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Agricultural Commissioners' Crop Reports

Ventura County 1959-1961

California County Agricultural Commissioners' Reports from the California Department of Food and Agriculture. This collection consists of annual crop and livestock data from each of the 58 California Counties. The collection covers 1915-1981; digitization of the rest of the collection is forthcoming.

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VENTURA COUNTY

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ANNUAL REPORT AND CROP STATISTICS

1959

AGRICULTURAL

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APR 11 1960

AGRICULTURAL COMMISSIONER

CULINTY OF VENTURA

CALIFORNIA

ANTUAL REPORT YEAR ENDIG DECTIBER 31, 1959

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AUNUAL REPORT TO THE BOARD OF SUPERVISORS COUNTY OF VENTURA AND THE DIRECTOR STATE DEPARTMENT OF AGRICULTURE

1959

We submit the annual report of the activities of the Agricultural Commissioner's office for the calendar year 1959.

This office is charged with the enforcement of State laws and County regulations for the protection of the agricultural industry of the State and the County of Ventura. Public relations play a large part in the success of our work, and we have endeavored to the best of our ability, to maintain good relations with all, as well as enforcing the laws of the State of California.

Increased population has added to our work over the past years. New sub-divisions have made it necessary to change personnel to new areas to keep pace with the work. No new positions have been added for a number of years, Quarantine inspections have increased nine times that of a ten year period.

In order to create better public relations and inform the public, personnel of our office have been ruest speakers before service clubs, garden clubs, and other civic organizations. We feel that an informed public makes for better cooperation and a more thorough job of protection to agriculture.

We have tried to benefit city dwellers as well as ranchers, and much of our time is spent in answering calls for those with problems of insects and diseases of plant life.

We have taken on several services relative to problems that are not closely related to our office. In all cases we have tried to give the tax payer something for his tax dollar.

Among the duties and activities mentioned in this report are plant quarantine; nursery inspection; plant diseases; pest surveys; field and orchard inspections; ship inspections; seed inspections; standardization of fruits, nuts, veretables, eggs, honey and poultry meat; rodent control; weed control; apiary inspection; pest control supervision; and compilation of statistics.

QUARAUTINE

Quarantine continues to be one of the most important phases of our duties. Destination inspection is required on all plants moving into the county. The presence of serious insect and disease pests prevalent in other areas and not known to be present in Ventura County causes us to take every precaution to protect the agricultural industry in our county.

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Inspections are made daily at all receiving points such as post offices and express depots. All incoming nursery stock is inspected at destination before being offered for sale.

The following is a summary of quarantine work during the year 1959:

Interstate Quarantine

Plants: . . 2,693 No. of shipments inspected. No. of shipments passed No. of shipments rejected 2,655 No. of plants passed No. of plants rejected 892 No. of plants rejected & released 1,166 Grain: No. of shipments inspected 27, 282.43 No. of tons inspected No. of tons passed No. of tons rejected 50 112 No. of tons treated & released Intrastate Quarantine Plants: . 9,670 No. of shipments inspected . . . No. of shipments passed9,521No. of shipments rejected93No. of shipments treated & released56No. of plants inspected56No. of plants passed15,539,265No. of plants rejected2,416 9,521 15,544,446 No. of plants treated & released 2,765 Grain: No. of shipments inspected 273 6,178.78 6,178.78 No, of tons passed No. of tons rejected 20,75 Export Certification (European & Asian)

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NURSERY INSPECTION

The nursery inspection program in Ventura County includes quarterly inspections of nurseries and at least one inspection during the year of adjoining properties. In addition all nursery stock moving into the county must be held for inspection at time of entry. Vacuum fumigation of all citrus and walnut nursery stock is required as a condition of planting.

If serious pests are found in a nursery, immediate eradicative measures are required and are applied under supervision of this office.

Eighteen insect specimens were submitted to the Bureau of Entomology for identification, and twenty five specimens of diseased nursery stock were submitted to the Bureau of Plant Pathology for diagnosis during the year 1959. Many plant specimens were identified for us by Dr. T.C. Fuller, Botanist with the Bureau of Weed and Rodent Control.

Surveys for three pests new to California were made at the request of the Bureau of Mursery Service. Twenty three (23) nurseries were inspected for the presence of Cuban Laurel Thrips, <u>Gynaikothrips uzeli</u>, a pest known to attack citrus. Six (6) nurseries were inspected for Maple Mite, <u>Oligonychus aceris</u>, a pest of maples and several other species of shade trees. Twenty (20) nurseries were inspected for the presence of <u>Vesiculaphis carisis</u>, a pest reported in azaleas, rhododendrons, tomatoes and sedge. Approximately nine man days were spent on these surveys. Findings were negative in all cases.

Solanum carolinianum, Carolina Horsenettle, continues to appear in one nursery. The areas previously treated remain free of infestation. This single small infestation was promptly treated by this office. Eradication is mandatory in the case of this and all other "A" pests.

Aonidiella aurantii, California Red Scale, a serious pest of citrus, was found in five nurseries during 1959. Eradicative treatments were applied to all hosts. Reinspections were made. Findings were negative.

Chrysomphalus ficus, Florida Red Scale, a pest of citrus, was found in one nursery during 1959, infesting potted plants. All hosts were vacuum fumigated at the County Fumatorium.

Sclerotium rolfsii, a serious fungus disease attacking a wide range of vegetables and ornamentals was found in one nursery. This is a recurrence of one of last year's infections. Soil fumigation with methyl bromide was recommended. All hosts in the area of infection were burned.

Origin certification of tomato plants free from nematode required 220 hours of field inspection in eleven nurseries, totalling 291 acres of seed bed. Thirty four acres were found infested with <u>Meloidogyne spp</u>. nematode, and these plantings were destroyed. The following is a summary of nursery inspection for the year 1959:

	. 3	99
Number of nursery inspections	• •	
Number of reinspections to determine results		55
of specific pest treatment	•	
Number of nurseries with "A" pests (eradication		٦
mandatory throughout the state)	۰. ۱	
Number of nurseries with "B" pests (serious pests		
of limited d'stribution; eradication mandatory		7
in Ventura County)	•	
Number of nurseries with "C" pests in excess of		
tolerance allowed ("C" pests are pests of common		
occurrence. The tolerance allowed is defined in		
the rules and regulations of the Bureau of Nursery		66
Service.)		74
Number of nurseries required to clean-up Number of notices of non-compliance issued	•	74 32
Number of notices of non-compliance issued		
Hours spent on nursery inspection	1,	<u>ь</u> ро
Hours spent on nursery inspection	. •	

PLANT DISEASE INSPECTION

Seven hundred seventy inspections, relating to plant disease problems other than those discussed under "Surveys", were made by this office during the year 1959. Inspections were made in fields, orchards, nurseries and residential properties covering a wide variety of problems including fungus, bacterial, virus and nematode infection, disorders resulting from minor element deficiencies or excesses, salt and alkali injury, fertilizer burn, chemical injury due to pest control materials and physiological conditions.

Phytophthora cinnamoni, (cinnamon fungus) now occurs on ten properties in the county, an increase of five over last year. The total land area affected is approximately 11.5 reces as compared with 8 acres last year. No treatment is known, at the present time, which will insure eradication of the disease in the field. Removal of infected hosts and replanting to immune crops is the control measure recommended. While there are many hosts of this disease, avocados are the principal agricultural crop affected. Avocado nurserymen have availed themselves of a service, offered by this office, which is designed to aid in combatting the disease. We are equipped to heat treat avocado seed in the manner prescribed by the Bureau of Mursery Service in their new avocado nursery stock certification program. 33 lots, comprising 31,950 seeds, were treated for nurserymen during 1959. The service is offered at cost to those interested.

Sclerotium rolfsii, a fungus disease, unknown in Ventura County prior to 1956, occurs on six known properties. No new infections were found in 1959. Because of the wide range of crop hosts, regular surveys for this serious soil borne disease will continue.

The incidence of disease in tomatoes, a major field crop in this county, was at the lowest level in many years.

We acknowledge again the cooperation of the Bureau of Plant Pathology, State Department of Agriculture, and of the office of the Farm Advisor of this county. Their aid to Department personnel in disease determination is appreciated.

Following is a summary of plant disease inspections for 1959:

Host		No. of Inspections
Avocados Citrus Deciduous Fruits Grapes and Caneb Vegetable Crops Field Crops Flower Crops, an Ornamental Shrub Lawn Dichondra Miscellaneous	and Muts perries nd Bulbs ps and Trees	23 58 75 4 20 7 33 366 33 366 33 18 116 17
Total Humbe	er of Inspections .	• • • 770

Number of hours spent on plant disease inspection . . 1,023

SEED INSPECTION

Seed inspection includes various regulatory duties. The commissioner enforces the "California Seed Law" (Sec. 910-20 Agric. Code, Sec. 3850-390h Calif. Adm. Code); regulates movement and disposal of seed screenings (Sec. 15h.3 Agric. Code); and under the rules of the California Crop (mprovement Association, supervises the cleaning of all seed production facilities including threshers, seed cleaning machinery and storage bins, samples eligible lots (purity and germination), controls sealing and labeling and movement of those lots which meet the standards of the organlabeling and requires and enforces maintenance of identity of certified lots. Commercial grade sampling is done for the Bureau of Field Crops.

Enforcement of the "Seed Law" and regulations affords protection to the buyer of seed by insuring that the seed is properly labeled to show germination, purity, kind and variety, and weed seed content.

Legal disposal of lots in violation of seed law or quarantine is provided through maintenance of a list of approved mills. These mills are periodically inspected. They are required to maintain certain standards which guarantee that the viability of weed seed will be destroyed. Grinding for feed is permitted for most lots in violation. There are five approved mills in Ventura County.

Following is a summary of this work performed during 1959:

Number of dealers t lots inspected	1,486
Lots in violation	25
Lots seized or destroyed "Stop sale" orders issued	13
"Stop sate" orders tooded	

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Official samples drawn Service samples drawn	3
California Crop Improvement Assoc. certification samples drawn	3
Quarantine samples drawn (weed seed identification) Grade samples drawn	3 49
Number of lots of seed screenings held (destruction by grinding approved) Number of seed houses inspected	24 108

Number of hours spent on seed inspection in 1959 703

TOMATO SEED CERTIFICATION

The tomato seed certification program in Ventura County operates under the authority of the Director of Agriculture and in collaboration with the Bureau of Plant Pathology, State Department of Agriculture. The rules and regulation of the program cover all phases of tomato seed production. Three inspections during the growing season are required for the purpose of determining the presence or absence of Bacterial Canker (<u>Corynebacterium michiganense</u>), a seed-borne disease. Equipment used in the production of seed is cleaned and sterilized under the direct supervision of this department.

Five hundred fifty two and two thirds (552.65) acres were submitted for inclusion in the 1959 program. This acreage represents seed production plantings of three seed companies. Certification was approved for sixtyfour varieties of tomatoes prown on three hundred forty five and two thirds (345.65) acres. Ten varieties, grown on two hundred seven (207) acres, were declared ineligible for certification for violation of the rules covering extraction and processing.

The supervision of this program is assigned to one member of the staff. Eight district men assisted in the field inspections.

No bacterial canker (Corynebacterium michiganense) was found in any of this tomato seed production acreage in Ventura County in 1959.

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Number of hours spent on tomato seed certification work . . . 355

TREATMENTS

Ventura County requires the treating or fumigation of all citrus and walnut trees before being planted. The work is done at the County Fumatorium at cost. This is a protection against the spread of serious insect pests unknown, or not widely spread in the county, and for which eradication treatments are applied. This enables us to insure insect-free plant material without the necessity of rejecting and returning to point of origin.

The following is a summary of treatment work completed during the year 1959:

Vacuum Fumagation (HCN)

Citrus Trees	841 lots	155,483 trees
Ornamentals	7 11	2,737 plants
Walnut Trees	26 11	1,224 trees
	20 It	2 boxes
Citrus Fruit	1. I I I I I I I I I I I I I I I I I I I	5,800 plants
Seedlings	4	

Methyl Bromide Vacuum

Soil)4 lots	213 cu.ft.
Used Bags	13 "	18,448 bags
Seedlings	1 "	21,000 plants
Citrus Trees	5 "	5,081 trees
Grain	2 "	4,400 lbs.
Miscellaneous	14 "	16 pieces
Methyl Bromide Atmospheric		
Citrus	45 lots	1,918 trees
Seedlings	3 "	1,200 plants
Number of hours spent on fumige	ation	2,320

Number of hours spent on fumigation

SHIP INSPECTION

The inspection of ships is made by the 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. Ship's stores, carpo and passenger baggage, as well as the crew's quarters, are inspected for restricted items. Whenever found in violation, they are properly disposed of to safeguard the agricultural industry.

Garbage disposal is carefully enforced by the department to prevent the introduction of foot and mouth disease.

23

84

Number of ship inspections Number of hours spent on ship inspection

STANDARDIZATION

In the process of enforcing the State Standardization Law as defined in Division V of the California Agricultural Code, the Commissioner's office had faced many complex and interesting situations. The matter of increased vegetable acrease, despite sub-divisions. The problem of prober personnel are perhaps the most important aspects to confound the enforcement procedures. Should the Commissioner choose to disregard rublic relations, then personnel would be no problem, since we have responsible agencies to interpret the law. Unfortunately, the very nature of fruit and vegetable inspection, to certify or reject, requires a person of character, firmness, and fairness, so that even an otherwise conscientious workman could not qualify in this field. This situation has caused the Department head to shift personnel for a specific period to handle certain crops.

Multiple cropping in vegetables, increased acreage in strawberries, thirty citrus houses, five avocado packing operations, plus the walnut industry, is some indication of the diversity required by the personnel, which involves the matter of maturity, quality, macking and labeling requirements of the State Law.

The members of the lettuce industry continue to assess themselves, voluntarily, 32.00 per acre for overtime inspection.

The decrease in the number of certificates of compliance is due to the termination, in the fall, of citrus fruit certification.

Following is a summary of the standardization work done during 1959:

Containers certified	68,623 97,253 10,909 17,323 136
Eggs: Lots inspected Number of dozens inspected Number of dozens rejected Number of violation notices issued	491 51,266 2,976 60
Poultry and Rabbit Meat: Number of inspections Number of carcasses inspected Number of carcasses rejected Number of violation notices issued Total man hours spent on standardization, 1959	65 3,027 80 5 11,878

We wish to acknowledge the fine cooperation of the growers and shippers.

SURVEYS

Surveys continued to be an important phase of the work carried on by the County Department of Agriculture during 1959. This type of work is a valuable aid to the agricultural industry in that infestations of many pests new to the county can be eradicated without great expense provided they are found before they become firmly established and start to spread. In surveys involving serious pests of statewide importance, Federal and State Departments cooperate with the County Department by furnishing personnel, equipment, and materials to essist in these inspections.

