

University of California

Agriculture and Natural Resources

Making a Difference for California

U.C. COOPERATIVE EXTENSION/ COUNTY OF VENTURA FARM ADVISOR

669 COUNTY SQUARE DR. #100
VENTURA, CA 93003

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Every year fair season is a busy time for our Master Gardeners and 4-H club members. A flurry of activity and excitement pervades as exhibits and presentations are prepared and fair entries readied for competition.

This year's theme was "Western Nights and Carnival Lights" and featured thousands of exhibits for visitors to enjoy. One of the key objectives of the Fair is to educate people about the importance of agriculture in California.

The Fair serves as a valuable outreach venue for our 4-H and Master Gardeners to showcase their knowledge and accomplishments in the community. According to a fair survey taken in 2002, 81% of attendees felt they knew more about agriculture than when they arrived (attendance represented 93% of the county).

Fair Weather Every Year

This is a significant event for 4-H members whose efforts can be found in exhibit areas and buildings such as home arts, arts and photography, livestock, and food competitions.

The Master Gardeners were found in the atria outside the Floriculture building with a display and representatives ready to answer questions and dispense gardening information to visitors.



Master Gardener's 2009 fair display

We're the University of California Cooperative Extension/Farm Advisor...

connect local CE advisors to the campus-based Agriculture Experiment Stations and other resources that may provide appropriate research and new technologies to address myriad issues and needs throughout California.

University of California Cooperative Extension (UCCE), known in the county as the Farm Advisor, takes information developed on its campuses and research centers, and makes it available to local communities. In addition, CE experts conduct applied research of their own to address local county problems in the areas of sustainable agriculture and natural resources, water quality, exotic and invasive pests, gardening, nutrition, youth development, and family and community development.

UC COOPERATIVE EXTENSION REPORT

Fall 2010

ACP Update — Periwinkle Experiments

The Asian Citrus Psyllid (ACP) spreads the Huanglongbing (HLB) bacteria that has destroyed over 200,000 acres of citrus in Florida and threatens citrus crops worldwide. Current research may pave the way toward viable treatment options.

The HLB bacteria is being studied by scientists at the U.S. Department of Agriculture and the University of Florida Indian River Research and Education Center to test the effectiveness of periwinkle in fighting the bacteria.

Periwinkle, an ornamental plant, is infected from HLB-infected lemon trees. Experiments are then run to find optimal nutrient and soil treatments for regenerating those periwinkle with high infection rates.

Periwinkle cuttings responded well to two of the chemical treatment compounds tested.

Although the results have yielded some valuable information on a potential option for combating this pernicious citrus condition, the experiments were confined to a greenhouse setting and the compounds still need to be subject to field trials and approved for use by regulatory agencies.

To stay up-to-date on the ACP please visit:

<http://ucanr.org/blogs/venturacountyucc/> or

<http://www.farmbureauuvc.com/pest.html>



Waxy residue left by the psyllid



Periwinkle



Gold-Spotted Oak Borer

An informational brochure on the Gold-Spotted Oak Borer can be found at:

<http://groups.ucanr.org/GSOB/files/70958.pdf>

Gold-Spotted Oak Borer Damages Trees

Ventura County is home to many oak trees. This shady and popular tree hosts a variety of insects both damaging and benign. The Gold-Spotted Oak Borer (*Agrilus coxalis*) falls into the first category.

This insect is distinguished from other pests in that it attacks large, healthy trees. Its larvae feed under the bark, damaging the limbs and branches and eventually causing tree death.

Since 2006 this pest has been responsible for killing over 17,000 oaks in California.

Measures can be taken that will help keep this insect in check:

- Don't transport oak firewood into or out of campgrounds or parks
- Chip infested oak wood into 1-inch pieces
- Cover stored oak firewood with 6 mm-thick, UV-stabilized, durable plastic tarps in the spring. Secure all edges to the ground.
- Season oak firewood by removing the bark and placing the wood in direct sunlight.

