



# your Lake County HORTICULTURAL NOTES

FEBRUARY 1992

## !!! REMINDERS !!!

- FEBRUARY 22 Wine Grape Day - Fresno  
(contact us for a registration form)
- FEBRUARY 26 1991 Pear Research Update  
Lakeport Lions Club, Lakeport  
(agenda on page 4 )
- MARCH 1 HORT NOTES subscription forms DUE!  
You will not receive an April  
newsletter unless it is returned.  
See Sept.-Oct. 1991 HORT NOTES or  
use form on page 9 .

## ORCHARD THERMOMETER TESTING

The U.S. National Weather Service will again be testing thermometers this year. The schedule is as follows:

Bring thermometers in by Monday, March 2nd.  
Testing will be done on Wednesday, March 4th.  
Pick up thermometers by Friday, March 6th.

New thermometer tags will be provided at the Farm Advisor's office. Thermometers will not be tested without your name on a new tag on each one. The following instructions will help you complete preparations for testing:

1. Remove thermometers from any containers.
2. Clean thermometers of all old tags, dirt, cobwebs, etc.
3. Transport thermometers vertically with bulb end down.

Fruit Frost Report recordings are furnished by the Agricultural Commissioner's office. The telephone numbers are available to the growers by calling the Ag Commissioner's office at 263-2271, the Farm Advisor's office at 263-2281 or your local pear packing shed or winery. For your ease in accessing these recordings, these numbers are unlisted and not available to the general public. PLEASE KEEP THEM CONFIDENTIAL! The general public has access to these reports from the following radio stations and schedules:



- KNTI - beginning March 9 - 6:30, 7:30 & 8:30 P.M. - 7 days per week
- KUKI - beginning March 9 - 6:60 A.M., 7:06, 8:06, 9:06 P.M. on the FM station. You can also pick up this station on Jones Intercable FM Channel 94.9.
- K-WINE - beginning Mid-February - reports will run every hour on the hour from 7:03 P.M. to 5:03 A.M.
- KXBX - will run as a public service announcement only when a freeze is anticipated - no set schedule is provided.

Again, to allow you access to the recordings more readily, please refer your non-grower friends to these radio schedules.

#### LATE WINTER IRRIGATIONS - AGAIN?

As of January 11, the state reported 7.42 inches of rain in Lakeport, or 50% of normal. Although there are still two potentially rainy months until bloom, many orchards and vineyards may require 1 or 2 irrigations to replenish deep (3-6') soil moisture prior to bloom, for several reasons:

- Roots begin to grow before tree/vine tops, so root zone moisture will enhance spring growth. Adequate moisture is most critical at BLOOM.
- It is very difficult to replenish depleted subsoil moisture once tree/vine demand increases in late spring. If water is in short supply this season, starting the season with a full root zone profile will be even more important.
- SMOOTH, MOIST, BARE SOIL PROVIDES AN EXTRA 2-4 F OF PROTECTION AGAINST FROST DAMAGE. This is often the difference between a good crop and total disaster. Lake County should be prepared for an early frost season if temperatures warm sufficiently early.

#### USE A PROBE TO MONITOR SOIL MOISTURE

Irrigations should only be applied if moisture is known to be depleted. The following was written by the Kings River Conservation District:

#### MAKE A SOIL PROBE TO MONITOR WATER PENETRATION

##### What are they?

There are many kinds of soil probes and samplers, but the simplest of these consists of a straight steel shaft with a

slightly enlarged tip. This type of probe will not take a sample of soil, but it can be used to determine the depth of water penetration, depth to hardpan, or the uniformity of irrigation.

When this probe is pushed into the soil, it will slide relatively easily through wet soil but will be difficult to push into dry soil or hard pan.

#### How deep does the irrigation penetrate?

Soil probes are used to determine the depth of the wetted portion of the soil letting a grower know how deep his irrigation has penetrated. The probe should be pushed into the ground at several places throughout the field within a couple of days after the irrigation.

An irrigation should penetrate to the bottom of the crop's root zone - a soil probe is a good way to monitor this. If moisture does not reach that depth, the soil is not being used to its full potential and the crop will become stressed. If the water penetrates past the root zone, then it will be unavailable for the crop to use.