The following surveys were made in 1959:

Insect Surveys:

Khapra Beetle Mexican Bean Beetle

Citrus White Fly Le Multiple Fruit Fly Trapping European Corn Borer

Plant Disease Surveys:

Quick Decline of OrangeLettuce DiseasesBunch Virus of MalnutsCelery DiseasesBroom Rape of TomatoesClub Root of CrucifersDutch Elm Disease

Khapra Beetle

This, the most serious pest of stored grain, is under eradication in the United States. It is known to exist in Arizona, California, New Mexico, and Texas.

All grain storage houses, dealers and major feeders of grain, including poultry houses and cattle feed yards, were inspected in the county this year. Valuable assistance was furnished by the Federal Department of Agriculture and the State Department of Agriculture.

Summary of the 19r9 Khapra Beetle Survey:

County Man	Properties	Properties	No. of Specimens
Hours	Inspected	Infested	Identified
199	186	0	46

Mexican Bean Beetle

A spot check was once again made in the county for Mexican bean beetle. With the help of the State Department of Agriculture, representative fields of beans were inspected. No Mexican bean beetles were found in any areas of the county. Summary of the 1959 Mexican Bean Beetle Survey:

County Man H	ours	Acres Inspected	Acres Infested
152		1,784	0

European Corn Borer

This year, for the first time, a survey was made for the European corn borer. This very serious pest is under State quarantine and is not known to exist in California.

We were assisted in this survey by the State Department of Agriculture. Corn plantings within the county were carefully checked. Results were negative.

Although a serious pest of corn, this insect readily attacks many other hosts, including beans, rhubarb, and cut flowers such as stocks.

Summary of the 1959 European Corn Borer Survey:

County Man	Acres	Acres	Specimens Submitted
Hours	Inspected	Infested	For Identification
24	305	0	2

Citrus White Fly

In cooperation with the State Department of Agriculture, a survey was made this year for citrus white fly, a serious pest of citrus. Although this pest has been found established in California on several occasions, it has never been taken in Ventura County. It has been successfully eradicated in California wherever it has been found. A strict quarantine is maintained against it.

Yard inspection throughout the county was made this year with particular emphasis being made on some of the older plantings containing host plants of the pest. No infestations were found.

Summary of the 1959 Citrus White Fly:County ManPropertiesPropertiesSpecimens SubmittedHoursInspectedInfestedFor Identification1214806

Multiple Fruit Fly Trapping Program

Once again the County cooperated with the State in maintaining fruit fly traps in the county throughout the spring and summer months. Fruit flies are among the most serious insect pests of agriculture wherever they occur. During the 1959 season, the County maintained 100 traps in the eastern half of Ventura County, while the State serviced 100 traps throughout the western half. Traps required servicing once a week.

Summary of the 1959 Multiple Fruit Fly Trapping Program:

County Man			Specimens Submitted
Hours	n a se	No. of Traps	For Identification
1,046		100	16

Quick Decline Of Oranges

With the cooperation of the State Department of Agriculture the annual Quick Decline of Oranges Survey was again made in 1959. With a strict State quarantine maintained against this pest it is necessary to determine whether the virus has spread to areas hitherto free of the disease.

This year the disease took a serious toll of oranges on sour rootstock in areas where it was already prevalent. The survey, however, indicated little or no spread outside the infected area.

Summary of the 1949 Quick Decline of Oranges Survey:

County ManPropertiesHoursInspected		Acres Inspected	Specimens Submitted For Identification		
1,036	737	16,296	84		

Bunch Virus Of Malnuts

A survey was made in cooperation with the State Department of Agriculture of a portion of the county walnut acreage to determine the possible presence of bunch virus. This serious disease of walnuts is not known to occur in California. Mone was found in Ventura County.

During this survey, however, one case of black-line of walnut was found. This is a physiological condition and is not contagious. Apparently, it is due to incompatibility of certain rootstocks to some variaties of grafts. The condition is fairly prevalent in Northern California, but this is the first time it has been discovered south of the Tehachapis.

Summary of the 1959 Bunch Virus of Walnuts Survey:

County Man	Properties	Acres	Acres	Specimens	
Hours	Inspected	Inspected	Infected	Collected	
24	9	184	0	9	

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Broom Rape Of Tomatoes

Broom rape, a serious parasitic plant of tomatoes, is known to occur in some tomato growing areas of California. Inasmuch as Ventura County imports tomato plants from areas near the infected fields, a survey of this pest was made in 1959. This was carried out in cooperation with the Bureau of Plant Pathology of the State Department of Agriculture. No broom rape was found.

Summary of the 1959 Broom Rape of Tomatoes Survey:

County Man Propertie		Acres	Acres	Specimens
Hours Inspecto		Inspected	Infected	Collected
21	3	32	0	3

Lettuce Diseases

In cooperation with the State, a survey was made of lettuce fields within the county to attempt to discover any serious disease of lettuce not known to be prevalent within the area. Although several of the common diseases of lettuce were found, no new diseases were taken in the survey.

Summary of the 1959 Lettuce Disease Survey:

County Man Hours	Properties Inspected	Acres Inspected	New Diseases Found	Specimens Submitted	
8	3 3	13	0	3	

Celery Diseases

A survey similar to the lettuce disease survey above was made on celery with the same results. There were no new diseases found, although most of the common ones were discovered.

Summary of the 1959 Celery Disease Survey:

County Man Hours	Properties Inspected	Acres New Inspected	r Diseases Found	Specimens Submitted
710	5	180	0	5
	Club Ro	ot Of Crucifers		

Club root of crucifers is a fungus disease of cabbage and related species known to occur near the San Francisco Bay area. A survey for this pest was made by the County and the State Department this year. Although several common discases of cabbage and cauliflower were seen in the field, no club root was found.

Summary of the 1959 Club Root of Crucifers Survey:

County Man	Properties	Acres	Acres	Specimons
Hours	Inspected	Inspected	Infected	Collected
8	<u>1</u>	12	0	<u>1</u>

Dutch Elm Disease

Dutch elm disease is the most serious disease of elms known to occur in the United States. Since it does not occur in California, a strict State quarantine is maintained.

A survey of elm trees in Ventura County in 1959 showed no indication of the disease.

Summary of the 1959 Dutch Elm Disease Survey:

County Man Hours	Properties Inspected	Properties Infected
1	7	0
4	and a second	

APIARY INSPECTION

One of the duties required of this office is the inspection of apiaries for bee diseases. One man is employed full time to work with the beekeepers. To assist in the protection of bees against insecticide damage, a large map of the county has been prepared to show the exact location of every apiary location recorded in the county.

Following is a summary of the inspections made in apiaries in 1959:

No	Apiaries	No. Colonies
Registered Entering County Leaving County Moving within County Inspected Infected with European Foulbrood Infected with American Foulbrood Burned for American Foulbrood	295 110 147 87 208 6 41 38	20,685 10,404 15,087 6,485 7,453 12 268 134
Man hours spent on apiary inspection		1,670

BIOLOGICAL CONTROL OF INSECTS

The citrus growers of Ventura County have for a long period of time recognized the value of biological control of citrus pests. This type of control is assuming increasing importance. As more information becomes available regarding coordination of chemical and biological control, and as new parasites and predators are introduced, full advantage is taken of this information.

There are five insectaries located in this county. The production cost of beneficial insects has been kept low by improved techniques in rearing, and all growers are benefited by the properly timed release.

Following is a summary of beneficial insects produced and released in the county during 1959:

Parasite	Host	Muiner.
<u>Cryptolaemus</u> <u>Diomus sp.</u> <u>Leptomastix sp.</u> <u>Metaphycus helvolus</u> Pauridea sp.	Mealybug Mealybug Mealybug Black Scale Mealybug	51,985,910 700 56,722,400 3,400,000 40,000

Following is a summary of beneficial insects produced for release in areas outside the county:

Trichogramma sp.

Codling Moth

100,000,000

FIELD AND ORCHARD INSPECTION

Inspections of orchards and field crops are a regular and continuous part of our duties, either on request from individual grovers, or as a routine procedure in the various areas of the county. These inspections give us a current knowledge of insect and plant disease conditions in the commercial plantings, and aid in making recommendations for control. We are on the alert for new pests during these inspections, so that early control measures may be taken or suggested. Approximately 1,160 hours were spent on this activity during 1959.

A summary of pest conditions, and the more common pest control materials, follows:

Citrus

Black Scale:

Generally distributed. Heavier than past years in most areas, with hatch more uneven than usual, about 30 days ahead of normal development. The exception was the Fillmore area, where the scale was heavily parasitized, and only about 50 acres were treated. Biological control is always a very important factor in the control of this insect in all areas of the county. Materials used were oil, rotenone, HCN, korosene and DDT, parathion, and malathion. <u>Citrus Aphis</u>: Infestations a little lighter than usual, with some exceptions, where more treatment than usual was applied. Systox, oil, rotenized oil, TEPP, nicotine, malathion, parathion used, often combined with treatments for other pests.

Citrus Mites: Citrus red mite, while general, was a little lighter than usual in most areas, especially in those areas depending on oil and biological control for black scale. Very little Ovotran now used, due to resistance to the material. Aramite was used early in the season before zero tolerance established. Later in season more Kelthane and Trithion used, as well as Tedion on young trees. Oil, DN-111 also used.

> Lewis mite is found mainly around Santa Paula, but is gradually increasing in other areas. Infestations usually held at low level by treatments for other pests.

Silver or rust mite may be found in increasing isolated infestations in most areas of the county, most common in the Santa Rosa Valley. Chlorobenzilate used in most treatments.

Six-spotted mite found mainly near coast. Usually in light infestations treated in combination for other pests.

Bud mite was generally heavier than for past several years, and more noticiable in interior areas of the county. Oil, Chlorobenzilate used in treatments:

Mealybugs: Average in most areas, Worse in new areas around Ojai and Piru, Biological control always the most important factor in control of this insect, which is often interfered with by drift of insecticides. The granular formulation of chlordane is increasing in use for control of ants, Parathion, malathion, oil, and rotenone used in control treatments.

Orange Tortrix: Damage light. Cryolite or parathion used for control;

<u>Citrus Thrips</u>: Lighter than during last year, with little treatment necessary. DDT, sabadilla, dieldrin, tartar emetic and sugar used.

Red Scale: Due to comparatively mild weather during past two winters, larger numbers of scale developed in infestations. Large parts of county still free of this pest. Combined spray and fumigation, oil and parathion or malathion and HCN; malathion or parathion, either alone or in oil, used in treatment.

Yellow Scale: Heavier in most infested areas. More commonly found on oranges. Oil, malathion, parathion used, often combined with treatment for other pests.

Dictyospermum Scale: One infestation east of Santa Paula, another west of Camarillo, show some spread from last year. Intensive spray and fumigation program being followed, similar to that for red scale. Brown Rot of Citrus: The usual precautionary treatments with Bordeaux or other forms of copper were applied, but due to low rainfall, little damage was noted.

Avocados

Brown Mite: Shows spread from previous years, and more treatment necessary. Materials used were sulfur, Kelthane, and Ovotran. Treatment is avoided wherever possible to prevent build-up of other pests.

Walnuts

Husk Fly: Now generally found in most walnut areas of county, and treatment usually required. Parathion and malathion used for control.

Codling Moth: Most walnut plantings now require one or more treatments to hold infestations at an acceptable level. DDT commonly used.

Walnut Aphis: A common pest, usually requiring treatment. Systox, parathion, malathion, nicotine, and Trithion used. Less malathion than in past years, as insect is apparently becoming resistant.

European Red Mite: Infestations unusually heavy in some groves, with heavy leaf-drop. Aramite, Kelthane, Trithion, and very little Ovothran used.

Field Crops and Vegetables

The wide variety of field and vegetable crops now grown in the county, with some crops maturing throughout the year, and with double-cropping becoming the common practice, has complicated the necessary pest control practices. These complications may arise from carry-over of pests from one crop to another in some stage of development, or from the effects of constant pest control work and drifting insecticides on natural parasites and predators. The problem of excess residues, which may result from repeated applications made necessary by increased difficulty in control, or even at times from drifting insecticides, has become increasingly important and difficult.

Spider Mites: Extensive control usually necessary, about same as previous year. Systox, Aramite, sulfur, parathion, Kelthane used.

Aphis:

Usually a problem on vegetables, unless early treatment applied. Systox, Perthane, malathion, TEPP, parathion, Diazinon, Dibrom, endrin, nicotine sulfate, Phosdrin, Trithion used.

<u>Worms</u>: Main difficulty usually in proper timing. If applied soon enough control usually obtained. Late instars difficult to control with most materials, complicated by danger of residues over tolerances if materials applied too close to harvest. Malathion and Perthane mixture gave good control of loopers. Few cut-worms noted. Beans and peppers most affected by striped army-worm; difficulty in control with one application. DDT, phosdrin, malathion, toxaphene, parathion, endrin, malathion plus Perthane used in treatments.

Lygus spp: Caused more trouble than usual. Toxaphene, DDT at heavy damages, main materials used.

PEST CONTROL SUPERVISION

The Agricultural Code requires that every person engaged in the business of pest control shall first qualify for and obtain a pest control operators license from the State Department of Agriculture. In addition, he is required to register with the Commissioner of any county in which he operates. The Commissioner, in turn, makes certain that each registrant has suitable equipment, properly maintained, that it is operated by competent men, that all State and County regulations are complied with, and that all work is properly performed. During 1959, 32 pest control operators were registered to engage in pest control operations in Venture County.

Section 1080 of the Agricultural Code requires that all persons using injurious pest control meterials, defined by law, first obtain from the Commissioner a permit for such use. The permit to use must be obtained before the meterials may be purchased from a dealer. During 1959, there were 96 such permits issued on a seasonal basis.

A similar permit from the Commissioner is required for the use of injurious herbicides, such as 2,4-D, and must be obtained before the material may be purchased. Permits for small scale operation, such as weed control in orchards, etc., are issued on an annual basis. Permits for large scale operations, such as weed control in grain, other large fields and brush control are issued on a seasonal basis from November 1st to February 15th. For the rest of the year, they are only issued for each separate job. This is done in order to reduce the chances of possible damage from drift. During 1959, 233 seasonal and 22 individual permits were issued.

Number of hours spent on pest control enforcement 1,008

Pest control is a big business in Ventura County, and plays a complex, indispensable part in the production of agricultural crops. To give some idea of the extent of these treatments, the following figures, covering application by commercial pest control operators in 1959, are included.

