CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE

CALIFORNIA AGRICULTURE DETECTOR DOG TEAM PROGRAM

Annual Report
July 1, 2013 - June 30, 2014

Pictured: *San Joaquin County Dog Team Tom Doud and Kojak. Photo courtesy of San Joaquin County Agricultural Commissioner Office.*

Purpose of Cooperative Agreement #13-8506-1165-CA
The purpose of cooperative agreement USDA #13-8506-1165-CA is to implement the use of the California Agriculture Detector Dog Teams (herein referenced as California Dog Teams) to enhance inspection and surveillance activities related to plant products entering the State of California via parcel delivery facilities and airfreight terminals for the purpose of excluding the introduction of plant pests that may negatively impact agriculture.

Work Plan Activities Performed by CDFA
CDFA oversaw and provided guidance for the statewide California Dog Team Program and distributed funds through cooperative agreements to County Agricultural Commissioners (CAC) for the purposes of fulfilling California Dog Team activities as outlined in the CDFA/CAC cooperative agreement. CDFA verified all expenses approved for payment to county agricultural commissioner cooperators were legitimate expenses as outlined in the CDFA/CAC cooperative agreement. CDFA acted as the liaison between CAC and the National Detector Dog Training Center (NDDTC) and was responsible for communicating significant pest finds and smuggling information to USDA/SITC.

Work Plan Activities Performed by County Agricultural Commissioners
The California Dog Teams were distributed as outlined in **Table 1** below. Seven of the thirteen California Dog Teams worked parcel facilities for the full reporting period (July 1, 2013 - June 30, 2014): Alameda (1 team), Fresno (1 team), Los Angeles (1 team), Sacramento (1 team), San Bernardino (1 team), San Diego (1 team), and Santa Clara (1 team).

TABLE 1: Distribution of CA Dog Teams

County	Area Covered	# of Teams
Alameda	Alameda County	1
Contra Costa	San Francisco Bay Area	2
Fresno	Fresno County	1
Los Angeles	Los Angeles County	2
Sacramento	Sacramento Valley	1
San Bernardino	Inland Empire Area	2
San Diego	San Diego County	2
San Joaquin	San Joaquin County	1
Santa Clara	South Bay Area	1

Three canines retired just prior to the start of the agreement period--two from Contra Costa County and one from San Diego County. The three experienced handlers of the retired canines attended a three-week replacement canine training course at the National Dog Detector Training Center (NDDTC) in Georgia and returned to California with their new partners in July 2013. After acclimation, the new canines began working parcel facilities in late July 2013.

A Los Angeles team (handler and canine) was also replaced. The new handler attended a 10-week training course at the NDDTC for new handlers and returned to California in August 2013. Unfortunately, the handler's new canine partner was diagnosed with heartworm before being shipped back to California and had to undergo treatment. The dog recovered and was sent to Los Angeles on October 28, 2013. The team began working parcel facilities in November 2013.

During this year's report period, the Program unpredictably lost two teams. Kiwi, one of the two San Bernardino canines, required knee surgery in February 2014. After surgery she was retired and adopted by the San Bernardino inspector that worked closely with the team.

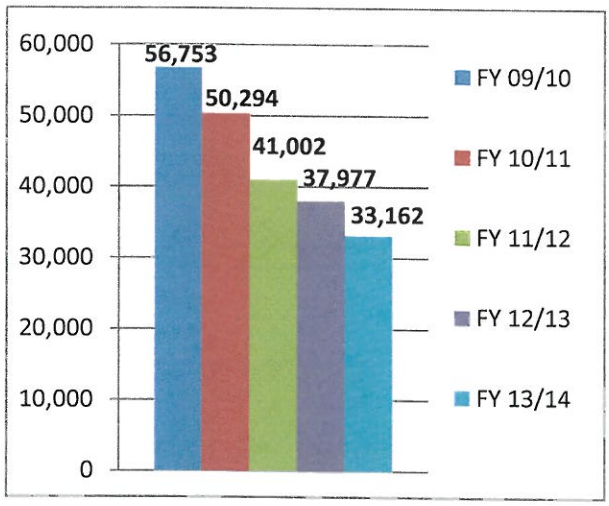
Lastly, our San Joaquin handler, Tom Doud, unexpectedly passed away in May 2014. Canine Kojak was returned to the NDDTC at their request.

Data Reporting

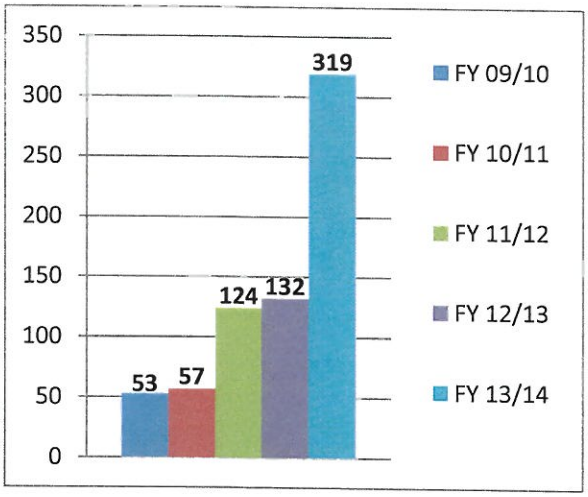
During the entire agreement period (July 1, 2013 – June 30, 2014), the California Dog Teams alerted on 33,162 total marked and unmarked parcels containing agricultural products. Of the total alerts, 2,107 were unmarked parcels containing agricultural commodities. A total of 319 pests were intercepted as a result of the California Dog Teams work. Some of these interceptions involved multiple pest specimens in a single package. Additionally, due to the efforts of the California Dog Teams, 1,581 rejections have been issued for violations of state and federal plant quarantine laws and regulations.

The California Dog Teams continue to demonstrate that unmarked parcels present a high-risk pathway for significant agricultural pests to enter California. The graphs below compare data for five agreement periods of the California Dog Team Program. The graphs illustrate that the number of total parcels alerted on by the canines has decreased (**Graph 1)** and pest finds (**Graph 2)** have increased over time. This comparison demonstrates the California Dog Teams have improved their proficiency with time and experience. The number of unmarked parcel alerts (**Graph 3)** and Plant Quarantine violations (**Graph 2)** shows fluctuation during the past five years. This suggests that additional public education and outreach is needed to improve compliance with existing laws and regulations.

