUARANTINE

No. of shipments inspected	11,487
No. of plants inspected	18,740,318
No. of shipments rejected	146
No. of plants rejected	3,293
No. of shipments passed	11,341
No. of plants passed	18,737,025
No. of shipments of grain passed	966
No. of tons of grain passed	11,967
No. of shipments of hay passed	25
No. of tons of hay passed	515

The following were rejected until fumigation treatment was applied:

No. of shipments	1,095
No. of plants	591,357

Number of hours spent on quarantine inspection 9,970

TREATMENTS

Ventura County is well equipped to furnish treatment for insect pests on plant material. Two vacuum fumigation chambers and one atmospheric chamber, for methyl bromide use, are installed in the county owned building.

Our county policy of requiring treatment by vacuum fumigation of all citrus trees and walnut trees or their propagative parts before planting

affords the growers freedom from serious scale insects that might later become a serious threat to their groves. By operating these facilities of fumigation we are able to be of real service to our growers at a minimum price and aid in fast movement. Large quantities of infested plant material can be safely treated at this plant and thus eliminate the need of return to point of origin.

The following is a summary of the treatment work done by the Commissioner's office during the year:

VACUUM FUMIGATION (HCN)

Citrus Fruit (boxes)	13 lots	255
Citrus Trees	930 "	230,315
Ornamental Plants	7 "	583
Rose Bushes	4 "	400
Walnut Trees	39 "	1,548

METHYL BROMIDE VACUUM

Used Bags	41 lots	146,047
Walnuts	1 "	8

METHYL BROMIDE - ATMOSPHERIC

Seedlings	15 lots	107,950
Budwood (bundles)	20 "	27
Citrus Trees	3 "	44

Number of hours spent on fumigation 1,862

NURSERY INSPECTION

Inspection of all nursery stock moving into the county is required at the time of entry. In addition, quarterly nursery inspections are made during the year. Those yards adjoining and in the vicinity of nurseries are inspected regularly and if found infested with serious pests, are subjected to clean up programs.

When infestations of pests are found in nurseries, these infestations must be properly controlled or eradicated before the stock is allowed to move.

Infestations of Parlatoria oleae and Aonidiella aurantii, armored scales which are serious orchard pests, were found in 1955. Eradication of both these scales is mandatory. All hosts, in each case, were vacuum fumigated with HCN at the county fumatorium and the remaining plants in the vicinity in each nursery received the required pest control treatment. In the case of Parlatoria oleae, the entire nursery was sprayed with a malathion cover spray and the infested section was quarantined for thirty days during which time two thorough reinspections were made by county personnel.

Psylla uncatoides, a pest new to the county, was discovered in two nurseries on Albizzia sp. in one case, and on Acacia sp. in the other. Both properties were promptly treated with malathion. No recurrence has been noted to date.

Thirty-three specimens of diseased nursery stock were submitted to the Bureau of Plant Pathology, California Department of Agriculture for diagnosis. Control programs were outlined for the nurserymen.

The following is a summary of nursery inspection work for the year 1955:

Number of nursery inspections	150
Number of reinspections	23
Number of nurseries with "A" pests (Eradication mandatory)	0
Number of nurseries with "B" pests (Eradication required in Ventura County	2
Number of nurseries with "C" pests (Of common occurrence)	53
Number of nurseries required to clean up	55
Number of hours spent on nursery inspection	593

PLANT DISEASE INSPECTION

A substantial increase in the number of calls relating to disease problems was noted during 1955. Inspections were made in commercial fields and orchards, nurseries, and residential properties. The problems were varied, including fungus, bacterial, virus and nematode infections. As in the past, a percentage of the troubles involved minor element deficiencies or excesses, salt injury, fertilizer burn, injury due to application of pest control materials, etc.

We wish to acknowledge again the fine cooperation of the Bureau of Plant Pathology, State Department of Agriculture and Dr. Alex French, who aided county personnel in the plant disease inspections, which we summarize below:

Commodity	No. of Inspections
Avocados	16
Citrus	27
Deciduous (Fruits, Nuts, Grapes, Berries)	41
Vegetables	22
Ornamental Shrubs and Trees	132
Bulbs and Flowers	15
Lawns	21
Alfalfa	3
Cantaloupes	3
Miscellaneous	2
Total inspections	282

Number of hours spent on plant disease problems 410

FIELD AND ORCHARD INSPECTION

Inspections of orchards and field crops are a regular part of our duties. These inspections give us a knowledge of pest conditions and aid us in making proper recommendations for their control.

We are constantly on the alert for new pests and are anxious to know of their presence so that proper control measures can be taken. In some cases, certain pests require regular yearly control measures, while in other cases the degree of infestation varies from year to year.

A summary of the pest conditions follows:

CITRUS

Black Scale: Generally distributed over most of the citrus acreage, heavier infestation in many cases than noted last year, especially on lemons. The second brood, in double-brooded areas, was usually heavier. Treated with oil, oil and rotenone, HCN fumigation, kerosene, DDT, and reduced in many cases by the oil and malathion, and oil and parathion applied for red scale control.

Citrus Aphids: Intensity of infestation about normal at beginning of season, but weather conditions did not cause usual reduction, resulting in sharp increase in amount of treatment on all citrus, but especially on lemons.

Citrus Mites:

Citrus red spider--Received more treatment than any other citrus pest. Slower spring build-up noted this year, but season average about normal. The unusually hot weather caused only a temporary reduction. Materials used were oil, Aramite, Ovotran.

Lewis mite--Found mainly around Santa Paula. Infestation lighter than usual, little specific treatment needed.

Silver or rust mite--Isolated infestations may now be found in most parts of the county. All infestations received treatment. Sulfur most often used, but the use of Chlorobenzilate is increasing, especially where sulfur may have an adverse effect on natural predators and parasites.

Six-spotted mite--Not of general importance, but in limited areas infestations may be heavy and damage severe. Generally lighter this year than last. Treatments for other mites usually give adequate control.

Two-spotted mite--Noted in additional areas, usually forced over on citrus from beans or cover crops. Damage may be severe, especially on young lemons, and specific treatments may be required.

Bud mite--Infestation about same as in past. Control measures necessary on much of lemon acreage. Oil most commonly used. Increase in amount of Chlorobenzilate used for treatment.

Mealybug: Infestation generally heavier than last year, with heavy build-up noted in some groves, and more treatment necessary. Heaviest infestation believed due to adverse effect on natural control of some pest control materials commonly applied on adjacent crops.

Good ant control measures are always necessary to keep infestation under control. Parasites were released in most groves.

Orange Tortrix: Infestations more general and heavier, on average, than in 1954. Oranges most commonly infested, but some treatment was also necessary on lemons. Cryolite usually used in treatment, but parathion used in emergencies.

Greenhouse Thrip: Infestations lighter than noted in years. Very little treatment, only on oranges

Citrus Thrip: Generally lighter than normal, and less scarring evident. Some treatment necessary in Ojai, for first time. Sugar and tartar emetic still effective in Ventura County, and is most commonly used for treatment. DN-111, when used in mite control, was also partially effective in controlling citrus thrips.

Red Scale: Fewer infested trees found than last year. All infestations received treatment. The usual treatment consists of two HCN fumigations, although some areas were treated with parathion or malathion, either alone or in combination with oil.

Yellow Scale: More treatment applied than in previous year, especially in Los Posas area. Other areas about normal. Oil in combination with parathion or malathion usual treatment, often combined with treatments for other pests.

