Reporting and communicating about new pests in California

Winter 2021



Presenters

- Linda Pinfold, Deputy County Agriculture Commissioner, San Joaquin County
- Kyle Beucke, Primary State Entomologist, CDFA
- Heather Scheck, Primary State Plant Pathologist/Nematologist, CDFA
- Tania Brenes-Arguedas, Associate Director, Western Plant Diagnostic Network

- Moderator
 - Jim Farrar, Strategic Initiative Leader, Endemic and Invasive Pests and Diseases

Agriculture and Natural Resources

Desired learning outcome

Participants will be able to describe:

- The proper methods to report sightings of potential new pests
- The confirmation process for identifying new pests
- The proper methods for communicating new pest finds
- Their responsibility to follow this process

Role of County Agricultural Commissioner

- Outline
 - Role of CAC in receiving reports of new pest sightings
 - What does CAC do with reports?
 - Privacy and confidentiality issues

California County Agricultural Commissioners Introduction

- Every county has one some share
- Each agricultural commissioner is charged with the protection and promotion of California's agriculture, the protection of the environment as well as protection of the public's health and safety.
- A bit of interesting history:
 - 1881: California Legislature provided counties with the authority to establish local Boards of Horticultural Commissioners in an effort to protect the state's tree and vine industries new pests.
 - 1920: California Legislature established the State Department of Agriculture: County Horticultural Commissioners and their deputies under the direction of the Director of Agriculture.
 - 1922: Association of Agricultural Commissioners established -> Name Change
 - Now: State law now requires every county to have an agricultural commissioner who is appointed by the Board of Supervisors.
 - Each County Agricultural Commissioner (CAC) must manage a regulatory agency serving under the program direction of the California Secretary of Agriculture and the Director of the California Department of Pesticide Regulation.



California County Agricultural Commissioners California Food and Agricultural Code Mandates

FAC 2276.5.

- (a) The Legislature finds and declares that, acting under policy direction of the Secretary of Food and Agriculture, California's unique system of county agricultural commissioners forms the front line of defense in protecting the state from the many exotic and invasive species threatening our people, commerce, and environment.
- (b) It is the intent of the Legislature that agricultural commissioners take an increasingly assertive and proactive role in the exclusion and detection of exotic and invasive species in the urban environment, particularly those potentially spread by human activities, such as landscaping and yard maintenance.



California County Agricultural Commissioners California Food and Agricultural Code Mandates

The commissioner is......

5101:an enforcing officer of all laws and regulations which relate to the prevention of the introduction into, or the spread within, the state of pests. He is, as to such activities, under the supervision of the director.

5102: (each qualified representative of the commissioner)... is a state plant quarantine officer for the following purposes:

(b) Enforcing laws and regulations which relate to plant quarantine



California County Agricultural Commissioners California Food and Agricultural Code Mandates

The commissioner shall.....

- •2274: ...learn about all pests...in his county.
- •2276: ...for the purpose of becoming informed about new and dangerous agricultural pests, observing and learning new and better methods of pest control, and determining the best and most efficacious methods of conducting the work of his department, consult with staff members of the United States Department of Agriculture, the State Department of Agriculture, the University of California, and with agricultural commissioners of other counties....



So what does the Food and Agriculture Code about pest finds for UC Staff?

- **5307:** It is unlawful for any **person**, who is employed by any agency or institution that is supported or financed from public funds, willfully or knowingly to neglect or refuse to make a report to the commissioner of the county or to the director, or such person's immediate superior for the purpose of having such report transmitted to the commissioner of the county or to the director, of the presence in this state of any **pest**, as defined in Section 5006, which is new to, or not widely distributed in, the area or locality in which the pest exists, if the presence of such pest has been determined as a result of investigation, research, survey, or inspection which is made in behalf of the employing agency or institution.
- ➤ 38: "Person" means any individual, partnership, association, corporation, limited liability company, or any organized group of persons whether incorporated or not.
- **5006:** "Pest" means any of the following things that is, or is liable to be, dangerous or detrimental to the agricultural industry of the state:
- (a) Any infectious, transmissible, or contagious disease of any plant, or any disorder of any plant which manifests symptoms or behavior which the director, after investigation and hearing, finds and determines is characteristic of an infectious, transmissible, or contagious disease.
- > (b) Any form of animal life.
- ➤ (c) Any form of vegetable life.