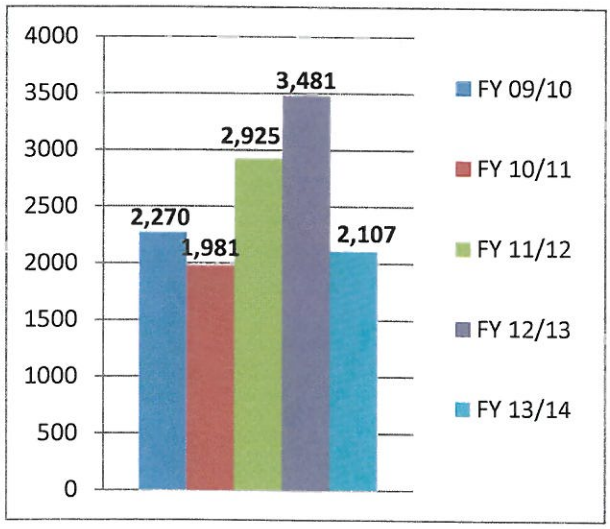
Graph 1: Total Parcel Alerts



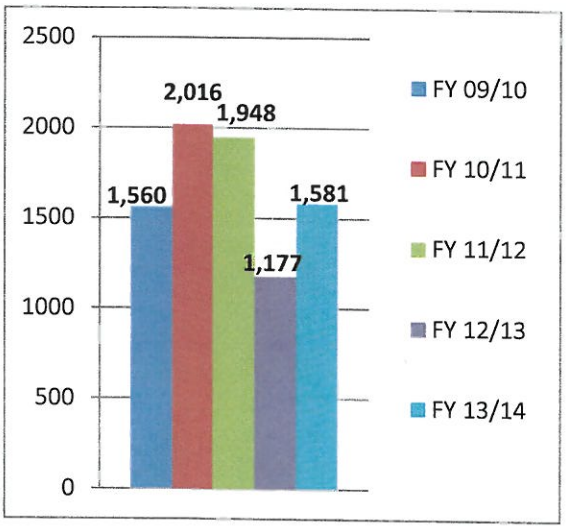
Graph 2: Actionable Pest Finds



Graph 3: Total Unmarked Parcel Alerts

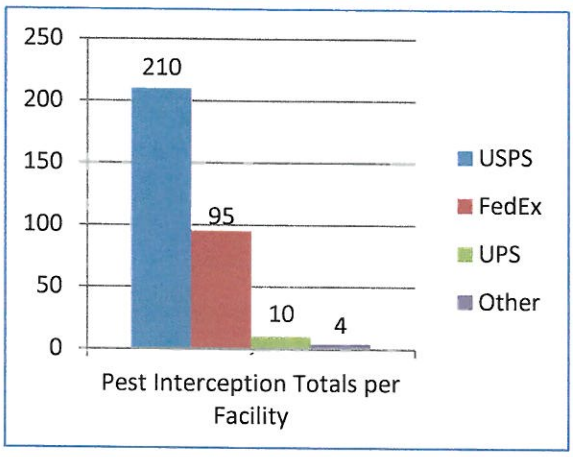


Graph 4: Violations of Plant Quarantine Laws & Regulations



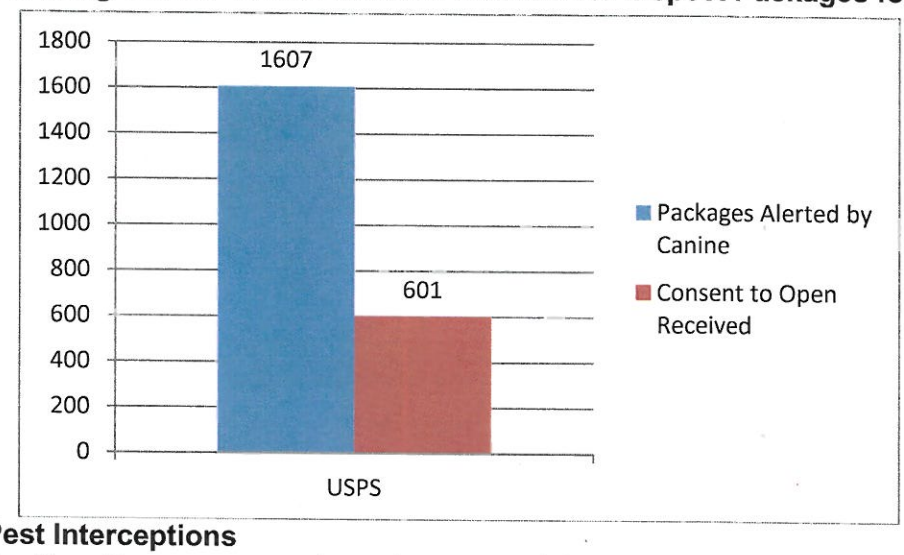
Graph 5 below illustrates the parcel facilities where pests have been intercepted. The California Dog Teams have increased inspection hours at the United States Postal Service (USPS) because the data shows that this is a very important pathway to monitor for actionable pests. During this reporting period, the Teams worked at four of the six approved USPS facilities. All six facilities are planned to be continuously visited during the next reporting period.

Graph 5: CA Dog Teams- Pest Interception Totals per Facility Type



As outlined in the USPS Memorandum of Understanding (MOU) between the USPS/USDA/CDFA/CACSA, consent to open a package must be obtained or a search warrant granted. Consent may be by either the shipper or receiver before the dispatch time for delivery, which is usually 24 hours. A total of 1607 packages were alerted on by the canines at the USPS, of which 601 packages the county inspectors obtained contest to open **(Graph 6)**. Efforts continue to get the warrant process streamlined to allow the opening of parcels when inspectors are unable to gain consent of the shipper or receiver for parcels in the USPS pathway.

Graph 6: CA Dog Teams- USPS: Consent Obtained to Inspect Packages for FY 13/14



Significant Pest Interceptions

The California Dog Teams were extremely successful at protecting California agriculture by intercepting significant pests of agriculture before they could be introduced into California. The data in **Graph 2** shows the number of actionable pests intercepted for all fiscal years. Half-way through this year's agreement period, the teams had already superseded the best 12-month period on record with 134 pests. **Table 1** below lists the number and type of actionable pests which included 70 actionable A-rated pests and 249 actionable Q-rated pests found as a result of the efforts of the California Dog Teams during the reporting period.

TABLE 4: Significant Pests Interceptions
July 1, 2013 – June 30, 2014

Interceptions	Scientific Name	Origin	Common Name	Rating
1	Abgrallaspis aguacatae	Mexico		A
1	Agromyzidae sp.	FL		Q
2	Aleurodicus dispersus	HI	spiraling whitefly	Q
1	Aleurodicus sp.	HI	whitefly	Q
2	Aleyrodidae sp.	FL		Q
1	Aleyrodidae sp.	HI		Q
1	Allopeas clavulinum	FL		A
1	Allopeas gracile	HI	graceful awlsnail	A
1	**Anastrepha suspensa**	**FL**	**Caribbean fruit fly**	**A**
5	Aonidiella orientalis	FL (3), PR (2)	Oriental scale	A
15	Aphididae sp.	FL (6), HI (7), MI (1), NC (1)		Q
9	Aphididae sp.	HI (7), MI(1), NC (1)		Q
1	Aphididae sp.	MI (1), NC (1)		Q
1	Aphididae sp.	NC		Q
1	Arctiidae	HI		Q
1	Arvelius albopunctatus	TX		Q
1	Asteraceae sp.	Hong Kong		Q
8	Aulacaspis tubercularis	FL (3), PR (5)	armored scale	Q
1	Aulacaspis yasumatsui	Unknown	cycad aulacaspis scale	Q
1	Brachymyrmex sp.	HI	ant	Q
1	Cabomba sp.	NY		Q
4	**Candidatus Liberibacter**	**FL**	**HLB or Citrus Greening**	**A**
4	Cardiocondyla sp.	HI (2), MA (1), TH (1)	ant	Q
1	Cecidomyiidae sp.	PR		Q
2	Cerambycidae sp.	FL		Q
2	Ceroplastes rubens	FL	red wax scale	A
1	Ceroplastes sp.	FL (1), HI (1)	wax scale	Q
1	Ceroplastes stellifer	HI		Q
1	Chalcidoidea sp.	Unknown		Q
5	Cicadellidae sp.	CA (1), GA (3), SC (1)		Q
13	Coccidae sp.	FL (9), HI (3), WA (1)		A
2	Coccus capparidis	FL	capparis soft scale	Q
1	Coccus sp.	Puerto Rico	soft scale	Q
3	Coccus viridis	FL	green scale	A

Interceptions	Scientific Name	Origin	Common Name	Rating
1	Corythucha sp.	Puerto Rico	lace bug	Q
1	Cucurlionidae sp.	FL		Q
3	Cucurlionidae sp.	TX (3), India (1)		Q
1	Delottococcus confusus	HI		Q
1	Dermaptera sp.	Unknown		Q
2	Dialeurodes kirkaldyi	HI	kirkaldys whitefly	Q
2	**Diaphorina citri**	**FL**	**Asian citrus psyllid**	**A**
22	Diaspididae sp.	FL (16), HI (4), PR (1), Unkwn (1)		Q
2	Dysmicoccus boninsis	HI	sugarcane mealybug	Q
3	Dysmicoccus grassii	FL	mealybug	A
1	Dysmicoccus neobrevipes	HI	gray pineapple mealybug	Q
2	Elsinoe australis	FL	sweet orange scab	A
1	Euwallacea sp.	HI		Q
3	Fiorinia externa	NC	diaspidid scale	Q
2	Fiorinia phantasma	Unknown		Q
1	Fiorinia sp.	FL	armored scale	Q
5	Formicidae sp.	FL (1), HI (3), PR (1)		Q
1	Frankliniella bispinosa	Unknown		Q
1	Gelechiidae sp.	Puerto Rico		Q
1	Gyponana/sp.	NC	leafhopper	Q
1	Hemiberlesia ithacae	ME	hemlock scale	Q
1	Hemiberlesia lataniae	FL	lantania scale	Q
1	Hemiberlesia palmae	Unknown	tropical palm scale	A
1	Hemiberlesia sp.	MX	armored scale	Q
3	Howardia biclavis	FL (2), PR (1)	mining scale	A
3	Insecta	CA (1), KY (1), TX (1)		Q
1	Ischnaspis longirostris	FL	black thread scale	A
1	Kallitaxila granulata	HI	planthopper	Q
1	Lepidoptera sp.	FL		Q
4	Maconellicoccus hirsutus	FL (2), MA (1), PR (1)	mealybug	A
1	Megathrips sp.	FL	thrips	Q
5	Milviscutulus mangiferae	FL		Q
1	Miridae sp.	FL		Q
3	Mycetaspis personata	FL (2), TX (1)	mask scale	Q
1	Mycetaspis sp.	FL		Q
1	Nipaecoccus sp.	FL	mealybug	Q

