



# your Lake County HORTICULTURAL NOTES

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DECEMBER 1988

## WALNUT DEEP BARK CANKER - AN EPIDEMIC?

In past newsletters, I have editorialized on the importance of pruning to maintain tree vigor, renew fruiting wood and maintain nut size and quality. This fall, newsletters from all major walnut-producing counties describe extensive dieback due to the effects of heat and water stress on trees already weakened by the heavy crop of 1987. Secondary problems being associated with these stresses include: sunburn (a large crop lays down limbs, hence aggravating the condition), branch wilt (a fungus which enters through sunburn cracks), increased susceptibility to winter injury and the bacterial disease, deep bark canker.

Lake County walnuts are suffering from all these maladies to varying extents. In 1988, the same heat that caused dark, shriveled kernels no doubt sunburned exposed weak, water-stressed limbs as well. Although branch wilt seems less prevalent here, what looks to be deep bark canker - mainly in Hartley, but also some Franquette - is rampant. I say "looks to be" because I have been unable as yet to get a confirming isolation in the lab, and in some cases, the symptoms vary somewhat from stereotypical DBC. However, we have had DBC inducing conditions for the past three years. Also, in affected orchards, symptoms are more prominent on trees in poorer soils, e.g. gravel or hard-pan. The situation is compounded in the fall by disk and shaker injuries (I've seen plenty of these!) which are a prime entryways for bacteria carried from tree to tree on contaminated shaker pads. I am afraid that DBC will be in epidemic proportions unless growers do their utmost to minimize stress. Deep bark canker will defoliate and kill limbs--causing even more sunburn and other dieback problems--DO NOT IGNORE IT!

Now, back to pruning. DBC is systemic in the tree; once it is in the phloem (sap), it is always there. Maintaining a healthy tree via pruning (especially non-irrigated trees), fertilization and irrigation helps keep the bacteria inactive. This winter I will be happy to work individually with growers on an economical pruning program. Also, in cooperation with local orchardists, pruning demonstrations will be held. Watch for dates and places in next month's newsletter or in the newspaper. Please call me for advice or to come out and discuss your particular situation.

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## WINTER INJURY TO GRAPES

Last April growers throughout the county noted many blank or dead spurs during budbreak in certain vineyards. In only one case was a pathogen (*Eutypa*) isolated in the lab. In all cases, there was a pattern of weather, vine characteristic and management that lead to the conclusion it was winter injury. Injured blocks were:

1. vigorous varieties, e.g. Cabernet sauvignon, Sauvignon blanc, Chenin blanc, often (but not always) on fertile soils,
2. irrigated in the fall during the warm spell after harvest,
3. PRUNED VERY EARLY IN THE WINTER, i.e. December - early January,
4. in low pockets or at the low end of rows.

Temperatures were quite warm after harvest and in the first part of December. On December 11th, minimums dropped drastically, as low as 16 or 17°F in individual vineyards. My best guess was that warm, fall weather, coupled with post-harvest irrigations, encouraged growth and prevented full dormancy of canes and spurs. Early-pruned wood of vigorous vines were thus vulnerable to winter kill when temperatures dropped radically.

There is little data to back up the long-held observation that time of pruning significantly impacts winter injury. No doubt, all factors - the environment, vine vigor and management - must come together to complete the scene. The environment cannot be controlled but perhaps late season vine vigor and time of pruning can. Before starting to prune, make sure the wood is dormant. Labor availability often dictates pruning schedule, but in our northern, cold growing area, it may be worth waiting a little to prevent a lot of damage.

### DAMAGING TEMPERATURES - DORMANT (from observation, not data)

canes and spurs	25°F
3 - 5 yr. old vine	25
5 - 10 yr. old vines	20

### BURN PERMIT REMINDER

(Lake County Air Quality Management District)

The Lake County Air Quality Management District would like to remind you that all agricultural burning requires a permit and that you must be sure that it is a permissive burn day PRIOR to igniting any fire. This applies to all operations where prunings, brush or other vegetative wastes are gathered from an area of 5 acres or more. An agricultural burn permit can be obtained at the District offices in the County Agricultural Center, 883 Lakeport Blvd., Lakeport, or at most local fire District offices. For burn day status you may call 263-3121, 987-2100, 994-4444, or listen to the local radio stations (KIBX, KNTI, KWTR).

Please remember that it is never legal to burn plastic, rubber, metal or petroleum based wastes, and that the law allows for severe penalties for burning prohibited materials. Your cooperation will help ensure the most healthful air possible for all Lake County residents.

1989 WINTER MEETING SCHEDULE  
MARK CALENDARS NOW:

Friday, January 6th - Vineyard Canopy Management  
co-sponsored by Lake County Grape Growers Association  
Clearlake Grange, Finley  
(agenda and registration form attached)

Tuesday, February 7th - 1988 Pear Research Results  
co-sponsored by California Tree Fruit Agreement  
Mendocino County Farm Bureau  
(agenda in January newsletter)

Walnut meeting will be held in February. Also, I am scheduling pruning demonstrations for young and mature trees - MORE LATER.

