

SANTA BARBARA COUNTY

AGRICULTURE AND WEIGHTS & MEASURES NEWSLETTER

Spring 2014

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ZERO DARK THIRTY: TINY WASPS AS SPECIAL FORCES TO COMBAT DEADLY CITRUS PEST

Submitted by Dr. Brian Cabrera, Entomologist, Ag Commissioner's Office

When riding bikes with my daughter through our neighborhood I see lots of citrus trees. Lemon, orange, and lime trees laden with fruit are a common sight in Santa Barbara County. Driving through some areas you can see rows of lush green lemon trees standing in locally-owned groves. Citrus is deeply rooted in our yards and local history.

Now fast-forward a few years and imagine all of these citrus trees turning sickly, slowly declining and eventually dying. This scenario is already happening in other parts of the world because of a deadly citrus disease called huanglongbing (HLB) which is caused by a bacterium called *Candidatus Liberibacter asiaticus*. The bacterium is spread by a tiny insect called the Asian Citrus Psyllid (ACP).



Asian Citrus Psyllids

Photo UC IPM

Since the Fall of 2012 there have been several isolated finds of ACP in Santa Barbara County. The California Department of Food & Agriculture (CDFA) has responded to these finds with carefully monitored and targeted control efforts to prevent ACP from becoming established. It would take just one ACP to find an infected citrus tree for HLB to start spreading locally. If large numbers of psyllids are present then HLB will spread like a wildfire.

One of the latest tactics to slow the spread of ACP is to use a natural enemy of the psyllid – a tiny wasp named *Tamarixia radiata*. Although the mention of the word wasp usually conjures up images of large, stinging insects like yellow-jackets, *Tamarixia* is barely 1 mm long; it does not sting and it only attacks ACP. *Tamarixia* is a specialized type of wasp known as a parasitoid. Wasp parasitoids are abundant in your yard but you've probably never noticed them. *Tamarixia* is native to Pakistan and was brought back to the U.S. to help manage ACP. It was tested under extreme quarantine conditions to make sure they were safe to release and wouldn't attack native psyllids.

The stinger of *Tamarixia* is no longer used for stinging but instead it's modified into a specialized egg-laying structure called an ovipositor. A *Tamarixia* female oviposits an egg under an ACP nymph, which lays flat on budding leaves and stems.

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ZERO DARK THIRTY:TINY WASPS AS SPECIAL FORCES TO COMBAT DEADLY CITRUS PEST ...continued from previous page

When the egg hatches, the maggot-like larva chews a hole on the underside of the nymph and feeds on its fluids. To finish its development, the larva crawls into the hollowed out nymph (known as a “mummy”) and becomes a pupa. This develops into the adult wasp which chews a hole at the top of the mummy, crawls out and is ready to search for a mate.

Since January, 5 more ACPs have been found in Santa Barbara County. Such a small number of psyllids indicates the populations are probably very low making an ideal situation for eradication. However, local resistance to control efforts has resulted in less treatment and protection of citrus trees in residential areas. Nonetheless, the Santa Barbara County Agricultural Commissioner’s Office in cooperation with CDFA is still taking action to combat the Asian Citrus Psyllid in these areas by releasing *Tamarixia*.

On March 11, CDFA scientists brought several hundred *Tamarixia* for release at two of the residences where ACP was found. We released 200 wasps on a lime and a lemon tree in Carpinteria and 200 on an orange and a lemon tree in Goleta. The wasp releases were like sending elite units of Special Forces Operatives on a seek-and-destroy mission. Hopefully the wasps were able to hunt down any unseen ACPs.

Using *Tamarixia* can reduce population levels of ACP but they are not going to eradicate them. Once released, *Tamarixia* can fall victim to predators, they can succumb to various environmental factors and their lifespan is only 2-3 weeks. Thus, releases are more for ACP suppression rather than eradication. However, the wasps can slow down the spread of ACP and HLB. When ACP is found again in Santa Barbara County, we’ll be ready to call in the troops.



SB County Entomologist Dr. Brian Cabrera releasing wasps on citrus plants



Enlarged photo of *Tamarixia radiata*

For more information, please visit these websites:

<http://www.californiacitrusthreat.org/>

<http://www.saveourcitrus.org/>



LIME PRICES SKYROCKET DUE TO BAD WEATHER AND HUANGLONGBING IN MEXICO

Submitted by Dr. Brian Cabrera, Entomologist, Ag Commissioner's Office

Heavy rains at the end of 2013 caused major losses of limes in Mexico, which supplies most of the limes sold in the U.S. In addition, HLB is being spread by ACP in Mexico's lime-growing regions where it has severely affected Key lime production. As a result, there is a temporary shortage of Mexican limes and prices have shot up. Making matters worse, Mexican criminals are cashing in on the higher prices by stealing from groves and hijacking truckloads of fruit. Growers are also harvesting under-sized fruit to take advantage of overinflated prices. Although currently high prices should drop, the continued spread of HLB in Mexico may make limes more scarce and expensive here in the U.S.



Dear Santa Barbara County Resident:

Santa Barbara County residents have been enjoying fresh, California-grown citrus fruit for generations. Unfortunately, an invasive insect called the Asian citrus psyllid was recently found in Santa Barbara County and is threatening local citrus. We need your help to stop this dangerous pest.

The Asian citrus psyllid is a tiny insect that feeds on the leaves and stems of citrus plants, and can transmit a deadly plant disease called Huanglongbing (HLB). There is no cure for HLB and infected trees will die. The best way to protect the community's citrus trees is to stop the Asian citrus psyllid.

The Citrus Pest & Disease Prevention Program offers the following tips:

- **Inspect your trees regularly** for the psyllid. Visit CaliforniaCitrusThreat.org to see photos of the pest.
- **Report psyllid finds** by calling the California Department of Food and Agriculture hotline - 800-491-1899.
- **Cooperate with local agriculture officials** who may ask to access your property.
- **Talk to your local nursery or garden center** about products that can help protect your citrus trees against the Asian citrus psyllid.
- **Do not move citrus** into Santa Barbara County from other areas because it may be infested with the Asian citrus psyllid.

