Contra Costa & Alameda Counties

CROP CURRENTS

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JUNE 2005

TRAINING YOUNG CHERRY TREES

There have been several new cherry orchards planted around Brentwood in recent years and I have been getting numerous questions on how to keep the trees small and get them to come into bearing earlier. There are several approaches that can help you achieve these goals:

- **Rootstock selection**: On our excellent clay loam soils, the traditional training methods and the standard rootstocks (Mahaleb, Mazzard, Colt) tend to produce tall, vigorous trees which are non-productive until at least year 6. The newer Giesla rootstocks offer varying degrees of dwarfing and all are precocious so that you may get fruit as early as year 3 or 4 after planting. Giesla 6, Giesla 12 and Giesla 5 are the most commonly available and they will produce trees that are respectively about 10%, 25%, and 60% smaller than a standard rootstock. Because these new rootstocks set fruit early and heavily, there is a concern that the heavy set may contribute to smaller fruit size in later years. This could potentially be offset by diligent pruning but it is too early to really know. The fruit size issue may be less of a concern for U-Pick than shipping operations.

  Whatever rootstock you choose, you can keep the trees smaller and encourage early bearing, if needed, by employing one or more of the techniques discussed below.

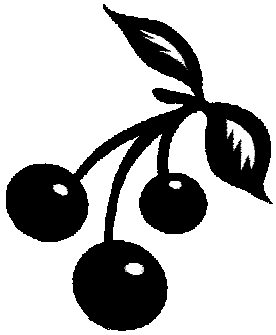
- **Promalin:** This is a plant growth regulator that can be used to encourage branching on unheaded, one year old shoots. It is typically used during the 1st and 2nd dormant seasons. There is a very narrow window of opportunity to apply this material and get the desired effect. It should be applied at the end of the dormant season just as the vegetative buds on the 1 year old shoots show about 1/8" of leaf tissue. It is typically mixed with latex paint (1 part Promalin to 3 parts paint) and painted on those sections of the branch where you want branching to occur. Results are not always consistent due to variability with budbreak. So if the Promalin doesn't work, you can follow up with summer pruning or limb bending to get some lateral branches to break.

- **Summer pruning**: Waiting until the summer to make any heading cuts has the advantage of both keeping trees smaller and encouraging more branching (which can lead to more fruit set). The general idea is that after the trees have put on 24"-30" of growth, head the scaffold branches back by about 1/3 to promote branching. Make sure to supply enough water after this heading that they will grow several more inches that season. Any vigorous branches that are competing with scaffolds or growing in an undesirable direction should be completely thinned out. This can be done during the dormant season (less de-vigorating) or the summer (more de-vigorating). Make sure to keep all the weaker shoots (pencil sized or smaller) as these tend to fruit earlier.

- **Limb positioning**: Pulling vigorous, permanent limbs to a nearly horizontal position will devigorate the limb and encourage it to begin flowering and fruiting the following season. And bending limbs downward will encourage lateral branching at the bend. However, these techniques have some practical disadvantages. First of all, you need something to tie the limb to – like a trellis (expensive!) or strings attached to the trunk/ground (which get in the way) or the adjacent tree in the row (least expensive). Secondly, the tips of the branches tend to turn up as the branch continues to grow, so you need to keep moving the tie outward over the course of the season to keep the branch horizontal. This makes this approach more costly than other methods.

- **Deficit irrigation**: If trees are growing too vigorously for their space, you can slow their growth by cutting back on the water in mid to late season. The general rule is to cut back to about 50-60% of their full water use requirement once you want to slow the growth (see accompanying water use article in this issue). You want the limbs to stop growing and set their terminal buds, but you do not want to see yellow or dropping leaves before Fall. Be careful with this approach as you can sunburn limbs and permanently stunt young trees. If the trees are old enough to fruit, do not impose water stress before harvest or from mid August-mid September. Water stress during this late summer period can lead to spurs, doubles, and sutures in the fruit next season.

