

CROP CURRENTS

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JANUARY 2004	
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WEATHER REPORT

I have included a summary of the rainfall and chill hour accumulation from the Brentwood CIMIS station, below. We are a little above our normal rainfall as of December 31st. This has gotten us off to a good start in replenishing soil moisture and leaching salts. However, we are a little below “normal” for our chill accumulation, as we have been for the past 2 years at this time. Without the required amount of winter chill, deciduous trees may drop buds, break fewer buds, break buds late, and/or have an uneven and prolonged bud break. All these can lead to reduced pollination, set, yields and harvest uniformity.

If you have internet access, you can update these records at your convenience through the Fruit and Nut Research and Information Center web site (<http://fruitsandnuts.ucdavis.edu>). Just click on the “Weather Services” button.

RAINFALL (inches)			
MONTH	2003-2004	2002-2003	AVG
October	.1	0.0	0.7
November	1.2	2.4	1.1
December	3.9	6.2	1.7
January		.8	3.0
February		1.5	2.8
Mar		1.5	1.5
April		1.8	0.7
May		.7	0.7
June		.0	0.3
July		.0	0.1
August		.6	0.1
September		.0	0.3
TOTAL	5.2	15.5	13.0

ACCUMULATED CHILL HOURS												
MONTH	2003-2004	2002-2003	2001-2002	2000-2001	1999-2000	1998-1999	1997-1998	1996-1997	1995-1996	1994-1995	1993-1994	AVG
November	113	125	74	281	101	123	41	128	96	277	212	148
December	324	368	240	631	451	589	422	376	309	753	655	492
January		589	596	1013	640	1007	652	691	579	879	995	807
February		759	777	1226	715	1209	756	821	688	966+	1215+	903

PESTICIDE SAFETY TRAINING IN SPANISH

All farmworkers are required to have a pesticide safety training before they begin work for the season. *Pesticide Handlers* (anyone who applies, mixes, loads, flags, or otherwise handles pesticides) need this training every year. *Fieldworkers* (who work in areas where pesticides have been applied but do not handle pesticides themselves) need to be trained on pesticide safety at least every 5 years.

UC Cooperative Extension and the Contra Costa County Department of Agriculture are again offering free classes that meet these training requirements. All classes are given in Spanish.

Brentwood classes will be held at:
Delta Community Center
730 Third St, Brentwood

Classes for Pesticide Handlers

- Thursday, **February 19**
8:00 – 10:30 am
- Thursday, **March 4**
8:00 – 10:30 am

Classes for Fieldworkers

- Thursday, **April 15**
8:00 – 10:00 am
- Thursday, **May 6**
8:00 – 10:00 am

Richmond classes:
To be announced

If your employee(s) cannot attend one of these classes, any certified commercial applicator (PCA, PCO, QAC, QAL) or private applicator may legally provide the training.

To Register:

Call UC Cooperative Extension at (925) 646-6540 by the Monday before the Thursday class to let us know how many people from your operation will be attending. This assures that we can prepare sufficient materials for all attendees.

STATE BUDGET CUTS AFFECT UC COOPERATIVE EXTENSION

In August the 2003-04 state budget was finally signed containing a 14% budget cut for UC. As UC enrollments have increased by 18%, all the non-instructional programs were more severely cut to preserve resources available for student instruction. This includes Cooperative Extension (CE) which received a 25% permanent cut as well as the Agricultural Experiment Station (AES) which received a 20% permanent cut. Additional cuts are expected mid year and next year.

What does this mean in terms of CE/AES programs? It means that statewide at least 80 CE county advisor positions, 34 CE/AES support positions, and 200 positions on the 3 land grant campuses have been lost since August. So there will be a lot fewer resources available to respond to growers needs and support a competitive California agriculture.