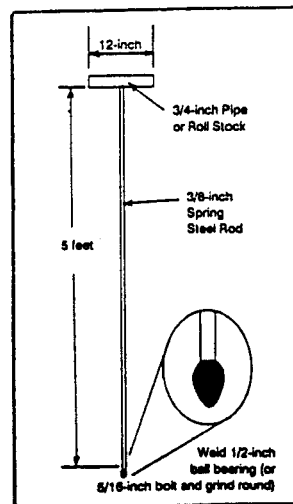
#### Uniformity

A soil probe can also be used to determine irrigation uniformity. This can tell a grower how evenly water is applied to a field. To determine the uniformity, a field's soil should be probed at the head end, mid-point and tail end within a couple of days after an irrigation.

If the water penetration is about the same at all these places, then the irrigation is fairly uniform. If the probe will go deep into the soil in some locations (usually the head end) but will not go very deep in other locations (usually near the tail end), the the irrigation is not very uniform. A non-uniform irrigation will result either in over-watering one part of the field or under-watering other parts.

#### *Making a Simple Soil Probe*

A soil probe can be made from materials that are usually found lying around the farm. The sketch below gives suggested sizes. Actual sizes can vary depending on available materials. Note that the ball (or bolt) should be slightly larger than the rod diameter and can be ground to a slight point.



1991 PEAR RESEARCH UPDATE

(Lake-Mendocino District Meeting)

ATTENTION ALL PEAR GROWERS!!

I strongly encourage you to come and learn what  
your assessments have paid for!

DATE: Wednesday, February 26, 1992

TIME: 9:00 A.M. - 3:30 P.M.

PLACE: Lakeport Lions Community Hall  
2495 Parallel Drive, Lakeport  
(Handicapped Accessible)

SPONSORS: University of California Cooperative Extension  
California Tree Fruit Agreement - Pear Research  
Sub-committee

2.5 units PCA credit applied for

AGENDA

- 9:30 Combining lowering tree height and summer pruning to increase productivity in shaded mature Bartlett pear trees  
Rachel Elkins, UCCE, Lake County  
Ted DeJong, Dept. Pomology, UC Davis
- 9:55 A nondestructive firmness sorting system for pears  
Michael Delwiche, Dept. Ag Engineering, UC Davis
- 10:20 BREAK
- 10:40 Testing of Bartlett pear maturity and ripening characteristics using magnetic resonance procedures  
Julie Heil and Michael McCarthy,  
Dept. Food Science & Technology, UC Davis
- 11:05 Control of fire blight, frost injury and fruit russet of pear using chemical and biological agents; fruit russet of pear incited by leaf surface bacteria  
Steve Lindow, Dept. Plant Pathology, UC Berkeley
- 11:35 Study of factors affecting codling moth control by mating disruption  
Jocelyn Millar, Dept. Entomology, UC Riverside
- 12:00 LUNCH (on your own)
- 1:15 Mating disruption of codling moth in pear orchards; Efficacy of the IGR fenoxycarb against Guthion resistant codling moth; Insecticide resistance in codling moth in pears  
Steve Welter, Dept. Entomology, UC Berkeley
- 2:05 Assessment of vibration induced injury during transport of pears  
Tom Hinsch, USDA/ARS Horticultural Crops Research  
Lab, Fresno  
David Slaughter, Dept. Ag Engineering, UC Davis
- 2:30 Enhancing biological control of pear psylla with the specialist predator Psenulus alienus (Hymenoptera: Sphecidae)  
Jay Rosenheim, Dept. Entomology, UC Davis
- 2:55 Codling moth control in organic orchards using mating disruption  
Rachel Elkins, UCCE, Lake County (time permitting)
- 3:15 ADJOURN & "reception"

VINEYARD AUDIO-VISUAL TRAINING AIDS  
(English and/or Spanish available)

U.C. Visual Media Vineyard Workers Safety Videos

- Work hazards in the vineyard (slide set only) #86/116
- Odd jobs safety in the vineyard #V/88-AC
- Tractor safety in the vineyard #V/88-AD
- Pesticide safety in the vineyard #V/88-AE
- Safe pruning in the vineyard #V/88-BM
- Back safety in the vineyard #V/88-BQ
- Safe harvest practices in the vineyard #V/88-BW
- Safe use of farm machinery, repair and maintenance in the vineyard #V/88-BV

We also have a small but growing collection of videos on various agricultural production and safety topics, as well as lists, catalogues and order forms from various sources.

