

Ventura County's Crop & Livestock Report 2023

Presented to the Honorable Board of Supervisors

July 23, 2024

Korinne Bell

Agricultural Commissioner

2023 Crop & Livestock Report

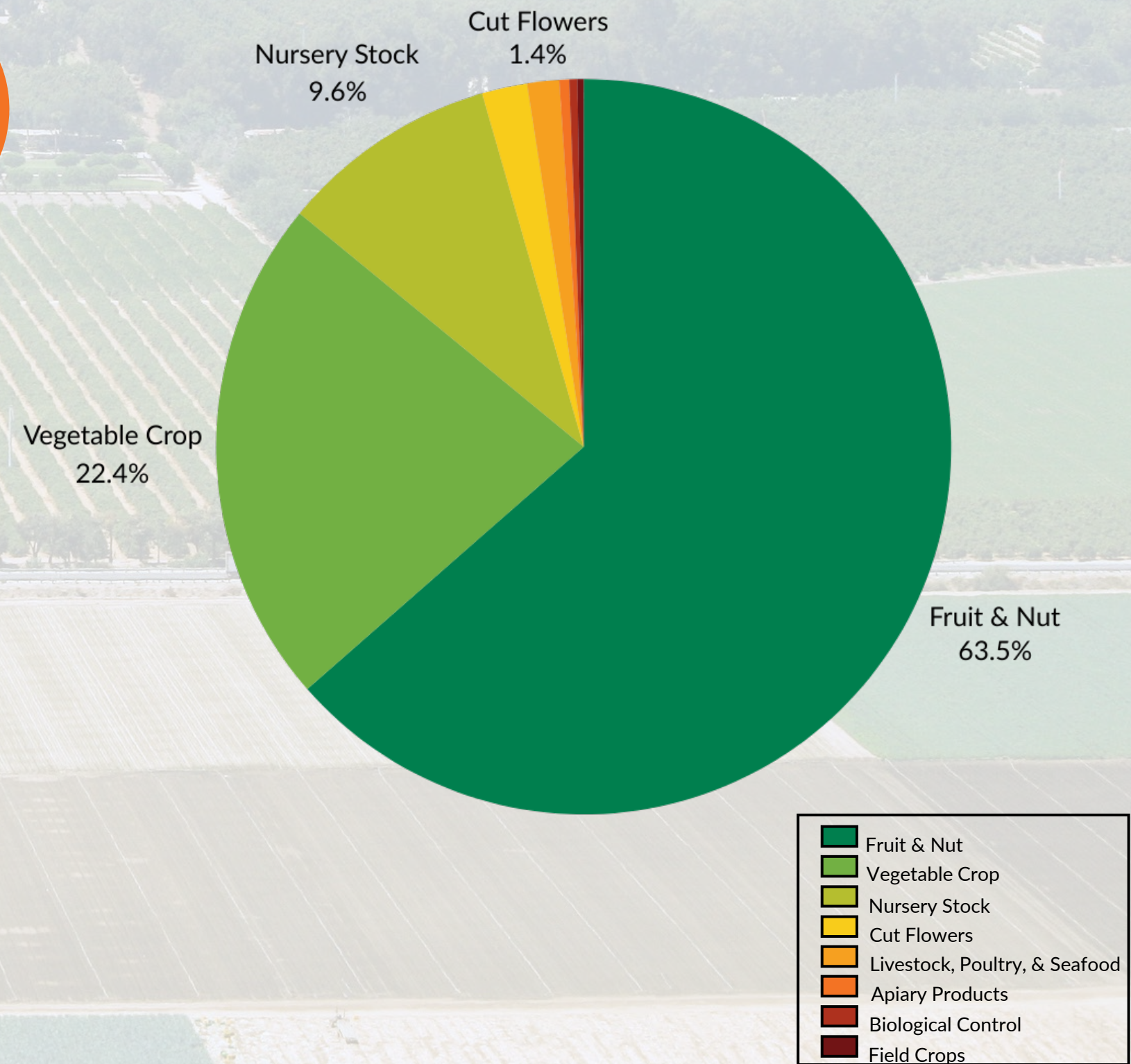
“...seeks to highlight the challenges and emphasize the resilience of Ventura County’s farmers as they employ integrated pest management strategies to combat these issues.”



