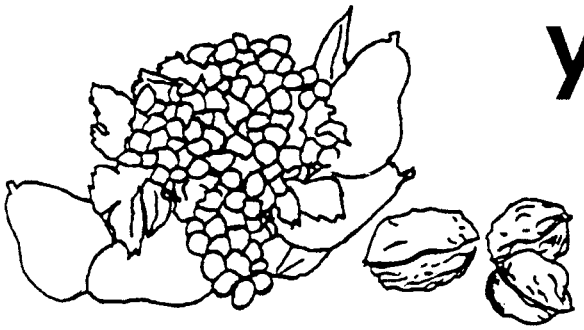

# your *Lake County* HORTICULTURAL NOTES

## APRIL 1997

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

| | |
|---|---|
| **APRIL 24** | **1997 LAKE COUNTY WALNUT UPDATE**<br>Nice Community Clubhouse<br>(agenda page 7) |
| **May 15-17** | **Olive Oil Production Short Course, Santa Rosa**<br>contact UNEX, 1-800-752-0881<br>(description page 4) |
| **May 21** | **Ag Tech '97, UC Davis**<br>contact: UC Fruit and Nut Research and Information Center<br>(916) 754-9708 |

### *WALNUT BLIGHT OUTLOOK*

March was unseasonably warm, but walnut growers should be prepared to treat for blight if conditions turn rainy during bloom, leafing, and early fruit set. This is especially critical if you grow susceptible varieties such as Payne, Serr and Tehema. Chandler, Hartley, and Franquette trees, though less susceptible due to their later bloom and leafing, have been infected to some extent the last couple of years due to very late spring rains. Even some late-leafing orchards may still require one copper spray if 1) there was blight last year and 2) it rains.

The latest UC treatment guidelines for walnut blight are enclosed. Fortunately, testing has shown that the walnut blight pathogen is still susceptible to copper in Lake County. Thus, there is no need to supplement copper with Manex®, as they are doing in the Sacramento and San Joaquin Valleys. The section 18 for Manex® DOES NOT apply to Lake County. Please contact me to discuss your particular situation.

883 LAKEPORT BLVD. • LAKEPORT, CA 95453 • (707) 263-2281 • FAX 707-263-2399 • TDD 1-800-698-4544
U. S. Department of Agriculture, University of California and County of Lake Cooperating

Wheelchair Accessible

***1997 LAKE-MENDOCINO PEAR RESEARCH UPDATE HANDOUTS***

(contact our office)

These were distributed at the meeting on February 26:

⇒ **1996 RESEARCH REPORTS FOR CALIFORNIA BARTLETT PEARS**
Research sponsored by California Pear Advisory Board and Pear Pest Management Research fund

⇒ **PEARS 'Bartlett'; Recommendations for Maintaining Postharvest Quality**
UC Davis Postharvest Outreach Program Produce Facts, May 1996

⇒ *Control of Pear Psylla, Spider Mites and European Red Mite in Pears with AGRI-MEK®*
Technical Bulletin, Merck AgVet Division

***WINEGRAPE MEETING HANDOUTS***

(contact our office)

There were numerous handouts from the two recent workshops, "Establishing a Vineyard in Lake County":

Part 1: Finding money and getting started (February 24)

- *Water considerations in planning to grow grapes*
  Larry Schwankl
- *Information required for reservoir projects*
  Lake County Community Development Department
- *Developing a vineyard budget*
  Mike Fisher
- *Checklist for contract between winegrape grower and winery*
  Peter Windrem

Part 2: Deciding what to grow and how to grow it (March 3)

- Napa River Watershed Owners Manual
  Napa County RCD (1 COPY - IN-OFFICE USE ONLY)
- trellis styles and costs (loose-leaf folder)
  A & P Ag Structures
- *Standards for grapevine nursery materials and guidelines for planting*
  Ed Weber et al.

We also have the updated version of *Information for Prospective Lake County Winegrape Growers*. It is available for $10.00 ($13.00 by mail) from our office.

## *AGTECH '97 TO BE HELD AT UC DAVIS*

Examples of new technology being perfected for fruit and nut growers will be showcased for California agriculture May 21 during AgTech '97 at the University of California, Davis.

