



TREE AND VINE NOTES



OCTOBER 2001

NSJV CLING PEACH DAY

Mark Friday 14 December as the NSJV Cling Peach Day.

If you are involved in cling peach production in some way you should plan on attending. It will be held at the Stanislaus County Ag Center in South Modesto.

We will have some interesting research reports and a short industry meeting followed by lunch. A full program will be in the next newsletter.

WHEN PLANTING, EARLIER IS BETTER (Norton)

When planting trees it is almost always better to be early than late. Trees that have been in cold storage and planted in spring are almost always weaker than those planted in mid-winter. Trees planted mid-winter will usually be more uniform also which produces a much healthier looking block.

Another thing to remember is that newly planted trees should be watered in thoroughly. Really soak them – even if the soil is moist to begin with. The object is not to provide water for transpiration, it is to fill in all the tiny air pockets and make sure that all the roots are in contact with soil. After watering you can apply a safe pre-emergent herbicide to reduce competition from weeds for water and nutrients.

One more thing: don't forget to paint the trunk from just below the soil level to the top to prevent sunburn and discourage borers. Use a light-colored water-based paint.

SALT BURN IN ORCHARDS (Norton)

I have seen what appears to be classic salt or high water table injury in some orchards this year. If high water table can be ruled out then you need to calculate if you are applying enough water to wash the salts out of the root system. The salt burn around the margin of the leaves really shows up in late summer and early fall when orchards begin to dry out. Salt problems are more common when irrigating with well water and less common when using district water.

Something else to be very careful about is getting chloride burn from potassium chloride fertilizer. KCl is less expensive than potassium sulfate but it carries with it the potential to cause leaf burn if the Cl is not leached out of the root zone well before bud break. Discuss this concern with your PCA when planning your fall and spring fertilizer programs.

KNOW THE SOURCE OF YOUR PLANTING MATERIAL (Norton)

With the threat of sharka virus and plum pox disease in the eastern part of the United States you can't be too careful about the source of planting material if you are planting almonds, peaches, plums, or any other *Prunus* species. Do NOT obtain nursery stock from outside California. Our local nurseries and CDFA are trying hard to keep this virus out of the state. Deal only with reputable in-state nurseries.

SOIL SHOULD BE DRY WHEN RIPPING (Norton)

If you are going to sub-soil, deep rip or slip plow the soil should be dry as possible. You will get a better job if the soil is not wet. It is also better to level with the soil is dry. Leveling or scraping wet soil will result in significant soil compaction – especially sandy soils.

NO GLASSY WINGED HERE (Norton)

So far we have had no glassy-winged sharpshooter catches in Merced County Vineyards. I think we should all raise a toast to that. I attribute it to good bio-security practices of not allowing plant materials to be transported from vineyard to vineyard.

A NOTE FROM MAXWELL

I want to publicly thank Lonnie for being an outstanding mentor and friend from the day I was hired back in August 1979. I was pretty green back then and Lonnie was always there to help me when I needed it. He was a great role model for what a good Farm Advisor should be. I could tell right off that Lonnie was devoted to agriculture and our local farmers. Other people in Extension told me how lucky I was to be able to work with him. They were right.

PROGRAM COVERAGE AFTER LONNIE RETIRES by Maxwell Norton

When Lonnie retires there will be a huge hole in our extension and research program here in Merced County. It will take at least a year to propose and compete for a UC position to fill that void. In the meantime we will do our best to respond to your problems as they arise. Please understand that with large number of calls I may not get back to you as fast as I usually do. Your patience is appreciated!

The neighboring Farm Advisors will do their best to help.

Kathy Kelley in the Stanislaus County office 525-6800 will be helping us with walnut questions. Brent Holtz in the Madera office 559/675-7879 ext. 209 will be helping us with Pistachio problems. Brent Holtz and Roger Duncan (Modesto office) will both be helping me with almond problems. I am going to try to take care of any apricot and fig problems myself.

With almonds call me and I will attempt to answer your questions. If I need to I will call on Roger or Brent to help me. With almonds south of the Merced River you can call me or call Brent directly. With walnuts and pistachios call Kathy or Brent directly. Apricots and figs – call me.

Questions? Confused? Call me at 385-7403 M: 761-2846

Any questions about the process of proposing a position to fill the program void should be directed to our County Director, Jim Farley 385-7403.

RETIREMENT DINNER FOR LONNIE – YOUR’E INVITED!

