

The Pesticide Review



Santa Clara County Division of Agriculture

November 2014

US Customs & Border Protection

Protecting Agriculture by monitoring travelers

Santa Clara County had a unique experience this past summer riding along with Customs and Border Protection Officials at the San Francisco International Airport. Biologists got to see firsthand the amount of produce, plants, and food products seized by agents on a daily basis. The mountain of seized contraband was sobering.

Invasives continue to be a big problem in Santa Clara County and across the entire state. Invasives are being brought into our area at an alarming rate and there is only so much a handful of officials can do. Please remind friends and family you know are traveling not to bring any plants, seeds, fruits, vegetables, or meat products back with them. To read an interesting article on the subject, click on this bon appétit article:

<http://www.bonappetit.com/entertaining-style/trends-news/article/customs-food>

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Talking to Employees about What to Say When Something Goes Wrong

A case of a child gaining access to a bait station

A few months ago, an inspector in a neighboring county informed our department of a troubling posting she observed on a blogger's site. The blogger had received word from one of her subscribers that their child overturned a rat bait station at a location in San Jose and gained access to the bait inside! Before we could make contact with the location, we saw the blog was updated about the resolution of the incident and what mitigating factors were put in place to prevent this accident from happening in the future. The blogger and their subscriber writing in about the incident were satisfied with the explanation.

In this case, the manager of the location did the right thing. They sincerely apologized for the mistake and explained why the bait box was there (a rat had been spotted in the area and they were concerned about vector-borne diseases). They explained that they had anchored the bait stations with glue but unfortunately it had failed, which allowed the boxes to be moved. They informed the person that the boxes were immediately removed and they were in conversations with their pest control company regarding solutions to the problem.

The take home message to this article is to watch the securing of your rodent bait devices! In this case, the property manager was the one interfacing with the complainant, but it could have easily been a pest control representative. Talk to your technicians about what to say when something like this happens. If companies react immediately and sincerely, most often you can resolve the issue before they ever reach our office. It is not a perfect world and many things do not go according to plan. It's impossible to prepare for everything that might happen, but talking to your crews about what to say and how to act when something does happen goes a long way!

Because the child did not become ill and the location took steps to insure this wouldn't happen again, our office did not pursue this case.

Structural Pest Control Board

Update

Excerpts taken from a Department of Pesticide Regulation publication

Senate Bill 1244 was the Structural Pest Control Board's (Board) "Sunset Bill" and was approved by the Governor on September 25, 2014. The Sunset Bill extends the Board's sunset date to January 1, 2019.

The bill amends approximately 40 statutes. Some of these changes include defining "pesticide"; "working days" was changed to "business days" throughout; changing the expiration dates for Applicators to mirror Operators and Field Representatives with a three-year expiration date on June 30th; extending the period of time that an unlicensed individual may apply pesticide under the direct supervision of a licensee from 30 days to 90 days to allow more time for that individual to become licensed; language was added to allow for fumigations without a "warning" agent in rare occasions when the warning agent may damage the contents; removing "affix" to language regarding pesticide use stamps (strikes the requirement to affix the pesticide use stamp to a Monthly Summary Pesticide Report [MSPUR] and requires either a stamp [sticker] or a stamp number [number only, no sticker] for each MSPUR submitted as stated in Business and Professions Code section 8505.17(c); extending the statute of limitation for the CACs to take action against a licensee to two years, along with numerous other changes. This bill becomes effective on January 1, 2015.

In addition to the changes SB 1244 represents, Board staff are working with Department of Consumer Affairs' Office of Professional Examination Services office to move the Applicator exam to the Board's current computer-based testing method starting January 1, 2015. More information will follow regarding moving the Registered Applicator examination from being conducted at CAC sites to being conducted at the Board's contracted computer based testing sites in California. The following link is to the Chaptered Bill:

http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB1244&search_keywords=

On-Line Pesticide Use Reporting

DPR recently published a "ranking" of on-line pesticide use reporting by County. Santa Clara County is at 26%! We have set our goals to move Santa Clara County higher in the list in 2015, so please help us out if you haven't signed up to report on-line!