These are the basic tools to use to keep your cherries small and to encourage early production. The trick is to incorporate them into a system that works well for your soil, rootstock, spacing, varieties, and wallet.



The Spanish Bush System

One training system that has received a lot of attention for producing small, highly productive trees is the Spanish Bush System. This system is commonly used throughout Spain where they plant Mahaleb rootstock on extremely poor, stony soils and are able to maintain high productivity on 8' tall trees. I am including a detailed outline of this system below because it demonstrates a very successful integration of all the concepts that I have discussed above. If you would like to learn more about this system, a video tape is available at my Knightsen office. You can view it in the office or check it out of the video library for a 1 week period. Steve Southwick, our former UCCE cherry specialist, made the video when he visited Spain to study this system.

This Spanish system is not likely to work exactly the same here as it does in Spain as our soils and climate are different. Mahaleb trees on our deep, clay loam soils are not likely to stay as small and be as precocious as trees on Spain's rocky soils, but these same techniques can help us achieve orchards that are smaller and more precocious than our traditional training methods. In fact, a Spanish Bush type system may work better for us on Giesla rootstock as the continued summer pruning may help to maintain large fruit size.

YEAR 1:

	Irrigate trees well during the first season.
At planting:	Head tree 8-12" above the graft union
April-May:	After 24-30" of growth, select 3 primary scaffolds and head them to remove 8-12" of growth. Thin out any strong competing branches; leave small, pencil sized branches.
July-Aug:	After 24-30" of growth, select secondary scaffolds and head them to remove 8-12" of growth. Thin out any strong competing branches; leave small, pencil sized branches. Irrigate well to encourage several more inches of new growth. Then reduce irrigation gradually to set the terminal bud in a position where you would like to have fruitful laterals developing (about waist high).
Sept-Oct:	Stop irrigating

YEAR 2

Feb-Mar:	Make thinning cuts to remove crossing branches, open center, remove excessively vigorous branches. Make few or no heading cuts. Optional: Apply Promalin to induce lateral braching on 1 year old shoots when vegetative buds show 3-8 mm of green tip (early March).
Apr-Aug:	The goal is to get 12-24" of shoot growth this season so limit irrigation. On deep soils little or no irrigation may be needed to get this growth. After reaching the growth goal – set terminal bud by withholding water. Then give enough summer water to keep the leaves from turning yellow and dropping. Do not give enough water to stimulate shoot growth (maybe 50% ET). If growth is too strong, head in April. If you need to head in summer too, get several inches of new growth before setting terminals.
Sept-Oct:	Stop irrigating

YEAR 3

	Repeat practices of year 2. If there is fruit, don't water stress trees before harvest.

YEAR 4

Dormant:	Thin to open center if needed. Tie limbs in the row to adjacent tree to reduce upright growth if needed
Spring:	Provide normal irrigation thru harvest.
May-June	After harvest, set terminal buds by reducing water
Jul-Sept:	Apply full irrigation to maintain healthy fruit bud development. Prune to reduce water loss, shape tree, check growth.
Sept:	Reduce water to set terminal buds
Oct:	Stop irrigating

YEAR 5 AND BEYOND

	Dormant prune sparingly, as needed. Repeat practices of year 4

ORCHARD LEAF ANALYSIS

July is an excellent time to check the overall nutrient status of your orchard. The nutrient status of the tree depends on many factors besides what nutrients are available in the soil. So the most accurate way to know what nutrients the trees are actually taking up is by taking a leaf sample for analysis by a lab.

Taking the Sample: For *deciduous trees*, collect 1 or 2 leaves from 50 to 100 trees throughout the block until you have gathered about 100 leaves. Select fully expanded, mature leaves from non-fruiting spurs. For *olives*, collect 100 leaves from the middle of non-bearing current season shoots.

Trees of different varieties, rootstocks and ages should be sampled separately. Likewise trees grown on different soil types or with different irrigation systems should be sampled separately. Ideally, every 10 acres of orchard should be sampled separately.