Earwigs - Friend or Foe?

Earwigs, nocturnal insects with a serious set of pincers, are much more benign than their appearance suggests. They like to hide in the daytime in dark, cool, moist places in the yard.

Friend: If your outdoors areas mainly consist of lawn, trees, woody ornamentals or native plants, earwigs are not a concern and can be beneficial feeding on aphids and other insects.

Foe: If you grow vegetables, herbaceous flowering plants, sweet

corn, or plants with soft fruits like strawberries and apricots, earwigs can damage seedling vegetables and chew holes in your fruit and flowers.

The Farm Advisor/UC Cooperative Extension office has a supply of free informational cards on earwigs and other pests available in the office reception area. These cards provide useful advice on reducing outdoor hiding places, trapping them and making your home earwig-proof.

Additional information on earwigs and pest management can be found on



Earwig feeding on young plant

the UC Integrated Pest Management (IPM) website at:

<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74102.html>

Avocado Freeze

After the county landscape experiences an unusual cold snap, you may find your warm weather-loving avocado trees are looking different. The leaves are firm and brittle and possibly curled, some appear lifeless. Your trees have likely experienced freeze.

Examining the tree further, areas of the twigs or wood look as if they've been water-soaked or discolored. In the older branches and trunks there may be splitting or loosening of bark.



Freeze damaged avocado leaves

The only treatment that needs to be done right after a freeze is whitewashing with a white latex paint diluted with water. Whitewashing will protect exposed and defoliated twigs and branches from sunburn, something that can cause severe damage.

The whitewash spray needs to appear white on the tree, so it's important not to dilute too much.

Pruning can be delayed until spring when new growth appears. Irrigation should be done carefully and less frequently as freeze-damaged trees require less water.

Damaged trees should be evaluated before applying fertilizer to determine what mineral deficiencies are in evidence. Nitrogen fertilizer should be greatly re-

duced in the case of some damage.

If the tree isn't too greatly injured, the leaves will slowly recover, but may have dark flecks left on the leaves.

For further information on rehabilitating freeze-damaged avocados see:

<http://ucanr.org/blogs/blogcore/postdetail.cfm?postnum=2262>

A chart of critical temperatures for several varieties of avocado can be found here:

<http://ucanr.org/blogs/blogcore/postdetail.cfm?postnum=2155>

Substrate Research May Yield a Better Strawberry

Last May Dr. Oleg Daugovish held a seminar on alternate fumigants for strawberry production. Among the group of speakers were Ian Greene from the California Strawberry Commission and Tom Sjulin from Driscolls, who spoke on raised bed trough substrate systems.

This system of growing strawberries in a raised trough filled with substrate is more commonly and successfully used in Europe. As restrictions on fumigant use in California become more stringent, researchers are investigating methods of minimizing or eliminating fumigants with alternate growing options.

The advantage of growing in substrate is a greatly reduced potential for plant diseases and weeds thus eliminating the need for fumigants. The research is crucial in determining the best methods of adhering to requirements while maintaining and improving strawberry quality and production and remaining profitable.

The experiments were conducted on grower fields in Santa Maria and Camarillo using seven types of substrate mixtures. Through trial and error various types of covers, fertilizers and techniques were employed with early results showing improvements in plant quality.

An audio and Power Point presentation of this talk can be found at:

http://ceventura.ucdavis.edu/Vegetable_Crops/Strawberry.htm



Raised trough bed

Scroll down to Raised Bed Trough Substrate Systems (presented in three parts)

Strawberry Production Meeting

Dr. Oleg Daugovish hosted the 9th annual Strawberry Production Meeting in September at the Freedom Center in Camarillo.

The meeting featured seven UC experts who spoke on a variety of subjects pertinent to strawberry growers. The topics covered the latest updates including plant disease, research, field trials, weeds and pests.

