



# **your Lake County HORTICULTURAL NOTES**

**JANUARY 1995**

Part I

**! HAPPY NEW YEAR !**

## **!!! MARK CALENDARS !!!**

(contact our office for details)

**FEBRUARY 10**

### **LAKE-MENDOCINO 1994 PEAR RESEARCH REVIEW**

Clearlake Grange, Finley - Please RSVP by February 3  
to 263-2281 (see yellow page)

**February 26-28**

### **12th Annual California Farm Conference**

Radisson Hotel, Sacramento

This conference focuses on family farming, direct marketing and agricultural sustainability. Included will be tours, short courses, workshops and a trade show. It is designed primarily for family farmers, farmers' market managers, other direct marketers, those interested in farming and those interested in agricultural sustainability.

**MARCH 8**

### **HANDS-ON TRAINING FOR PESTICIDE APPLICATORS**

UC Hopland Research and Extension Center  
(see goldenrod page)

**June 20-21**

### **1995 International Symposium on Clonal Selection (ASEV)**

Portland, Oregon  
(registration materials available in the spring)



## **PEAR PRUNING ARTICLE TRANSLATED INTO SPANISH**

In the last several years, many of you have attended the CTFA/Pear Advisory Board-sponsored pruning demonstrations given by Dr. Dan Strydom of South Africa. The next is *tentatively* scheduled locally for Saturday, January 28 (PAB will send out notices).

To complement the demonstration, Dan has recently provided an article called *'Training and Pruning of Pear Trees in Countries Characterized by Long Hot Summers and Where Dwarfing Rootstocks Cannot be Used or Are Not Available'* (whew!).

As discussed in October-November **Hort Notes (Part 1)**, this article details many of the concepts he shows during the demonstrations. It was also stressed that it is meant to give *ideas, not rules*. EVERY YEAR IS DIFFERENT (i.e. 1993 vs. 1994) and pruning levels must be adjusted for bud load, desired fruit size and tree vigor. However, many of the principals are widely held through the world today and Dan continuously modifies his ideas as he travels through different growing areas.

Because growers have brought Spanish-speaking personnel to the demonstrations and it is they who actually perform and/or supervise much of the pruning, I arranged to have the article translated into Spanish. This was done by local Kelseyville resident Roberto Lozano, a certified translator/interpreter.

Growers are encouraged to contact us for *both* the English and Spanish version of the article. It is one of the few bilingual publications available for pruning pears and is available **free** from our office. We also have several other publications and tapes on pruning pears.

## **BACKGROUND ON HARMONY ROOTSTOCK WARNING**

(In December **Hort Notes**, the UC Phylloxera Task Force warning on Harmony was printed. The following article by Napa County Farm Advisor Ed Weber details the situation which prompted the warning. If you missed the December article, contact me.)

'A report from the Phylloxera Task Force .... describes the decline of Harmony rootstock and reiterates the message that you should not plant rootstocks with *Vitis vinifera* parentage due to the uncertainty of their phylloxera resistance. Harmony and Freedom both have *vinifera* in their parentage, although it is uncertain in what amount.

The vineyard where the decline of Harmony was observed is a valley-floor vineyard near Rutherford. The original vineyard was planted on AXR#1 and was one of the early sites with decline due to Type B phylloxera. The grower allowed UCD Extension Viticulturist

Jim Wolpert and I to establish a rootstock trial in this location. This was our first opportunity to plant a rootstock trial where we knew Type B was a problem. The old vineyard was removed in the fall of 1989 and new vines (green-growing) were planted in 1990. The site was not fumigated, as we wanted to ensure as many surviving phylloxera as possible.

The trial includes 12 rootstocks: AXR#1, 3309, 110R, 5C, 1616, 101-14, 420A, 039-16, 1103P, 140Ru, Freedom and Harmony. Vines are planted in groups of 18 (3 rows wide, 6 vines long) and there are 8 replications of these 18-vine groups for each rootstock. The vineyard is irrigated only with overhead sprinklers.

Most vines came into production in 1993, although we did not collect harvest yield data until 1994. In both 1993 and 1994, the trial was surveyed for the presence of phylloxera by digging roots from one vine of each replicate of each stock. The AXR vines were consistently infested and showed decline. We occasionally found phylloxera feeding on the young roots of other stocks, but populations were very low and there was no apparent decline. This was expected as all rootstocks will support some phylloxera on the young roots.