What does this mean specifically to Contra Costa (CCC) and Alameda County (AC) growers? We've lost 2 advisor positions: Al Lochmann, CCC Director/Env. Ed. Advisor and Karen Wilkins, Horticulture Advisor for CCC, AC, SCC. These positions will not be refilled! The 3 advisors in CCC have decided to rotate the administrative responsibilities of the county director on a yearly basis. I have agreed to take the first shift which will consume half my time for the next year. So CCC and AC growers have essentially lost an additional half a Farm Advisor. My priorities will be to respond to grower's questions and concerns and reduce my research program for the coming season. Please be patient.

CE/AES has initiated a serious restructuring effort to deal with these budget cuts. If you would like to provide input on the future of CE programs, I invite you to participate in one of the afternoon **Listening Sessions** which will be held: Jan 29 at San Luis Obispo; Feb 5 at Riverside; Feb 12 at Redding; Feb 19 at Parlier; and Feb 26 at Davis. You may register (or submit comments) online at <http://groups.ucanr.org/directions/> or by phone (510) 987-0027 before Jan 15.

VINE MEALYBUG UPDATE

Vine mealybug is a relatively new pest in California grapes. The infestation had been largely confined to the Coachella and southern San Joaquin Valleys until 2002. That year the pest was found in several vineyards around the state, late in the season. Most of these remote infestations have been traced back to contaminated nursery stock or equipment from infested areas.

In the spring of 2003, we found a single vineyard in Contra Costa County with a small infestation. The vineyard was immediately treated and closely monitored for any escapes. No more were found and although the vineyard will be monitored for at least another year, it looks like we may have eradicated the pest due to early detection and fast corrective action.

In the summer of 2003, we began a cooperative and comprehensive monitoring program in both Contra Costa and Alameda counties to determine if there were any other infestations here. CDFA provided traps. I provided training on identification and trap use. The County Agriculture Departments, growers, and I placed traps and brought them in for periodic examination under the microscope. Any suspect traps were sent to CDFA for confirmation.

No new infestations were found in Contra Costa County. One small infestation was found in Alameda County. That vineyard was immediately treated and is continuing to be watched and retreated if needed. The monitoring program was quite comprehensive and I feel confident that we have no other infestations in either county. I want to thank all those who made time and resources available to help with this program as no support funds were available.

Grapevine nurseries in infested areas have initiated a hot water dip for dormant stock that should eliminate the spread of this pest via their dormant plant material. So if growers are diligent with sanitation measures, we should be able to keep this pest out of our vineyards.

CHERRY BUCKSKIN DISEASE UPDATE

Cherry Buckskin Disease (AKA Western X Disease) is not a new disease to California but it is a new disease in Contra Costa County. The disease is prevalent in neighboring San Joaquin County and in an effort to keep it from getting established in this county, I coordinate a survey for the disease every year in local cherry orchards. Together with staff from the Ag Department and volunteers from our Master Gardener program we scout orchards for any sign of the disease.

Until recently, our cherry orchards were entirely free from the disease. In 2002, trees in two local cherry orchards tested positive for the disease. One orchard was removed entirely. The other orchard removed all symptomatic trees and sprayed the orchard several times to control the leaf hopper which spreads the disease. Nearby cherry growers were encouraged to spray preventatively until the infestation was eliminated. No new infected orchards were found during our especially vigilant 2003 spring survey. However, more infected trees *were* found in the original orchard. These may have been infected the previous year as it can take a year before trees show symptoms. Again, the infected trees were removed and the orchard sprayed throughout the season.

In the fall of 2003, I found an adjacent orchard with infected trees. This grower was not applying preventative sprays. In order to keep the disease from spreading to other orchards, **I would strongly advise any cherry growers in the vicinity of Walnut Blvd. and Eureka Ave. to monitor for leafhoppers and apply preventative sprays**, if found, for at least the 2004 season. These would include:

- a dormant oil spray with an insecticide
- 2-3 post harvest sprays to control leafhoppers through mid October. 12-14 oz/100 gallons/acre of Asana should last for 6 weeks.