Some structural companies were nervous about on-line reporting due to the structural code stating the stamp must be "affixed" to the use report. Starting on January 1, 2015, the Structural Code will no longer have the "affix" language! So, structural companies can be assured that reporting on-line is okay in the eyes of the Structural Board. So, please get on-line and bring up our reporting percentage!

Excerpt taken from the list:

<u>County</u>	<u>Number of lines on use reports</u>	<u>% reported electronically</u>
San Benito	45,763	89%
Monterey	477,281	85%
Napa	55,637	77%
Santa Cruz	37,246	54%
Alameda	28,839	52%
San Mateo	21,230	51%
Santa Clara	57,556	26%
Contra Costa	26,454	24%
Grand Total For the State	3,456,629	61%

If you would like to do away with postage and running to the post office by the 10th of every month; consider electronically posting your use report!

We've also been told that there are several new third party software providers who have completed pesticide use report submission interfaces with the State use reporting system this year, so hopefully it will be even easier to report!

We will personally help you set up your on-line reporting. Call today to set up your FREE appointment with our On-Line Use Reporting expert. We will set you up with a log-in name, password, and details of how to submit your monthly use reports.

For information about on-line pesticide use reporting, please contact Biologist Kristian Barbeau at: Kristian.Barbeau@aem.sccgov.org Or you can reach him at: (408) 201-0650

Second Generation Rodenticides become CA Restricted Materials

*Excerpts taken from a Department of Pesticide
Regulation publication and Enforcement Letter 14-14*

Effective July 1, 2014, the 2nd generation rodenticides (SGARS) brodifacoum, bromadiolone, difenacoum, and difethialone were added to 3CCR section 6400 as California restricted materials. Section 6471 was also added to supplement label restrictions by prohibiting placement of above-ground bait more than 50 feet from a man-made structure with some exceptions.

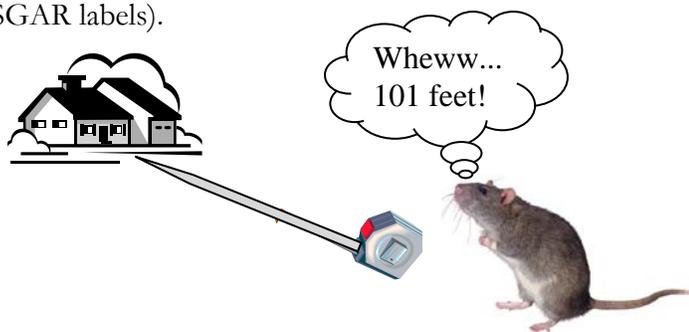
What types of uses are on the currently registered SGAR product labeling?

These products are labeled only for control of three rodent species (Norway rats, roof rats, and house mice) in and around buildings and other man-made structures as defined by the product label.

SGAR labels explicitly prohibit use against any other pest species. DPR has determined that SGAR products are not labeled for controlling ornamental, plant, or turf pests.

What are some examples of the phrase used in 3CCR Section 6471: “a feature associated with the site that is harboring or attracting the pests targeted”?

Such features potentially could include any harborage (such as dense vegetation or debris) or any attractive resource (such as a source of food or water). The key consideration is that the feature must be both: currently harboring or attracting one of the three rodent species listed on SGAR labeling, and the “feature” is located more than 50 feet from the man-made structure, but less than the placement limit specified on the label (which is up to 100 feet on some SGAR labels).



Brown Marmorated Stink Bug

*A new pest invading three
neighborhoods in San Jose*



Since it set feet in Pennsylvania in the mid-1990s, the Brown Marmorated Stink Bug (BMSB) has spread to more than 41 states. Unfortunately, this pest is now calling San Jose home. Originally from Eastern Asia, the BMSB has become a significant economic agricultural pest in five mid-Atlantic states, causing millions of dollars of damage to over 150 susceptible crops. This could mean significant losses to California multi-billion dollar fruit, vegetable, and nursery industry. The piercing-sucking mouthparts discolor fruit making them unmarketable.