We all play a part in protecting California citrus. For more information on how you can help, visit CaliforniaCitrusThreat.org.

Sincerely,

Victoria Hornbaker

Citrus Program Manager,
Citrus Pest & Disease Prevention Program

Protecting Bee Health.



The California Department of Food and Agriculture and citrus growers are committed to protecting bees and other pollinators while also protecting citrus trees - a vital part of California's landscape and economy. CDFA communicates with local beekeepers and employs spotters to locate bees and mitigate hazards. Asian citrus psyllid treatment crews use stringent safeguards to protect bee health, including only using products approved by the Environmental Protection Agency and California Department of Pesticide Regulation, and applying treatments safely and according to label instructions. These same safety measures should be used if you elect to proactively treat your personal citrus tree. Talk to your local nursery or garden center for more information about the best way to protect your citrus from the Asian citrus psyllid.



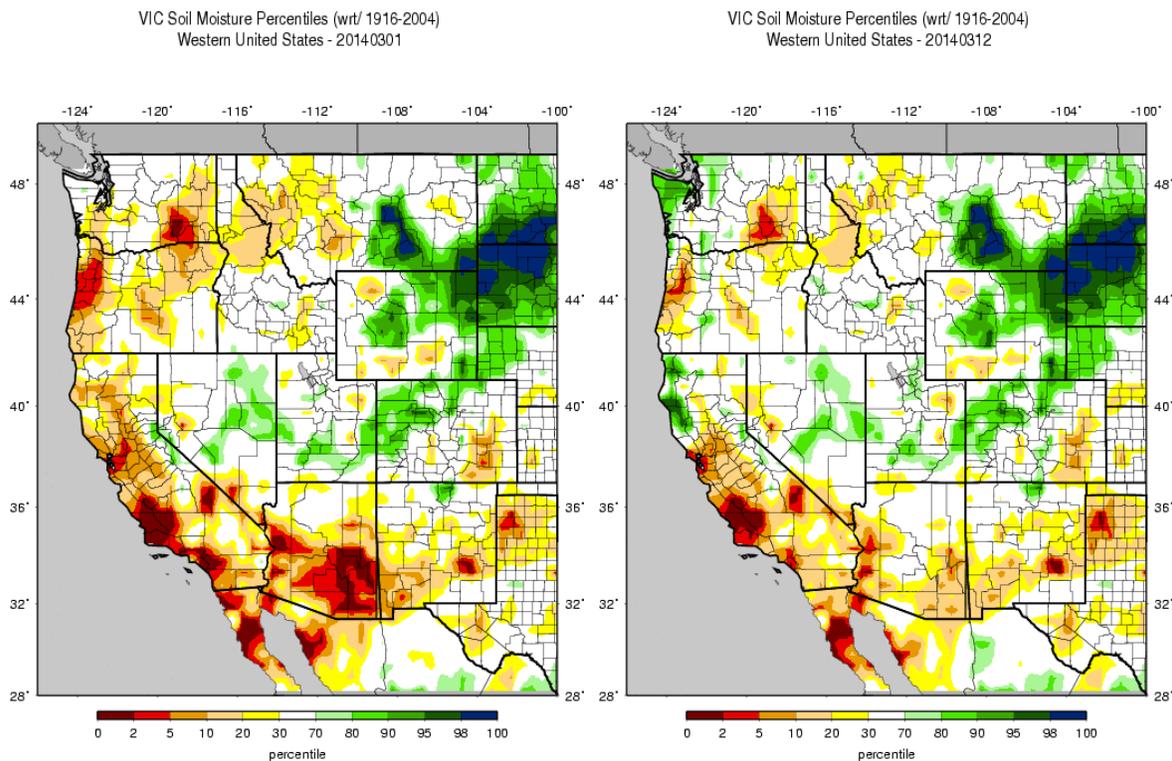
DROUGHT IMPACTS ON THE ECONOMY AND ON THE GROUND

Submitted by Mary Bianchi, UCCE County Director / Horticulture Advisor, San Luis Obispo & Santa Barbara Counties

The recently released National Drought Forum Report 2012 noted that the costs of Hurricane Sandy exceed \$70 billion. Droughts can have a significant, albeit less visible, economic impact than other natural events. Estimates of losses nationwide from the 2012 drought may surpass \$50 billion dollars (www.drought.gov/media/eventfiles/2012-droughtForumReportOnly.pdf).

The costs of the continuing drought are difficult to assess. The recently released Economic Contributions of Santa Barbara County Agriculture allows a snapshot of the value of agriculture to the County <http://www.countyofsb.org/uploadedFiles/agcomm/outreach/SB-Ag-Econ-vDec31-5pm.pdf>. Agricultural production created \$1.9 billion in total economic output within the county. The drought may have the following impacts on total economic output from agriculture by influencing direct costs though decreased revenue – reduced herds, yields, or idle ground, impacts to food processing and employment. Indirect costs reflect business to business purchases like supplies (seeds, plants, ag chemicals, fuel) and services (banking, insurance, crop consultants, veterinarians, etc.). And finally there are induced costs that represent consumption spending by ag business owners and employees on housing, health care, recreation etc.

Understanding on the ground drought impacts for our local area is improved by considering estimates of drought impacts to soil moisture levels. The following images show the results of a model of soil moisture levels from the Hydrology Program from the University of Washington <http://www.hydro.washington.edu/forecast/monitor/>.



These models show soil moisture levels on a broad scale, so local on-farm conditions may vary. The first image is from March 1st, and is updated in the second image on March 12th. Our latest storms improved modeled soil moisture in many areas, although the majority of Santa Barbara County remains at low soil moisture percentiles compared to the years 1914 to 2004. As with the drought monitor, this model reinforces the importance of measuring soil moisture levels on a very local scale.