What does all this mean for UC staff?

- County Commissioners Offices (aka County Agriculture Department) are the local regulatory authorities and are tasked with serving all (protect & promote ag) stakeholders within the county.
- When there is a new, unknown, or limited distribution pest found, it is required to be reported to the county commissioner (call, email, fax, via CDFA)
- The County Commissioners and their staff depend on UC Staff to:
 - Provide notification when a new, unknown, or limited distribution pest found.
 - Provide input and guidance regarding methods, practices and biological science information for eradication and/or control of these pests.
 - Assist local agricultural industries as advisors for IPM programs.
 - Provide local knowledge of production practices and biology for regulatory application



Role of Ag. Commissioners in receiving reports and what do they do with those reports?

- Commissioners' staff obtain
 - Official sample to submit to CDFA's Plant Pest Diagnostics Laboratory
 - Location and other important information
 - May place regulatory hold
- Commissioner ensures communication
- Works with affected and regulatory parties (compliance and collaboration are 1° goals)
 - Take appropriate regulatory action based on diagnostic results
 - May include abatement or other actions

What about privacy and confidentiality issues or concerns?

- Although diagnostic results are public record, the result records are maintained by CDFA.
- Ag. Commissioners will share the results to the owners or parties responsible for the items that were sampled.
- In communicating within the county organization (i.e. reporting to the Board of Supervisors), generally the main focus is on the pest, commodity and location. Names are not usually shared or explicitly relevant.
- Generally when sharing information with the public, information with be discussed broadly (i.e. a pest was found in the Stockton area)



Recent Examples of "WHEN IT WORKS WELL"

- WORKING WELL = GROWERS, PUBLIC, UC, COUNTY COMMISSIONERS, CDFA, USDA, AND INDUSTRY GROUPS ALL WORKING TOGETHER COLLABORATIVELY TOWARDS THE SAME COMMON GOAL
- Isolated Incident Example:
 - Egyptian Broomrape in Solano County



- Multi-County Incident Example:
 - European Grapevine Moth



Role of CDFA

cdfa CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

Outline

- Sampling and confirmation process
- What happens after confirmation?
- When does USDA-APHIS get involved?
- Who can disseminate new finding information and when?

Official samples

Only samples taken by regulatory officials are considered <u>official</u> for the purpose of establishing presence of a pest in California and for initiating regulatory action.

Examples:

- Fruit fly trapped in a county trap: OFFICIAL.
- Leaf spot found during a nursery inspection by CDFA: OFFICIAL.
- Wood-boring beetle found on furniture by a resident and submitted to county for identification: NON-OFFICIAL.





Official samples (continued)

<u>Unofficial</u> samples submitted to the county by UCCE or other non-regulatory cooperators may prompt the collection of an <u>official</u> sample by county, state, or federal personnel.



Sample submission

A sample is submitted to the state (CDFA) Plant Pest Diagnostics Laboratory.

A pest and damage record (PDR) is completed either beforehand or upon receipt depending on the situation.



	DEPARTMENT PLANT HEALT	STATE OF CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE PLANT HEALTH AND PEST PREVENTION SERVICES			PDR NUMBER TEST20140611 Lab @ ENTO @ PLANT PATH M NEMA					Date collected 10/21/2014 Time Collected 16:08		
Na sales	PEST AND DA	PEST AND DAMAGE RECORD				NOR Number: Number of samples:0						
Location SA	Owner/receiver	Owner/receiver LOCATE MAP				Collector Alex						
Activity 07		Address/physical description				Affil. F S C E U O Describe Other						
Situation 02	1220 N Street City Sacramento					Quarantine shipper/broker LOCATE MAP Name Alex						
Section 3	County Sacramento			Address 1220 N street								
Township 3 N	Phone				City Zip or Sacramento 9581-							
Range 4	(916) 403-6613 E-mail alex.ma@cdfa.ca.c	State/Country Galfornia United States V Geocode (set Lat/Long)										
Base and meridian H 🗸	Cross street 12 street			Phone (916) 403-6613		Fax		Latitu	ide			
Quarantine destination Secremento					-mail Longit lex.ma@cdfs.cs.gov							
Quarantine origin (where host grown)							Carrier (grou	nd/air/maritime)				
City	County	State/Country			Zip		Business name			ght mber		



Photograph: CDFA

Sample submission (continued)

Proper sample submission is critical for timely identification of pests and assessment of potential risk.

