UNIVERSITY OF CALIFORNIA ~ SUTTER/YUBA COUNTIES COOPERATIVE EXTENSION
142A Garden Highway, Yuba City, California 95991
(916) 822-7515~TDD 800-698-4544 ~ Fax (916) 673-5368

ORCHARD NOTES

O C T O B E R 1 9 9 7

UPCOMING PEACH MEETINGS

Mark Your Calendars Now!

PEACH PRUNING MEETING

Thursday, November 20, 1997
10:00 a.m. - 12:00 p.m., Live Oak
A demonstration of a new pruning tower that holds two pruners will follow the discussion on pruning techniques.

ALTERNATIVES TO DORMANT INSECTICIDE SPRAYS: USING Bt

Tuesday, November 25, 1997 in the afternoon, Yuba City
Details on these meetings will follow in the November issue of Orchard Notes.

PRUNING WALNUT TREES/MINIMIZING WINTER INJURY

Pruning in the fall after harvest while the leaves are still on has certain advantages over dormant pruning in mature walnut trees. Few other orchard activities are occurring then; diseased and dead branches such as from branch wilt are easily seen; the weather is milder and usually drier; brush disposal is easier; and pruners can manipulate light penetration within and around the canopy to maintain fruitwood. However, young trees less than five years old should not be pruned until fully dormant since new, frost sensitive growth can be stimulated if pruned before leaf fall. If young trees are pruned too early and if a severe freeze does occur, the tree could end up losing these carefully selected limbs. Young walnuts

(1-3 years old) which are particularly sensitive to winter kill should not be pruned until the delayed dormant period (next March). Young walnut trees that have hardened off (ceasing of terminal and new growth) will withstand a sudden autumn frost better than those trees that are still actively growing. Shorter days, lower temperatures and cutting off irrigation will help to acclimate young trees. With bearing trees, those growing in dry soil are more at risk for cold injury. Adequate soil moisture in the late fall and winter will lessen the effect of winter freezes and should not be a problem if our current rainfall patterns continue.

ORCHARD FLOOR MANAGEMENT

Fall Weed Control

Mid-October through November is the usual time to apply preemergence (soil applied, residual) herbicides for winter annual weed control. Where weeds have started to germinate, combine a contact herbicide with the residual herbicide. After application, most residual herbicides need to be incorporated into the soil, most commonly by rain or irrigation. The 1997 registered herbicide list for tree crops, recently updated by Clyde Elmore, UC Extension Weed Specialist, and weed susceptibility chart is included for your reference. Note that a new post emergent grass herbicide, Prism, has been added to the list.

For organic growers or others who prefer not to use herbicides for weed control, options available include mechanical methods such as mowing and hand hoeing, flaming using liquid propane gas, weeder geese or various mulches. In many studies, fabric mulches have controlled broad leaf weeds, grasses and sedges and have been durable for five to ten years. Cost of fabric mulch is high initially but is the same as herbicide application after five years.

Cover Crops

Many growers maintain a winter cover crop of resident annual weeds in the row middles and strip spray the rows. The practice of maintaining resident vegetation requires some spring mowing and allows orchard access in the winter. Another option that is increasing in practice is to plant cover crops often for a specific purpose. This can be as varied as planting a barley cover crop to improve soil structure and enhance water penetration to planting a legume to increase the available nitrogen content of a soil. When selecting a particular species or mix, consider costs vs. benefits, tillage practices, irrigation method and nitrogen needs. Specially

planted cover crops usually require more management; they do not need to be mowed more often but the mowing needs to be tied to the growth stage of the particular cover crop.

Whether cover crops are seeded or are resident weeds, they offer a practical method of supplying organic matter to improve soil tilth and structure of orchard soils. Besides the benefits, the drawbacks to cover crops must also be considered. For example, actively growing cover crops modify the microclimate causing the air above it to be cooler than firm, moist, bare soil increasing the risk of frost damage or delaying the onset of flowering.

Plant winter annual or perennial cover crops by mid to late October for the best stand. For information on selecting and growing a particular cover crop, the publication "A Cover Crops for California Agriculture" available from our office for $3.50 is quite useful. We also have a video "A Creative Cover Cropping in Perennial Farming" available on a checkout basis. Specific information on several cover crops is available on the Internet through the Sustainable Agriculture Research and Education Programs web site (http://www.sarep.ucdavis.edu).

PEACH MUMMY REMOVAL

Removing infected and rotted fruit (mummies) from trees and orchards interrupts the life cycle of brown rot disease. Mummies should be removed immediately after autumn leaf fall. A combination program of mummy removal and spraying protective fungicides during bloom, should give the best possible control of brown rot.

NEW PUBLICATIONS

Walnut Production Manual ~ Finally, this comprehensive manual will be available from our office towards the end of October. Publications will be sent directly to those who attended the Walnut Short Course. We have a long waiting list in our office so we ordered many books to accommodate everyone who wants this publication. This manual will be available in the usual paperback form for $35.00 and in hardcover (something new) for $50.00. These books would make great gifts.

Pesticide Safety: A Reference Manual for Growers ~ This book is a resource and study guide for growers who are preparing for the

written Private Applicator Certification examination administered through the Agricultural Commissioner=s Office. Cost - $7.00.

PERSONNEL NEWSLETTERS AVAILABLE

There are two free personnel newsletters from the UC Cooperative Extension Agricultural Personnel Management Program - *1) Labor Management Decisions* is a statewide publication with broad coverage of personnel management, workplace safety, labor market, and related public policy topics. 2) *Personnel Practices to Add Value*, written by Brian Linhardt, Personnel Management Farm Advisor for the Sacramento Valley. This will cover personnel/business management issues, meeting schedules and information of interest to the Sacramento Valley. Contact Brian in Oroville at (916) 538-7201 to get on the mailing list.

PEST SCIENCE CONFERENCE

December 16-17, 1997, UC Davis

Enrollment brochures are available from our office or contact Karen Fischer at (916)757-8899 or e-mail agr@unexmail.ucdavis.edu.

1997 Registration Status of Herbicides in Trees and Vines

Susceptibility of Weeds to Herbicides

JANINE HASEY
UC Farm Advisor
e-mail: jkhasey@ucdavis.edu