It is Time to Remind Everyone of Sulfur Dust Stewardship

Sulfur dust is the backbone of Lodi’s powdery mildew management program. Now that the season is in full swing a lot of sulfur dust is being applied. I have become aware that some of the sulfur stewardship principles promoted in our region have not been adhered to in some instances. For example, during a recent early morning period of temperature inversion a sulfur dusting in a vineyard next to a county road created a dust cloud that slowly drifted across the road creating a hazard for passing vehicles. In other cases sulfur dusting was done in such strong winds that it was clear the application would not provide effective coverage to control mildew. To preserve the use of sulfur in Lodi vineyards for the long term it is absolutely important that all growers and equipment operators adhere to the sulfur stewardship principles. I am sure none of us want to see the Lodi wine industry featured on the evening news because a school bus was dusted with sulfur.

Some of the more important sulfur dust stewardship are:

- Stop dusting activities if sulfur will drift into sensitive areas
- Avoid applications when people are active in areas bordering a treated vineyard
- If dusting equipment allows, discharge blower when making row turns
- When possible sulfur dust at night or on weekends
- Sulfur dust should not be applied when wind velocity exceeds 10 miles per hour
- Cover sulfur stewardship with all applicator employees
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Managing Spider Mites in Lodi Vineyards

BY CLIFF OHMART
LWWC Research/IPM Director

It is that time of year again, time to worry about mites. I will be the first one to admit that I find dealing with mites in Lodi vineyards a difficult issue. I have two main reasons: 1) It is very difficult to accurately estimate their level of infestation because their distribution in the vineyard is often patchy; and 2) There is not a whole lot of data to go on regarding treatment thresholds and impacts that mite damage have on winegrape yield and quality. Furthermore, it seems that Pacific mites are becoming more common in the Lodi region and this species behaves much differently than Willamette mite so being able to tell them apart is very important in dealing with them successfully.

The following discussion is a great illustration of what comes from a lack of data on mites at winegrape vineyards. I recently participated in an on-line discussion with several California pest control advisors about whether Willamette mite is a pest or not. I began with a post management consultant from the San Joaquin Valley reporting that he never recommends a treatment for Willamette mite unless a client insists. He stated that although in some vineyards Willamette mite feeding can make the vines look pretty ragged, he never sees any affect on the fruit. He then asked what other consultants do about Willamette mite-infested vineyards. He got several responses from around California. Some said they do not view the mite as a problem while others said in certain situations it can adversely affect winegrape quality. One made the point that Pacific mite is so much more serious that one cannot afford to not keep an eye on Willamette mite populations. Some believe that in the cooler grape-growing regions of California’s North Coast in vineyards with poor soils and/or where deficit irrigation is pushing the vines to the limit in terms of crop to canopy ratio, a significant Willamette mite population (maybe 60% infestation or greater) can significantly delay harvest and/or significantly lower the Brix level at harvest. They believe the mites add to these other stress factors and actually push the vineyard over the edge and quality suffers. Some of the people responding from the warmer growing regions reported that about the only time they see Willamette mites become a problem is when they occur in vineyards at very high numbers early in the season. In the Lodi region, it is clear from monitoring 70 vineyards over the last 8 years for the BIFS program that the level of Willamette mite infestation that are considered unacceptable by growers and consultants can vary considerably. Part of this is explained by things such as different varieties, different irrigation strategies, or differing canopy management styles. However, it is also clear that some growers and consultants have more tolerance for Willamette mite damage that others do.

So what can we do in Lodi to improve our mite management? Do more quantitative monitoring, keep written records of this monitoring, identify the mite species you have in your vineyards, make and record observations on how mite levels affect yield and quality, and take advantage of the experience of your PCA (if you work with one), your farm advisor (Paul Verdegaal) and other growers by talking with them about your views on mite management and getting their help in identifying the kind of mites you have in your vineyard.

Quantitative Monitoring: Without measuring mite levels in some quantitative way you have no way to relate their numbers to their effects on wine and quality. As seasons go by, good quantitative monitoring will help you identify when mite numbers become a problem, when a problem exists, and whether to treat with a miteicide. If it is determined that the mite population is too high then one can make correlations between mite numbers and yield and quality so you can make correlations between mite numbers and yield and quality so you can make correlations between mite numbers and yield and quality.