More than 75 demonstrations are planned in a wide range of production topics -- biotechnology, composting and mulches, farm management, GPS and mapping, integrated pest management, irrigation scheduling, microirrigation, new variety breeding, postharvest technologies, precision spray equipment, safety and ergonomics, subsurface irrigation, weed control techniques and World Wide Web technology.

Demonstrations feature the work of UC faculty, staff and Cooperative Extension specialists and advisors, as well as select industry members. Specific crops included in the demonstrations include almonds, apples, apricots, cherries, plums, peaches, nectarines, figs, **pears**, **kiwifruit**, olives, pistachios, prunes and **walnuts**.

Special tours will give growers an opportunity to see how rootstock is developed at the campus's Foundation Plant Materials Service and how a "living museum" of trees is preserving genetic diversity for future generations at the USDA Germplasm Laboratory. In a tour of the Bee Biology facility, AgTech participants will see demonstrations featuring almond pollination and the artificial insemination of honey bee queens.

Pest Control Advisers (PCAs) and Certified Crop Advisers (CCAs), will also be able to obtain hard-to-get professional credit in new rules and regulations for worker protection and safety and new laws affecting pesticide registration.

Some other demonstrations will include:

- Use of satellite technology to map out soil compaction and salinity
- A "mow and throw" device to create orchard mulch and improve soil tilth
- Subsurface gypsum injectors to improve poor soil penetrability
- Mechanical topping, hedging and pruning of pistachios, olives and walnuts
- Forced air and "controlled atmosphere" postharvest fumigation of pests
- Use of lacewings for biological control in almond and walnut orchards
- Use of low-cost degree day recorders for improved pest management
- Laboratory techniques used to create transgenic walnuts and apples
- DNA "fingerprinting" to protect proprietary plant materials

The event will take place in the UC Davis teaching orchards on Hutchinson Drive, just west of Highway 113. No pre-registration is required, but a $10 admission fee will be requested at the event. Registration for up to eight hours of PCA and CCA credit is an additional $15.

AgTech '97 is hosted by UC Davis' Department of Pomology, Department of Biological and Agricultural Engineering, College of Agricultural and Environmental Sciences, and the UC Fruit

and Nut Research and Information Center. For additional information about the program, contact Naomi Hirsch at the Center by phone at (916) 754-9708, e-mail the center at fruitsandnuts@ucdavis.edu or tap into the Center's new website at http://pom44.ucdavis.edu. Our office will also have brochures available.

***OLIVE OIL PRODUCTION SHORT COURSE***

(UNEX #964E300, $550, CALL (800) 752-0881)

This three day program is coordinated by Paul Vossen, Cooperative Extension farm advisor from Sonoma County and brings together speakers from the University of California, California growers, producers, chefs and a guest lecturer from Italy. The presence of Paolo Fantozzi, professor of food science at the University of Perugia, Italy, is a special feature of this program. Fantozzi is an analytical chemist and director of the Institute of Agri-Food Industries in Perugia. Aside from working with olive oil as a food scientist, Fantozzi understands first hand about the commercial production of oils, as his family produces and exports olive oil to specialty markets in and outside of Italy.

The course examines:

- how olive oil quality is assessed world wide
- how olive varieties, growing conditions and processing variables affect olive oil quality
- what the future holds for the economic production of high quality olive oil in California

The agenda features sensory evaluation sessions designed to show how to assess olive oil quality in an objective manner, appreciate quality differences among oils and identify defects. A panel of California producers and marketers discuss the economics of production of olives and olive oil and review demand and marketing trends. Attendees learn to evaluate their land for its ability to produce oil olives and how to determine if they have the potential for developing a bottled oil product for sale. In addition to discussions on production, processing and marketing, there are ample opportunities to network with experts in the field of olive oil production. A guided field trip to orchards and processing facilities is also included

Course dates are May 15-17, all day. The course will be held at the Double Tree Hotel in Santa Rosa. The $550 fee includes course materials, lunches and field trip.

# DISEASES

## WALNUT BLIGHT (8/95)

**Pathogen:** *Xanthomonas campestris p.v. juglandis*

**SYMPTOMS:** One to several black lesions may appear on catkins. Fruits develop black, slighty sunken lesions at the stigma end when young; more lesions will develop on the sides of fruit as it matures. Shoots develop black lesions and leaves show irregular lesions on blade. All leaflets of a leaf usually show signs of infection.