2023 Agriculture Value

Grand Total: \$2,170,243,000

- 2% increase over 2022
- Gross revenues only; from this growers must pay labor, water, fuel, electricity, bank loans, land leases, insurance, taxes, equipment, materials and all other farming costs



10 Year Gross Revenue Comparison



#1: Strawberries

- 11% increase over 2022
- Market conditions gave way for good pricing
- Leached salts (salts removed from the rains-
allowed for healthier, more productive plants)
- Better well conditions

\$733,257,000



#2: Nursery Stock

- 8% increase over 2022
- Has not been in number two spot since 2009
- Increased value in several crop categories

\$208,169,000



#3: Lemons

- Very minor increase of 0.47% over 2022
- Prices have been low for the last several years due to increased competition

\$207,542,000



#4: Celery

- 32% increase over 2022
- Increase in acres, increased production

\$167,950,000



#5: Raspberries

- 49% increase over 2022
- More summer production allowing for Oxnard to have its window of pricing differentiated from other districts

\$167,008,000



#6: Avocados

- 51% decrease from 2022
- Timing (harvest delayed due wet spring), size, and coming off record high pricing of 2022, saw the retail pricing drop dramatically (18% drop)

\$125,728,000



#7: Blackberries

- 56% increase over 2022
- Good market conditions (rain) and benefitted from lower-than-expected yields in other regions (both locally and abroad) which increased demand.

\$70,177,000



#8: Peppers

- 9% increase over 2022
- Increased acreage and an increase in value per ton

\$58,046,000



#9: Tomatoes

- 25% increase over 2022
- Increased production
- Bumped Blueberries from top ten

\$41,061,000



#10: Lettuce

- 53% increase over 2022
- Impatiens Necrotic Spot Virus (INSV) hit Salinas Valley and caused lettuce prices to increase to record high
- Ventura made up for that lack of production.

\$38,114,000



County of Ventura: Did You Know...?

- Number 10 in California
- 1st for Avocados, Raspberries, Kale
- 2nd for Lemons, Celery, Peppers, Cabbage
- 3rd for Nursery Stock, Strawberries, Blackberries, Artichokes
- 4th for Blueberries
- 5th for Spinach

County of Ventura Did You Know...?

Ventura County celebrated its 150th anniversary in 2023. The county was established in 1873, with agriculture as its leading industry. Ventura County has always been a leader in agribusiness and is ranked 10th in the state in gross value of agricultural production. Our production contributes to California's rank as first in the United States and the fifth largest food and agricultural products supplier globally.

Ventura County Facts & Statistics

Land:

1,840.79 sq. miles of total land.
149.66 sq. miles of irrigated land (approx.
8.13% of total land).

Population:

832,605 people.
13th largest county by population.

Economy:

Over \$2.1 billion annual crop value.
5.4% of Ventura County industries are related
to agriculture, forestry, fishing, and hunting.
\$39,828 for the average fieldworker salary.
Trend of the number of employed workers
have dropped, while the average salary has
increased.

Crop information:

Ventura County's rank in commodity
values in California:
1st for Avocados, Raspberries and Kale;
2nd for Lemons, Celery, Peppers and
Cabbage;
3rd for Horticulture, Strawberries,
Blackberries and Artichokes;
4th for Blueberries; and
5th for Spinach.



2023 brought with it an unexpectedly large amount of rain which created extensive storm damage for farms. As the agricultural industry cleaned up the aftermath of the storms, Ventura County Department of Agriculture/Weights & Measures (VCAWM) staff were sent out to collect data which could potentially help growers get compensation for damages.

After the storm damage, growers had to focus on pest control. Pests like weeds, insects, mold and rodents are already a problem in the field, but the increased water the storms brought made the situation worse.

The Huanglongbing (HLB) virus, carried by the Asian Citrus Psyllid (ACP), and the Queensland Fruit Fly (QFF) had the greatest impact on the county. HLB and QFF were unprecedented in Ventura County before 2023. This triggered quarantines in the areas of Santa Paula for HLB and Thousand Oaks, Moorpark and Santa Rosa for QFF. Restrictions and specific mitigations were set forth for the harvest and transport of commodities that are hosts to the HLB/ACP and QFF. The VCAWM partners with the California Department of Food and Agriculture (CDFA) and the United States Department of Agriculture (USDA) in the enforcement of those quarantines.