Lunch was provided and the content was presented in both English and Spanish

Dr. Daugovish conducts similar presentations several times a year. Please contact the Farm Adviser/UC Cooperative Extension office or call 805-645-1452 if you would like to be on the contact list for these meetings.



Arundo, aka giant reed.

Powdery Mildew

Powdery mildew, a plant disease that can be found on leaves, flowers, fruits and shoots, flourishes in the dry California summer weather.

This mildew can be responsible for creating yellowing, die-off, reduced crop yields, shortened production times and diminishing taste and quality in food crops.

UC ANR has several free and informative publications that can be used for reference on this and other plant diseases.

For home gardening see:

[https://ucanr.org/freepubs/finalpage.cfm?
s=7406&cat=6&subcat=0](https://ucanr.org/freepubs/finalpage.cfm?s=7406&cat=6&subcat=0)

For mildew on ornamentals see:

[https://ucanr.org/freepubs/finalpage.cfm?
s=7493&cat=6&subcat=0](https://ucanr.org/freepubs/finalpage.cfm?s=7493&cat=6&subcat=0)

For commercial growers information on powdery mildew by crop see:

[http://www.ipm.ucdavis.edu/
PMG/crops-agriculture.html](http://www.ipm.ucdavis.edu/PMG/crops-agriculture.html)



Powdery mildew infects roses

Invasive Species - Arundo

It resembles bamboo and was introduced into the Americas as a building material by early immigrants. It was thought to prevent erosion and was planted by streams, but soon proved to be more of a nuisance.

Arundo donax grows at alarming rates and creates several serious problems. It consumes lots of water, destroys fish and wildlife by displacing native plants that provide food, shelter, and breeding grounds for fish and wildlife, and is highly flammable.

It is capable of growing so quickly and spreading rapidly in fire devastated areas that other native plants

that would normally provide a fire-resistant buffer are not able to regain a foothold. In California and Texas, arundo is listed as a noxious weed.

To learn more about this plant and what you can do to control it, pick up a copy of "Arundo-Streamsider Invader," an informative free pamphlet available in the Farm Advisor/UC Cooperative Extension office reception area.

Also, check out this topic on our blog:

[http://ucanr.org/blogs/blogcore/
postdetail.cfm?postnum=3071](http://ucanr.org/blogs/blogcore/postdetail.cfm?postnum=3071)

Alternaria Disease

Alternaria is a fungae species causing common plant disease that damages a wide variety of fruits and vegetables. *Alternaria* spores usually grow on host crops during rainy or moist periods, their fungus settling and growing on plant residues.

Some spores can be airborne transferring the infection to other individual plants, and sometimes the fungus is seed-borne leading to damage. Weaker plants are more susceptible to invasion than healthier plants.

The first signs of the disease are small, circular, dark spot which may turn gray, gray-tan or near black as they grow. Yellow halos can develop around the infected spot and dark, sunken lesions can be found on roots, tubers, stems and fruits.

There are several ways to reduce the odds of *Alternaria* thriving on plants. Using disease free or treated seed, rotating crops so that susceptible plants follow non-host crops, weed control and crop residue destruction are all good preventative measures. In addition, ultraviolet light and certain fungicides have been effective against this disease.

For additional information on *Alternaria* please see:

[http://ucanr.org/blogs/blogcore/
postdetail.cfm?postnum=3101](http://ucanr.org/blogs/blogcore/postdetail.cfm?postnum=3101) or

[http://anrcatalog.ucdavis.edu/
pdf/8040.pdf](http://anrcatalog.ucdavis.edu/pdf/8040.pdf)

USDA Report on Local Food Systems

A USDA study, "Local Food Systems: Concepts, Impacts, and Issues," was recently released. It explores alternative definitions of local food, estimates market size and reach, describes the characteristics of local consumers and producers, and examines early indications of the economic and health impacts of local food systems.

Key findings were:

- There is no generally accepted definition of "local" food. Geographic distance varies by regions, companies, consumers and local food markets.
- Consumers who value high-quality foods produced with low environmental

impact are willing to pay more for locally produced food.