Don't hesitate to call if you need assistance identifying the leafhopper or deciding on a prevention strategy.

ADVANCING CHERRY BLOOM AND HARVEST

There has been a lot of interest in recent years in using rest breaking agents that are reported to advance and compact cherry bloom (and thus harvest) in an effort to both offset the effects of low chill and to take advantage of early market prices. Dormex and CAN 17 are the two most commonly used materials in cherries. However, results can be variable among orchards due to different rootstocks, varieties, application timings, adjuvants, weather, and other (unknown) orchard conditions.

In 2002 and 2003, I initiated a series of trials with the help of Mark Maggiore and Ross Sanborn to evaluate the use of these materials under local conditions. The Brentwood area tends to have lower chill and different varieties than Stockton where much of the research has been done.

In 2002, we applied Dormex (4% in 100GPA) at 3 different timings, to 3 different rootstock/variety combinations, in 2 different orchards and compared the bloom and harvest with unsprayed trees in the same orchards. The results are shown in Table 1, below. We were very successful in advancing bloom and harvest in all situations. The earlier applications (January 22 at 446 chill hours) advanced bloom by about 20 days and harvest by about 10 days in both Bing and Coral. The later applications went on at similar chill hours of 596 (Jan 31) or 656 (Feb 4) and advanced bloom similarly by 13-14 days and harvest by 4 days (Mazzard) to 7 days (Colt). However, *all the applications also significantly reduced fruit set!* The reduction varied from 50% to 87% with the earlier application showing slightly less reduction than the later applications.

We assumed the poor set had to do with the low chill hour accumulation that year. It is generally recommended that the materials be applied between roughly between 600-800 chill hours so that the buds are mature enough to set fruit when they are brought out of dormancy. However, it can't be applied within 4 weeks of bloom without damaging buds so we couldn't make application

any later that year. We decided to continue the experiment the following year and hope for more chill.

In 2003, we used both Dormex (4% in 100 GPA) and CAN17 (25% + 3% oil) and applied them both on the same day, as late in the season as possible without risking bud damage. We had 676 hours of chill which is within the target range. The materials were applied to 5 different variety/rootstock combinations and in 2 different orchards. One of the orchards had untreated trees for comparison but the other orchard used either Dormex or CAN17 and did not leave any unsprayed trees. The results are shown in Tables 2 and 3.

Dormex advanced the Bing bloom by about 8 days and harvest by 1 to 3 or 4 days compared to no spray. And Dormex improved the fruit set on Mazzard rooted Bings while slightly reducing set on the Colt rooted Bings. This slight set reduction may be desirable to help size fruit.

Dormex had a much less favorable effect on Brooks even within the recommended spray window – it advanced bloom by 3 days and harvest by 2 days but reduced set by 66%.

In the second orchard, the Dormex application advanced bloom and harvest on Coral and Brooks compared to the CAN17, but it also reduced fruit set significantly (68-84%).

So what's the bottom line? Dormex is a powerful rest breaking agent but results are still a bit unpredictable – it can significantly reduce set if applied too early but not give an early harvest if applied too late. Timing seems to be the difficult issue. For Bing, it looks like one should wait until about 700 chill hours have accumulated before application but the effects are not predictable even in this window. Brooks and Coral had seriously reduced fruit set in both years so they may have a higher chill requirement than Bing.

CAN17 + oil isn't quite as powerful a rest breaking agent as Dormex and the results are equally unpredictable. However, it doesn't seem to reduce fruit set like Dormex. It is also safer to

apply since Dormex is a Category 1 material that requires a restricted materials permit and a closed cab application. And CAN17 + oil is certainly less expensive, costing about \$25/A to Dormex's \$200/A. So in my estimation, CAN17 + oil seems like the safer bet until we figure out a better way of estimating the timing to obtain a predictable result with either of these materials.