References: U. S. Census Bureau, Ventura County Civil Alliance State of the Region Report, California Statistics Review 2021-2022, County of Ventura 1873-2023; 150 Years of Prosperity.

A Summary of Invasive Pests in Ventura County

What is IPM?

Integrated Pest Management (IPM) is a sustainable and environmentally responsible approach to managing pests based on the principle of using a combination of strategies to minimize the impact of pests while reducing the reliance on chemical pesticides. This holistic approach seeks to strike a balance between economic viability, environmental protection and the need to ensure human and animal safety.

The concept of IPM was developed in the mid-20th century as a response to the negative consequences of the over-reliance on chemical pesticides. Early IPM pioneers recognized that a more holistic and strategic approach was needed to manage pests effectively. They laid the foundation for the integration of various pest control methods, including biological control (using natural predators), cultural practices (such as crop rotation) and physical methods (like traps or barriers).

IPM is widely practiced in agriculture today and has evolved with advancements in technology and research. Farmers use a combination of scientific knowledge, monitoring systems and data-driven decision-making to implement IPM strategies. This approach has been successful in reducing chemical pesticide use, mitigating resistance and preserving natural ecosystems.

The future of IPM looks promising. With ongoing research and technological innovations, IPM will continue to improve. For example, the use of drones and sensors allows for real-time monitoring of pest populations, enabling more precise and targeted interventions. Genetic technologies, such as genetically modified crops with built-in pest resistance, may also play a role in the future of IPM.



Scan QR Code to read the *Roadmap for Integrated Pest Management* through the UC IPM website.

If you need help identifying pests we suggest contacting Master Gardeners or downloading the iNaturalist app. If you have seen a new or unusual pest in your area, you can report it to the CDFA Pest Hotline at 1-800-491-1899. You can also visit the UC Cooperative Extension Ventura County or UC IPM websites for more information on agriculture, pests and IPM. Visit the California Department of Pesticide Regulation's (CDPR) website to read *Accelerating Sustainable Pest Management: A Roadmap for California* to learn more about the state's plan for safer, sustainable pest management practices.

Steps of IPM



1. Identify and Research Pest.

Correctly identify the pest and research its life cycle and beneficials to determine best preventative measures.

2. Monitor Pest Populations.

Use appropriate monitoring techniques and keep detailed records of observations.



3. Determine the Action Threshold.

Determine when the pest population becomes an economic threat.

4. Choose the Appropriate Management Tactic.

Explore different management tactics, like biological, cultural, mechanical/physical and chemical controls. Choose which is appropriate for you.



5. Evaluate Results. Some Steps may be Repeated.

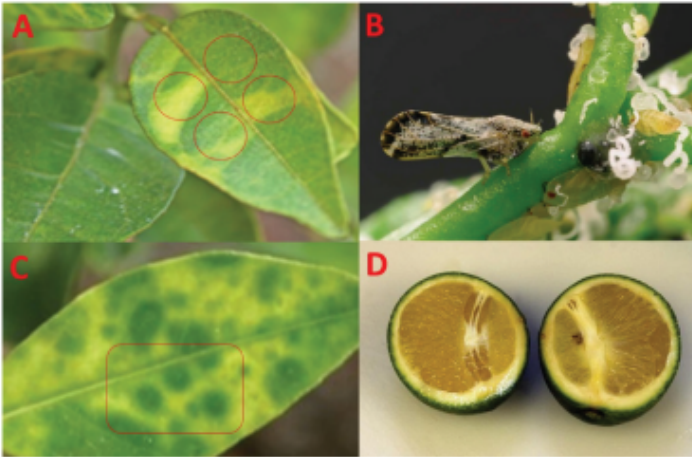
Determine if the management tactic was successful. Review records and continue monitoring. Explore other tactics if current one was unsuccessful.

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What should you know about ACP and HLB?