	By	Aircrai	ft	Ву	Ground	Equipment	
	Sprays	Dusts	Total	Sprays	Dusts	Other	Total
Field Crops Grains Alfalfa, Clovers Beans	6,706 200 17,912	1,323 1h0	6,706 200 19,235 1,466	598 1,647	3,888		598 5,535
Other Field Crops TOTAL FIELD CROPS	<u>1,326</u> 26,144		27,607	2,245	3,883		6,133

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	By Aircraft		Bj	r Ground	Equipment		
	Sprays	Dusts	Total	Sprays	Dusts	Other	Total
Vegetables Tomatoes Lettuce Other Vegetables	314 1,054 4,516	15,439 900 <u>3,548</u>	15,753 1,954 8,064	1,745 2,287 10,671	4,516 5,702 14,322	<u>12,932</u>	6,261 7,989 <u>37,925</u>
TOTAL VEGETABLES	5,884	19,887	25,771	14,703	24,540	12,932	52,175
Other Crops Deciduous Fruits Nuts Berries Flowers, Ornamentals Subtropical Fruits Miscellaneous TOTAL OTHER CROPS	79 95 95 163 5,388	86 336 1,417 663 60 2,562	165 431 1,512 5,619 223 7,950	72 16,157 1,106 281 82,833 <u>4,612</u> 105,061	2 1,784 436 280 2,502	1,895 1,895	74 16,157 2,890 717 85,008 4,612 109,458
TOTAL FIELD, VEGETABLE	, <u>,</u> ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
AND OTHER CROPS	37,416	23,912	61,328	122,009	30,930	14,827	167,766
TOTAL TREATED BY OPERA	TORS						229,094
ESTIMATED TOTAL ACREAG	es treat	ED BY OT	HER TYAN	PEST CON	ITROL OPI	ERATORS	22,909
				ESTILAT	TED GRAM	D TOTAL	252,003

Miscellaneous reported in other than acres:

Yards sprayed 124

R.R. Right of Ways 132 miles

WEED CONTROL

Surveys were conducted by Department personnel to discover new infestations of primary, secondary, and other weeds, that might become a pest to agriculture. Several new infestations of White Horse Nettle, Puncture Vine, Johnson Grass, and Yellow Star Thistle were found. Recommendations were promptly made, and followed up, that property owners take proper steps to eradicate these pests. In cases where weed pests were found on county or state highways all infestations were promptly treated.

Department personnel answered many calls pertaining to weed problems of farmers, small property owners, State Highway Division, County Road Department, and county parks.

A noxious weed file was inaugurated by the Department to pinpoint all infestations of weed pests, and to keep permanent records of all treatments.

A great many chemical test plots were applied on several types of weeds to

educate Department personnel as to the most effective methods of combating these pests.

Following is a summary of weed control work in 1959:

Weeds Controlled

Yellow Star Thistle Russian Knapweed White Horse Nettle Wild Artichoke Thistle Texas Blue Weed Purple Star Thistle Bladder Pod Weed Clotbur Medusa-head Hoary Cress Gaura spp. Poison Oak Dogbane Pignut

Johnson Grass Puncture Vine Poverty Weed Milk Thistle Morning Glory Wild Tobacco Russian Thistle

Materials Used

Weedone 638. 400 gal. Oil . . . 7,101 gal.	Amino Triazole . 1,798 gal. 2,4-D (amine) 532.5 gal. Dalapon 210 gal. Polybor Chlorate . 75 gal,
Total area treated	••••••••••••••••••••••••••••••••••••••
Number of man hours spent on weed of	control in 1959 1,762

RODENT CONTROL

Squirrels:

Most of Ventura County is designated as Bubonic Plague area. For the protection of public health special attention was given to ground squirrel control. Due to weather conditions and the irregular breeding period, a problem arose as to the proper time for placing poisonous bait materials. Methyl bromide and carbon bisulphide were used extensively early in the season. For the protection of domestic animals, secondary poisons were used only on rangeland and in non-populated areas. Warfarin in bait pipes was used in all areas where there might be danger to domestic animals.

Gophers:

The pocket gopher again proved to be one of our most serious rodent pests. Severe damage was suffered by many citrus and avocado growers. Poison materials were sold at cost to growers. Staff members conducted many field demonstrations to instruct farmers as to proper methods of poisoning and trapping.

Red Fox Squirrels: Numerous calls were received relative to this rodent. Advice on methods of control was given in each case. Some damage occurred to walnuts and oranges. This rodent now infests most of the county area.

Rats:

As rats are known carriers of the fleas transmitting disease, and also cause wide spread damage to stored foods, avocado

and citrus trees, stringent campaigns were conducted to control this nuisance. Cooperative agreements were entered into with some of the cities to control rats in the sewer systems. Warfarin baits were furnished by the Department to all interested, and demonstrations given as to best methods of applying same.

- Field Mice: A few incidents of field mice damage occurred during the past year, but only where dense native foliage afforded protection for these rodents. Poisoned baits of strychnine rolled barley were furnished at cost to growers.
- Rabbits: Cottontails and jack rabbits again caused much damage to beans, vegetables, flowers, and in some cases, young citrus and avocado trees. Demonstrations were given by staff members as to proper methods of prebaiting and poisoning.
- Birds: Severe damage to seed crops, vegetables, grain feed, deciduous fruits, and strawberries due to certain bird species. Linnets, white crowned sparrows, English sparrows, horned larks, and blackbirds were the predominent species causing trouble. When bird damage was anticipated, and proper pre-baiting was carried out before placing poisoned baits, good control was obtained.

Following is a summary of plague operations for 1959:

No.	of acres treated in plague area		•	•	•	٠	• .	334,041
No.	of pounds of strychnine treated grain .		÷ .	•		. •	•	. 588
No.	of pounds of thallium treated grain		•	• •	٠		• •	. 370
No.	of pounds of 1080 treated grain			•		•.	•	, 10,401
No.	of pounds of warfarin treated grain	•			. . •	• .	÷.,	. 3,353
No.	of pounds of methyl bromide	•	•		: •	٠	•	ــــــــــــــــــــــــــــــــــــــ
No.	of gallon of carbon bisulfide	. 🐔	•	• •		•.	• • •	. 552

Following is a summary of non-plague operations for 1959:

Rodent Acres Treated

ed <u>Materials Used</u>

PREDATORY ANIMAL CONTROL

To assist in the rabies control, an agreement was entered into with the Bureau of Fish and Wildlife, United States Department of the Interior, to trap these small animals, as well as other predators. Members of this Department have assisted in this program during certain times of the year, as well as answering many calls relative to small animal infestations.

Following is a tabulation of the results of this trapping program:

	Anima	1								Νu	ımk	er			
(] (]]	Fox Bob cats Coyotes Badgers Raccoons	* * • • • *	• • •	•	•	•	•	•	•			-	827 842 364 196 107 75 56 10		
. 1	Mountain	lio	ns	. .	٠	•	•	•	· •	٠	•	•	TO		

Total predatory animals killed during 1959 2,477

FINANCIAL STATEMENT FOR FISCAL YEAR ENDING JUNE 30, 1959 VENTURA COUNTY DEPARTMENT OF AGRICULTURE

Salaries and Wages: Commissioner Deputy Commissioners (3) Inspectors and Office Help	143,413.00		
Extra Help Overtime (Lettuce Inspection)	17,651.60 3,896.73	\$164,961.33	
Maintenance and Cpcration		35,463.90	
Capital Outlay		884.05	\$201,309.28
Revenue: Certification Lettuce Inspection Contract Service Vacuum Fumigation Miscellaneous Sales	28,816.00 6,214.97 2,829.46 6,157.81 1,028.89		\$ 45,047.13
• • • • • • • • • •		• • • • • •	• • • •
Classification of Est_mated Expendi	tures by Func	tions:	
Plant Quarantine (Interstate) Plant Quarantine (Intrastate) Standardization Field and Orchard Inspection Nursery Inspection Seed Inspection Rodent Control (County Expense Plague Suppression (County Exp Weed Control (County Expense) Apiary Inspection Crop Statistics Other Items*) pense)	11,030.48 22,060.97 28,365.45 14,139.23 7,384.48 2,503.47 6,319.27 21,896.74 9,268.43 4,829.61 5,826.01 66,801.09	\$200,125.23
Capital Outlay			\$ 884.05
* Functions Included in "Other Iter	• • • •		
Miscellaneous Vacuum Fumigation General Pest Survey Entomology Plant Pathology Pest Control Lettuce Inspection Fruit Frost Service	17,338.82 11,667.54 22,733.73 886.22 1,284.75 7,442.85 4,447.18 1,000.00		

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VENTURA COUNTY DEPARTMENT OF AGRICULTURE

Agricultural Building Santa Barbara and Eighth Streets Santa Paula, California

ANNUAL CROP PRODUCTION AND ACREAGE REPORT

1959

Pursuant to Section 65.5 of the Agricultural Code, we submit the crop production, crop value and acreage report for the calendar year of 1959.

The values in this report are the F.O.B. values of the commodities. This value represents the price of the commodity when it is fully prepared and offered for sale, and in no way can it be construed as a net return to the grower. All necessary expenses of harvesting and packaging are included in this F.O.B. figure.

The total F.O.B. value returns for all commodities are the highest in the history of the county, yet the returns to the growers for certain of these commodities were barely enough to pay the expenses of production. For instance, lemons, because of the acreage, continued to show the highest F.O.B. value. Returns on a field box basis were among the lowest in the history of the county for years past. The total production of 316,330.206 tons was, in spite of the extreme weather conditions during the year, only 4.7% below the all time high of 1958. 43% of the total crop was diverted to products which returned little or no profit above the cost of picking and transportation. This left 57% of the fruit to be sold on the fresh fruit market. Based on an average production of 580 field boxes per acre, the average return showed a profit of only eleven (11) cents per field box above the cost of production, or an average net return of only \$63.80 per acre. The cost included taxes, depreciation, pest control, frost protection, cultural practices, etc., but did not include the cost of living.

Vegetables showed a marked increase in acreage and production. Poultry showed a decrease in value from the previous year. Walnut acreage continued its decline. Bean acreage was sharply decreased. Sub-divisions, military installations, highway and road construction, schools, and industry continued to take valuable farm land out of production.

We acknowledge the assistance of many individuals, firms, companies and corporations, and hereby express our appreciation for their fine comperation.

C. J. Barrett

C.J. Barrett Agricultural Commissioner

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COMPARISON OF ACREAGES AND F. O. B. VALUES FOR YEARS 1959-1949

The following are crops produced in Ventura County during the year 1959, with an F.O.B. value of \$1,000,000 or more. The comparison to 1949 is made to show the trend of agriculture in Ventura County.

CROP	1959 VALUE	BEARING ACREAGE	1949 VALUE	BEARING ACREAGE
Lemons	\$28,255,633.00	21,728	\$25,336,388.03	17,708
Cronges, Valencia	20,557,571.44	16,136	11,469,231,31	16,756
Tomatoes	8,319,524,30	7,634	432,100.59	740
Eggs	4,982,150.00	аланан алан алан алан алан алан алан ал	146,531.00	and and and
Celery	4,199,000.00	2,210	110,927.32	155
Beans, Dry	3,737,012.00	17,180	6,499,864.40	38,056
Milk	3,120,000.00		2,180,183.40	₽4640
Beans, Green	3,048,975.87	9,314	1,227,684.23	4,666
Cattle	2,790.000.00	eria sini gag	2,303,280,00	*****
Lettuce, all	2,594,692.75	4,569	558,452.02	797
Oranges, Navel	2,097,462,18	2,020.4	1,577,267.14	1,554
Strawberries	1,889,000.00	334	16,369.50	<u>4</u>
Walnuts	1,654,160.00	10,675	5,945,349.94	19,748
Turkeys	1,595,000.00	sin top to	1,783,600.00	12 14 16
Cabbage	1,467,323.44	908 و1	57,528.38	238
Peppers	1,415,900.00	2,598	1,257,948.13	2,094
Avocados	1,364,413.00	1,828	201,618.55	470
Nursery Stock	1,080,968.95	ана станата и станат Спорти и станата и ст	734,306.05	tin Cauta
Cut Flowers	1,001,960.00	810	153,880,50	

ACREAGE OF AGRICULTURAL CROPS

The following are the acres devoted to major agricultural crops in Ventura County. The non-bearing acres are those on which trees and vines are 5 years of age or less.

CROP	BEARING ACRES	NON-BEARING ACRES	TOTAL ACRES
Almonds	67.7	1.0	68.7
Apples	68.3	1.7	70,0
Apricots	500.9		500.9
Avocados	1,828.6	1,122,2	2,950.8
Berries, Bush	2.0	وبية تبني وري	2.0
Cherimoyas	0.3	an a	0.3
litron	2.1	ing as the	2.1
Grapefruit	330.8	169.0	499.8
Grapes	80 . 4	a de la construcción de la constru esta una de la construcción de la co	80.4
Lemons	21,728.1	6,059.3	27,787.4
Orange, Navel	2,020,5	519.2	2,539.7
Orange, Valencia	16,136.4	1,411.5	17,547.9
Pears	11.2	•••••	11.2
Peaches	38,6		38.6
Strawberries	334.0		334+0
Tangerines	18.8	4.8	23.6
Walnuts	10,674.9	237.7	10,912.6
Hay & Grain	11, 748.0		11,748.0
Beans, Dry	17,180.0	ωι ψ3 Γ ⊅	17,180.0
Vegetables	35,991.0	₩ ₩	35,991.0
Sugar Beets	2,027.0	аланан алан алан алан алан алан алан ал	2,027.0
Seed	9810		984.0
Cut Flowers	810.0	e a lia fa Maria Antonia (Albana)	810.0
ALS	122,583.6	9,526.4	132,110.0

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VENTURA COUNTY CROP REPORT

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	<u>1959</u> Fruit	s and Nuts		
Product	Production	Unit	F.O.B. Price	Bearing Acreage
Almond Meats	10,636	Pounds	\$ 6,380.00	67
Apricots Fresh Dried	633 98.50	Tons Tons	37,980,00 78,800,00 116,780,00	l482 -
Avocados	1,049,548	Flats-14#	1,364,413.00	1,828.6
Citrus: Lemons Packed Juice	9,123,535 136,330.39	Cart39# Tons	24,194,022.00	21,728.1
		10113	<u>4,061,611,88</u> 28,255,633.38	
Oranges, Valencia Packed Juice	6,639,441 79,266.56	Cart.⊶39# Tons	16,263,580.49 <u>4,293,990.95</u> 20,557,571.44	16 ,1 36.4
Oranges, Navel Packed Juice	827,107 4,456.81	Cart39# Tons	1,967,049.62 130,412.54 2,097,462.16	2,020.5
Grapefruit Packed Juice	247,1444 2,278.19	Cart.~36# Tons	516,043.97 36,362.23 552,406.20	330
Tangerines	5,012	Lugs -33#	24,057.60	18.8
Aiscellanious Fruits Apples Grapes Pears Peaches Bush Berries Raspberries	26,983 205 960 5,000 1,071 1,500	Boxes-40# Tons Lugs -35# Lugs -30# Trays- 9# Trays- 9#	53,966.00 8,200.00 2,160.00 7,500.00 2,142.00 4,500.00 78,468.00	68 80 11 38 3 3 3
trawberries trawberries	530,000 1,540	Flats→llµ# Tons	1,457,500.00 431,200.00 1,888,700.00	33 4 c
alnuts	3, 596	Tons	1,654,160.00	10,675 C
FRUITS AND NUTS	TOTAL	* * * * * * *	56, 596, 032.28	53,823.4

