



your Lake County HORTICULTURAL NOTES

SEPTEMBER-OCTOBER 1991

!!!! ATTENTION !!!!

HORT NOTES SUBSCRIPTION FORM

Pg. 7 Return promptly!

Integrated Pest Management for
Apples and Pears

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1991 WALNUT HUSK FLY SUMMARY

Like the walnuts themselves, husk fly emergence and development was abundant and strung out this year, as was the case for other orchard and vineyard insects. Reports of damage have been numerous, and in some cases, problems noted where previously not experienced. If damage occurred, growers should review:

- 1) TRAP CATCHES - Were traps hung in the proper manner and monitored regularly? If not, it is impossible to guess when or why damage occurred. If so, but light catches contradicted heavy damage, plan to use traps "supercharged" with ammonium carbonate next year (contact your supplier or the farm advisor); more flies will be caught sooner. Review trap location. Were they hung in the shadiest, moistest areas of the orchard? Perhaps more traps are necessary. Finally, were they checked, cleaned and stickum replaced as necessary? Trap catches are the only documentation of population dynamics before damage is seen; USE THEM WISELY.
- 2) CONTROL PROGRAM - 1991 was difficult because most growers had used up their supply of ethion and only "shorter residual" materials remained. How short? Theoretically, with bait,



available registered materials are thought to last about 14 days. However, there is little or no data comparing materials, with and without bait, under Lake County conditions. This year, with multiple emergence peaks through August and September, three and perhaps four sprays may have been warranted this season (see trap catch summary below). This posed a problem for pear growers still harvesting in September, but much damage can be traced back to mid-September, after growers quit spraying.

In summary, trap catches are the key to knowing the pattern of fly emergence and (to a lesser extent) population density. With this data, growers can then evaluate their control program - material, timing, application rate, coverage - and improvements made in 1992. Please contact me to discuss any aspect of your WHF monitoring and control program.

1991 WHF TRAP CATCHES - Lake County
traps hung 7/18/91

TRAPPING PERIOD	NO. DAYS	<u>TRAP LOCATION</u>			
		LAKEPORT	KELSEYVILLE	NICE	UPPER LAKE
7/18-7/30	13	0	1	1	6
7/31-8/6	7	0	1	2	4
8/7 -8/14	8	0	1	1	12
8/15-8/18	4	1	3	2	6
*8/19-8/29	11	2	5	19	9
*8/30-9/5	7	5	12	28	9
9/6 -9/12	7	9	6	8	9
*9/13-9/16	4	15	5	2	13
*9/17-9/23	7	9	12	2	5
9/24-9/29	6	2	6	1	3
9/30-10/6	7	7	1	1	2
10/7-10/10	4	1	1	0	2

*indicates key emergence period

GRAPE ROOTSTOCK CHARACTERISTICS TABLE REVISED (see page 5)

Lately, there has been the usual flurry of inquiries as to which rootstock(s) to order, with the usual "hedging" advice to consider the particular site, irrigation set-up, variety, clone, etc. Based on continually updated information, particularly from Dr. Andy Walker of the UCD Dept. of Viticulture and Enology, and observations from various rootstock trials, the Lake County Grape Rootstock Characteristics table has been revised. Stocks have been grouped according to species origin with characteristics described, so growers may choose based on a real knowledge of attributes rather than what the neighbors or neighboring counties are planting. Thus, if 5BB is unavailable, but 5A is, this is probably just as suitable, because they are very closely related.

Growers in the Big Valley area should particularly note lime tolerance which has, thus far, been of no concern with own-rooted vines. Also, due to space and general insignificance in Lake County, nematodes have not been elaborated on. Contact me if you are particularly interested in this. As information changes, so will the table.

MORE GRAPE ITEMS TO NOTE

1) The deadline for ordering certified stock or scion from Foundation Plant Material Service (FPMS) at UC Davis is NOVEMBER 15. Contact us for the order forms. A major change in selections is that what was previously sold as S04 has been identified as 5C and a new true-to-variety S04 is now available. Both stocks are horticulturally similar (see rootstock table, page 5).

2) Contact our office for the following handouts:

- Map and first year's data from the Lake County Sauvignon blanc rootstock trial at Kendall-Jackson Vineyards, Lakeport.
- Summary of presentations from Oakville Grape Day, August 6.
- Summary of talks from San Joaquin Valley Grape Day, August 9.

WINE GRAPES - GROWING UNCOMMON VARIETIES Del Farnham, Amador County Farm Advisor

Recent interest in Rhone and Italian grape varieties for red wine production in the foothill counties is a mixed blessing.

First, it's great to look forward to wines that include a wider range of grape varieties. However, it's discouraging to see young vineyards planted with virus-infected vines. We are slipping back 40 years to a time before the virus indexing program was established at U.C. Davis. Grape virus is easily spread in infected budwood or cuttings.

Growers should carefully look at the vineyard in the early fall and avoid collecting wood from vines with symptoms or better yet, invest in getting these varieties cleaned up. Grafting over vines to the more desirable Rhone or Italian varieties can also show virus that was not obvious in the vineyard when the previous variety was grown.

Virus indexing is expensive and time consuming. Private individuals or companies can contract with FPMS on a fee-for-

service basis to have special grape varietal selections heat treated and virus treated as necessary to qualify them for foundation stock status. The process takes several years, yet these varieties will never be clean if we don't get the process started.

