COOPERATIVE EXTENSION UNIVERSITY OF CALIFORNIA

TREE AND VINE NOTES

JANUARY 2005

NORTH SAN JOAQUIN VALLEY ALMOND DAY

Wednesday 26 January 2005

Stanislaus County Agriculture Center
Service and Crows Landing Roads, Modesto

8:00 Registration & Coffee

- 8:30 Program:
  - Overview of minimal pruning trials at Nickels Estate
  - Environmentally friendly pest management
  - Choosing the right rootstock for your orchard
  - Almond variety overview
  - Potassium fertilization – what type, how much, and when?
  - More information: Roger Duncan 209/525-6800

WALNUT ISSUES

By Janine Hasey, UC Cooperative Extension, Sutter/Yuba Counties

Every fall I discuss the advantages of managing your orchard floor using no-till with mowed middles of either resident vegetation or planted cover crop. Facilitating harvest by enhancing orchard access is one more reason (and one not usually considered) to stop disking your orchard. Some Chandler growers who disk and flood irrigate were unable to harvest this fall after it rained. Walnut harvest was moving along well then slowed down with the early October heat. Then it started raining October 17 and continued for 10 days into early November adding about 2 1/2 inches of rainfall. Some growers lost from 80-100 percent of their crop on hundreds of acres. It doesn't take long to pencil out that the costs of mowing and planting a cover crop would have been minimal compared to crop loss because of inaccessibility. The cover crop does not have to be a perennial or permanent sod type to increase orchard accessibility although that is one option. An annual cover crop of either winter weeds or a planted legume or legume/grass mix that is mowed in the late spring to early summer will usually decompose by fall leaving a mulch over firm ground without much trash that can interfere with harvest.

Navel Orangeworm Dilemma - There are literally tons of mummy nuts on trees and nuts on the ground where orchards went unharvested. These are the sites where navel orangeworm overwinter as larvae. They feed and develop inside the nut during warm weather, pupate in March through May and start emerging in April. Mummy nuts in trees will need to be removed by shaking or knocking them down this winter. They should be flail mowed by mid-March to kill overwintering larvae and eliminate food sources for first-generation larvae later in the spring. Disking mummy nuts is not quite as effective as flail mowing. Maintaining a ground cover during the winter will allow better orchard access for these operations and also aid in decomposing trash nuts by microorganisms.

Make sure to remove and destroy any trash nuts in and around hullers. Do not allow navel orangeworm to build in 2005 since we already saw increased damage in the 2004 crop. Destroy mummy nuts and control walnut blight, codling moth and sunburn during the season.

WINTER WALNUT TIPS

Walnut Scale – Many Chandler growers are seeing high populations of walnut scale in their older blocks. While pruning this winter, take time to inspect pruned limbs randomly across your orchard to assess the scale population. Treatments are not applied until the delayed dormant period; the safest time is as bud swell begins. More about scale and treatments will be included at our February walnut meeting.

Pruning 1-3-year old trees – Not now! It is best to prune in March after the threat of winter kill from freezing temperatures has passed.

DORMANT SPRAY – PEACHES
by Janine Hasey, UC Cooperative Extension, Sutter/Yuba Counties

The pesticides used in the conventional dormant spray include oil, an organophosphate or pyrethroid and copper. The target pests controlled by the oil are San Jose scale (low to moderate populations) and European red mite, the organophosphate controls peach twig borer and San Jose scale, pyrethroids control peach twig borer (not scale), and copper controls peach leaf curl. Delayed dormant spray timing (mid-February before bloom), is more effective than dormant spray timing for controlling San Jose scale and European red mite and peach leaf curl. Additionally, there is often more orchard floor vegetation in mid-February reducing pesticide runoff potential.