The Asian Citrus Psyllid (ACP), *Diaphorina citri*, is a small, invasive insect that poses a severe threat to the citrus industry worldwide. Native to Asia, this psyllid has become a global concern due to its role in transmitting the devastating plant disease known as Huanglongbing (HLB), or citrus greening disease. The psyllid feeds on the leaves and stems of citrus trees, and during this process, it can introduce the HLB-causing bacterium, *Candidatus Liberibacter asiaticus*, into the tree's vascular system.

Once infected, citrus trees exhibit symptoms like mottled leaves, stunted growth and deformed fruit,



A. Uneven yellowing on opposite side of medial vein.
B. Adult ACP with instars.
C. Mottled pattern on leaf.
D. Misshapen, discolored fruit that tastes bitter or salty. Seeds are not viable.



Scan QR Code to view the latest HLB quarantine map.

Citrus Trioza, also known as the African Citrus Psyllid or *Trioza erytreae*, is a tiny sap-sucking insect that is a significant pest of citrus trees. Native to Africa, this invasive psyllid is notorious for its ability to transmit the bacterium *Candidatus Liberibacter africanus*, responsible for the severe citrus disease known as African Citrus Greening or African Huanglongbing. Infected citrus trees exhibit symptoms like yellowing leaves, stunted growth

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ultimately leading to tree death and crop losses. Effective management strategies to combat ACP and HLB include the use of insecticides, biological control agents and the removal of infected trees, as well as ongoing research to develop disease-resistant citrus varieties and promote strict quarantine measures to prevent its further spread.

Santa Paula and its surrounding area are currently under quarantine measures for HLB. Citrus plants, including backyard fruit, should not be transported out of the quarantine area without the proper mitigation methods taken to prevent the possible spread of HLB.

and misshapen, bitter fruit, leading to reduced fruit production and economic losses.

Many symptoms of HLB and African Citrus Greening resembles nutrient deficiencies in trees. If you suspect your citrus trees may be infected, you can contact the CDFA Pest Hotline by calling 1-800-491-1899 or by emailing reportapest@cdfa.ca.gov.

How does the Queensland Fruit Fly quarantine affect you?

The Queensland Fruit Fly (QFF), *Bactrocera tryoni*, is a highly destructive and economically significant pest insect that primarily affects a wide range of fruit crops, including citrus, stone fruits and grapes. Native to eastern Australia, this invasive fly has established itself in various regions worldwide, causing substantial damage to fruit production. The female QFF lays its eggs in the flesh of ripening or ripe fruit, and the hatched maggots feed on the fruit, causing it to rot and become inedible. Infestations can lead to significant crop losses and reduced fruit quality. Eradicating the QFF involves a combination of strategies, including monitoring, baiting and the use of conventional or organic chemical control methods. Preventative measures like strict quarantine regulations and public education efforts are essential to reduce the spread of this invasive pest and safeguard fruit production industries.



Adult QFF lateral view.



Scan QR Code to view the latest QFF quarantine map.



A Santa Rosa grower applying organic Spinosad bait to the base of a blueberry bush to attract QFF in the field.

The Black Fig Fruit Fly (BFF), *Silba adipata*, also known as the Black Banded Fruit Fly, is a notable pest that primarily targets fig trees and other fruit-bearing plants. These flies are widespread across various regions, including parts of Asia, Europe and the Americas. Adult female flies lay their eggs in ripening or overripe fruit, particularly figs, which serve as a crucial breeding ground for their maggots.

The infestation causes damage to the fruit, making it inedible and reducing crop quality and yield. To combat the BFF, integrated pest management strategies are often employed, including monitoring traps, cultural practices and the use of insecticides. Additionally, controlling fruit fly populations is vital to protect fruit crops and ensure their continued productivity and marketability.