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	Vegetable (Crops		Booming				
Product	Production	Units	F.O.B. Price	Bearing				
Beans, Green								
Processed	20,381.36	Tons	\$2,905,665,31	9,210				
Market	3,553	Crts48#	11,540.75	10				
Pole	911,88	Tons	131,769.81	94				
Broccoli								
Processed	2,858,46	Tons	365,137.30	2,070				
Market	33,800	Crts45#	117,902.00	290				
Cabbage	1							
Red.	4,180	Crts95#	16,720.00	10				
Creen	732,628	Crts.→95#	1,450,603.44	1,898				
Cerrots	20,509,23	Tons	867,253,78	1,422				
Cauliflower	205,625	Cart.→24#	300,137.50	435				
Gelery	2,099,500	Crts62#	4,199,000.00	2,210				
Chard	4,137	Crts32#	5,171,25	8				
Corn, Sweet	31,992	Dozen	14,396.40	43				
Cucumbers	611,436	Lugs⊶ 35#	819,324.24	753				
Lettuce	י חיז ללח	Grand 1.2.4	1.001.010 CO	ן מיני ט				
Head Duttom	1,031,550	Cart43#	1,804,212,50	3,174				
Butter	125,606	Cart.~32#	188,409.00	314				
Bronze Romaine	10,565	Crts32#	14,407.25	1 060				
Onions	356,160	Crts.→50#	587,664.00	1,060				
Green	306.4	Tons	21,168.70	16				
Dry	11,080	Sacks-50#	17,880.00	39				
Porsley, Processed	2,880	Tons	120,000,00	100				
Peas, Processed	1,962	Tons	184,087.45	1,316				
Peppers		1 4110						
Pell, Market	62,939	Crts48#	188,817,00	191				
Bell, Processed	4,200	Tons	220,000.00	350				
Chili, Green	11, 543, 50	Tons	721,479.75	1, 546				
Pimiento	4,394	Tons	285,610.00	511				
Spinach								
Processed	4,988.17	Tons	117,835.63	655				
Market	61,584	Crts.→32#	126,054.04	180				
Squash								
Winter	2,830	Tons	73,367,51	310				
Summer	3,312	Lugs-23#	6,107.85	21				
Tomatoes								
Canning	99,441	Tons	2,271,735.00	4,420				
Market	1,876,127	Flats-24#	3,564,641,30	1,011				
Market, Loose-Green	23, 304, 42	Tons	2,473,148.00	2,203				
VEGETABLE CROPS TOTAL			\$24, 191, 246. 76	35,894				
(Abbreviations used a	(Abbreviations used above: Crts. = Crates							

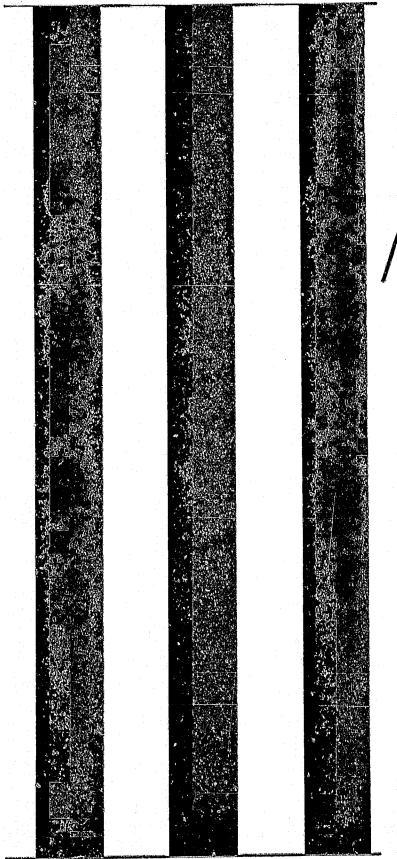
Carts, = Cartons)

	Field Cro	ps		Bearing
Product	Production	Units	F.O.B. Price	Acreage
Beans Dry Limas Seed Beans Blackeyes	260,800 146,601 680	Bags+100# Bags+100# Bags+100#	\$3,126,400,00 605,852.00 4,760,00 3,737,012,00	15,200 1,912 <u>68</u> 17,180
Grain Barley	93,000	Bags-100#	209,250.00	6,220
Hay Alfalfa, Green Barley Oats	27,360 2,h12.8 1,600	Tons Tons Tons	164,160.00 56,700.00 48,000.00 268,860.00	912 3,016 1,600 5,528
Permanent Pasture				289
Safflower	43	Tons	3,010.00	99
Sugar Beet Government Payment	38,908.13	Tons	468,337.77 86,765.13 555,102.90	2,027
Seed Flower Vegetable	17,291 203,205	Pounds Pounds	38,564.75 754,952,00 793,516.75	146 837 983
FIELD CROP TOTALS .	• • • • • • • •		. \$ 5,566,751.65	32,326
	Nursery	Stock		
Avocados Citrus Walnuts Ornamentals Vegetable Plants Tomato Plants Cuttings NURSERY STOCK TOTAL	8,000 202,482 15,000 93,725 264,000 61,643,000 300,000	Trees Trees Trees Plants Flats Plants Plants	16,000.00 435,336.00 18,750.00 77,700.00 158,400.00 359,782.95 15,000.00 \$ 1,080,968.95	
TLILTONATION AND ALL AND A CARAGE A CARAGE AND A CARAGE				
CUT FLOWERS			. \$ 1,001,960.00	810

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	Apiary Pr	oducts		Bearing
Product	Production	Units	F.O.B. Price	Acreage
Honey Wax	300 35	Tons Tons	\$ 73,500.00 32,200.00	
APIARY PRODUCTS TOTAL			\$ 105,700.00	
	Number of Apia Number of Cold	aries 2 onies 20,6	95 85	
	Livestock and	d Poultry		
Hogs Cattle, Range Cattle, Gain-1bs,	16,670 7,560 3,600,000	Head Head Pounds	<pre>\$ 500,100.00 2,790,000.00 900,000.00 4,190,100.00</pre>	
Rabbits	40,000	Pounds	10,000.00	
Squabs Chicken Meat Turkeys Eggs	42,000 1,365,000 319,000 12,455,625	Birds Pounds Birds Dozens	112,400.00 116,025.00 1,595,000.00 4,982,150.00 6,735,575.00	
LIVESTOCK AND POULTR	Y TOTAL		. \$10,935,675.00	
	Dairy Pro	oducts		
Number of Dairies Number of Dairy Cows Estimated Revenue	11 5,290		\$ 3,358,014.65	
Goat Milk Estimated Revenue			3,870.00	
DAIRY PRODUCTS TOTAL			\$ 3,361,884.65	

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VENTURA COUNTY

REPORT

AND CROP STATISTICS

1960

AGRICULTURAL COMMISSIONER

AGRICULTURAL COMMISSIONER

COUNTY OF VENTURA

CALIFORNIA

ANNUAL REPORT YEAR ENDING DECEMBER 31, 1960

BOARD OF SUPERVISORS Edwin L. Carty - Chairman A.C. Ax Robert Haley Robert LeFever Fred Ireland

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DEPARTMENT PERSONNEL

COMMISSIONER	
Deputy Commissioner John L. Schall Deputy Commissioner John C. Allee Deputy Commissioner	
Supervising Inspector - Standardization	
Vacuum Fumigation	
Sr. Inspector, Ventura	
Sr. Inspector, Oxnard - Quarantine W. M. Dunning Sr. Inspector, Oxnard - Standardization & Pest Control Clyde W. May Sr. Inspector, Oxnard - Egg & Poultry Standardization	
Sr. Inspector, Moorpark-Simi I.L. Clements Inspector, Moorpark-Simi - Weed & Rodent Bruce Burns	
Sr. Inspector, Ojai	
Sr. Inspector, Fillmore-Bardsdale Harold Hawkins	
Sr. Inspector, Camarillo W. M. Jones Inspector, Camarillo	
Inspector, Santa Paula - Weed & Rodent	
Sr. Inspector - Apiary & Surveys	
Agricultural Field Assistant	Jr.
Account Clerk	
Record Clerk II	

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ANNUAL REPORT TO THE BOARD OF SUPERVISORS COUNTY OF VENTURA AND THE DIRECTOR STATE DEPARTMENT OF AGRICULTURE

1960

We submit the annual report of the activities of the Agricultural Commissioner's office for the calendar year 1960.

This office is charged with the enforcement of State laws and County regulations for the promotion and protection of the agricultural industry, both locally and state-wide. Good public relations, so necessary for cooperation, play a very large part in the success of our work. We have endeavored, to the best of our ability, to maintain good relations with all, while carrying out this enforcement work.

An informed person is usually a cooperative person, and to better inform the public of our duties and responsibilities, personnel of our office have been guest speakers before service clubs, garden clubs and other civic organizations.

The expanding population of the county has led to increased duties. For instance, quarantine inspections have increased almost ten-fold in the last ten years. Some of the new demands are related to services for residents of cities and sub-divided areas. Many calls are received from those who have problems concerning insect and disease pests of plants.

Among the duties and activities mentioned in this report are plant quarantine; nursery inspections; plant diseases; pest surveys; field and orchard inspections; ship inspections; seed inspections; standardization of fruits, nuts, vegetables, eggs, honey and poultry meat; rodent control; weed control; apiary inspection; pest control supervision; and compilation of statistics.

QUARANTINE

Plant quarantine continues to be one of the most important duties of our department. All plants moved into the county are inspected at destination. Serious insects and plant disease pests known to be present in other areas, and not present in Ventura County, lead us to take every precaution to prevent their introduction and establishment here.

Inspections are made daily at all receiving points such as post offices and express depots. All incoming nursery stock is inspected before being offered for sale.

The following is a summary of plant quarantine work for the year 1960:

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Interstate Quarantine

	of shipments inspected	
No.	of plants inspected	1,538,251
Seed: No. No.	of shipments inspected	172 . 31,823
Grain: No.	of shipments inspected	950
No •	of tons inspected	. 55,615
Intrasta	te Quarantine	
Plants:	te Quarantine of shipments inspected	. 10,008
Plants: No.	of shipments inspected	
Plants: No. No.	of shipments inspected. No. of shipments passed	9,305,468
Plants: No. No. Seed: No. Grain: No.	of shipments inspected	9,305,468 1,026 .597,662
Plants: No. No. Seed: No. Grain: No. No.	of shipments inspected	9,305,468 1,026 .597,662
Plants: No. No. Seed: No. Grain: No. Grain: No. No. No.	of shipments inspected	9,305,468 •••1,026 ••597,662 •••124 •••4,969

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NURSERY INSPECTION

The increase in number and size of nurseries continues, requiring more and more of our time. The inspection program includes quarterly inspections of nurseries and at least one inspection during the year of adjoining properties. In addition, all nursery stock moving into this county must be held for inspection at time of entry. Vacuum fumigation of all citrus and walnut nursery stock is required as a condition of release for planting.

If serious pests are found in a nursery, immediate eradicative measures are required and are applied under supervision of this office. Other pests, when appearing in excess of "trace" to "light" infestations or infections, must be controlled to the satisfaction of the Commissioner.

Fifteen insect specimens were submitted to the Bureau of Entomology for identification, and seventeen specimens of diseased nursery stock were submitted to the Bureau of Plant Pathology for diagnosis during the year 1960. Many plant specimens were identified for us by Dr. T.C. Fuller, botanist with the Bureau of Weed and Rodent Control.

Surveys for two pests were made at the request of the Nursery Service. Eleven nurseries were inspected for the presence of Cuban Laurel Thrips, <u>Gynaikothrips ficorum</u>, a pest known to attack citrus. Thirteen nurseries were inspected for False Garlic, <u>Nothoscordum</u> fragrans. Findings were negative in all cases.

Solanum carolinianum, Carolina horsenettle, is proving a difficult pest to eradicate in the single nursery in which it continues to appear. Previously treated areas remain free from infestation. After two quarterly inspections in which findings were negative, the weed again made its appearance. Eradicative measures were promptly applied by this office. Eradication is mandatory in the case of this and all other "A" pests.

Aonidiella aurantii, California red scale, a serious pest of citrus, was found in one nursery during 1960. Eradicative measures were applied to all hosts.

Agrobacterium tumefaciens, crown gall, a bacterial disease which attacks a great variety of plants in more than forty families was found on stone fruits in one nursery. All infected plants were burned.

Cyperus esculentus, yellow nutgrass, a serious noxious weed pest of agricultural lands was found in seven citrus nurseries. In all cases, the infestations were light and were confined to the borders. Nursery stock growing in these infested sections of the various nurseries may not move to other properties.

Origin certification of "tomato plants free from nematodes" required 231 hours of field inspection in eleven nurseries totalling one hundred ninety one and one half $(191\frac{1}{2})$ acres of seed bed. Digging started in March and extended into the middle of July. No nematodes were found in any of the plantings.

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The following is a summary of nursery inspection for the year 1960: 334 Number of nursery inspections Number of reinspections to determine results 96 of specific pest treatments Number of nurseries with "A" pests (eradication mandatory throughout the state) 3 Number of nurseries with "B" pest infestations (serious pests of limited distribution; 12 eradication mandatory in Ventura County) Number of nurseries with "C" pests in excess of tolerance allowed. ("C" pests are pests of common occurrence. The tolerance allowed is defined in the rules and regulations of the Bureau of Nursery 61 Number of nurseries required to clean-up. . . . 76 53 Number of notices of non-compliance issued.

PLANT DISEASE INSPECTION

Five hundred seventy four inspections relating to plant disease problems other than those discussed under "Surveys", were made by this office during the year 1960. Inspections were made in fields, orchards, nurseries and residential properties covering a wide variety of problems including fungus, bacterial, virus, and nematode infections, disorders resulting from minor element deficiencies or excesses, salt and alkali injury, fertilizer burn, chemical injury due to pest control materials, and physiological conditions.

Phytophthora cinnamomi, cinnamon fungus. No increase in the number of infected properties or spread of infection on these properties has occurred this year although surveys continue. The total remains at 10 properties involving 14.5 acres. No eradicative field treatment is known at this time. Removal of infected hosts and replanting to immune crops is the control measure recommended. Unile there are many hosts of this disease, avocados are the principal agricultural crop affected. Avocado nurserymen continue to avail themselves of a service, offered by this office, which is designed to aid in combating the disease. We are equipped to heat treat avocado seed in the manner prescribed by Nursery Service in their "Avocado Nursery Stock Certification Program". Twenty three (23) lots, comprising 36,500 seeds, were treated for nurserymen during 1960. The service is offered at cost to those interested.

Sclerotium rolfsii, a fungus disease, unknown in Ventura County prior to 1958 occurs on seven known properties. One new infestation was found in 1960. Because of the wide range of crop hosts, regular surveys for this serious soil-borne disease will continue.

A PARTY AND A PARTY

We acknowledge again the cooperation of the Bureau of Plant Pathology, State Department of Agriculture, and of the office of the Farm Advisor of this county. Their aid to department personnel in disease determination is appreciated.