This past summer, one of the replicates of Harmony began to show significant decline. Shoot growth was reduced, there were considerable potassium deficiency symptoms and large populations of phylloxera were found on the roots. All 18 vines in the one replicate were affected. Our first thought was that there had been an error in planting the trial and that AXR had been mistakenly planted. This turned out not to be the case. Dr. Andy Walker ran isozyme profiles on samples from each of the 18 plants and confirmed they were indeed Harmony.

The other replicates of Harmony are uninfested and are growing well. Freedom is uninfested and growing well. Some of the lower vigor stocks, 420A, 5C and 101-14 are struggling at this site, but it is most likely due to the lack of drip irrigation.

As mentioned in the Task Force Report, in sites where phylloxera is the primary pest, rootstocks with *Vitis vinifera* in the parentage should not be used. The only exception to this would be in a site infested with fanleaf virus and its nematode vector *Xiphinema index*. In these sites, 039-16 is a recommended rootstock, even though it is half *vinifera*. This is a case of calculated risk. 039-16 has the best performance against fanleaf, which is certain to return to the site. When, or if, 039-16 might fail to phylloxera is unknown. So, there is a known risk if you don't plant 039-16 versus an unknown risk if you do.'

**ITEMS FROM RECENT MEETINGS** (contact us)

**Winegrape Canopy Management, December 8**

ASEV International Symposium on Clonal Selection, Portland, Oregon  
(announcement of meeting)

- \* Comparison of crop yield, construction cost, income and returns of four trellis systems in Napa and at Davis, California.  
Dr. Mark Kliewer

The UC Davis Oakville Experimental Vineyard; Past, present and future  
Dr. James T. Lapsley

*Viticulture and Enology Briefs*, fall 1994  
Dr. Christian Butzke, ed.

- \* for those that attended, these are copies of his many slides!

**Oak Root Fungus Field Meeting, December 16**

Vapam® Tree and Vine Replant Soil Treatment  
Zeneca Corp.

**NEW UC SMALL FARM HANDBOOK**

UC DANR Publication #SFP001    \$20.00    available at our office

New and experienced farmers alike can benefit from the experiences of other successful small-scale farmers, small farm specialists, farm advisors and agricultural researchers who have combined their knowledge of small-scale agriculture into a comprehensive book, the *Small Farm Handbook*. Published by the UC Division of Agriculture and Natural Resources, the 170-page book covers topics ranging from how to buy used farm equipment to interpersonal communication.

38 authors, many of them farmers, contributed to chapters on personal commitment and skills needed for successful farming, farming basics, finances, marketing, ideas on what to produce, how to grow crops and raise animals, postharvest handling of perishable crops, alternative farming methods, labor management and farm family dynamics. Nearly each chapter lists references and suggests sources for further information. The handbook also contains worksheets so information can be tailored to meet individual farm needs.

## ***UC AG PERSONNEL MANAGEMENT MATERIALS***

contact our office

### ***Labor Management in Ag; Cultivating Personnel Productivity***

UCCE Stanislaus Co.      170 pgs.      \$10.00

Written by UC Personnel Management Advisor Greg Billikopf, this book presents ideas and practices to improve management of human resources on the farm. Topics emphasize productivity rather than legal issues. Chapters include all aspects of staffing, training, appraisals, compensation and supervision. This is a unique and *excellent* resource!

### **Systematic Selection of Ag Employees**

Video #V90-Y      \$20.00

This video discusses employee selection factors, recruitment, selection process and orientation.

## ***NEW UC AG SAFETY TRAINING MATERIALS***

(contact us for information or to order)

### **Farm Safety and Field Sanitation/Worker Personal Cleanliness**

\$15.00 (English and Spanish)

The training packet will assist farmers, farm labor contractors, supervisors and foremen who conduct field health and safety training for workers. It is bilingual and provides a guide for trainers with little or no experience in the field of training. It presents specific information regarding the legal responsibilities of farmers and farm workers on field sanitation and personal cleanliness practices at work.