Once the sample is collected, place the leaves from each sample in a clean bag with an identifying label. Send them to the lab for analysis as soon as possible. Don't forget to include a note telling the lab exactly which elements you want analyzed. Call my office if you need a list of agricultural laboratories in central California

What to Look For: If you've never had a leaf analysis done on your orchard before, it would be a good idea to analyze at least for N, P, K, and Zn to get some good baseline data. If there are symptoms of marginal burn, you may also want to test for excess Sodium (Na), Chloride (Cl) and Boron (B).

If you have applied any foliar nutrients, make sure to get the lab to wash the samples. Otherwise, you will get a false high reading because of the excess material on the outside of the leaf.

The critical levels for nutrients in a variety of tree crops are listed in the following table. The levels can vary slightly from year to year due to weather, cultural practices or other orchard conditions. For example, an excessive crop load can reduce the percentage of K and increase Ca and Mg levels. High (not excessive) soil moisture conditions tend to increase P, K, Mg and Ca levels, probably due to increased root activity. The improved water and nutrient status can lead to increased top growth which, in turn, may result in lower leaf N levels due to "dilution."

CRITICAL NUTRIENT LEVELS IN LEAVES OF TREE CROPS (JULY SAMPLES)

Crop	N (%)		P (%)	K (%)		Ca (%)	Mg (%)	Na (%)	Cl (%)	B (ppm)			Zn (ppm)
	Def. below	O.K. range	O.K. range	Def. below	O.K. over	O.K. over		Excess over		Def. below	O.K. range	Excess over	O.K. over
Almonds	2.0	2.2-2.5	0.1-0.3	1.0	1.4	2.0	0.25	0.25	0.3	25	30-65	85	18
Apples	1.9	2.0-2.4	0.1-0.3	1.0	1.2	1.0	0.25	-	0.3	20	25-70	100	18
Apricots (ship)	1.8	2.0-2.5	0.1-0.3	2.0	2.5	2.0	-	0.1	0.2	15	20-70	90	16
Apricots (can)	2.0	2.5-3.0	0.1-0.3	2.0	2.5	2.0	-	0.1	0.2	15	20-70	90	16
Cherries	-	2.0-3.0	0.1-0.3	0.9	-	-	-	-	-	20	-	-	14
Figs	1.7	2.0-2.5	01-0.3	0.7	1.0	3.0	-	-	-	-	-	300	-
Olives	1.4	1.5-2.0	0.1-0.3	0.4	0.8	1.0	0.1	0.2	0.5	18	19-150	185	?
Peach/Nectarine	2.3	2.4 3.3	0.1-0.3	1.0	1.2	1.0	0.25	0.2	0.3	18	20-80	100	20
Pears	2.2	2.3-2.8	0.1-0.3	0.7	1.0	1.0	0.25	0.25	0.3	15	21-70	80	18
Plums	-	2.3-2.8	0.1-0.3	1.0	1.1	1.0	0.25	0.2	0.3	25	30-60	80	18
Walnuts	2.1	2.2-3.2	01.-0..3	0.9	1.2	1.0	0.3	01.	0.3	20	36-200	300	18

Adequate levels for all fruit and nut crops: copper (Cu) over 4 ppm; manganese (Mn) over 20 ppm.

Nitrogen levels higher than underlined values will adversely affect fruit quality and tree growth

HOW MUCH WATER DO YOUR TREES & VINES REALLY NEED?

The amount of water that an orchard or vineyard needs will vary over the course of the season depending on crop development, temperature, day length, wind and other environmental factors. However, the water used each month is really quite consistent from year to year for the various trees and vines grown in any given region. Because of this consistency, it is possible to use historical weather data to help schedule your irrigations. You can also use this information to design a more efficient irrigation system.