Besides being a significant agricultural pest, the BMSB can become a nuisance structural pest. We have heard reports of this stink bug entering houses by the thousands. Although they do not bite, sting, or spread diseases, as their namesake states, they can create quite a stink. -Especially if they are crushed. We have received a number of calls this fall from residents in the San Jose area where there appears to be several new infestations. These homeowners have been taken aback by the number of stinkbugs congregating on the south-facing walls of their homes in the late afternoon. This is common behavior for this pest to congregate outside and enter buildings in late summer and early fall looking for safe places to overwinter.

How can you control BMSB?

Controlling BMSB can be difficult. The best approach is to exclude them from structures. Caulk all cracks, install door sweepers, fix window & ventilation screens, keep outdoor lights to a minimum or move them away from doorways, etc. If BMSB do find their way inside, we've been instructing residents to vacuum them using a designated vacuum other than the usual household vacuum because the vacuum that is used will start to stink. If BMSB survive the trip into the vacuum, have a bucket with a few inches of soapy water available to drown them.

Pesticide applications will be short-lived and not effective in the long run. For more information, please visit the University of California website:

<http://ucipm.ucdavis.edu/PMG/PESTNOTES/pn74169.html>

Bagrada Bug

Another new invasive discovered in Santa Clara County



The Bagrada Bug is an invasive stink bug that attacks many vegetable crops (their favorites being: cabbage, kale, Brussel sprouts, cauliflower, mustard, broccoli, radish), and several different species of ornamental plants. These stink bugs reproduce quickly and their large numbers cause a considerable amount of damage very quickly.

Native to Africa, the Bagrada Bug was first found in Los Angeles County in 2008 and has been steadily spreading throughout California. It has unfortunately invaded Santa Clara this year and we've had a number of homeowners and growers contacting our department about it.

Why is it a problem?

We have native stink bugs in California but most of our natives lay their eggs on leaves, which leave them vulnerable to predatory wasps. Bagrada bugs will sometimes lay their oval creamy-white eggs on leaves, but their favorite spot to lay their eggs is in the soil underneath host plants. Laying their eggs in the soil protects them from predatory wasps, who can't find their eggs to parasitize them.

How do you control this pest?

Detecting the Bagrada Bug early is important because populations grow very quickly. Be sure to monitor plants and remove stink bugs when you find them. Stink bugs are most active when it is 75° F or warmer outside, so scouting in midafternoon is recommended. We've been instructing homeowners to use a large piece of cardboard or a sturdy sheet of paper, place it under plants and beat / shake the plant to knock the bugs onto the cardboard / paper. Slide the stink bugs into a bucket of soapy water to drown them. If you discover large numbers of stink bugs, get a shop vac and vacuum the bugs. They can be hardy and can survive the trip into the shop vac, so dump them into a bucket of soapy water.

There are commercial stink bug traps available, but be aware the lures won't work for bagrada bugs. You may need to bait the traps with some of their favorite foods.

Pesticides can be used, but stink bugs are known to be difficult to manage with insecticides. Cultural methods like removing weed hosts in and near planting areas, and removing plant residue after harvest can be successful in reducing numbers. For more information visit this site:

<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74166.html>

Asian Citrus Psyllid

Photo by Jeffrey Lotz, FDACS-Division of Plant Industry



4mm

In October 2014, The State Department of Food and Agriculture (CDFA) detected an infestation of Asian citrus psyllid (ACP) in San Jose near Kelly Park. This is the first detection of ACP in Santa Clara County and the Bay Area. The ACP were detected in a residential neighborhood near Phelan Avenue and Roberts Avenue in San Jose.