The training packet includes the following:

- \* The Instructor's Guide to Farm Safety Training
- \* The Instructor's Guide to Field Sanitation and Worker Personal Cleanliness
- \* 2 Audio Cassettes
- \* 2 Training Brochures (15 copies and white copies for duplication)
- \* 10 Picture Boards
- \* 4 Photographs

## **La Loteria del Manejo Seguro; A Driver Safety Training Game**

DANR Publication #3363

\$10.00

English and Spanish

This training game was developed with the help of law enforcement officials and the target audiences. It was designed for use with Spanish-speaking workers in community education and worksite settings, driver trainings, English-as-a-Second Language and migrant education classes, and at home. The bilingual instruction guide targets both Spanish and English speaking audiences. The *Loteria* itself, the colorful images, and the language are appropriate to the target cultures, for new and continuing drivers in cities and rural areas.

## **Selected Safety Order Affecting Agricultural Employers**

134 pgs.

\$10.00

Developed by Stephen R. Sutter, UC Cooperative Extension Farm Advisor and L. George Daniels III of the Farm Employers Labor Service, under the sponsorship of the UC Agricultural Personnel Management Program, this publication contains the general industrial safety orders (GISOs) that are most likely to apply to agricultural work. It includes, for example, rules regarding field sanitation, vegetable-trimming saws, hand and portable power tools, transportation of employees and materials, and tractors. A detailed table of contents and a subject index help readers find regulations that pertain to a specific interest.

We also have listings of VHS tapes and films on many topics concerning farm and ranch safety. Most are available to borrow; some to buy.

## ***UC E-MAIL HELPS WITH AG PESTICIDE LAW***

(from Ag Personnel Management Program Newsletter, Fresno UCCE)

An electronic bulletin board opened this year to quicken and broaden the flow of information on a complex Environmental Protection Agency regulation that covers some four million people who work in U.S. fields, forests, nurseries and greenhouses.

Anyone who is concerned with the Worker Protection Standard for Agricultural Pesticides (WPS) and who has access to Internet, Bitnet, or a compatible electronic mail system is welcome to join the network of participants. The bulletin board, "WPS-Forum", is maintained as a free public service at the College of Natural Resources of the University of California Berkeley.

"The forum will help people dealing with the WPS to pool knowledge, identify problems, share solutions and distribute timely announcements--in short, to get on and stay on the same page," says Cooperative Extension Specialist Howard Rosenberg, who developed WPS-Forum with systems analyst Gary Casterline and Dana Keil, all of the UC Department of Agricultural and Resource Economics.

"Although it was published in August 1992, after years of consultation with representatives of groups affected," Rosenberg explains, "awareness and understanding of the WPS remain very uneven. Partly because of widespread confusion about the regulation and how to comply with it, Congress enacted a bill in March pushing back the effective date of several provisions from April 15, 1994, to January 1, 1995. Many agricultural employers, employees and advisors still have basic questions about the WPS and all face difficulty in keeping abreast of rule interpretations, proposed modifications and practical tools and references for compliance."

Like other pesticide safety rules, the WPS is enforced in California by the Cal-EPA Department of Pesticide Regulation and by county agricultural commissioners. "It is important that employers learn all they can about WPS," says Paul Gosselin, DPR Assistant Director for Enforcement, Environmental Monitoring and Data Management. "We have had public workshops on the new standard and, of course, held training sessions for the commissioners. An electronic bulletin board is an important additional vehicle for getting the word out."

To subscribe to the WPS-Forum, send the following electronic mail message to ListProc@are.berkeley.edu: "SUBSCRIBE WPS-FORUM yourfirstname yourlastname" (for example: subscribe wps-forum Pete Wilson). The system will return a message confirming your subscription and providing more information about the bulletin board features. Direct phone inquiries about WPS-Forum to Rosenberg at (510) 642-7103 or Casterline at (510) 642-5583.

*Permitted to reprint from Farm Employers Labor Service Newsletter, Sacramento, (916) 924-4124, by George Daniels, Editor.*

I hope to see **ALL** pear growers at the FEBRUARY 10 research meeting at the Grange!

Sincerely,



Rachel Elkins  
Farm Advisor

Cooperative Extension  
U.S. Dept. of Agriculture  
University of California  
Oakland, CA 94612-3560

Bulk Rate  
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Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Kenneth R. Farrell, Director of Cooperative Extension, University of California.