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COMPLIANCE ASSISTANCE OUTREACH AVAILABLE TO PESTICIDE HANDLERS

Submitted by Tom Donlon, Agricultural Biologist

It is the County Agricultural Commissioner's (CAC) responsibility to enforce laws and regulations for pesticides. The purpose of these laws is to ensure that those using pesticides are doing so in a safe manner and that consumers and the public are protected from exposure to pesticide residues. To that end, county inspectors are required by the CA Dept of Pesticide Regulation to conduct random inspections of pesticide users. Unfortunately, these inspections are frequently the only contact the CAC's office has with those in the field actually applying pesticides. A priority of Santa Barbara CAC, Cathy Fisher, is to provide education for individuals applying pesticides about the regulations that affect them. This serves to help them achieve and maintain compliance.

In an effort to assist growers and licensed pesticide applicators to stay in compliance with the changing Federal, State and local regulations associated with pesticide use, the Santa Barbara CAC's office would like to inform interested parties of various outreach opportunities available to them. One training available, called "*Characteristics of a Good Applicator*" is aimed at educating and empowering applicators and field supervisors in agricultural settings. This training is also available to structural applicators and maintenance gardeners. It addresses the unique challenges and situations faced by these companies.

Another training available is "*How to Prepare for an Inspection*", a series of trainings on the various requirements associated with different inspections such as application and mix and load inspections, fieldworker safety, headquarters/records audit, and field fumigation. These outreach opportunities can be tailored to the specific needs of the participants. For example, requirements for pesticide applications in a vineyard setting would be different from those associated with pesticide applications to landscaped areas.

The CAC is committed to expanding on these outreach programs and any input on training needs is always welcomed. If you are interested in scheduling any of these trainings, please contact us in Santa Maria at 934-6200, in Santa Barbara at 681-5600, or email Tom Donlon tdonlon@agcommissioner.com.



DROUGHT IMPACTS ON THE ECONOMY AND ON THE GROUND

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While 4 inches of rainfall may replenish soil moisture to a depth of 4 feet in a coarse sandy soil, that same depth of rainfall may only replenish soil moisture to a depth of 2 to 2.5 feet in a clay soil. Little rain is in the forecast for the remainder of March. With full sunlight and warm temperature the rate at which plants will be extracting water from the soil to meet their water needs is high – equivalent to one-tenth of an inch per day or higher.

For information on soil moisture monitoring and drought strategies for important local crops visit the University of California Cooperative Extension website at <http://cesantabarbara.ucanr.edu/>.



DROUGHT IMPACTS AND THE POTENTIAL FOR INCREASED ROOTZONE SALINITY

Submitted by Mary Bianchi, UCCE County Director / Horticulture Advisor, San Luis Obispo & Santa Barbara Counties

After three years of drought many local producers are beginning the growing season with low stored soil moisture levels. Low stored soil moisture means that plant available water is reduced as we head into the warmer spring and summer months, increasing applied water requirements. The critical water source for range and dryland crops is severely limited, with impacts to forage production and yields. The market value of many of our fruit and vegetable crops are based on quality, and the quality of many fresh fruits and vegetables responds poorly to deficit irrigation. This leaves a limited range of drought strategies, including limiting production or idling crop fields. Additionally there are concerns with lack of winter leaching of salts that have accumulated in the root zone during previously dry years. Salinity in the root zone reduces the plant's ability to take up water, and may increase irrigation requirements for leaching during the production season.

The following diagram of salinity is from the Cal Poly San Luis Obispo Irrigation Training and Research Center (<http://www.itrc.org/reports/treecropsalinity.htm>). It demonstrates accumulation of salts in a soil profile from a pistachio orchard on the west side of the San Joaquin Valley irrigated with micro-sprinklers since the late 1960s. With limited rainfall, salinity increases in or below the soil profile. For crops that are sensitive to elevated soil salinity, growers will sometimes irrigate during rain events to increase leaching of accumulated salts.

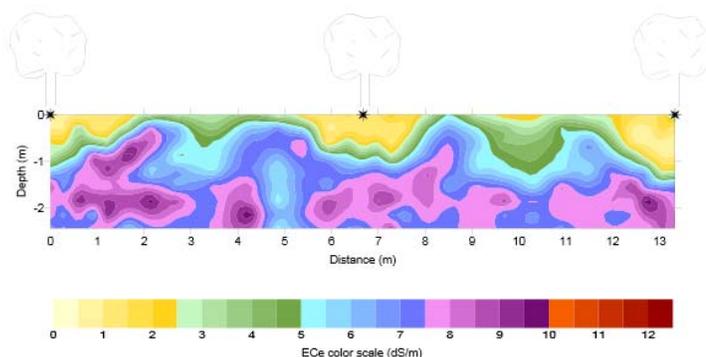
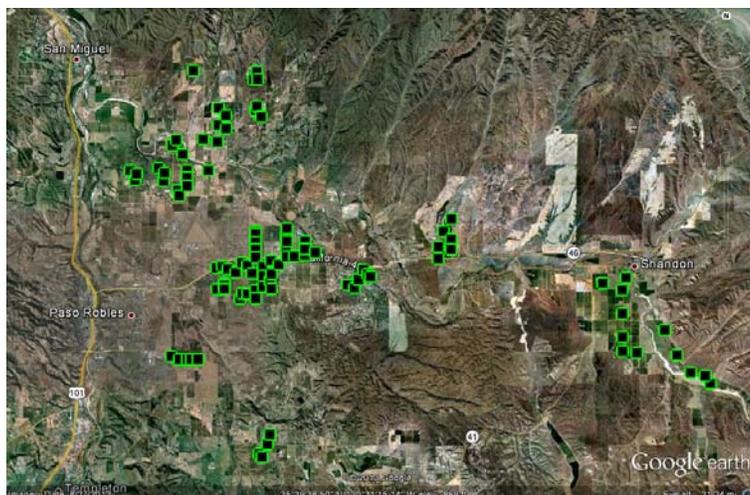


Figure 42a. Field 6B salinity concentration profile.