Interceptions	Scientific Name	Origin	Common Name	Rating
1	Ortheziidae sp.	Puerto Rico		Q
2	Parlatoria pseudaspidiotus	FL	vanda orchid scale	A
1	Paropeas achatinaceum	FL		A
1	Pentatomidae sp.	FL		Q
6	Phalacrococcus howertoni	FL (4), PR (1), SC (1)		Q
2	Pheidole megacephala	HI	bigheaded ant	Q
12	Pheidole sp.	FL (10), HI (2)	ant	Q
2	Philephedra sp.	Puerto Rico	soft scale	Q
1	Phlaeothripidae sp.	Unknown		Q
1	Phylllanthus urinaria	FL		Q
1	Phytocoris sp.	FL	plant bug	Q
4	Pinnaspis buxi	CA (1), HI (3)	boxwood scale	A
8	Pinnaspis strachani	FL (3), HI (1), PR (4)	lesser snow scale	A
4	Planococcus minor	HI	pacific mealybug	Q
1	Pseudaonidia duplex	FL	camphor scale	Q
4	Pseudaonidia trilobitiformis	FL (2), HI (1), Unkwn (1)	trilobe scale	Q
1	Pseudaulacaspis cockerelli	HI	magnolia white scale	A
1	Pseudaulacaspis pentagona	HI	white peach scale	A
26	Pseudococcidae sp.	CA (1), FL (12), HI (8), PR (4), Unkwn (1)		Q
1	Pseudococcus odermatti	Puerto Rico	mealybug	Q
1	Pseudococcus sp.	FL	mealybug	Q
1	Radionaspis indica	FL	mango scale	Q
2	Rutherfordia major	FL		Q
1	Scirtothrips dorsalis	HI	thrips	Q
1	Sophrorhinus sp.	TX		Q
4	Technomyrmex albipes	FL (2), HI (1), Unkwn (1)	ant	Q
2	Technomyrmex albipes	HI (1), Unkwn (1)		Q
1	Technomyrmex sp.	FL	ant	Q
2	Tetramorium sp.	FL	ant	Q
2	Tetranychidae sp.	FL (1), Unkwn (1)		Q
2	Tetranychus sp.	FL	tetranychid mite	Q
6	Tettigoniidae sp.	FL (2), GA (3), HI (1)		Q

Interceptions	Scientific Name	Origin	Common Name	Rating
5	Thripidae sp.	FL (4), HI (1)		Q
1	Thrips orientalis	HI	thrips	Q
5	Thrips palmi	HI	thrips	A
1	Thrips parvispinus	HI		Q
6	Thysanofiorinia nephelii	FL (3), MA (2), MI (1)	longan scale	Q
1	Tineidae sp.	Puerto Rico		Q
7	Tortricidae sp.	FL (5), NC (1), India (1)		Q
1	Tuckerella sp.	FL	peacock mite	Q
1	Vallisneria cf. spiralis	HI		Q
1	Veronicellidae sp.	Unknown		Q
1	Wasmannia auropunctata	FL	ant	Q
1	**Xanthomonas Citri subsp. citri**	**FL**	**Citrus canker**	**A**
Total: 319				

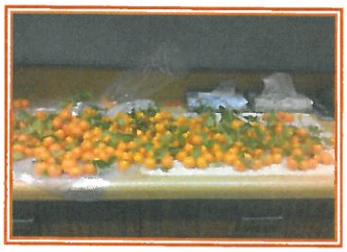
The narratives below detail examples of interesting interceptions during the reporting period.

Examples of Alameda County Dog Team Interceptions

1. **Sweet Orange Scab**

   On December 19, 2013, Alameda County Inspector Keely Kirkman, Inspector/Handler Lisa Sampson, and dog Cosmo were working at an Oakland USPS. Cosmo alerted to an unmarked parcel. With the assistance of Alameda County staff member Cora Robles, permission to open the parcel was obtained. The county intercepted 17 pounds calamondin citrus fruit with stems and leaves from Florida.

   Pests were collected and submitted to the Plant Pest Diagnostics (PPD) Laboratory resulting in A-rated *Elsinoe australis* (sweet orange scab). A Notice of Rejection was issued and the parcel destroyed.



Photos of parcel and contents intercepted by Alameda County

2. Backyard Curry Leaves with GWSS

On February 21, 2014, Alameda County Inspector Keely Kirkman and Inspector/Handler Lisa Sampson with K-9 Cosmo intercepted a package of 20 pounds fresh, backyard-grown curry leaves from a residence in Inglewood, Los Angeles County. Consent to open the package was obtained from the receiver, which was a supermarket in Hayward, Alameda County.

A USDA-SITC Referral Form was submitted to the United States Department of Agriculture/Smuggling Interdiction and Trade Compliance program.

Psyllids, nymphs and other pests collected throughout the box and leaf surfaces were submitted to the Plant Pest Diagnostics (PPD) Laboratory for identification. Q-rated Cicadellidae (Sharpshooter nymph), B-rated *Homalodisca vitripennis* (glassy-winged sharpshooter) and multiple C- and D-rated pests were identified. The shipment was destroyed.

Q-rated nymphs

Examples of Contra Costa County Dog Team Interceptions

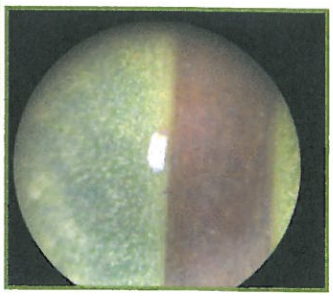
1. Multiple Pest Interception

On March 14, 2014, Contra Costa County Dog Team Inspector/Handler Mariah de Nijs with dog Cairo intercepted a package from Waianae, Hawaii at the West Sacramento USPS distribution facility in Yolo County.

The package was initially released Friday afternoon for lack of contact. The receiver called after-hours and granted permission to inspect the package. The package was recovered from the sort area Friday evening and inspected by Yolo County inspectors Bill Lyon and Kevin Martyn. It contained sprouted palm seedlings and a foot-long rooted fern rhizome of Laua'e or Musk Fern (*Microsorum grossum*) in soil, along with beach shells and coral. According to the receiver, the plants were dug from the shipper's backyard.

Pest specimens were collected from the plants and submitted to the Plant Pest Diagnostics (PPD) Laboratory for identification. The palms were infested with Q-rated Hymenoptera, Q-rated Dermaptera (*Paralabella corvicauda*), and many other C-rated and D-rated pests. The ferns were infested with Q-rated ant (*Cardiocondyla* sp.), A-rated graceful awlsnail (*Allopeas gracile*), Q-rated Diaspididae, and B-rated snail (*Bradybaena similaris*). All the plant material was destroyed.

Sprouted palm seedlings



Musk Fern and Intercepted Pests

Violations included Federal Hawaiian Territorial Quarantine 318.13, California State Exterior Quarantine, Burrowing and Reniform Nematodes, CCR Section 3271, California Food and Agricultural Codes, Sections 6421 (lack of markings) and 6461.5 (live pests).

2. **Homegrown Curry from Florida**
On June 11, 2014, while working at the USPS San Jose parcel facility, Santa Clara County Inspector Julius Calso and Inspector/Handler Cecillie Siegel, along with dog Conan, intercepted an uncertified parcel package with a homegrown curry leaf that originated from Florida. The shipper granted permission to open and inspect the parcel and, upon inspection of the package's contents, intercepted a live exotic ant pest. The pest samples collected were submitted to the PPD Laboratory and identified as Q-rated Formicidae.

A Notice of Rejection was issued for the shipment for violating the following:
- California Food and Agricultural Code, Section 6421 (lack of markings)
- California Food and Agricultural Code, Section 6461.5 (live pests)

The shipment was destroyed.