Dictyospermum Scale: Number of infested trees down sharply from last year. Infestations were treated by HCN fumigation.

Brown Rot of Citrus: Most groves treated, especially lemons. Damage especially noted in non-cultivated orchards after May rains. Bordeaux and copper used in control.

AVOCADO

Brown Mite: Infestations lighter than last year, but many adults are over-wintering, which may result in early spring build-up. When possible, treatment is avoided to prevent interference with natural control. Materials applied when necessary are sulfur, Aramite and Ovotran.

Two-Spotted Mite: Infestations lighter and not as numerous as in previous year, are only noted when forced onto avocados from drying beans or cut cover crops.

WALNUTS

Husk Fly: This insect is now found in most areas of the county. Treatment is usually necessary. Parathion is most commonly used in control, cryolite used occasionally.

Codling Moth: A serious pest, which requires treatment in most walnut plantings. DDT is widely accepted as a control material, while basic lead arsenate is still used in a few cases.

Walnut Aphids: Generally present, and usually required one or more treatments. Parathion, nicotine, commonly used. Systox and OMPA used in large amounts this year, with effective results.

European Red Mite: Infestations normal, treatment generally necessary. Aramite, Ovotran generally used. Systox and OMPA applied in larger amounts.

FIELD CROPS

The wide variety of field and vegetable crops now grown in this county, with harvests at varying times of the year, often allows a carry-over of insect pests from one crop to another. Some of the organic insecticides, used on the specific crop or perhaps applied to an adjacent planting and allowed to drift, have in some cases reduced the normal population of natural parasites and predators. This reduction may result in a build-up to large numbers of insect pests usually controlled or held to low numbers by natural control.

Spider Mites: No significant change from the preceeding year was noted. Crops are generally and widely infested unless treated. Sulfur, Aramite, Ovotran, TEPP and parathion were the most important materials used in control.

Lygus spp.: Populations about the same as during the previous year. Treatment needed on most seed crops and beans. DDT, toxaphene, Metacide, and parathion used in treatment.

Aphids: Always present in varying numbers in field crops and usually require treatment. Lindane, malathion, TEPP, Metacide and parathion used. The spotted alfalfa aphid is now present in the county, and required some treatment.

Worms: Cabbage and lettuce were again the crops most affected, the semi-loopers Autographa spp. being the most prevalent. Cutworms did some damage and required treatment. The corn ear worm was again damaging to beans, requiring treatment. Aldrin, dieldrin, DDT, endrin, Metacide, parathion, Perthane and toxaphene were used.

Flies: Fruit flies (Drosophila sp.) were not noted as causing any economic damage this year. Seed corn maggot commonly injures beans and other field crops unless soil or seed is treated, using chlordane, DDT or lindane.

BIOLOGICAL CONTROL OF INSECTS

For many years citrus growers of Ventura County have recognized the value and importance of biological control of citrus pests. This idea is now coming

into its own because mass production of parasites and predators can be done at a cost far below that of chemical treatment. Many of our pests that are serious to the production of citrus can be controlled far better by natural parasites than by chemicals.

Four insectaries are located in various parts of the county and are owned and operated by citrus associations. The cost of mass production is very low and association growers are benefited to a great measure by frequent release of a large number of beneficial parasites and predators.

Following is a summary of the kinds and numbers of parasites reared and released in the county during the year 1955 by the citrus associations:

Parasite	Host	Number
Cryptoleamus montrouzieri	Mealybug	46,631,990
Leptomastix sp.	Mealybug	33,428,000
Pauridea sp.	Mealybug	1,845,000
Metaphycus helvolus	Black Scale	5,390,000
Diversenervus elegans	Black Scale	400,000
Scutellista cyanea	Black Scale	70,000
Pseudophycus perdignus	Mealybug	379,000
Anagyrus pseudococci	Mealybug	50,000
Allotropa sp.	Mealybug	3,000
		88,196,990

SEED INSPECTION

The purpose of the California Seed Law, of which we are the enforcing agency, is to insure proper labeling as to germination, purity and weed seed count, of crop seed. This enforcement work included inspection of all seed entering or offered for sale within the county.

Following is a summary of the work performed during the year 1955:

Number of dealers' lots inspected	1,510
Number of interstate lots inspected	192
Number of intrastate lots inspected	1,310
Total number of lots inspected	3,012
Number of lots in violation	132
Number of official samples drawn	6
Number of stop sale orders issued	4
Number of lots released for destruction	39
Number of quarantine samples drawn	5
Number of grade samples drawn	107
Number of Crop Improvement Assoc. samples drawn	6

In cooperation with the California Crop Improvement Association, the cleaning of threshers and seed cleaning machinery was supervised. Crop seed was inspected and sampled and for those lots of seed eligible for certification, identity was maintained.

Sec. 154.3 of the Agricultural Code regulates the movement of seed screenings and provides for the disposal of those lots infested with weed seeds. Grinding for feed was permitted of seed screenings for most lots in violation.

To expedite the handling of seed screenings, a new approach to the problem was tried this year. Thirty-eight (38) flower fields totaling 282½ acres were surveyed for the presence of weeds immediately prior to harvest. Destruction of seed screenings in an approved manner was required on screenings from five lots (77 acres). No restrictions on movement of screenings from the remaining thirty lots (205½ acres). This is practical on certain specialty crops only.

Number of hours spent on seed inspection 617

PEST CONTROL ENFORCEMENT

Recent changes in California State Law relative to the use of injurious materials and injurious herbicides now require permits for their use and also for their purchase. Inspections were made prior to issuance of permits in order to lower the chance of damage to adjoining crops and properties.

Two county wide meetings were held with the law enforcing agency and commercial pest control operators. Agreements between crop dusting operators and citrus growers were reached in an effort to decrease the amount of chemicals that might drift onto adjoining property and thus reduce the number of beneficial parasites.

Inspections were made of spray operations, dusting operations and fumigation practices during the season. County and state regulations were enforced and inspections made for their compliance.

Number of hours spent on pest control enforcement 1,686

MATERIALS USED IN PEST CONTROL

Pest control is a big business in Ventura County and is essential to production of paying agricultural crops. To give some idea as to the types of materials used, and the amount, we offer this summary of materials reported by commercial pest control operators only. These figures do not include those materials used by persons on their own property and applied with their own equipment.