Fortunately, Dr. Steve Southwick, our Cherry Specialist at UCD has been looking at other models to better evaluate chill. Traditionally, we have used the number of hours below 45°F after

November 1st as the way to calculate our chill hour accumulations. He has compared this method (Chill Hours) with the Utah method (Chill Units) and the Dynamic model (Chill Portions) and compared it to cherry tree responses over an 8 year period in central California. The Dynamic model may be a better estimate of true bud maturity and tree response to these materials. He will continue his evaluation over the upcoming season under more controlled conditions. Hopefully we will have a more predictable way to use these rest breaking agents next year!

Table 1. 2002 Results: Dormex compared to untreated trees					
VARIETY/ ROOTSTOCK	TREATMENT DATE	CHILL HOURS	BLOOM	HARVEST	FRUIT SET
Bing/Colt	Jan 22	446	+ 20 days	+ 10 days	- 50%
Bing/Colt	Feb 4	656	+14 days	+ 7 days	- 79%
Bing/Mazzard*	Jan 31	596	+ 13 days	+ 4 days	- 87%
Coral/Colt	Jan 22	446	+ 20 days	+ 10 days	- 74%

* from a different orchard than the colt rooted trees

Table 2. 2003 Results: Dormex compared to untreated trees in Orchard 1					
VARIETY/ ROOTSTOCK	TREATMENT DATE	CHILL HOURS	BLOOM	HARVEST	FRUIT SET
Bing/Colt	Feb 9	676	+ 8 days	+ 1 day	- 25%
Bing/Mazz.	Feb 9	676	+ 8 days	+ 3-4 days	+ 76%
Brooks/Colt	Feb 9	676	+ 3 days	+ 2 days	- 66%

Table 3. 2003 Results: Dormex compared to trees treated with CAN17+oil in Orchard 2					
VARIETY/ ROOTSTOCK	TREATMENT DATE	CHILL HOURS	BLOOM	HARVEST	FRUIT SET
Coral/Mahaleb	Feb 9	676	+ 2 days	+ 5 days	- 84%
Brooks/Mazzard	Feb 9	676	+ 7 days	+ 8 days	- 68%

PROCESSING TOMATO 2003 VARIETY TRIAL

year in conjunction with the CTGA Annual Lunch and afternoon Meeting. RSVP (209) 478-1761.

Every year I plant an early season processing tomato variety trial in conjunction with a series of identical trials coordinated by UC Farm Advisors throughout the state. This year the trial was planted on March 6th in cooperation with Anthony Massoni of Simoni & Massoni Farms. It was located on the south side of Hoffman Lane on a Sorrento silty clay loam soil. Harvest was on August 12th. The trial results are shown below and were better than expected after a long, cool, wet Spring and a blistering July.

Call my office for a copy of the Statewide Processing Tomato Variety Trial results. Or pick up a copy at Tomato Day which will be held this

UCCE No. San Joaquin Valley Tomato Day Wednesday, January 21 Doubletree Hotel, Modesto 8 am – noon

Symphytan Trials – Bob Mullen, UCCE
Fungicide Trials – Jan Mickler, UCCE
Weed Control Research – Scott Stoddard, UCCE
New Worm Materials – Benny Fouche, UCCE
CTRI Funded Research – Chuck Rivara, CTRI
Cover Crops for Tomatoes – Gene Miyao, UCCE
Transplant Studies - Gene Miyao, UCCE
Stink Bug Monitoring – Frank Zalom, UCCE
Air Quality Issues – Randy Southard, UCD