ACP is an invasive species of grave concern because it can carry the disease huanglongbing (HLB), also known as citrus greening. All citrus and closely related species are susceptible hosts for both the insect and the disease. There is no cure once a tree becomes infected, the diseased tree will decline in health and produce bitter, misshaped fruit until it dies. HLB has been detected just once in California –in 2012 on a single residential property in Hacienda Heights, Los Angeles County. That tree was destroyed and thankfully, after an extensive survey no other citrus in the area showed signs of the disease.

This insect and disease endangers not only our commercial citrus industry, but also our backyard gardens. If ACP spreads across California, an introduction of HLB anywhere can spread like wildfire and we will no longer be able to have citrus in our backyard gardens.

What can you do to help?

If you should spot an insect at a client's residence that looks like ACP, please catch the insect and call us! If you have anyone asking for your help because their citrus tree is looking sick and producing green misshapen bitter fruit, don't touch the tree and call our office or the State Pest Hotline at 1-800-491-1899.

Please pass the word around that HLB can be carried into California on citrus plants or cuttings. For more information about the pest and the disease, please visit: www.cdfa.ca.gov/plant/acp

Stingless Honey Bees

Found at a residence in Palo Alto



Recently Stingless Honey Bees were found in a residential tree in Palo Alto. These tiny 1/4" inch bees were identified as *Plebeia frontalis*. Santa Clara County has never seen these before and while we were trying to find out more about these bees, we discovered some interesting facts.

There are over 500 species of stingless bees in the world, mostly in tropical areas. The Plebeia bees are commonly found in Brazil where they are called Mirim or "kids". These bees do produce honey but not in large amounts like the European honeybee. The Plebeia bees store pollen and honey in large egg-shaped pots made of beeswax. The honey from stingless bees has a lighter color and a higher water content (from 25% up to 35%), compared to commercial honey, which causes it to spoil more easily.

Also, as their name implies, these little bees do not sting or even bite. In Brazil, due to the lack of a functional stinger and characteristic non-aggressive behavior, they can be kept without problems in cities, provided there are enough flowers nearby. Being so tiny some stingless honey bee species produce only a very small amount of honey, typically less than 500 ml a year, and therefore are not interesting for commercial honey production. They are considered "toy" bees and are kept just because they are fascinating to watch.



A peek inside the hive. You can see the tiny bees on the lid as it is being removed. Inside the box you can see the honey pots.

These are not birdhouses but rather bee-houses in Brazil.



A close up picture of stingless bees and their honey pots.

The Pest Game – Is it a Structural or an Agricultural Pest?

There are some pests that are clearly structural or clearly an agricultural pest, but there are some that can be placed in both categories. Where a pest is found can play a big part of what category it is placed under!

- Ants: Both. If ants are invading a structure, the ants and nest are clearly structural pest control. If the ants are milking aphids on plants in the garden and are protecting "their herd", then the ants can be agricultural pest control.
- Earwigs: Both. Earwigs will chew on new seedlings and can be an agricultural pest. They can also be found in the home and be bothersome to homeowners so they can also be considered a structural pest too.
- Fleas & Bedbugs: Structural. These are pests of human and their pets.
- Gophers & Ground Squirrels: Agricultural. Although in very rare instances if the structural company can show the animal is tunneling under sidewalks or a shed foundation, etc., an argument for structural pest control can be made.
- Paper Wasps, Carpenter Bees, & Yellowjackets: Structural. These are bothersome to people or their home. They are not agricultural pests.
- Snails: Can be both. Snails are primarily an agricultural pest, but can be structural if they are crawling all over a house. If a structural pest control company applies snail bait or a contact pesticide for snails, the pesticides should be confined to a narrow band around the foundation of the structure.
- Springtails: Structural. This pest is bothersome to humans and are not an agricultural pest.
- Spiders: Structural. Spiders are a beneficial in the agricultural setting.
- Rodents: Can be both. It depends on where the rodents are residing and what they are damaging. Rodents residing inside a structure are clearly structural pest control. If the rodents are damaging garden plants, trees, or fruit in the yard, they can be controlled outside of a structure by an agricultural pest control company.