Plants differ in their sensitivity to salinity. Grapes, depending on rootstock, will begin to see yield declines at 1.8 to 2.5 deciSiemens/meter (dS/m). Avocados are among the most sensitive with yield declines beginning at 0.6 dS/m. Many annual crops will tolerate higher levels of salinity. For example, broccoli begins to experience yield declines at 3.8 dS/m.

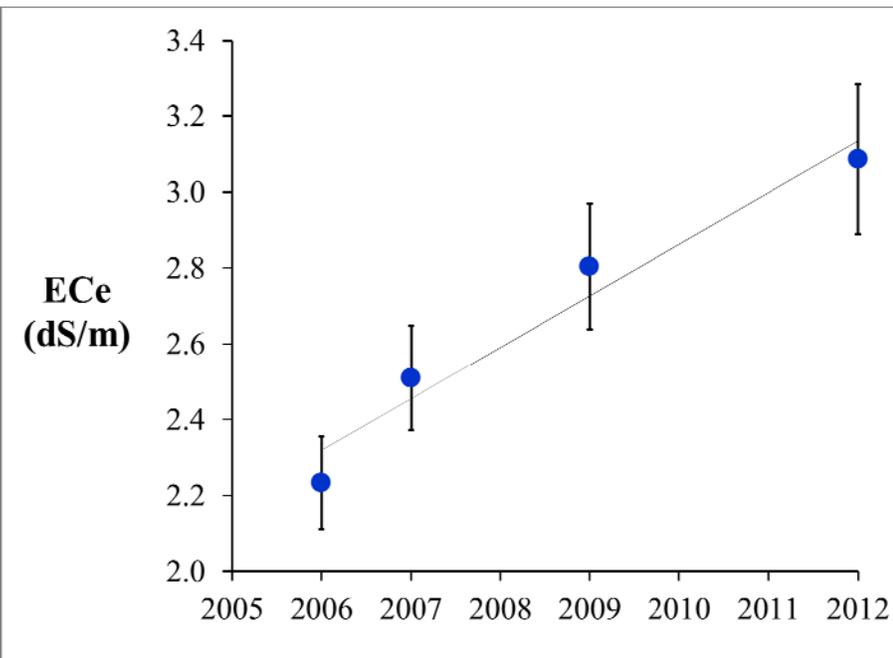


Mark Battany, Viticulture Advisor with the University of California Cooperative Extension in San Luis Obispo and Santa Barbara, has been monitoring soil salinity in vineyards over the Paso Robles Groundwater basin since 2006. In 100 vineyard locations, Mark sampled soils at multiple depths. Each sample represents a composite of 15 subsamples taken down the vineyard row. Locations of sampling sites range from southeast of San Miguel to southwest of Shandon.



DROUGHT IMPACTS AND THE POTENTIAL FOR INCREASED ROOTZONE SALINITY ...continued from previous page

The results shown here represents samples taken at the one-foot depth. Mark's work indicated that salinity conditions are increasing during a period characterized by below-average rainfall for the region. The survey also indicated that salinity conditions were at levels which would be expected to lead to



measurable reductions in vine growth or yield at those vineyards where levels exceeded the mean values. The full text of Mark's report is available at

[http://cesanluisobispo.ucanr.edu/Viticulture/Salinity Management/](http://cesanluisobispo.ucanr.edu/Viticulture/Salinity%20Management/).

For information on soil moisture monitoring and salinity management strategies in vineyards visit the University of California Cooperative Extension website at <http://cesantabarbara.ucanr.edu/>.

FARM WORKER RESOURCE FAIR

Submitted by Alma Cangelosi and Robbie Towne, Agricultural Biologists

On March 11, 2014, we participated in the Farm Worker Resource Fair, an event put on by the State of California's Employment Development Department. It was held at the Minami Community Center in Santa Maria. We were one of many agencies there to offer information on employment, career training, social service resources, and agricultural worker rights and safety.

We arrived at the event loaded with consumer fact sheets to hand out and ready to answer any safety questions about pesticides, or concerns about how pesticides are being used in our area. In addition to informing the public of the key role our department plays in enforcing pesticide laws and regulations, we also informed the public of the wide range of duties our office performs such as, plant inspections at nurseries and at package shippers to keep exotic pests out of our county. We also provided information about our weights and measures programs, which protect consumers and ensure equity in the market place.





CaliforniaVolunteers & The California Endowment
are pleased to invite you to a:

**DROUGHT INFORMATION GATHERING SESSION
AND
RESOURCE FAIR**

*Santa Barbara County
Location TBD*

**On Friday, May 9, 2014
9:00am to 2:00pm**

Register



Meeting will be in Cachuma Lake's Recreational building



THE FAIR PACKAGING ACT AND PACKAGE INSPECTIONS

Submitted by Chris Tyler, Weights and Measures Inspector

The Fair Packaging and Labeling Act was written to standardize consumer packaging and protect consumers. In 1961, the Antitrust and Monopoly Subcommittee of the Senate Judiciary started hearings to determine if federal legislation was required to curtail packaging and labeling abuses rampant at that time. It took 6 years of lengthy hearings and two bills presented before the Senate, but ultimately the Act passed and went into effect July 1st, 1967. WM enforces the Fair Packaging and Labeling Act by evaluating package *quantity representations* for accuracy.

The Fair Packaging Act requires all consumer packages contain:

1. The **Identity** or name of the product and name and place of business of the manufacturer, packer, or distributor;
2. An accurate statement of the net **Quantity** of contents at a uniform location on the principal display panel
3. A statement describing the contents of a serving, if a declaration of the number of servings is given.

The first two points are most important for WM inspectors. All consumer products must contain the identity of the product, the net quantity of the contents, and the name of who is responsible for the product. It is simplified to the acronym **IRQ** for **I**ntity, **R**esponsibility, and **Q**uantity. Packages must display the **I** and **Q** statements on the front of the packages in very specific locations and use at least a minimum font size for consumers to find them and read them easily. The goal is that shoppers can make quantity and price comparisons easily.