9 am to 4 pm: Exhibits and Displays

REPLICATED VARIETIES

COMPANY	VARIETY	YIELD	BRIX	BRIX-YIELD	COLOR	pH
Orsetti	BOS 3155	56.0	5.8	3.24	24.3	4.26
Heinz	H9997	53.9 A	5.0	2.71	22.3	4.36
Asgrow	APT 410	51.4 AB	5.3	2.71	22.3	4.31
Heinz	H 1100	51.1 AB	5.6	2.86	24.5	4.31
Asgrow	AP 957	50.3 AB	5.1	2.54	22.3	4.32
Peto	HYPEEL 45	48.7 BC	5.7	2.78	23.0	4.25
Heinz	H 9280	48.1 BC	5.1	2.42	23.3	4.33
Heinz	H 1400	47.8 BC	5.8	2.76	23.0	4.28
Campbell	CXD 224	44.8 CD	5.6	2.5	22.0	4.33
Sunseeds	SUN 6358	44.4 CD	5.5	2.40	23.5	4.32
Hazera	CALISTA	42.1 D	4.8	2.02	22.5	4.44
	MEAN	48.2	5.3	2.57	22.9	4.32
	LSD @.05	4.3	0.5	0.24	1.1	0.03
	C.V.	6.2	6.2	6.4	3.2	0.5

OBERSERVATIONAL VARIETIES

Harris Moran	HMX 2853	57.2	5.8	3.3	23	4.34
United Genetics	UG 8168	53.3	5.4	2.9	22	4.34
Orsetti	BOS 3155	52.0	5.6	2.9	24	4.38
Heinz	H 9280	50.5	5.0	2.5	24	4.37
Asgrow	APT 410	47.7	5.2	2.5	22	4.36
Orsetti	AGT 771	47.4	6.5	3.1	21	4.28
Orsetti	BOS 40809	46.7	4.5	2.1	25	4.32
Peto	HYPEEL 45	45.0	5.0	2.2	24	4.46
Unilever	U 205	41.2	6.0	2.5	23	4.21
Heinz	H 1100	38.2	5.6	2.1	23	4.34
Hazera	HA 3523	32.1	5.9	1.9	24	4.22

CORN STUNT ALERT

Corn Stunt is a new disease that first showed up in the southern San Joaquin Valley (SSJV) in 1996. By the end of the 2003 season about half the corn acreage (215,000 acres) in the SSJV was estimated to be infected.

The disease only occurs in corn, but it affects all types of corn (sweet corn and field corn). It is more severe in corn planted after July 1 and symptoms include:

- stunted corn with shortened internodes
- multiple ears per stalk which are small and poorly filled with loose kernels
- Red leaves in the fall

It is caused by an organism called *Spiroplasma kunkelii* which is moved from plant to plant by the corn leafhopper. **Last summer leafhoppers infected with this disease were caught in Sacramento County!** No infected corn was discovered but the potential for this disease to move up the Valley is very real.

This leafhopper only feeds on corn and it overwinters as an adult with the disease inside it. Therefore, the best way to eliminate any infected leafhoppers and control the disease is by maintaining a corn free period of 4 months. This means **no corn growing in any field after October 31st**. We need the corn free period to be this long as the insect can survive in winter forage crops or grassy vegetation for a few months without feeding on corn!

We don't typically grow corn after October 31st but we could have some volunteers sprouting in harvested grain corn fields. A few small volunteer seedlings that stay alive into November or December are all that are needed to keep the diseased leafhoppers alive. They can even survive in partially frosted corn.

Once the disease is present in an area, we do not have effective management tools. The best approach is prevention. So make an effort to **patrol your fields and plow down any volunteer corn this winter!**

ANNOUNCEMENTS

Food Facility Registration

In compliance with the new Bioterrorism Act, owners/operators of all food facilities should have registered their operation with the FDA by December 12, 2003. A food facility includes domestic and foreign facilities that manufacture, process, pack, or hold food for human or animal consumption in the US. This includes any agricultural commodity that will be used for food or components of food or animal feeds. It doesn't make any difference if the food from the facility enters interstate commerce. *This includes packing houses, hullers/shellers, cold storage facilities, etc.* The only exemption to the rule is when the packing is done on farm AND sales are exclusively direct to the consumer.