In the attached charts, I have summarized the bi-weekly water use for ***mature*** trees and vines grown in Brentwood and Livermore. Orchards/vineyards are considered mature (from a water use standpoint) if they shade at least ½ of the ground surface at high noon. Younger plantings will use proportionally less water. For example, if only ¼ of the ground surface is shaded at noon, the planting will use about ½ the amount of water that a mature planting would.

Orchards and vineyards with any type of cover crop (including winter weeds) will use more water than those that are clean cultivated since the cover plants use water too. If you have a cover crop, use the "cover crop" column to figure out how much water your orchard/vineyard is removing from the soil. Once the cover has died or been tilled in, then switch to the "bare soil" column.

In the winter and spring the trees/vines are using water stored in the soil from the winter and spring rains. You don't need to begin irrigating until the orchard/vineyard has used up the amount from the soil that you can easily re-apply with your irrigation system OR you have used up ½ the water stored in the root zone. For example, orchards on deep, clay loam soils with surface irrigation systems (flood, furrow, sprinklers) can use 5"-6" of water from the soil profile before irrigation needs to begin in April or May. After that water should come from your irrigation system and enough should be applied to replace the water that has been used by the crop.

Orchards with drip or partial coverage microsprinklers may need to begin irrigating sooner as these low volume systems cannot deliver as much water in 1 set.

Deficit irrigation*:* With some crops it is desirable to apply less than the full amount of water to improve fruit quality (winegrapes, oil olives) or to keep plants small (cherries). Deficit irrigation is commonly used for winegrapes and oil olives. To use the chart to schedules your irrigations, use the Full Water Use column to figure out how much water the orchard/vineyard is using in the spring. Then, when it has used enough water that you need to begin irrigation, apply the amount in the deficit column. For winegrapes, irrigation usually begins when growth has slowed considerably and about 75% of the stored soil water has been used up.

Deficit irrigation for the deciduous orchard crops has not been as well defined and can have some negative impacts if done at the wrong time of year (ie. fruit doubles/sutures/spurs in stone fruit, reduced fruit size, reduced pistachio shell splitting, etc.). So I have not included any deficit amount for those crops in the attached charts. If you would like to explore deficit irrigating in any of the other crops, give me a call and we can come up with a schedule that will keep the trees smaller while preserving crop quality.

To convert inches to gallons: If you have a drip irrigation system, it may be more convenient for you to convert the inches in the chart to the gallons that each tree or vine needs each day. That way, if you know how much each emitter puts out and how many emitters each plant has, you'll know how long to leave your system on at each irrigation. Just plug your plant spacing (feet between plants in the row x feet between rows) into the conversion equation below:

$$\text{Gallons/tree or vine/day} = \frac{\text{inches/period} \times 0.622 \times \text{plant spacing}}{\text{No. of days/period}}$$

Or, if you call me (925-646-6129) and let me know your plant spacing and your emitter output per hour for each tree/vine, I can generate a customized water use table for your orchard/vineyard.