SPECIALTY AND MINOR CROPS HANDBOOK  
UCANR Publ. #3346 130 pages \$30.00

Specialty and minor crops are fruits, vegetables, herbs and other agricultural products that are either imported to the United States or grown here on a limited scale. A product that is a specialty or minor crop in this country could be quite common in another part of the world. Specialty and minor crops have given many small-scale growers a way to reach markets that are as yet too limited to sustain conventional, large-scale agriculture.

Now small-scale growers have a new and growing resource for information on these crops. The staff of the UC Small Farm Center have compiled the Specialty and Minor Crops Handbook, an all-new loose-leaf collection of descriptive sheets on organic, ethnic, or simply unusual agricultural products that, while they are not mainstream, may well be profitable for determined growers and marketers.

In its first edition, the new handbook profiles 37 crops. Each crop sheet includes color photographs, seed sources, cultivation and production methods and valuable information on marketing alternatives. At least as many more crop sheets will be added in 1992, and they can be incorporated easily into the loose-leaf format.

Besides the crop sheets themselves, Specialty and Minor Crops Handbook includes an extensive bibliography that guides you to more information on each specific crop, a glossary to oriental vegetables that matches scientific names to common names in six languages and, of course, an index to the crop sheets. All of this is packaged in a handsome and durable three-ring binder.

Current crop sheets include arugula, bok choy, chives, daikon, endive, fennel, kiwano, specialty lettuces, mung beans, nappa cabbage, salsify and tomatillo, among others. Upcoming sheets will cover a wide variety of grains, herbs, fruits and vegetables.

To order your copy of Specialty and Minor Crops Handbook, contact our office.

#### ORGANIC FARMERS MUST REGISTER WITH CDFA

A newly signed law that takes effect immediately requires all organic growers in California to register with their county agricultural commissioner.

Assembly Bill 645 (Farr), which implements the California Organic Foods Act of 1990, states that all producers and handlers of organic foods must register immediately with the county agricultural commissioner in the county of their principal operation.

The purpose of the legislation is to provide protection for producers, handlers, processors, retailers and consumers of organic foods marketed in California.

Standards for organic foods will be enforced by the Department of Food and Agriculture and the county agricultural commissioners.

Any questions should be directed to your local county agricultural commissioner's office or Paul Branum, Manager, California Organic Program at (916) 654-0919.

#### MORE NEW UC PUBLICATIONS AVAILABLE (contact our office)

California Commercial Laboratories Providing Agricultural Testing  
(revised 1991)

Publication #3024	24 pages	\$2.50
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#### **Diseases of Temperate Zone Tree Fruit and Nut Crops**

The only publication of its kind. There are entries for nearly 200 diseases and disorders affecting pome fruits, stone fruits, nuts, olives, figs and several minor fruits grown in temperate zone areas. Each such entry gives the history, causes, symptoms and control methods for particular fruit or nut hosts. (See accompanying flyer.) Distributed under separate cover.

Publications #3345	464 pages, hardbound	\$55.00
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Natural Enemies Are Your Allies! (color poster)

Publication #21496 \$5.00

Postharvest Technology of Horticultural Crops (2nd ed., 1991)

Publication #3311 304 pages \$45.00

PUBLICATIONS FROM NON-UC SOURCES

Alternative Rootstock Update (grapes) \$15.00

incl. Vitis species, rootstock parentage, rootstock propagation, availability, importation research activities, performance, future choices

Contact: ASEV, P.O. Box 1855, Davis, CA 95617

Resource Guide to California Agricultural Irrigation Services

incl. incentives, special loans, technical assistance

Contact: QEI, Inc., 1623-5th Street, Suite C, Davis, CA  
95616 (916) 743-6006

AGRICULTURAL PUBLICATIONS CATALOGUES

All those seriously involved in agriculture should keep the following catalogues handy:

Ag Access; Agricultural Book Source  
Post Office Box 2008  
Davis, CA 95617  
(916) 756-7177  
FAX (916) 756-7188