IPM MANUAL FOR PEARS IS HERE!!!

As stated on page 1, this is a long-awaited and extremely important event. The manual updates the pioneering 1974 Pear Pest Management and will rapidly become an industry "bible". Contributors include UC and other researchers, Extension specialists, farm advisors and PCA's, including Lake County personnel. Besides covering all aspects of pest management, there are excellent chapters on pear botany and growth cycle, horticultural factors and cultural practices. Every topic is well-illustrated and there are numerous charts and tables. It is a beautiful publication and an absolute MUST for every serious grower and others involved in any aspect of the pear industry.

Besides one for yourself, I urge growers to consider purchasing additional copies for key personnel who perform technical tasks. To promote my goal of (at least) one manual on every pear ranch in Lake County, I have enlisted PCA's to distribute brochures and take orders from their clientele to obtain a group discount. The importance of this book cannot be exaggerated. Pear pest management is, and will get, even more complicated. Growers must assist their PCA by being educated about their orchard ecosystem and pest control alternatives. **BUY THIS BOOK NOW!**

For those who prefer, use the order form below, or contact our office.

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GRAPE ROOTSTOCK CHARACTERISTICS
Lake County Trials

ROOTSTOCK AND SPECIES ORIGIN	PHYLLOXERA	WET SOIL	DROUGHT	ROOT/GRAFTING EASE	VIGOR
<u>berlandieri x riparia</u>					
5C	4	4	1/2	3	3
SO4	4	4	1/2	3	3
5BB Teleki, selection					
Kober	4	3	2	3	2
5A Teleki (same as 5BB?)	4	3	2	3	2
5C Teleki	4	3	2/?	3	?
420A Mgt.	3/4	3	2	2/?	3/?
225 Ruggeri	4	3/?	3	4	?
<u>berlandieri x rupestris</u>					
110 Richter	4	2	4	4	3
1103 Paulsen	4	2	4	4	4
<u>riparia x rupestris</u>					
3309 Couderc	4	4	1/2	3	3
101-14 Mgt	4	4	1/2	3	3
<u>rupestris</u>					
St. George (Rupestris du lot)	3	2	3/4	4	4
<u>vinifera x rupestris</u>					
AXR #1	1/2	3	3	4	4
1202 Couderc	2/?	3	3	4	4
<u>vinifera x m. rotundifolia</u>					
039-16	4	?	1/2	2/3	4
<u>longii x (vinifera x (riparia x labrusca))</u>					
1613 couderc	2/4/?	1/2/?	4	4	4
1613 x Champini (Dogridge)					
Freedom	3/?	1	4	4	4
Harmony	3/?	2	3	4	3

VITIS SPECIES CHARACTERISTICS

- V. berlandieri - Excellent phylloxera resistance. Tolerates drought and lime soils. Difficult to root and propagate.
- V. champinii - Vigorous. Moderate phylloxera resistance. Excellent drought and lime tolerance. Difficult to propagate.
- V. Longii - Good phylloxera resistance. Drought tolerant. Easily propagated.
- V. riparia - Excellent phylloxera resistance. Poor drought and lime tolerance. May hasten maturity. Easily propagated.
- V. rupestris - Good phylloxera resistance. Moderately drought tolerant, poor lime tolerance. Easily propagated.
- Muscadinia rotundifolia - Resistant to most Vitis spp. pests, including phylloxera. Poor drought and lime tolerance. Cannot be rooted from cuttings and progeny with Vitis are usually sterile.

KEY TO RATINGS

- 4 = strong or well-known characteristic/resistance/tolerance
- 3 = moderate characteristic/resistance/tolerance
- 2 = mediocre or erratic characteristic/resistance/tolerance
- 1 = known lack of characteristic/resistance/tolerance
- ? = unknown characteristic or insufficient data in California

UPCOMING UNIVERSITY EXTENSION COURSES AT UC DAVIS
contact our office or UNEX at 1-800-752-0881

Grape Disease Management and Identification
Monday, November 11 \$95.00 incl. lunch

Taxation and Accounting for the Small Vineyard
Thursday, November 21 \$120.00 incl. lunch

Vertebrate Pest Management
Monday, November 25 \$70.00 incl. lunch

Current Topics in Winegrape Pest Management
Tuesday, December 3 \$85.00 incl. lunch

changed to Dec. 5

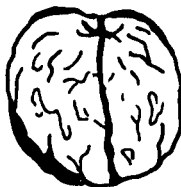
Predators, Parasites and Pathogens
Tuesday, December 17 - Wednesday, December 18
\$135.00 incl. lunches

TO ALL WALNUT GROWERS - HAPPY HARVEST!

Sincerely,

Rachel B. Elkins

Rachel Elkins
Farm Advisor



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Phone # - Business _____

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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.

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Please indicate commodities you are interested in:

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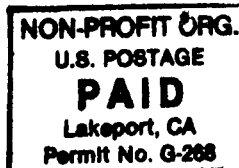
Thank you for your cooperation.

Sincerely,

Rachel B. Elkins

Rachel Elkins
Farm Advisor

COOPERATIVE EXTENSION
U.S. DEPARTMENT OF AGRICULTURE
UNIVERSITY OF CALIFORNIA
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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.