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Highlights from Departmental Programs

PEST EXCLUSION

DEPUTY AGRICULTURAL COMMISSIONER DAVID WIRTA

- HIGH RISK PEST EXCLUSION
- MISC. PHYTOSANITARY CERTIFICATION
- SUDDEN OAK DEATH
- SEED PROGRAM
- TREE CROP PHYTOSANITARY CERTIFICATION
- INDUSTRIAL HEMP PROGRAM
- LETTUCE MOSAIC
- HLB TESTING

TOP 10 LEADING EXPORT COUNTRIES

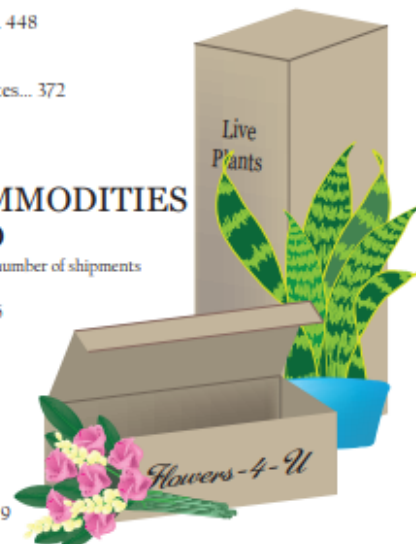
Numbers are reported as number of exports per country.

1. Canada... 4,631
2. Japan... 1,399
3. Saudi Arabia... 520
4. Republic of Korea... 448
5. Mexico... 433
6. Taiwan... 407
7. United Arab Emirates... 372
8. Kuwait... 367
9. Netherlands... 233
10. Chile... 151

TOP 10 COMMODITIES EXPORTED

Numbers are reported as number of shipments per commodity.

1. Strawberries... 3,276
2. Blueberries... 2,295
3. Raspberries... 2,116
4. Seeds... 1,790
5. Blackberries... 1,686
6. Lemons... 1,035
7. Parsley... 892
8. Kale... 482
9. Cabbage... 221
10. Nursery Stock... 149



If you have ever sent or received flowers in the mail, they may have been inspected by the county before being delivered. The VCAWM inspects boxes at the shipping terminals that contain plants, plant parts (like fruits and seeds) and even soil that could potentially harbor pests. Shipments come into Ventura County from other counties, states and countries that each have their own pest quarantines. VCAWM inspectors prevent the spread of pests by inspecting the package contents, reviewing the quarantines that apply based on origin and ensuring the appropriate paperwork is present for shipping into Ventura County.



INCOMING SHIPMENTS

FedEx	1,731
UPS	868
Truck Inspections	633
Ocean Freight Inspections	26
Household Goods (Pest Inspections)	7
Notices of Rejection	23

OUTGOING SHIPMENTS

Federal Phytosanitary Certificates	10,508
State Phytosanitary Certificates	1,429
Certificates of Quarantine Compliance	57

PESTS INTERCEPTED

A Rated	17 + 26 ACP
Q Rated	22 + 2 weeds

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PEST MANAGEMENT

DEPUTY AGRICULTURAL COMMISSIONER GRETA VARIEN

- GLASSY-WING SHARPSHOOTER
- INVASIVE SHOT HOLE BORER
- TRAPPING (LBAM/AM/ACP/GWSS)
- NURSERY PROGRAM
- ASIAN CITRUS PSYLLID-BULK CITRUS MONITORING
- ABANDONED ORCHARDS
- GREEN WASTE MONITORING
- CELERY MOSAIC
- APIARY PROGRAM

Nursery stock is the highest risk pathway for the movement of plant pests worldwide. Maintaining a system of clean, healthy nursery stock is essential to the protection of California's agriculture and environment. Supported by nursery license and acreage fees, nursery regulatory activities conducted by the county agricultural commissioners and their staffs are an integral part of the state's agricultural pest prevention system. The VCAWM inspects incoming shipments of nursery stock, enforces plant quarantines and inspects nursery stock for proper labeling and condition. The VCAWM also issues shipping permits, nursery stock certificates and other required certificates to facilitate movement of nursery stock in trade.



