

# Contra Costa County Agriculture and Weights & Measures Newsletter



Summer 2011

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This is a part of a series of quarterly newsletters designed to inform growers in Contra Costa County about issues important to the Agricultural community. We welcome your questions and comments about any topics in this newsletter as well as suggestions for future newsletters. Contact us at:

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## European Grapevine Moth Update

In 2009, the European Grapevine Moth (EGVM), *Lobesia botrana*, was first reported in Napa County vineyards. By the end of 2010, it had been reported in Napa, Sonoma, Solano, Mendocino, Fresno, Monterey, Merced, San Joaquin, Fresno, and Santa Clara counties.

EGVM primarily feeds on the flowers and berries of grapes, and the flowers of olives and rosemary. The larvae hollow out grape berries and contaminate the bunches with webbing and frass (insect excrement). Feeding damage may also attract other pests and lead to fungal infection.

Currently, parts of Napa, Sonoma, Solano, Mendocino, San Joaquin, Fresno, Merced, and

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**EGVM is currently under quarantine in eight California counties. Contra Costa County has had no EGVM finds at this time.**



**The control program used in 2010 for EGVM has drastically reduced their numbers.**

Santa Clara are under quarantine for EGVM. A small portion of Lake County had been included in the 2010 quarantine area due to detections in nearby areas of Napa County. The Lake County quarantine was lifted in early 2011 when experts decided the infestation in Napa County was unlikely to cross the mountain range that lies between Napa and Lake Counties.

A comprehensive program of quarantines, removal of backyard grapes, and control methods used by commercial growers has shown excellent results. During January to mid May 2011, only 94 male moths were trapped in California compared to over seventy thousand during the same period in 2010. Up until mid May 2011, Napa County had 64 EGVM and Sonoma had 9. Santa Clara had a localized infestation in Gilroy that resulted in 18 moths detected. In early May, there were three EGVM found in Nevada County and a quarantine area was established in that county. Fortunately, there have been no detections of EGVM in Contra Costa County.

The 2011 EGVM control program in quarantined counties will include fruit removal, trapping, surveys, and treatment of the quarantine core areas near sites where moths have been detected. In areas with the heaviest infestations, officials will use mating disruption twist ties infused with a pheromone that keeps the males from being able to locate the females. In Contra Costa, we monitor detection traps in commercial vineyards and urban areas throughout the county.

The EGVM quarantines primarily affect those who grow, harvest, transport, receive, process, and/or handle host crops and nursery stock. These growers and businesses must sign compliance agreements that specify how crops, vehicles, equipment, etc. are to be handled and tracked during the quarantine.

The University of California Cooperative Extension has been working to help grape growers in infested areas find control methods for EGVM. They have updated recommendations for 2011 that include a list of both conventional and organic pesticides for EGVM control. There is also a EGVM degree-day model available to help growers time their insecticide treatments in order to get the best results.

If any EGVM detections in Contra Costa County result in quarantines, we will contact affected growers as soon as possible. We will also post information about quarantine restrictions and links to the University of California Cooperative Extension recommendations on our website. If a quarantine occurs, we will need to be able to contact growers quickly. Please make sure we have your most current phone number and email address. If we can reach you without delay, it will help avoid interruption of your harvest and the shipment of your crops.



**If EGVM is detected in Contra Costa County, we will need to be able to contact growers as soon as possible.**

## Pesticide Residue Testing

In the early twentieth century, the public became increasingly concerned about contaminated food and drugs. The problem of pesticide residues on food was one of the most serious safety concerns. In 1925, there were so many illnesses in Great Britain from arsenic residues on American-grown fruit that the British Health Ministry issued a warning not to buy California apples.

In response, the California Legislature passed a law in 1927 making it illegal to pack, ship, or sell fruits and vegetables with harmful pesticide residues. The law also required a certificate of chemical analysis for all produce exports. The goal of the law was to promote California agriculture by making sure no shipments of California fruit had excess residues. California's pesticide tolerances remained more strict than those of the Federal government until 1996, when Federal legislation prohibited states from setting their own tolerance standards.

As a part of that 1927 law, the California Department of Agriculture set up a residue testing program that analyzed fresh produce both for export certification and for enforcement monitoring. Growers whose crops repeatedly had residues over the allowable levels faced hefty fines and even jail sentences. At first, the residue testing program just screened for arsenic but was expanded over the next several decades to test for additional new pesticides.



**Arsenic was a commonly used pesticide during the early twentieth century.**



**California's pesticide residue monitoring program is the most extensive in the nation.**

The issue of pesticides and their effect on human health became a very hot topic in the 1980's. Public attention was increasingly drawn to the subject of pesticide residues in food, particularly on fresh produce. Many reports and studies concluded that the risk from dietary exposure to pesticides, especially for infants and children, was unacceptably high. Federal and state agencies were criticized for not doing enough monitoring of pesticide residues on both domestic and imported food products.