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Following is a summary of plant disease inspections for 1960:

Host				No. of	Inspections
Avocados				• • • •	31
Citrus Deciduous Fru:					51 43
Grapes and Car	neberrie				6
Vegetable Croj Field Crops.					25 16
Flower Crops a	and Bulk		6		26
Ornamental Sh: Lawns.					277 LI
Dichondra.					
Ground Covers					11
Tomatoes Miscellaneous		• • • •	• • •	* * * * *	8

Total Number of Inspections 574

Number of hours spent on plant disease inspection. . . . 509

SEED INSPECTION

Seed inspection includes various regulatory duties. The Commissioner enforces the "California Seed Law" (Sec. 910-20 Agric. Code, Sec. 3850-3894 Calif. Administrative Code); and under the rules of the California Crop Improvement Association, supervises the cleaning of all seed production facilities including threshers, seed cleaning machinery and storage bins, samples eligible lots (purity and germination), controls sealing and labeling and movement of those lots which meet the standards of the organization, and requires and enforces maintenance of identity of certified lots. Commercial grade sampling is done for the Bureau of Field Crops.

Enforcement of the "Seed Law" and regulations affords protection to the buyer of seed by insuring that the seed is properly labelled to show germination, purity, kind and variety, and weed seed content.

Legal disposal of lots in violation of seed law or quarantine is provided through maintenance of a list of approved mills. These mills are periodically inspected. They are required to maintain certain standards which quarantee that the viability of weed seed will be destroyed. Grinding for feed is permitted for most lots in violation. Two types of mills, "hammer" and "steam-roller", are included in the list of five approved mills in this county.

Following is a summary of seed work performed during the year 1960:

Number of dealers! lots inspected.		•	3	.1,313	
Lots in violation					
Lots seized or destroyed	8 -	8	1	. 23	
"Stop-sale" orders issued				. 21	

• 6 •

Official samples drawn.	•	•		16	
California Crop Improvement Assoc		•			
certification samples drawn	# .	٠	•	3	
Quarantine samples drawn (weed seed identification)	•	•	•	2	
Grade samples drawn		, • .	•	07	
Number of lots of seed screenings held (destruction by grinding approved)	¥		¥.	17	
Number of seed houses inspected	٠		*	00	

* These lots are in addition to an estimated 165 tons of screenings which were destroyed and an estimated 977 tons which were processed in an approved manner.

Number of hours spent on seed inspection in 1960. . . 1469

SEED CERTIFICATION PROGRAMS

Sec. 9113.31 - 9113.32 of the Ventura County Ordinance Code establishes a schedule of fees to be charged for work of this kind, the purpose being to make it a self-supporting function of the Agricultural Commissioner's office.

The tomato seed certification program in Ventura County operates under the authority of the Director of Agriculture and in collaboration with the Bureau of Plant Pathology, State Department of Agriculture. The rules and regulations of the program cover all phases of tomato seed production. Three field inspections during the growing season are required for the purpose of determining the presence or absence of Bacterial Canker (Corynebacterium michiganense), a seed-borne disease. Equipment used in the production of seed is cleaned and sterilized under the direct supervision of this department.

Five hundred seventy-three and one half (573.5) acres were submitted for inclusion in the 1960 program. This acreage represents seed production plantings of three seed companies. Inspection was refused on a 26 acre block because "land previously infected with Bacterial Canker cannot be used for tomato seed production during the five year period following the year of infection". Eighteen varieties, grown on one hundred seventy two (172) acres, were declared ineligible for certification for violation of the rules covering "extraction and processing". Sixty varieties, grown on three hundred seventy five and one-half (375.5) acres were approved for certification. No Bacterial Canker (Corynebacterium michiganense) was found in any of the inspected acreage in Ventura County during 1960.

Pepper acreage is also accepted for inspection. A single field inspection is required after fruit has reached maturity. Eleven varieties grown on seventy two (72) acres were inspected this year and found free from seed borne disease.

Supervision of all seed certification work is assigned to one member of the staff. Nine district men assisted in the field inspections.

Number of hours spent on seed certification work. 1453

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TREATMENTS

Ventura County requires the treating or fumigation of all citrus and walnut trees before being planted. The work is done at the County Fumatorium at cost. This is a protection against the spread of serious insect pests unknown, or not widely spread in the county, and for which eradication treatments are applied. This enables us to insure insect-free plant material without the necessity of rejecting and returning to point of origin.

The following is a summary of treatment work completed during the year 1960:

Vacuum Fumigation (HCN)

Citrus Trees	470	lots		98,507 trees 3,600 plant	
Ornamentals Seedlings	3	11		11,900 plant	5
Walnut Trees	25	- 11		1,216 trees	

Methyl Bromide Vacuum

Used Bags Miscellaneous	8 Lots	12,745 bags 56 pieces
Soil	6 11	109 boxes
Fruit	<u>1</u> 1	1 box 122 sacks
Grain	4 ¹¹	TEC SACKO

Methyl Bromide Atmospheric

Citrus	n an the second seco	106 Lots	9,085 trees
Tomato Seed		2 ¹¹	45 sacks
Used Bags		1 "	125 bags
Ornamentals		ի հերություններություններություններություններություններություններություններություններություններություններությու	1,500 plants
Seedlings		<u>4</u> "	8,960 plants
Buds		J 1	200 bud-sticks

SHIP INSPECTION

The inspection of ships is made by the 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. Ship's stores, cargo and passenger baggage, as well as the crew's quarters, are inspected for restricted items. Whenever found in violation, they are properly disposed of to safeguard the agricultural industry.

Garbage disposal is carefully enforced by the department to prevent the introduction of foot and mouth disease.

STANDARDIZATION

The enforcement of the law regarding the minimum State standards for fruits, nuts, vegetables, eggs, honey and poultry meat, and specifically to the matters of labeling, quality, packing and maturity, is a function of all qualified personnel of the Department.

Citrus, tomato, lettuce, celery and strawberry acreage represented the bulk of crops that were subject to these enforcement measures.

Five avocado operations, thirty citrus houses and the increasing egg and poultry industry, accounted for many hours of inspection by the district inspectors. Citrus packing inspections have not been suspended, but citrus fruits need not be certified for shipment. This has reduced the number of reported certified packages.

Radio cars installed during the vegetable harvest greatly expedited this phase by reducing the number of personnel and saving nearly 1,500 man hours, despite an increase in lettuce acreage. Members of the lettuce shipping industry voluntarily assess themselves \$2.00 per acre for field inspection. These funds are turned over to the county treasury.

The inspection of eggs, poultry and rabbit meat at wholesale and retail levels is designed to enforce the State grade and quality standards. One member of the staff is assigned to this duty and is assisted by all district inspectors.

Following is a summary of the standardization work done during 1960:

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Fruits, Nuts and Vegetables:

Containers inspected	• ·	• •	2,748,669
Containers inspected			
sturber of containers rejected		. ⊊ .∦	
Number of violation notices issued		5 8	

Eggs:

Lots it	snected .		¥	8			8			æ	100 907	
Stinulanse	AP dozons	inspected		8	4		8 -		٠	*		
99		M/2 TOTTEL						•	-	-		
Number	of violat	ion notices	j	.SS	su@	d.				÷	28	

Poultry and Rabbit Meat:

ໂນ້າຫຼັງອາ	of	inspection	IS				s (۰.	9,615	
Theman 19	of.	0010098888	inspe	icted		.8	¥ 1	9 9			
89	1 a 2	3000000000	MAIAC	ned .	a (20	8	a∵ ⊨	i 3	. .		
Number	oſ	violation	nould	es la	ssue	iu -	¥				

Total man hours spent on standardization in 1960 . . . 7,219

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SURVEYS

The importance of surveys was emphasized this year when three Oriental Fruit Flies were taken in traps in Southern California. The third one, found in Carpinteria, was only 2% miles from the Ventura County line. In cooperation with the State and Federal Departments of Agriculture, an intensive trapping program was carried out in the county. Although interest was centered on the Oriental Fruit Fly, the other important flies of this family, the Mediterranean, the Melon, and the Mexican, were not forgotten. Bait lures specific for these species were also employed.

Increase in the number of jet plane flights into California during 1960, with the consequent reduction in travel time, has resulted in increasing the threat of introduction of serious pests from foreign countries as well as from other areas of the United States. An example is the large number of live Japanese Beetles intercepted this season from flights originating in Eastern United States.

This Department has been active during the 1960 season in survey work. Because of the above mentioned conditions, we have been required to greatly expand the program. Fortunately, this has been accomplished without requesting additional funds to date.

The following is a report on Survey and Detection for 1960:

Man Hours	No. Traps Installed	Total Trap Inspections
County588	Methyl Eugenoll,088	Methyl Eugenol7,411
State693	Multi-Furpose185	Multi-Purpose555
Federal32	McPhail211	McPhail709

Multiple Fruit Fly

	Khapra	Beetle	A
Man Hours	Froperties Inspected	Specimens Collected	Infestations Found
County177 Federal177	70	28	0

Mexican Bean Beetle

Man	Properties	Acres	Infestations
Hours	Inspected	Inspected	Found
County72 State80	36	2,130	O

Walnut Bark Beetle

Man	Properties	Hosts	Infestations
Hours	Inspected	Inspected	Found
Gounty 56 State 56	20	172	0

	Japanese	Beetle	
County Man Hours	No. Traps	In Operation	Infestations
140		7	0

Quick Decline of Orange

Man Hours (County Only Available)	Properties	Acres	No. Suspects	Phloem Samples Taken	Budwood Samples Taken	
766	739	14,432	264	30	24	

Cot	m

Man Hours	Disease	Properties	Acres	Specimens Collected
County 8 State 8	Witchweed & Nematodes	6	*16.5/46.5	8

Curcurbits

Man Hours	Diseases	No. Properties	Acres	Specimens Collected	
County8 State8	Significant diseases, including nematodes	8	*40/84	11	

Tomatoes

Man Hours	Diseases	Properties	Acres	Specimens Collected
County36 State36	Broom Rape & Nematodes	17	**93/253	1.9

Oalc

Man Hours	Disease	Properties	Acres	Trees	Infections Found
County9.5 State9.5	Oak Wilt	11	*358/1,777	3,560	0

* Numerator refers to acres inspected; denominator refers to total acres in plantings inspected.

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FIELD AND ORCHARD INSPECTION

Inspections of orchards and field crops are a regular and continuous part of our duties, either at the request of individual growers, or as a routine procedure in the various areas of the county. These inspections give us a current knowledge of insect and plant disease conditions, and aid in making recommendations for control. We are on the alert for new pests during these inspections, so that early control measures may be taken or suggested. Approximately 2,000 hours were spent on this activity during 1960.

The wide variety of field and vegetable crops now grown in the county, with some crops maturing throughout the year, and with doublecropping now becoming a common practice, has complicated the necessary control programs. These complications may arise from the carry-over of pests from one crop to another in some stage of development, or from the effects of constant pest control work and drifting insecticides on natural parasites and predators. The problem of excess residues, which may result from repeated applications made necessary by increased difficulty in control, or even at times from drifting insecticides, has become increasingly important and difficult. Many buyers will not buy produce unless it can be proven that all pesticides applied were in accordance with official recommendations.

Following is a brief summary of common pests, and the materials used in their control:

Citrus

Black Scale:	Oil, rotenone, kerosene and DDT, parathion, malathion.
Citrus Aphis:	Systox, oil, rotenized oil, rotenone, nicotine, mala- thion, parathion, TEPP, often in combined treatment.
Citrus Mites:	Kelthane, Trithion, Tedion, oil, DN-111, Delnav, Chlorobenzelate.
Mealybugs:	Biological control, parathion, malathion, oil and rotenone.
Orange Tortrix:	Cryolite, parathion, TDE.
Citrus Thrips:	DDT, sabadilla, dieldrin, tartar emetic and sugar.
Red Scale:	Combined spray and HCN fumigation, oil and parathion or malathion.
Yellow Scale:	Oil, malathion, parathion.
Brown Rot:	Bordeaux or other forms of copper.

Avocados

Brown Mite: (Avoid treatment if possible) Sulfur, Kelthane, Ovotran.

Walnuts

Husk Fly: Parathion, malathion, malathion bait spray.

Codling Moth: DDT.

Walnut Aphis: Parathion, nicotine, Trithion, OMPA

European Red Mite: Aramite, Kelthane, Tedion.

Field Crops and Vegetables

Spider Mites: Systox, Aramite, sulfur, parathion, Kelthane.

Aphis: Systox, malathion, TEPP, parathion, Diazinon, Dibrom, nicotine sulfate, Phosdrin, Trithion.

Loopers: Malathion and Perthane, DDT, toxaphene, Phosdrin, parathion, endrin, Dibrom.

Lygus spp: Toxaphene, DDT.

PEST CONTROL SUPERVISION

The Agricultural Code requires that every person engaged in the business of agricultural pest control shall first qualify for and obtain a pest control operators license from the California Department of Agriculture. This office assists in the examination which is a part of this process. In addition, the operator is required to register with the Commissioner of any county in which he operates. The Commissioner, in turn, makes certain that each registrant has suitable equipment, legally marked, in proper condition, that it is operated by competent men, that all State and County regulations are complied with, and that all work is properly performed. During 1960, 35 pest control operators were registered to engage in agricultural pest control work in Ventura County.

Section 1080 of the Agricultural Code requires that all persons using injurious pest control materials, defined by law, first obtain from the Commissioner a permit for such use. The permit to use must be obtained before the materials may be purchased from a dealer. During 1960, there were 73 such permits issued on a seasonal basis.

A similar permit from the Commissioner is required for the use of injurious herbicides, such as 2,4-D, and must be obtained before the material is purchased. Permits for small scale applications, such as

weed control in orchards, etc., are issued on an annual basis. Permits for large scale operations, such as weed control in grain, other large fields, and brush control are issued on a seasonal basis from November 1st to February 15th. For the rest of the year, they are only issued for each separate job. This is done to reduce the chances of possible damage from drift. During 1960, 204 seasonal and 9 individual permits were issued.

Number of hours spent on pest control enforcement 842.