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PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
Aramite 3%	5,866	Avoc., Berries, Vegt., Walnuts	Mites	16,690 lbs.	212,300 lbs.	228,990 lbs.
Aramite 15%W	11,705	Avoc., Apples, Citrus, Walnuts	Mites	111,647 lbs.		111,647 lbs.
Aramite 2#/gal.	5	Berries	Mites		2 gal.	2 gal.
B.H.C. 2%	54	Vegt.(Seedlings) Seed Crops	Aphis	500 lbs.	1,350 lbs.	1,850 lbs.
Captan 5%	1,151	Berries, Flowers, Vegetables	Mildew		50,250 lbs.	50,250 lbs.
Captan 10%	8	Vegetables	Mildew		400 lbs.	400 lbs.
Captan 50%W	435	Bareland, Flowers, Vegt.	Mildew	2,467 lbs.	150 lbs.	2,617 lbs.
Chlordane 45%E	481	Bareland, Vegt.	Beetles, Wireworms		148 gal.	148 gal.
Chlordane 40%W	1,875	Bareland, Citrus	Wireworm, Seed Corn Maggot, Ants	7,926 lbs.		7,926 lbs.
Chlorobenzilate 25%W	4,235	Citrus	Bud Mite	17,520 lbs.		17,520 lbs.
Chlorobromide	10	Bareland	Weeds	8,000 lbs.		8,000 lbs.
C.M.U. 80%	Unknown	RR Rights of Way, Roadways, Etc.	Annual weeds	6,782 lbs.		6,782 lbs.
Copper 5%	383	Vegetables	Blight, Mildew		8,950 lbs.	8,950 lbs.
Copper 7%	70	Vegt., Flowers	Mildew		3,500 lbs.	3,500 lbs.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
Copper 10%	896	Vegetables	Mildew	3,800 lbs.	41,400 lbs.	45,200 lbs.
Copper 20%	1,039	Vegetables	Mildew	650 lbs.	64,450 lbs.	65,100 lbs.
Copper 22%	988	Citrus, Decid.	Brown Rot	10,102 lbs.		10,102 lbs.
Copper 42%	591	Walnuts	Blight	3,032 lbs.		3,032 lbs.
Copper 53%	12,627	Citrus, Decid., Vegt., Walnuts	Brown Rot, Blight, Mildew	80,489 lbs.		80,489 lbs.
Cryolite	1,600	Citrus, Walnuts	Husk Fly, Thrips, Tortrix	33,411 lbs.		33,411 lbs.
Dalapon	Unknown	Various	Weeds	755 lbs.		755 lbs.
DD	1,110	Citrus, Bareland, Vegt., Walnuts	Nematodes	332,048 lbs.		332,048 lbs.
DDT 4%	837	Vegt., Flowers, Seed Crops	Worms	50,450 lbs.	450 lbs.	50,900 lbs.
DDT 5%	14,779	Vegt., Flowers, Seed Crops	Worms	81,010 lbs.	442,500 lbs.	523,510 lbs.
DDT 10%	9,429	Vegt., Walnuts, Seed Crops, Bareland, Flowers	Worms, Wireworms	104,895 lbs.	233,450 lbs.	338,345 lbs.
DDT 25%E (2#/gal)	10,130	Vegt., Flowers	Lygus, Worms	495 gal.	9,325 gal.	9,820 gal.
DDT 50%W	1,191	Bareland, Citrus, Vegt., Walnuts, Flowers	Scale, Wireworms, Worms, Leafrollers	126,539 lbs.		126,539 lbs.
Dieldrin 1%	33	Vegetables	Aphis, Worms	900 lbs.	200 lbs.	1,100 lbs.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
Dieldrin 1.5#/gal.	155	Bareland, Citrus	Seed Corn Maggot, Thrips	106 gal.	8 gal.	114 gal.
Dieldrin 50%W	34	Citrus	Thrips	117 lbs.		117 lbs.
Dinitro Compounds	30	Bareland	Weeds	25 gal.		25 gal.
DN-111 20%W	2,166	Citrus	Mites	13,834 lbs.		13,834 lbs.
Duraset 20%W .	85	Vegetables	Fruit Set	41 lbs.	12 lbs.	53 lbs.
Duraset .26D	38	Vegetables	Fruit Set		1,700 lbs.	1,700 lbs.
E.D.B. 83%	7,590	Bareland	Nematode	26,498 gal.		26,498 gal.
Endrin 1 & 1.25%	1,993	Vegetables	Worms	61,170 lbs.		61,170 lbs.
Endrin 2%	21	Vegetables	Worms		700 lbs.	700 lbs.
Endrin 1.6#/gal (19.5%)	105	Vegetables	Worms	105 gal.	75 gal.	180 gal.
Ferbam 11%	41	Flowers, Vegt.	Mildew, Rust	26 lbs.		26 lbs.
HCN	144,124 trees	Citrus, Walnuts	Scale	53,968 lbs.		53,968 lbs.
Heptachlor 2%	10	Vegetables	Leafminer		500 lbs.	500 lbs.
Heptachlor 25E	30	Bareland	Seed Corn Maggot		15 gal.	15 gal.
Karathane 1%	576	Vegt., Flowers	Mildew	1,060 lbs.	23,400 lbs.	24,460 lbs.
Kerosene	28	Citrus	Scale	405 gal.		405 gal.
Lead Arsenate (Basic)	42	Walnuts	Worms	1,050 lbs.		1,050 lbs.
Lindane 1%	1,187	Vegt., Flowers	Aphis	45,200 lbs.	500 lbs.	45,700 lbs.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
Lindane 20%E	336	Vegt., Bareland	Aphis, Seed Corn Maggot	41 gal.	6 gal.	47 gal.
Lindane 25W	1,274	Vegetables	Aphis	2,304 lbs.		2,304 lbs.
Lime	10,502	Citrus, Decid., Walnuts	Safener	44,507 lbs.		44,507 lbs.
Malathion 4%	445	Vegetables	Aphis	5,650 lbs.	9,250 lbs.	14,900 lbs.
Malathion 25%W	2,965	Citrus	Mealybug, Scale	40,708 lbs.		40,708 lbs.
Malathion 5#/gal.	1,091	Citrus, Walnuts, Flowers, Vegt.	Aphis, Worms	434 gal.	7 gal.	441 gal.
Malathion 8#/gal.	182	Vegetables	Aphis, Worms	23 gal.	9 gal.	32 gal.
Manganese	11,578	Avoc., Citrus	Deficiency	33,082 lbs.		33,082 lbs.
Manzate 5%	189	Vegetables	Mildew	3,000 lbs.	5,050 lbs.	8,050 lbs.
Metacide 50%E	32	Vegetables	Aphis, Lygus, Mites, Worms		2 gal.	2 gal.
Methoxone-Chlorax	160 Mi.	RR Rights of Way	Weeds	12,342 gal.		12,342 gal.
Nabam 19%	46	Vegetables	Blight	58 gal.		58 gal.
Neotran 40%W	3,710	Citrus, Walnuts	Mites	4,788 lbs.		4,788 lbs.
Nicotine 1.8% (No.5)	658	Citrus, Walnuts	Aphis	3,755 lbs.	25,900 lbs.	29,655 lbs.
Nicotine 3.6% (No. 10)	327	Vegt., Citrus, Walnuts	Aphis	8,120 lbs.	2,820 lbs.	10,940 lbs.
Nicotine 40%(BL-40)	984	Citrus, Walnuts	Aphis	666 gal.		666 gal.
Oil	30,473	Citrus	Mites, Scale	472,093 gal.		472,093 gal.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
Oil (Weed)	Unknown	Misc.	Weeds	5,361 gal.	100 gal.	5,461 gal.
Oil (Rotenized)	2,219	Citrus	Aphis, Scale	21,798 gal.		21,798 gal.
OMPA	2,915	Walnuts	Aphis, Mites	921 gal.		921 gal.
Ovotran 50%W	19,883	Avoc., Citrus, Vegt., Walnuts	Mites	114,579 lbs.		114,579 lbs.
Parathion 1%	8,277	Flowers, Walnuts, Vegt., Seed Crops	Aphis, Mites, Worms	156,520 lbs.	161,650 lbs.	318,170 lbs.
Parathion 1.5%	158	Flowers, Walnuts, Vegt., Seed Crops	Aphis, Mites, Worms		7,350 lbs.	7,350 lbs.
Parathion 2%	7,762	Flowers, Walnuts, Vegt., Seed Crops	Aphis, Mites, Worms	161,240 lbs.	124,300 lbs.	285,540 lbs.
Parathion 2#/gal.	2,391	Vegetables	Aphis, Mites, Worms	45 gal.	587 gal.	632 gal.
Parathion 25%W	12,584	Vegt., Citrus, Walnuts	Aphis, Husk Fly, Scale, Worms	54,625 lbs.		54,625 lbs.
Parathion 4#/gal.	607	Vegt., Flowers	Aphis, Lygus, Worms		78 gal.	78 gal.
Perthane 5%	188	Vegetables	Aphis, Worms		8,650 lbs.	8,650 lbs.
Perthane 10%	144	Vegetables	Aphis, Worms		5,200 lbs.	5,200 lbs.
Perthane 25%E	10	Vegetables	Aphis, Worms	10 gal.		10 gal.
Rotenone 2.5%E	1,483	Citrus	Aphis	1,023 gal.		1,023 gal.
Rotenone 3-4-5%	7,872	Citrus	Scale	42,091 lbs.		42,091 lbs.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
Sequestrine	13	Avocado	Deficiency	6 lbs.		6 lbs.
Sodium Chlorate	125	Vegetables	Defoliant	1,300 lbs.	225 lbs.	1,525 lbs.
Sugar	110	Citrus	Thrips	380 lbs.		380 lbs.
Sulfur 15%	1,005	Vegetables	Mildew	16,450 lbs.	22,300 lbs.	38,750 lbs.
Sulfur 25%	1,678	Vegt., Flowers	Mildew	31,500 lbs.	31,650 lbs.	63,150 lbs.
Sulfur 50%	16,406	Vegt., Flowers, Seed Crops	Mildew, Mites	77,586 lbs.	515,400 lbs.	592,986 lbs.
Sulfur 70--80%	1,472	Vegt., Citrus	Scale, Mites	20,255 lbs.	24,650 lbs.	44,905 lbs.
Sulfur 90--100%	22	Vegetables	Mildew, Rust		1,000 lbs.	1,000 lbs.
Systox (Demeton)	6,829	Citrus, Flowers, Seed Crops, Walnuts	Aphis, Stemborers, Mites	1,391 gal.	23 gal.	1,414 gal.
Tartar Emetic	110	Citrus	Thrips, Slugs	380 lbs.		380 lbs.
TEPP 1 & 2%	1,397	Vegt., Citrus, Walnuts	Aphis	17,750 lbs.	54,550 lbs.	72,300 lbs.
TEPP 20%E	2,303	Vegt., Citrus, Flowers, Seed Crops	Aphis, Mites	19 gal.	553 gal.	572 gal.
TEPP 40%E	201	Vegetables	Aphis		68 gal.	68 gal.
Toxaphene 10%	6,451	Vegt., Flowers, Seed Crops	Lygus, Worms	10,950 lbs.	231,300 lbs.	242,250 lbs.
Toxaphene 15%	938	Vegetables	Lygus	8,600 lbs.	25,550 lbs.	34,150 lbs.