SPANISH-LANGUAGE PRUNING PUBLICATIONS AVAILABLE

Contact me if you would like to review the following -- I have one copy of each:

- Guia y Poda de Parras  
(Pruning and Training Grapevines)  
M. Ahmedullah and Jorge Lobos  
Washington State University Cooperative Extension  
Bulletin #0761
- Poda y Guia de Manzanos y Perales  
(Pruning and Training of Apples and Pears)  
Robert Stebbins  
Pacific Northwest Extension Publication  
#PNW 156-S

NATIONAL DIRECT MARKETING CONFERENCE AND TRADE SHOW

January 18 is the deadline for exhibitors to reserve a booth for the National Direct Marketing/Farm Conference '89 trade show at the Oakland Convention Center February 2 - 5.

The trade show will be open from noon Friday, February 3 until 11:00 A. M. Sunday, February 5 for exhibits featuring agricultural products and equipment, services, farms, farmers' markets, California marketing boards and other state marketing programs.

Delegates and the public also will be attending a food and wine tasting reception Friday night in the trade show area.

Anyone interested in exhibiting at the trade show should call Vance Merrill-Corum at the California Department of Food and Agriculture Direct Marketing Program, (213) 749-5775.

THANK YOU FOR YOUR COOPERATION

At the end of my first field season, I owe lots of thanks to research cooperators, meeting sponsors, advisory committee members and tour guides. I learned so much from all of you and wish everyone the happiest of holidays and a great New Year.

ABBOTT LABS  
ERNIE AKINS  
VIC AND JANE BARNES  
RICK BARNETT  
JOHN BARR  
KEN AND CAROLYN BARR  
ROSS BENSON  
MIKE BRENDLEN  
DAVE AND VIVIAN BUCKNELL  
BIO-CONTROL LTD.  
AL AND JEAN CALDWELL  
DICK CODY  
STAN CONRAD  
STEVE ELLIS  
BILL ESTREM  
DON EUTENIER  
ROSS EUTENIER  
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IKE HILL  
BRENT HOLDENREID  
ART HORTON  
KIT AND LINDA JONES  
KENDALL-JACKSON VINEYARDS  
PAT & JANET ROSENTHAL

LAKE COUNTY FARM BUREAU  
MARYKA ORCHARDS  
JACK MC CABE  
MENDO-LAKE COLLEGE  
MOYER PRODUCTS  
JANE PLACHEK  
DAN PRICE  
RAINBOW AG SERVICES  
DIETMAR RENKER  
ALVIN AND BRIAN RENTSCH  
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DIANE HENDERSON STOKES  
SID STOKES  
SUTTER HOME VINEYARDS  
BOB SUENRAM  
TRI-CAL FUMIGATION  
RAFAEL VALADEZ  
WIN HORNE  
LAKE COUNTY GRAPE GROWERS  
ASSOCIATION

A very special acknowledgement to several who's help, advice and constant encouragement have meant so much to the success of our program this year:

Lake County Ag Commissioner Staff  
- Chuck Morse, Dave Niemann, Don Tompkins, Drew Tritchler,  
Chris Twohy, and Doug Wilson  
John Sisevich  
Alex and Lois Suchan  
Broc Zoller

Sincerely,

*Rachel*

Rachel Elkins  
Farm Advisor

VINEYARD CANOPY MANAGEMENT

co-sponsored by  
University of California Cooperative Extension and  
Lake County Grape Growers Association

Friday, January 6, 1989

PROGRAM

8:30 A. M.	-	Registration and coffee	
9:00	-	Welcome, announcements	
9:20 - 10:00	-	Bud Fruitfulness and It's Relationship to Canopy Management	Dr. Janice Morrison Dept. Viticulture & Enology, UC Davis
10:10 - 10:50	-	Canopy Management Systems and Characteristics	Dr. Mark Kliever Dept. Viticulture & Enology, UC Davis
11:00 - 11:15	-	BREAK - coffee and muffins	
11:20 - 12:00	-	Trellis Systems - Practical Considerations	Mr. David Parrish, President A & P Agricultural Structures Visalia, CA
12:00 - 1:00	-	<u>LUNCH</u>	
1:30 - 3:30	-	Rootstock and Management Seminar	Lucie Morton Grower/Consultant

WHERE: Clearlake Grange, Finley COST: \$5.00 per person

Checks payable to: Lake County Grape Growers Assoc.  
65 Soda Bay Road  
Lakeport, CA 95453

REGISTRATION DEADLINE: December 24, 1988

FOR INFORMATION call: UC Cooperative Extension - 263-2281  
or  
LCGGA - 263-0911

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(cut & send)

REGISTRATION FORM - Vineyard Canopy Management

DEADLINE - December 24

Name \_\_\_\_\_

Address \_\_\_\_\_

Phone No. \_\_\_\_\_ No. of Persons \_\_\_\_\_

Total Enclosed \$ \_\_\_\_\_