3. **Mango and Lichti Fruit from Florida**
On June 13, 2014, while working at the USPS San Jose parcel facility, Santa Clara County Inspector Julius Calso and Inspector/Handler Cecillie Siegel, along with dog Conan, intercepted an uncertified parcel package of mango and lichti fruit that originated from Florida. The shipper granted permission to open and inspect the parcel and intercepted scale pests during inspection of the fruit. The pest samples collected were submitted to the PPD Laboratory and identified as Q-rated Diaspididae and Q-rated *Thysanofiorinia nephelii* (longan scale).

A Notice of Rejection was issued for the shipment for violating the following:
- California Food and Agricultural Code, Section 6421 (lack of markings)
- California Food and Agricultural Code, Section 6461.5 (live pests)
- California State Exterior Quarantine for Caribbean Fruit Fly, CCR Section 3252

The shipment was destroyed.

Examples of Fresno County Dog Team Interceptions

1. **Multiple Pest Interceptions**
On August 21, 2013, Dog Team Handler/Inspector Stephanie LeBarron, dog Chelsea, and Inspector Samantha Tomlinson intercepted sprouted bulbs and leaves of *Cocos nucifera* (coconut palm) from Hawaii at a FedEx Air in Fresno County. Chelsea alerted on the box. Proper nematode and LBAM federal shield certification were present on the box. It was brought to the office for further inspection. Multiple pests were collected on leaves emerging from the coconut bulbs. Some coconuts showed evidence consistent with burrowing pest damage. Samples submitted to the Plant Pest Diagnostics Laboratory resulted in Q-rated pests: Aleyrodidae, Diaspididae, and Pseudococcidae.

A Notice of Rejection was issued due to violating California Food and Agricultural Code, section 6461.5 (live pests). The shipper was notified and the package was destroyed.

On November 7 and 8, 2013, Fresno County dog team Inspector/Handler Stephanie LeBarron, dog Chelsea, Inspector Laine Bauer, and Inspector Rupinder Grewal intercepted Hawaiian shipments of ti leaves at FedEx Air in Clovis. The shipments were properly certified with a limited permit. Upon inspection, the shipments had light infestation of live scale on the leaves.

Samples submitted to the Plant Pest Diagnostics Laboratory resulted in the following pests:

- Q-rated pests from Coccidae family (scale) and Diaspididae family (scale) (PDR 100P06195140)
- Q-rated pests from Diaspididae family (scale) and unidentified insect eggs (PDR 100P06195142)
- A-rated *Pseudaulacaspis cockerelli* (magnolia white scale) (PDR 100P06195143)

The shipments were in violation of California Food and Agricultural Code, Section 6461.5 (live pests), reconditioned and released.

On November 13, 2013, Fresno County dog team Inspector/Handler Stephanie LeBarron, dog Chelsea, Inspector Laine Bauer, and Inspector Rupinder Grewal intercepted Hawaii and Illinois flower shipments at FedEx Air in Clovis. Upon inspection, the shipments were properly certified, but contained pests.

Samples submitted to the Plant Pest Diagnostics Laboratory resulted in the following:

- Q-rated *Aleurodicus* sp. (whitefly), Q-rated *Planococcus minor* (Pacific mealybug), A-rated *Thrips palmi* (thrips) (shipment from Hawaii, PDR 100P06195145)
- Q-rated insect egg mass (shipment from Illinois, PDR 100P06195146)

The shipments violated California Food and Agricultural Code, Section 6461.5 (live pests). Shipments were released after removal and destruction of infested parts in the shipments.

On April 30, 2014, Fresno County Inspector Rupinder Grewal was working at FedEx Air and intercepted a properly certified marked box from Hawaii. The box contained bird of paradise cut flowers and ti leaves. Upon inspection, Inspector Grewal collected multiple pests and submitted to the PPD Laboratory for identification. A-rated *Pseudaulacaspis cockerelli* (magnolia white scale), Q-rated *Planococcus minor* (pacific mealybug), and Q-rated Diaspididae (armored scale) were intercepted. A Notice of Rejection was issued and the material was destroyed.

2. Aphid Interception

On December 4, 2013, Fresno County Inspector/Handler Stephanie LeBarron, dog Chelsea, and Inspector R. Grewal were working at Fresno FedEx Air. Chelsea alerted on a properly certified package from Hawaiian Tropical Direct. Upon inspection, Inspector Grewal collected aphids on the petals of the yellow oncidium and submitted it to the Plant Pest Diagnostics Laboratory for identification. Q-rated Aphididae (aphid) was indentified. The package was in violation of California FAC, section 6461.5, and reconditioned and released.

3. Thrips and More

On January 9, 2014, Fresno County Inspector Rupinder Grewal, A. Hernandez, and dog team Inspector/Handler Stephanie LeBarron with dog Chelsea, intercepted a Hawaiian shipment of *Dendrobium* sp. (white orchids) and *Alpinia purpurata* (red ginger) at FedEx Air in Clovis. The

shipment was properly certified with a limited permit. Upon inspection, the live pests were collected.

Samples were submitted to the PPD Laboratory for identification and resulted in the following pests:

- A-rated *Thrips palmi* (thrips)
- Q-rated *Dysmicoccus boninsis* (sugarcane mealybug), *Planococcus minor* (pacific mealybug), *Ceroplastes* sp. (wax scale), Formicidae (ant), and Pseudococcidae (scale)
- C-rated *Dysmicoccus brevipes* (pineapple mealybug), *Planococcus* sp. (mealybug) and *Pentalonia nigronervosa* (banana aphid)
- D-rated Araneae (spider) and Cecidomyiidae (fly)

The shipment was in violation of California Food and Agricultural Code, Section 6461.5 (live pests and reasonable cause), reconditioned and released.

On March 12, 2014, Inspector Laine Bauer, Inspector/Handler Stephanie LeBarron and dog Chelsea were working at FedEx Air in Fresno County. Chelsea alerted on a marked shipment from Hawaii. It contained 24 pounds of *Dendrobium* orchid, *Alpinia purpurata* (ginger) flower, and *Heliconia caribea* flowers. Upon inspection, Inspector Bauer collected mealybugs and thrips from the stems of the flowers. The specimens were submitted to the PPD Laboratory and identified as Q-rated *Dysmicoccus boninsis* (sugarcane mealy bug) and A-rated *Thrips palmi* (thrips). Although proper certification (limited permit and HILO) accompanied the shipment, it was in violation of California Food and Agricultural Code, Section 6461.5 (live pests). The shipment was reconditioned. The infected flowers were destroyed and the rest of the shipment was released to destination.

On April 29, 2014, Fresno County Inspector Rupinder Grewal and Inspector/Handler Stephanie LeBarron were working at Fresno FedEx when K-9 Chelsea alerted to an unmarked package of white orchid cut flowers from Orange County. Upon inspection and submittal of samples to the PPD Laboratory, the inspectors intercepted A-rated *Thrips palmi* (thrips). The infested parts were destroyed and the remainder of the shipment reconditioned and released. A Notice of Rejection was issued for violating California FACs, Section 6521 (live pests) and Section 6501 (intrastate markings).

On May 1, 2014, Fresno County Inspectors Rupinder Grewal, Patricia Henke, and Laine Bauer were working at FedEx Air and intercepted a properly certified marked box from Hawaii. The box contained white orchids, red tower ginger, and pink ginger cut flowers. Upon inspection, a light infestation of thrips were collected from the orchid petals. The pests were submitted to the PPD Laboratory for identification resulting in A-rated *Thrips palmi* (thrips). Plants with pests were removed and destroyed. The remainder of the shipment was reconditioned and released.

4. ***Technomyrmex albipes***

   On February 13, 2014, Fresno County Inspector Alberto Hernandez, and dog team Inspector/Handler Stephanie LeBarron with dog Chelsea, intercepted a shipment of *Alpinia purpurata* (red ginger) cut flowers from Hawaii at FedEx Air in Clovis. The shipment was properly certified with a limited permit. Upon inspection, the inspectors collected live pests near the base of the flower.