The FDA prefers online registration. More information can be found at:

<http://www.fda.gov/oc/bioterrorism/furls/>

EQIP Program Deadline: Jan 30, 2004

By Joe Takai, NRCS

Farmers and ranchers interested in soil and water conservation measures may apply for funding from the Natural Resources Conservation Service's (NRCS) Environmental Quality Incentives Program (EQIP) until January 30, 2004.

EQIP is a voluntary program for farmers and ranchers to promote agricultural production and environmental quality as compatible goals. Through EQIP, agricultural producers may receive financial and technical assistance to install structural, vegetative, and management conservation practices on their lands. Eligible structural and vegetative practices can be cost-shared up to 50% and management practices (like mating disruption or other types of pest management) up to 100%. Popular conservation practices include upgrading flood or furrow irrigation to water-saving systems such as drip or sprinkler systems, improving soil health and reducing agricultural runoff by planting cover crops. Incentives are also offered for saving

water, reducing tail water, and reducing the use of chemical pesticides through an integrated pest management strategy.

Beginning farmers and ranchers may qualify for up to 75% cost-share assistance, while limited resource farmers and ranchers may qualify for up to 90% cost-share assistance.

To see if EQIP is right for you, consider the following program characteristics:

- the applicant must be an agricultural producer;
- a minimum contract period of two years and a maximum of ten years;
- EQIP is highly competitive & funding for each county is limited; there is no guarantee for funding;
- EQIP timeline may not match your operation timeline;
- the proposed project must benefit the environment;
- the applicant cannot start the project until NRCS reviews and approves all designs and plans;
- the applicant is responsible for up to 50% of the project cost;
- the applicant must develop a conservation plan in collaboration with NRCS.

To apply for EQIP, visit the USDA Concord Service Center located at 5552 Clayton Road in the Farm Bureau building. Contact Joe Takai or Lisa Hokholt at (925) 672-4577 extension 100.

New Size-Controlling Peach-Plum Hybrid Rootstocks

UC has just released the two new peach-plum hybrid rootstocks described below. They were jointly developed by breeders in the UC Davis Pomology Department and the USDA. Propagation materials will be made available in late January/February of 2004 to fruit and nut tree nurseries that have completed a license through the UC Davis Technology Transfer Center (TTC). Contact Clint Neagley at TTC (530) 757-3471 or chneagley@ucdavis.edu for licensing information and agreements. To place an order for propagation

material, contact Ginnie Dixon at the UC Davis' Foundation Plant Services at (530) 752-3590 or vndixon@ucdavis.edu by **January 15, 2004**.

P30-135: This was developed as a commercial rootstock for peaches and nectarines. Tree size is about 90% the size of a tree growing on Nemaguard rootstock. They have similar fruit quality, require less pruning, and have more open canopies than trees on standard rootstocks. In some soils, trees on P30-135 have higher leaf and fruit calcium than trees on Nemaguard. The rootstock is moderately susceptible to rootknot nematodes and may be susceptible to other soil born pathogens. This stock can be clonally propagated by hardwood cuttings.

K146-43: This was also developed as a commercial rootstock for peaches and nectarines. Tree size is about 50–60% the size of a tree growing on Nemaguard rootstock and fruit quality is similar. The rootstock is moderately susceptible to rootknot nematodes and may be susceptible to other soil born pathogens. This stock can be clonally propagated by hardwood cuttings.