CROP WATER USE

BRENTWOOD											
Date	**Grass Water Use**	**Deciduous Tree Full Water Use**		**Wine Grapes Full Water Use**		**Wine Grapes Deficit Irrigation**		**Oil Olives Full Water Use**		**Oil Olives Deficit Irrigation**	
	(in./ per.)	(inches/period)		(inches/period)		(inches/period)		(inches/period)		(inches/period)	
		bare soil	cover crop	bare soil	cover crop	bare soil	cover crop	bare soil	cover crop	bare soil	cover crop
Jan	0.99		0.87		0.87		0.52	0.74	1.04	0.45	0.62
Feb	1.8		1.62		1.62		0.97	1.35	1.89	0.81	1.13
Mar 1-15	1.48		1.38		1.38		0.83	1.11	1.55	0.67	0.93
Mar 16-31	2.07	1.12	1.95	0.10	1.95	0.06	1.17	1.55	2.17	0.93	1.30
Apr 1-15	2.46	1.48	2.34	0.54	2.33	0.32	1.40	1.85	2.58	1.11	1.55
Apr 16-30	2.87	1.89	2.90	1.06	2.90	0.64	1.74	2.15	3.01	1.29	1.81
May 1-15	3.19	2.33	3.38	1.56	3.38	0.94	2.03	2.39	3.35	1.44	2.01
May 16-31	3.72	2.94	4.05	2.23	4.05	1.34	2.43	2.79	3.91	1.67	2.34
Jun 1-15	3.8	3.19	4.29	2.66	4.29	1.60	2.58	2.85	3.80	1.71	2.28
Jun 16-30	3.98	3.42	4.54	3.02	4.54	1.81	2.72	2.99	3.98	1.79	2.39
Jul 1-15	4.05	3.77	4.70	3.28	4.70	1.97	2.82	3.04	4.05	1.82	2.43
Jul 16-31	4.14	3.89	4.80	3.52	4.80	2.11	2.88	3.11	4.14	1.86	2.48
Aug 1-15	3.61	3.39	4.26	3.10	4.26	1.86	2.56	2.71	3.61	1.62	2.17
Aug 16-31	3.45	3.24	4.07	2.93	4.07	1.76	2.44	2.59	3.45	1.55	2.07
Sept 1-15	2.83	2.66	3.34	2.32	3.34	1.39	2.00	2.12	2.83	1.27	1.70
Sept 16-30	2.37	2.16	2.70	1.82	2.70	1.82	2.70	1.78	2.37	1.07	1.42
Oct 1-15	1.92	1.63	2.13	1.21	2.13	1.21	2.13	1.44	1.92	0.86	1.15
Oct 16-31	1.53	1.21	1.67	0.69	1.67	0.69	1.67	1.15	1.53	0.69	0.92
Nov 1-15	1.02	0.71	1.07	0.29	1.07	0.29	1.07	0.77	0.97	0.46	0.58
Nov 16-31	0.71	0.00	0.68	0.01	0.68	0.01	0.68	0.53	0.67	0.32	0.40
Dec	0.9		0.79		0.79		0.79	0.68	0.86	0.41	0.51
TOTAL	**52.89**	**39.04**	**57.53**	**30.35**	**57.52**	**19.83**	**38.13**	**39.67**	**53.69**	**23.80**	**32.21**

LIVERMORE											
Date	**Grass Water Use**	**Deciduous Tree Full Water Use**		**Wine Grapes Full Water Use**		**Wine Grapes Deficit Irrigation**		**Oil Olives Full Water Use**		**Oil Olives Deficit Irrigation**	
	(in./per.)	(inches/period)		(inches/period)		(inches/period)		(inches/period)		(inches/period)	
		bare soil	cover crop	bare soil	cover crop	bare soil	cover crop	bare soil	cover crop	bare soil	cover crop
Jan	1.22		1.07		1.07		0.64	0.92	1.28	0.55	0.77
Feb	1.54		1.39		1.39		0.83	1.16	1.62	0.69	0.97
Mar 1-15	1.17		1.09		1.09		0.65	0.88	1.23	0.53	0.74
Mar 16-31	1.76	0.95	1.65	0.09	1.65	0.05	0.99	1.32	1.85	0.79	1.11
Apr 1-15	2.03	1.22	1.93	0.45	1.93	0.27	1.16	1.52	2.13	0.91	1.28
Apr 16-30	2.41	1.59	2.43	0.89	2.43	0.54	1.46	1.81	2.53	1.08	1.52
May 1-15	2.72	1.99	2.88	1.33	2.88	0.80	1.73	2.04	2.86	1.22	1.71
May 16-31	3.19	2.52	3.48	1.91	3.48	1.15	2.09	2.39	3.35	1.44	2.01
Jun 1-15	3.2	2.69	3.62	2.24	3.62	1.34	2.17	2.40	3.20	1.44	1.92
Jun 16-30	3.46	2.98	3.94	2.63	3.94	1.58	2.37	2.60	3.46	1.56	2.08
Jul 1-15	3.66	3.40	4.25	2.96	4.25	1.78	2.55	2.75	3.66	1.65	2.20
Jul 16-31	3.77	3.54	4.37	3.20	4.37	1.92	2.62	2.83	3.77	1.70	2.26
Aug 1-15	3.17	2.98	3.74	2.73	3.74	1.64	2.24	2.38	3.17	1.43	1.90
Aug 16-31	3.14	2.95	3.71	2.67	3.71	1.60	2.22	2.36	3.14	1.41	1.88
Sept 1-15	2.83	2.66	3.34	2.32	3.34	1.39	2.00	2.12	2.83	1.27	1.70
Sept 16-30	2.4	2.18	2.74	1.85	2.74	1.11	1.64	1.80	2.40	1.08	1.44
Oct 1-15	1.77	1.50	1.96	1.12	1.96	0.67	1.18	1.33	1.77	0.80	1.06
Oct 16-31	1.29	1.02	1.41	0.58	1.41	0.35	0.84	0.97	1.29	0.58	0.77
Nov 1-15	0.88	0.62	0.92	0.25	0.92	0.15	0.55	0.66	0.84	0.40	0.50
Nov 16-31	0.61		0.59	0.01	0.59	0.01	0.35	0.46	0.58	0.27	0.35
Dec	0.85		0.75		0.75			0.64	0.81	0.38	0.48
TOTAL	**42.28**	**34.79**	**51.25**	**27.22**	**51.25**	**16.34**	**30.30**	**35.30**	**47.76**	**21.18**	**28.65**