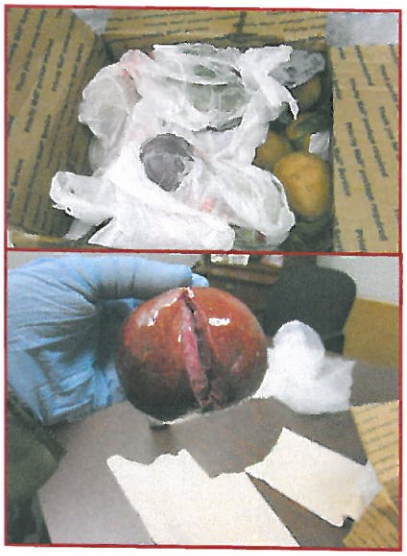
Samples were submitted to the PPD Laboratory and identified as Q-rated *Technomyrmex albipes* (ant). Two C-rated mealybugs were also identified.

The shipment was in violation of California Food and Agricultural Code, Section 6461.5 (live pests). A Notice of Rejection was issued and the infested flowers were destroyed, and the remainder of the shipment was reconditioned and released.

Examples of Los Angeles County Dog Team Interceptions

1. Caribbean Fruit Fly Interception

On April 1, 2014, a Los Angeles County Detector Dog team, Inspector Rogelio Carranza, Assistant Craig Foy, and canine Tahoe, were working a USPS sort facility. It was the first time that they had started a 2:00 a.m. inspection schedule and Tahoe was looking a bit tired as he was not used to working so early. During the inspection, however, Tahoe alerted on two unmarked first class packages.



Photos: Florida fruit intercepted by Los Angeles Dog Team at USPS

While Inspector Carranza separated the flagged packages and placed them in a special post office hold cart, Inspector Foy worked on filling out and filing the paperwork to obtain the required authorization to open the held packages and notify the Post Office police that both packages were to be placed on hold. Later that day, Inspector Foy was granted permission to open the package by the shipper in Florida. After completing their regular inspections the next day, Inspectors Carranza and Foy met at the USPS to open and inspect the package.

After informing USPS agents of the permission and exchanging information on the shipment, Inspectors Carranza and Foy opened the package and found it to contain tropical fruits, some of which were very ripe, and herbaceous leaves infested with scale insects. Inspector Carranza proceeded to inspect the fruits very carefully, starting with the ripest. After about eight minutes, he found an insect larva which appeared to be a small maggot. Based on the larva and scale finds, it was decided to reject the shipment and bring it to the Entomology Lab at South Gate in order to conduct a close inspection of the entire shipment contents.

Back at the Entomology Lab, Dr. Gevork Arakelian and staff helped to open and closely examine the held fruit for more pests; none were found but the solitary larva was identified as

More Photos: Florida fruit intercepted by Los Angeles Dog Team at USPS

a possible early-instar Tephritid and the scale insects from the "herb" twigs were identified as mining scale. The pest samples were sent to the Plant Pest Diagnostics Laboratory for confirmation and identified as A-rated *Howardia biclavis* (mining scale) and A-rated *Anastrepha suspensa* (Caribbean fruit fly). Caribbean fruit fly had to be identified through DNA analysis.

Disposal was accomplished by freezing that same day.

Note: At the time of surrender for removal, the receiver's sister volunteered that similar packages came "two to three times per month."

Shipment Violations

California Food and Agricultural Code, Section 6421 (lack of markings)
California Food and Agricultural Code, Section 6461.5 (live pests)
California State Exterior Quarantine for Caribbean Fruit Fly, CCR Section 3252

Examples of Sacramento County Dog Team Interceptions

1. Citrus Canker Interception

On August 1, 2013, Yolo County Inspector Bill Lyon and Sacramento County Dog Team Inspector/Handler Jennifer Berger with dog Dozer intercepted a package from Dania, Florida at USPS. The receiver was contacted but reluctant to allow inspection. She later called back to allow inspection after she was able to get in contact with the shipper. The shipper had sent a surprise birthday package to the receiver which included a purse, three mangos, and about 30 small lemons. The purse was released but the fruit was removed from the package. Lemon samples were submitted to the Plant Pest Diagnostics Laboratory for identification. A-rated *Xanthomonas citri* subsp. *citri* (citrus canker) was identified.

The lemon fruit violated Federal Domestic quarantine, section 301.75 (citrus canker) and California State Exterior quarantine, section 3250 (citrus pests).The mango fruit violated California State Exterior quarantine, section 3252 (Caribbean fruit fly). Both fruit were rejected for the above quarantines and California Food and Agricultural Code, section 6421 (lack of markings) and destroyed.

A SITC Referral Form was completed and submitted due to violation of a federal quarantine.

Reported by CDFA Plant Pathologist Lucia Kumagai "The fruit exhibited the typical erumpent, corky lesions consistent with citrus canker disease. Copious bacterial streaming was detected from the infected tissue. DNA was extracted from infected tissue and subjected to PCR using two different primer sets, DLH1/2 (Hartung et al., 1993) and Xac01/02 (Coletta-Filho et al., 2006). Crude DNA extractions from bacterial growth was also tested by PCR. Sequence analysis of the amplicons revealed 100% identity with sequences of *Xanthomonas citri* subsp. *citri* (syn = *Xanthomonas axonopodis* pv. *citri*) in the GenBank database."

Photos courtesy of Yolo County – Sacramento County

2. Backyard Citrus Fruit from Florida

On January 9, 2014, the Sacramento County Dog Team Handler/Inspector Jennifer Berger and dog Dozer pulled an unmarked priority package from the West Sacramento USPS distribution center. Yolo County Inspectors Bill Lyon and Kevin

Martyn contacted the receiver in Chico and received permission to inspect the package. The package contained backyard citrus fruit from Florida. Certification was not present with the shipment.

Samples were submitted to the Plant Pest Diagnostics Laboratory. Plant Pathology confirmed A-rated *Candidatus liberibacter asiatus* (huanglongbing or HLB) by PCR analysis. Also the laboratory identified Q-rated Pseudococcidae (mealybug), Q-rated Diaspididae (armored scale), and B-rated *Lepidosaphes beckii* (purple scale) on the fruit (PDR 570P06215979).

Photos of the infested, intercepted citrus fruit from Florida, by Yolo County

A Notice of Rejection was issued for violation of the following quarantines:

Federal Domestic Quarantine
- Citrus Canker (CFR 301.75)
- Citrus Greening and Asian Citrus Psyllid (CFR Section 301.76)

Federal Order
- Sweet Orange Scab
- Citrus Black Spot

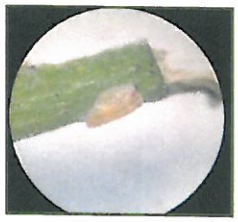
California State Exterior Quarantine
- Citrus Pests (CCR Section 3250)

The package was rejected for violation of these quarantines and California Food and Agricultural Code, Section 6461.5 (live pests) and Section 6421 (lack of markings) and fruit destroyed by autoclave.

3. ACP on Florida Shipment

On March 13, 2014, Sacramento County Dog Team Inspector/Handler Jennifer Berger with dog Dozer intercepted a package from St. Petersburg, Florida at the West Sacramento USPS distribution facility in Yolo County. Both shipper and receiver were contacted and granted permission to inspect the package. The package had backyard-grown *Murraya koenigii* (curry) leaves, two curry plants in soil and yams.

Asian citrus psyllid photos from shipment



An Asian Citrus Psyllid adult and many nymph specimens were collected from the package when inspected by Yolo County inspectors Bill Lyon and Kevin Martyn. Specimens were submitted to the PPD Laboratory for identification.

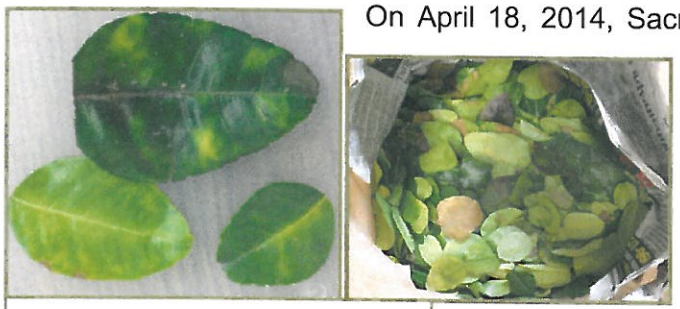
The curry plants were heavily infested with various life stages of A-rated *Diaphorina citri* (Asian citrus psyllid). HLB and Burrowing and Reinform nematode (BRN) tests were negative.