PESTICIDE	ACREAGE	CROP	PEST	AMOUNT BY GROUND	AMOUNT BY AIR	TOTAL AMOUNT
Toxaphene 4#/gal.	705	Vegetables, Seed Crops	Seed Corn Maggot, Lygus, Leaf Miner, Worms	54 gal.	458 gal.	512 gal.
Toxaphene 6#/gal.	1,770	Vegetables	Worms		1,218 gal.	1,218 gal.
Toxaphene 8#/gal.	3,451	Vegetables	Worms		1,646 gal.	1,646 gal.
Urea	4,701	Citrus	Nitrogen Foliage Spray	160,277 lbs.		160,277 lbs.
Zinc	17,847	Avoc., Citrus	Deficiency	94,772 lbs.		94,772 lbs.
Zinc Manganese Combinations	15,636	Avoc., Citrus	Deficiency	145,528 lbs.		145,528 lbs.
Zinc, Manganese, Copper	511	Citrus	Deficiency	3,889 lbs.		3,889 lbs.
Zinc 4%, Manganese 4%) Copper 3%, Sulfur 30%)	431	Citrus	Deficiency, Silver Mite	5,822 lbs.		5,822 lbs.
Zineb 3.25%	1,819	Vegt., Flowers	Mildew	27,900 lbs.	22,500 lbs.	50,400 lbs.
Zineb 6%	1,623	Vegt., Flowers	Mildew	18,250 lbs.	45,550 lbs.	63,800 lbs.
Zineb 65%W	12	Vegetables	Mildew	33 lbs.		33 lbs.
2,4-D; 2,4,5-T	8,266	Grain, Misc., Bareland	Weeds	244 gal.	1,881 gal.	2,125 gal.
2,4-D; 2,4,5-T	6,074	Citrus	Tree Conditioner	158 gal.		158 gal.

PORT INSPECTION

Inspection of ships is made by staff members of the Agricultural Commissioner's office. State and Federal Quarantines restrict the movement of certain materials likely to introduce serious insect and disease pests. Ships stores, as well as the crew's quarters, cargo and passenger baggage, are checked for restricted articles. Whenever found in violation of the quarantines, they are properly disposed of to safeguard the agricultural industry.

Disposal of garbage also comes under our control to prevent the introduction of foot and mouth disease.

Number of ship inspections 17

Number of hours spent on ship inspection 40

TOMATO SEED CERTIFICATION

In collaboration with the Buareu of Plant Pathology and under authority of the Director of Agriculture, county personnel inspected plantings of seed tomatoes for three seed houses. Inspections are for the purpose of determining the presence or absence of bacterial canker (Corynebacterium michiganense), a seed-borne disease. In the event of discovery of the disease in a field, no seed tomatoes intended for certification may be grown in the field for the succeeding four years.

Sterilization of all equipment used in the seed production process, as well as harvesting and processing, are under our direct supervision.

No evidence of the disease was found during the 1955 season.

Sixty-six varieties totalling 268.15 acres were inspected.

Number of hours spent on tomato seed certification inspection . . 188

INSPECTION OF CITRUS FRUIT SHIPPED TO FLORIDA

Each lot of citrus fruit consigned to Florida must be inspected and certified. The certificate shows that the fruit contained in the boxes meets the requirements of Florida as to cleanliness from insect pests and diseases.

Number of cars inspected and certified	165
Number of containers inspected and certified	141,783
Number of hours spent on inspections	64

STANDARDIZATION

The enforcement of the State Standardization Law is performed to protect the public when buying fresh fruits, nuts, vegetables, eggs and honey. The law is incorporated in Chapter V of the California Agricultural Code, and it's enforcement is a function of the County Agricultural Commissioner's office.

Standardization work is done, at the local level, by inspections at the origin, at packing houses, at wholesale outlets and at retail stores to insure the packaging and sale of products that conform to the minimum state standards for quality, pack, labeling and maturity.

The increase in population has necessarily increased the amount of produce and eggs to be inspected; and despite the expanding residential areas there was in excess of 14,000 acres of vegetables; nearly 40,000 acres of beans; 13,950 cars of citrus; an estimated 6,000 tons of walnuts, and approximately 116,000 field boxes of avocados harvested during 1955.

Because of the increasing practice of field packing of certain vegetables, considerable time was spent on origin inspection. However, there are thirty citrus packing houses, fourteen vegetable packing plants, and avocado operations that require constant inspection for purposes of certification. Two hundred and forty-two (242) lots of avocados were tested for maturity, sixty-six (66) of which failed to meet the required eight per cent (8%) of oil by weight.