- Local food markets account for a small but growing share of total U.S. agricultural sales.
- Production of locally marketed food is more likely to occur on small farms located in or near metropolitan counties.
- Federal, state, and local government programs increasingly support local food systems.
- Earlier this year, very few studies had examined the impact of local food markets on economic development, health, or environmental quality.

For the complete report see:

<http://www.ers.usda.gov/Publications/ERR97/ERR97.pdf>



Farmer's Market Produce

Master Gardeners Produce



The Ventura County Master Gardeners held a series of free classes at the Oxnard Senior Service Center in July.

Class gardening topics focused on learning how to create a sustainable landscape, California native plants, low cost/no cost gardening and water saving tips.

Check out some upcoming events:

10/2-10/31 - Pumpkin Patch. Saturdays and Sundays. The annual Hansen Agricultural Center (Faulkner Farms) Pumpkin Patch. Bring the kids. For more information call the Rotary Club Pumpkin Patch line at 888-522-1884.

11/6 - Winter Home Gardening Workshop. A full day of gardening education with presentations by UC advisors and horticulture experts at the Faulkner Farm. Includes breakfast, snack, lunch and access to the Master Gardener plant sale. \$50. Registration forms can be obtained our website at <http://groups.ucanr.org/vcmg/>.

1/29 - Spring Mastering Your Home Garden Workshop. See above website.

Have a home gardening problem? Call the Master Gardener Help-Line on Tuesday or Thursdays from 1-4:00

**805-645-1455 or email:
MGVentura@ucdavis.edu**

Camino del Sol Community Garden

On July 15 there was a ground breaking at the Camino del Sol Community Garden in the La Colonia area in Oxnard. Residents in the area were encouraged to attend and learn about gardening.

Officials from the county and city used gold-plated shovels to break ground at the garden. Several local organizations worked together to bring about the event designed to involve citizens in making better food choices.

Expenses for the garden are funded by a grant aimed at building community gardens in the county. The project seeks to bring members of the neighborhood together and address the problem of obesity and diabetes through education and hands-on gardening experience.

Heat Illness Prevention

Agricultural workers and other employees working outdoors are susceptible to heat related illness in California where our beautiful weather can be too much of a good thing.

In warm weather outdoor workers can succumb to heat stroke, heat exhaustion, heat cramps, heat syncope and heat rash very quickly.

California employers must take four preventative steps:

Train: All supervisors and managers must be trained about heat illness prevention.

Water: Provide enough water so each employee can drink at least one quart per hour, and encourage them to do so.

Shade: Provide access for at least five minutes of rest when an employee believes he or she needs a preventative rest period. They should not wait to do so.

Planning: Develop and implement written procedures for complying with the Cal/OSHA Heat Illness Prevention Standard.

An employer training kit and instructive heat illness prevention webinar is available at the Cal/OSHA at:

<http://www.dir.ca.gov/dosh/HeatIllnessInfo.html>



WEB SURFING

Take a cruise on the information highway...

Free ANR Downloads

UC Agriculture and Natural Resources (ANR) has a considerable library of previously for sale publications that have been converted into free downloads.

Subjects include diagnosing soil problems, 4-H information, plant diseases, agritourism, invasive pests, weed control, family care giving, animal husbandry, nutrition and more.

These downloads are another way for UC to expand its educational outreach to the community.

Check out this great new feature at:

<http://anrcatalog.ucdavis.edu/FreePublications/>

For sale publications may be purchased at a discount by using the Farm Advisor/UCCE office promotion codes of **PRVEN56** to get 10 percent off your order. A portion of that purchase will go toward benefiting our local programs. Our catalog can be found at:

<http://anrcatalog.ucdavis.edu/>

Labor and Agriculture

The Merced County CE website features a link to a special section on Agricultural Labor Management. It includes a conflict management book, articles, papers, research, videos, labor law and other information related to labor in agriculture.