When applying any organophosphate or pyrethroid, it is best not to apply it 48 hours before a predicted rain event to avoid runoff. For Diazinon, the label states that With increasing concern and regulations regarding pesticides in surface water, growers must seriously consider their dormant spray options and management. The first step is **monitoring** for the pests by taking dormant spur samples. These samples will tell you what the San Jose scale and European red mite populations are which will help you determine the appropriate pesticide and rates. If San Jose scale is below 10 percent, oil alone should be an effective control using higher rates where more scale is present. If San Jose Scale is over 10 percent, then consider using an organophosphate such as Supracide or the insect growth regulator Seize.

It cannot be applied 48 hours before a predicted rain event or when soil moisture is at field capacity. There are other options to avoid runoff, such as, alternative materials like biological or insect growth regulators that have low runoff potential. These are used as replacements for dormant spray organophosphates and pyrethroids.

Dormant Spray Alternatives - For peaches, all alternative programs build from the basic dormant/delayed dormant spray which is oil for scale and copper for peach leaf curl. Below are programs that have been demonstrated to be effective:

Target Insect	Alternative Material	Rate	Spray Timing
Peach twig borer	Bacillus thuringiensis (Bt)	1 lb or 1 qt/acre	2 bloom sprays often with brown rot timing
Peach twig borer	Spinosad (Success)	6 oz/acre 4 oz/acre	Delayed dormant Late bloom (avoid bees)
Peach twig borer	Dimilin 2L	12-16 oz/acre	Delayed dormant
San Jose scale	Seize 35W	4 oz/acre	Delayed dormant

Bt and Spinosad also control oblique-banded leafroller. In orchards where we have sampled spurs annually, using Seize on blocks with over 10 percent San Jose scale applied delayed dormant with oil and copper have resulted in these blocks having either very low or no scale the following year.

JUST PUBLISHED

Seasonal Guide to Environmentally Responsible Pest Management Practices in Almonds

This handy publication is a decision guide packed with information to help almond growers make environmentally responsible pest management decisions year-round without decreasing their yields or increasing their reject levels. Based on research and results from the University of California and the Almond Pest Management Alliance. This full-color guide is in an easy-to-use fold-out format and is on sturdy coated paper for durability in the field.

#21619 $7.00 8 Pages

New Free Online Publications

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http://anrcatalog.ucdavis.edu/merchant.ihtml?pid=5637&step=4

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http://anrcatalog.ucdavis.edu/merchant.ihtml?pid=5649&step=4

8119 Pesticide Selection to Reduce Impacts on Water Quality: Farm Water Quality Planning Series
http://anrcatalog.ucdavis.edu/merchant.ihtml?pid=5644&step=4

8147 Pistachio: Calendar of Operations for Home Gardeners
http://anrcatalog.ucdavis.edu/merchant.ihtml?pid=5647&step=4

New Responsibilities by Maxwell Norton

After 25 years as a Merced County Farm Advisor I have been appointed to a statewide leadership position with University of California's Division of Agriculture and Natural Resources (DANR). My official title will be Program Leader, Agricultural Productivity and I will report to the DANR Associate Vice President in Oakland.

Program Leaders provide leadership to coordinate research and outreach programs across the Division of Agriculture and Natural Resources. In addition to their concern for statewide integration of programs, Program Leaders are mentors and advocates for work groups in their program areas. I will also represent the Division to external stakeholder groups. Program Leaders are appointed for three years with the possibility of re-appointment for additional terms.

I will be able work out of my current office here at the Merced County Agriculture Center. Because of these statewide responsibilities, I will spend a significant amount of time on the road attending meetings and working with colleagues at campuses and other Cooperative Extension offices. I am currently recruiting for a Staff Research Associate to continue my research program in the county. The position announcement is available from the Cooperative Extension office or at the cemerced.ucdavis.edu web site.

I will still be a Farm Advisor as 25% of my position. If you have any problems you need help with do not hesitate to contact the Cooperative Extension office here at the Merced County Ag Center. I will be continuing our regular educational programs such as our North Valley Cling Peach Seminar.