One supervising inspector is in charge of this work and is assisted by the district inspectors. This supervising inspector is also charged with the egg inspection, the bulk of which is done at retail stores.

No difficulties were experienced in the enforcement of standardization regulations and very good cooperation was shown by all shippers.

Following is the summary of work done in 1955:

Number of containers inspected	2,478,970
Number of containers rejected	665
Number of shipments certified	8,186
Number of containers certified	2,246,019
Number of violation notices issued	20

Eggs:

Number of premises visited	152
Number of lots inspected	580
Number of dozens inspected	102,031
Number of dozens rejected	2,355
Number of violation notices issued	24
Number of man hours spent on standardization	4,631

APIARY INSPECTION

Inspection of apiaries for diseases detrimental to bees is carried out by members of the Commissioner's staff. An increase in American Foulbrood was noted during the year. Most of the disease was confined to one owner. All diseased colonies were burned.

Following is a summary of the work carried on during 1955:

	No. Apiaries	No. Colonies
Registered	127	6,557
Entering county	119	12,135
Leaving county	79	6,597
Moving within the county	25	2,206
Inspected	59	1,647
Infected with American Foulbrood	21	323
Burned--American Foulbrood	5	278
No. of hours spent on apiary inspection		722

RODENT CONTROL

SQUIRRELS

Due to Ventura County being recorded as a bubonic plague area and to the economic losses suffered by agricultural crops, severe control measures were undertaken by this department to control the California Ground Squirrel.

Extra men were hired to augment our personnel to cover as much area as possible early in the spring before breeding season. Sodium fluoroacetate (1080) on grain baits was used along with methyl bromide and carbon bisulfide. Warfarin in bait boxes was used in populated areas to eliminate the hazard to domestic pets.

GOPHERS

This pest continues to be a serious threat to citrus trees, and was exceedingly heavy this past year, due to the dry early spring. Poisoned baits were furnished at cost to farmers and ranchers. Staff members assisted them by demonstrating the most effective methods of applying these poisoned baits.

FIELD MICE

Much damage is caused to young citrus trees each year by this rodent girdling the trunks. Strychnine rolled barley was sold to growers at cost to control this pest.

RATS

This spreader of disease and its ability to destroy has made it high on the list of rodent enemies of mankind. Many calls were answered to assist farmers and others to eliminate this pest. Advice was given as to the method of rat-proofing buildings, and how to apply poison baits to the best advantage.

MISCELLANEOUS

Many calls were answered to help ranchers and others on control of certain birds that were actually damaging agricultural crops. Skunks, coyotes, badgers, weasels, wildcats and opossums were some of the wild animal problems that were answered.

A wild animal trapping program was instituted in the Ventura-Casitas-Ojai areas to thin out the population, due to the presence of rabies in that area.

Following is a summary of the rodent control program:

Squirrels (Plague Area)

No. of acres treated in plague area	305,083
No. of pounds of strychnine-treated grain	1,613
No. of pounds of warfarin-treated grain (squirrels & rats)	1,830
No. of pounds of 1080-treated grain	8,246
No. of pounds of methyl bromide	2,198
No. of gallons of carbon bisulfide	55
No. of waste balls (used with carbon bisulfide)	2,550
No. of hours spent on rodent control, plague area	4,667

Other Rodents (Non-Plague Area)

No. of acres treated	33,079
No. of acres treated for squirrels	13,486
No. of pounds bait material for squirrels	727
No. of acres treated for gophers	15,599
No. of pounds bait material for gophers	3,677
No. of acres treated for field mice	85
No. of pounds bait material for field mice	16
No. of acres treated for rabbits	3,659
No. of pounds bait material for rabbits	2,185
No. of baits for coyote control	465
No. of hours spent on rodent control, non-plague area	1,617

WEED CONTROL

The Department continued to maintain surveys to find the presence of new weed pests or new locations of noxious weeds not of wide distribution in the county.

All infestations of noxious weeds along county and state highways were given severe control measures. Contracts were entered into with the State Division of Highways and the Southern Pacific Railway. A program was initiated this year with the Southern Pacific Railway to control all weeds along the right-of-way.

Cooperative agreements were entered into with the County Park Department to control poison oak in all county parks.

The following is a summary of the Weed Control Program and the materials used in 1955:

Materials Used (Actual)

No. of gallons of weed oil	5,078
No. of gallons of 2,4-D (Amine salts)	2,784
No. of gallons of brush killer (2,4-D & 2,4,5-T)	625
No. of gallons of dalapon	135
No. of gallons of Polybor-chlorate	1,260
No. of gallons of Karmex	350
No. of gallons of Telvar W	7,050
No. of sq. ft. cut and burned	10,500

Principal Weeds Treated

Puncture Vine	Gaura
Johnson Grass	Hoary Cress
Russian Knapweed	Milk Thistle
Spiny Clotbur	Morning Glory
Yellow Star Thistle	Poison Oak
White Horse Nettle	Wild Artichoke
Bermuda Grass	Dogbane
Purple Star Thistle	Kikuyu Grass
Pignut	

SURVEYS--1955

Surveys during 1955 revealed the presence of three insect pests new to Ventura County. The most important find was the Spotted Alfalfa Aphis, Therioaphis maculata, which has caused considerable damage to alfalfa plantings in certain areas of California. Surveys show it to be generally distributed throughout Ventura County and some damage occurred following the unseasonably hot weather during September, 1955.

A second pest of alfalfa, the Egyptian Alfalfa Weevil, Hypera brunneipennis, was also found in Ventura County. Although this weevil has caused considerable damage to alfalfa in the interior desert areas, it has not given indications of becoming a serious pest under climatic conditions such as occur in Ventura County.

The third new insect found in Ventura County this year was the Albizzia psyllid, Psylla uncatoides. This is a pest of acacia trees and the related Albizzia. It would be economically important only in the damage it could cause on acacia within the county. There are many acacia windbreaks throughout the county and the insect was found on most of those inspected. The sample sent to Sacramento from this office for determination was the first recorded occurrence of this insect in the United States. Subsequent inspections, however, revealed the psyllid to be generally present throughout a wide area of California.

In addition to surveys for these three pests, other surveys equally important were made in the county to determine the possible presence of agricultural pests new to the county. The Mexican Bean Beetle survey might be mentioned here as being of especial interest this year. Negative findings for the fifth consecutive year indicate conclusively that this insect has been eradicated in California. The Mexican Bean Beetle project ended with the 1955 survey.

Not all surveys were for insect pests. Plant diseases and nematodes came in for their share of attention in the 1955 survey work of the county. The most extensive plant disease survey this year was on Quick Decline of Orange. State and county inspectors checked the major portion of the orange acreage of the county. This work shows that the disease has increased in intensity within the infected areas and is gradually increasing its spread throughout the Santa Clara Valley.

Following is a list of the surveys made in 1955:

General Pest Survey
Mexican Bean Beetle
Quick Decline of Orange
Khapra Beetle
Spotted Alfalfa Aphis
Wheat Sawfly
Sugar Beet Leafhopper
Egyptian Alfalfa Weevil
Psylla uncatoides
Burrowing Nematode
Oak Moth
General Park Survey
Cinnamon Fungus
Yellow Dwarf of Sweet Potato
Branch Wilt of Walnuts
Camellia Flower Blight
Red Scale

GENERAL PEST SURVEY

A general survey of yards within the county to determine the possible presence of pests new to this area was again made this year. With the rapidly growing suburban areas within the county, resulting in increased landscape planting, the possibility of the introduction of economically important pests is greatly enhanced. Thus, the yard surveys became increasingly important as well as increasingly more difficult to accomplish with the available number of inspectors assigned to this task.