California responded by greatly expanding its residue testing program. Various types of samples were taken: of crops right before harvest, raw produce going to processing, retail and wholesale market stock, and commodities known to have been treated with pesticides of special health concern. At its height, the program tested over 12,500 samples a year.

Data gathered from the program showed that the California and federal pesticide regulations did adequately protect infants and children from dietary pesticide risks. Most produce has little or no detectable residue by the time it reaches market. This finding, plus budget cuts, led to reductions in the size of the sampling program. In 2009, the California program tested 3,429 samples, making it the most extensive state residue sampling program in the nation.

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**Multi-residue screens can test for many pesticides at the same time.**

Currently, the California Department of Pesticide Regulation (DPR) samples fresh produce at markets, ports, border stations, and packing sheds. Some samples are selected because of evidence that they might have an illegal residue, but most are simply routine surveillance samples. There is a special emphasis given to sampling certain types of produce: those typically consumed by infants and children, commodities that have had higher rates of illegal residues in the past, and crops normally farmed using higher health risk pesticides.

At the lab, the collected samples are tested using a multi-residue screen that can detect more than 200 pesticides and their breakdown products. Some samples also receive analysis for non-screenable pesticides of special enforcement concern. The test results are shared with the federal government as a part of a cooperative monitoring agreement.

The focus of the residue monitoring program is to enforce the U.S. EPA pesticide residue tolerances. EPA sets these limits based on extensive research plus an added ten-fold margin of safety to protect infants and children. Illegal residues are those found to be higher than the legal limit or when produce is found with even a trace of a pesticide not allowed to be used on that crop. Modern testing methods can detect residues at levels far below the established tolerances.

When illegal residues are detected, DPR immediately removes the produce from sale and traces its distribution. If the produce was grown in California, DPR investigates how it became contaminated and takes appropriate enforcement action. This includes ordering the contaminated produce destroyed, stopping harvest if any remaining crop is still in the field, and fining growers or applicators who have violated the law. If the produce came from out of state, it is held under quarantine and the case is referred to federal authorities for investigation.

In 2009, DPR collected 3,429 samples of more than 180 kinds of commodities. Of the samples, 57.4% were grown in the U.S., 41.6% were imported, and 1% were of unknown origin. California produce represented about two-thirds of the domestic samples.

Overall, only 2.4% of the overall samples had an illegal residue, 24.2% had residues below the legal tolerance limits, and 73.4% had no detectable residues at all. Of the domestic samples, about 1% had illegal residues. The imported samples had residues that exceeded U.S. EPA tolerances about 4% of the time on average.

Certain commodities produced in certain locations tended to have a higher proportion of samples with illegal residues. Although illegal, most of these residues were at very low levels. Some Mexican commodities (tomatillos, chili peppers, papayas, limes, and bitter gourds) had an overall 4.6% of samples with illegal residues. Taro root and ginger from China, as well as snow peas from Guatemala, also had more illegal residues than other imported products.

Years of residue monitoring testing have found that most fresh fruit and vegetables have little or no detectable pesticide residues. When residues are detected, they are generally measured at a fraction of a part per billion, which is well below the allowable tolerances. Imported produce violates the EPA pesticide tolerances more often than U.S. grown produce. However, violation rates for both types are very low.

## Recycling Companies

California's beverage container recycling program provides consumers with the chance to redeem recyclable drink containers for cash. As a result, many Californians take their household recyclables to for-profit recycling companies. Recycling drives for aluminum, glass, and plastic drink containers have also become a popular fund-raiser for charities, schools, churches, and other groups. However, like most businesses, recycling companies vary in the accuracy of their transactions with the public.

California consumers pay California Redemption Value (CRV) when they buy beverages from a retailer. The current CRV is 5 cents per container for those less than 24 ounces and 10 cents for 24 ounces or greater. Most, but not all, beverage containers are eligible for CRV. When consumers take the containers to a recycling company, they get the CRV back. In addition to the CRV, consumers may receive a scrap value.

Recycling companies make most of their profit from state-funded processing payments. These payments range from \$80 a ton for glass to \$1165 a ton for certain types of plastic. Aluminum and some other metals are not eligible for state payments because of their high scrap value. Recycling companies can also profit from accepting certain types of electronic waste. For these, they get e-waste payments funded by



**There are over 2,200 certified recycling companies in California.**

consumer fees on electronic products and also by selling the e-waste to electronic recyclers.

A recycling company must be certified by the California Department of Resources Recycling and Recovery in order to accept empty beverage containers and pay CRV to consumers. There are over 2,200 certified recycling centers in California. If the recycler uses a scale to weigh the materials presented for recycling, the scale must have been approved, tested, and sealed by the local County Division of Weights & Measures. It is illegal for recyclers to use a scale for commercial weighing that is incorrect and any suspected violations should be reported.

