

COOPERATIVE EXTENSION

UNIVERSITY OF CALIFORNIA



## TREE AND VINE NOTES



JULY 2005

### **Cooperative Extension Grape Safety Day - 21 July**

Plan on sending all of your employees to our annual grape safety day Thursday 21 July at the Madera Fairgrounds, West Cleveland Ave just west of the freeway. This event is free and is offered in Spanish, Punjab and English. Topics include: working safely around equipment and harvesters, transporting on the roads, electrical and gas safety, tractors, forklifts and emergency response. Employees will get a certificate of completion that you can use to document your safety training program.

The event starts with registration at 7:00 AM and concludes with a sponsored lunch. There is no limit to the number that can participate but reservations are requested by calling the Merced Cooperative Extension office at 209/385-7403 or the Madera Cooperative Extension office at 559/675-7879. You can fax in your participants by putting their names on your letterhead and faxing to 559/675-0639. Sponsorships and donations to cover the cost of the event are always welcome.

### **Nutrition Notes** by Maxwell Norton UC Cooperative Extension

Late June through July is the time to take tissue samples to determine the nutritional status of each block. Pistachio are sampled in August, grapes back at bloom time. With very light crops in dried plums and almonds, the nitrogen (N) requirements may be significantly less than other years. Since most N is transported out of the orchard in the crop. N application rates should be adjusted to take this into consideration. Tissue analysis can confirm this. Total crop tonnage in nut crops and in dried plums can fluctuate considerably from year to year. Total crop load on crops that are thinned (like peaches) fluctuate much less so. In any case, use tissue analysis along with tree vigor and color as indicators for the need for N.

Potassium (K) use will vary with crop load also. I am reluctant to recommend that you reduce K applications very much because it can take a long time to get levels in the soil back up to the point where you get a good response. Almonds and dried plums need ample K and those levels should be watched closely.

### **Check Well Water Quality** by Maxwell Norton UC Cooperative Extension

If you irrigate with well water or surface water that has variable amounts of salt, you should check the water quality annually. A good time to check water quality is mid summer when the water source is under maximum demand. Check for total bicarbonates, salts, sodium, chloride,

and on the Westside, boron. Have the lab calculate for you the amount of each that you are applying with each acre-foot of water. Keep year-to-year records so you can compare.

Well water quality has been declining in many parts of the north San Joaquin Valley due to urban growth and increased use from the conversion to micro-irrigation. Flood irrigation with canal water seemed wasteful to some but it recharged our ground water for use by cities and farmers. The rapid increase in the number of city wells and the conversion by farmers to micro irrigation is causing ground water quality to decline and the aquifers to become over-drafted. Some irrigation districts have incentive programs to encourage farmers to hook back up to the canal system.

### **Gili Mealybug**

The Gili mealybug is a class B pest that is starting to show up in orchards in various parts of the Central Valley. It can cause significant damage in pistachios and appears to have a diverse host range. It has been found in pistachios, almonds and grapes. Research has demonstrated that it can become a pest of ornamentals and stone fruit. Please go to our website at [cemerced.ucdavis.edu](http://cemerced.ucdavis.edu) and print out the color identification guides and use them to train your employees. If you do not have internet access, come to any Cooperative Extension office and request a copy.

New infestations should be taken seriously. If you discover an infestation please contact your local Ag Commissioner or Cooperative Extension office. Harvest equipment is suspected as being a prime carrier of the pest from field to field. It has been suggested that equipment be pressure washed and the loads be tarped to prevent the spread from infested orchards.

### **Hear Cooperative Extension on KYOS Tuesday Mornings**

Farm Advisors Maxwell Norton and Scott Stoddard have a weekly radio show on KYOS radio AM 1480 that features timely topics for farmers in the region. The five minute segment runs at 6:30AM and again at 7:30AM on Tuesday mornings. We hope you join us.

### **Walnut Tasks & Observations**

by Janine Hasey, UC Cooperative Extension, Sutter & Yuba Counties

- ?? There are many new walnut plantings especially where peaches or prunes once stood. That means there are many farmers new to growing walnuts in our area. I have observed a several new walnut orchards where it appears trees were planted more like a stonefruit than a walnut. Although some of the following recommendations may be too late for these plantings, growers training new orchards or planning future walnut orchards please take note.
  
- ?? Use 10 foot stakes with two feet in the ground. We train walnut trees as a modified central leader. The first season, one vigorous shoot is tied up the stake to become the trunk and competing branches are pruned back. For conventional trees, our goal is 10 feet or more of growth by fall, a little less for hedgerow trees. Because of north-south winds in our area, place stakes 10 inches to the west of the tree in the hole at planting. This way the stake will not wound the tree with later placement. The west direction allows the tree to blow to the north or south without rubbing on the stake. Often growers use 8 foot stakes with 6 feet above ground. This does not give enough height to train conventional trees without risking wind breakage. I've even seen walnuts this year with stakes only 4 feet above the ground.