Pest control is a big business in Ventura County, and plays a complex, indispensable part in the production of agricultural crops. To give some idea of the extent of these treatments, the following figures, covering applications by commercial pest control operators in 1960 are included.

	j	By Aircra	ft	By Ground Equipment				
	Sprays	Dusts	Total	Sprays	Dusts	Other	Total	
Field Crops								
Alfalfa, Clovers	38		38			1.40	1	
Beans	16,886	1,767	18,653	1,056	3,408	468	4,932	
Corn				9	2	000	11	
Other Field Crops	المراجع المحمد المراجع المراجع الم	••			253	298	551	
TOTAL FIELD CROPS	16,924	1,767	18,691	1,065	3,663	766	5,494	
Vegetables								
Tomatoes	484	12,139	12,623	1,778	5,265	583	7,626	
Lettuce	1,307	1,830	12,623 3,137	1,778 1,467	7,346	20	8,833	
Other Vegetables	2,732	6,521	9,253	6,372	11,509	277	18,158	
					-	000	AL 270	
TOTAL VEGETABLES	4,523	20,490	25,013	9,617	24,120	880	34,617	
Other Crops Deciduous Fruits Nuts	1,579	73	1,652	39 15,303	120	2	39 15,425	
Berries	98	473	571	555	1,529		2,084	
Flowers, Ornamentals		1,244	1,489	65	437	16	518	
Subtropical Fruits	1,976	545	2,521	80,723	629	1,405	82,757	
Miscellaneous	18	فنمصيب	18	3,551	<u> </u>	6,480	10,071	
TOTAL OTHER CROPS	3,916	2,335	6,251	100,236	2,755	7,903	110,894	
TOTAL FIELD, VEGETABLE						1997 - 1997 - 19		
AND OTHER CROPS	25,363	24,592	49,955	110,918	30,538	9,549	151,005	
		*******	C. C					
TOTAL TREATED BY OPERA	TORS						200,960	
ESTIMATED TOTAL ACREAG	ES TREAT	ED BY OTI	HER THAN	PEST CON	TROL OPE	RATORS	20,096	
				ESTIMAT	ED GRAND	TOTAL	221,056	
Miscellaneous reported Yards	ray-143;	Dust-3	cres :					
WELLS INTELLO OF MELARS		1117120						

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APIARY INSPECTION

One of the duties required of this office is the inspection of apiaries for bee diseases. One man is employed full time to work with the beekeepers. To assist in the protection of bees against insecticide damage, a large map of the county has been prepared to show the exact location of every apiary recorded in the county.

Following is a summary of the inspections made in apiaries in 1960:

<u>N</u>	lo,	Apia	ries	•		No.	Colonies
Registered Inspected Infected with European Foulbrood Infected with American Foulbrood Eurned for American Foulbrood. American Foulbrood to wax salvage.	•	232 11 80 76	¥ (¥ ¥, , ♥ ₩ , , ♥	•	• • • • • •	• •	9,217 22 437 361
Man hours spent on apiary inspection	1,	• •	• •	•	•	• •	1,694

BIOLOGICAL CONTROL OF INSECTS

The citrus growers of Ventura County have for a long period of time fully recognized and taken advantage of the value of biological control of citrus pests. This type of control is assuming increasing importance, as new beneficial insects are introduced into California, and more information is becoming available regarding the coordination of chemical and biological control.

There are five insectaries located in the county. The production cost of beneficial insects has been kept low by improved techniques in rearing, and all growers are benefited by properly timed releases.

Following is a summary of beneficial insects produced and released in the county during 1960:

Parasite

Host

Number

Aphytis melinus Aphyeus helvolus (Metaplycus) Cryptolaemus Leptomastix sp. Pauridea sp. Scutelista cyanea Red Scale Black Scale Mealybug Mealybug Black Scale 201,000 l, 500,000 50,893,000 l,7,509,000 6,000,000 23,000

WEED CONTROL

Surveys were conducted by Department personnel to discover new infestations of primary, secondary, and other weeds that might become a pest to agriculture. Several new small infestations of yellow star thistle, puncture vine, and Johnson grass were found and promptly treated. One rather large infestation of Italian thistle was found, the first of this pest to be found in Ventura County. Immediate eradication measures were taken.

Department personnel answered many calls pertaining to weed problems of farmers, small property owners, State Division of Highways, County Road Department, and county parks.

Several test plots, with new chemicals and mixtures of chemicals, were applied to several types of weeds to educate Department personnel as to the most effective methods of combating these pests.

RODENT CONTROL

Ground Squirrels: As most of Ventura County is designated as bubonic plague area, special attention was given to ground squirrel con-The problem of an irregular breeding season causing trol. a hardship in timing of placing bait materials continues. Methyl bromide and carbon bisulfide were used extensively early in the season and close to populated areas. Anticoagulants, in bait pipes and boxes, were used as poison materials close to inhabited areas where there might be danger to domestic animals.

Gophers:

Severe damage was suffered by citrus and avocado acreage due to this pest. Poison materials were sold at cost to growers. Staff members conducted many field demonstrations to instruct farmers as to proper trapping and poisoning methods. During the past year, a contract was entered into with the State Division of Highways to control gophers along state highways for the protection of adjoining ranches.

Red Fox Squirrels: Again, a great many calls were received relative to this rodent. Advice was given as to control methods. This rodent is found in all parts of the county, and causes considerable damage to walnuts and oranges.

Rats:

As rats are known carriers of fleas transmitting disease, and cause much damage to stored foods, avocado and citrus trees, stringent campaigns were conducted to control this nuisance. Cooperative agreements were entered into with some of the cities to control rats in the sewer systems. Warfarin baits were furnished by the department to all persons having rat problems, and demonstrations given as to best methods of applying.

Field Mice:

Very few incidents of field mice damage occurred during the past year, and then only where dense native foliage afforded protection for these rodents. Poisoned baits of strychnine rolled barley were furnished at cost to growers.

Rabbits:

Cottontails and jack rabbits again caused damage to vegetables, flowers, beans, young citrus and avocados. Several new repellents were tried with varying degrees of success. Poison grains were sold to farmers at cost and demonstrations given to show the best means of applying poison baits.

Birds:

Many calls were answered by staff members pertaining to bird depredations. Severe damage was encountered to seed crops, vegetables, grain feed, deciduous fruits, and strawberries due to birds. Linnets, white crowned sparrows, English sparrows, horned larks, wild canaries, and blackbirds were the predominant species causing trouble. Proper methods of pre-baiting and applying poison baits were demonstrated by Department personnel.

PREDATORY ANIMAL CONTROL

Ventura County is one of the many counties of the state that has been designated as a rabies quarantine area. Rabies have been known to infect small wild animals, especially skunks. To assist in the rabies control, an agreement was entered into with the Bureau of Fish and Wildlife, United States Department of the Interior, to trap these small animals, as well as predators.

Members of the Commissioner's staff have assisted in this program during certain times of the year, as well as answering many calls relative to skunk infestations.

Following is a tabulation of the results of this joint program:

<u>NUN</u>	MBER
BadgerBobcatBearCoyoteFoxLionOpposumRacoonSkunk	45 129 2 58 323 4 524 88 708

Total predatory animals killed during 1960. . . 1,881

FINANCIA FISCAL YE VENTURA COUNTY DEF	l Statement Ar 1959-1960 ARTMENT OF AGR	ICULTURE	
SALARIES AND WAGES Commissioner Deputy Commissioners (3) Inspectors Office Help	\$ 8,970.00 20,664.00 108,668.00 9,435.68		
Extra Help Overtime (Lettuce Inspection)	19,523.84 4,415.53	\$171,677.05	
MAINTENANCE AND OPERATION		33,897.43	
CAPITAL OUTLAY		1,719.51	\$207,293.99
REVENUE Certification Lettuce Inspection Contract Service Vacuum Fumigation Miscellaneous Sales	15,407.00 5,787.23 2,165.89 4,806.46 1,224.75		29,391.33 \$177,902.66
CLASSIFICATION OF ESTIMATED EXPENDITURES Plant Quarantine (Interstate) Plant Quarantine (Intrastate) Standardization Field and Orchard Inspection Nursery Inspection Seed Inspection Rodent Control (County Expense) Plague Suppression (County Expense) Weed Control (County Expense) Apiary Inspection Crop Statistics Other Items *	BY FUNCTIONS: 14,474.22 21,948.01 25,127.81 14,122.03 7,307.78 3,289.34 6,522.68 20,592.76 9,973.55 6,460.90 5,459.78 70,295.62		\$205, 574.48
CAPITAL OUTLAY	• • • • • • •	e • • • • • • •	\$ 1,719.51
<pre>* Functions Included In "Other Items": Miscellaneous Vacuum Fumigation Ceneral Pest Surver Plant Pathology Pest Control Lettuce Inspection Included in the expenditures by function</pre>	22,026.23 10,939.05 22,954.12 1,062.20 8,420.34 4,893.68 as are the foll	owing, under co	ontract:
Fruit Frost Service Trapper	1,125.00 6,525.00		

VENTURA COUNTY DEPARTMENT OF AGRICULTURE

Agricultural Building Santa Barbara and Eighth Streets Santa Paula, California

To The Director of the State Department of Agriculture:

Pursuant to Section 65.5 of the Agricultural Code, we submit the crop production, crop value and acreage report for the calendar year 1960.

The value figures in this report are the F.O.B. value of the commodity when it is fully prepared and offered for sale, and in no way can they be construed as net returns to the grower. All costs of growing, harvesting, packing and preparation are included in this ralue.

1960 was not a good year for the Agricultural producers in Ventura County. Even though the total figures are relatively high, one must consider that production of certain commodities showed a large increase in acreage, yet the total value was about the same as in 1959.

Costs of production rose during the year, sale prices dropped substantially from preceeding years, which resulted in many crops showing a loss for the season. This is true of lemons, which showed the poorest returns on an acreage average in years. The average production in the county for 1960 was 617 field boxes per acre. The average return per field box was \$0.85, while the cost of producing a 50 pound field box, including interest on the money invested, cultural costs, frost protection, pest control, taxes and general maintenance was \$0.94. This, on the average, made a loss of \$55.53 per acre. The amount of fruit diverted to juice, which paid no profit, was the highest in the history of the county.

The increase in vegetable acreage is due to the double use of land.

Tomatoes showed an increase in acreage over 1959, but the price received was far below the expected amount. The average price for all tomatoes was \$0.02355 per pound. When the cost of production and harvesting is considered one can readily see there was little left for the grower when all the costs were deducted.

We have changed the type of this report in som; respects to allow more uniform reporting throughout the state, and we have been able to gather more and better figures in comparison to past years.

We wish to acknowledge the assistance of many firms, individuals, companier and corporations, and hereby express our appreciation for their fine cooperation in supplying us with the following data.

C. J. Barnett

C. J. Barrett Agricultural Commissioner

The following are the acres devoted to major agricultural crops in Ventura County, The non-bearing acres are those on which trees and vines are 5 years of age or less.

UROP	BEARING ACRES	NON-BEARING ACRES	TOTAL ACRES
Almonds	56	1	57
Apples	69	2	71
Apricots	470	0	470
Avocados	2,084	843	2,927
Cherimoyas	0.6	0	0.6
Grapefruit	349	188	537
Grapes	66	0	66
Lemons	22,009	4,884	26,893
Macadamia Nuts	0	4.2	4.2
Olives	20	0	20
Orange, Navel	1,841	405	2,246
Orange, Valencia	16,480	1,643	18,123
Peaches	37	1 1 1 1 1 1 1 1 1 1	41
Pears	5	o	5
Strawberries	530	0	530
Tangerines	19	5	21
Walnuts	9,446	295	9,741
Hay & Grain	12,590	0	12,590
Beans, Dry	16,866	0	16,866
Cut Flowers	1,030	0	1,030
Nursery Stock	191	0	191
Seed	1,479	0	1,479
Sugar Beets	1,499	0	1,499
Vegetables	<u>42,140</u> 129,276.6	0 8,274.2	<u>42,140</u> 137,550.8

	••••			PRODUC	FION		/ALUE
CP.OP	YEAR	BEARING ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
ALMOND MEATS	1960 1959	56 67	0 。62	0 6	Ton "	\$ 0 1,201.50	\$0 6,380.CO
APPLES	1960 1959	69 ' 68	3.25 7.93	225 540	11 12	133.57 100.00	30,000.00 53,966.00
APRICOTS	1960 1959	491 482	3.55 2.33				
Fresh	1960 1959			462 633	11 12	60.43 60.00	27,920.00 37,980.00
Dried	1960 1959			217 99	11 11	640.00 800.00	138,880.00 78,800.00
AVOCADOS	1960 1959	2,084 ° 1,828	2.65 4.02	5,520 7,347	B N	220.56 185.71	1,217,628.41 1,364,413.00
Bushberries: BOYSENBERRIES	1960 1959	0	0 1.60	0 5	1	о 444.39	0 2,142.00
RASPBERRIES	1960 1959	03	0 2.25	0 7	11	0 666,66	0 4,500.00
GRAPEFRUIT	1960 1959	349 330	19.10 20.40				
Packed	1960 1959			5, 406 4, 454	11 11	112.26 115.86	606,882.16 516,043.97
Juice	1960 1959			1,260 2,278	11 11	13.50 15.96	17,017.98 36,362.23
GRAPES	1960 1959	66 ² 80	2.50 2.56	165 205	11 - 11	70°00 70°00	6,600.00 8,200.00
LEMONS	1960 1959	22,009 21,728	15.42 14.46	1			
Packed	1960 1959			182,182 177,909	n u	137.82 135.99	
Juice	1960 1959			157, 212 136, 330	11 11	15.98 29.79	

FRUIT AND NUT CROPS ACREAGE, PRODUCTION AND VALUE 1959 - 1960

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FRUIT AND NUT CROPS ACREAGE, PRODUCTION AND VALUE 1959 - 1960

-	1 .			1			
		BEARING	PER	PRODUC	TION	<u> </u>	7ALUE
CROP	YEAR	ACREAGE	ACRE	TOTAL	UNIT	PER UNIT	TOTAL
ORANGE, NAVEL	1960 1959	1,841° 2,020	6.48 10.19				
Packed	1960 1959			9,620 16,129	Ton "	158.98 121.95	<pre>% 1,529,453.34 1,967,049.62</pre>
Juice	1960 1959			2,321 4,457	11 11	21.86 29.26	50,728.53 130,412.54
ORANGE, VALENCIA	1960 1959	16,480 ' 16,136	8.37 12.94				
Packed	1960 1959			101,742 129,474	11 11	173,02 125.61	17,603,976.58 16,263,580.49
Juice	1960 1959			36,185 79,267	H H	42.95 54.17	1,554,155.94 4,293,990.95
PEARS	1960 1959	5 11	1.52 1.52	8 17	11 11	100.00 128.57	760.00 2,160.00
PEACHES	1960 1959	37 38	1.70 2.00	63 75	11 13	88.18 100.00	5,534.00 7,500.00
STRAWBERRIES	1960 1959	530 334	8.63 15.71				
Market	1960 1959			2,577 3,710	11 11	475.00 392.80	1,224,075.00 1,457,500.00
Processed	1960 1959			2,002 1,540	n n	280,00 280,00	560,560.00 431,200.00
TANGERINES	1960 1959	19 18	3.75 4.59	71 83	11	280.00 290.90	19,950.00 24,057.60
WALNUTS	1960 1959	9,446 10,675	• 56 • 33	5,353 3,596	1 1 11 11	501.00 460.00	2,682,500.00 1,654,160.00
TOTAL	1960 1959	53,482° 53,821					\$54,900,065.86 56,596,032.28