Two components:

- Quality of samples
- Quality of associated information

Proper submission guidelines for the Plant Pest Diagnostics Laboratory, by discipline, can be found here: https://www.cdfa.ca.gov/Plant/ppd



Quality of samples

Proper sampling depends on type of pest, but some general guidelines include:

- One (suspect) species per submission, if possible.
- Pathology: Larger/more complete samples of symptomatic plants are better. Diseases may be present in various stages and only some of these may be identifiable.
- More (numbers and apparent diversity) is better.
 - Many insect groups are identifiable in one sex or life stage but not in others.
 - May be multiple species present that are not apparent to the observer in the field.

Quality of samples (continued)

Proper preservation:

Plant material (pathology)

- Submit in a way that avoids decomposition and obscuring pathogens by secondary saprophages.
- For example: Pack securely in ziploc bags (NOT wrapped in wet paper towels) and send overnight with blue ice in the box Monday-Thursday to avoid it sitting over a weekend.



Quality of samples (continued)

Proper preservation:

Plant material (weeds)

- Include complete material (stems with several leaves and flowers or fruits if present).
- Press in folded newspaper under weight for one hour. If paper becomes wet, replace paper as many times as necessary.
- Add collection information/PDR sticker to newspaper.
- Ship in manila envelope or flat box or seal between two pieces of cardboard.
- Ship as soon as possible.





Quality of samples (continued)

Proper preservation:

Insects, mites, snails, and slugs

- Always submit <u>dead</u> (FAC Section 6305). All pests, unless exempt (FAC Section 3558), require a permit to be moved into or within California.
- Depending on type, should either be submitted dry or in alcohol.

Associated information

Origin of affected plants

Distribution of pest/disease in crop (incidence and severity), symptoms, affected plant parts.



Romaine with INSV



Romaine field with many symptomatic plants

Identification

At the Plant Pest Diagnostics Laboratory, specialists identify the pest with morphological and/or molecular methods.

Sometimes, a species identification is not possible (certain life stage, taxon insufficiently studied/undescribed species, etc.).





Rating: A, B, C, D, Q, or Z?

All pest identifications are accompanied by a rating. Ratings are defined in Section 3162: Pest Ratings and Official Control Actions.

A or Q: Quarantine or eradication is required.

B: Action may be taken at the discretion of the county agricultural commissioner.

C, **D**, or **Z**: Not subject to state-enforced regulatory action.

If sample was collected by county personnel, the identification and rating are communicated to the county.



When does USDA get involved?

Agriculture and Natural Resources

If the pest is identified as new to the United States (first in nation), a new state find, or is under federal regulation:

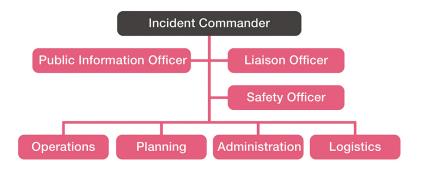
- Specimens need to be confirmed by the USDA sent to the National Identifier.
- For first in nation or new state finds: USDA will ask the state (usually primary scientist) to complete a Federal Pest Incident Worksheet (PIW): Situation surrounding the find, level of infestation, apparent impact, etc. The USDA will consider this information in deciding what actions they might take in response to the find. For pests under regulation, they may issue an Emergency Action Notification.

Communication of new finds

If the new find is considered significant, an incident command system (ICS) will be set with the affected county, CDFA and USDA

During ICS calls, the state response will be discussed and decided on.

Communication (for example, a press release) of the new find with the public may be initiated by the state and/or county media specialists.