Growers and farmers from all over the state can benefit from this comprehensive resource. UC Labor Management Advisor, Gregorio Billikopf Encina, provides an introduction and links to the above reference material many of which he has written.

There are also materials and information available in Spanish.

To learn more, visit the following webpage:

<http://www.cnr.berkeley.edu/ucce50/ag-labor/>

Food Preservation

The UCCE office has seen an increase in calls and inquiries about home canning and food preservation. A growing focus on home produced foods and a shaky economy has combined to rekindle interest in this time honored practice.

The National Center for Home Food Preservation, funded by the USDA Cooperative State Research, Education and Extension Service, provides an informative resource on home preservation and canning.

New and experienced canners can learn about canning safety and preservation methods, take a self-study course, find seasonal tips and view videos and presentations.

For more information on home food preservation, see this website:

<http://www.uga.edu/nchfp/>

GreenMyParents

GreenMyParents is a movement dedicated to helping youth teach other youth and their parents how to save the planet and save money. Their goal is to save \$100 million in energy costs throughout the next year by implementing green practices within the home.

They seek to bring home the idea that small do-able changes can result in big savings.

4-H and other youth organizations have been involved with the project. The Science Engineering and Technology (SET) program created a list of 10 easy things you can do to reduce energy consumption in their homes.

To learn more about GreenMyParents link into:

<http://www.greenmyparents.com/>

Published Research

UCCE Ventura County academic, research and program staff publishes the results of the wide-range of research that UCCE conducts, so that it may benefit others and increase the body of knowledge available on topics vital to the sustainability of agriculture. This is an area in which Ventura County staff excels. Below are some recent publications produced by members of our staff.

Samtani J. B., H. A. Ajwa, S. A. Fennimore, R. E. Goodhue, O. Daugovish and Z. Kabir. 2010. *Weed Control Efficacy and Economics of 1,3-Dichloropropene and Chloropicrin Applied at Reduced Rates under Impermeable Film in Strawberry Beds*. Accepted to Hort Science on September 28, 2010.



Save the Date....

10/14 - Landscape Disease Symposium. UCCE Plant Pathology Advisor Dr. Jim Downer will host a symposium at the Camarillo House in Camarillo. The event will feature a lineup of speakers covering a variety of topics relevant to keeping your landscape healthy. It includes lunch. The fee is \$65 for early registration. Walk-in fee is \$85. For questions, please contact Dr. Downer at 805-645-1458 or at ajdowner@ucdavis.edu. Registration forms are available at:

http://ceventura.ucdavis.edu/newsletterfiles/Landscape_Notes25182.pdf

"Every great advance in science has issued from a new audacity of imagination."

John Dewey

10/16 - 11/17 - Trick or Treat So Others Can Eat (TOTSOCE).

This community service project is organized by Ventura County 4-H to benefit FOOD Share, Ventura County's food bank. The canned food drive benefits over 38,000 monthly clients and is the only regional food bank that distributes collected food through a network of 240 certified charitable agencies. These agencies serve children, families in crisis, low-income seniors, the homeless, handicapped, disabled and many others living within the cities and communities of Ventura County.



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**U.C. COOPERATIVE
EXTENSION/
COUNTY OF VENTURA
FARM ADVISOR**

**669 COUNTY SQUARE DR. #100
VENTURA, CA 93003**

Our mission is to serve the people of California through the creation, development and application of knowledge in agricultural, natural and human resources.



We Are...

County Director:

Dr. Rose Hayden-Smith

County Advisors:

Dr. Oleg Daugovish

Dr. Jim Downer

Dr. Ben Faber

Julie Newman

Research Staff:

Maren Mochizuki

Cross County Advisors:

Dr. Carl Bell

Dr. Sabrina Drill

Program Representatives:

Suzana Bruzzone-Miller*

Leah Haynes

IT Technician:

Steve Griffin

Support Staff:

Tisha Fisher

Cris Johnson

Chris Webb

**UC Hansen Agricultural Center*