# **LAKE-MENDOCINO 1994 PEAR RESEARCH REVIEW**

Friday, February 10, 1995

Clear Lake Grange, Finley

## **Sponsored by:**

University of California Cooperative Extension

California Pear Advisory Board

## **PROGRAM**

(3 hours PCA continuing education credit applied for)

- 8:00 A.M.     **Registration, morning refreshments**
- 8:30           **Welcome and Introduction to program**  
                Rachel Elkins, Farm Advisor, UCCE Lake County
- 8:45           **The Future of Tree Fruit Research and Extension in California**  
                Dr. Ted DeJong, Chair, Dept. of Pomology, UC Davis
- 9:15           **Effects of Irrigation and Tree Water Status on Size and Quality  
                of Bartlett Pears**  
                Dr. Ken Shackel, Dept. of Pomology, UC Davis
- 9:40           **Codling Moth Resistance Management**  
                **Codling Moth Pheromone Degradation by Air and Sunlight**  
                Dr. Steve Welter, Dept. of Environmental Science Policy and  
                Management (DESPM), UC Berkeley  
                Dr. Jocelyn Millar, Dept. of Entomology, UC Riverside
- 10:30          **BREAK** (refreshments by Konocti Catering)
- 10:55          **Integrating Parasitism into the Management of Codling Moth**  
                Dr. Nick Mills, DESPM, UC Berkeley
- 11:20          **Post-harvest Control of Codling Moth**  
                Dr. Robert Van Steenwyk, Extension Entomologist,  
                DESPM, UC Berkeley
- 11:45          **Occurrence and Distribution of MLO's in Pear Trees**  
                Dr. Bruce Kirkpatrick, Dept. of Plant Pathology, UC Davis
- 12:10          **Control of Fireblight, Frost Injury and Fruit Russetting Using  
                Cultural, Chemical and Biological Controls**  
                Dr. Steve Lindow, DESPM, UC Berkeley
- 12:40          **Pear Rootstock Trials**  
                Wilbur Reil, Farm Advisor, UCCE Yolo-Solano Counties
- 1:05           **Effect of Tree Height and Summer Pruning on Pesticide Deposition  
                and Pest Population**  
                Dr. Bill Steinke, Dept. of Biological Engineering, UC Davis  
                Rachel Elkins, UCCE, Lake County
- 1:30 P.M.     **ADJOURN**

PLEASE POST



University of California  
Hopland Research & Extension Center  
Integrated Pest Management Project  
Cooperative Extension-Lake & Mendocino Counties &  
Agricultural Commissioners-Lake & Mendocino Counties  
present

## HANDS-ON TRAINING FOR PESTICIDE APPLICATORS

### LOCATION & DATE

U.C. Hopland Research  
& Extension Center (HREC)  
4070 University Rd.  
Hopland, CA., 95442

Wed. March 8, 1995  
Hours: 8:00 am to 4:30 pm

### CONTINUING

### EDUCATION CREDIT

7 PCA and Applicator CE hours

### For More Information

Call: (707) 744-1424  
(707) 263-2271  
(707) 463-4208

or

Write to:

U.C. Hopland Research  
& Extension Center.  
4070 University Rd.  
Hopland, CA., 95449

### LANGUAGE

Spanish and English language  
sessions are available for all  
topics.

The entire program will  
consist of hands-on training  
and will allow you to receive  
personal experience with  
equipment and techniques.

### TOPICS

- ✓ Personal Protective Equipment
- ✓ First Aid / Health Effects
- ✓ Mixing and Loading Pesticides
- ✓ Leaks and Spills
- ✓ Calibration
- ✓ Environmental Protection
- ✓ Cleanup and Disposal

### REGISTRATION

To register, fill out the form  
below.

Cost: *Pregistration* (postmarked  
by February 22, 1995) is \$40. *Late  
registration* (postmarked after  
Feb. 22, 1995) is \$50. Fee includes  
refreshments, lunch, handouts,  
and other materials. **There is  
limited space; register  
early!**

Confirmation: Registrations  
postmarked by February 22, 1995  
will be confirmed by mail.

Refund Policy: There will be no  
refunds. However, another  
person may attend in your place.



## 1995 UC PESTICIDE APPLICATOR WORKSHOP REGISTRATION FORM

(Register only one person per form; photocopy form for additional registrations.)

Please register me for:

HREC WORKSHOP  
March 8, 1995

☐ Spanish ☐ English

Register by mail:

University of California  
Hopland Res. & Ext. Center  
4070 University Road  
Hopland, CA 95449

Please print:

Applicator Name (First, Middle, Last)  
or PCA #

Daytime phone

Mailing Address

City

State

ZIP

✓ Enclosed is my check (\$40 per person / \$50 late registration) payable to UC Regents