RESOURCES

Web Resources:

Organic Farming Compliance Handbook,
This on line handbook posted to the web site of the University of California Sustainable Agriculture Research and Education Program (UC SAREP) provides up-to-date information for farmers and ranchers about organic standards, production practices and plans, economics and marketing, and resources. Access the handbook at: http://www.sarep.ucdavis.edu/organic/complianceguide

The Agricultural Marketing Resource Center (AgMRC) is a collaborative effort among the University of California's Ag Issues Center, Iowa State University and Kansas State University to enhance research and information delivery about value-added agriculture. Their website: www.AgMRC.org provides value-added business and economic tools; information on marketing, business principles and legal, financial and logistical issues; and ways to enhance value by improving quality and more closely tailoring farm production to consumer demand.

Publications:

Small Farm Center Publication:
Agritourism and Nature Tourism in California: A How-To Manual for Farmers and Ranchers

This new manual helps farmers and ranchers contemplate the feasibility of operating an agritourism or nature tourism business. This workbook helps producers consider if "tourism" activities are right for their operation and it walks them through the steps of setting up such a venture including liability, public safety, and health. It also includes county and region specific data and a chapter providing key resources. Order from:

Small Farm Center, One Shields Avenue, University of California, Davis CA 95616, (530) 752-8136.
$31.31 (includes tax, shipping & handling)
(checks made payable to UC Regents)

Free UC Publications:
The following are new UC publications which can be downloaded directly from the web at http://anrcatalog.ucdavis.edu or you can call my office for a free copy.

Vine Mealybug: What You Should Know, Pub No 8152

Minimum Tillage Vegetable Crop Production in California, Pub No. 8132.

Mulches in California Vegetable Crop Production, Pub No. 8129

Ozone Applications for Postharvest Disinfection of Edible Horticultural Crops, Pub No 8133

Key Points of Control and Management of Microbial Food Safety: Information for Producers, Processors, and Handlers of Fresh Market Tomatoes, Pub No 8150

Postharvest Handling for Organic Crops, Pub No 7254

Evaluating Water Quality: Farm Water Quality Planning Series, Pub No 8118

Pesticide Selection to Reduce Impacts on Water Quality: Farm Water Quality Planning Series, Pub No 8119