A Notice of Rejection was issued for violation of these quarantines:
- Federal Domestic Quarantine for Citrus Greening and Asian Citrus Psyllid, Section 301.76

- California State Exterior Quarantine for Citrus Pests, (California Code of Regulations or CCR Section 3250)
- California State Exterior Quarantine for Burrowing and Reniform nematodes, (CCR Section 3252)
- California Food and Agricultural Code (FAC), Section 6461.5 (live pests)
- California FAC, Section 6421 (lack of markings)

The shipment was destroyed."

4. HLB Intercepted on Florida Shipment of Kaffir Lime Leaves



Photos of the infested, intercepted kaffir lime leaves from Florida

On April 18, 2014, Sacramento County Dog Team Inspector/Handler Jennifer Berger with dog Dozer intercepted a package from Melbourne, Florida at the West Sacramento USPS distribution facility. Yolo County inspectors Bill Lyon and Kevin Martyn contacted the receiver the morning of the interception and were granted permission to inspect the box. Inside the package were approximately three pounds of fresh kaffir lime leaves (*Citrus hystrix*), two pounds of dried fish, and four pounds of turkey berry (*Solanum torvum*) branches with fruit.

Kaffir lime leaves were submitted to the Plant Pest Diagnostics (PPD) Laboratory Plant Pathology. Plant Pathologist Lucita Kumagai tested the sample by real-time PCR and identified A-rated huanglongbing or HLB (*Candidatus Liberibacter asiaticus*).

Several insect specimens were also collected from the plant material and submitted to the PPD Laboratory. Identifications were completed by Entomologists Rosser Garrison and Gillian Watson. The turkey berry harbored a Q-rated Pentatomidae (stink bug) nymph. (PDR 570P06216026) The following pests were collected from the kaffir lime leaves: Q-rated Tettigoniidae eggs, Q-rated *Pheidole* sp. (ant), Q-rated *Coccus capparidis* (capparis soft scale), Q-rated Diaspididae (scale), B-rated *Parlatoria pergandii* (chaff scale), B-rated *Lepidosaphes beckii* (purple scale), C-rated Polyxenidae (millipede), C-rated *Eucalymnatus tessellatus* (tessellated scale), C-rated *Pseudococcus longispinus* (longtailed mealybug), C-rated *Aleurothrixus floccosus* (woolly whitefly), and D-rated Hymenoptera (endoparasite larva). (PDR 570P06215958)

The shipment was destroyed and a Notice of Rejection was issued for violation of the following quarantines:

Federal Domestic Quarantines/Orders
Citrus Greening and Asian Citrus Psyllid (CFR Section 301.76)
Citrus Canker (CFR Section 301.75)
Sweet Orange Scab
Citrus Black Spot

California State Exterior Quarantine
Citrus Pests (CCR Section 3250)

California Food and Agricultural Codes (FAC)
Section 6461.5 (live pests)
Section 6421 (markings)

5. HLB Interception from Florida

Musa and Piper with Roots

Scale on Kaffir Lime

On June 5, 2014, Sacramento County Dog Team Inspector/Handler Jennifer Berger with dog Dozer intercepted a package from St. Petersburg, Florida at the West Sacramento USPS distribution facility. Yolo County inspectors Bill Lyon and Kevin Martyn contacted the receiver the morning of the interception and were granted permission to inspect. The box contained mango fruit (*Mangifera indica*) and various fresh plant cuttings wrapped in (*Musa* sp.) banana leaves, including kava (*Piper methysticum*) plants with roots, mango (*Mangifera indica*), moringa (*Moringa oleifera*), and four more unidentified stems with leaves. Two 1-qt. sandwich baggies were also enclosed, one with various unidentified, non-citrus seeds, and one filled with Kaffir lime leaves.

Black Thread Scale

Numerous insect pests were collected and submitted to the Plant Pest Diagnostics (PPD) Laboratory for identification. The plant material in the box collectively contained A-rated green scale (*Coccus viridis*), A-rated black thread scale (*Ischnaspis longirostris*), Q-rated mealybugs (Pseudococcidae), Q-rated insect eggs, Q-rated scale (Coccidae), Q-rated Aphididae (two instances), Q-rated Tortricidae (two instances), Q-rated Miridae, and Q-rated ants (*Pheidole* sp.).

Additionally, the Kaffir lime leaves were determined positive for A-rated huanglongbing or HLB (*Candidatus Liberibacter asiaticus*) by Plant Pathologist Lucita Kumagai, using real-time PCR and melt curve analysis.

A Notice of Rejection was issued for violation of the following quarantines:

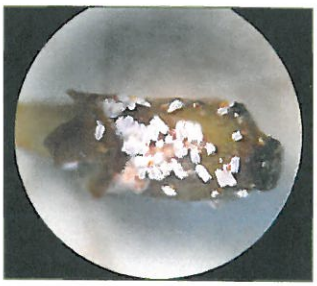
Federal Domestic Quarantine
- Citrus Canker (CFR Section 301.75)
- Citrus Greening and Asian Citrus Psyllid (CFR Section 301.76)

California State Exterior Quarantines
- Citrus Pests (CCR Section 3250)
- Burrowing and Reniform Nematode Exterior Quarantine (CCR Section 3271)

California Food and Agricultural Codes (FAC)
- Live Pests and Reasonable Cause (Section 6461.5)
- Markings (Section 6421)

The seeds were released and the remainder of plant material in the shipment was destroyed.

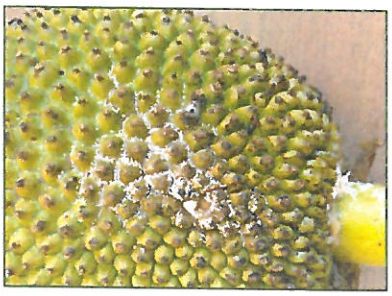
6. Jackfruit Interception



On June 4, 2014, Sacramento County Dog Team Inspector/Handler Jennifer Berger with dog Dozer intercepted a package from Fort

Meyers, Florida at the West Sacramento USPS distribution facility. Permission was obtained to inspect the package. The box was relatively heavy and had ripped during shipping, revealing a Jackfruit (*Artocarpus heterophyllus*) with stems and leaves.

Yolo County Inspectors Bill Lyon and Kevin Martyn collected several insect specimens from the plant material and submitted them to the PPD Laboratory. Identifications were completed by Entomologists Gillian Watson, Andrew Cline,
Steve Gaimari, and Shaun Winterton. The surface of the Jackfruit harbored A-rated lesser snow scale (*Pinnaspis strachani*), Q-rated ants (*Technomyrmex sp.*), Q-rated moth larvae (Tortricidae), Q-rated insect eggs (2 instances), C-rated beetle larvae (Dermestidae), C-rated fly (Chloropidae), and D-rated whitefly thrips (*Aleurodothrips fasciapennis*).



Infestation on Jackfruit

A Notice of Rejection was issued for violation of the California FAC Section 6461.5 (live pests) and Section 6421 (markings).

The shipment was destroyed.

7. Multiple Pest Interceptions

On July 17, 2013, Yolo County Inspector Bill Lyon and Sacramento County Dog Team Inspector/Handler Jennifer Berger with dog Dozer intercepted an unmarked parcel from Florida at the West Sacramento USPS Distribution Center. Dozer alerted on the parcel and the parcel was held until the counties could obtain permission from the shipper to open it. Permission was granted the same day. The parcel included citrus seedlings in soil and curry leaves. Certification was not present with the shipment.

Snails were collected from the citrus seedlings and submitted to the Plant Pest Diagnostics Laboratory. They were identified as A-rated *Allopeas clavulinum* (spike awlsnail), A-rated *Paropeas achatinaceum* (land snail), and Q-rated Lepidoptera.

A Notice of Rejection was issued for violating the following quarantines:

Federal Domestic Quarantine

- Citrus Canker (CFR 301.75)
- Citrus Greening and Asian Citrus Psyllid (CFR Section 301.76)
- Imported Fire Ant (CFR Section 301.81)

Federal Order

- Sweet Orange Scab
- Citrus Black Spot

Photo of the intercepted citrus seedlings from FL

California State Exterior Quarantine

- Citrus Pests (CCR Section 3250)
- Burrowing and Reniform Nematode (CCR Section 3271)

The parcel was rejected for violation of these quarantines and California Food and Agricultural Code, section 6461.5 (live pests) and section 6421 (lack of markings) and destroyed.

A USDA-SITC Referral Form was submitted to the United States Department of Agriculture/Smuggling Interdiction and Trade Compliance program (USDA/SITC) for follow-up.