Agricultural Sciences Catalogue  
UCD Bookstore  
University of California  
Davis, CA 95616-8687  
(916) 752-6846

UC Agricultural Publications  
Available at our office

THANK YOU FOR YOUR COOPERATION

1991 was another good year for Lake County agriculture. Some field plots have been "put to bed" for the winter, while others continue to demand the input of both researchers and cooperators. Once again, we extend our deepest gratitude to those who have donated trial sites, labor, energy, money and time to UCCE's cause. For 1991, we particularly acknowledge:

Janie Plachek  
Jack McCabe  
Alex Suchan Nursery  
and Ranch  
Rafael Valadez  
Moitozo Bros. Packing Co.  
Wayne & Elaine Sylvia  
Larry Rogers  
Dennis McCarthy  
Dave & Vivian Bucknell  
Neil & Karen Bradford  
Joe Woolridge  
Ben Cambron  
Ike & Lucille Hill  
John Sisevich  
Greg Hanson  
Brent Holdenried  
Myron Holdenried  
Bill Oldham  
Dick Keithly  
Kelseyville Packing Co.

Armando Vasquez  
Ken & Carolyn Barr  
John Barr  
Adobe Creek Orchards & Packing Co.  
Broc Zoller  
Don & Margaret Eutenier  
Dick Cody  
Quercus Ranch  
Randolph & Doug Railey  
Kendall Jackson Winery  
John Garduno  
Mark Hauser  
Sutter Home Winery  
Rollin Wilkinson  
Beringer Vineyards  
Dave Tuttle  
Willis Covey  
Keith Petterson  
Sid Stokes  
Mt. Konocti Growers, Inc.  
Ross Eutenier

The following organizations and people co-sponsored meetings, donated funds and supplied other support for our research program. We are thankful for this because it enhances the programs we can provide to the entire agricultural community.

Lake County Dept. of Agriculture  
Lake County Grape Growers Assoc.  
USDA Soil Conservation Service  
BioControl Ltd.  
Concep Membrane  
MSD AgVet  
Growers Ag Service (Geyserville)

Lake County Farm Bureau  
Moyer Products  
United Ag Products  
Rainbow Ag Services  
Ciba Geigy Corp.  
ICI Americas, Inc.  
Unocal Corp.

Sincerely,

Rachel Elkins  
Farm Advisor

REMINDER: Please return  
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subscription form  
NOW!



UNIVERSITY OF CALIFORNIA  
883 Lakeport Blvd.

COOPERATIVE EXTENSION  
Lakeport, CA 95453

COUNTY OF LAKE  
(707) 263-2281  
TDD 1-800-698-4544

YOUR LAKE COUNTY HORT NOTES  
SUBSCRIPTION FORM

Fill form in completely and return to the U.C. Cooperative Extension office immediately. Your name will be dropped from the mailing list if we do not have a current form on file by March 31, 1992.

Name \_\_\_\_\_ Phone # \_\_\_\_\_

Company \_\_\_\_\_ Phone # \_\_\_\_\_

Mailing Address \_\_\_\_\_

In order to help cover the cost of producing newsletters, it is necessary to charge a fee to those subscribers who DO NOT OWN PROPERTY NOR RESIDE IN LAKE COUNTY. Annual subscription fee is \$5.00 - please make check payable to U.C. REGENTS. However, if you do own property in Lake County, please sign below and indicate the address of the property (not your mailing address). Thank you.

YES, I do own property in Lake County.

Signature \_\_\_\_\_ Address \_\_\_\_\_

Please indicate commodities you are interested in:

☐ Pears ☐ Grapes ☐ Walnuts ☐ Kiwi ☐ Backyard Fruit  
☐ Vegetables ☐ Berries ☐ Ornamentals ☐ Other \_\_\_\_\_

The following Affirmative Action information is required by federal law. It is, however, kept confidential, as is all other information on this form.

☐ Male ☐ White ☐ Black ☐ Asian ☐ Hispanic  
☐ Female ☐ American Indian ☐ Other \_\_\_\_\_

Thank you for your cooperation.

Sincerely,

*Rachel B. Elkins*

Rachel Elkins  
Farm Advisor