The **R** statement must be in the form of an address or the company name and the city and zip code where that business is located. The business must then have full information available in the phone book for that city, including the full address. At this time web address cannot take the place of a physical address.

The inspection process doesn't stop at the required labeling. Inspectors routinely evaluate the **Q** statement on products. Random packages are inspected to verify the net weight listed on packages. If errors are found on two or more randomly selected samples, than the entire lot is inspected. The items are weighed on a certified scale to ensure that the package is the listed net weight. If an item is found to be short weight, that item and its corresponding lots are pulled from sale. Package inspections can occur at retail stores at the point of packaging or distribution, or at wholesale locations.

Please call the WM office at 681-5600 (SB) or 934-6200 (SM) if you have any questions about the accuracy of consumer packages.



This package was labeled 6 oz., the net weight was determined to be 4 oz., which makes this package 2 oz. or 33% short weight.



RAPTORS PROTECT FLOOD CONTROL LEVELS

Submitted by Matt Victoria, Agricultural Biologist

Twelve years ago the Santa Barbara County Flood Control District had a serious problem with California Ground Squirrels infesting their Santa Maria River levees. Constructed in 1963 by the U.S. Army Corps of Engineers, the levees provide flood protection to the Santa Maria Valley and the City of Santa Maria. The levees are compacted sand covered with protective riprap (rock) and they are built on the south-facing river slopes. They extend 17 miles from the Sisquoc River to the CA Highway 1 bridge.



California Ground Squirrels

Ground squirrels were a problem from the beginning. They prefer to construct burrows in elevated areas with little nearby vegetation, which allows them to see and run away from predators. The miles of treeless levees made the perfect home for squirrels. They formed colonies of several dozen animals, digging burrows up to 5' deep into the earthen levees and their populations grew quickly. Flood Control worried that over time, the squirrels could weaken the structural integrity of their levees.

Rodenticides were used to control ground squirrels prior to 2002. Two full-time employees would apply 50 lbs of rodent bait a week along the levee's entire length at a cost of nearly \$6500 per month!

They used diphacinone, an anticoagulant rodenticide, which when eaten by squirrels causes lethal internal hemorrhaging. Unfortunately, diphacinone also has the potential to cause secondary exposure to non-target wildlife. This occurs when other animals eat dead or dying squirrels.



Red-tailed Hawk catching Squirrel



Red-tailed Hawk on "Levee Patrol"

County Flood Control hoped to find an alternative ground squirrel control method that would be safer than diphacinone and save money. In the spring of 2002 they began installing raptor poles. This simple solution lets nature do the rodent control. By installing 20 ft high poles with wooden T-bar perches, they provided birds such as red-shouldered and red-tailed hawks with a stationary platform from which to hunt squirrels. They spaced 74 raptor poles along the length of the levees. Materials and labor for each raptor pole were \$275 and they took just 1 hour to install. Hawks moved in immediately and started hunting squirrels.

With the success of the raptor pole program, County Flood Control has not needed to apply rodenticides. Fewer squirrels were noted within a year, and hawks were often seen flying off with ground squirrels in their talons. Flood Control continues to add new poles as needed, whenever fresh mounds of soil indicate squirrels are burrowing. Today the Santa Maria River levees are mostly squirrel-free. The risk of secondary exposure of wildlife to rodenticides is gone and the cost savings to the County are substantial. Most importantly, the Santa Maria levees are maintaining solid structural integrity.



THE LOMPOC PRISON FARM & DAIRY OPERATIONS

Submitted by Ruth Jensen, Agricultural Project Aide

Recently, the Ag Commissioner's office had opportunity to arrange for leaders from Santa Barbara County's Agricultural community to tour the Farm & Dairy operations at the Federal Penitentiary in Lompoc. With 3400 inmates and a very small budget, they manage to feed their population as well as several other Federal prisons in California. Inmates here earn the privilege of working on the Prison Farm. From seed to harvest, this farm is operated with minimal use of mechanized equipment.

Farm Manager Fred Hayes described the transformation of a former Pig Barn into an amazing Hydroponic Garden Housing System where 20 acres of lettuce are grown using a water recycling system. Hydroponics is a soil-less system of growing a variety of plants, particularly vegetables. Hydroponics conserve water since it is re-circulated through the system and the trays of plants also take up far less space than conventional gardens. This indoor hydroponic system also allows for almost year-round growing as long as the temperature, humidity and light are monitored and adequate for the plants.



Hydroponic lettuce production at Lompoc FCC



Dairy cow at Lompoc FCC

The Dairy operation employs inmates to train and hopefully work in the dairy industry

when they are released. Inmates care for 350 head of cows and milk them twice a day in the modern and efficient milking parlor. The milk is packaged in pint size plastic pouches, eliminating the need to dispose of bulky cartons.

The staff provided us with a briefing on the history, vocational training and education program as well as commitment to excellence. It was clear that they are proud of how they manage the entire facility and inmate population. Inmates go through an intensive Ag education curriculum that prepares them to go out into the world and succeed.

Inmates working in the milking parlor and throughout the facility showed pride and respect for their work. It really made an impression on those on the tour. The Lompoc Federal

Correctional Institution offers inmates a full range of inmate employment, vocational training and education, primarily agriculture

education and hands-on training. The training provides pre-release preparation and self-improvement opportunities so that when they are released they have skills to offer potential employers.

The Santa Barbara County Ag Commissioner's office is committed to participating in awareness, education and outreach in all sectors of the agriculture community. We sincerely appreciate the opportunity to learn and understand the Prison Farm and Dairy operations and their presence in our community.