Actions that might result from official samples

- Delimitation trapping or survey
- Eradication or suppression
- Quarantine (establishment or expansion)
- Trace forwards or trace backs
- Reassessment of pest rating due to expansion of known distribution in California

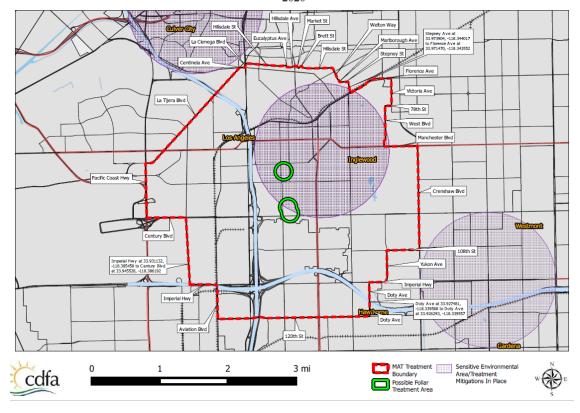


Communication of significant finds

CDFA releases information in a way that does not reveal specific addresses or owners (e.g., city or county only).

For quarantine projects, CDFA may have a public information officer or a public relations firm to communicate with stakeholders and the press Counties also may have a public information officer.

Oriental Fruit Fly Eradication Project Inglewood, Los Angeles County 2020





Communication of significant finds (continued)

Cooperators, including UCCE personnel, will typically be aware of official confirmation of pests, regulatory action, etc. when such information becomes public (e.g., news release).

News Release

CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE



Media Contacts: Steve Lyle (CDFA), 916-654-0462, officeofpublicaffairs@cdfa.ca.gov

MEDITERRANEAN OAK BORER DETECTED IN LAKE, NAPA, AND SONOMA COUNTIES



Español

SACRAMENTO, August 4, 2020 – The California Department of Food and Agriculture, in cooperation with the Lake County Agricultural Commissioner, Napa County Agricultural Commissioner, Sonoma County Agricultural Commissioner, the California Department of Forestry and Fire Protection (CAL FIRE), University of California Cooperative Extension, and the USDA - United States Forest Service (USFS), have started an extensive survey and outreach project, and are examining patterns of attack and management options, in



Your role as UC ANR person

UC labs help with finding new threats



Develop working relations and communicate



CDFA and county ag commissioners appreciate
UCCE's field experience, expertise, and relationships with
growers and the public



Report suspect pests and associated information to county agricultural commissioner



If a sample is submitted to the Plant Pest Diagnostics Laboratory directly, this is OK, they will report back to the county

Timing is key

 Report finds in a timely manner. This ensures timely awareness on the part of the county and the state regulators



I want to confirm my identification first

- Confirmation must be done by a regulatory lab
- Any sample you send is unofficial and only suspected



I want to publish first

- Learning of a new pest from a publication can put state officials and growers in difficult situation, as some pests can have trade implications
- Report first
- Plant health officials can provide guidance



This Photo by Unknown author is licensed under CC BY-SA-NC.

Clientele specific concerns

My clients have financial and practical reservations about reporting. What can I say to reassure my clients?





CDFA does not release specific location or owner information about new pest finds.



Reporting early may enable regulators to contain and manage the problem early.



Not reporting can result in the problem growing before someone else notices.

Your role as a UC ANR person

- Reporting protects California and is a legal requirement
- Let your clients know that it is going to happen
- Preventing the spread of new diseases is a collaborative effort

 Encourage growers to report suspicious pests that may be new to the state or area



If in doubt, Ask

• Your county Ag Commissioner is a great resource, to inform you of local pests.



 CDFA can help with official pest records in the State – which pests we have and their known distribution

 WPDN can help by reviewing our national database to see if a pest has been detected elsewhere in the US before.

Questions?

EIPD Regulated Pests Spotlight Webinar Series

- Webinar #2 Permits for Working with Regulated Pests
 - Tuesday, February 9, 10-11 AM
 - **Dean Kelch**, Environmental Program Manager, Permits and Regulations, Plant Health and Pest Prevention Services, CDFA
 - **Tselot Abdissa**, Environmental Scientist, Permits and Regulations, Plant Health and Pest Prevention Services, CDFA
 - Brian Oatman, Director, Risk and Safety Services, UC ANR
- Webinar #3 Extension Professionals Working with Clientele and Regulators during New Pest Outbreaks
 - Tuesday, February 16, 10-11 AM
 - Brenna Aegerter, Vegetable Crops Advisor, UCCE San Joaquin
 - Beatriz Nobua-Behrmann, Urban Forestry and Natural Resources Advisor, UCCE Orange
 - Lucia Varela, North Coast IPM Advisor Emeritus, UCCE Sonoma