		HARVEST-		PRODUC	TION	1	VALUE
CROP	YEAR	ED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
BEANS, GREEN							
Processed	1960	11,100	2.05	22,800	Ton	\$ 160.08	\$ 3,650,000.00
	1959	9,210	2.21	20,381	"	142.56	2,905,665.31
Market	1960	9	5.88	53	11	149.57	7,926.00
	1959	10	8.52	85	11	135.34	11,540.75
Pole	1960	65	7.69	500	11	171.22	85,643.07
	1959	94	9.70	912	11	144.50	131,769.81
BROCCOLI							
Processed	1960 1959	3,014 2,360	2.05	6,165 3,619	11 11	139.41 133.47	859,553.97 483,039.30
CABBAGE							
Red	1960 1959	58 10	10.40 19.85	603 199	11	40.00 84.21	24,128.00 16,720.00
Green	1960	1,896	17.47	33,131	- 11	32.50	1,076,766.93
	1959	1,898	18.36	34,850	- 11	41.68	1,450,603.44
CARROTS	1960	1,044	11.53	12,042	11	56.73	683,171.64
	1959	1,422	14.42	20,507	12	42.29	867,253.78
CAULIFLOWER	1960	421	6.12	2,575	11	43.36	111,680.00
	1959	435	5.67	2,468	11	121.63	300,137.50
CELERY	1960	2,017	30.41	61,339	11	56.45	3,462,684.75
	1959	2,210	29.45	65,085	11	64.50	4,199,000.00
CHARD	1960	5	7.87	39	11	78.11	3,073.00
	1959	8	8.27	66	11	78.12	5,171,25
CORN, SWEET	1960	84	3.25	273	11	119.04	32,500.00
	1959	43	3.90	168	11	85.71	14,396.40
CUCUMBERS							
Market	1960	637	12.42	7,909	11	65.00	514, 146.83
	1959	753	14.22	10,706	11	76.52	819, 324.24
Pickling	1960 1959	175	13.48 0	2,360 0	11	52.60 0	124,000.00

VEGETABLE CROPS ACREAGE, PRODUCTION AND VALUE 1959 - 1960

		HARVEST-		PRODUC	TION		VALUE
CROP	YEAR	ED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
LETTUCE			1				
Head	1960 1959	3,328 3,174	7.11 7.00	23,649 22,178	Ton "	\$ 76.07 81.35	<pre>\$ 1,798,876.00 1,804,212.50</pre>
Leaf	1960 1959	670 338	7.20 6.45	4,824 2,179	11 11	60.00 93.08	289,440,00 202,816,25
Romaine	1960 19 <i>5</i> 9	1,487 1,060	12.05 8.40	17,929 8,904	- 11 - 17	39.53 66.00	708,814.00 587,664.00
ONIONS, DRY	1960 1959	17 39	9.55 7.10	163 277	11 11	53.23 64.54	8,650.00 17,880.00
PARSLEY	1960 1959	175 100	22.00 28.00	3,850 2,800	17 17	40.00 42.85	154,000.00 120,000.00
PEAS Processed PEPPERS	1960 1959	1,411 1,316	1.75 1.49	2,464 1,962	H 37	86.50 93.82	213,214.46 184,087.45
Bell, Market	1960 1959	222 191	5.95 7.91	1,321 1,511	11	106.61 125.00	140,833.98 188,817.00
Bell, Processed	1960 1959	350 350	10.57 12.00	3,700 4,200		47.30 52.38	175,000.00 220,000.00
Chili, Green	1960 1959	1,639 1,546	7.89 7.46	12,933 11,544	11. 11. . * 11.	62.61 62.50	809,718.15 721,479.75
Pimiento	1960 1959	924 511	8.11 8.60	7,496 4,394	11 11	65.00 65.00	487,255.61 285,610.00
PINACH							
Processed	1960 1959	770 655	6.58 7.61	5,070 4,988	11 11	25.83 23.62	131,000.00 117,835.63
Market	1960 1959	358 180	3.14 5.50	1,125 990	11 11	131.79 127.32	148,271.68 126,054.04
	1960 1959	205 310	8.34 9.12	1,710 2,830	11 11	23.00 25.92	39,330.00 73,367.51

VEGETABLE CROPS ACREAGE, PRODUCTION AND VALUE 1959 - 1960

		HARVEST-		PRODUC	TION		VALUE
CROP	YEAR	ED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
TOMATOES							
Processed	1960 1959	5,862 4,420	19.57 22.50	114,777 99,441	Ton	\$ 23.82 22.85	\$ 2,734,191.25 2,271,735.00
Market	1960 1959	3,721 3,214	13.09 14.25	48, 743 45, 818	11 11	102,16 131.80	4,979,639.72 6,037,789.30
MISC. VEGETABLES*	1960 1959	476 37	6.75 9.31	3,213 344	11 11	88.00 62.36	282,744.00 27,276.55
TOTAL	1960 1959	42,140 35,894					23,736,253.04 24,191,246.76

VEGETABLE CROPS ACREAGE, PRODUCTION AND VALUE 1959 - 1960

* Includes radishes, green onions, cherry tomatoes, Chinese vegetables, egg plant, parsnips, summer squash, turnip greens, etc.

		HARVEST→		PRODUC	TION	VALUE		
CROP	YEAR	ED ACREAGE	PER ACRE	TOTAL.	UNIT	PER UNIT	TOTAL	
BEANS								
Limas, Dry	1960 1959	15,120 15,268	.81 .86	12,290 13,074	Ton "	\$ 319.42 239.49	\$ 3,925,537.00 3,131,160.00	
Fordhooks	1960 1959	1,746 1,912	1.09 1.22	1,916 2,330	11	260.00 260.00	498,056.00 605,852.00	
<u>GRAIN</u> Barley	1960 1952	5,762 6,220	• 55 • 75	3,169 4,650	11 11	40.00 45.00	126,764.00 209,250.00	

FIELD CROPS ACREAGE, PRODUCTION AND VALUE 1959 - 1960

-			HARVEST-		PRODUC	rion	1	TALUE
CROP		YEAR	ED ACREAGE	PER ACRE	TOTAL	UNIT	PER UNIT	TOTAL
<u>IAY</u> Alfalfa	a, Green	1960 1959	896 912	27.00 30.00	24,192 27,360	Tons 11	\$ 5.50 6.00	\$ 133,055.00 164,160.00
Barley		1960 1959	1,349 3,016	.79 .80	1,079 2,413	11	26.00 23.50	28,054.00 56,700.00
Oat		1960 1959	4,583 1,600	1.0	4,583 1,600	11 11	35.00 30.00	160,405.00 48,000.00
PERMANENT PA	STURE	1960 1959	600 289					
SAFFLOWER		1960 1959	32 99	.19 .43	6 43	u n	70.00 70.00	ليون.00 3,010.00
SUGAR BEETS		1960 1959	1,499 2,027	24.91 19.19	37,341 38,908	n n	13.32 14.27	497,423.09 555,102.90
SEED Flower		1960 1959	250 146	241.87 118.43	60,469 17,291	Lbs.	2.04	123,542.2 38,564.7
Vegeta	ble	1960 1959	1,229 837	247.84 242.77	304,605 203,205	Lbs , "	3.01 3.71	919,331.9 754,952.00
TOTAL		1960 1959	33,066 32,326					\$ 6,412,589.2 5,566,751.6
			APIA	RY PRODU	ICTS			
HONEY		1960 1959			450 300	Ton "	280.00 245.00	\$ 126,000.0 73,500.0
WAX		1960 1959			42 35	- 11 - 11	900.00 920.00	37,800.0 32,200.0
TOTAL		1960 1959						<pre>% 163,800.0 105,700.0</pre>

FIELD CROPS ACREAGE, PRODUCTION AND VALUE 1959 - 1960

Number of apiaries. . . 215 Number of colonies. . .13,293

NURSERY STOCK PRODUCTION

NURSERY STOCK	URSERY STOCK YEAR PRODUCTION				
AVOCADOS	1960	7,450	\$ 18,625.00		
Trees	1959	8,000	16,000,00		
<u>CITRUS</u>	1960	152,870	382,175.00		
Trees	1959	202,482	435,336.00		
<u>WALNUTS</u>	1960	13,850	20,775.00		
Trees	1959	15,000	18,750.00		
ORNAMENTALS	1960	32,265	72,596.25		
Plants	1959	93,725	77,700.00		
VEGETABLE PLANTS	1960	562,100	365,365.00		
Flats	1959	264,000	158,400.00		
TOMATOES	1960	77,557,000	415,368.00		
Plants	1959	61,643,000	359,782.00		
TOTAL	1960 1959		<pre>% 1,274,904.25 1,065,968.00</pre>		

CUT FLOWER PRODUCTION

CROP	YEAR	ACREAGE	TOTAL VALUE		
CUT FLOWERS	1960 1959	1,030 810	\$ 1,161,750.00 1,001,960.00		
TOTAL	1960 1959		<pre>\$ 1,161,750.00 1,001,960.00</pre>		

LIVESTOCK AND POULTRY PRODUCTION AND VALUE 1959 - 1960

		PRODUCTION			VALUE
ITEM	YEAR	TOTAI,	UNIT	PER UNIT	TOTAL
HOGS	1960 1959	9,000 16,670	Head "	\$ 35.00 30.00	\$ 315,000.00 500,100.00
<u>CATTLE</u> Range	1960 1959	6,875 7,560	11 11	187.00 369.04	1,285,625.00 2,790,000,00
Feed Yard, Gain in lbs.	1960 1959	17,802,000 3,600,000		.22 .25	3,916,440.00 900,000.00
RABBITS	1960 1959	126,000 40,000		.25 .25	31,500.00 10,000.00
SQUABS	1960 1959	44,400 42,000		1.00 1.00	144,1400.00 142,000.00
CHICKEN MEAT	1960 1959	1,970,062 1,365,000	Lbs.	.07 .085	137,904.34 116,025.00
CHICKEN EGGS	1960 1959	14,933,416 12,455,625		.31 .40	4,629,358.96 4,982,150.00
TURKEYS	1960 1959	243,000 319,000		4.80 5.00	1,166,400.00 1,595,000.00
TURKEY EGGS	1960 1959	376, 780) Each	.25	94,195.00 0
TOTAL	1960 1959				\$11,620,823.30 10,935,675.00

	DAIRY	PRODUCTS		
Number of Dairies Number of Dairy Cows	11 5,157			
Estimated Revenue		1960	\$ 3,660,01 3,358,0	43.92

AGRICULTURAL CROP REPORT RECAPITULATION

	YEAR	ACREAGE	VALUE
FRUIT & NUT CROPS	1960 1959	53,426 53,821	<pre>\$ 51,900,065.86 \$6,596,032.28</pre>
VEGETABLE CROPS	1960 1959	42, 140 35, 894	23,736,253.04 24,191,246.76
FIELD CROPS	1960 1959	33,066 32,326	6,412,589.29 5,566,751.65
APIARY PRODUCTS	1960 1959		163,800.00 105,700.00
NURSERY STOCK	1960 1959		1,274,904.25 1,065,968.00
CUT FLOWERS	1960 1959	1,030 810	1,161,750.00 1,001,960.00
LIVESTOCK & POULTRY	1960 1959		11,620,823.30 10,935,675.00
DAIRY PRODUCTS	1960 1959		3,660,043.92 3,358,014.65
GRAND TOTAL CROP REPORT	1960 1959	129,662 122,851	\$ 102,930,229.66 102,821,348.34

1955 Crop Valuation.	•		•		٠	٠	•	\$ 82,453,214.39
1956 Crop Valuation.	•		. .	٠	٠	÷	•	88,460,154.12
1957 Crop Valuation.		N	•	•	•	•	.*	82,473,986.27
1958 Crop Valuation.	i .#.	¥		•	٠	•	۵	100,666,262.56
1959 Crop Valuation		•		•		•	•	102,821,348.34
1960 Crop Valuation	5 B				ŧ	÷	÷	102,930,229.66



VENTURA

4.

ANNUAL REPORT AND

CROP STATISTICS

1901

AGRICULTURAL

California. Counties

UNIVERSITY OF CALIFORN. DAVIS APR 20 1962 LIERARY

VENTURA COUNTY

DEPARTMENT OF AGRICULTURE

Agricultural Building Santa Barbara and Eighth Streets Santa Paula, California

To The Director of the State Department of Agriculture;

Pursuant to Section 65.5 of the Agricultural Code, we submit the crop production, crop value and acreage report for the calendar year 1961.

The total values and acreages shown in this report are the highest on record for the County of Ventura. Part of the increase can be attributed to ... better method of gathering information, giving a more complete acreage and production figure than in the past.

The values reported do not indicate net returns to the growers, as they show the F.O.B. value of the product prepared for sale. All costs of growing, harvesting, cultural practices, pest control, etc., are included in this F.O.B. value.

A decrease in walnut acreage was noted during the year. The acreage of bearing citrus trees was decreased over 1,000 acres. As a result of increased subdivision, commercial use, new schools and roadways, approximately 2,000 acres per year have been removed from agricultural uses over the past five year period.

With the diversion of fine agricultural land to other use;, growers are forced to the practice of double and triple cropping, and other means of more intensive land use to keep the total annual production in line with past figures.

1961 was not an extremely good year for agriculture in general, and the increase in values is due to increased production rather than more favorable prices. Extremely warm temperatures during the winter caused almost a complete loss of deciduous fruit crops. Walnut production also suffered as a result of this rather unusual warm season.

We are greatly indebted to many individuals, companies, corporations, firms, and others who have supplied the figures that make up this report. To them we extend our thanks for this fine cooperation.

C.J. Barrett

C.J. Barrett Agricultural Commissioner

ACREAGE OF AGRICULTURAL CROPS FOR 1961

The following are the acres devoted to major agricultural crops in Ventura County. The non-bearing acres are those on which trees and vines are 5 years of age or less.