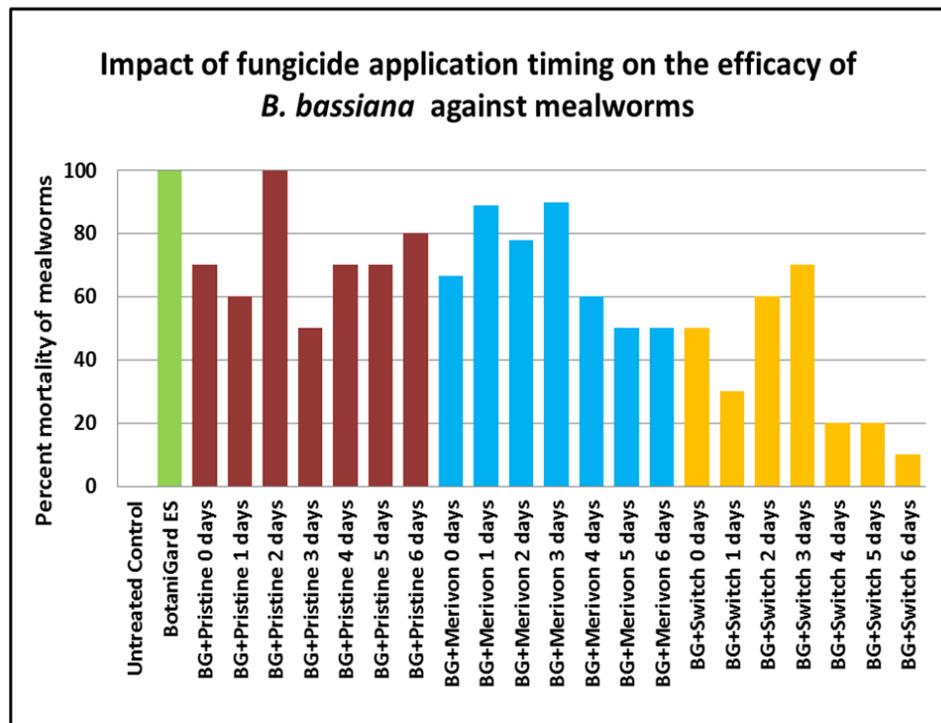


INTERACTION BETWEEN INSECT PATHOGENIC *BEAUVERIA BASSIANA* AND THREE STRAWBERRY FUNGICIDES

Submitted by Suchitra Dara, Sumanth Dara, and Surendra Dara, UCCE SB and SLO Counties

Recent studies show that the entomopathogenic fungus, *Beauveria bassiana* is effective in managing strawberry pests such as lygus bug and twospotted spider mite. However, routine use of fungicides for controlling plant diseases can interfere with the use of entomopathogenic fungus-based biopesticides. Preliminary studies indicated that Pristine® and Switch® are among the fungicides used in strawberries which are harmful to *B. bassiana*. If increasing the time interval between the application of the biopesticide and the fungicide could enhance their compatibility, it will improve the overall efficacy of the pest management. Two existing (Pristine® and Switch®) and a new fungicide (Merivon®) were evaluated for their compatibility with *B. bassiana* at different time intervals using mealworm larvae as bait insects. Mealworms were exposed to paper towels treated with fungicide, fungus, and fungicide + fungus applied at different intervals. Mortality in mealworms is an indicator of the interaction between *B. bassiana* and the fungicides. The following treatments were used in this study:

1. Untreated control
2. Positive control with BotaniGard ES®
- 3-9. BotaniGard applied 0,1, 2...6 days after treating with Pristine®.
- 10-16. BotaniGard applied 0,1, 2...6 days after treating with Merivon®.
- 17-23. BotaniGard applied 0,1, 2...6 days after treating with Switch®.
- 24-30. Pristine® alone applied 0, 1, 2...6 days prior to the exposure.
- 31-37. Merivon® alone applied 0, 1, 2...6 days prior to the exposure.
- 38-44. Switch® alone applied 0, 1, 2...6 days prior to the exposure.



Compared to the mortality in worms from *B. bassiana* alone, there was some decline in the mealworm mortality due to fungicides. However, it appears that an ideal time interval of 3 days for Merivon® and Switch® and 6 days for Pristine® is necessary before applying *B. bassiana*. Both fungicides negatively impacted mealworm mortality after 3 days. Merivon® and Switch® are probably more ideal compared to Pristine® for practical agriculture with their short-lived negative impact on *B. bassiana*. This experiment should be repeated to replicate the results.



HERBICIDES AND ORGANIC PRODUCTS ARE PESTICIDES TOO

Submitted by Bree Belyea, Agricultural Biologist



One of the issues we encounter during pesticide use monitoring inspections is the misconception that herbicides are not pesticides. Any substance intended to control, destroy, or repel a pest is considered a pesticide. Some common pesticides include insecticides, herbicides, rodenticides, fungicides, molluscicides, repellants, disinfectants and sanitizers. Spray adjuvants, growth regulators and defoliants may also be defined as pesticides. If a material has an EPA or California registration number on the label, it is a pesticide. All employees must be trained annually in safe handling procedures prior to working with any pesticide. For example, a worker spot spraying weeds with Roundup is a pesticide handler and needs the required safety training. Please see our Grower's Guide for an overview of regulatory requirements:

<http://countyofsb.org/uploadedFiles/agcomm/pue/SantaBarbaraGrowersGuide2010.pdf>

Another misconception we have found is the belief that products approved for use in organic production are not pesticides. While there are some products considered *Minimum Risk Pesticides* that are exempt from federal registration requirements because their active and inert ingredients are demonstrably safe for the intended use, many of the National Organic Standards Board and the Organic Materials Review Institute (OMRI) listed products are registered pesticides. Always check the label for an EPA or California registration number and please call our office with any questions.



WEIGHTS & MEASURES RECEIVES NEW HEAVY DUTY TRUCK

For the past 27 years the Santa Barbara County Department of Weights and Measures relied on a 1987 Heavy Duty GMC General for testing large capacity scales. The 26 ft long truck weighs in at 25,000 lbs before being loaded with another 17,500 lbs. in test standards which were moved with the assistance of a crane. Due to increased maintenance costs, we have retired "The General".