GLASSY WINGED SHARPSHOOTER (GWSS)

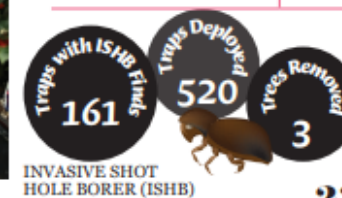
Shipments Inspected	5,476
Containers Inspected	416,995
Flats Inspected	11,495
GWSS Findings Outgoing	45
GWSS Finds at Destination	1

ASIAN CITRUS PSYLLID (ACP) BULK CITRUS

New Compliance Agreements	55
Updated Compliance Agreements	12
Total Compliance Agreements Issued	1,056
Compliance Inspections	568
Notices of Violations Issued	25
Notices of Proposed Action Issued	4

CELERY MOSAIC

Permits Issued	30
Number of Sites	25
Bags Collected	91



PESTICIDE USE ENFORCEMENT

DEPUTY AGRICULTURAL COMMISSIONER ANDY CALDERWOOD

- RESTRICTED MATERIAL PERMITS
- COMPLIANCE MONITORING
- ENFORCEMENT RESPONSE
- AIR MONITORING
- FIELDWORKER SAFETY
- PESTICIDE RELATED INVESTIGATIONS

PERMITS AND OPERATOR IDS

Agricultural Permits	399
Non-Agricultural Permits	54
Operator IDs	595

NOTICES OF INTENT AND PRE-APPLICATION INSPECTIONS

Notices of Intent Received	2449
Pre-Application Inspections	320
Percent Pre-Application Inspections Conducted	13.1%

ENFORCEMENT RESPONSES

Agricultural Civil Penalties	64
Structural Civil Penalties	0
Notices of Violation	81
Decision Reports	32

PESTICIDE USE INSPECTIONS

Agricultural Use	346
Structural Use	72
Farm Headquarters	22
Pest Control Business Headquarters	28
Fieldworker Safety	63
Commodity Fumigation	5
Pre-Application	320

Rodents, gophers and squirrels can be persistent pests to residential, industrial and agricultural settings. They can cause structural damage to buildings, injure crops and spread diseases. Rodenticides are pesticides used to aid in the control of rodents, gophers and squirrels. The VCAWM regulates the safe use of rodenticides by proctoring exams for private applicators' certificates, issuing pesticide use permits, registering pest control companies, conducting headquarters inspections on pest control companies and farms and inspecting pesticide applications.



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Local Farmer’s Markets and Organic Farming

Certified Farmers’ Markets

MONDAY



**Adventist Health
Simi Valley CFM**
3000 Sycamore Dr.
& Avenida Simi
10 AM - 3 PM
Michela Browning

TUESDAY

Midtown Ventura
Pacific View Mall,
West Parking Lot
9 AM - 1 PM
Karen Wetzel Schott

THURSDAY

Downtown Oxnard
Downtown Plaza Park
500 S. C St.
9 AM - 1:30 PM
The Oxnard Heritage Foundation

Thousand Oaks
222 W. Hillcrest Dr., East End Parking Lot
12 PM - 5 PM
Karen Wetzel Schott

Ojai Community Farmers’ Market
414 E. Ojai Ave.
3 PM - 7 PM
Julie Gerard

FRIDAY

**Simi Valley at Civic
Center**
2757 Tapo Canyon Rd.
11 AM - 3:30 PM
Michela Browning

SATURDAY

Camarillo Hospice
2220 Ventura Blvd.
8 AM - 12 PM
Ruff Smith

**Downtown
Ventura**
Santa Clara and Palm
St., City Parking Lot
8:30 AM - 12 PM
Karen Wetzel Schott

Santa Paula CFM
801 E. Main St.
10 AM - 2 PM
Ananda Luyt

**VENTURA
FISHERMAN’S
MARKET**
1449 Spinnaker Dr.
7 AM - 11 AM
(206) 391-9054

SUNDAY

**Ojai Farmers’
Market**
300 E. Matilija St.
9 AM - 1 PM
Cynthia Korman

**Channel Islands
Harbor**
3350 S. Harbor Blvd.
10 AM - 2 PM
Melissa Farwell

**Saticoy Farmers’
Market**
11321 Violeta St.
10 AM - 2 PM
Sierra Doeher

Westlake Village
2797 Agoura Rd.
10 AM - 2 PM
Melissa Farwell

CERTIFIED FARMERS’ MARKETS OPERATIONS MANAGERS’ CONTACT INFORMATION

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The Oxnard Heritage Foundation
(805) 247-0197
info@oxnarddowntowners.org

Karen Wetzel Schott
(805) 529-6266
www.vccfarmersmarket.com

All Certified Farmers’ Markets
are open year-round,
except Saticoy Farmers’ Market
is from Jun. - Dec.