On September 5, 2013, Yolo County inspector Bill Lyon and Sacramento County Dog Team Inspector/Handler Jennifer Berger with dog Dozer intercepted a package from Plantation, Florida at the West Sacramento USPS facility. The receiver was contacted and gave permission to inspect the package, which contained *Spondias* (hog plum fruit, leaves, stems), Xylosma (leaves), *Piper betle* (Betel leaves), and Pandanus leaves.

Intercepted Betel Leaves from Florida Shipment

Specimens were collected with leaf samples from all hosts in the shipment and submitted to the Plant Pest Diagnostics Laboratory for identification. The following pests were identified:

Rating	*Scientific Pest Name*	Common Pest Name
A	*Aonidiella orientalis*	Oriental Scale
Q	*Mycetaspis personata*	Mask Scale
Q	*Milviscutulus mangiferae*	Mango Shield Scale
Q	*Phalacrococcus howertoui*	Scale
Q	Coccidae	Scale
Q	*Pheidole* sp.	Ant
Q	*Megathrips* sp.	Thrip
Q	unknown	Insect eggs

A Notice of Rejection was issued for the following violations and the shipment was destroyed:

- California Food and Agricultural Code, Section 6421 (lack of markings)
- California Food and Agricultural Code, Section 6461.5 (live pests) and
- California State Exterior Quarantine CCR 3252 (Caribbean Fruit Fly).

On September 24, 2013, while working at FedEx in Placer County, Sacramento County Dog Team Inspector/Handler Jennifer Berger with dog Dozer intercepted a package containing 14 pounds of sugar apple fruit from Florida.

The package was brought to the Sacramento County office and thoroughly inspected by Inspector Berger and Yolo County Inspectors Bill Lyon and Kevin Martyn. There was a heavy infestation of pests on the fruit and tissue within the package.

Pest specimens collected from sugar apple fruit were submitted to the Plant Pest Diagnostics Laboratory for identification. The Laboratory identified Q-rated *Technomyrmex albipes* (ant) and A-rated *Maconellicoccus hirsutus,* (mealybug); both pests are not known to occur in California or of limited distribution and are prohibited entry.

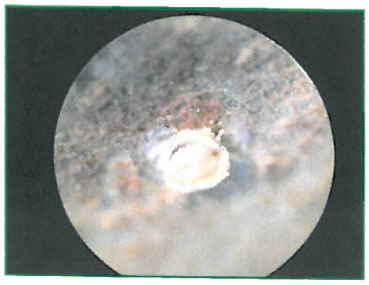
A Notice of Rejection was issued due to the following violations and the fruit was destroyed:

- California Food and Agricultural Code (FAC), Section 6421 (lack of markings)
- California FAC, Section 6461.5 (live pests)
- California State Exterior Quarantine CCR 3252 (Caribbean fruit fly)

On October 9, 2013, while working at West Sacramento USPS, Sacramento County Dog Team Inspector/Handler Jennifer Berger with dog Dozer and Yolo County inspectors Bill Lyon and Kevin Martyn intercepted a package from Massachusetts. Permission was obtained from the receiver to inspect the shipment. The shipment contained four pounds of longan fruit with stems. The inspectors assumed that the fruit was Florida origin because longan does not grow well in Massachusetts. There was no certification with the shipment.

Live pests were intercepted and collected from the fruit. Pests submitted to the Plant Pest Diagnostics Laboratory for identification resulted in A-rated *Maconellicoccus hirsutus* (pink hibiscus mealybug), Q-rated *Thysanofiorinia nephelii* (longan scale), and Q-rated *Cardiocondyla* sp. (ant). The shipment was in violation of California Food and Agricultural Code, section 6421 (lack of markings) and section 6461.5 (live pests) and destroyed.

On December 20, 2013, Yolo County inspectors Bill Lyon, Kevin Martyn and Sacramento County Dog Team Inspector/Handler Jennifer Berger with dog Dozer intercepted a package from Orlando, Florida at the West Sacramento USPS facility. The receiver was contacted and granted permission to inspect the package of backyard longans, sapodillas, and kaffir lime leaves.



Microscopic view of mining scale on sapodilla

Pest specimens were collected from all hosts in the shipment and submitted to the Plant Pest Diagnostics Laboratory for identification.

Longan fruit and branches were infested with Q-rated *Thysanofiorinia nephelii* (longan scale), Q-rated *Pseudaulacaspis major* (lychee bark scale), Q-rated *Technomyrmex albipes* (ant), Q-rated Coccidae (scale) and C-rated scale.

The sapodillas fruit were infested with A-rated *Howardia biclavis* (mining scale) and D-rated thrips. Additionally, the kaffir lime leaves were infested with B- and C-rated pests (PDR 570P06215902).

A Notice of Rejection was issued for the following violations and the shipment was destroyed:

- California Food and Agricultural Code, Section 6421 (lack of markings)
- California Food and Agricultural Code, Section 6461.5 (live pests) and
- California State Exterior Quarantine CCR 3252 (Caribbean Fruit Fly).
- California State Exterior Quarantine CCR 3250 (Citrus Pests)

Examples of San Bernardino County Dog Team Interceptions

1. ***Fiorinia externa* (elongate hemlock scale) Interceptions**

On December 5, 2013, San Bernardino County Inspector/Handler Mike Cochrane, dog Kiwi, and Inspector Josh Hardeman intercepted a 7.5 foot *Abies* (Frasier fir), with no certification, at a UPS facility in San Bernardino. During the inspection, the team began looking for hemlock scale as per A&Q Pest Report No. 50-2011. There was a heavy infestation of scales on the underside of the Frasier fir needles, which were collected and submitted to the Plant Pest Diagnostics Laboratory for identification.

Q-rated *Fiorinia externa* (diaspidid scale or elongate hemlock scale) was intercepted on Frasier fir from North Carolina. The shipment was in violation of California Food and Agricultural Code, section 6461.5 and destroyed.

On December 12, 2013, San Bernardino County Inspector/Handler Mike Cochrane, dog Kiwi, and Inspector Josh Hardeman intercepted a 50 pound certified *Abies fraseri* (Frasier fir) from Tennessee, at a San Bernardino UPS. During the inspection, a moderate infestation of scales on the underside of the Frasier fir needles were collected and submitted to the Plant Pest Diagnostics Laboratory for identification.

Q-rated *Fiorinia externa* (diaspidid scale or elongate hemlock scale) was intercepted. The shipment was in violation of California Food and Agricultural Code, Section 6461.5 (live pests) and destroyed.

2. **A-rated *Pinnaspis buxi***
On February 28, 2014, at FedEx Ontario, San Bernardino County Inspector Sean Tracy, Inspector/Handler Kristina Cummings with K-9 Bishop intercepted a shipment of properly certified cut flowers/foliage from Hawaii. Upon inspection of the shipment, leaves had heavy scale infestation. Samples submitted to the PPD Laboratory resulted in A-rated *Pinnaspis buxi* (boxwood scale) and other C-rated pests.
The shipment was in violation of California Food and Agricultural Code, Section 6461.5 (live pests). A Notice of Rejection was issued and the shipment was destroyed.

3. **Aphids on Hawaiian Flower**
On February 21, 2014, San Bernardino County Dog Team Inspector/Handler Kristina Cummings with dog Bishop were working at FedEx Ontario when Bishop alerted to a properly certified and marked parcel from Hawaii. Inspector Sean Tracy assisted and inspected the parcel. Upon inspection, the inside of the red bromeliad flower petals were heavily infested with live pests. Samples were collected and submitted to the PPD Laboratory and identified as Q-rated Aphididae.

Hawaiian Shipment

A Notice of Rejection was issued and the shipment was destroyed due to the violation of California Food and Agricultural Code, Section 6461.5 (live pests).

4. **Trilobe Scale Intercepted**
On March 7, 2014, at FedEx Ontario, San Bernardino County Inspectors Sean Tracy, Inspector/Handler Kristina Cummings and dog Bishop intercepted a Hawaiian shipment containing five pounds of maile leis.

There was no certification present and upon inspection of the leis, pests were intercepted on the leaves. The shipment was in violation of the Federal Hawaiian Territorial Quarantine 318.13 prohibiting leis from other parts of the United States unless accompanied with a certificate or limited permit. The shipment was also in violation of California Food and Agricultural Code, Section 6421 (markings) and Section 6461.5 (live pests).