The Department is pleased to introduce our new 2013 International Maxxforce 7500SBA. The new test truck is 28 ft long and outfitted with a Palfinger PK 12001 crane capable of lifting loads of up to 12,040 lbs. The new truck will save the County thousands of dollars in maintenance costs and will get superior gas mileage with its modern emissions system.



The 1987 GMC General



The 2013 International Maxxforce



CACASA COMBINES MEETING

Submitted by Ruth Jensen, Agricultural Project Aide



CACASA group at Windset Farms, Santa Maria

The Santa Barbara County Ag Commissioner's Office hosted the Spring, 2014 Combined Meeting of the California Agricultural Commissioners and Sealers Association. The gathering of California Agricultural Commissioners from around the state, representatives of the California Department for Food and Agriculture and California Office of Emergency Services participated in a tour of Windset Farms followed by a meeting at the Public Works building in Santa Maria.

The group was met at Windset Farms by President/CEO Steven Newell who guided the group to the top of the "look-out tower" where one can see for what seemed like miles and miles of glass roof-topped greenhouses. He shared some history of the project, successes and challenges then took the group to the prep area so that everyone can don scrub clothes, shoe covers and hair caps. Due to the sensitivity of the growing processes here, this facility is quite sanitary, almost a hospital-like environment.



View from the Look-Out Tower

Steven took the group through the tomato and cucumber operations, including the cleaning, processing, packing and shipping areas.

Everyone was impressed and amazed at the precision in which Windset Farms can grow food. From the massive size, robotic equipment, glass structures and resources management to the environmental protections and labor practices they employ, it is quite understandable why Windset Farms is an award-winning operation.



Tomato production greenhouse

The group sincerely appreciated the time and information Steven shared with them. After the tour, Steven handed everyone lovely bags filled with samples of the tomatoes and cucumbers. The rest of the afternoon was devoted to enjoying a wonderful lunch catered by the local Vocational Training Center followed by a great productive meeting.



Tomato packing area



ENOLOGY & VITICULTURE STUDIES AT ALLAN HANCOCK COLLEGE

From Allan Hancock College



Sign on at Hancock

Santa Barbara County's Allan Hancock College is based in Santa Maria, Calif., with a student body of some 10,000. Alfred Koch heads its Agribusiness program, which includes courses in enology/viticulture, wine marketing and sales, and wine and food pairing. Most of the program's 200 students are from the local area, although others come from as far south as San Diego.

"We have a brand new winery, which should be ready in about two more months, and we're working to get it bonded," Koch said. He aims to produce 500-1,000 cases of high-quality wine to market commercially.

Hancock recently received a grant for basic agriculture courses from the USDA, intended to prepare students to transfer to four-year schools. "Our classes are less expensive with flexible hours so students can work and study, and people from the industry can develop their job skills," Koch explained. Hancock has a 4-acre vineyard on campus and also sources grapes from a nearby vineyard owned by Kendall-Jackson.

Read more at: <http://www.winesandvines.com/template.cfm?section=news&content=129083>

For More Information: Terri Lee Coleman at 805.922.6966 ext. 3929

SANTA BARBARA COUNTY FOODBANK: FEED THE FUTURE

Submitted by Jamie Nichols, Director of Operations Foodbank of Santa Barbara County

Our Mission

We are ending hunger and transforming the health of Santa Barbara County through good nutrition. We serve the community as a leader and expert in improving the nutritional health of our county through increased food security.

Feed People, Not Landfills

Our country wastes up to 40% of the food that is grown and produced for consumption, with food making up the largest percentage of waste in municipal landfills. However, locally in Santa Barbara County, we have areas where nearly half of the population is below the federal poverty line, and over 20% of children in our county are unsure of where their next meal will come from. Despite our county's abundance of local produce, barely half the child population eats their recommended amount of fruits and



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FOODBANK: FEED THE FUTUREcontinued from previous page

At the Foodbank of Santa Barbara County, we believe the problems of both food waste and poor nutrition have similar solutions. We solicit, store, and distribute millions of pounds of healthy food every year through our outreach programs and over 330 member non-profit partners. Our network of partners ranges from local schools and afterschool programs to emergency feeding organizations and food pantries.

Who do we serve? Last year, the Foodbank reached over 104,500 unduplicated people from throughout our county, and nearly half of the recipients are children. Our partners and services reach low-income families from across the county, and many of our programs are aimed at nutrition and food education. At the Foodbank, we know that access to nutritious food is one of the best forms of preventative healthcare, and are committed to reducing the amount of diet related illnesses throughout Santa Barbara County.

How do we get food? With 30,000 square feet of warehouse and cooler space, a fleet of over 10 vehicles, and thousands of committed volunteers, the Foodbank has the resources to source healthy food from across the county. Every day, we pick up surplus foods from local grocery stores, harvest produce that would otherwise be plowed over, or host canned drive events at local organizations. If there's healthy food available, we'll make ourselves available to get food out to those who can use it.

Why Donate to the Foodbank? Because we partner with so many organizations throughout the county, no other non-profit reaches as many people in the county as the Foodbank. By supporting us, you're not only supporting our own services throughout the county, you're supporting hundreds of local non-profits that strive to provide nutritious food to our community. We want all residents of Santa Barbara County to know how to procure, prepare, and appreciate local foods, and we need your help.

Protections and Benefits of Donating Food All of our partners are both protected and supported to donate under State and Federal Law. Since the Foodbank is a 501c3 non-profit organization, all donations are tax deductible and, under California's AB-152, commercial growers and distributors are offered additional tax incentives of 10% of inventory costs *in addition* to other Federal and State tax deductions. We track all donations down to the fraction of a pound, and can easily issue reports itemizing all donor history. Donors to the Foodbank of Santa Barbara County are also protected against liability when donating food under the Good Samaritan Act. Because the Foodbank offers a sophisticated system of inventory and food safety procedures, we have never encountered a case of food borne illness arising from Foodbank food, but all donors are protected from liability. If you participate in a community gleaning program, our volunteer team has also signed liability waivers to protect the landowners we work with.

