



# your Lake County HORTICULTURAL NOTES

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January 8, 1988

## ATTENTION! PESTICIDE APPLICATION/SAFETY MEETING SET

Growers who apply pesticides, particularly restricted (permit) materials, should PLAN TO ATTEND.

DATE: Tuesday, January 19, 1988

TIME: 9:30 A. M. until late afternoon  
LUNCH INCLUDED

PLACE: Clearlake Grange Hall, Finley

SPONSORS: Lake County Department of Agriculture and  
UC Cooperative Extension

### TENTATIVE AGENDA

Current pesticide  
situation in Lake  
County -- problems  
and trends common  
throughout the  
state

Don Tompkins  
Lake County  
Agricultural Commissioner

David Niemann  
Lake County  
Agricultural Biologist

Rachel Elkins  
UC Cooperative Extension  
Farm Advisor

Handling pesticides  
safely

Melanie Zavala  
UC Extension Program Representative  
Pesticide Management  
University of California, Davis

Pesticide calibration  
and application

Dr. Jack Dibble  
UC Extension Entomologist  
Kearney Agricultural Center, Parlier

### LUNCH

Outdoor Demonstrations: Electrostatic spray rigs  
Calibration of dilute and concentrate  
spray rigs

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## Dryland Walnut Pruning Tips

Mendocino County Farm Advisor Glenn McGourty and San Luis Obispo County Farm Advisor Jack Foott have extensive experience growing dryland walnuts. They offer these general guidelines:

- A critical goal in pruning dryland walnut trees is to keep the top of the tree in balance with the moisture supply available to the root system. If you are seeing a lot of dead terminal growth and very short flags (previous season's terminal growth), the trees have some real problems with moisture supply. Pruning alone may not solve all of those symptoms, but can go a long way to reinvigorating the trees.
- To keep dryland trees vigorous, your pruning program should center on thinning out rather than heading back. Bearing wood should be uniformly distributed through the center of the tree as well as the top and bottom. Encourage upright branches and thin out those that are pendant, and/or growing into the center of the tree. Avoid horning, or any pruning technique that encourages rank growth.
- Sunburning of scaffold limbs can cause serious damage. When thinning wood out of the tree, be cognizant of sunburning, particularly on southern and western sides of the tree. If this is unavoidable, use interior white latex paint as a sun block on exposed bark. Opening up the tree excessively will promote sunburn.
- Pruning may not increase yields, but almost always increases quality. You are channeling water and carbohydrates into fewer nuts on well pruned trees, so you will end up with larger, better quality walnuts in most instances.
- Annual pruning is necessary usually only on young trees (less than 10 years). In reasonably vigorous orchards, heavy pruning every three years followed with water sprout and basal suckering annually has been shown to be the most economical approach to producing quality crops and healthy trees. Two heavy rain years in a row may promote more interior growth and suckering. In this case, heavier pruning may need to be done more frequently.

In Lake County, many dryland orchards are on non-fertile soils so consequently lack vigor. In this case, pruning is the primary tool in maintaining tree vigor. Annual pruning may be uneconomical since crop returns seldom justify the expense. However, I would venture that some pruning should be done every other year. Since lower yields are a fact of life in non-irrigated orchards, your goal should be to maximize nut quality (i.e. nut size and kernel color). Research and grower experience have shown that pruning definitely increases nut quality.

## Walnut Meetings

Thursday, February 11 - Tri-county Walnut Institute, Manteca  
(San Joaquin, Stanislaus, Merced)

Topics: Walnut acreage and production trends and future  
outlook  
(Bob Merrill, Diamond Walnut)

Walnut grower versus the Walnut Marketing Board  
(set asides, other issues)  
(Marketing Board Director)

Effect of water stress on production  
(Dave Goldhamer, UC Extension Specialist)

Nitrogen use - UC research update  
(Kathy Kelley, UC Farm Advisor)

Genetic improvement  
(Gail McGranahan, USDA)

Dealing with crowded orchards (not really our  
problem!)  
(Dave Ramos, UC Extension Specialist and Joe  
Grant, UC Farm Advisor)

Although many of our conditions differ greatly from the valley,  
this is an opportunity to learn a great deal about the current  
walnut production and economic situation. Contact me so I can  
send you a final agenda when it is ready.

Wednesday, March 2 - LAKE COUNTY WALNUT UPDATE

Topics: Phytophthora crown and root rot  
Deep Bark Canker of Hartleys  
Walnut breeding program  
Fertilization options

MARK YOUR CALENDARS! FINAL AGENDA IN THE NEXT NEWSLETTER

### Pear Pest Management Update

Reserve the morning of February 24 to hear speakers discuss critical recent and planned research. Topics include: codling moth control using pheromone confusion, resistance to miticides, antagonistic bacteria for frost protection and (potential) new miticides. The final agenda will be in the next newsletter.

### UC Offers Apple and Pear Pest Management Course

University Extension (UNEX) is sponsoring a one-day course on management of insects and diseases of these crops. Interest in Granny Smith apples and Asian pears, coupled by lack of knowledge of these crops in the valley, prompted this offering. Specific pests covered include: fireblight, apple scab, leafhoppers, leafminers, codling moth, pear psylla and mites. Speakers include UC pest management specialists and PCAs experienced in implementing biologically-oriented pest management. Six hours of PCA credit is offered. The course will be held in Visalia on February 17. Pre-enrollment closes February 3 and the course was apparently very well attended last year. Call me or stop by for an enrollment form.