Although emphasis is placed on the inspection for scale insects not of common occurrence, the inspectors are trained to be alert to the possible presence of any insect pest or disease new to the county.

Following is a summary of the 1955 survey:

District	Yards Insp.	Host Plts. Inspected	Yards Infest.	Scale Insects				Treatment		
				Red	Chaff	Purple	Dicto.	Host Fumig.	S.	Host Rem.
Ventura	1,600	11,200	3		2	1			28	
Oxnard	4,200	29,400	16	16					75	11
Santa Paula	3,200	22,400	12	9			3	78	21	1
Moorpark	450	4,050								
Camarillo	2,900	20,300	23	23				180		1
Fillmore	4,100	28,700	8	8				72		

All yards in Simi and Santa Susana were sprayed with oil and malathion as a precautionary measure.

MEXICAN BEAN BEETLE

The 1955 survey marked the end of the Mexican Bean Beetle eradication program. This is the fifth consecutive year in which inspection of all bean plantings within the county failed to reveal any infestations of the Mexican Bean Beetle.

In cooperation with the State Department of Agriculture, inspectors from the county office aided in the survey of the bean plantings. The county personnel consisted of ten survey men, one supervising inspector and a deputy commissioner. Included in the survey were small yard plantings within the areas where the bean beetle had previously been found.

The last infestations of the pest were found in 1950 near Oxnard. The state's program for eradication consisted of treatment of the infested areas during the season in which they were found and for the two following seasons. This was followed by inspection of the entire county for three consecutive years after the last treatment was done.

Following is a summary of work done during the 1955 season:

Man Hours		Properties	Acres	Number of
County	State	Surveyed	Surveyed	Infestations
[illegible]278	11,278	1,897	60,119	0

QUICK DECLINE OF ORANGE

State and county inspectors again made a survey of orange plantings within the county to determine the status of the Quick Decline of Orange virus. This disease first found in Ventura County in 1949, has now become a serious pest of oranges in the Santa Clara Valley.

Results of the 1955 survey show that Quick Decline is generally present in the Santa Clara Valley from the eastern county line to the original infections found in 1949 in the Bardsdale and Sespe Canyon areas. Although the most rapid spread of the disease is toward the east, it has also moved westward from the original infections and can now be considered as well established east of Santa Paula. New finding in one grove west of Santa Paula shows the virus is present at least in this particular grove. Negative findings in all other areas of the county indicate the disease is at present established only in the Santa Clara Valley.

Following is a summary of the work done:

Man Hours		Acres	Properties	Phloem	Budwood
State	County	Surveyed	Surveyed	Samples Taken	Taken
756	1,444	17,543.6	757	27	16

KHAPRA BEETLE

With the enactment of a quarantine within California against the Khapra Beetle it became necessary to make periodic surveys of all premises apt to become infested to determine whether any infested properties existed within Ventura County.

Inspection of all warehouses and feed dealers as well as the major poultry houses and cattle feed yards within the county was made by state and county inspectors. Although several closely related species of beetles were taken no Khapra Beetles were found.

Summary of the 1955 survey follows:

Man Hours		Properties	Properties
State	County	Inspected	Infested
24	76	49	0

SPOTTED ALFALFA APHIS

The most recent economic insect pest to become important in California is the Spotted Alfalfa Aphis, Therioaphis maculata. This has rapidly spread from the desert areas where it was first found in the state, to most alfalfa producing areas within California.

In cooperation with the State Department of Agriculture, surveys were made this year in Ventura County.

This insect was first found in the spring in the Moorpark and Fillmore districts. Later surveys, however, revealed it to be present in most of the alfalfa fields throughout the county. Some damage to crops was observed in the Oxnard and Camarillo districts, following unusually hot weather during September. Since this insect appears to cause the most severe damage in the warmer sections of the state, this local damage may have been the result of favorable temperatures at that time. County inspectors are observing the infested fields to determine whether or not the population counts will continue to remain high under normal temperature ranges.

The following is a summary of the 1955 survey:

Man Hours		Properties	Properties	Acres	Acres
State	County	Inspected	Infested	Inspected	Infested
16	24	15	12	1,050	825

WHEAT SAWFLY

A new pest of wheat, the Wheat Sawfly, was found in the Cuyama Valley of Santa Barbara County in 1953. Treatment was applied in 1954 and 1955 in an attempt at eradication.

In cooperation with State Department of Agriculture inspectors, a survey of wheat fields in that portion of Cuyama Valley within Ventura County was made. The wheat plantings in this area were carefully inspected without finding any infestations.

Summary of the 1955 survey follows:

Man Hours		Properties		
State	County	Surveyed	Acres Surveyed	Infestations
24	40	6	200	0

SUGAR BEET LEAFHOPPER

A survey was again made in 1955 of the potential breeding grounds within the county for the Sugar Beet Leafhopper. This insect is the vector

of western yellow blight of tomatoes and in past seasons has caused severe tomato losses in the county.

Surveys since 1953 indicate that although there are areas within the county where it would be possible for the insect to produce high populations, it is also possible for the leafhopper to migrate in large numbers from breeding grounds in the Antelope Valley and other areas outside Ventura County.

The survey in 1955 indicated that the local population count was low as compared to previous years.

Following is a summary of the survey for 1955:

Man Hours		Properties	Properties	Acres Surveyed
State	County	Surveyed	Infested	
4	4	7	1	750

EGYPTIAN ALFALFA WEEVIL

The Egyptian Alfalfa Weevil has long been known to occur in California in the area west of Yuma, Arizona. It was believed to be a pest of the hot desert areas only. In 1953, however, this pest was found infesting fields in coastal areas of Southern California.

A survey by county inspectors in 1955 revealed the insect to be present in several fields in the Oxnard district. Although one field had a rather high population of the weevil, damage was not severe and treatment for this pest was not warranted.

Following is a summary of the 1955 survey:

Man Hours	Properties Surveyed	Properties Infested	Acres Surveyed	Acres Infested
22	6	3	500	183

PSYLLA UNCATOIDES

Upon determination by the California Department of Agriculture that a new insect pest of acacia occurred in Ventura County, a survey was made by county inspectors to determine the extent of the infestation in the county. Acacia windbreaks throughout the county were surveyed, and it was found that the psyllid, Psylla uncatoides, was generally distributed.

A summary of the 1955 survey follows:

County Man Hours	Properties Inspected	Properties Infested
52	39	22

BURROWING NEMATODE

A nematode which is the cause of spreading decline of citrus in Florida has been intercepted in nursery shipments of plants entering California. Because of this, the State Department of Agriculture conducted, with aid of the County Department of Agriculture, a survey of this pest throughout the state. A Ventura County inspector and a nursery inspector from the State Department made a countywide check for this pest.

All findings were negative.

Following is a summary of the 1955 survey:

Man Hours		Properties Inspected	Properties Infested
State	County		
24	28	15	0

GENERAL PARK SURVEY

A request was made to the Agricultural Department for a survey of county parks for the purpose of determining the presence of injurious insects and diseases, and to recommend spray treatments or cultural practices which would improve the general appearance of the parks.