RESOURCES

Websites:

Agricultural Issues Center, UC Davis
<http://aic.ucdavis.edu>

Provides information from Ag Issues Center projects and numerous publications including those listed below and many more:

- CA's International Agricultural Exports in 2002
- The Measure of CA Agriculture
- China Agricultural Production, Trade, and Cost of Production Data
- Obstacles in the Agritourism Regulatory Process
- CA Farmers and Conservation Easements
- Agriculture in the Sacramento Region: Trends and Prospects
- Economic Consequences of European Processing Tomato Subsidies

Post Harvest Technology Research and Information Center, UC Davis

<http://postharvest.ucdavis.edu>

Provides information on maintaining quality after harvest including:

- A regular newsletter
- A listing of classes
- *Produce Facts*: storage and handling guidelines for over 100 fruits, vegetables and ornamentals (major and minor commodities)
- Timely science-based publications including:
 - *Internal Browning of Fuji Apples*
 - *1-MCP and Fruit Quality*
 - *Fresh Cut Products: Maintaining Quality & Safety*
 - *Small Scale Postharvest Practices*
 - *Refrigerated Trailer Transport of Perishable Products*
 - *Consumption of Cherries Lowers Plasma Urate in Healthy Women*
 - *Responses of "Wonderful" Pomegranates to CA Storage*

Fruit and Nut Research and Information Center, UC Davis

<http://fruitsandnuts.ucdavis.edu>

Highlights include:

- Lots of crop specific production information
- Farm Advisor newsletters (including this one)
- Chill Hour Accumulation Calculator
- Harvest Prediction Model for Stone Fruits
- Nitrogen Fertilizer Calculator for Nuts
- Continually updated with recent additions including:
 - *Replanting Guidelines for Walnuts without Methyl Bromide*
 - *Replanting Guidelines Prunus without Methyl Bromide*
 - *The Market for CA Blueberries*
 - *BIOS Approach Tested for Controlling Walnut Pests in San Joaquin Valley*
 - *Walnut Rootstock Selection for Resistance to Phytophthora*
 - *Mechanical Harvester for Olives Shows Promise*
 - *Patch Budding for Top Working Olives*
 - *Current Field Evaluations of Mandarin Cultivars for California*

Publications:

The following are **new UC publications**. Priced publications can be ordered and free publications obtained from our online catalog at <http://anrcatalog.ucdavis.edu>. You can also pick up the free publications or a free catalog from my office. Stop by or call for a copy.

Almond Leaf Scorch,

Pub. No. 8104, FREE

IPM for Almonds, 2nd ed.,

Pub. No. 3308, \$32

IPM for Walnuts, 3rd ed.,

Pub. No. 3270, \$30

Key Features of Common Lygus Species in the Central San Joaquin Valley

Pub. No. 8105, FREE

Key points of Control & Management for Microbial Food Safety

Pub. No. 8102, FREE

Making Table Wine at Home

Pub. No. 21434, \$15

Tree Fruit Pest ID and Monitoring Cards

Pub No. 3426, \$15

Wine Grape Varieties

Pub No. 3419, \$30

Over 100 current **UC Cost Studies** are available online at <http://coststudies.ucdavis.edu> or from my office. Some of the more recent additions that may be relevant to local growers include:

Alfalfa, 2003

Apricots, 2003

Blueberries, 2002

Boysenberries, 2002

Cherries, 2001

Corn, Sweet 2003

Corn, Grain 2003

Grapes, Wine 1999-2003

Lettuce 2003

Olive, Oil 2001

Peaches, 2003

Tomatoes, Processing 2001

Walnuts, 5A Homesite, 2002

Implications of the 2003 Tax Act for CA Farmers and Ranchers, Dr. Hoy Carmen, 3 pages.

Call my office for a copy.