Monitor and record mite levels but also yield and quality so you can make correlations between mite numbers and yield and quality. For example, during a recent early morning period of temperature inversion a sulfur dusting in a vineyard next to a county road created a dust cloud that slowly drifted across the road creating a hazard for passing vehicles. In other cases sulfur dusting was done in such strong winds that it was clear the application would not provide effective coverage to control mildew. To preserve the use of sulfur in Lodi vineyards for the long term it is absolutely important that all growers and equipment operators adhere to the sulfur stewardship principles. I am sure none of us want to see the Lodi wine industry featured on the evening news because a school bus was dusted with sulfur.

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Calculating Herbicide Rates Can Be Tricky

A Lodi PCA RECENTLY BROUGHT TO MY ATTENTION THAT THERE HAS BEEN CONFUSION OVER RATES OF HERBICIDE APPLICATION IN SOME LODI VINEYARDS. THIS IS A GREAT OPPORTUNITY TO REMIND EVERYONE ABOUT HOW EASY IT IS TO BE CONFUSED AND HOW TO AVOID IT.

I WILL USE AN EXAMPLE OF SPRAYING 1 PINT OF GLYPHOSATE PER ACRE FOR AN UNDER THE VINE WEED SPRAY IN A 2 ACRE VINEYARD WHERE THE UNDER THE VINE WEED-FREE STRIP OCCUPIES ONE THIRD OF THE TOTAL VINEYARD ACRES (2/3).

THE TOTAL AMOUNT OF GLYPHOSATE NEEDED FOR THIS JOB IS 7 PINTS NOT 21 PINTS. THAT IS BECAUSE

ONLY A TOTAL OF 7 ACRES, A THIRD OF THE VINEYARD, IS GETTING SPRAYED.

IN SOME INSTANCES THE PER ACRE RATE IS MISTAKENLY MULTIPLIED BY THE TOTAL VINEYARD ACRES, RATHER THAN THE ACRES OF THE WEED-FREE STRIP TO CALCULATE HOW MUCH MATERIAL IS NEEDED AND THIS IS THEN APPLIED UNDER THE VINE. THE RESULT IS THAT THE ACTUAL AMOUNT OF MATERIAL APPLIED TO THE STRIP IS TIMES THREE WHAT IT SHOULD BE.

THE WAY TO AVOID THE CONFUSION IS ALWAYS CALCULATE HOW MUCH HERBICIDE TO PUT INTO THE TANK BASED ON SPRAYED ACRES, NOT TOTAL VINEYARD ACRES.

GROWER PROFILE: Robert Abercrombie

Although Robert Abercrombie was born in Visalia, CA, he grew up in Lockeford, CA. His family has been in the farming business for three generations. Robert was about 14 years old that his father first taught him to drive a tractor. A close family friend had an orange and walnut farm, where Robert was hired for the summer. He fondly remembers driving up and down the orchard rows spot spraying for weeds high up on a Farmall tractor. About that time that Robert was turning 15 years old, he and his family moved to Lockeford where he attended Stagg High School, graduating in 1975.

Several years later, after graduating from high school, Robert began working for a business in Lockeford. In 1979, the businesswoman bought some property in Lockeford and asked if Robert would be interested in working at the ranch. Robert remembered how he loved being out in the country and working on those old tractors, about orchards and had decided that was exactly the career path he wanted to pursue. So, Robert took the position and when he had work on the Lockeford ranch, he jumped on the opportunity. Robert spent the next 11 years helping run the day-to-day operations of the ranch. He has been with the Sutter Home Winery since the grapes he picked on his vineyard. The process is referred to as a thinning of grape pomace laid out in 20 or so 1000 foot windrows that, once well established, provide organic matter to the soil and improve the soil’s structure.

The biggest problem he has had with organic farming is weed control under the vines because on a large scale farming operation, it is difficult to stay on top of weed development when there are so many other things to worry about.

While trying out organic winegrowing produc-

Sutter Home Vineyards decided to make their own compost and continues to do so today. Robert uses the compost to topdress the Sutter Home Vineyard from the grapes he picked on his vineyard. The process is referred to as a thinning of grape pomace laid out in 20 or so 1000 foot windrows that, once well established, provide organic matter to the soil and improve the soil’s structure.

The 2005 season has become a challenge to growers throughout the district’s quality and value is more evident now than ever and becoming better known. Good luck in 2005.

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