A survey of all county parks indicated that drought conditions during the recent years of below normal precipitation has caused considerable damage in all parks. Recommendations were made for securing better water penetration during irrigation periods.

Recommendations for ant control and spray for oak moth where necessary were also given.

Sycamore anthracnose and powdery mildew of oak was found to be prevalent in some of the parks, but not to an extent where control measures were deemed to be necessary.

Following is a summary of the work done in 1955:

Man Hours	Number of Parks Surveyed
20	12

OAK MOTH

During the summer of 1955, a very high population of oak moths occurred in certain areas of the county. These serious infestations are usually

cyclic in occurrence and follow periods of environmental conditions favorable for the development of the insect.

The infestation this year was of such intensity as to cause complete defoliation of live oaks in areas particularly hard hit. Because of this, the Department of Agriculture was called in to make a survey of all county parks and some city parks to make recommendations for treatment when such action was necessary.

Following is a summary of the 1955 survey:

Man Hours	Number of Parks Surveyed	Number of Parks Treated
32	14	2

CINNAMON FUNGUS

A fungus disease, Phytophthora cinnamoni, which has several host plants, but which is particularly serious on avocados, was found in one avocado planting.

A survey was made in cooperation with the State Department of Agriculture of plantings in which abnormal conditions were noted. The only property found infected was a planting consisting of approximately twenty-six (26) acres. An area of about three (3) acres and involving about three hundred (300) trees was found to be infected.

Summary of the 1955 survey follows:

Man Hours		Properties	Acres	Properties	Acres
State	County	Inspected	Inspected	Infected	Infected
8	8	16	65	1	26

YELLOW DWARF OF SWEET POTATO

The State Department of Agriculture is interested in determining the possible presence of a virus disease of sweet potato, Yellow Dwarf, in the state. Although the sweet potato acreage in Ventura County is small, a limited survey was made by a county inspector. No indications of the disease was found.

Following is a summary of the 1955 survey:

Man Hours	Properties Surveyed	Properties Infected
2	2	0

BRANCH WILT OF WALNUTS

A survey was made this year by a state inspector and a county inspector for a disease of walnuts, Branch Wilt of Walnuts. This serious disease is not known to occur in Ventura County and all findings on this survey was negative.

Following is a summary of the 1955 survey:

Man Hours		Properties	Acres	Properties
State	County	Inspected	Inspected	Infected
6	6	6	130	0

CAMELLIA FLOWER BLIGHT

The annual survey for Camellia Flower Blight was again made in 1955. When infections were found in retail nurseries, the owners were contacted, informed of the recommended treatment and required to clean up the infection.

Following is a summary of the 1955 survey:

Man Hours		Properties	Properties
State	County	Surveyed	Infected
10	16	20	14

RED SCALE

The County Department of Agriculture makes an annual survey for Red Scale. Citrus properties, which are not affiliated with any protective league, are inspected by trained county inspectors whenever there is reason to believe that the grove is infested with Red Scale. When Red Scale is found on a property, the grower is required to apply treatment recommended as the best method of eradication for this insect pest.

Following is a summary of the 1955 survey:

Man Hours	Acres Inspected	Acres Infested
288	412	385

FINANCIAL STATEMENT
FOR FISCAL YEAR ENDING JUNE 30, 1955
VENTURA COUNTY DEPARTMENT OF AGRICULTURE

Salaries & Wages			
Commissioner, Deputy Commissioners, Inspectors and Office Help	$100,263.75		
Extra Help	28,846.80	$129,110.55	
Maintenance and Operation		27,011.52	
Capital Outlay		832.21	$156,954.28
Revenue			24,465.08

Classification of Estimated Expenditures by Functions:

Plant Quarantine (Interstate)	7,955.77	
Plant Quarantine (Intrastate)	15,911.55	
Standardization	12,771.79	
Field and Orchard Inspection	11,708.14	
Nursery Inspection	4,059.29	
Seed Inspection	2,880.48	
Rodent Control (County expense)	5,506.22	
Plague Suppression (County expense)	22,246.61	
Weed Control (County expense)	4,997.97	
Apiary Inspection	2,622.17	
Crop Statistics	4,136.99	
Other Items*	61,325.09	156,122.07
Capital Outlay		832.21

*Functions Included in Other Items Include:

General Pest Surveys	$ 24,517.44
Vacuum Fumigation	10,417.56
Miscellaneous	26,390.09

VENTURA COUNTY
DEPARTMENT OF AGRICULTURE

Agricultural Building
Santa Barbara and Eighth Streets
Santa Paula, California

ANNUAL CROP PRODUCTION AND ACREAGE REPORT

COUNTY OF VENTURA

1955

Pursuant to Section 65.5 of the Agricultural Code, we submit the crop production, crop value and acreage report for the calendar year 1955.

This report is based only on the F.O.B. values of our agricultural production and in no way does it indicate net returns of growers. All costs pertaining to soil preparation, seeding or planting, cultural costs, pest control, harvesting and packaging are included in the F.O.B. values.

F.O.B. values are somewhat lower than in 1954 due mostly to the lower return in citrus values.

Extreme hot weather during the month of September caused considerable damage to certain crops that made for lower returns.

Removal of walnut acreage has shown a definite trend toward fewer acres of this crop. Ventura County no longer stands first in acreage and production figures. Lemon acreage showed an increase during 1955.

Subdivisions continue to take their toll of fine agricultural land, thus reducing the crop acreage.

We are indebted to many individuals, firms, companies and corporations for their assistance in compiling such a report, and we hereby express our sincere thanks and acknowledgment to them for their fine cooperation and help.

C. J. Barrett

C. J. BARRETT
Agricultural Commissioner

CJB:ms

Acres devoted to Agricultural Crops

A resurvey of orchard and vine crops was made during the year 1954. The following is the acreage figures as of December 31, 1955.

Crop	Bearing Acres	Non-Bearing Acres	Total
APRICOTS	726.5		726.5
ALMONDS	84.9		84.9
APPLES	70.7	3.4	74.1
AVOCADOS	1,364.5	815.0	2,179.5
BERRIES-BUSH	5.9		5.9
CHERIMOYA	.3		.3
CITRON	2.2		2.2
GRAPEFRUIT	313.0	36.0	349.0
GRAPES	152.0		152.0
LEMON-EUREKA	18,204.5	5,091.2	23,295.7
LEMON-LISBON	594.1	414.8	1,008.9
OLIVES	13.7		13.7
ORANGE-NAVEL	1,488.7	219.3	1,708.0
ORANGE-VALENCIA	16,069.8	225.9	16,295.7
PEARS	12.4		12.4
PEACHES	61.3	4.6	65.9
TANGERINES	7.4	6.2	13.6
WALNUTS	12,723.4	532.6	13,256.0
HAY & GRAIN			20,681.0
BEANS-DRY			33,569.0
BEANS-GREEN			6,597.5
VEGETABLES			14,857.5
SUGAR BEETS			2,272.0
SEEDS			609.0
CUT FLOWERS			512.0
			138,342.3