CALENDAR

JANUARY

12-14

2004 CA Weed Conference

Hyatt Regency, Sacramento; \$140
Sponsors: CA Weed Science Society
Contact: www.cwss.org

15

Sweet Cherry Research Review

Stockton, morning meeting
Sponsors: UCCE & CA Cherry Advisory Board
Contact: (209) 468-2085 OR (209) 368-0685

17

Scion Exchange

UCCE, Pleasant Hill, Free
Sponsors: CA Rare Fruit Growers
Contact: www.crfg.org; (510) 843-1657

20-22

Stockton Ag Expo

SJC Fairgrounds, Stockton
Contact: (209) 547-2930
www.stocktonagexpo.com

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Pistachio Day

Visalia Conv. Center, 9 am – 2 pm, \$12 for lunch
Sponsors: UCCE & CA Pistachio Commission
Contact: www.pistachios.org; (559) 221-8294
E-mail: cb@pistachios.org

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UCCE NSJV Tomato Day & Exhibit & CTGA Annual Meeting

Doubletree Hotel, Modesto, 8 am – 4 pm, free to
CTGA members, \$35 lunch fee for non-members
Sponsors: UCCE & CTGA
Contact: (209) 478-1761; www.ctga.org

21-24

24th Annual Ecological Farming Conference

Asilomar, \$50-525, depending
Sponsors: Ecological Farming Assoc. & many
industry sponsors
Contact: www.eco-farm.org; (831) 763-2111

27- 29

Unified Wine & Grape Symposium & Trade Show
Sacramento Convention Center, \$135-325
Sponsors: ASEV & CAWG
Contact: www.unifiedsymposium.org;
(916) 932-2244

FEBRUARY

2-8

*CA Farm & North American Farmers Direct
Marketing Conference*
Sacramento Convention Center, \$225 (variable)
Sponsors: NAFDMA, UC Small Farm Center,
CAFF, USDA, and several CA Farmers' Market
& Direct Market Associations
Contact: www.californiafarmconference.com

2

*Olive Day &
CA League of Food Processors Convention*
Sacramento Convention Center, \$30
Sponsors: UCCE & CLFP
Contact: www.clfp.com; (916) 444-9260

7

Managing the Small Vineyard I
UC Davis, 9 am – 4 pm, \$140
Sponsors: UCCE & UCD Extension
Contact: www.universityextension.ucdavis.edu;
(800) 752-0881

17

Health & Safety for Winery Operations
Sacramento, 8:30 am – 5 pm, \$235
Sponsors: UCD Extension
Contact: www.universityextension.ucdavis.edu;
(800) 752-0881

MARCH

2-4

Varietal Winegrape Production Shortcourse
UC Davis, 3 full days, \$625
Sponsors: UC Cooperative Extension, Agricultural
Experiment Station, UCD Viticulture Department
Contact: www.universityextension.ucdavis.edu;
(800) 752-0881

12- 13

Sensory Evaluation of Olive Oil
Sponsor: UCD Extension, \$395

Contact: www.universityextension.ucdavis.edu;
(800) 752-0881

16-17

Topics in Red Wine Production

UC Davis, 8:30 am – 5 pm., \$465

Sponsors: UCD Viticulture & Extension

Contact: www.universityextension.ucdavis.edu;
(800) 752-0881

18

Recent Advances in Viticulture & Enology

UC Davis, 8:30 am – 4 pm, \$175

Sponsors: UCD Viticulture & Extension

Contact: www.universityextension.ucdavis.edu;
(800) 752-0881

24

Pesticide Monitoring in Surface and Groundwater

UC Davis, 9 am – 4:30 pm, \$260

Sponsor: UCD Extension

Contact: www.universityextension.ucdavis.edu;
(800) 752-0881

CROP CURRENTS

JANUARY 2004

- **WEATHER REPORT**
- **PESTICIDE SAFETY TRAINING IN SPANISH**
- **STATE BUDGET CUTS AFFECT UCCE**
- **GRAPES: Vine Mealybug Update**
- **CHERRIES: Cherry Buckskin Update**
- **CHERRIES: Advancing Cherry Bloom & Harvest**
- **VEGETABLES: Tomato Trials Results**
- **VEGETABLE/FIELD CROPS: Corn Stunt Alert**
- **ANNOUNCEMENTS: Bioterrorism, EQIP, New rootstocks**
- **RESOURCES: Publications & Websites**
- **CALENDAR: Classes/Meetings/Events**

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