- ?? At planting cut off trees at 3-5 buds above the graft union (regardless of diameter). With walnuts, to force a good strong shoot for the trunk, you must cut back this far and throw most of the tree away. The biggest mistake I see is growers leaving their newly planted walnut trees too high so there are many buds that break but none dominate to train as the trunk.
- ?? Check trees frequently during the summer and tie trunk to stake as needed. Keep competing shoots pruned back. They add carbohydrate for increasing caliper growth but don't let them slow the growth of your trunk.
- ?? Check soil moisture frequently with a soil tube or auger. Walnut trees do not like to be stressed for water and wills top growing if they are. The key to great growth is frequent and light irrigations. Avoid saturated soil and do not irrigate over 18 hours per set time to avoid crown and root rot diseases.
- ?? Off-Type Chandlers – These are trees that drop their nuts in certain years. Around mid-May, several growers observed that off-type trees had dropped their nuts, so 2005 is an off-type year. Although we don't know why these trees do this, I have observed over the years that it often happens when springs are cooler and wetter than usual.
- ?? Walnut Husk Fly – In the past, we have recommended hanging husk fly traps by July 1. Instead, consider hanging traps in early to mid-June because of observing earlier and earlier flights in several local orchards. To properly control this pest, it is very important to know when the initial flies are present, especially if using some of the newer materials such as GF-120 for control.
- ?? Walnut Aphids – Early in the season, populations of over 15 aphids per leaflet reduce nut yield and quality and cause an increase in nuts with perforated shells. Walnut aphid is often controlled biologically by the parasitic wasp, *Trioxys pallidus*, unless disrupted by chemical spraying. Consider treatments for walnut aphid if the average number of non-parasitized healthy aphids found on the underside of subterminal leaflets of early varieties is over 15 per leaflet. Please notify me of any orchards with particularly heavy infestations.
- ?? Dusky-veined Aphid – These started appearing in some orchards in May. Treatments should be considered for this aphid whenever an average of 10 percent of the subterminal leaflets have colonies of six or more feeding on their upper surface along the midvein.

**WALNUT HUSK FLY** By Bill Coates, UC Cooperative Extension, San Benito County

The first walnut husk flies (WHF) of the season were caught on June 16 south of Hollister. You should have monitoring traps out now. Use the yellow AM-NB traps with no bait in the stickem. An ammonium carbonate supercharger is added for increased trap catches especially when populations are low. Be sure to stir up the stickem or replace the trap whenever the surface gets dirty. Shake up the ammonium carbonate container weekly and replace it if it gets wet or is depleted. Record your trap counts weekly when you clean the traps out. Begin applying conventional materials when the trap counts begin to go up rapidly and repeat every three weeks. Apply GF-120 when you first begin to catch flies and repeat whenever you catch a significant number of WHF (more often than with conventional materials). Continue spraying until hull split for early varieties (Payne, Serr, Howard) and through September for Chandler. WHF is controlled by applying bait sprays. Full

coverage sprays for codling moth will kill WHF but should not be relied upon for adequate control. Your choices for control include:

1. Malathion + bait (such as NuLure): This is the local standard for conventional orchards and is still very effective. Other choices that could be mixed with bait include chlorpyrifos (Lorsban), esfenvalerate (Asana), phosmet (Imidan) or spinosad (Success). Use the recommended amount of insecticide and bait per acre – the amount of water applied per acre has varied from 5 to 100 gallons depending upon spray equipment.
2. GF-120: This is our new standard for the organic control of WHF. This is a mixture of spinosad plus a built-in bait. It is applied in very small amounts (20 oz/acre combined with 30 to 80 oz of water/acre) usually by a small sprayer attached to an ATV. It must be applied early and often if moderate to high populations of WHF are present.
3. Entrust + NuLure: This is an organic treatment for higher WHF populations and is used at similar spray volumes per acre as Malathion.

### **Survey on Organic Research Efforts at UC**

UC ANR's Sustainable Agriculture Program conducted a detailed survey of academics involved in organic research. This large document can be viewed and downloaded for free on-line at:

<http://www.sarep.ucdavis.edu/organic/organicsurvey04.htm>

University of California Cooperative Extension  
and the  
Kearney Agricultural Center

Present

**2005  
VARIETY DISPLAY AND RESEARCH UPDATE  
SEMINARS**

**Kearney Agricultural Center**  
9240 S. Riverbend Avenue  
Parlier, CA 93648

**Mark your calendars for this date**

**Friday, August 12 (last one of the series)**

8:00 – 9:00 a. m.      Variety display by stone fruit nurseries, breeders and the USDA

9:00 – 10:00 a. m.      Research Update

For more information call: Harry Andris (559) 456-7557, Brent Holtz (559) 675-7879, Ext. 209