### Vineyard Irrigation - Review of December 17 meeting

To those that attended, thank you all for making my first grower meeting successful and fun. I felt all the speakers made in-depth and interesting presentations and many useful ideas were there to "run with".

Herb Shulbach, Soil and Water Specialist from Colusa County, discussed irrigation scheduling and his handy scheduling "formula" for drip systems. The formula takes into account vine (or tree) spacing, canopy size, evapotranspiration ( $ET = \text{water loss from evaporation and leaves}$ ), number of emitters and emitter flow and system efficiency. Generally, it says that the number of hours to irrigate per day is a function of water use divided by the amount of water applied. Herb calculated the weekly water use ( $ET_0$ ) curve for Lakeport and these numbers can be used along with your own information on emitters, canopy, etc. Of course, in many of our vineyards, water is a scarce resource and compensating plant water use is impossible. However, the water use curve will assist in planning for maximum vine water use. Contact us for a copy of the "Daily Drip Irrigation Schedule Schedule for Orchards and Vines".

Terry Prichard, Soils and Water Specialist in San Joaquin County, discussed the pros and cons of low volume and sprinkler systems. He distributed an 8-page handout, 'Low Volume Irrigation -- Design Considerations', and we have extra copies. Low volume includes: drip, min-sprinklers and bubblers. Call me for a copy.

Finally, Dr. Mark Matthews, Viticulture Professor at UC Davis,

reported on his experiment to determine when and how withholding water before veraison or after veraison affected yield, vine vigor and wine quality on hillside Cabernet Franc. Preliminary 1984 results related to yield and vine vigor are in the 1987 article, "Phenologic and growth responses to early and late season water deficits in Cabernet franc". Contact me for a copy of the article. Of immediate importance to most growers is yield. In four years of data (1984 - 1987), vines deprived of water up to veraison consistently yielded less than those deprived of water only after veraison. Vines irrigated continually through the season yielded the highest. Matthews determined that decrease in individual berry size and fruitfulness (number of clusters per vine) were the key reasons for reduced yield. Both of these were lower in the early deficit treatments. He concluded that both these yield components are affected by early-season deficit. For a given crop, individual berry size is determined early in the current season and fruitfulness is determined very early in the previous season. In fact, the number of clusters per bud is decided between bud break and set the previous year, so whatever stresses affect vines early this season will play a major role in determining next year's yield.

With the interest in reducing vine vigor to increase wine quality, not to mention the necessity in many cases to deficit irrigate, it is necessary to know the consequences of withholding water at critical periods so that production and wine quality are both maximized.

NEXT MONTH: Treatment effects on wine quality factors

GRAPE GROWERS - COURSES OFFERED

UNEX has released their Winter 1988 course offering among which includes the following:

Introduction to Sensory Evaluation of Wine  
January 23 & 24, UC Davis, \$225 (includes wines & lunches)  
Enroll by January 15

Canopy Assessment and Management  
January 29, UC Davis, \$90 (includes lunch)  
Enroll by January 22

Establishing and Managing the Home Vineyard  
February 6, UC Davis, \$60  
Enroll by January 29

Factors in Irrigation Management for Wine Grapes  
February 10, UC Davis \$75 (includes lunch)

Other courses are geared to winery operation and wine making. Contact me if you are interested in those topics.

Call (800) 752-0881 to pre-enroll with credit card or obtain an enrollment form from our office.

WINE GRAPE DAY

PLACE: California State University, Fresno  
DATE: Saturday, February 20, 1988  
TIME: 9:00 A. M. - 2:00 P. M. (includes luncheon)

The event will be held at CATI on the CSUF campus and Ms. Grace Williams, CATI Program Coordinator is handling registration and arrangements.

Registrations or other inquiries about Wine Grape Day can be directed to:

Ms. Grace Williams  
CATI  
California State University  
Fresno, CA 93740-0079  
209/294-2361

## LEARN HOW TO PLAN AND BUILD A PRIVATE ROAD

Are you a hillside vineyardist, homeowner, developer, contractor, or other, contemplating construction of, or already maintaining a small private road? If so, and if you are interested in the latest planning and building technology, you are invited to participate in a unique, half-day, rural-roads workshop, to be held Friday, February 19th in the main Seminar Room (Room 1033) at Napa Valley College.

Organized by Napa County Resource Conservation District (RCD) and U.S.D.A. Soil Conservation Service (SCS), and sponsored by Napa Valley College, speakers will include experts from the civil engineering and construction sectors, California Dept. of Forestry, U.S.D.A. Soil Conservation Service, California Dept. of Fish & Game, and the Napa County Public Works Dept.

Topics included are site evaluation, road design, construction techniques and costs, maintenance, including erosion control, permits and codes, and emergency response uses. A question and answer session will conclude the program. Outlines of presentations and additional resource materials will be available. For further details and registration information, interested parties should contact the Napa RCD/SCS Office, (707) 252-4188, or Steven Krebs at Napa Valley College, (707) 253-3259.

## MARKETING INFO FOR GROWERS AND SHIPPERS

There is a February 1, 1988 deadline for two Dept. of Food and Ag programs:

Matching Agricultural Export Promotion Funds for promotional and advertising costs, trade show expenses, product samples, market research, merchandising costs, etc. Call (916) 322-4339.

Farmer to Consumer Directory for growers operating roadside stands, U-pick fields and other on-farm retail enterprises. Call 1-800-952-5272.

We have a copy of the 1986 California Agricultural Exports Annual Bulletin. If you are interested in any specific information, contact us.

Sincerely

*Rachel Elkins*

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Farm Advisor