**COMMENTS ON THE DISEASE:** The bacteria that causes walnut blight survives on and in dormant buds and catkins, and also in twig lesions. Rain or prolonged sprinkler irrigation is important for spreading bacteria and aiding infection. Early leafing varieties are most severely affected, and the disease tends to be more severe in northern California.

**WHEN TO TREAT:** Control of this disease depends on the application of protective sprays on newly developing nuts to prevent infections. In orchards with histories of heavy infections and high overwintering bacterial populations, protective treatments at 7- to 10-day intervals must be applied during prolonged wet springs for adequate protection. In areas or years of less intensive rainfall, a 10- to 14-day schedule maintained until the rainy season is over is important.

The first application should be made no later than first pistillate bloom, followed by additional treatments made as discussed above. Walnuts are susceptible to blight infections well beyond the pistillate bloom period whenever free moisture occurs. Additional sprays are often necessary, but they must be applied before rain for maximum benefit. The total number of sprays required depends on the judgement of the grower based on disease history and climatic conditions. The success of alternate row spraying during early bloom and leafing depends upon the ability of the machinery to deliver sufficient copper material with good coverage to trees of both target rows.

**TREATMENT:**

| Pesticide (commercial name) | Amount to Use |
|---|---|
| A. BORDEAUX# | |
| 8-5-100 | Label rates |
| COMMENTS: Adding 0.5 gal summer oil emulsion can reduce phototoxicity. If 100 gal/acre or less are used, the Bordeaux mixture should include at least 16 lbs copper sulfate. The objective is to apply 4 lb metallic copper/acre/application. Four lb of copper sulfate contain 1 lb of metallic copper. | |

*Continued on next page.*

# Acceptable for use on organically grown produce.

*Walnut blight cont. (8/95)*

| Pesticide (commercial name) | Amount to Use |
|---|---|

B. FIXED COPPER#

COMMENTS: Resistance to copper is not uncommon in Sacramento Valley orchards and has been found in a few San Joaquin Valley orchards. A Section 18 for some areas of the Sacramento Valley (check with your county agricultural commissioner) allows the addition of Manex to copper. This combination improves control, especially where resistant strains occur.

*Wettable powders* with 50 percent metallic copper (Kocide 101, Champion, etc.) - rates equivalent to 4 lb metallic copper/acre are most effective.

*Dry flowable* formulations with less than 50 percent metallic copper (Kocide D.F., etc.) or liquid formulations (Copper-Count N, Champ, etc.) - use label rates.

Some liquid formulations of copper require less than 4 lb metallic copper/acre. When used at recommended label rates, these formulations provide the same control as that of wettable powders with 4 lb metallic copper.

# Acceptable for use on organically grown produce.

# 1997 LAKE COUNTY WALNUT UPDATE

Thursday, April 24, 1997
Nice Community Clubhouse
3000 Lakeshore Blvd., Nice
(This is a wheelchair accessible site)

## PROGRAM

**8:30 a.m.** REGISTRATION AND COFFEE

**9:00** Effect of weather on fruit set and development
*Rachel Elkins, UCCE Farm Advisor, Lake County*

**9:30** Chilean walnut industry

Comparison of seeds, grafted seedlings and grafted trees for orchard establishment
*Wilbur Reil, UCCE Farm Advisor, Yolo-Solano Counties*

**10:20** BREAK (refreshments courtesy of Walnut Marketing Board)

**10:40** Walnut husk fly biology and management (with new UC video)
*Carolyn Pickel, UCCE Area IPM Farm Advisor, Sacramento Valley*

**11:30** Walnut Marketing Board and California Walnut Commission marketing and research update
*Dennis Balint, Executive Director, WMB; Chief Executive Director, CWC*
*Nathan Holleman, Marketing Director, CWC*
*Dave Ramos, Director of Research*

**12:30** ADJOURN

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

Bulk Rate
Postage & Fees Paid
USDA
Permit No. G-00268

Official Business
Penalty for Private Use, $300

Sincerely,

Rachel Elkins
Farm Advisor