We will be having a retirement dinner for Lonnie Sunday afternoon December 2 at the Elk’s Lodge in Merced. If you are interested in joining us, please contact one of the secretaries in our office 209/385-7403 or cemerced@ucdavis.edu and they will send you an invitation.

POSTHARVEST NITROGEN FERTILIZATION OF GRAPES

Bill Peacock, UCCE Tulare County of Merced

Grapevines depend heavily on nitrogen (N) stored in roots and other permanent vine parts to support early spring growth. A postharvest application of N can effectively increase the vine’s storage N. To be effective, postharvest applications of N should be incorporated and irrigated into the root zone as soon as possible after harvest to allow the vine ample time for uptake before dormancy. Uptake also requires that vines have an intact and functioning leaf canopy.

Determining how much N to apply is a compromise between productions and quality. A deficient vine will have a smaller crop but the highest fruit maturity. A vine with moderate N status will achieve optimum production and intermediate fruit maturation. The addition of N beyond the moderate status will further delay fruit ripening, increase bunch rot, and potentially reduce vine fruitfulness. Vineyard problems stemming from too much N are more common than those stemming from too little. A vineyard can often coast for years without fertilization before vines become deficient. When N fertilization is recommended, 25 to 50 pounds of N per acre are usually applied depending on variety, tissue levels, soil type, and irrigation method.

Nitrogen fertilizer is not always necessary. Vines grafted onto vigorous nematode resistant rootstocks ‘Ramsey’ (‘Salt Creek’), ‘Freedom,’ and ‘Harmony’ often do not require N fertilization due to their more vigorous and explorative root systems and excess vigor. Also, vigorous vines with a history of excess growth do not require nitrogen fertilization. Vineyard with winter legume cover crops such as vetch or bur clover or that are irrigated with water high in nitrogen require no fertilization.

MERCED COUNTY WEBSITE

Check out our website at <http://cemerced.ucdavis.edu/>. We are striving to post our newsletters and publications that are of current interest, and there are links to other counties and statewide programs. We will be adding more information as time goes by. Give us feedback so we can provide information that you can use. Special thanks to our local webmaster Larry Burrow.

THANKS! (Hendricks)

I want to say “THANKS!” and express my gratitude to all the growers, PCAs and others in the Ag Industry for a very enjoyable career as a farm advisor during the past 41 years. I can’t think of a better job than to work with all of the fine people I have been privileged to work with in Merced, Stanislaus and Madera Counties. I started on October 12, 1960 as an understudy to Norman Ross in Stanislaus County. Norman was a tremendous teacher, and I still hear farmers fondly talk about things he taught them and advice he gave many years ago. In January 1961 I moved to Merced County to fill in for Verner Carlson who was on sabbatical leave at Michigan State University. I have been fortunate to live in Merced County since 1961, although at times I did cross-county work in both Stanislaus and Madera Counties when they were short of staff. It has been great fun, but I will officially retire on November 1st.

Many of you whom I met early in my career can remember with me how nuts were then harvested almost totally by hand. Almonds were commonly knocked with mallets, hand raked, and then scooped up with wire-mesh scoop shovels. Walnuts were picked off the ground by hand into buckets and transported in burlap bags. Very early models of tree shakers were being developed about 1960. Today’s total mechanization is quite a change, and certainly more changes are on the way. Early pest control was also much more crude and dangerous than today. We have seen a tremendous change in the professionalism of pest control, improved techniques, and much safer materials for both humans and the environment. It is very encouraging to me to see many new materials entering the pest control market that will help us truly realize an integrated pest management strategy with much more safety to applicators, farmers, the environment, and consumers. Great things are ahead for you all.

In our system vacancies are not automatically filled but rather must be reviewed from a statewide perspective. Maxwell Norton will now be the only tree and vine advisor in Merced County. We are hoping to arrange for help from the advisors in Modesto and Madera for the short term. For the long term we all hope to retain two positions in the tree and vine area in Merced County.

Again I truly thank you all for a great career and wonderful friendships. Lola and I plan to stay right here in Merced, and I am sure I will see you all at nut grower field days and research conferences in the future. **THANKS!**

Winter Almond Orchard Tasks and Evaluation (Hendricks)

Winter is a good time for almond growers to review this past year and make plans for improvements in the year 2002. The California almond crop appears to be setting a record this year exceeding the previous all-time record crop of 1999. Reject levels seem to be about average. If your almonds had insect damage this year, be sure to take note of the type of insect damage. Rejects could be higher in 2002 in an expected smaller crop.