Image of Confiscated Leis, photo courtesy of San Bernardino County

The pests collected from the leis were submitted to the PPD Laboratory and identified as Q-rated *Pseudaonidia trilobitiformis* (trilobe scale). The shipment was destroyed.

5. **Holly Plants from Georgia**
On April 10, 2014 while working in Riverside County at the FedEx Home facility along with Riverside County inspector Lucy Candelario, K-9 Bishop responded to two large unmarked and uncertified boxes from Georgia. The contents were four potted *Ilex* sp. (holly) plants. Inspector Candelario and San Bernardino County assisting Inspector Sean Tracy inspected the trees. Pest samples were collected from the leaves and submitted to the Plant Pest Diagnostics (PPD) Laboratory. Q-rated Tettigoniidae eggs were identified as well as Q-rated Cicadellidae nymphs. The shipment was destroyed.

A Notice of Rejection was issued for the shipment of holly plants for violating the following: California Food and Agricultural Codes (FAC):

- Section 6461.5 (live pests/reasonable cause)
- Section 6421 (lack of markings)
  California State Exterior Quarantine
- CCR Section 3271 (Burrowing and Reniform Nematodes)

6. **Mealybug Intercepted on Hawaiian Shipment**

On May 2, 2014, Inspector Sean Tracy, Inspector/Handler Kristina Cummings and K-9 Bishop were working at a San Bernardino County FedEx. Bishop alerted to a properly certified Hawaiian protea cut flower shipment. The inspectors collected pests from the leaves of the flower. The samples were submitted to the PPD Laboratory and identified as Q-rated Pseudococcidae (mealybug) crawler. A Notice of Rejection was issued due to FAC Section 6461.5 (live pests) and the shipment was destroyed.

Intercepted Hawaiian Shipment

Examples of San Diego County Dog Team Interceptions

1. ***Phalacrococcus howertoni* (soft scale) Interception**
"On August 2, 2013, County of San Diego Agricultural Detector Dog Drake was alerted to a FedEx home box shipped from South Carolina by Fast-Growing-Trees.com. The box stated "live plants" and was pulled aside by County of San Diego Agricultural Inspectors Ted Olsen and Jaime Garza for further inspection. The box contained a potted *Coffea arabica* (coffee plant) in soil and had certification for burrowing and reniform nematode, Japanese beetle, and imported fire ant. Hundreds of soft scale insects were observed on the stems and leaves of the coffee plant. Although the majority of the scale was common hemispherical scale, the Plant Pest Diagnostics Laboratory identified Q-rated *Phalacrococcus howertoni* (soft scale) in the mixed population. Fast-Growing-Trees.com was notified of the infestation on their shipment and the coffee plant was destroyed. The shipment was in violation of California Food and Agricultural Code, section 6461.5 (live pests).

2. **Multiple Pest Interception**
On August 22, 2013, Inspector Kristi Conway, Dog Team Handler/Inspector Jeremy Partch, and dog Venus were working at FedEx Carlsbad.

Coffee plant

Venus

Images courtesy of San Diego County

Venus alerted to three properly marked and certified parcels. The parcels contained potted plants and cuttings from Hawaii. Inspector Conway inspected the parcels and intercepted several pests, upon which she decided to hold the parcel and let San Diego County Entomologist Tracy Ellis look them over. Tracy and her skilled staff intercepted several more pests and submitted samples to the Plant Pest Diagnostics Laboratory.

The pests submitted were identified as Q-rated *Planococcus minor* (pacific mealybug) and Q-rated Pseudococcidae. Many C-rated pests were also identified in the mixed population. These are the first rated pest interceptions for Venus!

The shipment was in violation of California Food and Agricultural Code, section 6461.5 (live pests) and the infested plants were rejected and destroyed.

3. Potted Plants with Roots and Soil from Florida

Unmarked, Uncertified

On February 28, 2014, San Diego County Inspector Jason Sapp and Inspector/Handler Jeremy Partch with his K-9 Venus intercepted four unmarked and uncertified shipments of potted plants with roots and soil from Florida at a FedEx Ground Facility in San Diego. One shipment of mango and avocado plants were purchased on Ebay. In all, 10 potted plants were confiscated from the four shipments and brought to the local San Diego Entomology and Plant Pathology laboratory for inspection. Entomologist Dr. Tracy Ellis identified Q-rated *Tetranychus* sp. (tetranychid mite) on the Ebay shipment. Samples submitted to the PPD Laboratory confirmed the determination.

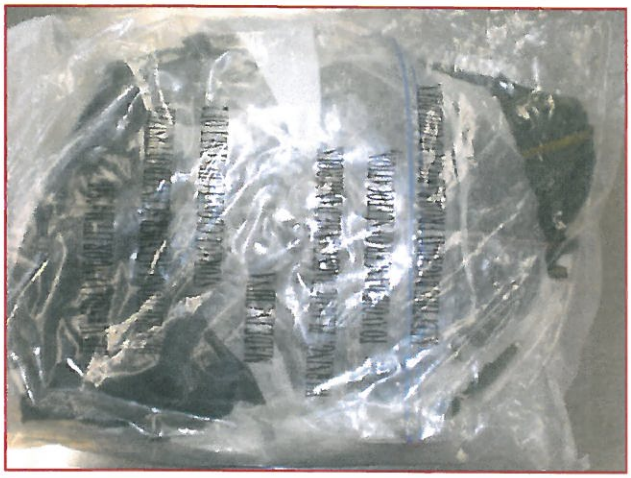
All the shipments violated California Food and Agricultural Codes, sections 6421 (lack of markings) and 6461.5 (live pests) and the following Federal and State quarantines. The shipments were destroyed.

- Federal Domestic Quarantine for Imported Fire Ant (CFR 301.81)
- California State Exterior Quarantine for Caribbean Fruit Fly (CCR 3252)
- California State Exterior Quarantine for Burrowing and Reniform Nematode (CCR3271)

Examples of San Joaquin County Dog Team Interceptions

1. Pests on Cheesefruit

On January 31, 2014, at FedEx Express, San Joaquin County Inspectors Tiffany Gonsalves, Sue Williamson and San Joaquin Dog Team Handler/Inspector Thomas Doud with dog Kojak intercepted a shipment from Hawaii. The unmarked and uncertified package contained cheesefruit and leaves.



Upon inspection, pest samples (adult female, pupae, eggs and crawlers) were collected from the cheesefruit leaves and submitted to the PPD Laboratory for identification. The pests were identified as Q-rated: *Dialeurodes kirkaldys* (kirkaldys whitefly), *Aleurodicus dispersus* (spiraling whitefly), *Ceroplastes stellifer* (scale), Aleyrodidae (whitefly), and Pseudococcidae (mealybug).

The shipment was in violation of the Federal Hawaiian Territorial Quarantine 318.13, California Food and Agricultural Codes, Sections 6421 (lack of markings) and 6461.5 (live pests). A Notice of Rejection was issued and the shipment was destroyed.

2. Avocadoes from Mexico

On April 24, 2014, San Joaquin Inspectors Anna Hazen, Sue Williamson and dog team Handler/Inspector Tom Doud were working at FedEx Express in Stockton when Kojak, the detector dog, alerted on a package. The package was from Mexico and included mostly personal items, but also five avocadoes. The avocadoes were removed from the package and the remainder of the package was released to the receiver.

Upon inspection of the avocadoes, a moderate infestation of scale pests was intercepted on the fruit and collected. Scale samples submitted to the Plant Pest Diagnostics (PPD) Laboratory for identification resulted in A-rated *Abgrallaspis aguacatae* (armored scale) and Q-rated *Hemiberlesia* sp. (armored scale).

A Notice of Rejection was issued for violating California Food and Agricultural Code (FAC) Section 6461.5 (live pests), and the avocadoes were destroyed. SITC was notified.

Both armored scale pests intercepted are from the Family Diaspididae. Only commercial shipments of fruit should not be rejected due to the presence of this family of armored scales. (Pest Exclusion Advisory No. 14-2011)

Shipment of Avocadoes and Other Items

***A-rated**, a pest of 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.

***Q-rated**, an organism or disorder suspected to be of economic or environmental detriment, but whose status is uncertain because of incomplete identification or inadequate information.

9-22-14

Nick Condos, ROAR Date
California Department of Food and Agriculture
Plant Health and Pest Prevention Services

Beth Stone-Smith, ADODR Date
United States Department of Agriculture
APHIS, Plant Protection and Quarantine