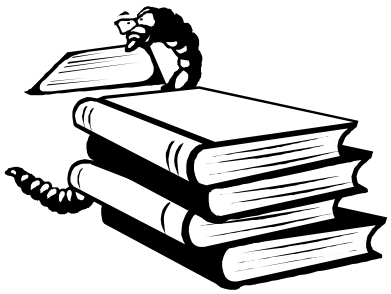
Lavenders for California Gardens, Pub No 8135

Roundup Ready Alfalfa: An Emerging Technology, Pub No 8153

Crop Biotechnology: Feeds for Livestock, Pub No 8145

Selling Meat and Meat Products, Pub No 8146

Selecting Lumber and Lumber Substitutes for Outdoor Exposures, Pub No 8144



Priced UC Publications:
The following UC publications and videos/DVDs may be ordered from our central publications warehouse by phone **1-800-994-8849** or **FAX 510-643-5470** or online at: **http://anrcatalog.ucdavis.edu**.

If you would like to take a look at a publication before you order, you are welcome to stop my office and take a look at our reference copy. You can also pick up a free publications catalog to see if there are other publications you may be interested in.

Seasonal Guide to Environmentally Responsible Pest Management Practices in Almonds, Pub No 21619, $7.00; full color; 8 pp

Olive Production Manual – 2nd Ed, Pub No 3353, $35.00

A Statistical Profile of Horticultural Crop Farm Industries in California, Pub No. GFRR348, $20.00

Economic Contributions of the California Nursery Industry, Pub No. GFI-04-1, $10.00

Whither California Agriculture: Up, Down, or Out? Some Thoughts about the Future, Pub No. GFSR-04-1

California Agriculture: Dimensions and Issues, Pub No. GFI03-1, $25.00

UC Video/DVD:
The following video/DVD may be ordered from our central publications warehouse by phone **1-800-994-8849** or **FAX 510-643-5470** or online at: **http://anrcatalog.ucdavis.edu**.

Genetic Engineering in California Agriculture
Take a look at the science behind genetic engineering and see how it is used in food crops and animals. Learn where and why this technology is used and look at the science-based concerns about the use of genetic engineering in agricultural production systems. Available in **VHS** or **DVD** format.

VHS: Pub No 6502V, $20.00, 30 min
DVD: Pub No 6502D, $20.00, 30 min

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CALENDAR

JUNE

16
CONSERVATION TILLAGE FARM TOUR,
UC West Side Research & Extension Center,
Five Points, 7:00am – 4:00pm,
$10 early reg; $20 day of; meals included.
Sponsor: UC Cooperative Extension
Contact: Diana Nix (559) 646-6526; Diana@uckac.edu

20 – July 1
POSTHARVEST TECHNOLOGY SHORT COURSE
Designed to showcase principles and technological procedures for handling fresh horticultural crops. First week intensive lectures and discussions; second week field trips. $800-$1200 plus housing if needed
Sponsor: UC Davis Plant Science Dept.
Contact: (800) 752-0881 or enroll online:
www.extension.ucdavis.edu

23
CONSERVATION TILLAGE FIELD DAY
Russell Ranch, UC Davis
Russell Blvd. 0.5 miles west of CR 95
7:30am – 2:00pm, free
Sponsor: UC Cooperative Extension
Contact: Kabir (530) 754-6497 or kabir@ucdavis.edu

23
BENEFICIAL INSECTS IN WALNUTS FIELD DAY
Choose one of two locations:
1. Stanislaus County, 9 –11:00am,
Modesto Junior College Farm,
Beckwith Rd between N. Dakota Ave & Finney Rd
2. San Joaquin County, 2 – 4:00pm,
Cavalli Ranch –
Eight Mile Rd, 0.6 mile east of Jack Tone Rd.
Sponsor: UC Cooperative Extension
Contact: (209) 468-2085

24
EXPORTING ORGANIC
University Club Conference Center, UC Davis,
9:30am – 3:00pm; $40-$45.00 ($45 includes lunch)
Sponsors: COPES (Cert.Org.Products Export Strategy)
Contact: (831) 476-2434;
www.copes-ca.org/semnars.php to register online.