1955

VENTURA COUNTY CROP REPORT
Compiled by
VENTURA COUNTY DEPARTMENT OF AGRICULTURE
C. J. BARRETT, AGRICULTURAL COMMISSIONER

PRODUCT	PRODUCTION	UNIT	F.O.B. VALUE	BEARING ACREAGE
APRICOTS				726.5
Dried	123	Tons	$ 87,800.00	
Fresh	563	Tons	34,811.00	
			122,611.00	
AVOCADOS	5,960,300	Lbs.	566,244.37	1,364.5
BEANS				
Dry Limas	612,000	Bags	6,426,000.00	29,000.0
Seed Fordhooks	56,773	Bags	738,179.00	2,987.0
Blackeye	10,019	Bags	75,142.50	1,575.0
Misc. Varieties	55	Bags	412.50	7.0
	678,847		7,239,734.00	33,569.0
CITRUS:				
LEMONS				18,798.6
Pkd. Boxes	4,022,223	Boxes	22,169,597.30	
By-Products	77,279.53	Tons	2,648,077.22	
			24,817,674.52	
ORANGES - Valencia				16,069.8
Pkd. Boxes	2,914,286	Boxes	11,533,406.52	
By-Products	62,388.20	Tons	2,458,842.12	
			13,992,248.64	
ORANGES - Navels				1,488.7
Pkd. Boxes	342,878	Boxes	1,553,605.13	
By-Products	3,503.25	Tons	72,378.80	
			1,625,983.93	
GRAPEFRUIT				313.0
Pkd. Boxes	89,554	Boxes	347,852.07	
By-Products	1,596.40	Tons	17,460.80	
			365,312.87	
GRAIN				
Wheat	9,705	Bags	33,967.50	647.0
Barley	194,280	Bags	417,702.00	12,952.0
Oats	34,226	Bags	34,226.00	1,260.0
	238,211		485,895.50	14,859.0

PRODUCT	PRODUCTION	UNIT	F.O.B. VALUE	BEARING ACREAGE
HAY				
Alfalfa	38,010	Tons(Green)	190,050.00	1,267.0
Barley	1,150	Tons	23,000.00	920.0
Oats	4,531.25	Tons	158,593.00	3,635.0
	43,691.25		371,643.00	5,822.0
MISC. FRUITS				
Apples	11,203	Boxes 40#	30,000.00	70.7
Grapes	56.8	Tons	3,818.00	152.0
Peaches	6,400	Lugs	8,230.00	61.3
Berries	300	Trays	550.00	5.9
Raspberries	4,226	Flats	16,904.00	
Strawberries	131,796	Flats	310,340.00	141.0
Strawberries	75	Tons	25,484.00	13.0
			395,326.00	
SUGAR BEETS	53,839	Tons	525,007.03	2,272.0
Government Payment			125,983.26	
			650,990.29	
WALNUTS	7,385.2	Tons	4,234,795.54	12,723.4
VEGETABLES				
Beans--Green	14,503.74	Tons	2,201,188.38	6,556.0
Beans--Green	1,000	Baskets	3,200.00	3.0
Beans--String	403.59	Tons	60,054.19	38.5
Beets--Table	108.6	Tons	2,715.00	5.5
Broccoli	30,662	Crts.	105,884.25	174.0
Broccoli	1,609.67	Tons	239,782.34	715.0
Cabbage	162,896	Crts.	363,616.01	433.0
Carrots	406,393	Crts.	1,086,452.25)	1,367.0
Carrots	294,379	Sks.	315,276.90)	
Cauliflower	127,152	Crts.	179,198.80	309.0
Celery	1,449,396	Crts.	3,041,870.95	1,299.0
Corn--Sweet	13,845	Dozen	5,538.00	21.0
Cucumbers	154,448	Lugs	188,699.40	197.0
Egg Plant	14,000	Crts.	12,600.00	14.0
Lettuce	418,321	Crts.	1,003,970.40	1,673.0
Lettuce--Endive	4,163	Crts.	12,179.75	15.0
Lettuce--Romaine	64,833	Crts.	86,645.78	141.0
Onions	75	Tons	4,500.00	8.0
Onions--Green	100	Tons	6,000.00	8.0
Peas	1,007.22	Tons	87,547.56	710.0
Peas	146,071	Lbs.	17,150.06	35.0
Parsley	1,000	Tons	45,000.00	60.0
Peppers:				
Bell	1,525	Tons	103,140.00	234.0
Chili--Green	1,856	Tons	123,920.00	218.0
Pimientos	5,082	Tons	329,180.00	638.0
Chili--Dried	351.78	Tons	105,535.20	260.0
Radishes	4,889	Crts.	17,111.00	13.0

PRODUCT	PRODUCTION	UNIT	F.O.B. VALUE	BEARING ACREAGE
VEGETABLES (CONT'D)				
Squash	2,041.25	Tons	44,007.50	175.0
Spinach	2,706	Tons	73,422.00	392.0
Spinach	2,846	Crts.	4,269.00	50.0
Tomatoes---Market	285,424	Flats	438,121.04	403.0
Tomatoes---Market	6,880	Tons	598,560.00	948.0
Tomatoes---Canning	72,054	Tons	2,096,693.13	4,017.0
Misc. Vegetables	33,598	Crts.	73,100.03	210.0
			13,099,128.92	21,455.0
SEED				
Vegetable	277,484	Lbs.	315,992.00	767.0
Flower	57,849	Lbs.	92,894.82	262.0
	335,333		408,886.82	1,029.0
CUT FLOWERS			771,798.00	512.0
NURSERY STOCK				
Citrus Trees	229,224	Trees	573,060.00	
Avocado Trees	22,125	Trees	44,250.00	
Walnut Trees	19,000	Trees	23,750.00	
Tomato Plants	27,769,300	Plants	138,748.95	
Vegetable Plants	272,730	Flats	187,182.20	
Bedding Plants	1,658	Flats	1,082.50	
Ornamentals	107,349	Cans	101,254.00	
			1,069,327.65	
LIVESTOCK				
Hogs	12,252	Head	416,568.00	
Cattle	17,256	Head	2,364,072.00	
Rabbits	187,800	Lbs.	41,316.00	
			2,821,956.00	
POULTRY				
Squabs	210,000	Birds	210,000.00	
Turkeys	332,000	Birds	2,091,600.00	
Chicken Meat	1,456,763	Lbs.	262,217.34	
Chicken Eggs	10,672,600	Dozens	4,269,040.00	
			6,832,857.34	
MILK PRODUCTION				
Milk Fat	1,901,000	Lbs.		
Estimated Revenue			2,580,800.00	
GRAND TOTAL			$82,453,214.39	

CJB:MS
700

COMPARISON 1954 AND 1955

PRODUCT	1954	1955
APRICOTS	$ 107,500.00	$ 122,611.00
AVOCADOS	325,383.00	566,244.37
BEANS	7,160,254.09	7,239,734.00
LEMONS	27,971,655.05	24,817,674.52
ORANGES-VALENCIA	14,188,733.01	13,922,248.64
ORANGES-NAVEL	1,502,365.20	1,625,983.93
GRAPEFRUIT	399,226.70	365,312.87
GRAIN	640,930.20	485,895.50
HAY	378,671.00	371,643.00
MISC. FRUITS	315,478.00	395,326.00
SUGAR BEETS	874,159.08	650,990.29
WALNUTS	4,327,614.08	4,234,795.54
VEGETABLES	10,096,243.29	13,099,128.92
SEED CROPS	316,939.69	408,886.82
NURSERY STOCK	933,042.28	1,069,327.65
CUT FLOWERS	1,132,091.27	771,798.00
LIVESTOCK	3,075,936.00	2,821,956.00
POULTRY	6,136,421.10	6,832,857.34
MILK	2,691,225.85	2,580,800.00
TOTALS	$82,573,868.89	$82,453,214.39