How to Donate Food The Foodbank of Santa Barbara County gladly accepts donations of unprepared foods at both of our warehouses, located at 490 West Foster Road in Santa Maria and 4554 Hollister Ave in Santa Barbara. For large donors, we also have volunteers, supplies, totes, and trucks available for routine gleaning and pickup programs. Our Backyard Bounty Program will organize community leaders to glean and transport local produce. www.foodbanksbc.org.



DAVID CHANG, WEED MANAGEMENT AREA SPECIALIST, LEAVES AG COMMISSONER'S OFFICE AFTER 33 YEARS

David Chang has left us for an exciting new career opportunity as General Manger of Mosquito and Vector Management District of Santa Barbara County. David's last day with us was March 14th. About him, Commissioner Cathy Fisher says "David has done an outstanding job as the department's WMA Program Specialist and will leave big rubber boots to fill".

Contact David at (805) 969-5050

dchang@myvmdistrict.org



David's parting gift was this beautiful bouquet of weeds including Pampas grass, wild onion, castor bean, Arundo and fennel

CRESSIDA SILVERS, ASIAN CITRUS PSYLLID LIAISON FOR SANTA BARBARA AND SLO COUNTIES. Submitted by C. Silvers



In order for California to succeed in our fight against the Asian citrus psyllid (ACP) and the deadly disease it vectors, Huanglongbing (HLB), collaboration is essential from a variety of local, state and federal agencies, researchers and scientists, pest control professionals and of course citrus producers. The timely flow of information among these groups is key. To this end, the *Citrus Pest & Disease Prevention Program* has appointed regional grower liaisons to serve as conduits of information. Liaisons provide the grower community with updates on ACP finds and treatment protocols in their area, and relay the latest information on treatment activities and grower needs or concerns to the appropriate project cooperators. I am the new ACP/HLB Grower Liaison for Santa Barbara and San Luis Obispo Counties.

My undergraduate studies were in plant sciences at Swarthmore College in PA and I earned a M.S. in Entomology from the University of California at Riverside. I have more than 15 years experience in agricultural pest management, research, demonstration and outreach in a variety of crops. I spent five years as Project Coordinator of the USDA Areawide Pest Management Project for the invasive melaleuca tree in South Florida. Much of the remainder of my work has been in California agriculture. One of my first jobs was scouting for citrus pests in the Central Valley. I worked on the IPM program for stone fruit pests at the University of California's Kearney Agricultural Center, and did my graduate studies on biological control of avocado thrips. Most recently, I worked as Watershed Coordinator for the Central Coast Agricultural Water Quality Coalition in Santa Barbara County. Please feel free to contact me (cressidasb@gmail.com; 805 284-3310) with any questions about the program, how to best protect your citrus from the Asian citrus psyllid and HLB, or to sign up for ACP/HLB updates.



**Main Offices****Santa Barbara**

263 Camino del Remedio
Santa Barbara, CA 93110-1335
Phone: (805) 681-5600
FAX: (805) 681-5603
Hours: M-F 8:00AM to 4:30PM

Santa Maria

624 W. Foster Rd., Suite E
Santa Maria, CA 93455-3623
Phone: (805) 934-6200
FAX: (805) 934-6202
Hours: M-F 8:00AM to 4:30PM

Lompoc

401 E. Cypress Avenue
Lompoc, CA 93436-6806
Phone: (805) 737-7733
FAX: (805) 737-7735
Hours: By Appointment Only

District Offices**Carpinteria**

941 Walnut Avenue
Carpinteria, CA 93103
Phone: (805) 681-5600
FAX: (805) 681-5603
Hours: By Appointment Only

Solvang

1745 Mission Drive
Solvang, CA 93463
Phone: (805) 686-5064
FAX: (805) 686-5065

The Solvang office will continue be staffed, however the Tuesday office hour has been discontinued. To improve service to the community, all phone calls to the Solvang office will be answered by staff in Santa Barbara. Biologists are available daily by appointment in Solvang.

NEWS & ANNOUNCEMENTS

Office Closures

Memorial Day—Monday May 26, 2014

Permits, Operator ID Numbers and PAC Exams

The Office is issuing restricted material permits and operator identification numbers. Group private applicator exams are scheduled in Santa Barbara, Carpinteria, Solvang, and Santa Maria. Call your local office for an appointment to renew your permit, operator identification number or PAC.

UCCE Annual Strawberry Field Day in Santa Maria.

Wednesday, May 7, 8:30 am Manzanita Berry Farms, 1891 West Main St, Santa Maria. Free with Lunch provided. 3 CCA and 1 DPR CE units approved pre-register by May 2 (805) 781-5940

<http://ucanr.edu/2014strawberryfieldday>

www.agcommissioner.com

<http://www.facebook.com/agcommissioner>

STAFF HIGHLIGHTS

Tashina Sanders began working for the Santa Barbara County Ag Commissioner's office as a seasonal Glassy Winged Sharp Shooter inspector in 2005 while completing her undergraduate degree. She graduated from UCSB with a Bachelor's degree in Environmental Science, with specialization in environmental quality for soil and water. Tashina worked in the Santa Barbara office as an Ag Biologist from 2005 until 2010. She left the department and completed a Master's of Science in Environment and Resource Management specializing in Ecosystem Services and Biodiversity from the VU University in the Netherlands, 2011. She became employed by the Mendocino County Ag Commissioner's office as an Ag Biologist in January 2012 and worked for two



years in the Mendocino County Agriculture department before returning to Santa Barbara County as a Supervising Agricultural Biologist.

Sally Leon-Tondro is a new Weights & Measures



Inspector and her primary responsibilities will be Price and Quantity Verification Inspections

Sally grew up in Santa Barbara, CA. Sally has many years of customer service experience working for GTE, and has been co-owner of a sea charter service for

the past 25 years. Among charter boats, she has performed various duties from deckhand all the way to captain, and has even piloted a submersible vessel.