25

SUCCESSFUL HOME WINEMAKING

UC Davis, Room 180, Medical Science Bldg, Garrod Dr; $110, 9:00am – 3:00pm,
Sponsor: UC Davis Extension
Contact: 1-800-752-0881
www.extension.ucdavis.edu/winemaking

27- August 18

SUSTAINABLE AGRICULTURE & ORGANIC FARMING: PRINCIPLES & PRACTICES(AMR 192)

Limited Enrollment, 5 units UC Davis Credit, $888, pass/no pass grading. 13 hours of field activities/week plus lectures and field trips.
Sponsor: UCD Student Farm
Contact: Mark Van Horn (530) 752-7645;
mxvanhorn@ucdavis.edu;
http://studentfarm.ucdavis.edu

July

1

STONEFRUIT: VARIETY DISPLAY AND RESEARCH UPDATE SEMINARS

Kearney Agricultural Center,
9240 S. Riverbend Ave, Parlier, CA
8:00 – 10:00 am, free
Sponsor: UC Cooperative Extension
Contact: Scott Johnson (559) 646-6547

11-29

WINE MARKETING SHORT COURSE

UC Davis, 106 Wellman Hall,
M-F, 8:30am – 5pm, $2500
Sponsors: UCD Extension
Contact: (530) 757-8899 or www.extension.ucdavis.edu

14

ANNUAL WEED DAY

UC Davis, Buehler Alumni Visitors Center
7:30 am - meet at Lot #VP1 ($6 for parking) for morning field tour; afternoon presentations indoors
Fee: $30 early reg; $35 day of; $10 student. Lunch & booklet included.
Sponsor: UC Davis Plant Sciences Dept.
Contact: Brenda Brinton (530) 752-2278 or
http://wric.ucdavis.edu/education/education.html & follow links to Weed Day

AUGUST

12

STONEFRUIT: VARIETY DISPLAY AND RESEARCH UPDATE SEMINARS

Kearney Agricultural Center,
9240 S. Riverbend Ave, Parlier, CA
8:00 – 10:00 am, free
Sponsor: UC Cooperative Extension
Contact: Scott Johnson (559) 646-6547

13

SMALL VINEYARD SERIES: INTEGRATED PEST MANAGEMENT, COVER CROPS AND EROSION CONTROL

UC Davis, Saturday, 9:00am – 4:00pm, $150
Sponsor: UCD Extension & UC Cooperative Extension
Contact: 1-800-752-0881 or
www.extension.ucdavis.edu/winemaking

16

ROOTSTOCK IDENTIFICATION WORKSHOP

UC Davis, Viticulture Field House, Hopkins Rd, $210, 8:30am – 4:00pm
Sponsor: UC Davis Extension
Contact: 1-800-752-0881 or
www.extension.ucdavis.edu/winemaking

17-18

WINEGRAPE VARIETY IDENTIFICATION WORKSHOP

UC Davis, Viticulture Field House, Hopkins Rd, $395, 8:30am – 4:00pm
Sponsor: UC Davis Extension
Contact: 1-800-752-0881 or
www.extension.ucdavis.edu/winemaking

SEPTEMBER

13-15

FRESH CUT WORKSHOP: MAINTAING QUALITY AND SAFETY - A Workshop With Emphasis On Current Research

This workshop is designed for representatives from the fresh and processed fruit and vegetable industries. It should be of interest to food scientists, food engineers, quality assurance personnel, new product development staff. The course also is valuable to representatives from research institutions, restaurant and institutional food industries, and packaging and ingredient suppliers.
Sponsor: UCD Plant Sciences Dept – Post Harvest Group
Contact: (530) 752-6941 or
http://postharvest.ucdavis.edu

CROP CURRENTS

JUNE 2005

CROP CURRENTS
UCCE – CONTRA COSTA COUNTY
75 SANTA BARBARA RD, 2ND FLOOR
PLEASANT HILL, CA 94523-4215

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