When consumers bring materials in, recycling companies must inspect each load to find out if it is eligible for CRV. They have the option to refuse to accept containers which, in their opinion, are excessively contaminated with dirt, moisture, or other foreign substances. For contaminated loads, they may also reduce the CRV per pound they pay back to the consumer based on how badly the load is contaminated. If this happens, the consumer has the right to accept the discounted price, clean up the load and separate the the CRV from non-CRV material, or take the material back. For this reason, consumers should sort, empty, and rinse containers thoroughly before recycling them.



**Many people choose to take their aluminum, glass, and plastic to recycling companies.**

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California law allows consumers the option of being paid based on the count instead of by weight for up to 50 empty beverage containers of each material type. This means you can bring in up to 50 aluminum, 50 glass, and 50 plastic containers in a single visit and request to be paid by count. Consumers can also make more than one visit per day to a recycling center and be paid by count on each visit.

Most consumers who use recycling companies assume they are getting a fair deal. Unfortunately, undercover checks of recycling centers by County Weights & Measures inspectors throughout the state have found that a high proportion of companies shortchange their customers. Undercover checks by inspectors in San Diego County in 2004 found that almost one in four companies paid less than the actual amount of recyclables. While the shortages may each only be for a small amount, over thousands of transactions, the money adds up quickly.

Most of these shortages are probably not intentional. Common reasons for errors include: incorrect calculation of payment rates, using the wrong type of scale, employee carelessness, poor scale calibration, scale wear and tear, and failure to properly “zero” the scale. Zeroing means to weigh the company’s empty container and set the scale at zero before filling it with the consumer’s recyclables. This allows for an accurate measure of the weight of recyclables. Companies may assume that all their containers weigh the same.



**Consumers can be paid by count on up to fifty beverage containers of each material type.**



**Containers used to weigh recyclables should either be zeroed or marked with their weight.**

Instead, they should either weigh the container and zero the scale for each transaction or mark the outside of each container with its weight.

Contra Costa County Weights & Measures inspectors conduct undercover investigations at recycling companies. To prepare, they collect CRV recyclable materials from various sources to sell to the company. The materials are cleaned, sorted by type, and weighed on an official scale. Knowing the net weight of the recyclables to be sold allows the inspectors to compute exactly how much money the company should pay out.

The inspectors then take the recyclables in an unmarked vehicle to the recycling company. The company attendant weighs the material and issues cash or a payment receipt. Throughout the weighing process, the inspector notes how the material was weighed, if the weight of the container was taken into account, whether the consumer would be able to see the scale’s weight indicator, and how much was paid.

The first time a company is found underpaying for CRV recyclables, they receive a notice of violation. The company’s scales may also be checked to make sure they are accurate. For repeat or very serious violations, the case may be referred to the County District Attorney.

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**When you recycle, you help the environment and get back the CRV you paid at the store.**

### **Tips for consumers when selling recyclables**

Separate your CRV recyclables by types (aluminum, glass, and plastic) before going to the recycler. Make sure the containers are empty and clean since recyclers will pay less than the CRV for contaminated loads. It is better to leave aluminum cans uncrushed so the recyclers can inspect them more easily. Estimate either the weight or the number of containers you will take to the recycler so you have an idea of how much money you should get back.

Recycling centers can be found in many locations. The types include vending machines that accept bottles and cans, small stations outside supermarkets, and large companies that specialize in accepting many different types of materials. To find locations near you, call 1-800-RECYCLE or go to [www.calrecycle.ca.gov](http://www.calrecycle.ca.gov).

When you get to the recycler, check the scale that they will use. It must have an indicator that shows you the weight of your recyclables and a county seal showing it has been tested and approved by a County inspector. Remember that you have the right to be paid on a per-container basis for 50 or less of each type. Watch the weighing of the containers and notice the weight on the scale display. Make sure the operator wrote that amount on the ticket to be taken to the cashier. Check the price on the receipt and compare it to see that it matches the posted price sign.

## **Contra Costa County Yesterdays**

Balfour, Guthrie & Company, a British shipping company, opened an office in San Francisco in 1869. Originally, they exported California wheat and imported industrial goods from Britain. The company also owned the California Wharf and Warehouse Company just west of Port Costa.

In 1910, Balfour, Guthrie & Company expanded their operations into east Contra Costa County. The company bought over 12,000 acres of farmland and planted huge orchards. The land included present day Oakley, Knightsen, and Brentwood and was a part of the Rancho Los Meganos that had once belonged to John Marsh.



courtesy Contra Costa County Historical Society

**A packing shed owned by the Balfour, Guthrie & Company where cut fruit was loaded on trays to be dried in the sun.**

Balfour, Guthrie & Company was responsible for many farming innovations in Contra Costa County. In 1913, they provided most of the financing to start the East Contra Costa Irrigation District. Their fruit drying yard near Brentwood was the largest in the world and had its own small gauge railroad system to move the fruit on drying trays from the packing shed to the sulphur treatment area then to the drying yards. The company was also one of the first growers to use airplanes to spray their fruit orchards.

By the 1940's, Balfour, Guthrie & Company had sold off most of their land to other growers. Today, the company is remembered in many road and place names in east Contra Costa County.



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