CROP			
GROP	BEARING ACRES	NON-BEARING ACRES	TOTAL ACRES
Almonds	47.6	0	47.6
Apples	52.6	0	52.6
Apricots	354.5	0	354.5
Avocados	2,382.5	554.3	2,936.8
Cherimoyas	0.6	0	0,6
Grapefruit	363.8	189.9	553.7
Grapes	68,8	0	68.8
Lemons	22,656.5	3,178.4	25,834.9
Macadamia Nuts	.6	3.6	4.2
Olives	19.6	0	19.6
Orange, Navel	1,991.3	239.2	2,230,5
Orange, Valencia	16,320.1	1,845.7	18,165.8
Peaches	24.3	5.8	30.1
Pears	4.8	0	4.8
Strawberries	520.0	0	520.0
Tangerines	24.6	16.7	41.3
Walnuts	7,955.1	157.8	8,112,9
Hay Grain	5,316,0	0	5,316.0
Beans, Dry	17,360.0	0	17,360.0
Cut Flowers	1,054.0	0	1,054.0
Nursery Stock	264.0	0	264.0
Beed	1,577.0	0	1,577.0
Sugar Beets	760.0	0	760.0
/ogetables	43,630.0	0	43,630.0
	122,748.3	6,191.4	128,939.7

		BEARING	PER PRODUCTION			VALUE			
CROP	YEAR	ACREAGE	ACRE	TOTAL	UNIT	PER UNIT	TOTAL		
APPLES	1961 1960	52 69	7.69 3.25	400 224	Ton	\$ 80.00 134.00	\$		
AVOCADOS	1961 1960	2,375 2,084	1.80 2.65	4,275 5,520	;; ;;	395.00 221.00	1,683,000 1,220,000		
GRAPES	1961 1960	67 66	2.00	134 165	27 24	60.00 40.00	8,000 6,600		
GRAPEFRUIT									
Total	1961 1960	364 349	17.70 19.11	6,444 6,670	**	89.30 93.40	575,000 623,000		
Fresh Market	1961 1960			5,147 5,410	.7	107.00 112.00	551,000 606,000		
Processed	1961 1960			1,297 1,260	n ::	19.00 13.50	24,000 17,000		
LEMONS Total	1961 1960	22,656	13.60 15.40	308,000 339,000		97.66 81.50	30,079,000 27,628,000		
Fresh Market	1961 1960			204,000 182,000	11	128,00 138.00	26,112,000 25,116,000		
Processed	1961 1960			104,000 157,000	11 11	38.15 16.00	3,967,000 2,512,000		
ORANGES, NAVEL									
Tctal	1961 1960	1,991 1,841	8,00 6,50	15,940 11,940	3	174.00 132.00	2,774,700 1,580,800		
Fresh Market	1961 1960			14,220 9,620		190.80 159.00			
Processed	1961 1960			1,719 2,320		35.90 21.90			
ORANGES, VALENCIA									
Total	1961 1960		9.52 8.37			119.10 139.00			
Fresh Market	1961 1960			106,800		145.60 173.00			
Processed	1961 1960			48,470		60.00 43.00			

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FRUIT AND NUT CROPS ACREAGE, PRODUCTION AND VALUES 1960 - 1961

BEARING			PER	PRODUCTION		1	ALUE
CROP	YEAR	ACREAGE	ACRE	TOTAL	UNIT	PER UNIT	TOTAL
STRAWBERRIES							
Total	1961 1960	520 530	10.00 8.64	5,330 4,580	Ton	\$ 330.80 390.00	\$ 1,763,000 1,786,000
Fresh Market	1961 1960			2,430 2,580	77 77	475.00 475.00	1,154,000 1,226,000
Processed	1961 1960			2,900 2,000	22 91	210.00 280.00	609,000 560,000
IANGERINES	1961 1960	24 19	4.50 3.75	110 71	2) . (2)	220,00 280,00	24,200 19,900
MALNUTS	1961 1960	7,954 9,446	.27	2,115 5,380	¥2 72	523.00 501.00	1,106,000 2,695,000
TOTAL	1961 1960	52, 323 52,893					\$ 56,540,700 54,792,300

FRUIT AND NUT CROPS ACREAGE, PRODUCTION AND VALUE 1960 - 1961

VEGETABLE CROPS PRODUCTION AND VALUE 1960 - 1961 ACREAGE,

		HARVEST-	PER	PRODUC	TION	VALUE		
CROP	YEAR	ED ACREAGE	ACRE	TOTAL	UNIT	PER UNIT	TOTAL	
BEANS, GREEN Processed	1961 1960	13,200 11,100	1.96 2.05	25 ,9 00 22 , 800	Ton 	\$ 166.00 160.00	\$ 4,299,000 3,648,000	
BEANS, POLE	1961 1960	42 65	8.00 7.70	334 500	22 71	157.00 171.00	52,440 85,500	
BEETS, RED *	1961 1960	60 	9.35	561		41.40	23,200	

* 1960 production was included in "Miscellaneous Vegetables"

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	VEGETABLE CROPS	
ACREAGE,	PRODUCTION AND VALUE	1960 - 1961

	YEAR	HARVEST-	PER	PRODUCT	FION	V	LUE
CEOP	TOAL	ACREAGE	ACRE ·	TOTAL	UNIT	PER UNIT	TOTAL
BROCCOLI							
Processed	1961	2,106	3.00	6,318	Ton	155.90	985,000
	1960	3,010	2.05	6,170	"	139.00	858,000
CABBAGE, RED	1961	67	14.00	938	;;	59.30	55,600
	1960	58	10,40	603	;;	40.00	24,100
ABBAGE, GREEN	1.961	1,292	15.00	19,380	8	50.00	969,000
	1960	1,900	17.50	33,200	3	32.50	1,079,000
ARROTS	1961	538	13.20	7,114	22	60.30	429,000
	1960	1,040	11.50	12,000	22	56.70	680,000
CAULIFLOWER	1961	376	6,00	2,244	17	63.00	141,000
	1960	421	6,12	2,580	17	43.40	112,000
CELERY	1961	2,424	27.00	65,448	17	53,30	3,490,000
	1960	2,020	30.40	61,400	13	56,40	3,463,000
CHARD	1961 1960	70 5	10.76 7.30	753 39	17 CT	61.60 78.20	46,400 3,050
CORN, SWEET	1961	92	2.50	230	\$7	81.30	18,700
	1960	84	3.25	273	27	119.00	32,500
CUCUMBERS							
Total	1961	517	11.25	5,820	;;	99.30	578,000
	1960	812	12.63	10,260	;;	62.20	638,000
Fresh Market	1961	-337	11.70	3,950	33	118.00	468,000
	1960	637	12.40	7,900	77	65.00	514,000
Pickling	1961	180	10.40	1,870	::	58.80	110,000
	1960	175	13.50	2,360	:2	52.60	124,000
LETTUCE							
Total	1961 1960		10.55 8.45	58,492 46,420	17 12	60.70 60.32	3,548,000 2,800,000
Head	1961 1960		10.70 7.11	40,200 23,700	- 12 - 13	60.50 76.10	2,431,000 1,804,000
Leaf	1961 1960		8.00 7.20	4,080 4,820	22	65.00 60.00	265,000 289,000
Romaine	1961 1960		11.00 12.00	14,212 17,900	;1	60.00 39.50	852,000 707,000

		BLE CROPS		
ACREAGE,	PRODUCTION	AND VALUE	1960	 1961

CROP	YEAR	HARVEST-	PER	PRODUCT	TION	V.	LUE
	TUMIC	ACREAGE	ACRE	TOTAL	UNIT	PER UNIT	TOTAL
ONIONS, GREEN							
Processed *	1961 1960	35 	20,00	700	Ton	\$ 88.00 \$	61,500
PARSLEY	1961 1960	153 175	30.50 22.00	4,670 3,850	32 8:	51.00 40,00	238,000 154,000
PEAS		А. А					
Processed	1961 1960	3,050 1,410	1.10 1.75	3,350 2,470	27 27	81.20 86.60	272,000 214,000
PEPPERS, BELL							
Total	1961 1960	610 - 572	9.00 8.80	5,500 5,030	92 37	82.50 62.80	454,000 316,000
Fresh Market	1961 1960	290 220		2,300 1,320	1) 1)	120.80 107.00	278,000 141,000
Processed	1961 1960	320 350		3,200 3,710	**	55.00 47.20	176,000 175,000
PEPPERS, GREEN CHILI	1961 1960	1,236 1,640	7.00 7.90	8,650 12,900	\$2 92	65.00 62.60	562,000 808,000
PEPPERS, PIMIENTOS	1961 1960	805 924	7,80 8,10	6,280 7,490	11 22	65.60 65.00	412,000 487,000
<u>SPINACH</u>							
Total	1961 1960	1,020 1,128	8.06 5.48	8,230 6,190	†† 17	40.00 45.10	329,000 279,000
Fresh Market	1961 1960			2,350 1,120	27 27	73.20 132.00	172,000 148,000
Processed	1961 1960			5,880 5,070	17 92	26.70 25.80	157,000 131,000
G.UAGH, WINTER	1961 1960	186 205	7.50 8.34	1,395 1,710	17 17	20.00 23.00	27,900 39,300

* 1960 production was included in "Miscellaneous Vegetables"

	YEAR	HARVEST PE EAR ED AC		PRODUCTION		t.	IALUE
CROP	LEAR	ACREAGE	ACRE	TOTAL	UNIT	PER UNIT	TOTAL
TOMATOES							
Total	1961 1960	9,758 9,580	15,30 17,10	149,300 163,700	Ton	\$ 61.40 47.10	\$ 9,166,000 7,704,000
Fresh Market	1961 1960			48,500 48,700	97 72	126.00 102.00	6,111,000 4,967,000
Processed	1961 1960			100,800 115,000	2) 2)	30,30 23,80	3,055,000 2,737,000
TOMATOES, CHERRY *	1961 1960	42	14.00	588	n	200.70	118,000
MISC. VEGETABLES	1961 1960	405 476	8.00 6.75	3,240 3,210	27 87	60.00 88.00	194,000 282,000
MUSHROOMS	1961 1960			10,770 0	CWT O	50,00 0	538,500 0
TOTAL	1961 1960	43,626 42,115					\$ 27,008,240 23,706,450

VEGETABLE CROPS ACREAGE, PRODUCTION AND VALUE 1960 - 1961

* 1960 production was included in "Miscellaneous Vegetables"

CUT FLOWER PRODUCTION

CROP	YEAR	ACREAGE	TOTAL VALUE
CUT FLOWERS	1961 1960	1,054 1,030	\$ 1,526,000 1,162,000
TOTAL	1961 1960		\$ 1,526,000 1,162,000

CROP		YEAR	HARVEST-	PER PRODUCTION			N N	ALUE
		LUNI	ACREAGE	ACRE	TOTAL	UNIT	PER UNIT	TOTAL
BEANS								
Liı	nas, Dry	1961 1960	13,600 15,100	1.03 .81	13,990 12,200	Ton	\$ 310.00 319.00	\$ 4,337,000 3,892,000
See	ed Beans	1961 1960	3,760 1,750	1.15 1.09	4,324 1,910	21 21 27	310.00 260.00	1,340,000 497,000
HAY								
Al:	falfa, Green	1961 1960	760 896	30.00 27.00	22,800 24,200	27 27	5.50 5.50	125,000 133,000
0a [.]	ts, Barley	1961 1960	3,156 5,930	.80 .95	2,525 5,650	:) ;;	30.00 33.24	75,700 187,800
GRAIN								
Bai	rley	1961 1960	1,400 5,760	•70 •55	980 3,170	22 22	47.50 40.00	46,500 127,000
PERMANEI	NT PASTURE	1961 1960	685 600					
SEED								
Flo	ower	1961 1960	265 250	103.39 242.00	27,400 60,500	Lbs "	2.30 2.04	63,000 123,000
VeĮ	getable	1961 1960	1,312 1,230	256.00 248.00	336,228 305,000	11 17	2,88 3,02	970,000 921,000
BUGAR BE	<u>EETS</u>	1961 1960	760 1,500	28.55 24.93	21,700 37,400	Ton "	13,00 13,30	282,000 497,000
					ang			
TOT	ML	1961 1960	25,698 33,016					\$ 7,239,200 6,377,800

FIELD CROPS ACREAGE, PRODUCTION AND VALUE 1960 - 1961

NURSERY	STOCK	PRODUCTION

NURSERY STOCK	YEAR	PRODUCTION	VALUE		
AVOCADOS, TREES	1961 1960	6,000 7,450	\$		
CITRUS, TREES	1961	114,000	285,000		
	1960	153,000	382,000		
WALNUT, TREES	1961	12,000	15,000		
	1960	13,800	20,800		
ORNAMENTALS, PLANTS	1961	65,158	69,000		
	1960	32,300	72,600		
<u>VECETABLES, PLANTS</u>	1961	550,500	376,000		
Flats	1960	562,000	365,000		
<u>TOMATO PLANTS</u>	1961	127,985,000	742,000		
Field Grown	1960	77,557,000	415,000		
TOTAL	1961 1960		\$ 1,502,000 1,274,000		

APTARY PRODUCTS

		PRODUCTIO	PRODUCTION		VALUE		
CROP	YEAR	TOTAL	UNIT	PER UNIT	TOTAL		
HONEY	1961 1960	150 450	Tons	\$ 260.00 280.00	\$		
. <u>IAX</u>	1961 1960	20 42	22 23	860.00 900.00	17,200 37,800		
TOTAL	1961 1960				\$ 56,200 163,800		
Number	of col	aries onies keepers	. 180 9,849 . 150)			

LIVESTOCK AND POULTRY PRODUCTION AND VALUE 1960 - 1961

an an an ann an an an an an an an an an	e i A a	PRODUCTI	ON	VA	LUE
CROP	YEAR	TOTAL	UNIT	PER UNIT	TOTAL
HOGS	1961 1960	8,200 9,000	Head :1	\$ 34.00 \$ 35.00	279,000 315,000
CATTLE			•		
Range	1961 1960	7,020 6,880	Lbs ::	180.00 187.00	1,263,600 1,287,000
Feed Yard,			9. s. 14		
Gain in lbs	1961 1960	23,423,000 17,802,000	11 11	.23 .22	5,387,000 3,916,000
CHICKEN EGGS		14,018,000 14,933,000	Doz.	.37 .31	5,187,000 4,629,000
CHICKEN MEAT	1961 1960	1,318,000 1,970,000	Lbs.	•07 •07	92,200 138,000
SQUABS	1961 1960	32,000 44,400	Bird "	1,00 1,00	32,000 44,400
TURKEYS	1961 1960	211,000 243,000	22 89	4.30 4.80	907,000 1,166,000
	•		•		
TO <u>TAL</u>	1961 1960		1	\$	13,147,800 11,495,400

	DAIRY	PRODUCT	S	
Number of Dairies Number of Dairy Cows Average Daily Production of	Milk	13 5,480 22,247	Gallons	
ESTIMATED REVENUE			961 960	

\$ 3,623,000 3,660,000

	YEAR	ACREAGE	VALUE
RUIT & NUT CROPS	1961 1960	52,323 52,893	\$
EGETABLE CROPS	1961 1960	43,626 42,115	27,008,240 23,706,450
UT FLOWERS	1961 1960	1,054 1,030	1,526,000 1,162,000
TELD CROPS	1961 1960	25,698 33,016	7,239,200 6,377,800
URSERY STOCK	1961 1960		1,502,000 1,274,000
PIARY PRODUCTS	1961 1960		56,200 163,800
IVESTOCK & POULTRY	1961 1960		13,147,800 11,495,400
AIRY PRODUCTS	1961 1960		3,623,000 3,660,000
RAND TOTAL CROP REPORT	1961 1960	122,701 129,054	110,643,140 102,631,750

AGRICULTURAL CROP REPORT RECAPITULATION

1956 Crop Valuation	• • • • • • • • • • • • •	88,460,154
1957 Crop Valuation		82,473,986
1958 Crop Valuation		100,666,263
1959 Crop Valuation		102,821,348
1960 Crop Valuation	* * * * * * * * *	102,631,750
1961 Crop Valuation	* * * * <u>* * * *</u> * * * *	110,643,140