Department of Agriculture

During our conversations with pest control applicators, we are sometimes asked: “So what else do you guys do?” When we start rattling off all the different programs, people are a bit surprised.

So, what does the Department of Agriculture do when we aren’t inspecting farmers or pest control businesses?

Santa Clara County has 17 biologists performing work for the department. 7 biologists are specialists, concentrating in one or two specific programs. The other 10 biologists are what we call district biologists. They cover all the programs in a defined geographical area. Each biologist is responsible for all the programs in the defined area, with the exception of some specialty programs we rotate among the biologists. And, we too need to be licensed! In order to enforce the codes in any given area, we need a “Biologist License” in each category from the State.

This is a brief description of some of our programs:

PUE (Pesticide Use Enforcement)

All of you are very familiar with this program. We perform pesticide application and records inspections with growers, pest control advisors, agricultural & structural pest control companies, municipalities, golf courses, cemeteries, and pesticide permittees. We also investigate pesticide complaints and pesticide illnesses reported to our office through the County Health Officer & DPR.

High Risk Pest Exclusion (Quarantine)

California is very strict about what is allowed into this State and we have a long list of agricultural products that are not allowed into this State without proper treatment or certification. Whenever a commercial plant shipment crosses the border, the shipment is automatically placed under quarantine and the receiver must call the Ag office when it arrives at its destination. We perform regular plant inspections to make sure they do not have any pests. We also regularly visit the airport, UPS, Fed Ex, and the US Post Office inspecting parcels for incoming agricultural material to make sure it meets entry requirements. This is where our Dog Team Program comes in handy. We use the dog to sniff packages and alert us to parcels with agricultural products that we would otherwise have no idea contained prohibited material. In addition to plant material coming in, whenever someone moves from the Midwest or East coast to California, their outdoor articles are placed under quarantine. We inspect the outdoor articles of all new residents from the east coast looking for gypsy moth eggs.

Glassy-winged Sharpshooter (GWSS) & European Grapevine Moth (EGVM)

We have 5 biologists that concentrate in these two programs. We have had several infestations of GWSS over the years, necessitating an eradication program and intensive trapping in the area. We also trap all nurseries in the county and we inspect nursery shipments being sent up from southern California in an attempt to keep this pest out of our County. EGVM is another pest that had been detected in our County and we are right now monitoring the area where treatments took place a few years ago to make sure they were successful.

Direct Marketing (Farmers’ Markets & Certified Producers) & Organic Program

If a grower wants to sell their produce at a farmers’ market, they must first be inspected by their home county and be issued a certified producer certificate. We also inspect producers at the market to ensure they are selling only the products listed on their certificate. We also inspect organic growers to ensure compliance with regulations and we randomly pull samples at markets looking for pesticide residues.

Federal Phytosanitary Certificates (Phytos)

Our district biologists are also certified federal cooperators and can issue federal certificates. In order to ship agricultural products to another country, a federal phytosanitary certificate must be issued. When a grower or broker want to ship something to a foreign country; we look up the destination countries requirements to make sure the sender can comply. Sometimes we have to inspect crops during their growing season to ensure they are free from disease and some shipments require us to watch a pesticide application to verify that the proper treatments were performed.

Other Programs:

We perform nursery & seed inspections to insure producers are selling products free from pests. Those nurseries that ship Sudden Oak Death (SOD) host material from this area must have a compliance agreement from our office and be routinely inspected. Growers that ship host commodities of the Light Brown Apple Moth (LBAM) outside the regulated area must also be inspected within 30 days prior to shipment. We have one citrus packing plant and every year we perform citrus maturity tests on their fruit to ensure they meet State standards. We also inspect two egg production plants in the County and several wholesale markets for egg quality control.

It’s quite a list and all of these programs definitely keep us very busy!