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Organic Farming

Crop	Year	Acres	Gross Value
Registered Growers	2023		147
	2022		143
Cut Flowers & Nursery Stock	2023	30	\$30,000
	2022	35	\$40,000
Field & Seed Crops	2023	871	\$63,000
	2022	1,154	\$179,000
Fruit & Nuts	2023	9,415	\$194,694,000
	2022	8,919	\$229,344,000
Livestock & Poultry	2023	100	\$30,000
	2022	110	\$30,000
Specialty Crops	2023	15	\$10,000
	2022	15	\$10,000
Vegetables & Herbs	2023	3,234	\$18,007,000
	2022	2,058	\$24,300,000
Total*	2023	14,780**	\$212,834,000
	2022	13,393**	\$253,903,000

*Included in all other total values.
**Includes 1,115 acres of Fallow Cropland for 2023 and 1,102 acres for 2022.

CDFA Pest Rating System

Both California and the U. S. government maintain lists of pests that are considered threats to the wellbeing of the state or the country. If an organism is found to probably be “troublesome, aggressive, intrusive, detrimental, or destructive to agriculture, silviculture, or important native species, and difficult to control or eradicate”, the government will designate the organism as a noxious pest. At the time that CDFA lists a species, it also receives a rating of A, B, C, D or Q which reflects the CDFA’s view of the statewide importance of the pest, the likelihood that eradication or control efforts would be successful and the present distribution of the pest within the state.

“A” A pest of known economic or environmental detriment and is either not known to be established in California or it is present in a limited distribution that allows for the possibility of eradication or successful containment. If found entering or established in the state, they are subject to enforced action involving eradication, quarantine regulation, containment, rejection or other holding action.

“B” A pest of known economic or environmental detriment and, if present in California, it is of limited distribution. They are subject to state endorsed holding action and eradication only to provide for containment, as when found in a nursery. They are subject to eradication, containment, suppression, control or other holding action.

“C” A pest of known economic or environmental detriment and, if present in California, it is usually widespread. They are subject to regulations designed to retard spread or to suppress at the discretion of the individual county agricultural commissioner.

“Q” An organism or disorder suspected to be of economic or environmental detriment, but whose status is uncertain because of incomplete identification or inadequate information.

“D” An organism known to be of little or no economic or environmental detriment, to have an extremely low likelihood of weediness or is known to be a parasite or predator or pathogen of a pest or is an otherwise beneficial organism. There is no state enforced action.

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Crop & Livestock Report 2023

Celebrating 96 years with **ASSOCIATES INSECTARY** and saying, "Farewell"

A few parting words from Associates Insectary's President/General Manager Brett Chandler:
"Associates Insectary couldn't have existed without the dedication and commitment of our growers and our employees. I appreciate all you have done. Thank you."

An excerpt from the Associates Insectary website:

In the 1920's, California's Ventura County citrus crops were being ruined by masses of Citrophilus mealybugs which smothered the valuable fruit with black, sticky, sooty mold. There were no chemical methods available to control this pest at the time. Using a model to form other Southern California agricultural cooperatives, seven citrus packing house "associations" joined together to hire an entomologist and finance and build "Associates Insectary". Growers were charged the equivalent of about \$85 an acre to raise the start-up funds necessary to construct the buildings and begin operations. By the mid-1930's, additional pests were becoming a problem, and it became obvious that an "integrated" approach was needed to continue to successfully combat these new pests. A fleet of spray equipment was designed and fabricated by our staff to be used in conjunction with the release of beneficial insects and grove inspections by entomologists. This integrated approach pioneered by Associates Insectary has since been labeled Integrated Pest Management (IPM).



"Associates Insectary has been a leading innovator in pest management and IPM practices that has shown a like brilliant spotlight in Ventura County. We appreciate your decades of dedication and service to the industry. Your presence, professionalism and expertise will be missed."

- County of Ventura Agricultural Commissioner Korinne Bell

Thank you!
Any questions?