Navel orangeworm (NOW) damage seems to be down a bit in 2001 compared to year 2000. We often think that rejects are lower in big crop years because there are more nuts out there and the ratio of worms to nuts is lower. But there is also evidence that shell seals are better when nut sizes are smaller in big crop years. The theory is that large nuts in small crop years have more “split pit” or fractures in the shells that allow worms entry into the nuts. With small nuts the shell is more resistant to entry. This theory needs more proof, but field experience indicates that this is probably happening.

In anticipation of a smaller 2002 crop with a good chance of more worm pressure, remember that **winter sanitation** is still the number one priority in navel orangeworm management. Dirty trees promote an increase in NOW damage. Almond orchards that are cleaned to **2 mummies or less per tree** consistently show lower NOW damage at harvest than do dirty orchards. NOW survives on mummies in the winter and spring until hull split, when the NOW can feed on the new crop of nuts. Sanitation breaks this food chain. Heavy rains and strong winds also help clean the trees, but we lack these storms in the many of our California winters, especially in the San Joaquin Valley. Winter sanitation is equally important even if growers release the NOW parasite *Goniozus legneri*. *Goniozus* is useful in combating NOW when combined with sanitation, but alone it will not keep NOW at commercially acceptable low levels.

Several new pests are showing in some almond orchards in certain areas, but these pests are not widespread. These pests are lace bug, obliquebanded leafroller, and Fuller rose beetle. No one knows whether these pests will increase or just remain occasional pests, but they should be monitored and control measures taken when needed.

- **The lace bug or tingid** in the genus *Corythucha* has been seen in some Central Valley almonds. Don't confuse this with the lacewing, which is a “good bug”. This lace bug has been seen occasionally for years, in fact, Verner Carlson showed me lace bugs in an orchard in Livingston probably 30 years ago. It has become a serious pest in a few orchards during the past 2 to 3 years. The adults are about the size of a large aphid, but have a lacelike appearance. Lace bugs suck sap from the undersides of leaves which causes a leaf stippling and bleaching, similar to leafhopper damage. They also deposit black drops of excrement on the leaves. The nymphs produce honeydew which becomes blackened by sooty mold fungi. Most species of lace bug overwinter as adults under bark plates and under fallen leaves, or as eggs in leaves on evergreen hosts. Lace bugs have several generations a year. Many pesticides applied for mites and leafhoppers will also control this pest. A web site for ornamental plants can provide information and photos of a lace bug at <http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7428.html>.
- **Obliquebanded Leafroller (OBLR)** *Choristoneura rosaceana*, has also become a pest in recent years as “soft” pest control programs have become more widespread in almond. This moth larva folds the leaf over itself for protection. On occasion, the worms will also attack nuts in the early nut growth stages. Careful evaluation and judgement based upon past experience in each particular orchard block is essential to determine whether control measures are needed. OBLR was quite common in 2000, then in many orchards it dropped off considerably in 2001. Fortunately, good control of OBLR seems possible with the normal peach twig borer control program using soft materials during the bloom period such as *Bacillus thuringiensis* (Bt), spinosad

(Success®) and Confirm®. A web site for plums can provide information and photos of this pest at <http://www.ipm.ucdavis.edu/PMG/r611300511.html>.

- **Fuller Rose Beetle** *Asynonychus godmani*, has become a very annoying and costly pest in orchards with “pop-up” microsprinklers. The adult beetles lay eggs in the sprinklers. The egg masses gum up the emitters and prevent them from rotating. This pest can seriously increase the maintenance time required to keep the system working. Fuller rose beetles are brown snout beetles with one generation a year. The larvae live in the soil where they feed on roots for 6 to 10 months. The extent of damage to almond roots, if any, is not known. They pupate in the soil and the adults emerge from spring through summer after 6 to 8 weeks in the pupal stage. Adults are flightless and reach the canopy by climbing up the trunk or branches that touch the ground. The beetles feed upon and scallop the lower leaves in the canopy. This first scalloping in the spring is a sign that adults are emerging. Pesticide applications for peach twig borer control will often control beetles present at the time, but later emerging beetles continue to cause problems. We really need better sprinkler design to avoid plugging, and possibly some material that would repel the beetles. A web site for citrus can provide information and photos of this pest at <http://www.ipm.ucdavis.edu/PMG/r107300311.html>.